Pigs from six medieval sites in Flanders: A multiple methodological approach to the study of their husbandry development

DREW, CARRIE,ANN

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Carrie Ann Drew

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Durham University

Department of Archaeology

Durham University

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Abstract

This study considers the effects that variations in living conditions have on animals, in particular pigs, and how these differences can be examined using the archaeological record. A wider theme examines whether changes in the husbandry of animals can be understood more clearly and recognised more accurately by employing recently developing techniques and whether any of these could be beneficial to use as standard practice. It investigates how, using a much wider than normal range of approaches zooarchaeological evidence at archaeological sites can be used to answer questions about husbandry in a much better way than any of the approaches in isolation.

This research used six key faunal assemblages from sites in Western Flanders as case studies to investigate these questions, with a particular focus reserved for pigs. The sites used for the primary research comprised Raversijde (15th century AD), Koekelare (15th century AD), Ename (14th century AD), Londerzeel (13th-14th centuries AD), Veurne (10th-11th centuries AD) and Oudenberg (4th century AD), all sites from Western Flanders and predominantly dating to the medieval period. The sites exhibited differences in both physical location and social context which were believed likely to explain any variations husbandry strategies should they exist. Rsults showed that, as population pressures increased during the early modern period, a nuanced change in pig-keeping from pannage to stall-keeping occurred. It has been practically impossible to identify this change from the archaeological record through traditional means. At Raversijde, in particular the type of pig-keeping being employed was clearly determined as stall-keeping, especially seen through the high frequency of enamel hypoplasias, indicating stress, but the spacing of teeth in the jaws indicated good nourishment in general.

The techniques utilised in this project include dental microwear, linear enamel hypoplasia, and identification of pathologies or anomalies in both teeth and post-cranial elements, set alongside more traditional examinations of both mandibular and post-cranial elements. This provided an in-depth consideration of how recent scientific developments and established standard zooarchaeological techniques could be integrated, and also showed the potential in exploring further methodologies as standard for such sites. As well as successfully differentiating husbandry practices in the various sites examined, the research also highlighted the necessity to explore further what is meant by a ‘typical’ domestic pig.

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Declaration

I confirm that no part of the material offered has previously been submitted for a degree in this or any other University. Where material has been generated through collaborative work, the work of others has been indicated.

Carrie A. Drew

Durham, August 2010

Statement of copyright

Dedication

Dedicated with my deepest love to Gran, who didn’t get to see the end but was simply proud of the ‘doing’. And to my parents, who knew me better than I knew myself.

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Chapter 1: Introduction

1.1. Research focus and context

Stress is the biological response elicited when an individual perceives a threat to its homeostasis. An animal's biological response to stress is complex and has no defined aetiology or prognosis (Moberg, 2000:2). Stress is an inherent part of any animal's life and is not automatically a negative factor. All animals have evolved mechanisms to cope with limited stress with only a negligible biological effect (Moberg, 1987:1207; 1999:422). In the case of many stressors the first response is behavioural (the animal attempts to avoid the cause), a response which is virtually impossible to examine through faunal remains. However, animals finding themselves in situations where their behavioural options are limited (such as in confinement), where they cannot avoid the cause, may experience extended stress (Moberg, 2000:3-4; Dobson, 1982; Kock et al., 1987; Woodford and Rossiter, 1994 and Waser, 1985). When such stress becomes too great or prolonged the animal may become adversely affected as the balance of hormones in the body becomes changed as part of its reaction to the stress (Bayazit, 2009:1022). This can affect not only the ability of the individual's body to respond to illnesses, but may inhibit reproduction and modify the metabolism and behaviour of the animal as well. When stress becomes too great animals are more susceptible to disease and pathogens in the environment (Blecha, 2000), can fail to breed (MacArthur et al., 1982), or develop properly (Moberg, 2000:8). In such cases it is clear that stress is adversely affecting the animal's welfare.

It has proven difficult to be able to identify stressors by examining the animal alone, even in living creatures (Colborn et al., 1991; Weiss, 1972; Henry, 1992) let alone through their skeletal remains (which is all that is commonly available to zooarchaeologists (Belyaev and Borodin, 1982). In the longer-term genetic and morphological changes may allow the animal to adapt to different situations, but these adjustments take place over a long period of time. In order to explore ways in which zooarchaeologists can more accurately identify the presence and causes of stress in archaeological faunal assemblages a specific form of stress has been highlighted for consideration in this study. This study will examine the identification of the beginning of greater human intervention into the lives of pigs in the medieval period, specifically the introduction of stalling to allow the more productive rearing of pigs in difficult or more pressured environments. This has implications for palaeoenvironmental studies by providing a greater understanding of how biological adaptation is presented in zooarchaeological data and the level of interpretation which can be reached, as well as allowing a greater understanding of the particular archaeological sites studied. It is difficult to consider such questions by extrapolating from modern species onto the past. Human behaviour has invariably altered the environment and breeding of modern species. It is therefore extremely difficult to use modern analogies to determine how different husbandry strategies would affect past populations' (Levinsky et al., 2007:3813). This study intends to propose another, archaeologically-based, avenue for investigating the causes of stress in the past.

The consideration of the effect of marginal and stressful environments on animals is examined here through a sample of six archaeological faunal assemblages from Western Flanders, predominantly dating to the medieval period. These sites are used to explore in detail the extent to which zooarchaeologists can determine the human influence on animal populations through their faunal remains. This research aims to examine whether changes, such as the shift in pig husbandry from free-range foraging to stall-keeping in the late medieval period, can be identified and more clearly examined by using a combination of techniques. This will allow any identified changes to be seated more clearly into a consideration of the societal pressures and the fluctuating status of the animal within the period.

While archaeologists have, in recent years, begun to investigate the effects that adverse environments have on animals they have almost without exception only used traditional measures of morphology change (size changes) or examined a single specific stress indicator (such as harris lines or hypoplasias) within their individual studies, also often focusing on identifying climatically or environmentally extreme locations. Little work has been undertaken to identify stress initiated by humans and for faunal assemblages rarely has such stress been explored by using a combination of techniques in a holistic fashion. One of the few papers which has attempted to use such a multi-technique approach is Ervynck et al. (2007), where a number of techniques were combined to consider differences between husbandry at several Flemish sites from the high and late medieval period. However, while identifying clear differences between the sites examined, this paper raised more questions than it answered and was very much a pilot study into the strategy. It went only a little way to providing a cohesive methodology for examining stress caused by differing husbandry methods, with little clarity able to be reached over what variability between sites actually meant. Ervnyck et al. (2007) is used as the foundation for this further investigation, which aims to add to and enhance the preliminary findings by placing them within a wider context. It will do so by investigating further strands of evidence alongside those used in the original paper, and also incorporating additional datasets. It is intended that such additions should clarify the issues raised within this original work. Techniques employed to consider stress and differences between populations include dental microwear; linear enamel hypoplasia; the development of a new methodology for the identification of subtle pathologies or anomalies in mandibles alongside a more traditional assessment of pathologies in teeth and post-cranial elements; and also a consideration of further techniques such as isotopic changes and geometric micromorphometrics. These approaches sit alongside the use of more traditional techniques on the assemblages to provide a view of how the recent scientific developments and more established standard zooarchaeological and historical examinations interact.

A body of work on archaeological assemblages has been undertaken to examine how palaeopathological and skeletal indicators in archaeological faunal assemblages can reflect the health of populations or husbandry strategies. Studies such as Dobney and Ervynck (2000) and Teegen (2005) each explore a technique which can be used to investigate a specific manifestation of stress. Similarly, analysts have begun to aim to identify certain husbandry techniques in archaeological assemblages, for example De Cupere et al (2000)'s examination of evidence for the use of cattle as draught animals, as well as considering the effects of malnutrition in living populations of domesticated animals (for example Radostits et al. (1999) and Hight and Barton (1965)). The research in this study is thus not in isolation but fits into an established body of research.

Research into the way the urbanisation of the medieval and post-medieval period in Europe has affected the husbandry of animals also exists. Traditional zooarchaeological techniques have been used to examine this question on numerous sites (such as Armitage, (1980), Davis (1997), and O'Connor (1995) and many others) as well as through text based research (Overton, 1995; Kerridge, 1967) and a combination of the two (Albarella, 1999). All of such research has however predominantly focused on how changes in breeding can be identified through size-change and herd-structure in faunal assemblages, rather than either the identification of the effect differences in husbandry has on living animals or by utilising more 'modern' scientific methods. This study is unique in using a combination of all these techniques, which have previously been utilised separately, to consider the husbandry of pigs in six assemblages recovered from Western Flanders, Belgium.

Pigs have been selected as the focus of this study specifically because it is known that in Western Europe there was a shift in their husbandry from foraging to stall-keeping at some sites. This was due to increasing pressure to provide food for a burgeoning urban population during the Late Medieval period (Allen, 2000:3). This shift has proven extremely difficult to identify from the archaeological record using traditional methods, and so the incorporation of other techniques may assist in examining this issue. For four of these assemblages solely pig mandibles have been studied, whereas for two of the sites, Raversijde and Koekelare, a full faunal assemblage has been analysed in order to provide a traditional faunal assessment for comparison. Raversijde is a village sited on the coastal dunes of Western Flanders, and represents a site where it would have been very difficult to raise pigs using traditional methods. Questions have been raised over whether the high levels of stress identified by Ervynck et al. (2007) has been caused simply by extremely poor conditions for the raising of pigs using a traditional medieval 'pannage' technique, or by the introduction of new techniques of confinement, such as stalling. The other sites comprise faunal assemblages from sites within the same region without such adverse conditions for pigs (generally being further inland), allowing comparative data to be collected. This enables a consideration of whether the differences seen at Raversijde are due to either husbandry practices or very specific local conditions, without other factors also affecting the data. An in-depth examination of these assemblages will seek to clarify what the faunal remains indicate about husbandry at the sites, which has lain unresolved to some degree since the previous study (Ervynck et al., 2007).

The most fundamental question addressed in this research is whether differences in the husbandry of animals can be not only identified more clearly, but also be explained and recognised more accurately, through the use of recently developing techniques, and whether such methods would be beneficial to use as standard in the future. In order to do this, a particularly detailed analysis is restricted to pigs, concentrating on an examination into whether shifts in pig-keeping from free-range foraging to stall-keeping, as urban pressures increased, can be more clearly identified and examined through this combination of techniques. Through examining such a specific question the level of success and effectiveness of the approach will be demonstrated, and an assessment will be made of how this fits into a wider context of zooarchaeological research. This study not only potentially allows the first positive identification of stalling in medieval Belgium, and a greater understanding of the animal husbandry at several Flemish sites, but it also demonstrates how the inclusion of a number of techniques can clarify questions left unresolved from their original examination. The findings will add to our understanding of pig husbandry in Flanders during the high and late medieval periods (from which various of the sites derive). They also contribute to the more fundamental questions about the identification of stress in faunal assemblages. The study then analyses how these results can be used to relate more widely to other faunal assemblages in different situations, and reassesses our overall understanding of the range of techniques typically used.

1.2. Aims

The overall aim

A number of specific questions were identified to consider the effects that variations in environments or husbandry, in particular those considered as marginal or extreme, have on animals and how these can be identified in the archaeological record, using pig stalling in medieval Western Flanders as a means of examining the wider research context.

Specific aims examined in this study

- To consider the reliability of traditional morphological approach to faunal assemblages and to assess whether this provides an appropriate level of information. To look at whether a more ‘scientific’ approach can unlock information obscured by traditional methodology and to assess the level of information such an approach provides.

- To begin to propose a new protocol for zooarchaeological research and widen its realistic objectives.

- To determine whether increasing confinement of pigs in the medieval period can be identified through a zooarchaeological analysis and whether this can be positively differentiated from stress caused by unsuitable conditions through their skeletal remains. To explore the potential of traditional and more modern scientific techniques to reach an understanding about the husbandry of pigs at a selection of sites.

- To develop a new methodological approach for recording and interpreting subtle pathologies of the teeth, and to evaluate whether this provides any meaningful information about displaying stress in the skeleton.

- To expand on the investigation in Ervynck et al.'s (2007) study, which raised questions about pig husbandry at several Belgian sites through reassessing the original data, employing further techniques and incorporating additional sites into the study. Specifically, to clarify whether the differences identified at the site of Raversijde are due solely to its marginal natural environment or due to differences in the keeping of the pigs caused by economic change at this time. Additionally, whether using this wider gamut of techniques to identify the husbandry method being employed at Londerzeel is beneficial (Ervynck et al. (2007) raised a number of questions but could not resolve them).

- To demonstrate how 'extreme' living conditions for animals may not only represent extreme geographical or climatic conditions but that other conditions may also induce stress, in particular human influence.

- To examine the six Belgian sites forming the basis of this study with reference to the wider research context of each technique, and to provide conclusions about the husbandry employed at each site for pigs through an assessment of their dentitions.
    - To employ a 'traditional' archaeological examination of the material from two of the sites, Raversijde and Koekelare, to quantify the assemblages and to produce a high-quality bone data report employing traditional zooarchaeological techniques such as quantification and consideration of butchery and season of death.
    - To examine evidence for pathology from the assemblages from both post-cranial and cranial remains and to consider what this tells us about the health of the animals.
    - To examine the linear enamel hypoplasia data from the sites to consider what this relates to specific stress events and how these may be interpreted in light of the other findings.
    - To examine dental microwear from the pigs and examine whether this suggests any differences in diet between the sites, and the implications of this.

- To consider the implications of the findings of the study, assessing the relationships between the information from the techniques and examining how they complement or challenge each other. This will conclude with whether it has been possible to develop a methodological approach that will allow the specific cause of ‘stress’ in an animal population to be identified.

1.3. Outline of the study

This thesis uses a variety of techniques to attempt to reconstruct the situation in which pigs were living and to consider the potential that this combined approach has to reveal further information about such assemblages. It is structured so that each chapter examines the information that a different scientific technique provides, and how that information relates to the specific research questions and overall research aims. Each chapter details the reasons for inclusion of the technique and the methodology employed, including justification for any choices made. It also presents the data gathered from the application of the technique to the faunal assemblages and discusses the patterns identified from that specific technique, and how these relate to similar studies as well as to the overall research themes. A summary discussion of the various forms of information gathered is presented at the end of the study, tying the information from individual techniques together. The overall picture is considered and evaluated as to how successful such a multi-disciplinary technique strategy has been both in regard to the identification of stalling in medieval pigs, but also for the wider implications of the use of such an approach.

- Chapter 2 presents a detailed review of information from historical and documentary sources into the level of knowledge of animal husbandry available in Western Europe during the late medieval period. Within this chapter the validity of the sites being examined is also discussed with the reasons for their selection for this study explored.

- Chapter 3 provides an analysis of the information provided by typical methodologies commonly used in the examination of faunal assemblages. This allows a consideration of the information that can be ‘traditionally’ determined, and provides a benchmark against which we can compare the level of additional data that the supplementary techniques provide to the specialist, and how desirable the data is, or whether it is just replicating information already gathered.

- Chapter 4 discusses the further information that can be gained from biometry of faunal assemblages using the range of techniques normally employed to provide this information.

- Chapter 5 examines the development of a new methodology for investigating subtle dental pathologies alongside the more traditional pathologies usually examined in zooarchaeological analyses. An increase in the incidence of disease in stressed animals has long been recognised (Moberg, 2000:6), but an examination of very subtle differences from the 'norm' are often overlooked. This section considers a new avenue of investigation to evaluate such changes.

- Chapter 6 focuses on the investigation of linear enamel hypoplasia in the dental material from the six sites. It investigates the potential causative factors and looks at the difference between general stress levels caused by the environment as well as the effects of animal management strategies.

- Chapter 7 examines the evidence provided from dental microwear to investigate the factors of diet and nutrition as potential contributors to any differences in stress identified between the populations. The potential for such techniques to identify specific diets and/or the circumstances of feeding is considered, providing one of the first analyses of dental microwear in archaeological pig populations, allowing a unique examination of lifestyle alongside markers of stress.

- Chapter 8 gathers and summarises the information and evaluates what the combined techniques suggest about the husbandry at the six sites. Further discussion about the insight this study provides to larger research themes is considered, and the validity of using a greater number of methodologies to examine stress in archaeological populations is evaluated. This chapter investigates both whether a signature to identify stalling in the medieval period for pigs has been identified for the first time, and also the wider implication of a multi-technique approach for zooarchaeology in general.

- Chapter 9 provides a conclusion to the research, an acknowledgement of the limitations of this study, and a summary of suggestions for future work that is required to expand this analysis.

Chapter 2: Historical background and Archaeological Sites

2.1. An examination of Historical and Documentary sources

It is pertinent to consider the state of knowledge of farming in Belgium in the medieval period, as well as the individual location of each site and the individual 'demands' of the specific geography of the area. As well as directly examining the evidence from faunal assemblages, the archaeological investigation associated with their recovery and indeed comparable archaeological data, it is important to look at other contemporary sources for the period, such as the literature and documents, for any indication of what evidence can be gleaned from these. Documents, and in particular books, are particularly useful resources as they are written with the deliberate intent of informing current or future generations, whereas archaeological data is left involuntarily (Comet, 1997:12) and so the information they each provide to researchers may differ. Assessing the value of such sources is difficult, particularly as documentary evidence often relates to monastic sites or great households rather than to peasant or urban populations, and the tensions between archaeological and historical evidence merit careful consideration (Albarella, 1999). However when properly placed into context, historical data can yield both qualitative and quantitative information about past climate and landscape change and is a source long utilised by archaeologists working with food remains (Woolgar et al., 2006:7).

2.1.1. Historical documentary evidence particularly regarding the history of stalling (stying)

In some areas of the world pigs, since prehistoric times, have been kept close to settlements (Zeder, 1991:30), whereas in other areas they are still kept through relatively uncontrolled management even today, in varied locations from Papua New Guinea (Hide, 2003:23) to Sardinia and Corsica (Albarella et al., 2007). In north-western Europe the predominant husbandry technique for long periods in the past was herding in forested environments (Benecke 1994 in Ervynck et al., 2007:173). Indeed, pig herding in the forest was a characteristic part of the food economy of Europe in the early medieval period, with the nobility being particularly associated with the practice, linking the consumption of pork with power and prestige (Ervynck et al., 2007:173). In the late medieval period, however, as urban centres grew there was a definite shift towards breeding in confinement, with the identification of this shift being the particular focus of this study.

It is clear that the stalling or stying of pigs is not an invention of recent centuries. Even classical texts mention the presence of stying. Googe (1601) in his translation of Heresbachius mentions 'Homer maketh mention of one of my name that had twelve hogstyes, every Stye containing fiftie Porklings, and Polyhius writeth of more than a thousand to be readie at a time among the ancient Italians, Turkans, and French' (Heresbachius, transl. Googe, 1601:140). Much earlier Columella describes that while foraging in woods is good, to provide plenty of food for the herd almost all the year round (Columella transl. in Forster and Heffner, 1955:293), sties should still be constructed in which the sows can be shut up after farrowing and even during pregnancy (Columella transl. in Forster and Heffner, 1955:295). He suggests that particular attention should be paid to prevention of overcrowding in these to avoid abortions, suggesting a relatively sophisticated level of knowledge. Tusser (1557) in his list of husbandly furniture includes 'A Stye for a boar, and a hogscote for hog, a roost for thy hens, and a couch for thy dog' (Hartley, 1969:144), even going so far as to describe the most ideal form for such an item 'In stacking thy bavin and piling of logs, make under thy bavin a hovel for hogs, and warmly enclose it all saving the mouth, and that to stand open and full to the south' (Hartley, 1969:141). This is remarkably similar to the form and alignment described even as late as the early 20th century (Rowlands, 1923). It is clear from Tusser that these stys were not to provide a restrictive home for the swine but shelter. In his advice for September, for example, he suggests 'At Michelmas mast would be looked upon, and lay to get some or the mast time be gone: it saveth thy corn well, it fatteth thy swine, in frost it doth helpe them, where else they should pine' (Tusser, 1557:8), meaning that taking pigs out to pannage in the woods for acorn mast is desirable in order to feed them so they are strong and fat enough to last the winter.

In the English translation of the French text, 'Seneschaucie' (of unknown author and date, but known to not be later than the time of Edward I: 1239-1307 (Hartley, 1969:141)), stys are similarly described. 'The swineherd ought to be on those manors where swine can be sustained and kept in the forest, or in woods, or waste, or in marshes, without sustenance from the grange; and if the swine can be kept with little sustenance from the grange during hard frost, then must a pigsty be made in a marsh or wood, where the swine may be night and day' (Anon, transl. Lamond, 1890:115). Similarly, 'and he ought to see that he have a good fold for wethers, and another for ewes, and a third for hogs, according as there are sheep' (Anon, transl. In Lamond, 1890:99), suggests control of the pig herd beyond that of letting them roam free-range. This is a change from the earlier husbandry texts, where it is emphasised that free-range and pannage is vital for the maintenance of a pig herd, and that the keeping of pigs should not be employed where this is not possible ‘And then when the sows have farrowed, let them be driven with the feeble swine to the manors and kept with leavings as long as the hard frost and the bad weather last, and then driven back to the others. And if there is no wood or marsh or waste where the swine may be sustained without being altogether kept on the grange, no swineherd or swine shall be on the manor...’. It is the shift from views such as these which are being targeted in this study. It is important to remember that while debating the types of pig husbandry at the varying sites studied in this research, the question is not to determine the presence or not of a ‘new’ technology, as the stying or stalling of pigs has a long history, but the change in the regularity of the use of such techniques in north western Europe, moving from something of occasional control or use to more intensive employment.

By 1681 Worlidge explicitly specifies that pigs should not be allowed to roam free range ‘but also by their treading and battling in case they be kept in a court made several for that purpose, they will convert all such vegetables they eat not, into excellent Soil. If they are suffered to run abroad, they waste their Flesh much; and therefore it is esteemed the most Frugal and Beneficial way to keep them always Penned into some Court, both for their Flesh and soil’ (Worlidge, 1681:172), providing some of the clearest evidence that a number of farmers were still in the process of changing from a roaming ‘pannage’ system to a more contained one. Indeed, as late as the 19th century pannage is still being advocated by some (Banister, 1799:446-447), and even in the early 20th century some promote this system over anything more controlled (Rowlands, 1923). In addition, while Culley (1794) has moved away from a desire to breed the largest and fattest pigs attainable, he emphasises that the main attribute of swine is still as a ‘waste’ animal ‘whose stomachs seem a receptacle for every thing which other creatures refuse, and which, but for these, would be often entirely wasted....The refuse of the fields, the gardens, the barns and the scullery, to them is a feast’ (Culley, 1794:171-2), rather than a breed in want of a specific feeding regime, suggesting that even in systems of greater physical control, there may still have been a relatively lassaiz faire approach to nutrition.

In the French text, ‘Maison Rustique’ there is a detailed description of the the ideal form of a Swine cote, ‘Let the floore or pavement of their cote be layed with thicke paving stone, and every moneth renewed with gravell or sand to drie up their pisse, for this beast though he be sluttish and dirtie doth notwithstanding prosper best in a cleane house that is well kept and maintained' (transl. from the French by Surfleet, 1616:106). 'The Hogges which you intend to keepe in and to fat shall not come fort of their stie, being alone and free from others, neither shall they have any light but at the doore which is made to go in at for to dresse them' (trasl. From the French by Surfleet, 1616:106) Whereas, Tusser and other texts emphasise the need for pigs to roam, this is the first indication in documentary sources of deliberate restriction of some pigs to the sty, albeit only for the fattening period.

Particularly of note is the emphasis by Early Modern writers for a pig sty to be warm and comfortable, 'Fresh straw oftentimes giving them, and renewed, doth fat them as much as their meat' (Surfleet, 1616:105). It is now recognised that while adult European pigs can weather temperatures ranging between 40-85 ^{o}F (4.5-29.5 ^{o}C) while on pasture, (with protection from the sun at highest temperatures), for fattening pigs temperatures of 75^{o}F (24^{o}C) are ideal (Sainsbury, 1965:28). Experimentation has also shown that draughtiness is a significant limiting factor for the success of sty-kept pigs (Brent, 1986:45), with those in draughts only growing up to half the fat weight of 'best kept' pigs. It is important to note these other factors that would affect the welfare of the swine, in particular having a low plane of nutrition, means pigs would be less able to cope with adverse conditions such as poor keeping (Pomeroy, 1953; Cairne and Pullar, 1957; Brent, 1986:46). When considering the variables of the sty environment Brent (1986) notes air temperature, draughts, bedding, stock rates, size and insulation as well as other factors all play a part in the sty affecting the pigs reaction to environmental and health factors. The early modern writers have clearly recognised that it is desirable to coddle the swine, even if the exact reasons for it are not understood. For example, they overtly recognised that 'Of all creatures the swine is most troubled against wind tempests' (Worlidge, 1687:303) but there is no indication they understood that the piglet is poorly equipped with hair and subcutaneous fat which means that it needs more assistance with heat regulation, merely recognising that swine enclosed in warm and cosy sties did better than those without.

2.1.2. A consideration of the level of knowledge in the Low Countries and other North-West European areas.

Belgium is seen as being, in the late medieval period, one of the most advanced areas of Europe, with historians defining Flanders agriculture as being of a 'progressive character' (Thoen, 1997:69, Slicher Van Bath 1969:179; Fussell, 1947). Flemish cities grew impressively during the thirteenth century (Boone, 2002:62) with, alongside England and the Netherlands, the most rapid growth in Europe (Allen, 2000:10). This stemmed from a slower growth from the later eleventh century onwards (Thoen, 1997:71) to a period seen as an 'Indian Summer' of medieval economic growth and demographic pressure which many areas of Europe did not experience (Van der Wee, 1993:48). In the 13th century the tremendous growth saw one estimation of the population of Ypres as 200,000 (although more realistic but still intensive is the 1258 estimation of 40,000 (Nicholas, 1992:130)). This period similarly saw the most important transformations of Flemish agriculture and it is likely that the impetus came from the necessity to feed the growing concentrations of people. Belgium and the Netherlands in the late medieval period had the most productive agriculture in Europe (Allen, 2000:3). New ideas in stock breeding were appearing not only here but in surrounding areas. For example, in Normandy the income earned from acorn grazing decreased by 90% in the late medieval period, as pigs were increasingly confined to pigsties for fattening (Plaisse 1961 and Fourquin 1969:338 in Comet, 2007:20). It seems unlikely that such innovations would not be implemented in Flanders where deemed appropriate.

There are relatively few direct contemporary texts from the late medieval period for Belgium (Wintle, 1991:65). Loudon notes that according to Harte, 'The Flemings' dealt more with the practice of husbandry than in publishing books on the subject' (Loudon, 1831:73) and there is a general paucity of books from the region. What documents exist are predominantly leases and demesne accounts, giving only the name of the farmer, the area leased and the rent (Thoen, 1997:69). For the consideration of husbandry in the late medieval period in particular, sources of comparable depth to those available in England are simply 'not available for many parts of the continent' (Woolgar et al.,2006:1). There is a very uneven geographical distribution of relevant texts with England, and to a much lesser extent France, containing the main examples from this period. For Flanders the availability of sources is described as 'patchy and varied' (Thoen, 1997:69) and there are few of obvious relevance to the particular questions being examined here.

This suggests that we should also look at literature from other parts of Northern Europe to establish the probable level of knowledge of animal keeping in the vicinity of the sites during this time period. This examination will focus predominantly on north-western European agricultural texts, as an area geographically and climatically located relatively close to Belgium and known to have close links with the country both in terms of immigration and trade. Wider comments about European technological development have often been made on the basis of English developments (for example White, 1962; Gimpbel, 1976) because England is blessed with an abundance of surviving records (Langdon, 1997:275) and is believed to exhibit a type of agriculture which has at least some similarities to that of the continent (Comet, 1997:12). There were many Flemings, for example, living in East Anglia in the early 16th century (Tusser,1557 in Hartley, 1969:12), enabling the sharing of ideas, including husbandry practice. Evidence of trade along the European coastlines is seen in references such as John Smith (1670) in 'English Improvements revived' who discusses the extensive tradition of fishing and shipping trade of England with the Hollanders (Smith, 1670 in McDonald, 1908:130), and Houghton (1727:451) highlights the number of Flemish trading vessels and the amount of trade carried out by them over a long period; contact was certainly being made with surrounding countries and the dissemination of ideas is likely. The lower North Sea area of southern England, northern France and the Low countries have been described by one historian as a 'powerful economic nexus' (Langdon, 1997:276) and another as having 'close diplomatic and economic ties' (Nicholas, 1992:xi). Innovations clearly spread rapidly between these north-western European countries; for example, the post windmill suddenly appears throughout the lower North Sea region (France, Flanders, England) in the late 12th century, with such rapidity that there is still historical debate as to which of the countries is the originator of the invention (Langdon, 1997:276).

Similarities also exist in the levels of urbanisation. Flanders in the late medieval period was the most urbanised area of Europe and had per capita the most productive agriculture of all of Europe (Allen, 2000:3), followed by England and the Netherlands as the next most successful European economies of the period. Population demands led, in all these countries, to a need for the rapid development of agriculture. For agricultural methods in particular there is consensus that there are similarities among these 'lower North sea' countries. Campbell (1997:244) describes English agriculture in the period in question as similar to Flanders in terms of the adoption of more intensive methods.

France and particularly the Low Countries appear to have been making some advances in husbandry from a somewhat earlier time than in the rest of Europe, producing cattle of a notably better size, quality and milk yield (Davis, 1997:417). Certainly by the mid 17th century there is evidence of the introduction and cultivation of new forage plants such as clover (Chambers and Mingay, 1969:11) and rye grass (Worlidge, 1704) to England, but these same plants had been utilised in Flanders since the thirteenth century (Trow-Smith, 1957:115), and practices in England were clearly being inspired by, and based to some extent on, the Dutch model of agriculture over the centuries (Davis, 1997:417).

Well connected and educated authors from countries such as France and England travelled across Western Europe during the medieval and post-medieval period and in many cases took notes on the farming techniques of the countries that they visited. 'A travelled man would be likely...to observe the farming of the countries he passed through and...might have written on the subject' (Fussell, n.d.,1). Samuel Hartlibs 'his Legacy, or an enlargement of 'The Discourse of Husbandry used in Brabant and Flanders' (1641) was, for example, derived from travels in the Low Countries by R. Weston, who later (1650) published his travels under his own name 'A discours of husbandrie used in Brabant and Flanders' (Fussell, 1947:41). Similarly Markham travelled to Holland and Ireland before writing 'Cheape and good husbandry' (1614) (McDonald, 1908:85).

Transcription of texts from one language to another are common, for example Mascall's first book in English 'The Government of Cattle' (1572) was largely translated from French (Fussell, 1947:10) and also owed much to the classical texts (for example his list of admirable qualities in beasts owed much to 'Mago the Carthaginian' (Fussell, 1947:11)). 'The Expert Gardener' published by A Islip, London in 1594 was compiled from the Dutch and French 'The Orchard and the Garden' (Fussell, 1947:37). Similarly 'Maison Rustique' (or 'The Country Farm') was originally written in French by Stevens and Lievault and translated into English by Surfleet (1616), with additions of Spanish and Italian information. French agricultural texts included those also translated into English such as Walter of Henley and Robert Grossteste, but there were few new texts in France until the early 14th century when some of the Italian agronomists were translated. King Charles V had Crescentius's works translated into French in 1384 and a treatise on cattle raising 'Le Bon Berger' was written by Jehan de Brie for Charles V, who appears to have had had interest in this area during his reign, also supporting the publication of treatise on veterinary practice.

The first known European texts on husbandry and agriculture date from the thirteenth and fourteenth centuries, the period of particular focus for this study, predominantly as handwritten manuscript treaties and classical texts mentioning agriculture, such as 'Liber ruralium comodorum' by Crescentius, later printed in Ausburg in 1471. Thirteenth century original texts include Grossetesstes 'Boke of Husbandry', Walter of Henley's 'Husbandry', and an anonymous tract entitled 'Hosebondrie'. Such documents would have been read by the more 'educated agrarians' at the time of our site's occupation, but were at least two or three hundred years old at this point in time and were unlikely to have provided much direct practical advice. Similarly, the authors of these texts were mainly ecclesiastical which may not reflect the 'normal' farmer's lot. The first great treatise on farming, printed in English, was Fitzherbert's 'Boke of Husbondry' (1557), written by the lord of a Derbyshire manor (McDonald, 1908:13), now often seen as the 'father of husbandry' (Cunningham, 1921:238). There is a suggestion of some skill in land improvement, but only rudimentary animal husbandry skills. For example, in Fitzherbert there is no indication of the type of stock to breed from, of the characteristics to breed for, or suitable fodder to feed, merely the suggestion of fattening and selling weak and poor stock (Fitzherbert, 1557 ed). Fitzherbert's only pertinent advice about livestock is to buy young and healthy looking cattle, to not buy from any better ground, and to geld oxen so they will then be 'the most higher and longer of body and the larger boned.' These were evidently desirable traits.

While it is unlikely that most farmers would have had direct access to such texts, since they were extremely costly to obtain and required a high level of literacy, they were certainly studied as part of any 'gentleman's' education (Fussell, 1947:1), and provide a reflection of the 'best' knowledge available at the time (Guiot, 1992:94). Much of common practice would have been handed on by word of mouth, particularly until the rise of the printing press in the 16th century (Fussell, 1947:4), and books such as Tusser's 'A hundredth good points of husbandrie' (1557) were probably deliberately written in verse to enable ease of memory and repetition. These texts provided both those of lower orders as well as gentlemen farmers snippets of information about farming both in Britain and abroad, and are certainly a source worthy of consideration. Disseminating information in this way would require a degree of education and literacy among the receiving classes, suggesting that the target audience was not necessarily those who were actually farming, but there may have been a 'trickle down' of knowledge to these practitioners.

While much of what is written in such texts may seem fanciful today, they often contain a lot of practical sense and illustrate the issues of the farmers of that time. Even the most classical texts, translated from the great Greek and Roman scholars such as Cato, Varro et al (McDonald, 1908:7) include lists such as the most desirable attributes to look for when breeding animals such as pigs 'And most apparent is it, that not only the French, and the Dutch in those daies, but also the Italians, and the Grekes, nourished great heardes of Swyne...Their proportion would be long, large sided and [?], wide buttocked, short legged and footed, big necked, and well brawned....' (Heresbachius transl. By Googe 1601:140). These texts were prevalent in the early medieval period and continued to be produced throughout the medieval and into the post-medieval periods. These books are clearly not intended as solely academic works but also to offer some practical guidance.

Husbandry books were often reprinted over long periods of time. Fitzherberts 'Boke of Hosbandry', originally printed in 1523, was still popular well into the later 17th century (Fussell, 1947:3), a fact which was used as evidence by later authors such as Broderick (1881) and Ernle (1948:28) to claim that very little had changed in the basic principles of farming across Europe over this long time period (Fussell, 1947:6). Others, such as Armitage (1980:411), Kerridge (1967:38), Davis (1997:415) and Overton (1996:113) argue that the 16th century saw the beginnings of attempts to consolidate farming practice, providing a foundation for later experiments in technique starting in the 17th century, albeit lacking much scientific basis (Fussell, 1947:20). These opinions suggest such earlier shifts in knowledge were a progenitor of many of the agricultural improvements carried further in the 18th century.

By the mid 17th century, there were many pamphlets being produced about issues of improvement of land or farming techniques allied to the author's specific interests, such as fen reclamation or enclosure (Fussell, 1947:51). There were, however, still more generalised treaties being written such as Walter Blith's 'English Improver' (1649) one of the most important 17th century contributions to practical agriculture. It is clear from such texts that during this period there was still a lack of knowledge about how to judge the quality of beasts, and it has been described as a time when random observations still directed the breeding of stock, and that the emphasis was not upon the breeding but the basic raising of the animals (McDonald, 1908:123); many of the texts focus on the best techniques for fattening animals for market. This follows a long tradition which early texts such as 'Seneschaucie' (13th century) emphasised 'The bailiff ought, after St Johns Day, to cause all the old and feeble oxen with bad teeth to be drafted out, and all the old cows, the weak and the barren, and the young avers that will not grow to good, and put them in good pasture to fatten, so the worst shall then be worth a better' (Anon. Transl by Hartley, 1969:97).

It took until the early 19th century for knowledge to progress sufficiently that Bewick could make an engraving of an improved pig, from Sherburn, Durham and describe it using defined and known breeds requiring no further explanation than their names for the reader, 'by a mixture of the Chinese black swine with others of the larger British breed, a kind has been produced which produces many qualities superior to either of the original stock' (Bewick 1807 in Palmer and Mattely, 2007:84). Similarly Culley (1794) discusses the merits of specific Chinese or black breed as providing sweet meat that is fast to fatten, although not fattening to a great weight (Culley, 1794:174), suggesting specialised knowledge about the attributes of varying breeds. Indeed, Culley similarly emphasises that 'it would seem that the largest domestic animals are not the best or most advantageous to the breeder or feeder' (Culley, 1794:177) '...we have just been observing of the largest and biggest-boned animals not being the best, tho' formerly thought so' (Culley, 1794:185), suggesting a deliberate movement away from older husbandry techniques.

It is apparent from this discussion that the agricultural changes of the 13th and 14th century were clearly documented despite questions remaining over their audience and how widespread their use was. The number of books in Europe about animal husbandry expanded greatly throughout the period and was a litmus to a process of change that takes many centuries to complete. It is also evident from such documentary sources that Flanders is integral to the beginnings of this process, and with the sites examined spanning this crucial period (see figure 2.19 at the end of this chapter for a summary) it is clear that change may be evident between sites of differing time periods because of developing agricultural practice, as well as geographic location.

2.1.3. Documentary descriptions of Flanders and the general vicinities of the sites

By the eighteenth century Flanders was considered an especially fine area for farming. Texts describe Flanders as containing particularly notable soil for agriculture, it being 'Deep, level and fertile....a richer soil can hardly be desired to repay the industry of mankind, two, three and even four foot deep of moist and putrid but friable and mellow loam' (Young, 1793:8), having been enriched particularly by being covered by the sea in the past, making it excellent for agriculture. However, Flanders (and Normandy) are also highlighted for the quality of the pastures, with 'nothing either in England or Ireland to equal them' (Young, 1793:9). For cattle in particular the landscape of inner Flanders is considered to be particularly rich. Similarly, for sheep Flanders is seen as providing excellent stock, both of large size 'in Flanders and some parts of England it is not uncommon for a quarter of mutton to weigh 40-50 pounds' (Anderson, 1775:343) and also breeding sheep notable as the best in Western Europe for providing wool for combing (Young, 1793:291). North (1738) favourably compares the soils of Flanders and England and discusses the excellent form of the sheep of Flanders, both in terms of breeding productivity (noting that Flanders sheep have many lambs) but also that the Bruge capon is as large as two English.

In earlier times, Hartlib (or Westons) '<u>A discours of husbandrie used in Brabant and Flanders</u>' describes the richness of Flanders as an agricultural nature 'The barrennest, Heathie and Sandie Lands in [Brabant and Flanders] did produce richer Commodities, by an ordinarie waie of Husbandrie there in practice, then the strongest and richest grounds that were in both those Countries. When I first arrived at Dunkirk and went to Bridges [Bruges]....I saw as rich a Countrie as ever my eies beheld, stock't with goodie Wheat and Barlie and excellent Meadows and Pastures. The Soil began to alter into wors, mid-waie between Bridges and Gaunt [Gent]....' (Hartlib, 1652:5). On journeying across Flanders Hartlib/Weston describes the form of agriculture he had seen between Dunkirk and Antwerp as 'market-garden like'. He directly discussed the farming systems employed with Flemish farmers and then later he experimented with the same in England. While focusing on general agriculture rather than animal husbandry, this seventeenth century text does mention some animal husbandry techniques highlighting differences from the English system, which he considered to be improvements. Similarly, Worlidge in 1681 describes the best sort of cow as being of Dutch variety, as it gives a lot of milk and often bears twins (Worlidge, 1681:172). Dutch sheep are also highlighted as the largest in Europe, and often bearing twins or triplets, thus highly desirable to own, (alongside Spanish sheep, which have particularly fine fleeces). Even Dutch rabbits are praised. 'The great Dutch-rabbit is the best for their food, being much larger than the other' (Worlidge, 1681:174). While this evidence is later it is clear that these changes are based on earlier advances. Loudon (1839) when talking about the nature of the land of Holland includes a discussion on 'the Flemings', incorporating both when describing the agriculture of the area: 'It is certain that even in the thirteen century [agriculture] was in an advanced state, and ever since the culture of the Low Countries, both agricultural and horticultural has been looked up to by the rest of Europe' (Loudon, 1839:73).

The coastal areas of Flanders are generally less lauded as good farming land, 'Between Rossendal and the dunes there are many little houses, each with their own garden and one to two fields enclosed with wretched dune sand' (Young, 1793:153). There is no indication that the coastal areas had been improved from earlier times and it is likely that this also reflects the state of the land in earlier centuries, indicating again the probable ' poverty' of coastal areas for the keeping of animals or the growing of crops. John Ray (1673) when travelling through the region observes that at Nieuport (not far from Raversijde) 'the Inhabitants maintain themselves mostly by fishing' (Ray, 1673:56), with no mention of animal husbandry playing an important role in the region. This also confirms the coastal fishing emphasis in this region, a continuation of the domination of North Sea fishing by villages such as Raversijde. The coastal area also became important for peat-digging from the twelfth century onwards (Thoen, 1997:72). The coastal area of Flanders specialised in products from stock breeding (wool, cheese, butter, meat and hide) where animals were utilised, with products coming mostly from cattle and sheep pastured on the saline clay soils and dunes. There is no evidence of pork being of any importance as a product for the area (Thoen, 1997:72). In Weston/Hartlib's (1652) text, the area near Antwerp is described as a marsh, and only suitable as a feeding ground for cattle, being of poor form. Loudon, however, in the early 19th century, believes that a 17th century exploration by Radcliff found the strongest and best soil in Flanders near Ostend [which would presumably include the vicinity of Raversijde], and between Bruges and Ghent some of the worst (Loudon, 1839:73), with Radcliff's agricultural divisions presenting the coastal region as 'consists of the strongest and heaviest soil which Flanders possesses and a similarity of quality prevails generally throughout' (Radcliff in Loudon, 1839:73), singling out the polders 'or embanked lands' of Flanders as being very productive soil (Radcliff in Loudon, 1839:75). While this sounds counter-intuitive to modern understanding of such soils, it is possible that this is referring to such soils improved by manuring campaigns, similar to those 'plaggen' soils identified in the Netherlands from this period (Van Waateringe, 1992:89). It is known that sheep were penned in the Netherlands during the late medieval period (Hoppenbrouwers, 1997:106) and so it is likely that other animals, such as pigs, may have been receiving similar treatment. The sites examined in this study span this coastal region and the land further towards the interior of Flanders (see later in this chapter).

2.2. Archaeological information about the six sites being examined in this study

Literacy was, and often still is, limited in many parts of the world and during most periods in the past. Even in literate societies environmental changes/impacts and husbandry techniques are often unrecorded because they are seen as normal processes and activities that form the backdrop of day-to-day life. The natural environment in which human history unfolds is poorly served by written history, and collaboration with other sciences is vital to tell a complete story (Oosthoek, 2008:1). For the topics of interest to this study we need to consider a gamut of techniques beyond that of historical sources, and judge whether such sources provide similar or differing information (Albarella, 1999). This thesis combines sites over a range of periods from Roman to High Medieval and Late Medieval rather than investigating only one time frame, and were specifically chosen to investigate a targeted question, concerning the possibility of identification of late medieval stalling using a range of information sources. As discussed above, as historical sources providing information on the late medieval shift in husbandry in Flanders itself are limited, zooarchaeological studies are crucial in beginning to interpret any changes in husbandry in the same way that they have been combined with documentary sources for later considerations of agricultural improvement (for example Albarella, 1997).

The question of whether such shifts in keeping of animals (husbandry) can be definitively identified through the zooarchaeological record at specific sites is still up for debate. In order to investigate this question six archaeological sites were selected for examination, from the area nowadays defined as Flanders, the Dutch-speaking northern part of Belgium. These selections were based on the availability of large numbers of pig bones in significant contexts from each site which makes them suitable for incorporation into this study.

The overall focus of this study is pigs and, while other species are considered (see Chapter 3), they are the primary species are being examined. Where other species (in particular sheep and cattle) are included, this is to provide a general picture of the husbandry of the sites (Chapter 3) and the health of the animals at the site (Chapter 5). For this reason, pig jaws alone are examined from 4 of the sites, and at only Raversijde and Koekelare are wider samples of material (including other species) are examined. This is in order to at Raversijde and Koekelare consider the information that can be gained from traditional techniques by including the examination of full faunal assemblages. For the other four sites, however, this was deemed unnecessary as the assemblages were chosen primarily to support the interpretation of the husbandry at Raversijde and Koekelare. It was felt that demonstrating the value of traditional faunal analysis at two of the sites was appropriate, without becoming repetitive and creating unnecessary data for this examination, although it is recognised that for most archaeological sites, not examining a very specific research question, a full faunal analysis is appropriate.

Following is a brief description of each archaeological site from which primary evidence has been gathered. Full site reports of the development and archaeological excavation of the sites are not reproduced as much of the information contained within them lacks relevance to the specific interests of this investigation. The focus here is on a description of the site containing the salient information for the faunal assemblages examined as part of this study, with particular emphasis on evidence for the development and nature of the sites. The site descriptions for Raversijde and Koekelare are more detailed as these sites saw not only an examination of selected pig jaws but also an examination of the primary faunal assemblage. There was therefore a requirement to detail where the bones were excavated to draw them in line with contemporary assemblage reports. For the sites where only jaws were examined a brief account is included to summarise why these sites were selected together with a brief history and environmental description.

An etymological point to note is that it was decided to label the sites examined in this study after their modern locations for simplicity and ease of identification (see Nicholas, 1992:xiii for naming conventions also used in this study) albeit within the published literature other names may be used. A location map of the sites within the modern area of Belgium is provided for reference (See figure 2.1).

Figure 2.1. Map of the location of Belgium within Europe, and identifying the location of the sites within Belgium from which faunal material was analysed within this study.

2.2.1. Koekelare

'Koekelare' will be used throughout this study as the term for the site also identified as 'Het Oosthof' in the primary grey literature and published material, located within the village of Koekelare.

Koekelare is a historical site covering a clear and discrete area, comprising of a large threefold moated site in an oval area of around 200 metres by 140 metres inserted within the curve of a stream known as the Sint-Maartensbeek (Dewilde et al., 1996:190). Archaeological excavations were first carried out in 1988 and these continued sporadically across a decade, albeit the bulk of the large-scale investigations occurred within a 2 year period. A local society (*Spaenhiers*) was the first to undertake excavations at the site in collaboration with the professional body of the IAP (*Institute for the Archaeological Heritage of the Flemish Community*). The later large-scale excavation was entirely undertaken by IAP with the local society maintaining interest through the publication of an annual yearbook (Dewilde et al., 1996:190).

Koekelare is a village lying 18 km from the North Sea in the Flanders arrondisement of Diksmuide. The archaeological site in question, from which faunal material has been analysed, is situated slightly to the north-east of the modern village centre of Koekelare and is positioned within a landscape of multi-period occupation with finds from the Bronze Age onwards (see figure 2.2). The site itself lies 65 metres north of a major Roman and Medieval access road (see figure 2.2) running to Bruges. Similar sites have been found from across Flanders (Verhaeghe, 1981). Koekelare has been identified as containing several phases of occupation (Dewilde, Pers. Comm:2006), although only one of these is significant to this study and the faunal assemblage examined dates to this particular phase.

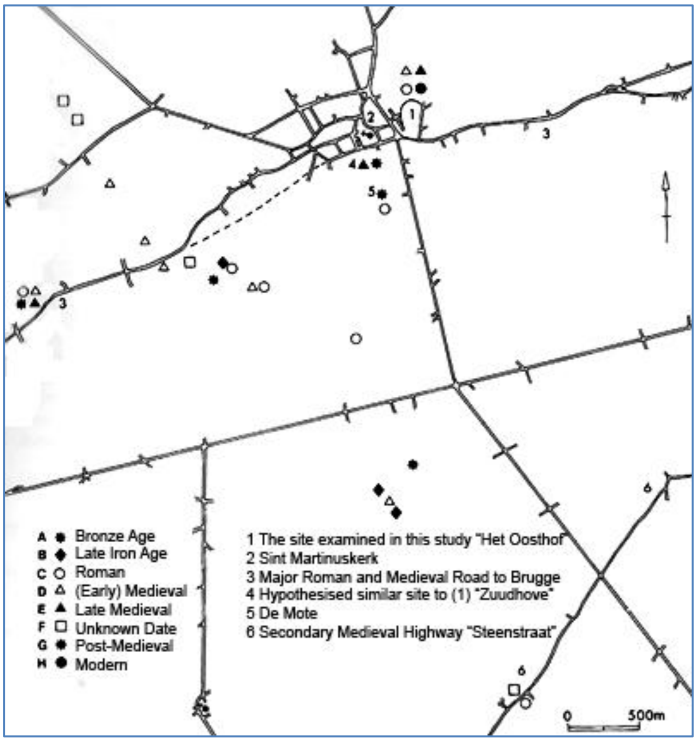


Figure 2.2. Location map of the multi-period finds in the surrounds of the modern village layout of Koekelare, and the location of the site from which the faunal material is examined within this study, adapted from Dewilde et al., 1996:179

The settlement of Koekelare is commonly thought to have been named from the Germanic *coc* or *kook*, 'a hill' or 'an elevated place', and *lars* or *lare*, 'an open place in a woody and marshy area', and first appears in historical documents in 847 when Charles le Chauve (the King of Francia Occidentalis) grants the area known as 'villa Koekelare' to the Benedictine abbey of Saint-Amand (now in the north of France). Monks evangelized the area and placed it under the patronage of the soldier monk St. Martin and a priory was built in the area, which is likely to have been the genesis for the growth of the village settlement.

During the main period of interest for this site, the 15th century, Koekelare lay within a landscape having good access to nearby towns, lying close to the town of Torhout (only 7-8km away) and not far from the larger cities of Brugge, Ieper, Mason and Kortrijk. Brugge in this period would have been the main focal centre of the area, with the site of Koekelare lying close to a direct access road to the city originally dating from the Roman period (see figure 2.2). It was likely that there were strong links to the wider area and direct trading with the city was feasible. The village itself lies in a pastoral landscape and is some 4km from the most easterly edge of the coastal polder zone (Dewilde et al., 1996:180).

Koekelare is primarily identified as a moated site and is typified by its central occupation level as a 15th century cattle breeding site (Ervynck, A., pers. comm. 2006), although a Carolingian 9th century oval farmhouse and landscape has been shown to underlie this most prominent of occupation phases (Dewilde et al, 1996:190). The vast majority of the faunal material has been dated to this central 15th century occupation level (Dewilde, pers. comm. 2006) and is of primary importance for this study as it has a large quantity of faunal material contemporary in date and also securely dated.

Today the area of the archaeological excavations are predominantly landscaped as a green park and leisure area in the vicinity of Koekelare village, with some parts of the original site lying under private boundaries and developments which precluded the whole of the occupation area from being available for access during the original excavations. However the size of the site and topography has been clearly preserved in the surrounding street layout (see figure 2.3), enabling a confident interpretation of the geography of the features, and a large proportion of the site was in fact available for the excavation.

Figure 2.3. The site of the central 15th century mound at Koekelare, overlying modern land boundaries of the site. Shaded areas indicate the excavated areas of the site (From Dewilde et al., 1996:181).

Prior to the first clear evidence for on-site occupation, dating to the 9^{th} century, there are indications in the surrounds that the landscape was in use in earlier periods (see figure 2.2). The village of Koekelare has seen some form of occupation since the Iron Age (ceramic and iron artefacts have identified), and possibly sporadically from the Bronze Age onwards (cemeteries with funerary urns placed in a circular pattern have been excavated and identified from this period) with a little Neolithic evidence also present in the surrounding landscape. A few Roman finds in the local vicinity to the site exist, namely tracks, small ditches and limited archaeological material such as fragments of Samian ware pottery, and in the larger vicinity of Koekelare a Roman burial has been identified along with Roman roads, in particular the one running to Brugge. However there was no clear evidence of major habitation at the specific site examined within this study from this period.

The earliest true phase of occupation at site dates from the 9^{th}-10^{th} century and consists of an oval area of c.150 metres in length by 80 metres in width surrounded by a ditch in the curve of St. Martensbeek (St. Martins brook) . This ditch consisted of three ditches parallel to each other, each 5-6 metres in width, with a z-shaped defensive entrance (Dewilde, pers. comm. 2006). The site has no indication of ever having been used specifically for overtly defensive purposes despite its design, although it may have been built as a reaction to a plundering of the village by 'Northmen', with the form interpreted as being developed both for prestige as well as a defensive purpose. A few faunal remains were recovered from this period from small pits and the ditches and it is possible that animals may have been kept in it when it was not being used for defence (Dewilde, pers. comm.:2006). No buildings have been identified on site and it is likely that Koekelare in this period was utilised more as a temporary or very superficial settlement which was also potentially used as some sort of animal enclosure when not needed as a defensive structure - an interpretation based on similarities with other enclosures of this period, especially in the Netherlands. Faunal material from contexts from these periods were excluded from analysis to ensure that the assemblage examined was from a concise period of site occupation and use.

The next main evidence of development in the form of the site occupation is during the late 13^{th} to early 14^{th} century, with a late 13^{th} century site built in the north part of the oval on an artificially raised mound of around 0.8 metres high (Dewilde et al., 1996:190). This phase of habitation consisted of two small buildings built upon the precursor of the later bailey, following the lines of the earlier oval area. These buildings have been interpreted as possible barns or stables, suggesting the presence of animals on site, with the owner living in some sort of brick building with masonry foundation in an outer court. However, this phase is particularly hard to interpret due to later disturbance of the site, in particular 20th century Second World War bunkers intruding into much of the area from which evidence of this phase has been identified. Some faunal remains were recovered for this period but only a very limited amount in comparison to the considerable bulk of 15th century faunal material; these were again eliminated from this investigation.

The main period of the occupation of the site of Koekelare, and that which is most important for this analysis, dates from the 15th century and appears as an increase in height of the central artificial mound from the previous periods, from around 0.8-1 metres in height in the 13th-14th century to around 3 metres on average in the 15th century phase (Dewilde et al, 1996:190). The vast majority of the faunal remains found at the site were recovered from the associated central ditch to this mound, which was also widened from the previous occupation phases of the site (see figure 2.4). This period of use was clearly identifiable in excavation, and is seen as the major occupation phase of the site, with the building of a rectangular brick house evidently reflecting an increase in status of the site. The layout of the site is also somewhat reorganised in this period, with the filling in of the earlier northern bailey ditch. Similarly, dating to this period is an orchard inside the bailey, identified from plant pits during the major excavation. Orchards are very rarely recognised archaeologically and few have been identified from this period; it is possible that this is part of the reorganisation of the use of the site at this time.

The 15th century central mound has also retained some traces of later intrusions by Second World War defensive features such as bunkers and trenches. However the majority of the contexts appear largely unaffected and there is little concern that significant potential for interpretation has been lost by their presence.

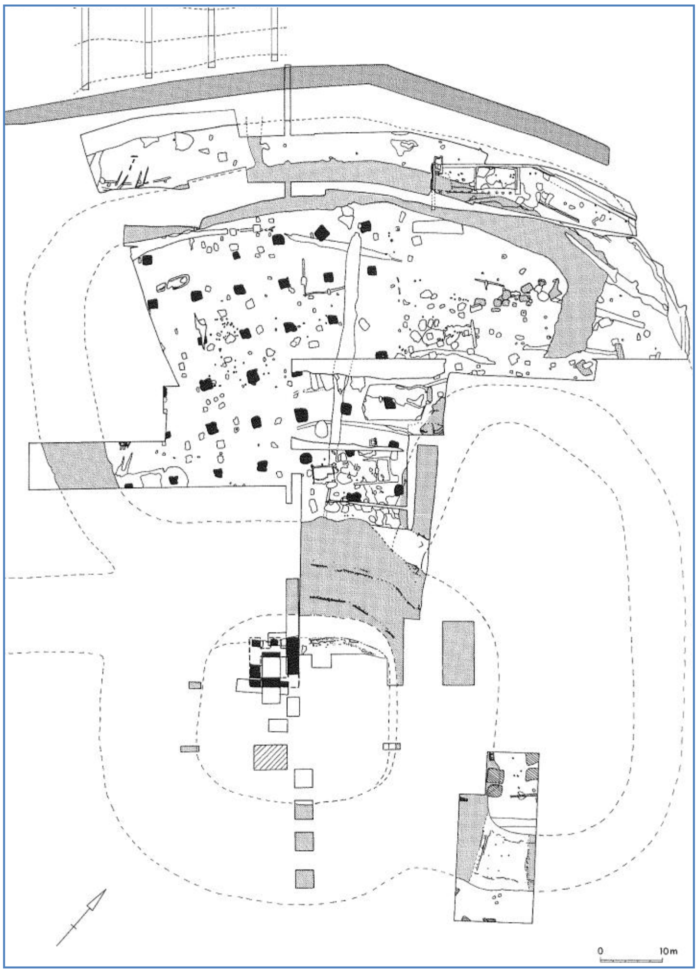


Figure 2.4. Details of the 15th century features excavated at Koekelare, (Dewilde et al., 1996:187)

The faunal remains were immediately identified as numerous from this period and the primary excavators instantly recognised a prevalence of cattle remains, something that they interpreted from early on as indicating that in the 15th century the site may have represented a cattle breeding station, with site usage appearing much more clearly dominated by cattle than in the previous periods.

How the presence of an orchard at Koekelare relates to the interpretation of the site as a cattle breeding centre is unclear, although it provides added supporting evidence of the changing use of the site from a place for the ‘elite’ to the working location of a wealthy farmer in the 15th century (see figure 2.5 for artists interpretation of Koekelare at this time).

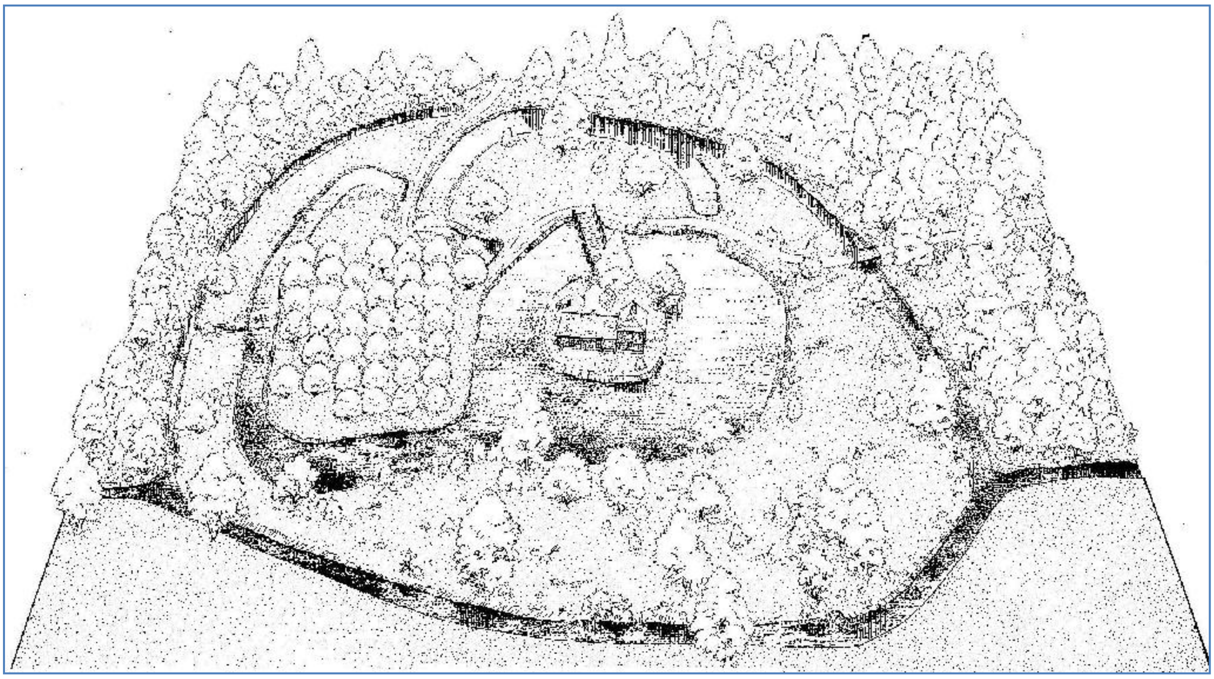


Figure 2.5. An artist's impression of the interpretation of the 15th century archaeological features and surroundings at Koekelare adapted from Van Meenen, Web reference 2.1.

The large amount of faunal material was predominately recovered from the ditch surrounding the central mound, from contexts confidently dated to a concise period in the 15th century and occurring in a clear 30-50cm thick layer within the ditch. The vast majority of the faunal material was recovered from the area in front of the building and has been securely dated from the form of datable bricks, and by pottery from the associated building known to be contemporary in date with the ditches. The pottery is of similar type to that found at other sites across Flanders, for example Raversijde, and mostly comprises storage and cooking vessels with some indications of imports such as stoneware from Germany and a limited number of fragments of luxury items such as glass and Majolica pottery. The pottery is an homogenous assemblage pointing to a 15th century occupation date for this phase, securely dating the bones used in this research as from this period and providing an excellent clearly dated sample for analysis.

Figure 2.6. Section through the surrounding ditch or moat from which the vast majority of the faunal material was obtained. (Dewilde et al., 1996:183)

This 15th century phase marks the apex of occupation at Koekelare. The last occupants of Koekelare abandoned the site completely in around 1510 and evidently had some prior knowledge of their departure as unbroken pottery was deposited in the ditches. It is not obvious why the site was abandoned at this time and there are no indicators of where the occupants moved to. This event however gives a concise end to the site and helps provide confidence that the vast majority of the faunal material can be ascribed to the 15th century period, something supported both by radiocarbon dating and ceramic finds. Very little later faunal material has been identified other than some carrion burials of pig, horse and cattle in the eastern area of the site.

The sheer amount of the 15th century faunal material, the majority of which has not been examined other than a brief evaluation by Anton Ervynck in 1991 (Dewilde, pers. comm, 2006) however could not have been accumulated in a deposition event just prior to the closure of the site, despite its deliberately sealed nature. It is likely that it would have taken a few years to accumulate such a large quantity of bones, stretching into many thousands. While some mixing with earlier phases is possible, contexts were clear and defined and no aberrant cross-dated material was found. Excavators are confident, from the dating evidence, that the vast majority of the faunal assemblage is from a 15th century single-phase occupation (Ervynck, pers. comm., 2006). Even if some mixing had occurred during excavation, the percentage of earlier material to later would be small, and so any potential for error introduced into the data collected is limited. It is the very nature of the faunal material so clearly dated to a concise and well-defined period (summarised as the 15th century, and ending at the latest by 1510) with so many bone fragments present, that makes it an excellent example for use in this analysis.

During excavations a 19th century high-status house was identified lying partly to the north of the 15th century site, with possibly an associated vinery and exotic trees, some of which are still present. It is thought the oval area may have been used to grow vegetables at this time, with small buildings/sheds across the site, but there is little evidence of disturbance of underlying contexts by occupation in this period. In the Second World War the evidence appears to suggest the site was used for bunkers, and disturbance has occurred in a limited number of features from this occupation.

It has been hypothesised that there may have been an almost identical site to the south of the modern village of Koekelare, identified on Figure 2.2 as 'Zuudhove'. It has however been impossible to investigate this, or obtain faunal material, as it exists under a modern developed area and so cannot be explored.

Koekelare is situated c. 20-25 km from the coast, close to the border of the transition between the coastal plain marine clay and the 'sandy' Flanders area of geology and is an area where cattle were historically bred and well suited to cattle breeding (Doing, 1995:147, Bieleman, 1992.:166). Its slight elevation means that the landscape is pastoral (see figure 2.7) but surrounded by ponds and marshy lands at lower levels. Documentary evidence from the 18th century map shows uncleared forest around the vicinity of the village of Koekelare with integrated pastoral land. It is known there was a hunting ground adjacent to the site of Koekelare in the later medieval period although it was prohibited to all but the elite, and the area is thought likely to have been well forested in this period, albeit fairly open.

The site of Koekelare itself would have been located on the edge of the cultivated land of the village and with forest to the north, and this forest is thought to have continued into the fifteenth century, being used as a working forest. It is very probable that the animals from the site of Koekelare would have been run in it (Anton Ervynck, pers. comm., 2006). Therefore, Koekelare represents a site far from marginal when considering conditions for animal husbandry.

Figure 2.7. Example of surrounding pasture landscape- Koekelare in modern times. (Web Reference 2.2)

2.2.2. Raversijde

The village of Raversijde was known in historical sources as ‘Walraversijde’ (De Paepe and Pieter’s, 1994:237), with an etymology probably deriving from a former resident known as Walrav, with ‘Ijdes’ or ‘(h)ydes’ being small ports or tidal inlets from which fishermen were based (Tys, 2006:24). The modern name of ‘Raversijde’ will be used throughout this study to refer to the excavated medieval village to prevent confusion.

Raversijde is a site defined as a late medieval fisherman’s village located on the Flemish coast in the modern municipality of Oostende in the province of West Flanders, Belgium, (see figure 2.1). Since 1992 an archaeological team from the Institute of the Archaeological Heritage of the Flemish Community (IAP) has been carrying out archaeological excavations in collaboration with the Provincial Government of West Flanders (Pieters, 1997:169, Da Paepe and Pieters, 1994:237). Around thirty houses of the medieval settlement of ‘Walraversijde’ were excavated (Kightly et al., 2000:27), covering an area of around three-quarters of a hectare. The site of excavation however has only covered a small area of the original village (see figure 2.8).

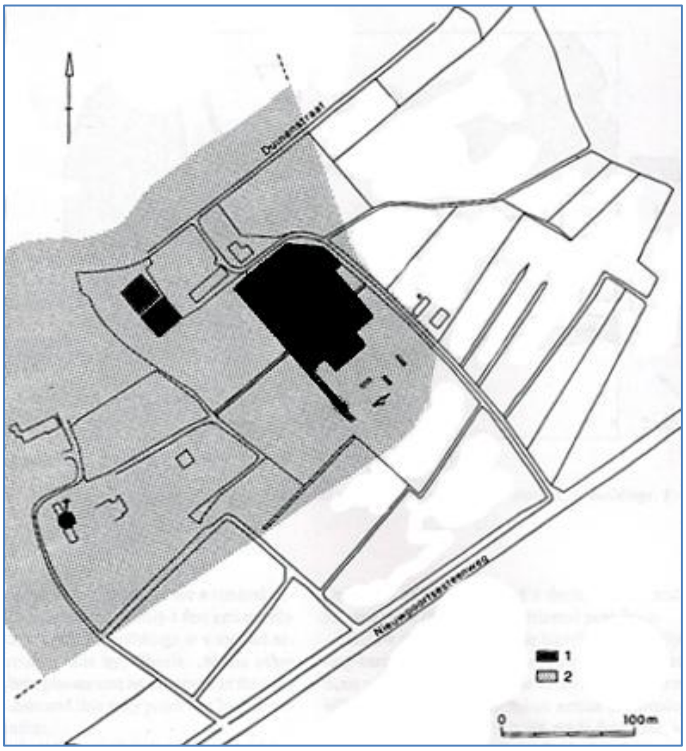


Figure 2.8. Map defining the excavated are of the late medieval village of Raversijde, with the darker shading (1) indicating the excavated area of the site, and (2) indicating the hypothesised total village area. (Modified from Pieters, 1997:170)

Raversijde in the fifteenth century occupied a size somewhere between the village and town norms of the region. It was considerably larger than other villages in the locality such as Middelkerke and Mariakerke, which consisted of a few farms clustered around a church, however it was significantly smaller than the local coastal towns of Oostende and Nieuwpoort (Kightly et al., 2000:17). The Raversijde economy was heavily reliant on fishing (Pieters, 2002:209), demonstrated by the number of ships ‘skippers’ (each with their own boat and crew) that were resident in Raversijde. In 1480 documentary sources report Raversijde as housing sixteen skippers in comparison to the seven in Blankenberg and ten in Heist (nearby villages of similar size) and the twenty-five of Nieuwpoort and fifty of Oostende, large local towns of the region (Kightly et al., 2000:19).

In the fifteenth century Raversijde probably had at least a few hundred inhabitants and was large enough to boast a sizeable chapel, built between 1420 and 1430. This building shows that Raversijde was a flourishing community, with the chapel having three aisles, various altars and a large and impressive tower. Its founders heralded from the highest social circles in Flanders including a councillor at the court of Duke Philip the Good and a large landowner in the local area (Kightly et al., 2000:17), as well as prominent village inhabitants such as the van Varsenare family, again emphasising the importance of the village in the local area. Small finds similarly reflect this relative wealth with imported goods and luxury items along with more serviceable materials such as textiles (Rogers, 1998:303) suggesting a mixture of affluent as well as less rich inhabitants.

Despite these important residents Raversijde never became an independent parish and had no market of its own. Indeed because of its fishing focus the village appears to be less invested in its landscape than most of the surrounding communities (Pieters, 2002:209; Tys, 2006:29), with agricultural development evidently a low priority. During the 15th century the development of fishing techniques meant that longer trips were possible to more distant fishing grounds (De Vries and Van Der Woude, 1997:245). It is likely that the Raversijde skippers worked mainly for middlemen in Nieuwpoort and Oostende, maintaining good contact with these localities, although there is historical evidence that some of the traders were located in Raversijde itself (Kightly et al., 2000:19).

The earliest evidence of human activity at the site is its apparent use for agricultural activities (Pieters, 1997:169), substantiation for which comes from a buried plough-layer encountered underneath all the later buildings. However no dating evidence has yet been obtained to conclusively indicate exactly how early this was. Close to the dunes there is also evidence for the occurrence of peat-digging earlier than the main 15th century habitation phase. This is tentatively dated as from the Roman period, although peat digging is also known to have been important in the region from the 12th century onwards with the focus on many of the polder lands moving away from sheep husbandry back to peat production (Thoen, 1997:171).

The first historical documentary indication of the village is a landbook from 1357 which describes a plot within the 'village of Wulravens hide'. During the 13th and 14th centuries the county of Flanders was flourishing with Ghent, Ypres and Brugge existing as large, international cities, their prosperity spreading into the surrounding countryside. Crops and stock (in particular sheep) were produced in the surrounding area to supply the cities (Tys, 2006:25), and fishing villages appeared along the coast, particularly in the second half of the thirteenth century. It is likely that Raversijde was one of these developing villages, situated on a small inlet of the North Sea (Kightly et al., 2000:13). The most important period of occupation on the site however occurs during the 15th century, and it is this phase that is highlighted within this study. To date, of the close to thirty buildings excavated on this site from this period, nineteen buildings have been found with brick wall foundations. The earliest dates for this village appear to be from the end of the 14th/beginning of the 15th century, when the former agricultural zone becomes a zone of habitation. There is no apparent evidence of the control of animals on the site, such as sties, although this may be due to them being built from materials such as wood, leaving no trace and so 'absence of evidence' does not necessarily mean 'evidence of absence'

It has been hypothesised that the genesis of the village came through severe damage, caused by numerous high spring storm-tides in the 14th and 15th centuries (De Paepe and Pieters, 1994:237; Pieters, 2005:145) to the previous settlement site which was located to the north-west of the late medieval village closer to the sea-front. Neglect of the maintenance of the dune belt along the coast due to a widespread economic crisis (Nicholas, 1992:259-261, Kightly et al., 2000:13) exacerbated the effects of the storms, with the dunes being weakened by unrestricted rabbit tunnelling and cattle grazing. This meant that the original site of the village of Raversijde and its environs were affected badly by heavy sand drifts as well as severe damage from heavy storms (Kightly et al., 2000:15, Augustyn 1995:14). Together these factors caused this previous site of the village to become part of the beach and severely damaged the viability of habitation on the site. As a consequence in the early 15th century it appears that in one concise movement the village was relocated behind the relative shelter of the dunes, with the construction of a protective dyke in the early 15th century being the first step towards this (Pieters, 1997:176).

This beach village probably dated back to the 10th-12th century at its earliest and can perhaps be seen as the first stage of 'Walraversijde', despite being in a different location to the later village (De Paepe and Pieters, 1994:237). A comprehensive migration to the later habitation site is supported by the regular and homogeneous lay-out of the village which suggests deliberate planning, and also through the chronological data provided by the material evidence during excavation. It is clear that movement was swift and in one phase, rather than a gradual shift from one location to the other. No material was analysed from this earlier location of the village in order to examine a concise single-span dated site.

The late medieval site of the village was in use from this early 15th century period until it was virtually abandoned due to the uprising of the Franc of Brugge against Maximillian of Austria in the last quarter of the 15th century and beginning of the 16th century. This was a period of military troubles and civil war spanning a decade, which included obstruction of trade combined with socio-economic turmoil (massive inflation, high tax burdens), food shortages and outbreaks of pestilence (Pieters, 1997:176, Kightly et al., 2000:21).

Raversijde itself was located between two hostile sea ports (Oostende and Sluis sided with Brugge, Ghent and Nieuwpoort with Maximillian within the dispute). Much of the violence took place on the coastal plain so the inhabitants of Raversijde would inevitably have encountered many problems at this time, both from direct violence but also financially and economically. Raversijde is reported as aiding in the purchase of a fortified ship in 1470 to protect the Flemish coast and more specifically its fishermen. This was obviously of particular concern to Raversijde with fishing being so dominant a trade within the village. This was all part of the ongoing tensions between Burgundy and France which left them at risk of hijacking by French pirates (Kightly et al., 2000:19-20; Nicholas, 1992:287). Indeed, evidence of the decline of the village from such pressures is clear- by 1510 twenty houses in the eastern end of the village were completely dilapidated (Tys, 2006:32), and by 1534 a contemporary document already reports that parts of the village were being slowly abandoned (Kightly et al, 2000:21; Pieters, 2005:15).

Raversijde however continued in some form, despite its problems, throughout this period and the most likely time for the final disappearance of the medieval village is during the

Siege of Oostende (1601-1604) when Oostende was forced to surrender to Spinola (Kightly et al., 2000:5). From contemporary descriptions it is believed that the village was used as a base for the attacking Spanish cavalry (Pieters, 2005:15) and formed part of the siege camp, and after this period, perhaps unsurprisingly, the village was never repopulated and became virtually abandoned. Some faunal remains from this period have been identified, included excellently preserved articulated horse skeletons, probably cavalry horses associated with the siege. However, these contexts have been excluded from this analysis, in order to maintain an assemblage for examination of a tight concise date, from a particular period of 'normal' settlement.

The buildings of Raversijde were grouped into three different areas of relatively dense housing separated from one another by 3-4 m wide ditches, probably dating back to when the site was used for solely agricultural purposes (see figure 2.9). The houses appear to be orientated around the ditches with the buildings running parallel or at right-angles to each other within the ditched areas (Pieters, 1997:170).

Figure 2.9. Simplified ground plan of some of the excavated area of houses at Raversijde, with buildings and ditches indicated- it is clear to see the alignment of the ditches and housing. (Modified from diagram by De Paepe and Pieters, 1994:238)

The predominant form of the brick-built houses is rectangular, with the majority being around 12 metres long (range 12 to 17.5 metres) by 6 metres wide (range 5.5 to 6 metres except for one exception at 8 metres). The houses were probably thatched as few tile or slate fragments were excavated. It is likely that galingale (*Cladium mariscus,* a cyperaceous marsh sedge) was used for the thatch. This is suggested by the large quantities of this species found in the archaeobotanical assemblage and its common occurrence in the region, reflecting the marshy nature of the environs (Kightly et al. 2000:31). Three wooden buildings were also present on site, although their purpose has failed to be determined from the surviving post-holes. There is, however, no evidence on site for buildings associated with animal husbandry (Anton Ervynck, pers. comm. 2006; Pieters, 2005:14), (see figure 2.10 for hypothesised artistic representation of the settlement in the 15th century).

Figure 2.10. Representation of the interpreted layout of the 15th century Raversijde, created by Past Forward Ltd. (Web Reference 2.3.)

The infill of the ditches dividing the site around the areas of habitation can be separated into two distinct parts. The lower infill is of a clayey nature and appears to be a water-lain deposit. The upper part however is of human deposition and consists predominantly of ashes mixed with archaeological material (Pieters, 1997:170) (see figure 2.11). It is from this upper context of these ditches that the vast majority of the archaeofaunal material was recovered. It dates to the 15th century habitation period, a time when the drainage provided by the ditches was no longer needed.

Figure 2.11. The excavation of one of the ditches surrounding groups of houses at Raversijde (Pieters, 1994:225), ditches from which the vast majority of the faunal material forming the Raversijde assemblage was recovered.

There have been few faunal finds from the latrines identified at Raversijde, which appear to have been used almost exclusively as toilets rather than as household waste dumps (Pieters, 1997:173), as is often the case in urban areas, and the majority of the faunal material analysed heralds from the ditches. One other area where a large amount of household refuse, including faunal material, has been recovered is a large pit in the centre of the site, contemporaneous with the 15th century occupation layer.

No evidence is available on site for the housing of any animals, with no traces of trampling or high phosphate accumulations found within the excavated areas (Pieters, 1997:171). It would however have been essential for some of the inhabitants to be engaged in agricultural, horticultural or stock-keeping activities in the surrounding area in order for the community to survive (Pieters, 1997:176). While not all of the settlement has been excavated this lack of evidence is perplexing (Ervynck, A., pers. comm. 2006) and makes it more important for this study to investigate what substantiation there is for any husbandry on site. The environmental conditions of Raversijde (and Oudenberg with its similar location) would have been made it difficult for pigs to live comfortably, with the medieval dune vegetation being covered in brushwood (*virgulta*), sea buckthorn (*spinas*) and bramble bushes (*runcos*) (Augustyn, 1995:14).

A particular feature of the site is its wide range of imported ceramics, with two European regions particularly well represented (Pieters, 1997:173). Wares from Germany, especially from around the Rhine area, and also from the Iberian Peninsula (predominantly Andalusia) form a sizeable proportion of the assemblage. These pottery types include the higher quality wares such as Majolica, but also coarser products from other international regions (Pieters et al., 1994:274). The ceramics confirm that while the village was small, its inhabitants certainly attained a moderate to good standard of living in terms of material culture. This is also supported by plant remains discovered within latrines on site, with some containing evidence of exotic foodstuffs such as pomegranates and black pepper (Pieters et al., 1996:220).

Of the other material finds objects related to fishing dominate, confirming the presumption based on historical reports that the focus of this village was the fishing industry. Sinkers, fish-hooks, netting-needles and many other types of fishing ephemera were recovered. Apart from domestic artefacts such as spindle whorls and weights there is no evidence for any other defined industrial presence on the site.

Eighty-four stones discovered as a unique deposit within one of the ditches were subject to petrological analysis. The stones showed no traces of working (De Paepe and Pieters, 1994:238) and were identified as possibly being ballast. The petrology of these rocks identified their probable source as the north-eastern or eastern coast of England (De Paepe and Pieters, 1994:249) and it is likely that these stones represent a late medieval (probably 15th century) link between the north-east/eastern English coast and Raversijde, and were being shipped to Raversijde as ballast to improve stability of the ships (De Paepe and Pieters, 1994:249). This again demonstrates Raversijde's focus on the sea and marine industries, as well as confirming that the inhabitants of Raversijde regularly called into ports on the eastern British coast from the 13th century onward (historical sources particularly mention ports such as Newcastle-upon-Tyne, Scarborough, Filey, Great Yarmouth and Whitby being visited by Flemish boats) (De Paepe and Pieters, 1994:249). When it is considered that out of the eighty-two safe-conducts for the English herring-fishing waters issued to Flemish fishermen by the King of England in 1443, thirteen were to fishermen from Raversijde; thus, the relative importance of this settlement to the Flemish fisheries industry is emphasised. This perhaps provides some explanation for the lack of evidence for other industrial activities at the village.

The 15th century village therefore appears to have been inhabited for a finite and relatively short time period. This has been determined not only by dated materials but also from the regular and homogeneous layout of the site, with very few modifications having been made to the buildings (Pieters, 1997:172). However the area of the site closer to the dunes does appear to have been inhabited for a longer period, with at least three phases visible. From the finds it can be concluded that the total area of the site *was* abandoned by the end of the 15th- beginning of the 16th century. Evidence from coins confirm this, with most of the coins dating from the period of John the Fearless (1405-1419) or his successor Philip the Good (1419-1467) (Pieters, 1997:175).

The 'bookmarking' events of the movement of the village to behind the dunes, the area of excavation in the early 15th century and the ending of the village at the latest in 1601 clearly provide a short time span for the faunal remains utilised within this research, with all material evidence supporting historical evidence for the dating of the assemblage as from the 15th century. There is little evidence of disturbance of the material, with only a few elements even suggesting secondary deposition (Pieters et al , 1994:275)

The site is located roughly 3 to 4 meters above sea level on a relatively flat polder area and in modern times separated from the sea by a dune-belt of around 20 metres in height. The upper part of the polder soil is heavily clayey, covering underlying sand and peat levels (Pieters, 1997:169). A massive 3 metre high and 20 metre wide man-made clay accumulation is situated to the landward side of the actual dunes, and is believed to have been created as a late medieval dike, possibly during the time of John the Fearless, Duke of Burgundy (1405-1419) (Pieters, 1997:169). Macrobotanical evidence collected from the site suggests that rye, millet, wheat, oats, barley and broad beans were grown or processed in the vicinity of the site during the 15th century (Pieters, 1997:175). Evidence suggests a marshy and wet, grassy environment in the surrounds at this time (Ervynck et al., 2007:177), an environment which can still be seen today (Zeebroek et al., 2000:65) (see figure 2.12). There appears to have been a complete absence of forest on the coastal plain at this time (Kightly et al., 2000:39). Similarly, the analysis of parasite remains from the in-fill of barrel-latrines identified the presence of eggs of various parasites, including one (*Trichostrongylus*) revealing the presence of sheep in the immediate surroundings (Pieters, 1997:175). Only very small cottage gardens have been identified on site which are too small to have played a major part in subsistence. It is unclear what cultivation and animal husbandry was occurring in the difficult conditions surrounding the village as no evidence, other than botanical, has been discovered. It is believed that the conditions of this area would be very challenging for animal husbandry or cultivation beyond that of the type already seen in earlier periods- the raising of sheep (Nicholas, 1992:98; Verhulst, 1999a:33; Zeebroek et al, 2000:23).

2.2.3. Ename

Ename is a village located in the province of East-Flanders, roughly 50km west of Brussels and 20km south of Ghent on the eastern bank of the River Scheldt, one of Belgium's two major rivers (see figure 2.12). Geographically Ename is located in the Flemish Ardennes, a hilly region in south-western Flanders, although the archaeological site itself is on the alluvial plains of the eastern bank of the Scheldt in a valley area of meadow-land on predominantly sandy loam (wet-dry) on tertiary clay and sand layers respectively, used mainly as agricultural land today.

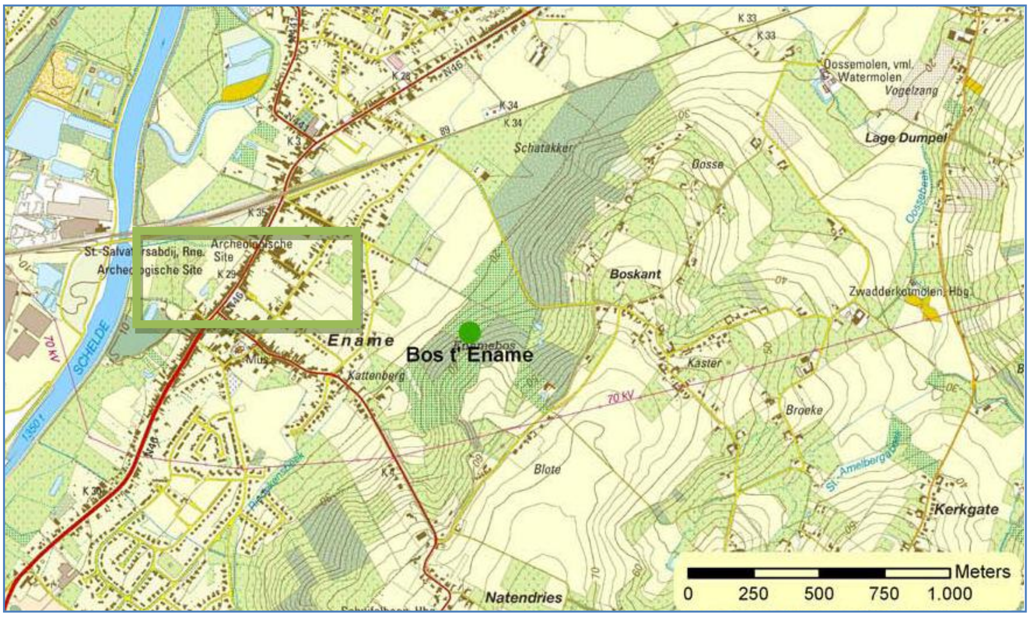


Figure 2.12. Map locating the original site of the village of Ename and the 'Bos t'Ename (woods of Ename) both pertinent for this study. (Modified from Web Reference 2.4.)

Five prehistoric sites have been identified in the vicinity of Ename, one of them (c.4200 BC) being based in the woodland on the valley side of the River Scheldt above the village, and remaining in the form of a sunken road. Another has been identified close to the river Scheldt near to the later habitation foci. It is likely that this period saw the beginnings of clearances for agricultural fields, and cattle, pigs and goats began to be grazed in the remaining woodland. A number of Roman camps were also located on the hill top above the valley. Ename only became significant in the 10th century when the French kingdom and German empire's boundary ran along the course of the river Scheldt. Because of its strategic position an imperial frontier fortress was erected at Ename, or '*Ehinham'* as it was known at the time, and a trading settlement with market, toll house and port developed a short distance to the south. The settlement was very prosperous, demonstrated by the establishment of two town churches (Saint Salvator and Saint Laurentius), and by 1005

Ename was described in the Chronogrpahiae Auctarium Affligemense' (written by Sigebert of Gembloux c.1005) as 'the most important seat of the duchy of Lorraine'.

However in 1033 the fortress of Ename was destroyed by Boudewijn IV, the count of Flanders, and in 1047 his son Bodewijn V took permanent possession of Ename changing the nature of the settlement by founding a Benedictine Abbey over the ruins of the earlier buildings. Only the Saint Salvator Church and Saint Laurentius churches remained standing. The majority of the merchants and craftsmen of Ename left the town to find new livelihoods in the recently founded city of Oudenaarde on the other bank of the River Scheldt. Following this time the abbey of Ename became the focus of community life in the settlement, with a village of workers and farmers gradually developing around the abbey, participating in its agricultural and industrial activities. From this period onwards Ename in many ways represented a very 'typical' European rural village (see figure 2.13).

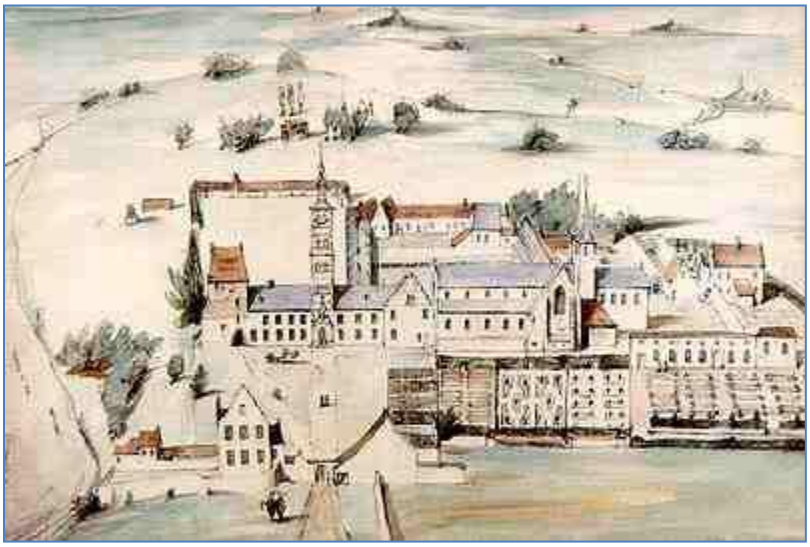


Figure 2.13. The abbey of Ename around 1663, showing the rural nature of the settlement. (accessed from Web Reference 2.5)

The history and archaeology of Ename is presented by the 'Ename 974 project' and the Ename provincial museum (Ename Centre for Public Archaeology and Heritage Presentation, founded 1998) due to the well-preserved remains from both the early-medieval occupational phase and the period of the medieval and post-medieval abbey. The excavated remains of the early medieval fortress, the trading settlement (portus) and the abbey all have seen extensive excavation.

Archaeological excavations were first conducted in Ename from 1941-1946, directed by A.L.J. Van de Walle and focusing on the exposed part of Saint Salvator Church and the fort. In 1982, because of the planned expansion of a nearby railway line, the Belgian National Service for Excavations carried out emergency excavations, uncovering an important medieval fortification and palace complex including one of the oldest keeps in Europe (see figures 2.14 and 2.15). These findings instigated a major interdisciplinary investigation by the IAP (Institute for the Archaeological Patrimony of the Flemish Community of Belgium), with the focus resting on the abbeys material culture, dynamics of the food supply and the surrounding environment (Deforce et al., 2007:89). The IAP, in collaboration with the municipality of Oudenaarde and the province of East-Flanders, conducted extensive excavations in the industrial area of the medieval and post-medieval abbey of Ename, throughout the 1980’s and 1990’s. The archaeological site of Ename (covering approximately 8 hectares) has been consolidated into an open-air museum with the foundations of the Benedictine Abbey that dominated Ename from 1063-1795 visible (the remains of the early-medieval trade settlement (975-1050) are not visible, as they consisted largely of soil layers removed during excavation).

Ename is a defensive site situated in what was a very forested area of sandy soil, with a large area of agricultural land also nearby. It provided an assemblage with a large proportion of pig bones ((58%), to cattle (17%) and sheep/goat (25%)).

Figure 2.14. The archaeological remains of the abbey are clearly visible on the banks of the Scheldt.

Figure 2.15. Aerial photograph (H Timmermans) of the consolidated archaeological remains at Ename, now a museum.

The environmental history of the area is particularly well understood, which is crucial for this study with the consideration of the resources available for pig management at this time. The 'Woods of Ename' are situated on the steep slope of the valley of the river Scheldt (see figure 2.16), directly above the settlement of Ename, and cover 180 hectares surrounded by fields and meadows on the eastern valley wall of the Scheldt at a height of between 13 and 70 metres above it, lying to the south of the village of Ename.

Figure 2.16. Image of the woods of Ename, above the modern settlement of Ename, with the River Scheldt visible towards the top-left. Accessed Web reference 2.6

The Ename woods are a well preserved area of mixed wood consisting of a mixture of alder (*Alnus glutinosa*), beech (*Fagus sylvatica*), oak (*Quercus robur*), ash (*Fraxinus excelsior*) and elm (*Ulmus minor*), with dense bramble (*Rubus*) undergrowth.

It is believed that the forest has always played a major role for the inhabitants of Ename, from as early as prehistoric times, and from the 10th century onwards documents show that the wood was used to provide timber for building, grazing, firewood for cooking, heating and craftwork. In later times it was identified as common ground used by the whole community to graze their animals and to run pigs through. When the abbey replaced the Ottonian settlement in the 11th century the exploitation of the wood by the abbey and adjoining village community continued much as before. Documents from the archive of the abbey and historical and paleobotanical research provide evidence of further evolution of the use of the woodland by the inhabitants of Ename. Rabbits were introduced from southern Europe during the 13th century and because of the heavy conditions they were housed in artificial rabbit hills on the woodland border. These were consumed by people in the abbey and wealthy families in the village, and their skins were processed.

The abbey sought to protect the forestry area where timber and firewood where produced and so the monks surrounded the area with a hawthorn hedge and planted many new trees in the 14th century (starting c.1290AD), the first recorded instance of deliberate reforestation in Europe. This was probably stimulated by concerns over the depletion of the wood cover around Ename which lead to a shortage of firewood and the need for the import of fuel (Deforce et al., 2007:92).

During this period, from which the faunal assemblage examined herein dates, the forest was screened off from the cattle and coppicing became the predominant management technique. The border between the protected woodland and common ground is still visible in the landscape, and the management of the woodland in present times is focused on preserving the nature of this woodland, limited to mowing and grazing with coppicing on a 12-year rotation (carried out by the Werkgroep Bos t'Ename, and overseen by the Administration for Monuments and Landscapes of the Flemish Community).

This site was selected because it is thought to represent very traditional pig husbandry in an environmentally favourable location in the high medieval period (14th century). In the course of the preliminary study (Ervynck et al., 2007) very high levels of hypoplasia were noted in the pigs at this site, a phenomenon considered difficult to explain considering the good location and all that is known about the management of the animals here. The paper hypothesised that possibly the forestry regime of the hinterland, which consisted of cutting the trees every 15 years, precluded the production of acorns as fodder for the pigs (a management system of cutting every 20-25 years is needed for that). This may therefore have led to an environment for the keeping of pigs which was less friendly than expected, and generated the high levels of stress-caused hypoplasia seen. The use of other investigative techniques aims to provide further evidence to consider this proposition, in particular whether dental microwear indicates any unusual form of diet.

2.2.4. Veurne

Veurne is a feudal township in the Belgian province of West Flanders (Westhoek). It is situated approximately 6 km from the Belgian coast close to the French border and at the confluence of four canals. Veurne is in the coastal hinterland, an area dominated by salt marshes, salty meadows, mudflats, tidal gullies and creeks (Ervynck et al., 2007:174) although it has a wooded hinterland to the hilly south of the settlement.

Veurne was founded in 877 AD as a possession of the Saint Bertin Abbey at Saint-Omer, and was soon the focus for the castellany of Veurne, a large territory owing allegiance to the Count of Flanders. It had a circular fortification being erected in the 10-11th century as part of a line of Flemish coastal defence works (Ervynck et al., 2007:174), the time from which the faunal assemblage originates. Veurne became a city in the 12th century and quickly established a flourishing trade connection with England which continued until 1270 when relations with England ended and the cities economy went into a long decline. The city began to flourish again after the economic and religious problems of Belgium in 1566-1583, when the town and the castellany merged and the agrarian region around the city began to expand. In the 17th century heavy fortifications were placed around the city due to war with the French although after this time Veurne enjoyed a time of peace and prosperity. A meat market dated to 1615 remains today, and emphasises the wealth existing in the agricultural economy by this period (see figure 2.17).

Figure 2.17. Photograph of the meat market in Veurne (dating to 1615).

The faunal remains of 10th-11th century date examined within this study were excavated by the Belgian National Service for Archaeology, and the assemblage was dominated by sheep and goat. A relatively large level of pig remains (n=1837) were also recovered, and a selection of pig jaws was provided from this for investigation. Pig remains are generally found more frequently here than in the surrounding rural area, explained by the use of forested land to the south of the site (Ervynck and De Meulemeester 1996:38).

Veurne was selected for this study not only because of its large assemblage of pig jaws, but also as a site of very suitable conditions for the keeping of pigs in the traditional 'pannage' system in the wooded and hilly hinterland, a technique believed to be commonly employed in the high medieval period. It is argued that Veurne could provide a 'base-line' of supposed normality for the investigation, with pigs believed to be being kept using 'traditional' methods in a traditional pig-friendly environment.

2.2.5. Oudenberg

Oudenberg (or Oudenburg) today is a municipality located in the Belgian province of West Flanders, 15km north-west of Bruges (Verhulst, 1999b:15). In the mid-4th century AD the area was developed with the first in a series of Roman 'Saxon shore' forts, or castellum, constructed (similar to the English forts of Reculver, Richborough, Lympne and Portchester) to protect the area from 'Saxon pirates'. Although nominally 'Roman', the fort was occupied by German troops, with associated vici, there was no particular Roman influence and only superficial Romanisation (Nicholas, 1992:4). Indeed, there were no substantial Roman towns in Flanders in this period (Nicholas, 1992:2) This fort now lies around 8 kilometres inland from the coast at Oostende (Mertens, 1977:62), due to coastal movement. However in Roman times it was at the head of a lagoon situated on a sandy promontory projecting from the surrounding coastal plain and jutting into the salt marsh and linked with the sea by a broad watercourse. The predominant environment was of a sandy/clayey creek landscape and described in several papers as a 'wasteland' (Troubleyn et al., 2009:38; Vermeulen, 2004:132)

The area was so isolated it was termed (lit.) 'The end of the world', as the promontory was cut-off from the rest of the area because of dense and inaccessible forest, and because of this the fort needed to be relatively self-sufficient (there is no evidence of large numbers of animals being imported), displaying evidence of industry as well as agriculture (Nicholas, 1992:4). The nearest town of importance, Tournai (Turnacum) was nearly 68 kilometres away (Mertens, 1977:62). Barley and emmer wheat were important cereals and husbandry was based predominantly around sheep, with cattle, horse and pig also being present (Groot, 2009:51).

The forts had associated civilian settlements outside the walls, and the outline of the Roman fort is still visible in the cities street plan. The town later became a place of significance, reflected in the building of St Peters abbey in 1084, although some time after the systematic collapse of the Roman empire. Excavations of the fort are ongoing, although are now coming to an end, and are focused on the phasing of the fort. Environmental evidence from Oudenberg was exceptionally well preserved, with spectacular timber construction wells even being preserved, and similarly the faunal assemblage recovered was in excellent condition.

This site was selected for inclusion because it provides another excellent comparative for Raversijde, despite the difference in dates, as at the time the assemblage was deposited it was relatively close to the environmental conditions of Raversijde in terms of landscape; this allowed consideration of whether any differences seen are due to environment or other factors. This site was not included in the original Ervynck et al. (2007) pilot study around which this research is based.

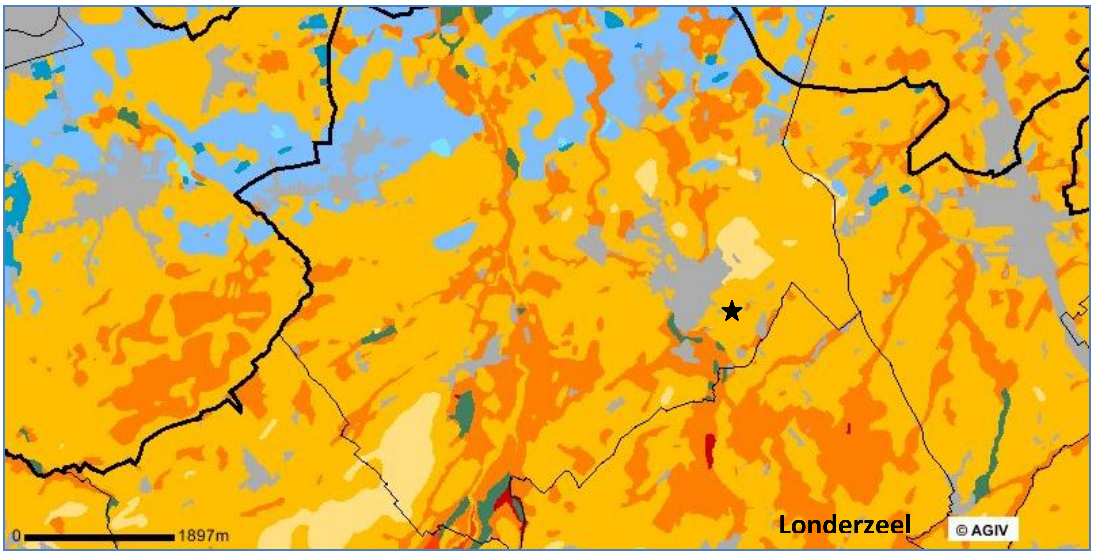
2.2.6. Londerzeel

Londerzeel is a municipality located in the Belgian province of Flemish Brabant. The site is a late medieval (14th-century) wealthy castle site with a faunal assemblage containing a large proportion of pigs. It is set in an area whose ecological history suggests was almost completely deforested by the 13th-14th century (Verhulst 1990). It has been hypothesised that because of the extreme deforestation in the area by this time and large population pressures, these pigs were potentially raised in stall/pen situations, the site seeming to have similar problems to Raversijde in terms of inappropriate environmental conditions for the traditional 'pannage' of pigs. This has suggested stalling is a shift from techniques used at Londerzeel in high medieval times where herding was identified as extremely important for the meat supply of the castle (Van der Plaetsen in Ervynck et al., 2007:175). To date no archaeological evidence has been provided for a change of pig husbandry other than the obvious presence of a significant number of pigs in an area with no forest. There was a very high quantity of pig cranial bones within consumption refuse of the late medieval period, suggesting that the pork was not imported to site, and other luxury foods such as Grey Heron (*Ardea cinerea*) and Great White Egret (*Egretta alba*) have been identified in the consumption refuse, suggesting that it is one of some luxury (Ervynck et al., 2003:432, 434). The 13th-14th century AD assemblage being studied was excavated by the IAP, and a number of pig jaws were selected from the dominant pig remains.

Using traditional archaeological methods there has been no real difference identified in the husbandry of the animals here to those pigs 'traditionally' kept despite the belief of archaeologists that they were styed. The previous investigation of the pigs (Ervynck et al., 2007) revealed a particularly low frequency of hypoplasia, suggesting that the animals were experiencing little stress, something particularly unexpected for the unusual location of the assemblage. This site was therefore included because of the suggestion that, similar to Raversijde, penning/styes may have been used to manage the pigs due to lack of a forested environment. There is no archaeological evidence for this, however, and the results of preliminary studies suggested a very 'typical' pig. It will be interesting in this study to consider what further investigations suggest about the husbandry of the animals at this site and whether a shift in the late medieval period towards confinement can indeed be identified here.

2.2.7. Geology of the sites examined

Two sources were used to examine the soil conditions of the period. A Geological map reproduced in Appendix 7.3, sourced from the European Digital Archive on soil maps of the world (EuDASM) and data from the Geological Survey of Belgium (2006). Specific maps of the geology around each archaeological site are reproduced below (Figure 2.18) to summarise the type of soil the sites are located within. It is important to note that the site of Oudenberg whilst now in silty polder land was, in the 4th century, a coastal dune site, and so the modern data of the soil-type for this location is misleading because land reclamation has dramatically changed the nature of the area (see earlier in this chapter for details).The descriptions summarised from these graphical sources are given in Figure 2.19.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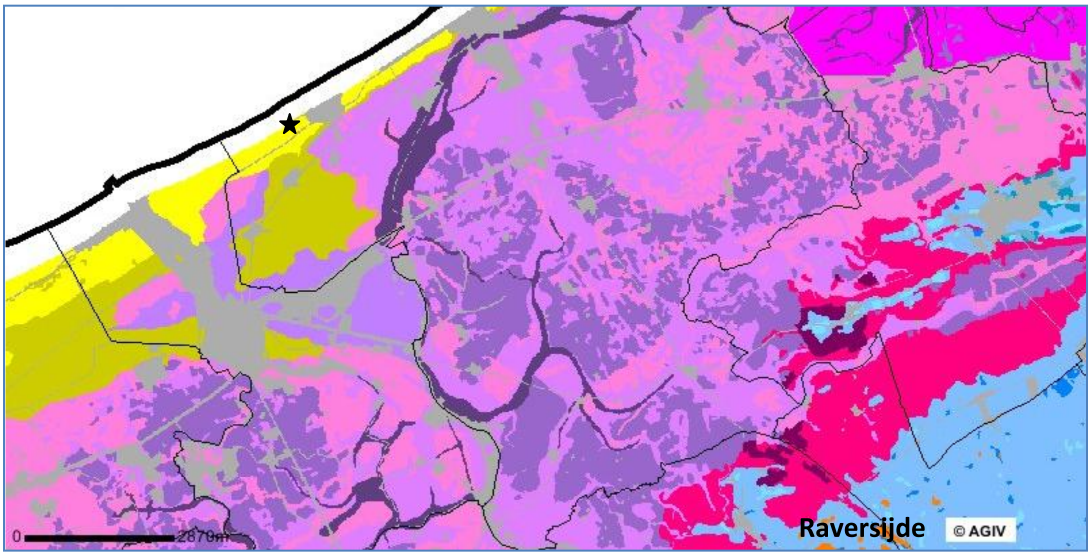
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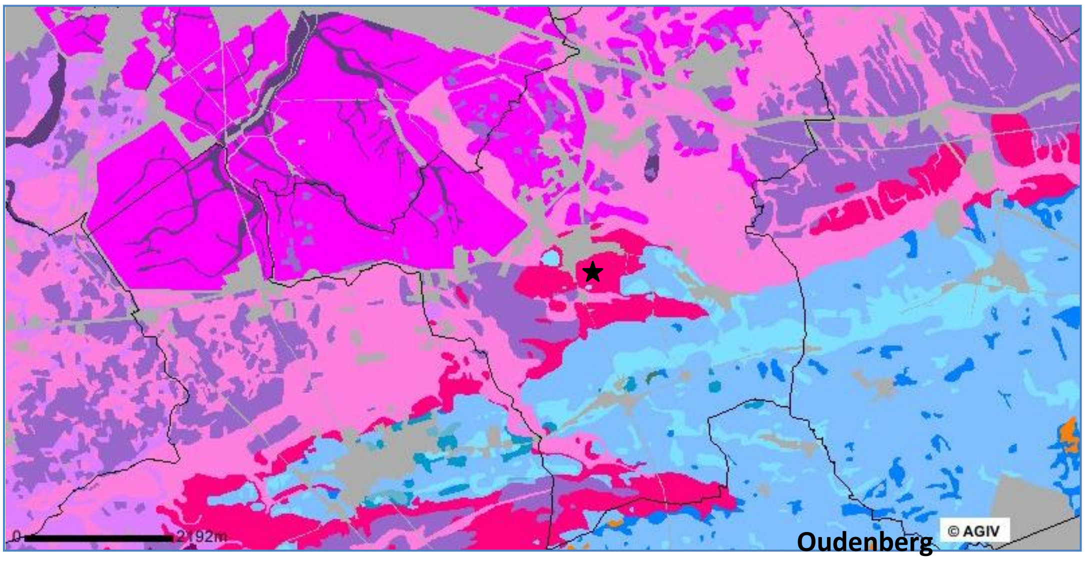
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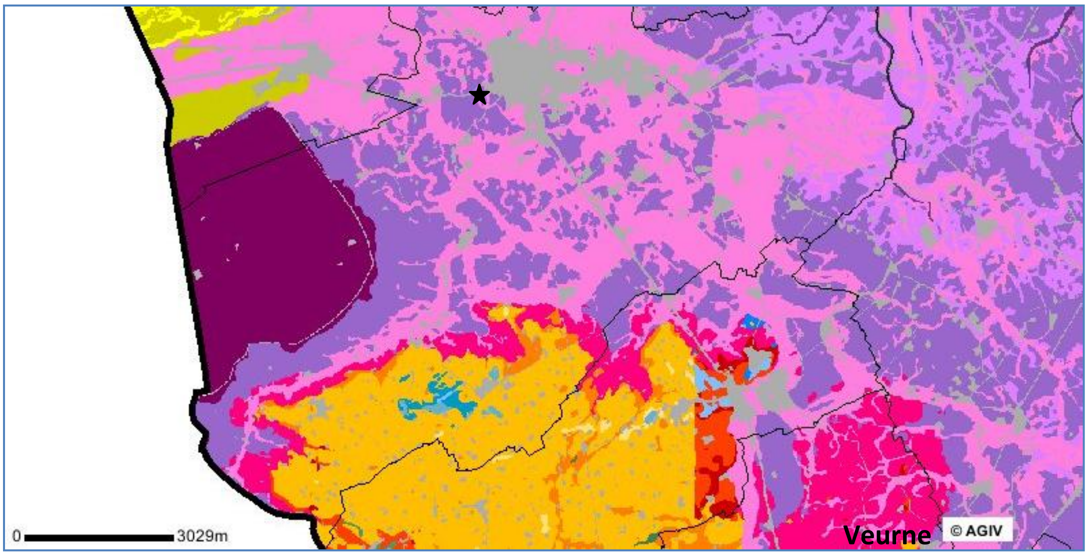
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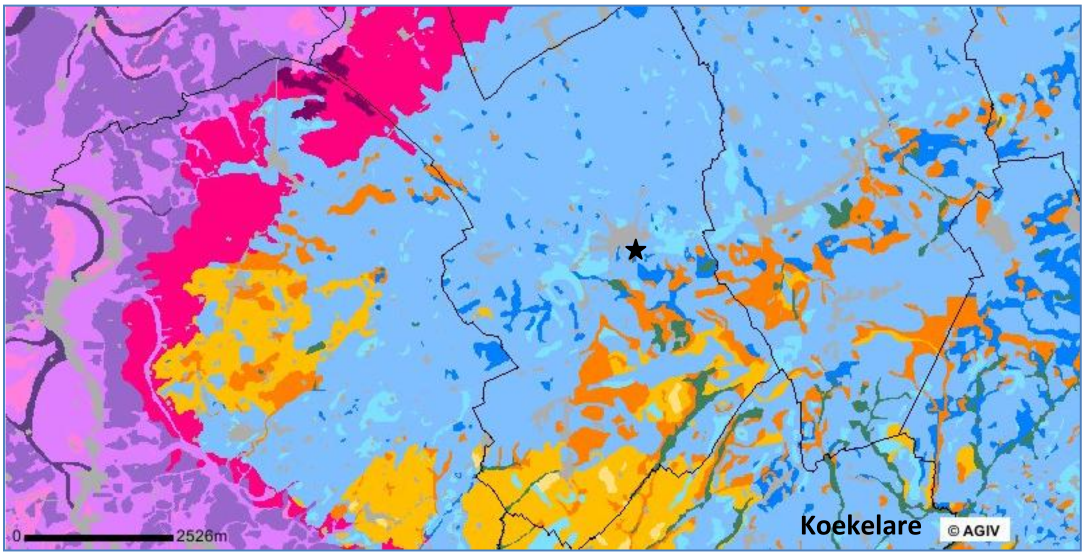
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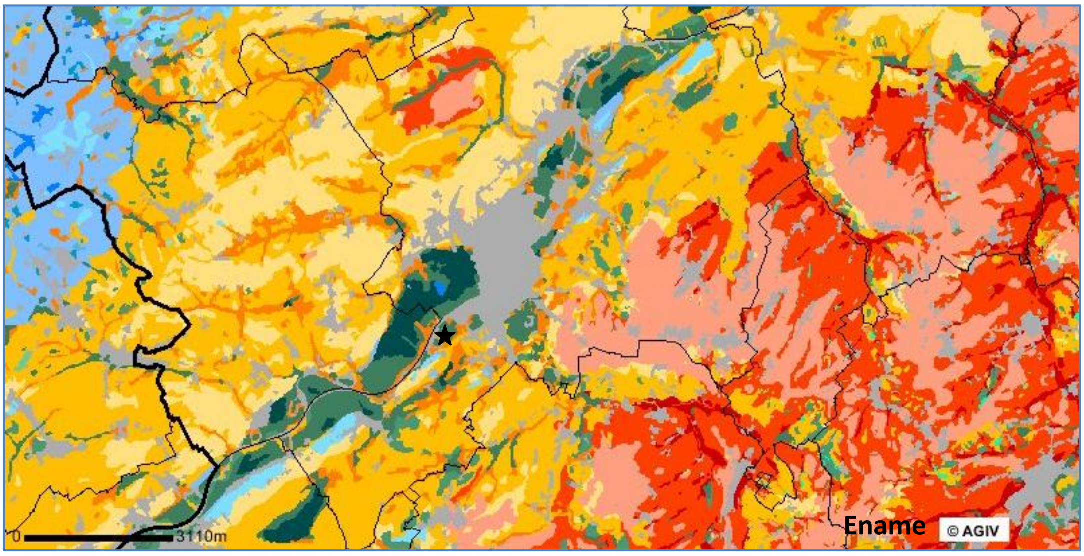
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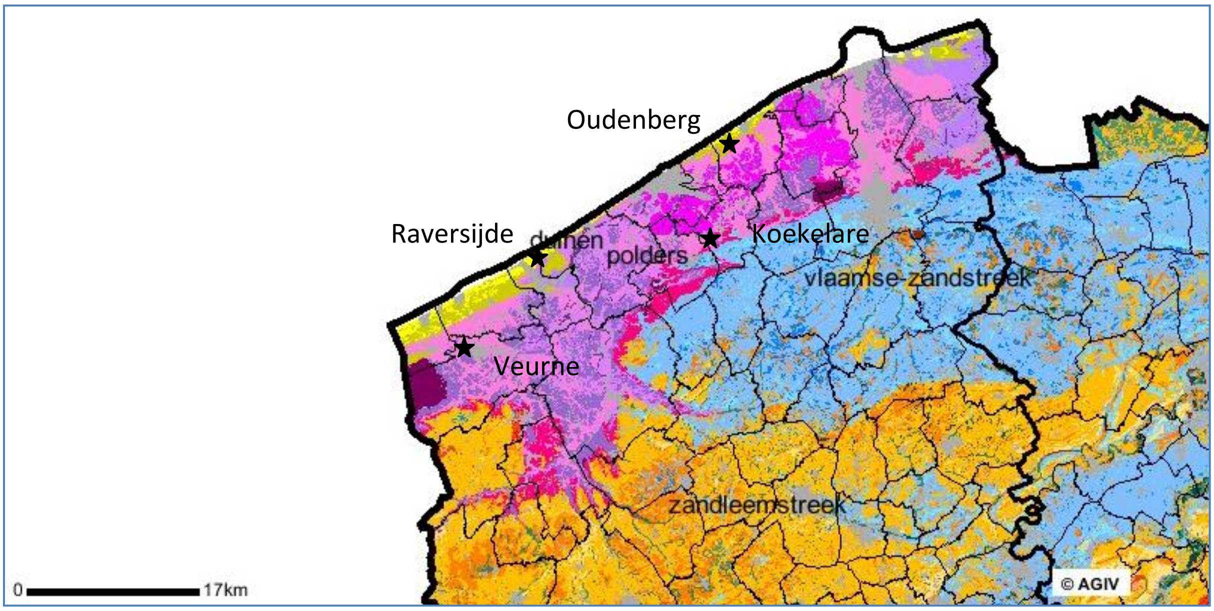
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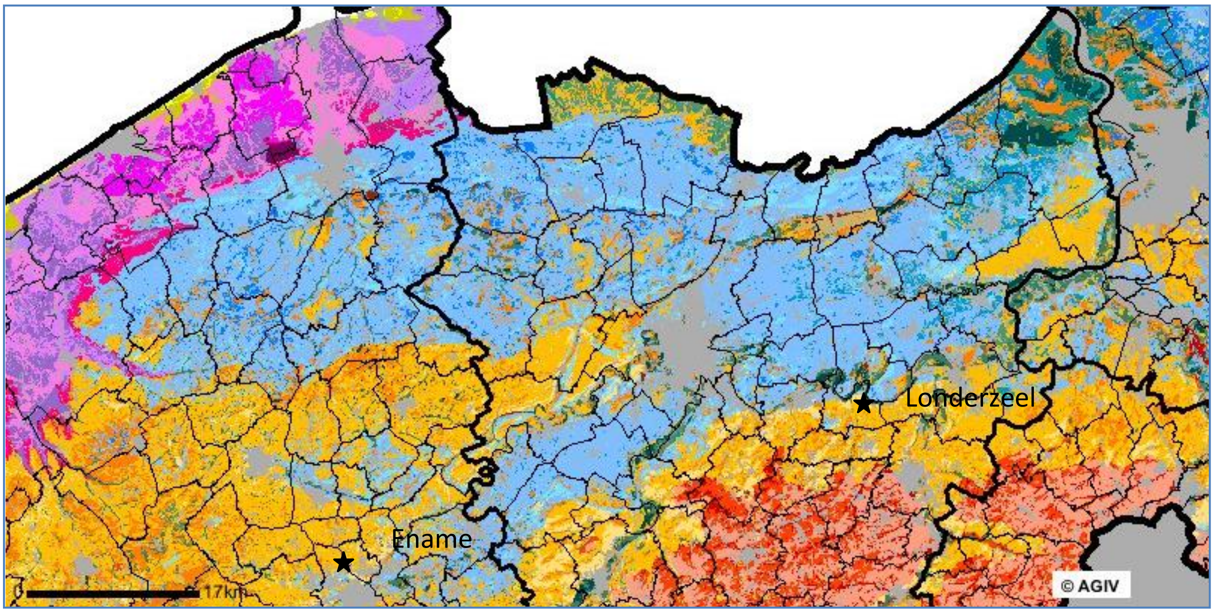
Londerzeel
Ename
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Key of Soil Maps

Dutch Key	English translation	Dutch Key	English translation
Antropogeen	Man-made soils	Nat zand antr	Man-made wet sand
bronnen	wells	Nat zand	Wet sand
Dekklei polders	Clay layered polders (fertile)	Nat zandleem	Wet sandy loam
Droge klei	Dry clay	Natte ZwKlei	Wet heavy clay
Droge leem	Dry loam	Natte klei	Wet clay
Droge zandleem	Dry sandy loam	Natte leem	Wet loam
Droog zand antr	Man-made dry sand	Overdekt Pleistoceen	Covered Pleistocene layer
Droog zand	Dry sand	Poelgrond polders	Thin clay layers lying above peat creek ridges
Geul polders	Ditch/gully polders	Schor polders	Rough polders
Hoge kustduin	High coastal dune	Veen	Peat/ Peat bog
Klei-complexen	Clay complexes	Vochtig zand antr	Man-made moist sand
Kleiplaat polders	Slate plated polders	Vochtig zand	Moist sand
Kreekrug	Creek ridges (Peat)	Vochtig zandleem	Moist sandy loam
Krijt	Chalk	Vochtige zware klei	Moist heavy clay
Kustduingrond	Coastal dune soil	Vochtige klei	Moist clay
Landduin	Inland dunes	Vochtige leem	Moist loam
Leem-complexen	Loam complexes	Zand-complex	Sand complexes
Mergel	Marl/Maristone	Zandleem-complex	Sandy loam complex
Moeren	Peat Bog	Zware Klei-complex	Heavy clay complex

Figure 2.18. Soil maps of location of the Belgian archaeological sites (stars marking approximate location of archaeological remains), for the area of each site and also an overall summary of the broad soil types in Flanders, sites marked. All data from Agentschap voor Geografische Informatie Vlaanderen (2006), maps modified from Web Reference 2.7. Translation of Dutch provided by Alice Whitehead and Lars Jacobs (EU).

2.2.8. Previous Stable Isotopic Ratio study

One of the lines of investigation considered during the pilot study (Ervynck et al., 2007) was to examine the stable isotope ratios of several of the assemblages examined in this study, something which is not being repeated within this study. Within that examination stable isotopes ($\delta^{13}C$ and $\delta^{15}N$) were analysed for five pig mandibles per site from Veurne, Ename, Londerzeel and Raversijde.

Dietary isotopic studies work on the basis that all natural matter, including the bones and teeth of animals, are built up of chemical elements. Most chemical elements consist of a mixture of several isotopes which in nature occur in relatively stable and unvarying ratios. In certain situations, however, minor but significant deviations from the 'normal' baseline isotopic abundance occur. One of these situations is within the bones and teeth of animals, which have different isotopic ratios to that of their surrounding landscape because of physiological processes and dietary intake (Van der Merwe, 1992:247).

The root of these deviations comes from the nature of isotopes. Isotopes are atomic species of the same chemical element, (meaning they show identical chemical behaviour) but with different neutron numbers (Pollard and Heron, 1996:356). Within palaeodietary studies a large field has now developed into the study of isotopes, which analysts believe to have 'excellent potential for elucidating dietary and locational histories' (Buikstra, 2001:208; also see Pate, 1994:161).

Isotopic analysis uses the ratio of these isotopes preserved within the skeleton as a tool to assess the diet of domestic animals and, while still a young and rapidly developing field (Zeder et al., 2004), it is one which is growing in importance and has had success both in identifying diet for humans (for example Katzenberg and Weber, 1999) and animals (for example Passey et al., 2005, and for pigs in particular, Howland et al., 2003)

The measurement of stable isotopes and trace elements provides a direct record of diet (Sealy, 2001:269). Stable carbon values ($^{13}C/^{12}C$) and stable nitrogen ($^{15}N/^{14}N$) are the most widely used indicator of palaeodiet (Sealy, 2001:269; Hobson et al, 1993:388). Carbon and nitrogen isotope ratios relate to the food eaten. For carbon ratios, the higher up the trophic level that the species is the greater the level of fractionation of the isotopes (see

Katzenberg 1992 and Koch 1998 for overview). Carbon isotopes can also be affected by the type of plants consumed, as ratios vary dependent on their photosynthetic pathway. Similarly, nitrogen also becomes enriched with the heavier isotope at higher trophic levels, based on dietary protein (Sealy, 2001:272), and the level of enrichment with trophic level is even greater for nitrogen than carbon. Nitrogen has been particularly useful for identifying other extreme conditions (for example aridity), which appear to substantially affect the nitrogen ratios (Ambrose, 1991; Ambrose and DeNiro, 1987; Schwarcz et al, 1999). Most significantly, for this study, sea-based life-forms are particularly enriched in ^{15}N. This means that they are particularly useful, alongside carbon, for studying marine/terrestrial diets among coastal populations (Sealy, 2001:272). For example, marine consumption in humans has been identified in coastal human dwellers using carbon and nitrogen ratios (Kusaka et al., 2010; Aufderheide et al., 1994).

This raising of carbon and nitrogen levels with trophic level is particularly important to this study where questions about diet could potentially be answered by considering whether the pigs exhibit a 'natural' herbivorous signal (from roaming in natural forests) or have supplementation with a higher-level food (for example feeding on leftover waste from human consumption such as meat, rather than vegetation, would raise the trophic level of the food consumed). Of course, such a signal cannot identify the difference between roaming and supplementation if the supplemented food is gathered herbivorous material. Such studies have previously been successfully employed using pig remains; for example, a vegetarian diet was identified in pigs from the Yellow river basin in China using carbon and nitrogen values (Pechenkina et al., 2005). Pigs at the 15th century Koksijde Dunes abbey (Belgium) were determined as having a vegetarian diet despite their coastal location (Polet and Katzenberg, 2003:527) and at Çatal Höyük, Turkey an omnivorous isotopic signal provided evidence of the importation of pigs from elsewhere (Richards et al., 2003a:71).

For the coastal site of Raversijde such a consideration is of particular interest. Raversijde is identified as a village heavily involved with fishing, and if the pigs are being fed on fish waste this should clearly be identifiable in the isotopic signature. It is important, however, to compare the species in question to other local known values for herbivores, omnivores and carnivores to gain the local 'values' for different trophic levels because there are latitudinal variations in any ratios present (Sealy, 2001:271). Ervynck et al. (2007) did this by considering isotopic ratios for two species for comparison, a herbivore (cow) and a carnivore (dog).

Examples of carbon and nitrogen ratios were gathered from such herbivores (cattle) and carnivores (dogs) at each of the four sites examined in the pilot study (See Ervynck et al., 2007:178 for details of methodology) and the study also incorporated earlier isotopic data gathered from Ename and Raversijde (Ervynck et al. 2003). The material from all four sites was determined to be well preserved, with only the exclusion of two samples from Raversijde (Ervynck et al., 2007:182). By interpreting the pig isotopic data in relation to the baseline values for herbivores (cattle) and omnivore/carnivores (dogs) at each location, it was possible to consider the evidence of stable isotopes for the pig's diet (see Appendix 8.1 for isotopic data examined).

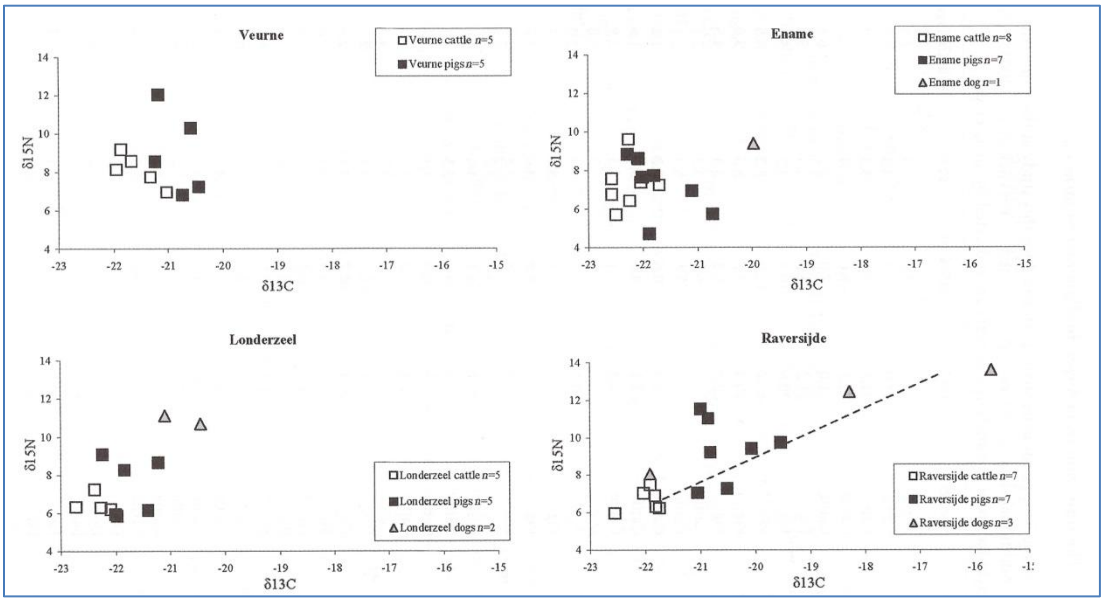


Figure 2.19. $\delta^{13}C$ and $\delta^{15}N$ stable isotope data from bone collage of pigs and other fauna from the four sites, reproduced from Ervynck et al., (2007:184). (The dashed line represents a hypothetical mixing line for terrestrial and marine foods at Raversijde).

It appears from the isotopic data that the pigs from Veurne had a mixed diet, with some showing greater enrichment in ^{15}N, suggesting a significant amount of animal protein in their diet, and others having a mostly herbivorous diet (see Figures 2.19 and 2.20. and Ervynck et al., 2007:182). At Ename the pigs match well with the herbivorous signal, suggesting a predominantly plant-based diet. Some minor differences in ^{13}C data may suggest some differences in the type of feed or feeding locations (Ervynck et al., 2007:185), but this is unclear. At Londerzeel the pigs again appear to have mixed diet, with some plotting with the herbivores and three of the five having nitrogen values between the cattle and dogs, suggesting their diet was a combination of plant and animal protein sources (Ervynck et al., 2007:185). Raversijde, however, is again the most strikingly different site (See Figures 2.19 and 2.20). At Raversijde the pigs appear to have extremely mixed signals, with two of the samples demonstrating a clear herbivorous signal (Ervynck et al., 2003). However, three of the others demonstrate clearly enriched nitrogen but normal carbon, which has been interpreted as indicating a marine component to their diet at this site (Ervynck et al., 2007:185) with the carbon and nitrogen combining to indicate some consumption of fish in a predominantly terrestrial 'mixed' plan and animal protein diet. For another two of the pigs, marine food was almost certainly consumed, but their carbon ratios are also much more enriched, suggesting a diet based more greatly on terrestrial animal protein rather than plant foods.

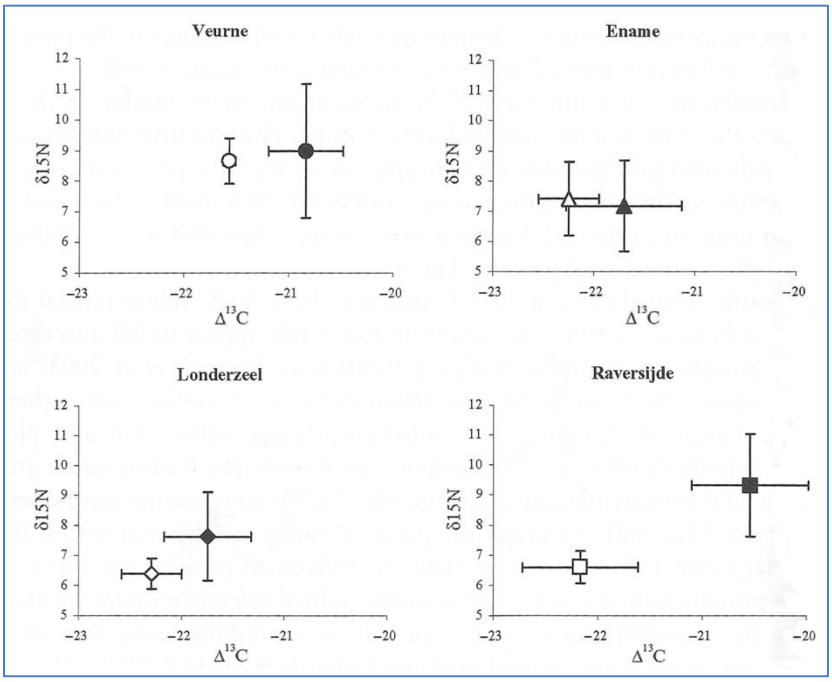


Figure 2.20. Mean and standard deviation of the $\delta^{13}C$ and $\delta^{15}N$ stable isotope data from bone collage of pig and cattle per site (solid symbols= pigs, open symbols=cattle). (Reproduced from Ervynck et al., 2007:186).

Perhaps the most significant findings of Ervynck et al. (2007) consideration of stable isotopes is the variation in diet at Raversijde. It suggests that the animals were not receiving a single 'diet', but that some were consuming marine protein which makes the comparison to herbivorous species notably different. It is evident that at all sites, except for Ename, the sites show a mixture of herbivorous and omnivorous pigs. This is not surprising considering the locations and the period (Grant, 1988 and Rixon, 2000). For Londerzeel, while such a signal was unexpected in the pilot study, it perhaps can be seen as another line of evidence suggesting some importation or closer management of the pigs at this site than was expected. In some ways the identification of a mixed signal at Veurne is more surprising, as this is thought from the other sources of evidence to be a site experiencing 'traditional' pannage.

Because this isotopic examination had already been carried out, it was felt that there was no validity in replicating the results again as part of this study. Further samples have recently been taken from the other sites (Oudenberg and Koekelare) under consultation with the IAP, and it is intended that these will be used to examine the sites in a future summary, but unfortunately these results were not available for this research. Therefore rather than repeating results already obtained, this study will instead look to identify any further isotopic techniques which may also provide useful information in the future.

While Ervynck et al. (2007) focussed on the identification of isotopic ratios from bone collagen of the mandible, other studies have considered the validity of using serial sections of tooth dentine as an additional line of investigation. Tooth material develops over a different time period to bone (Thompson et al., 2005:462) and the differences between them can provide information about any change in isotopic values over life, which may correlate to changing diet or migration. In humans such studies have been able to identify migration such as slave importation into Cape Colony (Cox and Sealy, 1997), and also the time of weaning in populations (as a particular type of change in trophic level diet), for example at Wharram Percy (Fuller et al., 2003). For animals, weaning has also been seen using such techniques (Balasse et al., 1999), and similarly changing diet over the lifetime of the animal has also been identified in some studies (for example, Wiedemann et al., 1999). Further research into relating stable isotopes to known situations is necessary before the technique can become truly useful, for example to explore the quantification of pig diets in both modern and archaeological examples of dental material (Zeder, 2006). This would allow zooarchaeologists to better understand how shifts that take place in diet over the lifetime of the individual can be clarified through these subtle changes in the micro-sampling of dental tissues. Because of the lack of comparatives as yet and the swiftly-developing nature of this field, this technique is deemed not suitable for this particular research, although it may in the future develop into a relevant technique. While dental material has yet to be significantly explored in pigs teeth, its future potential has clearly been illustrated in other species. For example, Balasse et al. (2001) used stable nitrogen isotopes in cattle teeth to identify physiological adaptation to a new environment caused by calves first being brought to pasture and exposed to outside conditions (Balasse et al., 2001:242). Studies like this in the future may undoubtedly provide additional information for research such as this.

The focus of isotopic studies is predominantly on the isotopic ratios of carbon and nitrogen, and for palaeodietary examination it is clear that these provide an excellent level of information. Trace elements are often felt to be more greatly affected by diagenesis, are less precise to examine, and are also complicated by variations in sex (Brown, 1974), meaning that such isotopes are not felt to be suitable for exploration in general studies (Gilbert et al., 1994:183). Sandford (1992) provides an excellent review of other trace element studies and identifies the lack of data on distribution of most elements in foodstuffs as extremely problematic for their use in palaeodietary studies. For zooarchaeology, the use of trace element measurements (other than strontium, and barium in some cases) has really been identified as an avenue not to be explored at present (Ezzo,1994) and therefore is not explored herein. Other isotopes, such as oxygen, have more interest for the study of major climatic change (White et al., 2004), or in the case of sulphur in identifying migration and residential locality (Richards et al., 2003a:43) but they do not appear to be subtle enough to identify variation across such a small area as being investigated in this study. While trace element studies were once touted as the future for dietary analysis it is clear that this is now being brought into question in zooarchaeological studies as there is a growing realisation that the relationships between such elements in the environment, diet and bone is extremely complex (Buikstra, 2001:208) and for this study clearly unsuitable.

- *<u>Summary:</u>*
    - *A previous study has demonstrated that the Raversijde pigs reflect the most different diet to herbivores at its site. The isotopic ratios have been interpreted as suggesting consumption of marine foods for some of the pigs.*
    - *Pigs at Londerzeel and Veurne both appear to have an omnivorous diet, whereas at Ename pigs appear to have a solely vegetarian diet.*
    - *Carbon and nitrogen isotopes both provide insights into palaeodiet, but a review of other isotopes commonly used in zooarchaeological studies does*

not suggest that their inclusions would be useful to this study. A consideration of isotopic ratios from enamel rather than the collagen used as standard and examined by Ervnyck et al., (2007) may be worthy of future consideration, particularly for sites such as Londerzeel where there is the suggestion of animal importation because this technique can help identify the timing of changes in diet.

2.2.9. Summary of the sites

It is useful, considering the large amount of information presented about the sites examined in this study, to finally summarise the pertinent features of each site for ease of reference. This is presented in the table below (Figure 2.21).

Site	***Date of major faunal sample studied***	***Soil type (data from the Geological Survey of Belgium, see figure 2.18)***	***Type of Site***
Koekelare	15^{th} century	Border of marine clay and sandy area. Well drained as elevated compared to surrounding land.	Cattle-breeding moated site
Raversijde	15^{th} century	Coastal dunes and clay based marshland	Fishermans village
Ename	14^{th} century	Wet clay in valley, sandy soils on higher elevations	Rural village based around a Benedictine Abbey
Veurne	$10\text{-}11^{th}$ century	Polder land with coastal sand inclusions	Feudal castle site
Oudenberg	Context examined is from the last quarter of the 4^{th} century AD	Salt clay based marshes with coastal dunes, now in polder land due to reclamation	Roman Military fort
Londerzeel	$13^{th}\text{-}14^{th}$ century AD	Silty and sandy soil, with damp and muddy horizons	Castle site

Figure 2.21: Table summarising the information in Chapter 2 about the archaeological sites examined

Chapter 3 Traditional Zooarchaeological Analyses

Full zooarchaeological analyses were carried out on a sample of the excavated animal bones from Raversijde and Koekelare in order to carry out an assessment of the nature of the faunal assemblages on site- this included examination of all species of animal identified. All animals present are considered within Chapter 3 in order to consider the nature of the sites animal assemblages.

3.1. The suitability of the assemblages for examination

By the very nature of the archaeological process an archaeofaunal assemblage is passed through a ‘cultural filter’ of human decisions and influences during its creation as well as its collection (Payne, 1972; Legge, 1978; Uerpmann 1973; Reed 1963 in Reitz and Wing, 1999:2) (figure 3.1). By its transit through such a filter, faunal remains allow archaeologists to reconstruct details of past human behaviour despite the bones themselves inherently being a naturally occurring material. While some bones may have entered into the collected assemblage through natural processes, it is assumed that in sites with a significant human presence the majority of the bones will have somehow been affected by humans (Uerpmann, 1973:307). This may be either by interference in the animal’s life while it was alive, in the animal’s death, or through the use and later deposition of the bones post-mortality. It is this very fact which means that zooarchaeologists can utilise faunal assemblages for the studies of historic peoples and, for this study, means that with the selection of suitable assemblages we can use animal bones to explore questions about animals in the past and how humans affected them.

Faunal assemblages examined by zooarchaeologists differ somewhat from those which were present at the time of deposition. They will have inevitably undergone further transformation after the bones were discarded, not only through being in the ground but also by decisions made in the collection process (Davis, 1995:22). It is therefore important to consider the potential effects that these later factors have on the assemblages to be studied. In particular it is essential to determine whether the assemblages selected are suitable to provide meaningful data about their original composition, or whether information is prohibitively masked by the later noise created after their deposition. It is particularly important to ensure that the assemblages are suitable for a rigorous scientific analysis to provide data for the examination of the stated research aims, and to assess their status as reliable data sources. Since the final interpretation is 'wholly affected by the methods used to recover, record and analyse the data' (O'Connor, 1982:72) it is important to determine whether any problems are likely to exist in the assemblages chosen for analysis.

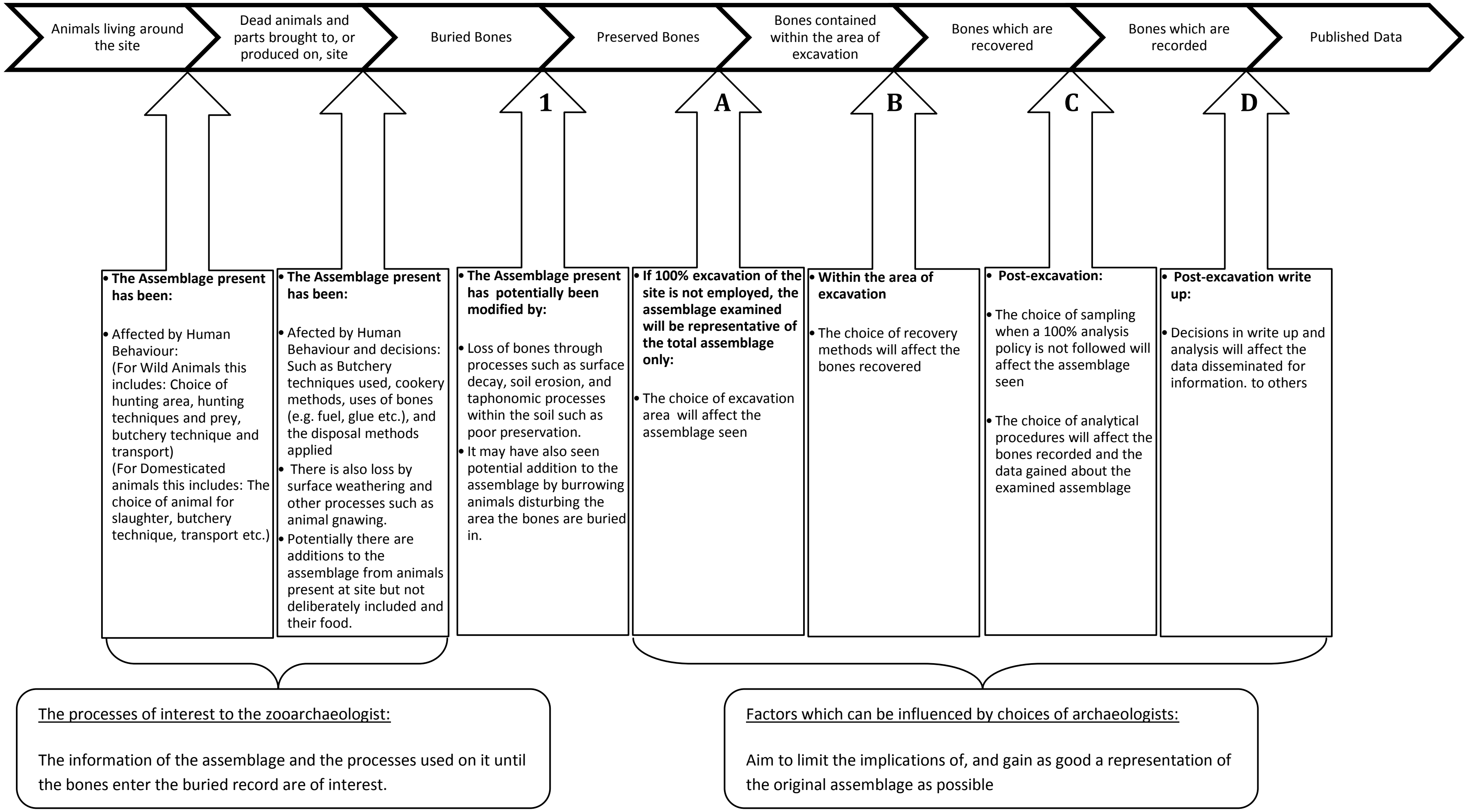


Figure 3.1. An Illustration of the factors which may affect the archaeological faunal data examined in comparison to that originally present. (Adapted from Davis, 1995:22 and Kausmally and Western, 2005:12)

In order to examine the suitability of the assemblages used within this study each stage of potential influence or bias on the assemblage after its deposition is considered, following the model illustrated in Figure 3.1 (based on models created by Davis, 1995:22 and Kausmally and Western, 2005:12) which identified a number of major areas in which bias may be introduced. Each of these stages will be assessed to determine whether there should be any concern of significant bias being introduced for the assemblages examined in this study. Each factor or stage will be discussed in turn, with reference to Figure 3.1, as confidence in the archaeological assemblage as a reflection and remnant of human interactions with animals is critical for interpretation.

3.1.1. Confidence in treating each assemblage as representative of a larger faunal collection (Factor A)

It is important that each assemblage can be considered as single and coherent in its own right (Reitz and Wing, 1999:118, O'Connor, 1984:3) in order for us to have confidence that any patterns identified are not caused by the erroneous mixing of bones and bone fragments that cannot really be compared with each other. The taphonomic history of a site may have seen the removal or introduction of animal remains over time, and so an examination of evidence for changes such as site formation processes and site history is vital for a sound interpretation of any faunal assemblage (Reitz and Wing, 1999:9).

If what is regarded as a single sample is, in actuality, a collection of smaller groups then data may be misinterpreted. This is of particular concern for this study as any differences between sites may be only subtle. It is vital to have confidence in the material studied in order to be able to interpret patterns as significant. An illustration of the importance of understanding an assemblage's history and context is perhaps most clearly demonstrated at a site such as Baynards Castle, London, where examination showed the cattle remains from inside the castle grounds to be much larger and more robust that those recovered from outside the walls of the same date (Armitage, 1982:98). If these assemblages had been grouped together the interpretation of the cattle and the site would have been very different, and this demonstrates clearly the importance of considering whether the sites reflect true single, concise, assemblages.

3.1.1.1. Raversijde

At Raversijde the assemblage can be regarded as a single discrete unit for a number of reasons. Excavations have revealed extremely homogenous finds from across the site, (see chapter 2), with only two houses being interpreted as of differing (higher) status (Pieters et al., 1996), which may have led to a very small inclusion of material from deposits of varying social status. The bones analysed within this study have all been excavated from one feature, a central ditch (see figure 3.2), which has been selected not only due to the large amount of faunal material excavated from within it, meaning a large assemblage is available for examination, but also because of the strength of dating for this feature to the main period of village occupation and the strong evidence that this forms a homogenous faunal assemblage (Pieters et al., 1994:275). The incorporation of material from only a single, clearly understood, feature obviates any confusion which could occur with examination of deposits distributed across site, where their relationship may be unclear.

Figure 3.2. The major ditch feature from which the Raversijde faunal assemblage was excavated. (Web Reference 3.1)

Dating evidence from Raversijde, such as dendrochronology and material cultural analysis, similarly supports the historical interpretation that the context is single-phase and fits into the main occupation period of the site.

3.1.1.2. Koekelare

At Koekelare, the faunal assemblage can similarly be interpreted with confidence as comprising a cohesive unit for analysis. The bones analysed have all been excavated from a central ditch feature (see figure 3.3) and securely dated by material culture finds, in particular pottery, as a 15th century context which has been undisturbed by later site use (Dewilde et al, 1996).

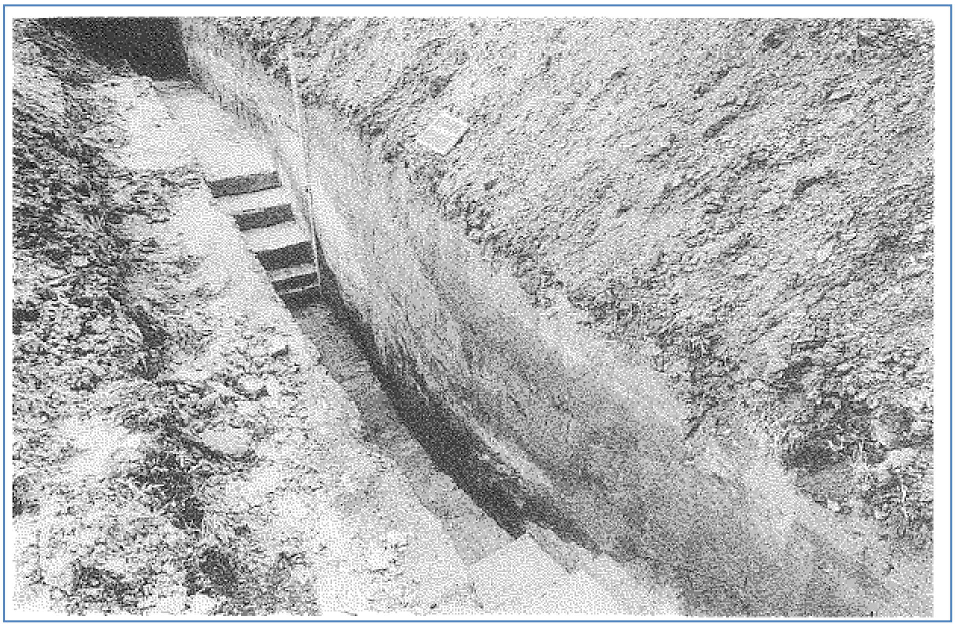


Figure 3.3. The central ditch at Koekelare from which much of the 15th century faunal remains were excavated (Dewilde et al, 1996: 183)

All contexts examined have been positively identified as from the 15th century. None of the earlier dated contexts or contexts where dates were subject to question have been incorporated into this analysis. This ensures that the material examined is not only from the same location but is certain to be of contemporaneous date.

3.1.1.3. The other sites from which mandibles alone are examined

Although the full assemblages are not examined from Ename, Veurne, Oudenberg and Londerzeel it is important to note that all contexts from which mandibles were examined for these sites date from very discrete periods of site use (See Chapter 2) and confidence is high that they are suitable for assessment as ‘single’ collections (Ervynck, pers. comm. 2006). No mandibles from contexts of unclear date were included in the collection of mandibles from any of these four sites.

3.1.1.4. Conclusion for 'Factor A'

Therefore, for the faunal assemblages of Raversijde and Koekelare it is a reasonable assumption that the material does in fact reflect a representative sample of the faunal material for a specific period of the sites. Indeed, it was the nature of such unusually large well-preserved faunal assemblages from a confidently defined time-span which was the particular strength of these samples and led to their identification as particularly appropriate to use to investigate the aims of this study. The mandibles are similarly selected from clearly dated sites, although as a selection of a single bone (mandible) from a single species (pig) was made, there is no concern over how 'representative' the sample is in terms of species or element distribution

3.1.2. Collection techniques during excavation of the faunal assemblage (Factor B)

Sieving is recognised by many as an ideal recovery methodology to establish that an assemblage is relatively unsullied by any recovery bias caused by the inevitable fallibility of excavators in either identification or recovery of faunal material while excavating (For example, Casteel, 1972; Payne, 1975; Clason and Prummel, 1977; Gamble, 1978). Sieving, and wet-sieving in particular, is believed to aid the prevention of biasing of the collection towards the most easily recognisable and larger skeletal elements and species (Davis, 1987:191, Payne, 1975:7,11). Therefore, to ensure a complete lack of bias towards larger or more easily identified bone elements as part of the collection process, an ideal collection policy would include a 100% sieving criteria for all contexts.

In practice, however, it was not possible to identify assemblages of sizes substantial enough to be appropriate and meeting the other criteria to make them desirable for inclusion (such as concise date, close location etc.) which had been sieved according to this criterion. It was therefore necessary to consider examining sites which have used less stringent collection policies. For both Raversijde and Koekelare the faunal remains were almost exclusively recovered by hand-collection during excavation with no comprehensive sieving policy being employed. At Raversijde the majority of site contexts were not sieved, with sieving occurring in only one specific context. This was a context identified during the excavation process as unusually rich in fish bones and so recovery by 100% sieving through a 0.5mm sieve was made to ensure that all of the small and fragile bones were collected (Pieters, 1997:175). This context was not included in the faunal assemblage examined. Similarly no contexts at Koekelare were sieved, with all faunal remains being recovered by hand collection during excavation (Ervynck and Dewilde pers. comm., 2006).

While accepted as best practice, the use of sieving is still not commonly employed as standard for all contexts from archaeological sites as it is relatively time-consuming and thus expensive (O'Connor, 1991:221). Although growing in popularity, it can perhaps be better seen as an 'ideal' methodology for the examination of a faunal assemblage rather than a necessity whose absence automatically precludes quantitative analysis (Gamble and Bailey, 1994:81, O'Connor, 1996:9). Sites with large faunal collections such as Lincoln (Dobney et al, 1996), and York (O'Connor, 1984), employed a 'hand collection' strategy, and, indeed, in commercial archaeology it is uncommon for sites to be one-hundred percent sieved (Armstrong, 2010: pers.comm) . Many large scale zooarchaeological assemblages which lacked a 100% sieving strategy have been examined without their interpretation being compromised by the lack of use of this method. Indeed, in British archaeology the MoLAS Archaeological Site Manual (often promulgated as the definitive modern handbook of guidelines for archaeological practice), even suggests that for the recovery of large mammal bone, hand collection is a 'suitable recovery procedure for animal bones' (MoLAS handbook, 1994: Section 3.2 Table 1).

As neither Raversijde nor Koekelare were sieved during excavation, there is inevitably some bias towards larger animals and elements (Reitz and Wing, 1999:119). There will therefore have been a relative under-recovery of smaller bones and species, and this does need to be considered both in regard to the qualitative summary of the contents of the assemblage (this chapter) and also when employing a more in depth quantitative strategy for the bones (chapter 4) (Dobney et al., 1996:16). However, it is important not to over-state the impact of sieving as a factor in the quality of recovery- it is only one stage in the 'long and complex process of taphonomic loss' (O'Connor, 1984:5), summarised in figure 3.1., and is merely something that must be kept in mind during interpretation, rather than meaning the assemblages should not be used. It is however important to consider its effects as it may indeed have significant implications on the data.

At Raversijde and Koekelare the bias due to the lack of a sieving strategy is also ameliorated because, at both sites, 100% of the faunal material excavated was collected and made available for analysis, rather than only a sample (Ervynck, 2008: pers comm.), something desired but often not attained on archaeological excavations (Kausmally and Western, 2005:13). While this does not eliminate bias induced by the collection policy it does mean that as large an assemblage as possible was gathered and that no deliberate selection process had been employed which could have biased the patterns further. These factors are a particular strength (O'Connor, 1996:9) of Raversijde and Koekelare, alongside the sheer quantity of faunal material available for analysis. Certainly this methodology ensured no 'cherry-picking' of particularly interesting or significant skeletal remains (Ervynck, 2008: pers. comm.).

Furthermore, the strategy of collection was consistent between the two sites. Both were hand collected and both incorporated a 100% collection policy for faunal material. For quantitative analysis and comparative purposes this is important as it reduces the number of variables needing to be considered in interpretation. Some archaeologists even go so far as to suggest that such consistency in recovery strategies is more important for site comparisons than the specific strategic methodology employed (Reitz and Wing, 1999:201). The implications of this collection policy are therefore that that the assemblages are as unbiased and complete as is possible when using standard archaeological practical collection techniques common on many archaeological sites. Identical criteria were used on both the sites. Inevitably, the lack of sieving must be considered as a factor which could affect interpretation of these sites, but it is clear that the collection strategies employed by no means preclude the choice of these assemblages. For this study, therefore, Raversijde and Koekelare both again appear suitable assemblages for examination.

For the sites from which only mandibles were examined a hand collection policy had again been employed. Collection strategy is less relevant in regard to these sites for this study, however, as the overall make-up of the assemblage is not being considered but rather a specific species and bone element.

3.1.3. Selection processes to obtain a representative sample of the total assemblages (Factor C)

Due to the sheer amount of material from both Raversijde and Koekelare, a sampling strategy was introduced to examine a selection from the total quantity of the faunal remains obtained. The exact number of bone fragments recovered from each site has not been determined but estimates put the size of each of the assemblages into the tens of thousands (personal observation) and it would not have been practical, however desirable, to record every bone fragment. This would have lead to a huge time investment and the recording of a vast amount of redundant data (O'Connor, 1989:139). Even if the full assemblage had been analysed it would still only have been a part of the original death assemblage, being that portion surviving and retrieved during excavation (Gautier, 1984:243). A sampling strategy is recognised by many zooarchaeologists as an inevitable and expedient use of resources when the volume of material from sites is too large and costly to examine as a whole (O'Connor, 1984:3). For example many advocate that sub-sampling is appropriate, and indeed often necessary, but that it is important to ensure that it is done with the overall research objectives in mind, and also that the sample is large enough to be representative of the whole (Reitz and Wing, 1999:122, 146).

In order to ensure that the samples from the sites were suitable for the research aims and objectives, a clear sampling strategy was employed. This was designed to be as free of bias as possible. There was no selection of contexts because they contained superior material, preservation or fragmentation (i.e. no 'cherry-picking' of contexts noted as particularly rich in bones, with many complete bones, or looking particularly interesting). A randomised strategy was used, as recommended by Fletcher and Lock (1994:73) from among the contexts of secure date. This was intended to provide a representative sample of the 'typical' picture of each site.

Koekelare has more than one dated phase (see chapter 2) and so sampling was deliberately restricted to those contexts securely datable to the 15th century. The assemblage can therefore be treated as one single assemblage dating to this period as earlier or later material has not been included. While it is important to be aware that the faunal remains analysed from Raversijde and Koekelare are just samples from the full assemblage excavated from the sites, it is felt overall that these sampling techniques have resulted in subsamples which are likely to be a good reflection of the total site assemblage and also of large enough size to allow secure analysis (see further on in this chapter for details of sample size).

For the sites where only mandibles were examined, the samples examined were the same as those used in the pilot study (Ervynck et al., 2007) in order to allow the integration of findings from different researchers, and to consider what if any differences in patterns were present. All sites from which mandible samples were examined provided finite and well dated assemblages and the samples were deemed of large enough size to allow secure scientific analyses to be employed within this study. The samples were obtained using a clear randomised sampling strategy (Ervynck, 2006: pers. comm.) and so no concerns are raised about the selection of particularly 'ideal' specimens for analysis.

3.1.4. Decisions made within the write up and analysis of the data (Factor D)

It is intended that this study should be as open to analysis by as many readers as possible, and therefore as much data as is practicable is presented for future examination and analysis. To this end all raw data are presented in appendices in Volume 3 (on associated CD) to enable others to re-interpret the data using the raw information gathered (Appendix 3.1.). Methodological choices and interpretation are discussed in detail, and the reasons for their choice made clear within this study so that the process of moving from the raw data to the conclusions drawn is as clear and as comprehensible as possible.

3.1.5. Assessment of the preservation and overall condition of the assemblages (Factor 1)

It is also important to assess the overall condition of the assemblages themselves, to examine whether their preservation makes them appropriate for the purposes of this study. It is necessary to have confidence that not only does the analysed assemblage reflect in some way the 'death' assemblage, but also that it is of a suitable condition to provide the data required. In particular, poor preservation may severely damage the archaeological assemblage excavated and render faunal remains unsuitable for the analyses which this study intends to use. Taphonomic changes may also affect the overall composition of an assemblage. For example, an assemblage may experience the differential loss of more fragile elements, more robust bones resist mechanical fracturing, fragmentation or general deterioration much better than their fragile counterparts (Reitz and Wing, 1999:117-8). In extreme cases there may be total loss of, or damage to, the entire bone assemblage (Reitz and Wing, 1999:14) rendering any sort of zooarchaeological analysis impossible.

Preservation is dependent on a number of factors, all of which can determine the condition of the surviving material. For instance the promptness of burial of material may be a factor, given the increased likelihood of damage while it is uncovered on the surface. If bones are accessible, dogs and pigs can both cause them considerable damage (Payne and Munson, 1985; Greenfield, 1988), and smaller creatures such as rodents and insects may similarly damage bones if they are left exposed and vulnerable (Lyman, 1994:393). Biological organisms may affect the bones even if they are buried, with the burrowing of animals, plant and root penetration, and even earthworm activity being potential hazards to the faunal assemblage preservation (Reitz and Wing, 1999:116, Canti, 2003). Bones which resist disturbance are generally those robust bones which can better resist mechanical damage and so will preferentially survive (Gamble and Bailey, 1994:87). Size and shape also plays a part, with small compact elements such as phalanges, carpals and tarsals weathering conditions above soil much more slowly than other elements (Behrensmeyer, 1978). If fragmentation or general damage in the assemblage was too great, it could also render it impossible to find a suitable number of bones to measure or, in the worst case scenario, even preclude the positive identification of much of the assemblage which would render it completely unsuitable for this study.

The Behrensmeyer scale of bone condition (1978:151)

Stage 0: Bone surface shows no sign of cracking or flaking due to weathering. Bone is often still greasy. Marrow cavities contain tissue; skin and muscle/ligament may cover part or all of the bone surface.

Stage 1: Bone shows cracking, usually parallel to the fiber structure (e.g., longitudinal in long bones). Articular surfaces may show mosaic cracking of covering tissue as well as in the bone itself. Fat, skin, and other tissue may or may not be present.

Stage 2: Outermost concentric thin layers of bone show flaking, usually associated with cracks in that the bone edges along the cracks tend to separate and flake first. Long thin flakes, with one or more sides still attached to the bone, are common in the initial part of stage 2. Deeper and more extensive flaking follows, until most of the outermost bone is gone. Crack edges are usually angular in cross section. Remnants of ligaments, cartilage, and skin may be present.

Stage 3: Bone surface is characterized by patches of rough, homogeneously weathered compact bone, resulting in a fibrous texture. In these patches, all the external, concentrically layered bone has been removed. Gradually the patches extend to cover the entire bone surface. Weathering does not penetrate deeper than 1.0 to 1.5 mm at this stage, and bone fibers are still firmly attached to each other. Crack edges usually are rounded in cross section. Tissue rarely present at this stage.

Stage 4: The bone surface is coarsely fibrous and rough in texture; large and small splinters occur and may be loose enough to fall away from the bone when it is moved. Weathering penetrates into inner cavities. Cracks are open and have splintered or rounded edges.

Stage 5: Bone is falling apart *in situ,* with large splinters lying around what remains of the whole, which is fragile and easily broken by moving. Original bone shape may be difficult to determine. Cancellous bone usually exposed, when present, and may outlast all traces of the former more compact, outer parts the bones.

(Text copied from Behrensmeyer 1978:151 and Uberlaker, 1997:79)

It is therefore necessary to evaluate the state of decay or otherwise of the bone tissue and assess whether preferential survival of certain elements/species is likely to have caused any biasing of the assemblage to be examined. This study follows the methodology of O'Connor (1991:233) to assess preservation both in terms of the condition of bone present, and also physical damage. It is inevitable that some taphonomic bias will be present in any excavated faunal sample, but in a well-preserved site it will be minimal. The preservation of all the sites in this study was identified as excellent (Ervynck, 2006:pers. comm.) and this was an important factor in their original selection for this analysis. The level of fragmentation or observable physical damage for each 'specimen' was evaluated during the recording process. This varied from bone breakage to abrasion of the surface or other damage, including a close assessment of whether the articular surfaces were complete and suitable for measurement. For each specimen an assessment of the surface porosity and wear was undertaken and recorded using the Behrensmeyer (1978) descriptive criteria to simplify and codify the condition of each bone. It must be remembered that this assessment scale itself is semi-subjective and interpretive, and that different readers may have slightly differing judgements as to which bones fall into which categories. However, the use of this scale aided the identification of whether preservation varied between different contexts, as well as giving an overall impression of the condition of the assemblage and its suitability for further investigation.

For each site where postcranial bones were examined, these had not been washed as only relatively macroscopic analysis was taking place of these bones and it was felt the fine covering of dust would not inhibit such an analysis. However, it is important to note that all teeth/mandibles were, in order to ensure that the occlusal surfaces were clear of dirt which may have caused problems for the techniques being employed within this study and prevented accurate ageing, and problems for the identification of hypoplasias and microwear analysis.

3.1.5.1. Raversijde

The majority of the contexts scored well on the Behrensmeyer scale of bone condition (1978). This supports the preliminary supposition that the bones were buried relatively swiftly, with little evidence of weathering from surface conditions and that they have preserved well in the ground since burial. A summary of the scores created for each individual specimen during this analysis shows that the majority of the Raversijde contexts score between one and two on the Behrensmeyer scale, with little variation between contexts and with the worst score being four. Alongside the other supporting evidence for excellent preservation at this site (see below), this provides great confidence that smaller and more fragile bones have not been lost due to deterioration, and allows the best possible identification of bones, as well as suggesting that the bones have not been left exposed on the surface for long periods of time (Levitan, 1993:259).

At Raversijde the excellent preservation of the site was also revealed by the survival of features such as wooden barrel wells and starfish skeletons, with even the cartilaginous parts of some faunal remains being identified during excavation (Pieters, 1997:175). This hints strongly at the excellent survival of not just the durable bone material but also the more fragile parts. Particularly noteworthy is the survival of a fish-bone rich deposit whose context contained thousands of fish bones deriving from approximately 130 individuals. Often such small and fragile bones would be the first to be lost if preservation was poor or there had been post-depositional disturbance. Their presence suggests that larger faunal material is likely to have been well preserved and clearly means the assemblage is likely to be of excellent condition for the intended examination

3.1.5.2. Koekelare

Similarly, at Koekelare the preservation of the majority of the bone contexts was excellent, on average scoring between one and two on the Behrensmeyer scale. This illustrated that in general the preservation of the faunal material on site was good and that the bones were in excellent condition for study. Several contexts however had no identifiable bones due to poor preservation, and so a true ‘random’ selection of contexts was not wholly possible as a number of contexts had to be discarded as unsuitable. These contexts, however, comprise only a very limited number of those examined (less than 2%), and with the preservation within the other contexts being excellent it is very unlikely that there has been a significant bias caused by preservation. This assemblage therefore can also be considered suitable for analysis.

3.1.5.3. The sites from which the mandibles were considered

All the mandibles examined in this study were in good preservation, with none scoring lower than three in the Behrensmeyer scale. It is impossible to determine from such a specific selection the overall nature of the rest of the faunal assemblages from these sites, but it is evident that all the jaws examined were of an appropriate condition for study.

3.1.6. Summary of the suitability of the assemblages

A review of the various factors necessary to determine samples of suitable quality, quantity, and comparability has therefore identified two faunal assemblages which are believed to be very suitable to be used to investigate the research aims and objectives. This is not based only on the overall nature of the site (see Chapter 2), but also the particular make-up of the faunal assemblages. Some problems must be acknowledged with the assemblages, in particular those created by the excavation methodology, but these are relatively minor and not unusual, and have been assessed in this evaluation as not of a large enough concern to mean that confidence cannot be placed in any findings. Zooarchaeologists must indeed accept that inevitably for any study of bone assemblages there will be problems due to the very nature of the material being examined, indeed that 'animal bone quantification is deeply problematic' (O'Connor 2001:708), but this should not prevent us from attempting interpretation of such material.

The sites of Raversijde and Koekelare are therefore assessed as representing faunal assemblages which provide comparable, suitable samples reflecting the original 'death' assemblage as accurately as possible and which should enable the research questions to be answered with confidence.

The full faunal assemblages from Ename, Veurne, Oudernberg and Londerzeel were not evaluated because only pig mandibles have been studied. This means that many of the assessments related to defining confidence in the findings of a full assemblage are simply not relevant (for example differential taphonomy between different species or element). The evaluation of the state of the mandibles is however important and has highlighted that the mandibles are all in good condition. This, alongside the knowledge that they are also from securely dated contexts, means that they are assessed to be appropriate for use in this study.

3.2. Methodology for the primary recording of the post-cranial material from Raversijde and Koekelare

The analysis of the faunal material from both the sites of Koekelare and Raversijde took place in a single research period spanning the autumn-winter of 2006 in facilities at the Museum of Domein Raversijde, Oostende, Belgium. The examination was carried out in clean, well-lit and spacious surroundings to ensure appropriate conditions for successful and accurate identification and analysis of the archaeological material (see figure 3.4).

Figure 3.4. Workspace at Domein Raversijde, Oostende used for the analysis of the archaeological material

3.2.1. Technique for identification and recording of data

Identification of the elements to individual species followed traditional zooarchaeological methodologies in common use for faunal material from archaeological sites. Reference collections were consulted and reference books, chosen for clarity, were also used to aid identification. In addition personal notes, photographs of reference samples from the Durham University zooarchaeological reference collection and diagrams from previous analyses of domestic animals were utilised to determine the mammal species present. The references texts consulted on-site included Von den Driesch (1976), Hillson (1996), Amorosi (1989) Sisson and Grossman (1965) and Schmid (1972).

Only bones positively identifiable to species were recorded, measured and studied. This is somewhat different from most zooarchaeological methodologies where the recording of the bone fragments which are only identifiable to various sizes of mammal (such as 'Large', 'Medium' and 'Small' (as recommended by Uerpmann, 1973 and defined by Dobney et al., 2007)) is often accepted practice. The decision to only include positively identifiable bones is a consequence of this study not attempting a standard faunal assemblage analysis of the sites, but rather utilising the assemblages as examples to investigate a wider question. The only exception to this methodological requirement was in the identification of sheep/goat. It is notoriously difficult to distinguish between sheep and goat due to their skeletal similarities (Boessneck 1969, Prummel and Frisch, 1986; Boessneck et al 1964, Payne 1985 in Reitz and Wing 1999:154, O'Connor, 2000:42) and so for the purposes of these examinations they were identified to a sheep/goat (*Ovis/Capra*) category, although in reality it is likely at this time and location that they largely represent sheep (Thoen, 1997; Tys, 2006:5).

Only 'large' domesticated mammals (as defined by Dobney et al., 2007) were examined and recorded on identification (for example, species included cattle, pig, sheep/goat, deer and horse), as these form the focus of this investigation. Species such as rodents and fish were left unrecorded as they had no relevance to this particular research.

Terminology in this study follows that of modern archaeological bone reports. Vernacular 'common' names of taxa are used throughout. For example, cattle/cow is used throughout this study to refer to members of the *Bos* genus of either sex, rather than the traditional meaning also encompassing other domestic animals including goats and sheep (Reitz and Wing, 1999:10). Sheep/goat refers to members of the *Ovis/Capra* genera, pig refers to the genus *Sus*, and incorporates either domesticated or wild varieties, although it is believed at this time period the vast majority of the pig remains would be from domesticated stock (Ervynck, 2005:pers.comm).

Ribs and vertebrae were not recorded as these elements cannot be readily identified to species (Davis, 1987:35). Concerns over misidentification of these elements were felt to be more significant than the small amount of information (only species representation) that the inclusion of these elements would give. Similarly, with the intentional creation of a methodology to only include material that could be used for quantitative as well as qualitative analysis, only those bones with at least one measurable span were recorded. 'Measureable' in this case is defined as a single complete measurement requiring no estimation to obtain a reading for the span. Results were recorded throughout this study in millimetres unless otherwise explicitly stated, as recommended by Fletcher and Lock (1994:8).

No bones with signs of burning were measured. This is due to the potential risk of warping and deformation of the bone from such a process, which may give measurements which would not be comparable to the unburnt assemblage because of shrinkage or deformation of the element. A study by Coy (1975) illustrated that a burnt element can shrink up to 5% in diameter when compared with an identical unburned partner (Coy, 1975), but proportions of shrinkage vary unpredictably dependent on heat intensity (Lyman, 1994) meaning that any burnt specimens are in reality unreliable for accurate measurement. Although some studies have seen such elimination as excessive caution, removing such elements from inclusion in statistical analysis prevents the introduction of a source of a potentially large margin of error for this particular study. Modification to the bones by other cooking methods, such as boiling or baking, is almost impossible to identify despite still potentially affecting the organic component of the bone (Reitz and Wing, 1999:131, Roberts et al., 2002). This must be recognised as a potential error source but is one which cannot be controlled within zooarchaeological data analysis. Such modifications have not been proven to affect measurements on bones (Roberts et al., 2002, Munro et al., 2007), only merely making it more likely that the bone is in a poorer condition due to underlying taphonomic changes leading to a weaker bone, and so it is unlikely that this will be a major problem to this analysis.

3.2.2. Methodology used for measurements

The methods and measurements chosen for the analysis of the mammal bone assemblages from the two sites of Raversijde and Koekelare have a two-fold purpose, firstly to produce results which are accurate and informative, and secondly to produce results which are directly comparable to other sites. It is vital to use techniques that are both apposite to the questions being considered and that do not mask or bias the evidence (Reitz and Wing, 1999:9). To this end it was decided to measure the bones using Von Den Driesch's published series of standardised measurements (Von Den Driesch, 1976), with some adaptations and additions as recommended by Davis (1996, 1992). This standard was primarily used as the measurements recommended are both clear to identify and thus record, as well as being the standard used for measurement in most archaeological faunal reports (Reitz and Wing, 1999:169); this allows ready comparisons with other sites. The additions and adaptations employed are ones that have been developed subsequent to the publication of Von Den Driesch's model (see Davis, 1992 and Davis, 1996 for further details) and are measurements now commonly taken and utilised in archaeological faunal reports.

Zooarchaeologists rarely measure unfused bones when analysing faunal assemblages as animal bones are continually growing and developing until maturation, dramatically changing their morphology (Davis, 1996:599). Some growth, particularly in width (Payne and Bull, 1988:30), continues after fusion but it is impossible to categorise bones once fused into specific age categories to account for this later growth; this must be accepted as a potential cause of variation in the range of width measurements within an assemblage (Legge, 1996:242; Payne and Bull, 1988:35). Long bones when immature generally comprise a middle shaft of bone (diaphysis), to which at each end is attached a separately growing piece containing the articular surface (epiphysis) (Rackham, 1994:7). As the animals mature the epiphyses become fused to the diaphyses as the attaching cartilage is converted to bone through ossification; this fuses the epiphysial ends to the main shaft (Rackham, 1994:10). A strategy of not recording measurements of unfused bones was employed throughout this study to attempt to prevent excessive measurement variation caused solely by the inclusion of immature as well as mature material. Only articular ends with the epiphysis fused to the diaphysis were measured and no midshaft measurements were taken unless a fused articular end was evident.

For incomplete bones broken mid-shaft it is impossible to determine the fusion status of the end not present. For the end present epiphyses on such bones were however still measured. While this may have increased the range of measurements, to some degree it is common practice at most sites where fragmentation of the bones is ubiquitous due to processing of the material pre-deposition and taphonomic changes; fragmentary specimens usually constitute most of the sample (Reitz and Wing, 1999:10). This decision is unlikely to have greatly biased the results, certainly not to the degree that knowingly including fully juvenile bone measurements would. It is important to note that juvenile bones were still recorded as present within the analysis, to gain a true picture of the age profile of the assemblage, but no measurements were taken.

Digital callipers of an +/- 0.1mm industry-standard measure of accuracy were used to measure the bones and mandibles. These were used to ensure the collection of accurate and reproducible results and are standard tools to use for these measurements (O'Connor and Barret, 2006:285). The same set of 150mm span callipers were used throughout to eliminate instrument variation or error, although for bone measurements exceeding the maximum span (a rare occurrence), Vernier callipers of 300mm span were used as it was felt that the instrument error potentially induced by the change of instruments was less than that of 'estimating' the length through using inappropriately small callipers. Digital callipers were used for ease of reading and accuracy of measurement and to try to prevent errors of transcription of results.

It must be remembered that while the tools are inherently as accurate as possible, the identification of the points of measurement on individual bones is by eye and not via an automated process, and so human judgement is used throughout this procedure and is clearly a source of potential error (Dibble and McPherron, 1988:432). This has been limited through following a rigorous measurement methodology, only taking complete measurements rather than estimation, following modern practice, and ensuring that the examination took place in spacious, well-lit and clean surroundings (at the Domain Raversijde Museum, Ostend, Belgium, see figure 3.2) so that errors of identification, measuring and recording were minimised.

For the mandibles, measurement of the teeth and jaws were taken using the same digital callipers as used for the examination of the bones. The examinations of these particular elements took place at the zooarchaeological laboratories, Department of Archaeology, Durham University and the same considerations of lighting and adequate facilities were adhered to.

3.2.3. Technical details of the recording of the faunal assemblages

The records for each specimen analysed, including measurements taken, were input into a customised database, using Windows Excel (primarily Microsoft Office version 2003, later updated to version 2007 in the latter stages of analysis), where each specimen had an individual and unique field containing all information for that specimen. The database was updated on-site as the bones were being recorded to ensure instant logging, so errors of transcription were as few as possible. For this analysis a specimen was defined as a bone preserved well enough to provide at least one measurement.

Diagrams adapted from Amorosi (1989) and the taking of descriptive notes were used as the basis for recording instances of working, pathology or gnawing. These notes recorded information about the type and location of any such feature (such as defining any areas missing, describing the nature, size and properties of the marks of working, gnawing or pathology). The raw database of the records produced is included in Appendix 3.1 so that other researchers can have access to the primary data, as recommended by modern archaeological practice (Fletcher and Lock, 1994:8). A secondary copy of the raw measurement data files for the post-cranial data was stored with the archaeological agency that excavated the sites and stores the bones (IAP) upon completion of the gathering of the primary information.

3.3. The Number of Identified Specimens (NISP)

3.3.1. NISP of the Post-cranial material examined.

The intention of this study is to examine the efficiency of using a spectrum of zooarchaeological methods to provide a clearer view of animal husbandry from archaeological faunal material. It is therefore important to reflect on the information that traditional lines of investigation can provide about the assemblages being considered.

As with any examination of faunal material from archaeological sites, it is important to first produce a summary of the 5053 bones and 742 mandibles examined as part of this study, and to consider the information this most broad quantitative analysis provides. The first strategy usually employed by zooarchaeologists to do this is to simply consider the proportions of species present. The raw data of the post-cranial material from Raversijde and Koekelare is summarised in Figure 3.5 below, showing the raw counts of the number of each bone specimen identified to species. These figures are variously known in literature as specimen, fragment or bone counts, or Number of Identified Specimens (**NISP**) (Payne, 1975 being the first to term this). NISP simply reflects the number of specimens in a sample (Reitz and Wing, 1999:155), and represents the most basic assessment of an assemblage. Because only bones with at least one measureable span were quantified, the NISP data does not represent the number of fragments, but rather a single specimen equates to a single bone with at least one measureable span.

Such an analysis is not relevant for the sites where only pig mandibles are being examined, as from these sites a true spectrum of species or bones is not being attained, and so such investigations are only relevant for the representative faunal samples of Raversijde and Koekelare.

	Raversijde								Koekelare							
	Bos?	Bos	O/C?	O/C	Sus?	Sus	Equus	Canis	Bos?	Bos	O/C ?	O/C	Sus ?	Sus	Equus	Cervus
? MC	0	4	0	10	0	0	0	0	0	2	0	0	0	0	0	0
? MC/MT	0	2	0	3	0	0	0	0	0	7	0	1	0	0	0	0
? MT	0	3	0	4	0	0	0	0	0	1	0	0	0	0	0	0
Metacarpal	0	68	0	301	0	67	3	0	2	186	0	42	0	3	1	0
Metacarpal/ Metatarsal	0	16	0	14	0	1	0	0	0	14	0	1	0	0	0	0
Metatarsal	1	54	1	359	0	56	1	0	1	169	0	44	0	2	0	1
Astragalus	0	27	0	35	0	35	0	0	0	26	0	4	0	2	0	0
Carpal	0	47	0	0	0	1	1	0	0	14	0	0	0	1	0	0
Tarsal	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Tibia	0	65	2	234	0	37	1	0	0	99	0	20	2	1	0	0
Radius/Ulna	0	12	0	3	0	3	0	0	0	9	0	0	0	0	0	0
Radius	0	53	1	183	0	72	0	0	0	98	1	14	0	3	0	0
Ulna	0	17	0	91	0	86	0	0	0	20	0	5	1	16	0	0
Phalanx 1	4	129	16	69	19	54	5	0	0	207	0	4	0	0	3	0
Phalanx 2	3	70	0	3	4	24	0	0	0	81	0	0	0	0	0	0
Phalanx 3	0	61	0	0	1	7	0	0	0	61	0	1	0	0	0	0
Phalanx 1/2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Humerus	0	48	2	192	0	71	0	2	0	52	0	34	0	13	0	0
Scapula	0	24	0	180	4	98	0	0	0	44	0	33	0	4	0	0
Femur	2	22	2	66	5	12	0	0	0	12	0	5	0	2	0	0
Navicula-Cuboid	0	24	0	7	0	3	0	0	0	29	0	0	0	0	0	0
Patella	0	4	0	0	1	0	0	0	0	1	0	0	0	0	0	0
Pelvis	0	8	7	23	1	10	0	0	1	16	0	3	2	4	0	0
Calcaneum	0	28	2	78	3	33	0	1	0	38	0	7	1	1	0	0
Jaw	0	10	0	1	0	76	0	0	0	61	0	6	0	18	0	0
Totals	10	798	33	1856	38	746	11	3	5	1247	1	224	6	70	4	1

Figure 3.5. Summary of the raw data of the post-cranial bones gathered from Raversijde and Koekelare.

From this NISP data it is immediately possible to provide a brief summary of the more obvious information about both assemblages. At Raversijde the three predominant domesticated mammal taxa in the assemblage are cattle (*Bos*), sheep/goat (*Ovis/Capra*) and pig (*Sus*) and these three taxa comprise 99.6% of the whole assemblage examined. There were only fourteen exceptions, these being three elements of a dog (*Canis*) and eleven elements from horse (*Equus*) (see Figure 3.5). At Koekelare the dominance of the same three taxa is again evident, with cattle, sheep/goat and pig comprising 99.68 % of the assemblage. One deer (*Cervus*) element, and just four horse (*Equus*) specimens were also identified from this site. Also at Koekelare there were two almost complete dog skeletons excavated from defined contexts, one identified from Bot 93 Kuil in Gracht Rond Motte (Box 34) and also one from KO93 78 UI (Box 24). These were not included in the post-cranial analysis, beyond identifying their presence because the focus is largely on the three major species. It is clear therefore that overall there are very few examples of 'unusual' taxa in the examined assemblages from either Raversijde or Koekelare.

The NISP data demonstrate an extremely high proportion of the three large and medium domestic mammal species at both sites examined for post-cranial elements in this study (Raversijde and Koekelare), to the near exclusion of other species, with wild larger mammals only present in insignificant numbers. It appears therefore that species which could have been hunted from the area surrounding the sites, such as deer, did not form a large part of the diet. There is also evidence, although not directly examined within this study, at the sites for the hunting/gathering of smaller species, with both wild birds and fish remains being present at both sites. Indeed the consumption of fish and shellfish at Raversijde was widespread (Pieters, 1997), hardly surprising considering its coastal location. Even though there may be some skewing in the NISP patterns due to the adopted recording method (only bones preserved well enough to provide at least one measurement being recorded), meaning that species of a particularly robust form, such as cow, are more likely to survive over those of more fragile form this is not considered to be a great problem in preservation differences between the larger domestic mammals (such as cow, pig and sheep/goat) examined in this study, but would be a greater consideration if a total faunal analysis including smaller mammals, such as rodents, were included (as these are far more likely to be excluded from having measurable spans due to preservation problems).

Indeed, the faunal assemblage proportions identified for Koekelare and Raversijde are not unusual for sites of these types and date supporting the suggestion that the NISP results are not overly affected by the recording strategy. The predominant pattern for this period across north-west Europe is for an overwhelming majority of any domestic faunal assemblage (excluding the presence of fish and bird bones) to be this triptych of domesticated mammals, which were among the most common livestock forms kept throughout the medieval and post-medieval periods (Koepke and Baten,2008:127). In a summary of sites in the Netherlands for example, these three taxa are seen on sites as disparate as urban settlements such as Maastrict and Amsterdam, rural sites such as Velsen, Assendelft and Midwondt, and religious sites such as the monastic site of St Agnientenklooster in Lieden (Van Waateringe, 1994). Similar patterns to the Netherlands examples are known to exist across Europe (Sykes, 2006; Schofield, 1999:222).

While NISP raw numbers are important, being the primary data obtained without statistical modification, zooarchaeologists recognise that there are fundamental problems with using the information in this form (Banning, 2000:95). A significant concern is that under most circumstances when evaluating archaeofaunal material it is impossible to guarantee that each specimen is independent of any another, i.e. that each bone comes from an individual animal. When there are juvenile individuals, as have been identified both at Raversijde and Koekelare for all domesticated species examined, NISP-based calculations inflate numbers further as bones can be represented by both diaphyses and unfused epiphyses. Similarly, fragmented specimens may have potentially been originally from the same bone (Chaplin, 1971:65). Different species also contain different numbers of bones. For example there are eight pig metacarpals, whereas cattle and sheep only have two. This means that pigs could be over-represented in comparison to the other two species (O'Connor, 1984:8, Marshall and Pilgram, 1993:262) unless the NISP figures are corrected for such factors.

- *Summary: NISP shows that the three major domesticated mammal species, cattle, sheep/goat and pig dominate at both sites and that few wild mammals are present in the faunal assemblage. This is as expected for Northern European domestic sites of this period.*

3.4. Minimum Number of Individuals (MNI) of the postcranial material examined

In order to produce a more balanced evaluation of the data, the raw NISP figures have been converted into Minimum Number of Individuals (**MNI**) statistics. This calculation aims to determine the smallest possible number of animals that could account for all of the specimens of a particular species (Shotwell 1955:330 in Reitz and Wing, 1999:194, Casteel, 1977 in Banning, 2000:101). While this means we are no longer dealing directly with the physical numbers of bones on site, this methodology goes some way towards obtaining a more realistic view of the proportion of animals on sites in the past and is a common zooarchaeological technique (Grayson, 1984; Payne, 1975).

MNI is usually recognised as a more suitable method of quantification than NISP (Klein and Cruz-Uribe, 1984:164), and certainly MNI is believed to be the most appropriate for estimating the number of individuals where there is good preservation (O'Connor, 2001:706, Banning, 2000:101), providing a way of better comparing relative frequencies of species. The survival of well preserved pig bones at both sites provides some indication that preservation of the faunal assemblage is good, as pig bones tend to be both porous and fragile (Albarella and Payne, 2005:589), supporting the use of MNI as a technique. This works best where there has been good identification of all elements of the body and species on a site (Marshall and Pilgrim, 1993:266). (See earlier in this chapter for a more detailed assessment of the preservation of the faunal remains of Raversijde and Koekelare and the selection strategies employed).

Different methodologies exist for calculating the MNI relating to the specifics of the particular assemblages on which they are employed. For example for small assemblages Clason (1972) recommends counting any fragments that can be physically rematched as one bone. This study did not however use this technique due to its time consuming nature (Banning, 2000:101) and, more significantly, concerns over the confidence levels needed to determine 'match' when considering material which may have undergone taphonomic processes leading to post-breakage or separation (White, 1953 in O'Connor, 2000:59). The MNI calculation used in this study follows the technique used by Bökönyi (1970) and Chaplin (1971) who recommend considering the age (epiphysial fusion) and sex of the specimens as well as physical symmetry when calculating the MNI from individual elements, to gain a more accurate idea of the 'true' MNI. MNI in this study also took into consideration when the bones examined were fragmented, how much of the bone was present, as well as the side of the skeleton the element derived from. Sexual dimorphism was not considered in the calculation employed here as most post-cranial elements are not clearly sexually dimorphic and it is traditionally felt to be too inaccurate to attempt to identify sexual diamorphism on postcranial material to provide data with any degree of confidence (Rackham, 1994:9). Even for such elements as the pelvis, which is often seen as one of the easier areas of the skeleton to identify to sex (Glucksman, 1978), and metapodials, which can also often be sexed (Svensson et al. 2008:945, Grigson, 1982:8), the degree to which this is possible is still very dependent on the age or completeness of the bone and there are often still significant difficulties (Rackham, 1994:9). In this study, it was rare to have elements of the appropriate areas, or a complete bone (or indeed, fusion) to be able to confidently attempt identification of sex. Additionally, it is often useful to have comparatives in the breed to determine the sex of the specimen being considered (Rackham, 1994:10), and with archaeological samples this is not possible. The technique used to calculate MNI is anticipated to provide a more accurate and realistic picture of the assemblages at the sites than NISP, by the prevention of over-counting in elements that could potentially have come from the same individual (Winder, 2005:111). The technique therefore presumes that the bones have come from the same animal unless there is certainty that they did not. For example, two left femurs are clearly from two individuals.

Similarly, a fused distal radius and an unfused proximal radius fragment cannot come from the same individual because the proximal end fuses before the distal end and so would produce a count of two individuals. This technique produces a count of the fewest theoretical number of animals from which the bones could have originated (Banning, 2000:101).

The MNI for phalanges were also adjusted, by dividing the NISP results by four because these elements cannot easily be accurately distinguished into left and right, front or back, and so otherwise are likely to produce an inflated count in the skeletal distribution without any adjustment (Klein and Cruz-Uribe, 1984:111).

There are theoretical concerns within the Zooarchaeological field that the MNI technique in some ways goes ‘too far’ (Plug and Plug, 1990:53). Some believe that MNI has little value as a parameter for estimating the size of original populations (for example, Gautier, 1984:242; Lie, 1980, Grayson, 1984). It is in reality almost certain that there are more specimens of any animal at the site than the MNI reflects and that the true values fall somewhere between the MNI and NISP values (Badgley, 1986:328). However as long as it is remembered that, as a technique, it is not attempting to provide a precise ‘animal count’ but a tool suggesting the minimum number of individuals present and therefore more reflective of the relative frequency of species, it is felt on balance by many practitioners to be a useful technique. MNI is also often critiqued for its use on small assemblages, as the relative frequency of rare species can easily be biased by only a few samples (Banning, 2000:101, Casteel, 1977:126). However both Raversijde and Koekelare are sizeable assemblages and it is felt that they are large enough for relative frequencies not to be biased by a few specimens.

(See Figure 3.6 for the calculated MNI figures for the sites of Raversijde and Koekelare)

	Raversijde						*Koekelare*					
	Bos	O/C	Sus	Canis	Cervus	Equs	Bos	O/C	Sus	Equs	Canis	Cervus
Tibia	35	138	22	0	0	1	53	11	2	0	0	0
Scapula	13	92	55	0	0	0	25	20	2	0	0	0
Humerus	29	100	38	2	0	0	25	21	8	0	0	0
Radius and Ulna	46	147	48	0	0	0	68	11	10	0	0	0
Metacarpal	31	149	34	0	0	3	91	20	3	1	0	0
Metatarsal	27	179	30	0	0	1	81	23	2	0	0	1
Pelvis	5	16	7	0	0	0	10	2	4	0	0	0
Femur	12	41	9	0	0	0	9	4	1	0	0	0
Calcaneum	17	44	20	1	0	0	22	6	2	0	0	0
Astragalus	14	19	35	0	0	0	13	3	2	0	0	0
Phalange	9	1	22	0	0	2	10	0	0	1	0	0
Jaw	7	2	45	0	0	0	31	4	10	0	0	0
Carpal	8	0	1	0	0	1	22	0	1	0	0	0
Tarsal	0	0	0	0	0	0	0	0	0	0	0	0
NC	12	4	3	0	0	2	17	0	0	0	0	0
Total	**46**	**179**	**55**	**1**	**0**	**3**	**91**	**23**	**10**	**1**	**2**	**1**

Figure 3.6. Table showing the MNI for species at Raversijde and Koekelare

It is immediately apparent that the compositions of the two assemblages differ noticeably when calculated with MNI or NISP data (see Figures 3.7 and 3.8). At Raversijde calculating MNI has increased the frequency of sheep/goat in comparison to the other two species (see figure 3.7), while at Koekelare it has slightly reduced the dominance of cattle (see figure 3.8). However, it is clear that the overall patterns are comparatively similar using both techniques, such perceived differences are likely to be a product of the recovery bias introduced by the strategy of hand-collection of the assemblage during the excavation. The largest difference in representation is in relation to the Koekelare cattle, where the calculation of MNI reduces the dominance from 81% to 73% (See figure 3.8). In only one instance has the calculation of MNI from NISP *modified* the patterns seen on site: at Raversijde MNI makes pigs second in importance, while cattle hold this position in the NISP count. Therefore, while the pictures given by NISP and MNI are subtly different, the use of either technique significantly modifies the picture given in only one instance.

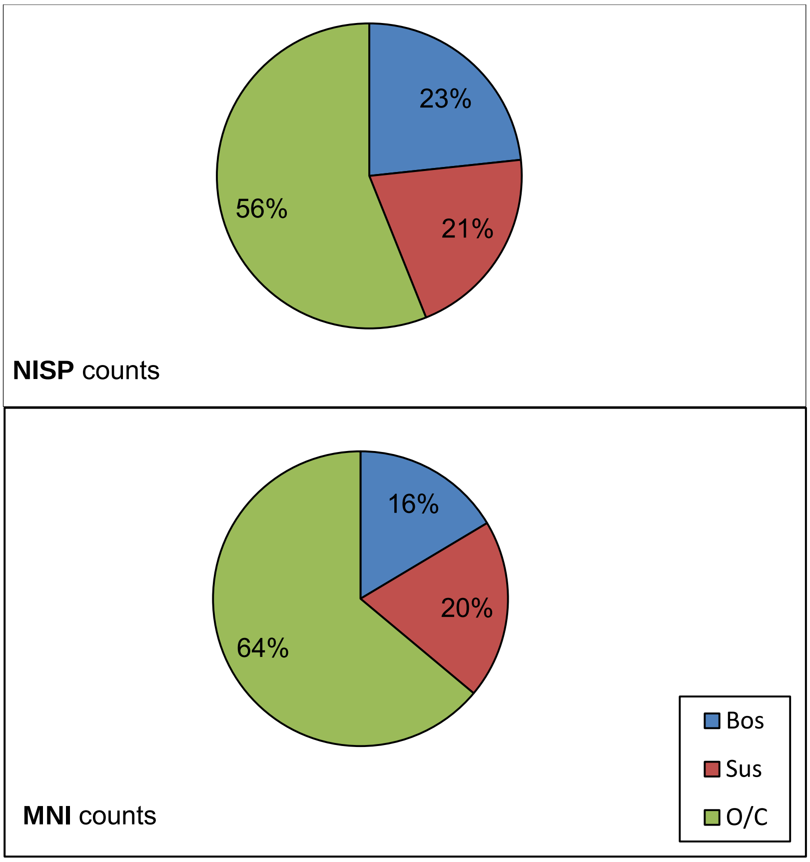


Figure 3.7. Relative frequency of major domestic animals using NISP and MNI counts at Raversijde

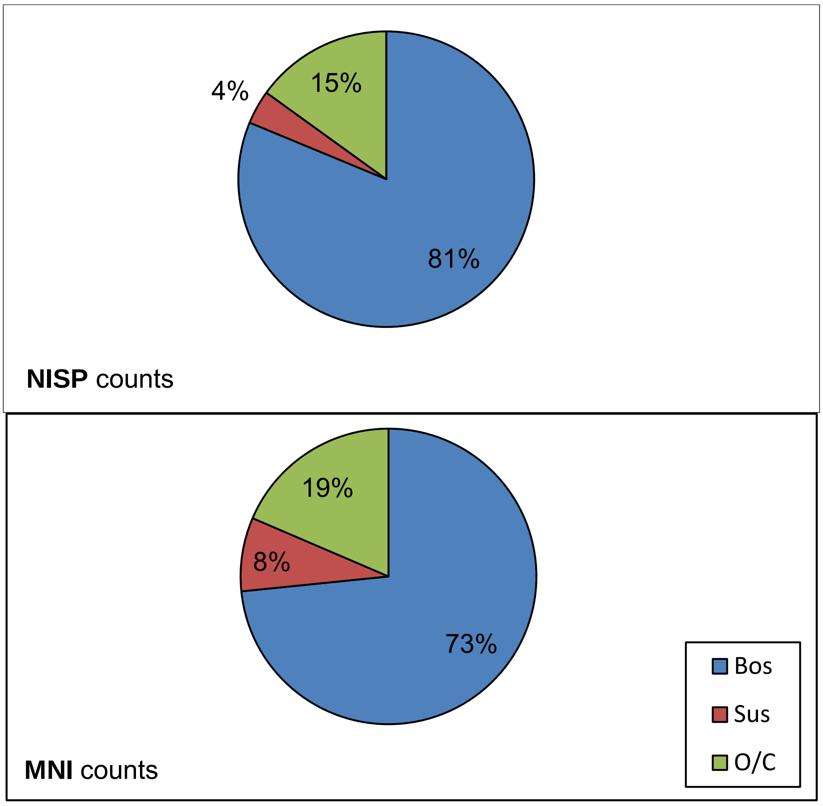


Figure 3.8. Relative frequency of major domestic animals using NISP and MNI counts at Koekelare

At Raversijde, pigs make up a significant albeit not large proportion of the assemblage (20% MNI), similar to that of cattle (16% MNI), with the vast majority of the bones being sheep/goat (see figure 3.7). At Koekelare pig stands at only 8% of MNI, and 4% if considering NISP (see figure 3.8). Often towns or urbanised areas and their hinterland have higher percentages of pig bones than rural sites (Albarella and Davis, 1996). This may however not indicate the greater consumption of pork in urban areas, but may instead reflect the difference between species butchered elsewhere with portions imported into urban areas versus species such as pigs kept in the locality, with more skeletal elements entering the archaeological record (Albarella, 2006:80). Therefore a difference of this type is not unexpected and reflects the different nature of the sites, with Raversijde representing a very different site type to Koekelare. However, the levels of pig at Raversijde is in itself notable, as it appears to indicate that pig keeping and breeding (or at the very least the presence of pigs) was taking place at a settlement outside of traditional forest confines during this period (Ervynck et al., 2007:177). The local environment to Raversijde had no forest cover but consisted of coastal dunes and grasslands, and would not have been expected to have such a presence of pigs (Ervynck et al., 2007:177).

Cattle comprise by far the greater proportion of the assemblage (73% MNI) at Koekelare, and this extremely high figure suggests that the focus of Koekelare was indeed cattle. This is interpreted as suggesting that Koekelare may represent a cattle-breeding centre, something known to be an important industry in the region at this time (Adamson, 2004:141). Koekelare is well situated for this role, with the surrounding towns well linked to the site by a strong transport network (see chapter 2).

The findings of this examination confirm the species prevalence patterns that were identified in the earlier unpublished pilot assessment of an extremely small sample of faunal material undertaken in the 1990's (Pieters, 1997:175). In the pilot study for Raversijde the predominant consumption of sheep, cattle and pig was identified, with the diet being supplemented by chicken, goose and duck, and occasionally rabbit and red deer (in this first analysis a few deer (*Cervus*) remains were present although none were identified within this modern assessment sample). Also identified were large amounts of shellfish (mussels, oysters and whelks), reflecting the nature of the site as a coastal fishing village (Pieters, 1997:175). Fish were also identified in this earlier consideration as a major feature of the diet of the inhabitants of the area with the fish remains being almost exclusively sea-fish (eel and carp being the only freshwater fish present).

This macro-analysis of the assemblages of Raversijde and Koekelare using NISP and MNI has clearly demonstrated that the faunal spectra of the two Belgian sites are very different and that this is reflected using both calculations of the assemblages. At Koekelare there was a distinct emphasis on cattle, to such a degree that it indicates that cattle production formed the focus of the industry of the site. Cattle are generally the predominant species on sites of this period, both across Belgium (Nicholas 1992:357) and more widely across continental Europe (Van Waateringe, 1994:153), even in areas where sheep and pig rearing is believed to have been the major focus (for example, Ypres (Ervynck, 1996:78)). However for cattle to represent such a high percentage does confirm the historical evidence for a particular emphasis on the species at this site. This is supported by the location of Koekelare as this region was known to be heavily involved at the time in cattle breeding (Adamson, 2004:141). For both Raversijde and Koekelare this examination has identified that domesticated mammals form the majority of the large mammal faunal assemblage with little apparent contribution from hunted animals such as deer, as would be expected. While there are subtle differences between the ratios reflected when using either the NISP or MNI data, these can easily be understood through a consideration of the different weaknesses or strengths of the two techniques and the differences are at no point dramatic enough to suggest a pattern beyond that created by the differences in the techniques used.

- *Summary: MNI shows again that the three major domesticated mammal species, cattle, sheep/goat and pig dominate at both sites and that few wild mammals are present in the faunal assemblage. Koekelare demonstrates a clear cattle emphasis, supporting the suggestion of this site as a cattle breeding centre. Raversijde has a substantial pig presence, despite its dune location. MNI and NISP data vary subtly but overall the patterns are remarkably similar.*

3.5. Quantification of the mandibles

For the sites where only pig cranial material was considered (see chapter 2 for details), MNI's have been calculated solely on the jaws to examine if there was any likelihood that the fragments examined as part of the study may have come from the same individual. The numbers of jaws are irrelevant in providing a true MNI figure of these sites, as no other species were considered and the jaws were chosen as a random sample of those contained within the excavation, rather than being all jaws within the assemblage. Details are included for reference only (see figure 3.9), to ascertain the possibility of any potential for more than one specimen to come from the same individual.

Site	***NISP** of Pig Jaws analysed*	***MNI** of Pig Jaws analysed*
Raversijde	104 (+ 76 retrieved during post-cranial analysis)	57(+46)
Koekelare	18 (retrieved during post-cranial analysis)	14
Ename	122	71
Veurne	121	72
Londerzeel	76	46
Oudenburg	225	128

Figure 3.9. Calculated MNI's of mandibles examined as part of this study

As the jaws examined are mandible fragments a consideration was made of whether any of the identified 'left' and 'right' sided jaws were potentially from the same animal. The MNI was based on an analysis of the tooth wear and eruption state, as both sides of the jaw would be expected to be of similar eruption/wear stages (Bourdillon and Coy, 1980:83) unless development was severely hindered through disease or deformity. No loose teeth were examined.

3.6. Evidence for butchery at Raversijde and Koekelare

Butchery marks on faunal material represent the remains of man 'taking an animal apart to suit his purposes' (Binford, 1981:91), and so an attempt to gain an understanding of the process by which the animals at a site have been processed may illuminate the intention behind the treatment of the skeleton post-mortem. An examination of the presence, type and frequency of butchery marks can assist the investigation into the process of carcass reduction (O'Connor, 1989:154). This may help produce a greater understanding of the techniques used by humans on their animals (Egeland, 2003:39) and allow some insights into what they were using the animals for.

There are at present few studies which have comprehensively investigated the meanings behind butchery marks on bones despite a recognition of the importance of examining butchery patterns (Guilday et al, 1962:96, Reitz and Wing 1999:29 and Noe-Nygaard 1989). It is now common for marks from butchery to be recorded for bones from archaeological sites as a matter of course even if the interpretation of such marks is more limited and based on anthropogenic comparatives. Binford's (1981) study of butchery techniques is one of the most comprehensive and widely used sources when considering butchery and cut marks on domestic bones in archaeology . Binford's (1981:136-142) coda for the definition of cut marks has been adopted in this analysis when recording, as are his explanations of the processes signified by these marks, alongside the study of Luff (1994) which specifically examined the butchery marks on pig bones.

When recording information in this study butchery marks are variously defined as 'cut marks' or 'chop marks', with deliberate breakage and points of impact also noted. The definition of the types of marks follows the descriptions of Greenfield (1999), with a cut mark defined as a slice on the bone created by drawing a knife across its surface, and a chop mark as an impact on the bone with the force of a knife/sword/axe-like blade (Greenfield, 1999:798, 2000:94). Any working on the bones from Koekelare and Raversijde was identified and recorded under a strong oblique light source through visual identification. In some cases, where more clarity was desired, a hand lens was also employed, as recommended by Greenfield (2000) and Egeland (2003). Attention was given to the type of damage, its degree, location and direction. This allowed a cursory examination of the evidence for butchery techniques on the material to establish an idea of the processing technique.

Higher magnification techniques, as for example employed by Gilbert and Jimenez (1990), or the examination of silicon casts of the marks (Greenfield, 1999), were not used in this study as it is generally acknowledged that working evidence of any importance is invariably visible to the naked eye (Greenfield, 1999:805, Dewbury and Russell, 2007:356), and is informative enough on its own to allow interpretation of butchery patterns. To record patterns of working on the bones, diagrams were created of the position of any working, as advocated by Guilday et al (1962) and commonly used in examination of butchery marks (for example, Binford, 1981; Luff, 1994 and Farello, 1995), and notes taken.

Differences between marks made by stone/bone and metal tools are usually clearly distinguishable on archaeological material (Greenfield, 2000:97), with metal tool marks producing consistent and characteristic marks (Greenfield, 1999:803-804, 2000:99). Metal tools produce deep, narrow and steep-sided cutmarks with a far more uniform appearance than stone (Binford, 1981:105) and when cut obliquely with metal a 'shelf' of bone is often left in place (Binford, 1981:106). Stone normally produces shallower cut marks with wide and irregular grooves (Greenfield, 2000:100) and these are generally shorter and more 'ragged' in appearance than those made by metal (Binford, 1981:105). It is also important to consider, within the interpretation of these marks, what we know of the techniques of the period. For example holes in cattle scapulae which would be identified as spear/arrow damage if dating from Mesolithic times may be interpreted as evidence for the hanging of shoulder joints in the Roman period (such as at Lincoln, by Dobney et al. 1996:26). Therefore, the consideration of the patterns visible on the faunal material must be placed into the context of known techniques from the appropriate period for the sites of Raversijde and Koekelare.

One of the particular problems in studying archaeological faunal assemblages comes when bones are heavily damaged through gnawing by animals (Payne and Munson, 1985:31). At Raversijde and Koekelare there is an extremely limited presence of gnawing and it is not anticipated that it will inhibit analysis of any butchery marks present.

The cattle at both Raversijde and Koekelare were heavily butchered. At Raversijde around 42% of the cattle bones examined as part of this study exhibit signs of working, varying from fragmentation to deep chop marks to fine cut marks. At Koekelare the percentage of butchery was slightly lower (35%) but exhibiting the same spectrum of techniques. Scapula and pelvis elements from both sites for cattle similarly show evidence of deep chops, interpreted as created when disarticulating the front/back legs from the axial skeleton (Binford, 1981:91). Indeed the cattle bone assemblage from both sites shows evidence of extensive butchery, characterised by the chopping of major elements, with many femur and humerus elements at both Raversijde and Koekelare showing evidence of working mid-shaft. This is likely to represent a systematic reduction of the carcass into smaller joints (Dobney et al: 1996:24), and is typical of division for consumption or transportation.

Sheep/goat species were also heavily butchered at both sites with around 30% of bones at Raversijde exhibiting cut marks and 36% at Koekelare. Most of the butchery marks consisted of small chops or deep cuts around the joints suggestive of jointing by using smaller tools used than were employed for working on the cattle. The metapodials at Raversijde were particularly heavily processed, with many being split longitudinally, presumably for marrow extraction.

For pig, some 21% of pig bones at Raversijde showed evidence of butchery, and 24% at Koekelare. Particularly evident at Raversijde were chop marks at the glenoid process of the scapula and on the proximal tibia, marks probably relating to carcass dismemberment (Connell and Davis 2001:314). This butchery frequency is lower at both sites than for either of the other two species and may suggest a differing butchery technique, representative of less intensive processing, was being employed for this species.

All major species at both sites therefore show evidence of jointing of carcasses with cut marks around the periphery of the joint being the most common types on all, marks which are often interpreted as indicating the jointing of limbs (Dobney et al, 1996:28). The pig and sheep/goat elements show less evidence of extensive fragmentation than the cattle at both sites. However, the presence of chopped metapodials and phalanges for cattle and sheep (both elements with little meat present and so unlikely to be transported) suggest that a level of primary butchery took place on site (Connell and Davis 2001:314) and we are not just seeing the results of imported meat joints. It is important to note that any bone included in this study has at least one measureable span present, as previously discussed. This policy may have reduced the level of butchery being identified in each species, as the most fragmented specimens will have been excluded from this examination and so in reality the butchery figures for the assemblage overall may have been somewhat higher.

The butchery marks in the examined assemblages from Koekelare and Raversijde have a regular profile, appearing cleanly cut. Consequently, at both sites they have been interpreted as being created by metal implements. This is as expected for the period in question, with metal tools being stronger and retaining a cutting edge far longer than stone (Greenfield, 2000:97). Tools known to have been used by butchers of the period include a variety of metal knives and cleavers, and the marks fit into the profile of these sorts of tools being used. There is no evidence of any sawing of the bones from either of the sites. Instead, the modifications on the bones at both sites appear to consist of two types, fine and/or deep cut marks made by knife-like instruments, and more substantial chop marks made with heavier instruments.

The majority of the butchery marks on all species reflect dismemberment and filleting, suggesting that all the domesticated mammal species examined were processed for meat on the site. No evidence for butchery was noted on any other species than cattle, sheep and pig although it is likely that it may have also occurred on hunted species. However, remains from these species were limited and none of those specimens present exhibited any traces. There is no evidence for further craft-working on the analysed bone.

There was limited evidence for cut marks on the faunal material in comparison to the number of chop marks or evidence of fragmentation. The evidence for fine cut marks representing filleting in particular is relatively scarce, with the majority of the working marks being defined as relating to dismemberment or more fundamental working. This may suggest that filleting and fine removal of meat was uncommon at Raversijde and

Koekelare. However it is more likely to be an artefact of the fact the faunal material examined had not been washed prior to examination, with fine striations potentially obscured by dirt (Albarella and Serjeantson, 2002:40), something identified at other archaeological sites (for example Dobney et al., 1996:25).

The cut marks present at both sites are of a nature to suggest that butchery occurred while the joints were still flexible and easy to disarticulate (Binford, 1981:94). The meat from cattle, sheep and pig was probably therefore all fresh at the time of processing and jointing and the animal was probably killed close to the area of butchery rather than the carcass transported over large distances. This corroborates evidence from the skeletal element analysis (see later in this chapter), that killing of the animals occurred on site at both Koekelare and Raversijde. Similarly, broken bones at Raversijde and Koekelare exhibited helical fractures with a spiral and smooth morphology, suggesting they had been struck while fresh as opposed to after transportation or after cooking when they are more likely to display as transverse fractures with rough edges (Alhaique, 1997:50). This was particularly clearly seen on the cattle bone of Raversijde, where the excellent preservation made the nature of breakage particularly clear.

Many of the long bones examined as part of this study from both Raversijde and Koekelare were fragmentary, which provides evidence of their having been broken to access marrow, something also identified in sheep metapodials within the preliminary study at Raversijde (Pieters et al., 1994:266). The fat contained in the medullary cavities, known as marrow, is of high calorific value (Outram, 2001:401) and may also be used as a grease or fuel (Grigson, 1999:226) and was commonly used in historical societies. The only way of accessing such resources is to smash the bones, either by the removal of the articular ends or by smashing the bones mid-shaft (Outram, 2001:402). This appears to have occurred at both Raversijde and Koekelare in all domesticated species.

There were few indications of burning on the bones obtained from either Raversijde or Koekelare. This lack of burning does not however conclusively mean that the bones were not cooked, but does provide strong evidence that at both sites the bones were not cooked by direct roasting over an open flame (Grigson, 1999:177). At both Raversijde and Koekelare this lack of burning may suggest that the meat was removed from the bones and the bones discarded prior to the cooking of the meat, or that alternative cooking methods such as boiling or using in stock (Stokes, 2000: 68) were employed, which would leave no obvious evidence on the bones.

In summary, the butchery techniques at both Raversijde and Koekelare appear to reflect those typical for this period and location (Audoin-Rouzeau, 1987; Sykes, 2006). For all three mammal species evidence suggests processing of carcasses on-site while fresh, and major jointing of the skeleton at both sites. There is no evidence for substantial craft working of the bones. There appears to be little differentiation in the treatment of species, with all showing evidence of jointing and destruction for marrow, although the frequency of butchery marks is somewhat more limited for pig than for other species. The cattle bones present greater evidence for larger tool use than pig and sheep/goat, probably due to their more substantial size, meaning larger tools are necessary to work with the carcass. The cattle breeding site of Koekelare also seems to have some processing occurring on site, rather than just seeing animals being transported off-site alive.

Two major problems have been noted with such assemblages. That the unwashed condition of the examined assemblages reduces confidence in the identification of all fine cut marks from the bones and secondly, the selection only of bones that have a measureable span for analysis may mean the most fragmented bones (and thus potentially being the most likely to show signs of 'catastrophic' processing) have been eliminated from the examination. Therefore in actuality the levels of butchery on the bones of these sites may be much higher than those identified within this study. This summary must therefore be just seen as an indication of the types of working on the bones rather than providing a definitive statistical examination of butchery techniques exhibited at Raversijde and Koekelare.

3.7. The relative frequency (Skeletal Element Distribution) of the main skeletal elements

Traditional zooarchaeological studies also consider the relative frequencies of the various bones from the skeleton at the sites in order to determine whether the death assemblage is comprised of complete animals or whether only portions of animals are represented (Banning, 2000:188). This can help to evaluate the patterns of consumption and/or deposition by considering what the frequencies of elements at the site may suggest about the strategies employed. It is of particular importance for this study where a major focus is understanding ways in which the animals present were being utilised, using a variety of techniques at a relatively micro-level of examination.

Skeletal Element Distribution was undertaken on the analysis of a sample of the complete faunal assemblage (undertaken for the sites of Raversijde and Koekelare), without including other mandibles selected later for study as this inclusion would have skewed the pattern from a true picture of the ratios of elements as present in the archaeological assemblage.

An examination of the relative proportions of the elements of the skeleton that are present has a long history as a useful technique in the examination of animal use at sites. For example, this technique has helped identifying industrial processes utilising animals, such as the prevalence of sheep metapodials at Walmgate, York helping identify industrial waste rather than consumption waste from a post-medieval tannery (O'Connor, 1984); similarly at Bruges, large numbers of horn cores reflected working and tanning on site (Ervynck et al., 2002). However skeletal element distribution is not a technique without problems. One notable criticism of the technique is that it does not reflect that the bones analysed by zooarchaeologists represent only the surviving remnant of a greater deposited assemblage which would have also potentially incorporated other animal matter beyond the surviving bone, such as flesh, hide and sinew, material which rarely survives to be excavated and incorporated into analysis (Jones and O'Connor, 2001:416). The faunal material examined by skeletal element distribution therefore only provides at best a snapshot of part of the animal matter deposited placed into the ground (Dobney et al 2007:77) and much information may be occluded by this limited data-set. However, it is still important to consider the findings of such techniques while recognising their limitations and, as we have seen, it can provide very useful results.

While being used for food is often the most fundamental use of an animal (Reitz and Wing, 1999:7), animal parts can also be utilised for numerous different purposes, for example tools or clothing, often alongside the use of the individual for meat. Oils, fats, gelatine and glue are similarly important animal by-products but are difficult to discern archaeologically unless on an industrial scale. For example, the production of bone grease was identified at Little Chester, Derbyshire due to the large proportion of smashed, young cattle bones (Askew, 1961 in Maltby, 1979:167), with small-scale production leaving few clues in the faunal assemblage (Schmid, 1972:46-9). Animals also naturally produce by-products while alive, such as manure, which may be used as fuel, building materials or fertiliser (Reitz and Wing, 1999:8). They may have been kept for milk, and animals may have also been used for draught purposes, all of them being later disposed of as meat at the end of their working life. An assemblage may therefore reflect a mix of waste from varying processes on a site, from household consumption refuse to primary butchery waste to waste from industry and craft activities (Dobney et al, 1996:23). These products or uses do not leave much evidence (Reitz and Wing, 1999:7) within the surviving bone material. Any attempt at interpretation using skeletal element analysis must be therefore made with caution and all explanations for patterns evident must be considered.

Despite the qualification that the picture represented may be incomplete, skeletal element distribution has traditionally been an extremely successful and sometimes impressive tool for establishing an idea of the method of processing of animals occurring at various sites, and has also been used when considering socio-economic status on some archaeological sites, particularly where domestic household waste is being examined (Davis, 1995: 189). The representation of minor meat bearing elements such as the radius, ulna and tibia in assemblages interpreted as domestic waste, has been used to suggest household waste of a lower quality type than an assemblage with a high prevalence of solely the major meat bearing bones, for example by Armitage (1984). A consideration of the percentage prevalence of various parts of the body may certainly provide at least an indication of the usage and husbandry of the animals and allow us to consider whether slaughter was occurring on site, or whether portions were brought in from further afield, as well as whether the assemblage represents domestic waste (such as identified at sites such as Exeter (Maltby, 1979) and Lincoln (Dobney et al, 1996:23)) suggested through the presence of large numbers of major meat bearing bones such as the scapula, humerus, femur and pelvis).

In this study skeletal element distribution has been analysed through the MNI counts for each element (presented as bar charts), using the policies and justifications outlined previously. In order to consider the evidence for the consumption of the domesticated animals on these sites, through the relative frequency of elements of the skeleton, the MNI values for the main triptych of domesticated animals at Raversijde and Koekelare are presented graphically by considering each element and displaying it as a proportion of the most frequently occurring element within each species. This is represented as 100% within each graph, with the other elements shown in proportion to this (see figures 3.10-3.15). This representation helps stop the raw number differences being 'bigger' in species with a larger presence as would be a danger if NISP figures were used (Bond and O'Connor, 1999:381), and means skeletal element examination of different species can be easily evaluated. This enables comparison between species and sites without larger assemblages or more frequent species dominating the picture. Where cranial elements are counted, this includes only those identified during the faunal analysis of the full faunal assemblages of the sites, and not those jaws selected to be added to the examination at a later date. No loose teeth were counted in the examination.

3.7.1. Raversijde Skeletal Element Analysis

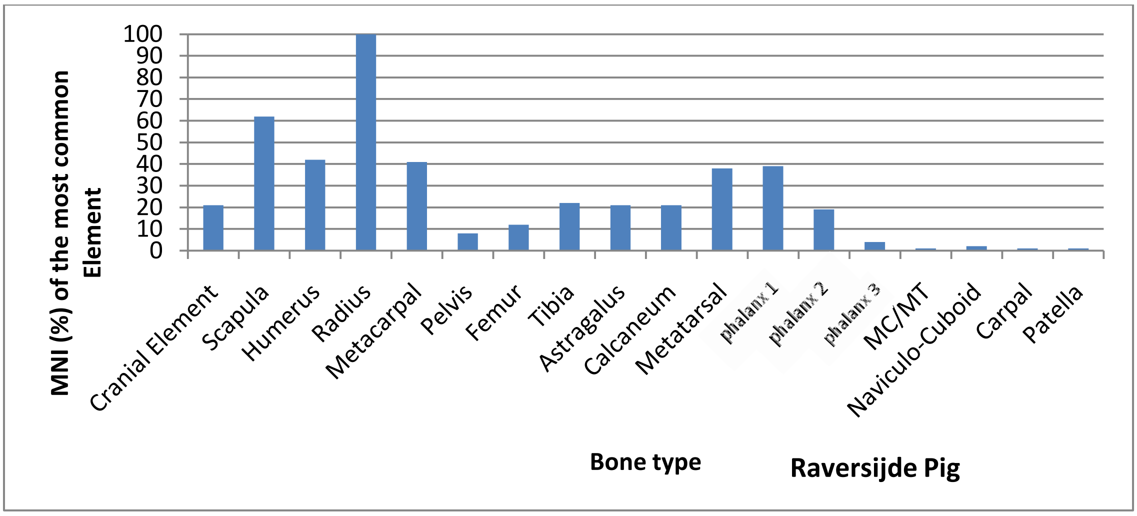


Figure 3.10. The relative frequency of the main skeletal elements of pig at Raversijde, based on MNI count

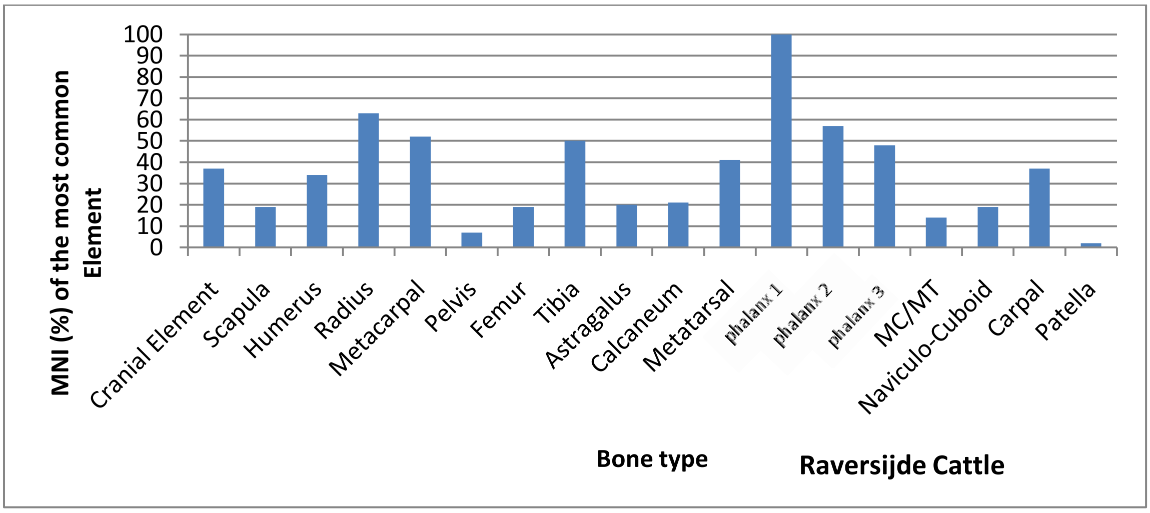


Figure 3.11. The relative frequency of the main skeletal elements of cattle at Raversijde, based on MNI count

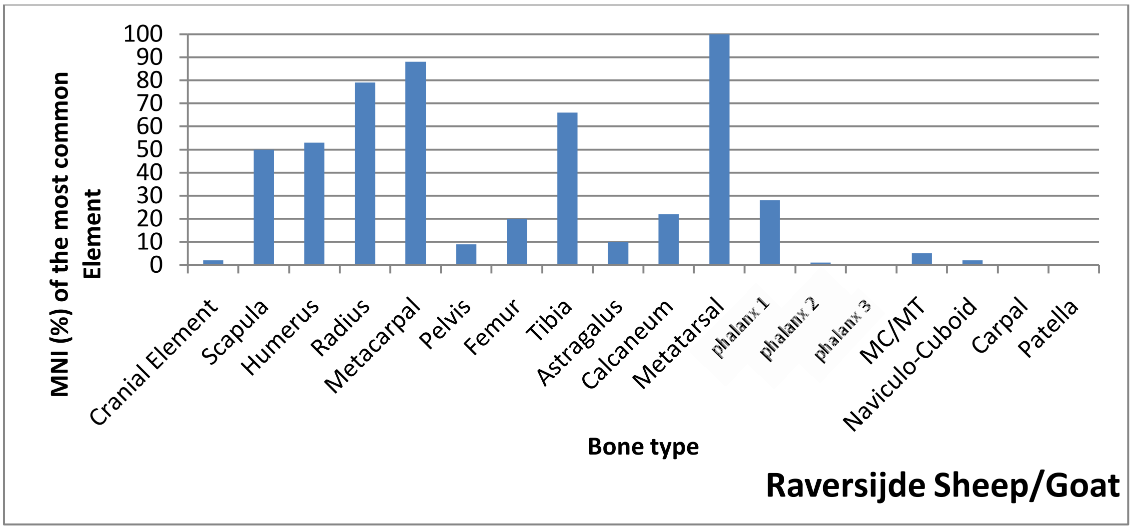


Figure 3.12. The relative frequency of the main skeletal elements of sheep/goat at Raversijde, based on MNI count

The Skeletal Element Distribution for the three major domesticated mammals at Raversijde clearly shows that, for all three, all elements of the body are present (see figures 3.10-3.12). This suggests slaughter and consumption on site, with meat-bearing bones such as the humerus and tibia (Rowley-Conwy, 1993:185) represented for all three species, supporting the butchery evidence. Similarly the presence of significant numbers of cranial elements at Raversijde supports the suggestion that primary butchery was occurring nearby or on-site as it is unlikely that this element would have been transported far (O'Connor, 2000:135).

The treatment of the skeleton of the three mammals appears similar, with no obvious differences in how the carcass elements are distributed. The representation for pigs and sheep/goat are alike and relatively analogous to cattle, although the cattle do appear to show a preponderance of phalanges and a relatively limited number of scapulae (see figure 3.12) which may suggest some removal of the primary butchery cuts, although the presence of major meat elements suggests this was of limited effect. The prevalence of large numbers of cattle phalanges may instead suggest some limited processing on-site for cattle beyond that of consumption, such as the tanning of cattle skins (a process often identified through concentration of phalanges, metapodials and cranial elements- O'Connor, 1984). However, it is more likely that this pattern simply reflects the limited processing undertaken on cattle phalanges by butchery techniques of the period, meaning that a greater number are of a size to be easily recovered from the ground. This is something more problematic for the smaller species of pig and sheep, with a larger number of these likely to be missed due to the recovery techniques employed. Therefore, this difference may be purely down to differential recovery and preservation between species, rather than evidence of specialised working for cattle at Raversijde.

At many urban sites the major meat-bearing bones, such as the scapula, humerus, pelvis, femur, vertebrae and ribs, are often among the more common. This is an expected outcome of domestic/household waste, although the presence of a percentage of minor meat bearing elements (radius, ulna, tibia, cervical vertebrae) is not unusual with this sort of waste, particularly when cooking on the bone is occurring. Raversijde, is best considered more as a village rather than an intensively urbanised area (see chapter 2), and a holistic use of the animal to recover as much from the individual as possible is expected from such a site in this period, rather than a specialised selection or importation of the most high-status, high-value or high-quality meat. An examination of the Skeletal Element Distribution for cattle, sheep and pig all appear to reflect this expectation. There is no particular dominance of bones reflecting prime cuts of meat, but a mix of these bones with more minor meat bearing elements. Indeed, for cattle and sheep/goat these minor elements are generally more prevalent than the major meat-bearing bones.

Particularly intriguing is the relative paucity of pelvic and femur remains across all species at Raversijde, and this is perhaps the best indication of any pattern beyond that of primary processing on site for consumption. It may suggest the removal of these elements from the assemblage for use elsewhere, and perhaps the removal of this 'prime' meat bearing area to a higher-status place of consumption such as the nearby town of Oostende. The extremely low level of pelvis elements may however be explained by the fact that only measureable bones were recorded, and due to the fragmentary and often unfused nature of the pelvis this would be less likely to be preserved with a measureable acetabulum or other spans. However, the paucity of pelvic bones combined with the low levels of femur across all species does perhaps suggest that preservation may also be a factor, with femur bones being easily damaged within the common butchery techniques of the time.

3.7.2. Koekelare Skeletal Element Analysis

The Skeletal Element Representation for Koekelare shows noticeably different patterns for all three domestic mammal species on site (see Figures 3.13-3.15). The Koekelare pigs (Figure 3.13) have very few head or feet elements and low amounts of lower-limb elements. This is indicative of consumption waste or secondary butchery deposits (Dobney et al 2008: 84), with the primary processing of the carcass occurring elsewhere, rather than slaughter and consumption on site. For Koekelare, this could be interpreted as a movement of meat onto the site as joints or some other processed ‘piece’ form of meat, possibly from the local centres known to be easily accessible along major transport routes running past the site. Major bones are well represented at Koekelare, such as the pelvis, scapula, humerus and radius, and would have been transported onto site as a by-product of the importation of this meat. Surprisingly, the femur levels are again markedly low, however, and while the femur is also a bone expected to be prevalent with the importation of major meat pieces, this can again perhaps be explained as an effect of preservation, with this bone particularly likely to become damaged with removal from the acetabulum, precluding it from examination.

The picture for the sheep/goat specimens (Figure 3.15) is more confused, with low numbers of phalanges but high numbers of metapodial elements. We should perhaps consider the lack of sieving, and the effect this may have had on the frequencies. Sheep/goat phalanges are relatively small and slender in comparison to the other faunal elements, and it may be an artefact of their relatively small size that so few have been recovered from the site, particularly considering the recovery strategy employed, rather than any unusual consumption or disposal pattern, a factor which would also explain the small number of tarsals. Major and minor meat bones are well represented, in particular the scapula, humerus, radius and metapodials and this perhaps is again indicative of primary processing and consumption on site for sheep/goat at Koekelare, which has merely been confused by collection technique.

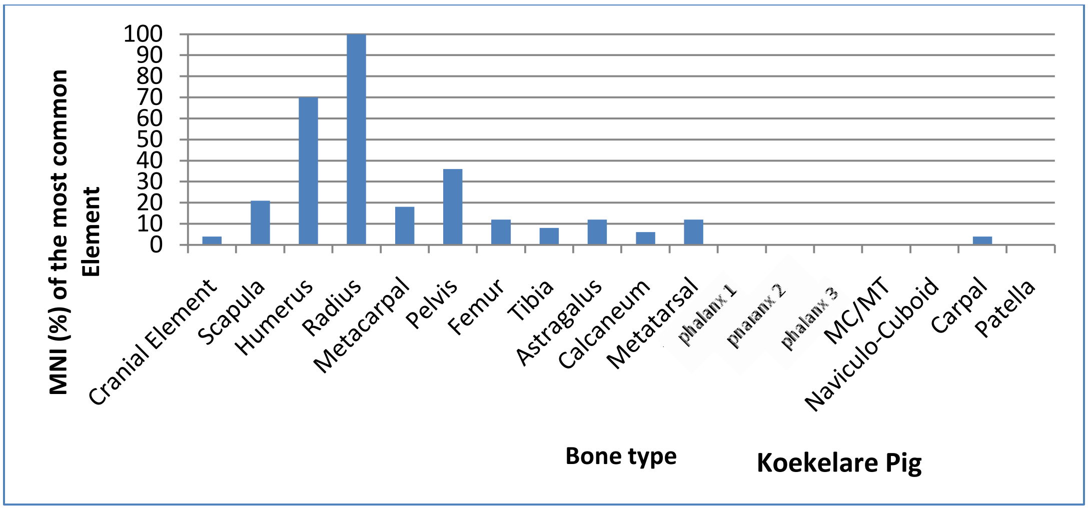


Figure 3.13. The relative frequency of the main skeletal elements of pig at Koekelare, based on MNI count

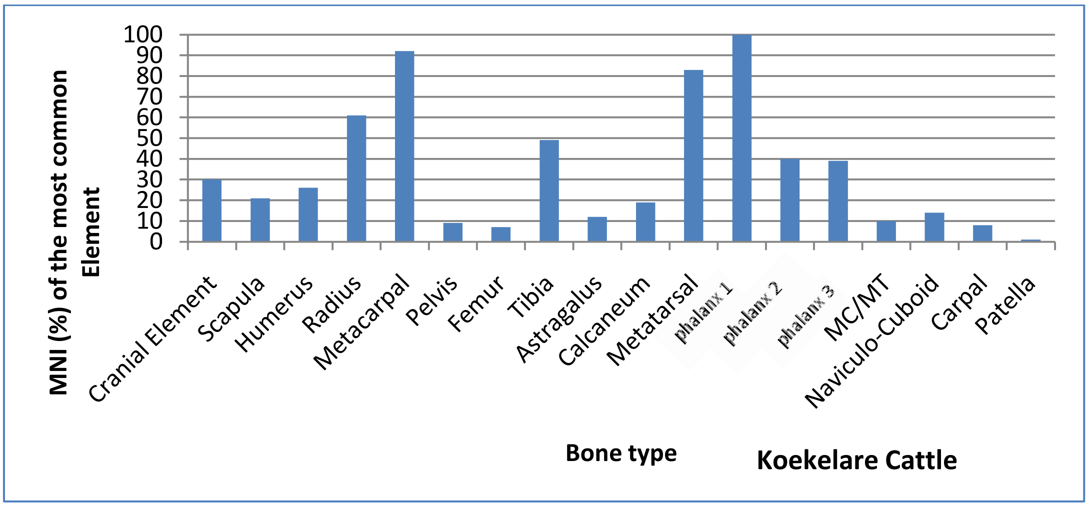


Figure 3.14. The relative frequency of the main skeletal elements of cattle at Koekelare, based on MNI count

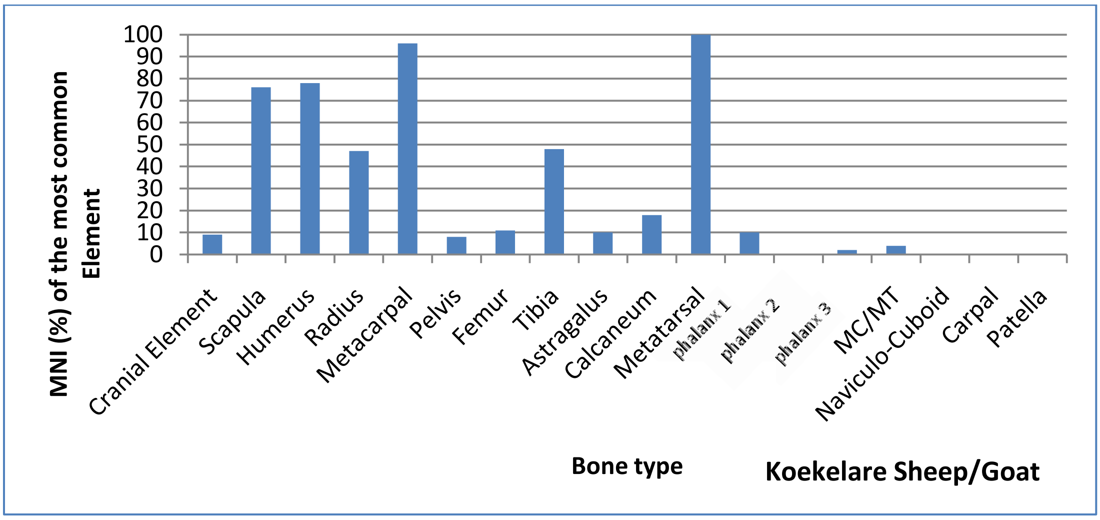


Figure 3.15. The relative frequency of the main skeletal elements of sheep/goat at Koekelare, based on MNI count

For the cattle, the skeletal element representation (Figure 3.14) suggests that at Koekelare there is not only consumption of lesser quality cuts of meat with the rest being transported elsewhere, as may have been anticipated from the hypothesis that Koekelare represents a cattle-breeding centre, but there is also a relatively great prevalence of bones representing joints of meat for consumption, such as the radius and tibia (see Figure 3.14). This may suggest a significant proportion of the cattle from the cattle-breeding station is leaving on foot rather than being processed on site. It also demonstrates that individuals were also slaughtered on site for consumption locally. However, it is clear from the skeletal element representation analysis that the major meat-bearing element frequencies are lower than would normally be expected on a site where primary slaughter and consumption is occurring, and this may provide some subtle evidence for the removal of some prime meat cuts from Koekelare for consumption elsewhere. However, while the skeletal element representation for the cattle at Koekelare does not confound the hypothesis that Koekelare is a cattle breeding centre for the support of urban localities, it does illustrate that the animals were often leaving the site while alive, rather than as processed portions of carcasses. The locality of Koekelare, with its excellent transport links also supports this suggestion; at other medieval urban sites animals were driven regularly from within a 10km hinterland, and in some cases, such as medieval Oxford, transport could routinely cover 19km or even further (Wilson, 1992:113) and so this pattern is not without precedent.

Similarly to Raversijde it is notable that across all three species there are very limited quantities of pelvic and femur elements. The extremely low level of pelvis elements may perhaps, as at Raversijde, be explained by the fact that only measureable bones were recorded, and due to the fragmentary and often unfused nature of the pelvis this would perhaps be less likely to be preserved with measureable acetabulae or other spans.

3.7.3. Summary of Skeletal Element Distribution from Koekelare and Raversijde

Traditional Skeletal Element distribution certainly offers some indication of the different uses of species at both Raversijde and Koekelare. However, the technique has provided no clear picture at either, although it does begin to provide information for some interpretation of animal use on site at both. For example, the suggestion at Koekelare of an importation of pigs into the site as butchered meat for consumption, and the evidence for live cattle exportation from Koekelare are both patterns which are unlikely to be discernable through any other technique. At Raversijde the pattern expressed seems to be one of very local butchery and consumption for all species.

At both sites it is true to say the results are far from obvious. In particular, the paucity of pelvis and femur elements from both sites is curious, although can be explained most easily as being a vagary of the methodology of examining only elements with measurable spans and differential preservation across the skeleton. While patterns can be identified from both sites, it is difficult to be entirely confident in interpretation and it is always wise for caution to be exercised where differences in numbers are relatively small. Differential effects of taphonomy on the smaller elements may have been a problem despite the overall good preservation. This caution is perhaps inevitable with the examination of such assemblages even though Raversijde and Koekelare are both sites of large sample size and good preservation (as recommended for the clearest data using this technique (Faith and Gordon, 2006:872)). However skeletal element representation is a methodology which allows us to interpret with some confidence, at both Koekelare and Raversijde, that the remains mainly represent a mixture of household and consumption waste being processed on-site, with some additional patterns which are more difficult to accurately define and which the incorporation of other techniques within this study may clarify.

- *Summary: Skeletal element distribution suggests slightly differing animal disposal from the two sites, with some indication of exportation and importation of animals at Koekelare which is not suggested at Raversijde, where more localised rearing and butchery is suggested.*

3.8. Relative representation of either side of the animals

For a site with domestic consumption no difference in the treatment of the two sides of the skeleton would be expected. From historical knowledge of the period, (Sykes, 2006:69), both sides of the carcass would be processed identically and at the same time. However, at sites of a more unusual or ritual nature, across many time periods and areas, dominance of one side above another in faunal remains has at times been identified as a marker of unusual practice on site (from sacrifices to the Greek God Apollo at Kourion, Greece (Davis, 1996) and Halieis, Greece (Jameson, 1988) to the Bronze Age graves of Longniddry, Gairneybank and Uppermill, Scotland (Armit, 1992). Therefore, it is always important to assess whether there is any indication of unusual practice at these sites, or whether processing appears to reflect the expected pattern of domestic consumption.

In order to examine whether either side is more prevalent in the major three domesticated mammal species at Raversijde and Koekelare, an assessment of the NISP for each side of each element has been undertaken. A ratio has been created of the percentage of the total number of bones from each side for each post-cranial element (figure 3.16) and these ratios have been mapped onto skeletal diagrams for each of the three main species: cattle, sheep/goat and pig (see figures 3.17 to 3.19). This enables a swift evaluation of any patterns in side distribution. The ratios are presented as percentages of left and right, and where sides could not be determined elements of unidentified sides are included as a third figure.

Statistical significance of the differences in the ratios of sides was tested using the exact binomial test for goodness of fit (McDonald, 2009:282-287) which is suitable for a small sample with one variable as in this case. A significance at the $P<0.05$ level was felt to be stringent enough while also likely to provide clear results and is the standard often used to consider scientific validity.

		NISP count			% of each side				NISP count			% of each side				NISP count			% of each side	
Species	Element	Side	Raversijde	Koekelare	Raversijde %	Koekelare %	Species	Element	Side	Raversijde	Koekelare	Raversijde %	Koekelare %	Species	Element	Side	Raversijde	Koekelare	Raversijde %	Koekelare %
Bos	Humerus	L	29	22	63.04	43.14	O/C	Humerus	L	93	21	47.94	61.76	Sus	Humerus	L	35	7	49.30	53.85
Bos	Humerus	R	17	29	36.96	56.86	O/C	Humerus	R	101	13	52.06	38.24	Sus	Humerus	R	36	6	50.70	46.15
Bos	Scapula	L	13	25	54.17	56.82	O/C	Scapula	L	77	20	42.78	60.61	Sus	Scapula	L	47	2	46.08	50.00
Bos	Scapula	R	11	19	45.83	43.18	O/C	Scapula	R	103	13	57.22	39.39	Sus	Scapula	R	55	2	53.92	50.00
Bos	Tibia	L	35	45	53.85	45.45	O/C	Tibia	L	136	9	58.62	45.00	Sus	Tibia	L	15	2	40.54	66.67
Bos	Tibia	R	30	54	46.15	54.55	O/C	Tibia	R	96	11	41.38	55.00	Sus	Tibia	R	22	1	59.46	33.33
Bos	Radius/Ulna	L	37	68	44.05	54.40	O/C	Radius/Ulna	L	147	9	52.69	45.00	Sus	Radius/Ulna	L	86	11	53.42	57.89
Bos	Radius/Ulna	R	46	57	54.76	45.60	O/C	Radius/Ulna	R	132	11	47.31	55.00	Sus	Radius/Ulna	R	74	8	45.96	42.11
Bos	Radius/Ulna	?	1	0	1.19	0.00	O/C	Radius/Ulna	?	0	0	0.00	0.00	Sus	Radius/Ulna	?	1	0	0.62	0.00
Bos	Femur	L	11	2	47.83	16.67	O/C	Femur	L	0	2	0.00	40.00	Sus	Femur	L	8	1	47.06	50.00
Bos	Femur	R	11	9	47.83	75.00	O/C	Femur	R	0	3	0.00	60.00	Sus	Femur	R	9	1	52.94	50.00
Bos	Femur	?	1	1	4.35	8.33	O/C	Femur	?	0	0	0.00	0.00	Sus	Femur	?	0	0	0.00	0.00
Bos	Astragalus	L	15	13	55.56	50.00	O/C	Astragalus	L	16	3	45.71	75.00	Sus	Astragalus	L	15	1	42.86	50.00
Bos	Astragalus	R	10	13	37.04	50.00	O/C	Astragalus	R	19	1	54.29	25.00	Sus	Astragalus	R	20	1	57.14	50.00
Bos	Astragalus	?	2	0	7.41	0.00	O/C	Astragalus	?	0	0	0.00	0.00	Sus	Astragalus	?	0	0	0.00	0.00
Bos	Calcaneum	L	11	22	39.29	57.89	O/C	Calcaneum	L	36	1	45.00	14.29	Sus	Calcaneum	L	19	1	54.29	100.00
Bos	Calcaneum	R	17	16	60.71	42.11	O/C	Calcaneum	R	44	6	55.00	85.71	Sus	Calcaneum	R	16	0	45.71	0.00
Bos	Metacarpal	L	28	91	40.00	47.89	O/C	Metacarpal	L	149	20	48.06	47.62	Sus	Metacarpal	L	34	0	50.75	0.00

Bos	Metacarpal	R	31	77	44.29	40.53	O/C	Metacarpal	R	147	18	47.42	42.86	Sus	Metacarpal	R	33	3	49.25	100.00
Bos	Metacarpal	?	11	22	15.71	11.58	O/C	Metacarpal	?	14	4	4.52	9.52	Sus	Metacarpal	?	0	0	0.00	0.00
Bos	Metatarsal	L	27	81	49.09	47.37	O/C	Metatarsal	L	174	23	48.20	52.27	Sus	Metatarsal	L	30	0	52.63	0.00
Bos	Metatarsal	R	24	75	43.64	43.86	O/C	Metatarsal	R	179	21	49.58	47.73	Sus	Metatarsal	R	27	2	47.37	100.00
Bos	Metatarsal	?	4	15	7.27	8.77	O/C	Metatarsal	?	8	0	2.22	0.00	Sus	Metatarsal	?	0	0	0.00	0.00
Bos	Pelvis	L	4	7	57.14	41.18	O/C	Pelvis	L	14	1	46.67	33.33	Sus	Pelvis	L	45	10	59.21	62.50
Bos	Pelvis	R	3	10	42.86	58.82	O/C	Pelvis	R	16	2	53.33	66.67	Sus	Pelvis	R	31	6	40.79	37.50
Bos	Carpal	L	8	3	17.39	21.43	O/C	Carpal	L	0	0	0.00	0.00	Sus	Carpal	L	7	4	63.64	57.14
Bos	Carpal	R	7	2	15.22	14.29	O/C	Carpal	R	0	0	0.00	0.00	Sus	Carpal	R	4	2	36.36	28.57
Bos	Carpal	?	31	9	67.39	64.29	O/C	Carpal	?	0	0	0.00	0.00	Sus	Carpal	?	0	1	0.00	14.29
Bos	NC	L	12	12	50.00	41.38	O/C	NC	L	2	0	33.33	0.00	Sus	NC	L	1	0	50.00	0.00
Bos	NC	R	12	17	50.00	58.62	O/C	NC	R	4	0	66.67	0.00	Sus	NC	R	1	0	50.00	0.00
Bos	Phalange 1	L	69	101	52.27	48.79	O/C	Phalange 1	L	47	2	50.00	50.00	Sus	Phalange 1	L	31	0	50.82	0.00
Bos	Phalange 1	R	63	106	47.73	51.21	O/C	Phalange 1	R	47	2	50.00	50.00	Sus	Phalange 1	R	30	0	49.18	0.00
Bos	Phalange 2	L	37	41	50.68	51.25	O/C	Phalange 2	L	1	0	33.33	0.00	Sus	Phalange 2	L	15	0	53.57	0.00
Bos	Phalange 2	R	36	39	49.32	48.75	O/C	Phalange 2	R	2	0	66.67	0.00	Sus	Phalange 2	R	13	0	46.43	0.00
Bos	Phalange 3	L	36	24	59.02	41.38	O/C	Phalange 3	L	1	0	100.00	0.00	Sus	Phalange 3	L	4	0	50.00	0.00
Bos	Phalange 3	R	25	34	40.98	58.62	O/C	Phalange 3	R	0	1	0.00	100.00	Sus	Phalange 3	R	4	0	50.00	0.00

Figure 3.16. Table showing the NISP numbers and calculated percentages for each element of the three main domesticated mammals at Raversijde and Koekelare, by identified side.

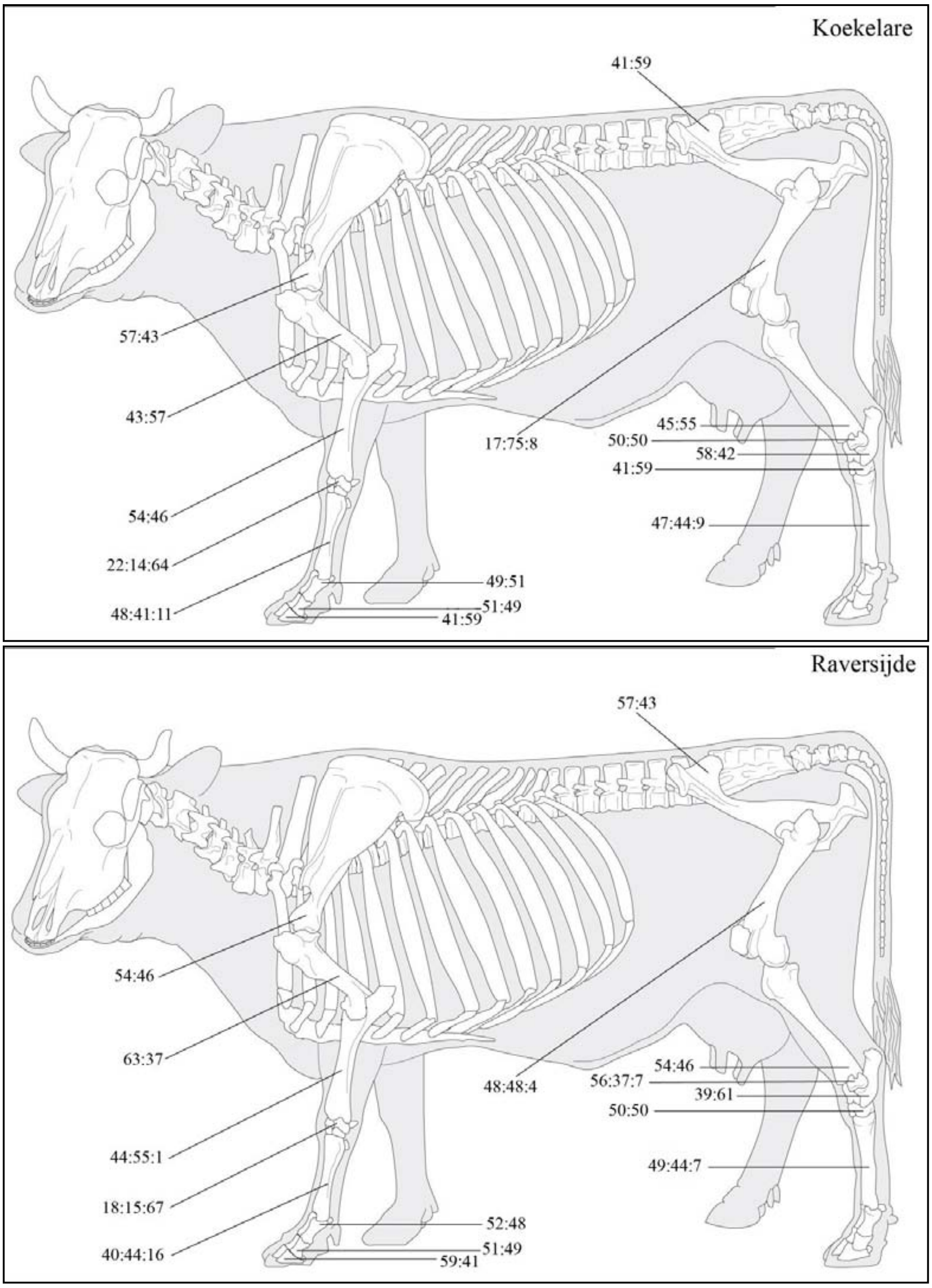


Figure 3.17: Diagrams representing the ratio of Lefts: Rights: (Unknown) for Cattle at Koekelare and Raversijde after M. Coutureau's diagrams (see Web Reference 3.2, 2009)

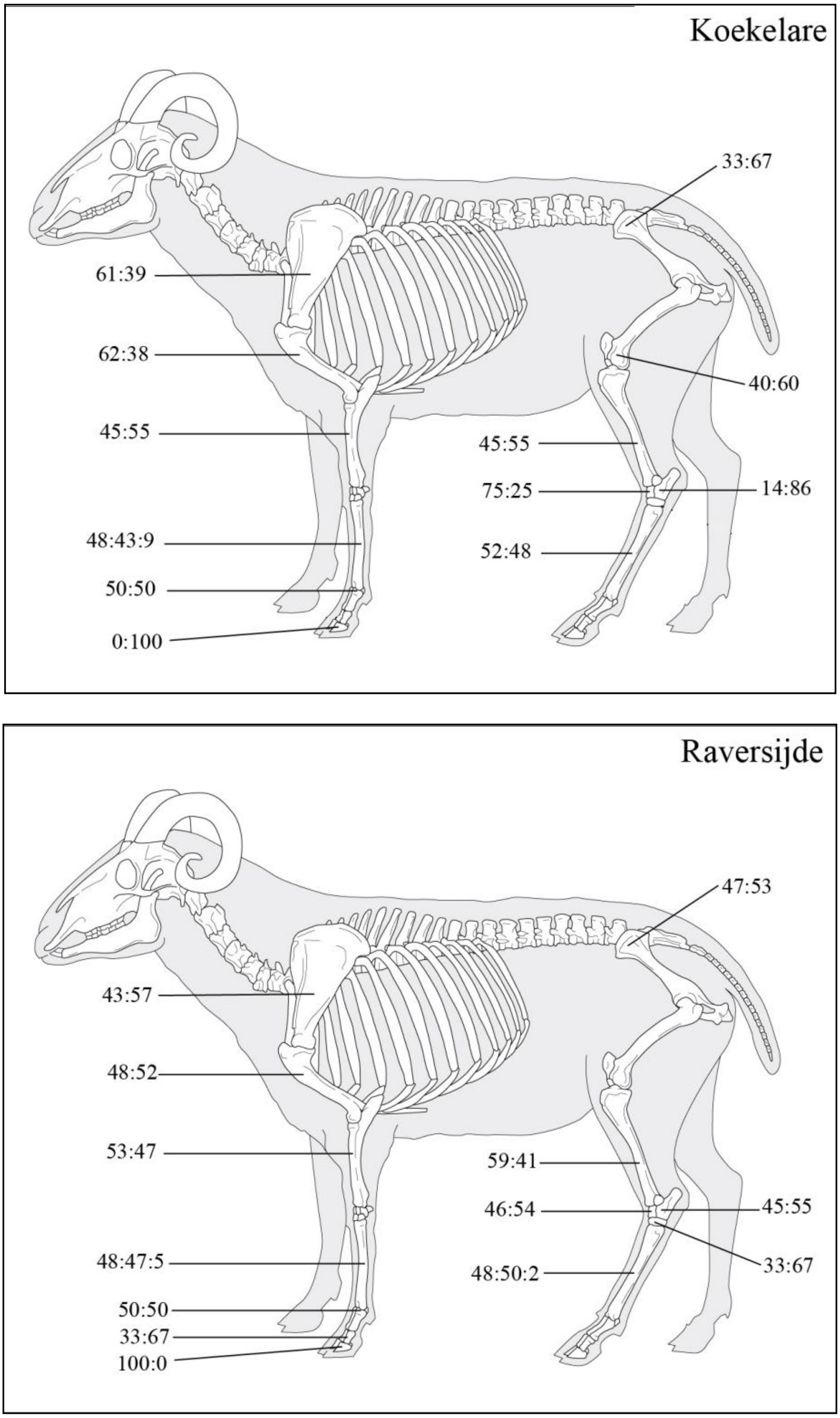
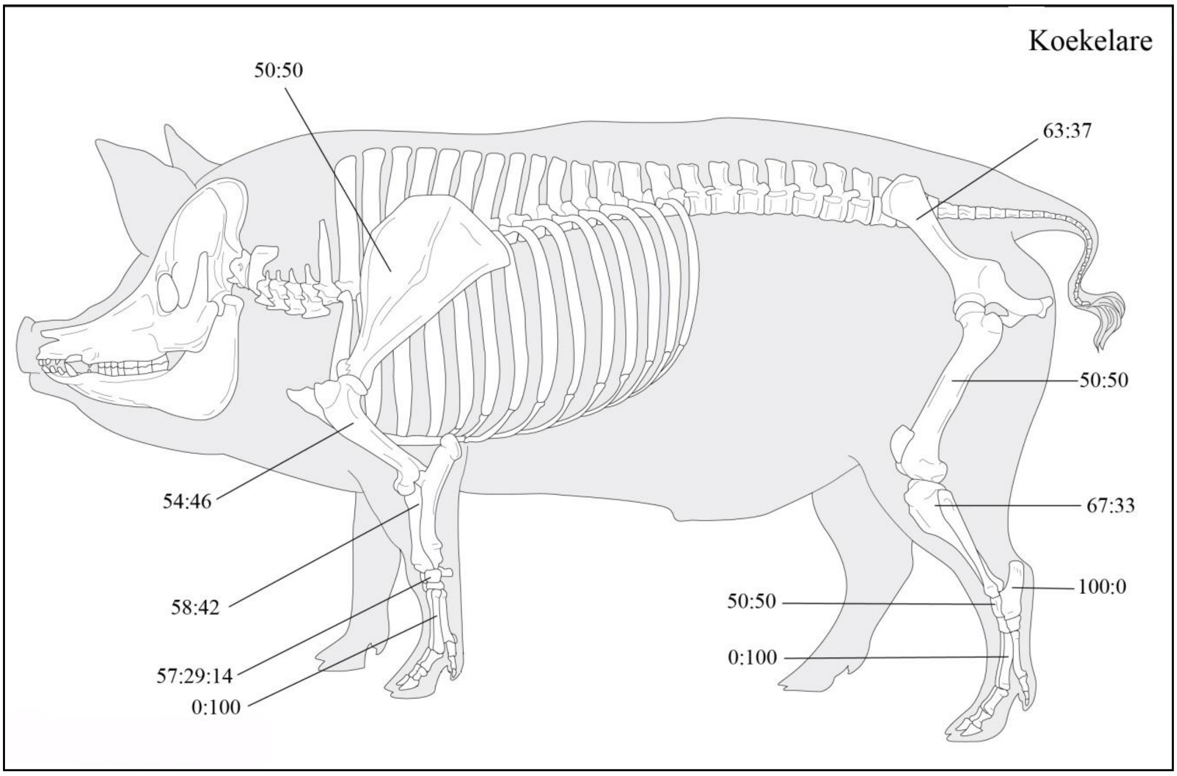


Figure 3.18. Diagrams representing the ratio of Lefts: Rights: (Unknown) for Sheep/Goat at Koekelare and Raversijde after M. Coutureau's diagrams (see Web Reference 3.2, 2009)



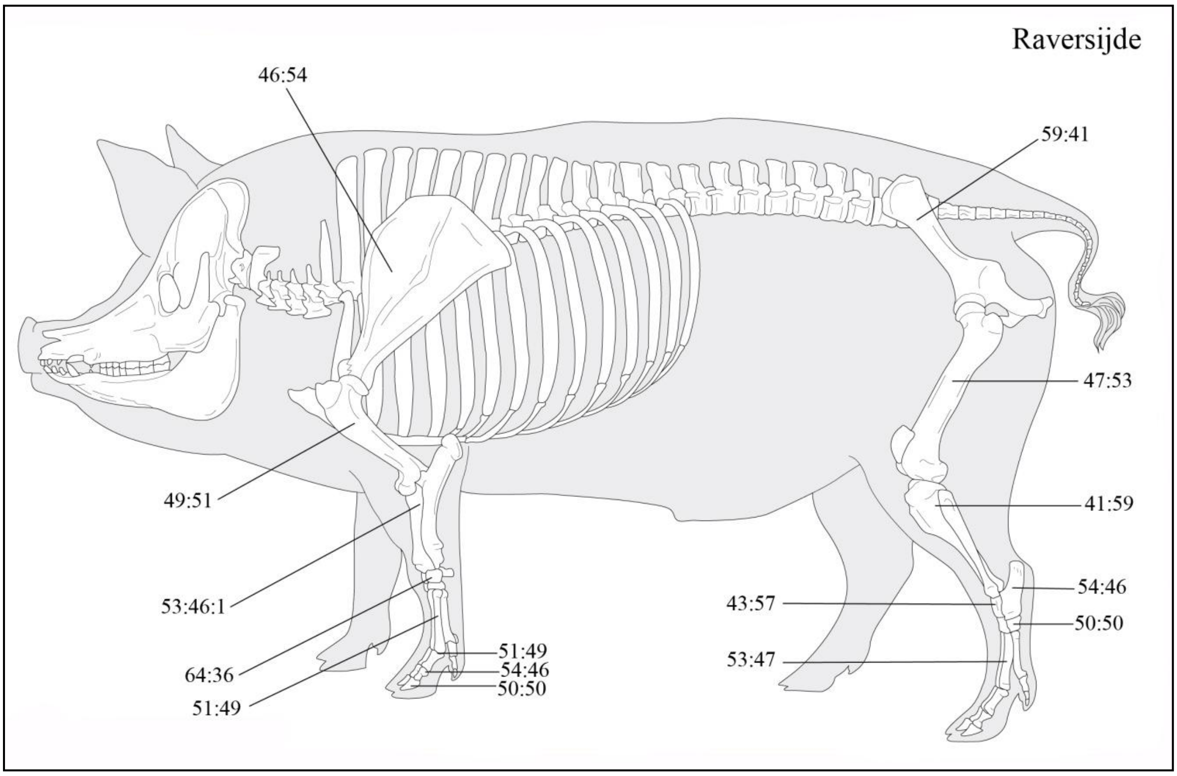


Figure 3.19. Diagrams representing the ratio of Lefts: Rights: (Unknown) for Pig at Koekelare and Raversijde, after M. Coutureau's diagrams (see Web Reference 3.2, 2009)

There is no demonstrable evidence of differential treatment of sides of the animals for any of the three main domestic species at either Raversijde or Koekelare (see figures 3.17-3.19). For all species where there was a substantial sample, it is evident that the ratios remain around 50:50 with small variations from this, none of which is statistically significant, and interpreted as natural variation within samples. This is not surprising as, although butchery techniques of the period often divided the skeleton into sided halves, there was no bias towards selection of one side or the other for consumption purposes. Other evidence of the period shows butchery as a highly specialised industry. For example, the impressive meat hall at Ghent built between 1407-1419 illustrates the wealth and importance the meat trade had obtained by this time. There is no evidence from any architectural or documentary evidence of the period for deliberate preferential treatment of either side of animals in municipal butchery either in the architecture of such places or the literature of the period. Therefore both Raversijde and Koekelare follow anticipated patterns of butchery techniques of their time, with no differential treatment of either side of the skeleton in any of the domestic mammals.

- *Summary: A consideration of the evidence of any patterns in the sides of animals disposed at Raversijde and Koekelare shows no clear patterns. This lack of bias towards either side would be expected of domestic sites from this period and place. There is no suggestion of any meaningful deposition of any side over another.*

3.9. Age at Death

Another zooarchaeological technique commonly utilised and one with a long history is the estimation of the age at which the animals present in the faunal assemblage died (Wilson, 1994:103, Maltby, 1982:81). Consideration of the age profiles of species at a site, also known as slaughter or mortality profiles, can provide indications of the types of animal husbandries employed (O'Connor, 1991:248), as the mortality profiles are often distinctive and dependent on the site use strategy (for examples see Klein, 1982; Payne, 1973; Greenfield, 2005; Levine, 1983 and Steele, 2003). For instance for primary products, such as meat, the animals are theoretically reared and fattened until they are at a suitable stage for the optimum harvesting of their product, when their maximum carcass size has been reached (Wilson, 1994:103), at which point they are slaughtered (Rackham, 1994:49). This would provide a pattern of remains of very different ages to the natural profile of the very young and old individuals (Steele, 2005:406). However if the animals are predominantly being raised for secondary products, or for traction, they will usually be slaughtered once their usefulness for this product has ended, which can often be much later than the optimal meat-producing age (Dobney et al, 2007:117). Depending on the product desired and the husbandry techniques being used, slaughter can focus on a variety of developmental ages (Payne, 1973 provides clear demonstration of a number of these theoretical models).

An agricultural economy is often complex and a variety of strategies may be employed at the same time (Nicolini, 2004:130). Hypothetical age distributions, such as illustrated in Payne (1973), should not be expected to be perfectly demonstrated in archaeological populations as age structures will vary due to many individual factors such as climate or pressure on food (Lyman, 1987:125). Similarly, there may be problems with identifying such patterns because more juvenile bones and teeth are less likely to survive than their adult counterparts meaning that the latter may be under-represented (Munson, 1991, 2000; Klein and Cruz-Uribe, 1984; Lyman, 1994:288). Despite this, age-at-death profiles reconstructed from zooarchaeological assemblages have been proven to provide invaluable information regarding husbandry techniques, and animal husbandry usage has been clarified through such techniques at innumerable sites (Zeder, 2006:171). Examples range from sites as varied as medieval assemblages (Albarella and Davis, 1996; O'Connor, 1991; Grant, 1984; Gidney, 1991 and many more) to ancient Egyptian villages (Miller, 1990) or goat domestication in the Zagros mountains (Zeder and Hesse, 2000).

3.9.1. Methodologies to consider Age-at-Death

3.9.1.1. General theory behind ageing for all species

Teeth are particularly useful in the examination of age as they are regarded as the most precise way of estimating the age of skeletal remains (Walker et al, 1991:169). The patterns of dental eruption and tooth wear are generally considered an excellent indicator of an animal's age (Banning, 2000:148, Silver, 1969:289). While epiphysial fusion, as discussed below, is another indicator of animal age, teeth are generally regarded as providing a far more accurate method to determine age in an individual (Rowley-Conwy, 2004:52), with epiphysial fusion often seen as as a 'valuable if crude' (Wilson, 1994:104) check on the reliability of mandible information. For all mammal species the teeth 'undergo a sequence of eruption, wear and loss' (Rackham, 1994:10) often over a number of years. This sequence is well understood for most mammals (Rowley-Conwy, 2004:52). Deciduous teeth are replaced on a schedule well known for modern animals and thought to be very similar in archaeological species (Matschke, 1967:109). This allows very precise identifications of age (for example, see figure 3.20 for the eruption dates used to age the pigs in this study), illustrating the level of definition which can potentially be achieved.

As well as the sequence of eruption the increase of wear on occlusal surfaces of teeth can also be useful to consider, as the older the animal is the more wear is accumulated (Silver, 1969:289). Ageing by wear is not as accurate as ageing from eruption due to the effects of differing diet and health meaning that wear can vary somewhat dependent on individual situations (Matschke, 1967:111; Hillson, 1986: 182-7; Bond and O'Connor, 1999:39). However, once the period of tooth eruption (and epiphysial fusion) is passed, tooth wear is often the only possible strategy to use to analyse an animal's age. Where a number of teeth are present in the mandible, tooth wear can be useful to give a rough indication of age, although it is likely to contain more inherent inaccuracies than eruption data (Banning, 2000:198).

For this study occlusal eruption and wear stages, follow the ageing of Bull and Payne (1982) and Grant (1975, 1982) for pigs and sheep/goat, and Grigson (1982) for the cattle, were used. The eruption dates used to age the teeth for this study were Rowley-Conwy for pigs (1993:180) with consideration also of Greenfield and Arnold (2008), and Grigson for cattle (1982:20).

Stage	*Dental development*	*Estimated age (months)*
1	Deciduous premolars unerupted	Foetal
2	dP2, dP3, dP4 at stage e	Birth-1 week
3	dP2, dP3, dP4 at stage ½	1-4 weeks
4	dP2, dP3, dP4 at stage u	4-7 weeks
5	dP2, dP3, dP4 in primary wear, M1 unerupted	2-4
6	M1 at stage e	4-5
7	M1 at stage ½	5-6
8	M1 at stage U	6-7
9	M1 in primary wear, M2 unerupted	7-8
10	M1 in secondary wear, M2 unerupted	8-9
11	M2 at stage e	9-10
12	M2 at stage ½	10-11
13	M2 at stage U	11-12
14	P2, P3, P4 at stage e	12-14
15	P2, P3, P4 at stage ½	14-15
16	P2, P3, P4 at stage U	15-16
17	P2, P3, P4 in primary wear, M3 unerupted	16-17
18	M3 at stage e	17-19
19	M3 at stage ½	19-21
20	M3 at stage U, pillar one in primary wear	21-23

Figure 3.20 Stages of pig dental eruption used in the ageing of pig teeth in this study, adapted from Rowley-Conwy (1993:180) to use Payne and Bull (1988) terminology

Ageing was undertaken on all the pig mandibles gathered for study from the six Belgian sites as well as those mandibles collected for pig, cattle and sheep/goat from the full faunal analysis study of Raversijde and Koekelare (those species being the only ones with mandibles present).

The teeth of all species were aged through visual examination considering both the degree of tooth eruption and wear, and comparison with the chosen wear stage representations. Teeth were examined closely and a x10 hand lens used where wear was unclear (as recommended by Levitan, 1982:207). The eruption and wear of each tooth was recorded separately with notes taken on any unusual features, before the overall age of the mandible was determined.

As well as tooth eruption and wear, evidence of age at death can be obtained from a consideration of the state of fusion of the post-cranial skeleton, although this is best seen as supportive evidence rather than an adequate alternative to aging from the mandibles (O'Connor, 1991:254). Epiphyses fuse to the diaphysis by ossification of cartilage between them over time, with this ossification taking place in different joints at different ages (Rackham, 1994:10). This timing is roughly known by comparison with modern species and how epiphysial fusion develops (Banning, 2000:148; O'Connor, 1989:181; Legge et al. 1991:56). If complete immature skeletons were present it would be possible to establish precisely (to months) the developmental stage the animal had reached when it had died (Rackham, 1994:12) but, once epiphysial fusion is complete, indications of ages from bones are very inaccurate (Silver, 1969:284) and are not considered within this study. Much less information is known about the exact timing of epiphysial fusion in archaeological species than is known about tooth eruption and wear timings, making any ageing far less likely to be accurate (Bull and Payne, 1982:67). For each individual bone the age parameters identified are also relatively large (being only identifiable as above or below a certain age). In this study, the modern and relatively standard definitions (as defined by Albarella and Payne, 2005:590) are employed, namely 'fused' (epiphysis and diaphysis joined and no fusion line is visible), 'fusing' (epiphysis and diaphysis joined but fusing line still visible), and 'unfused' (epiphysis and diaphysis separate). These definitions are becoming the norm when recording fusion data and allow the epiphysial fusion data listed in Amorosi (1989) and gathered from Silver (1969) for all species examined in this study to be used to determine the ages of skeletal remains. For calculation of ages in this study, bones classed as fusing have been incorporated within the counts for non-fused samples, as is usual practice. When such epiphysial data from single elements are built up for a population a picture may be produced of whether the assemblage is of older or younger animals, or if there is a range, despite each individual specimen providing little ageing information. Bones of similar fusion age have then been grouped together into a number of age categories following O'Connor (1989) for each species (see Appendix 3.2), and graphs produced of the number of bones within each class (after Dobney et al., 2007). The use of postcranial elements is particularly useful in this study for cattle and sheep/goat, as these species had relatively few mandibles to examine for age information (see Figure 3.9). Epiphysial data were recorded for each post-cranial element identified from Raversijde and Koekelare during the primary data collection.

3.9.2. Ageing of the Pigs

For pigs, the tooth eruption status was recorded following the criteria proposed by Payne and Bull (1988) and aged using a model put forward by Rowley-Conwy (1993) to allow ageing even when the mandible was fragmentary. The original designations for eruption status by Higham (1968) of 'primary, secondary, tertiary' reproduced by Rowley-Conwy in his model were felt to be too vague to be of use in this study and so this methodology has been adapted to allow more accurate ageing of the jaws (see Figure 3.20 for the eruption status aging employed in this study), a modification employed successfully elsewhere (for example Drew, 2005).

Studies of dental data in wild pigs from three differing areas (former East Germany, United States and Poland) (Matschke, 1967) all show extremely close similarity in eruption ages, despite their varying locations. This illustrates that variable nutrition does not appear to have a dramatic effect on the eruption sequence and timings of teeth in pigs in particular (Rowley-Conwy, 1993:180), and appears to confirm Bull and Paynes belief that eruption sequences in both domestic and wild pigs are very stable, to such an extent that they can be extrapolated onto the past (Bull and Payne, 1982:55,65). This means that, although in this study we are contemplating different situations that species inhabit, it is unlikely that these would have dramatically affected eruption dates of teeth and so this is a suitable technique to use to examine varying husbandry strategies across sites.

3.9.2.1. Mortality profile using broad age categories

The mandibles from all six sites were first grouped relative to the age bands into which they had been attributed, following the method of O'Connor (1989:18) (see Figure 3.21). It is believed that Belgian pigs in the medieval period were likely to have been born at a relatively defined time of the year, between March and May (Lauwerier, 1983: 486-7). This most likely focused around an April farrowing date (Banning, 2000:200), as reproduction depends greatly on the availability of good levels of food and suitable climatic conditions (Noe-Nygaard and Richter, 1990:275). It is useful to assign jaws to such broad categories to consider the use patterns of animals of different ages such as 'juvenile' or 'adult', without having the picture being confused by more subtle patterns of variation between different months (see Figures 3.22 to 3.27).

Designation	*Lower age of jaw band*	*Upper age of jaw band*
Juvenile	1	7
Immature (1)	8	16
Sub-Adult (2)	17	27
Adult (1)	28	44
Elder (2)	45+	

Figure 3.21: Table showing the definition of the grouping of mandibles identified to months (using an adapted Rowley-Conwy, 1993 ageing strategy) into broader age bands used in this study.

When presenting this graphically it is clear that there are some obvious patterns in the results between the six sites for the mortality profiles.

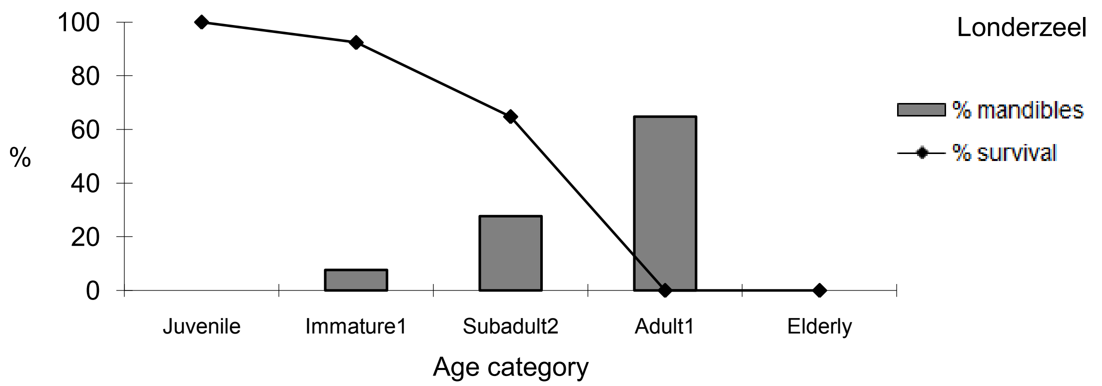


Figure 3.22 Mortality profile of the pig mandibles from Londerzeel

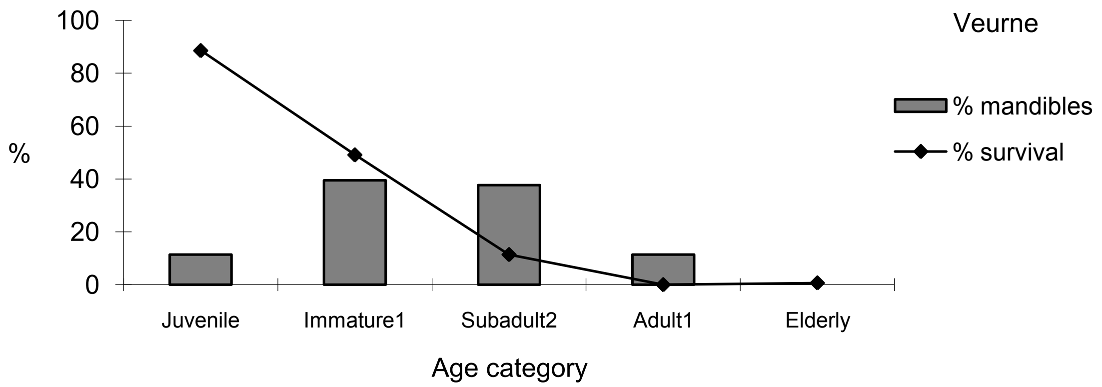


Figure 3.23 Mortality profile of the pig mandibles from Veurne

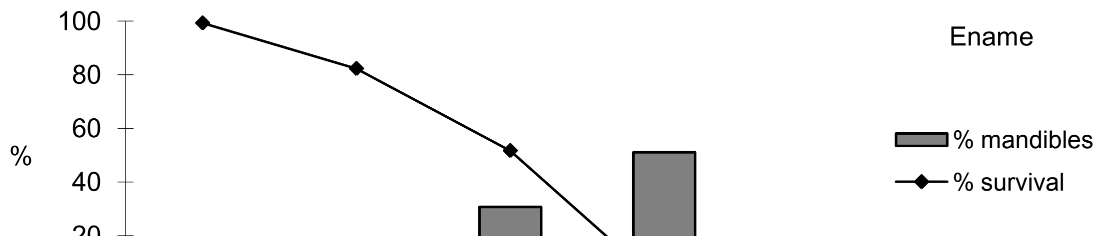


Figure 3.24 Mortality profile of the pig mandibles from Ename

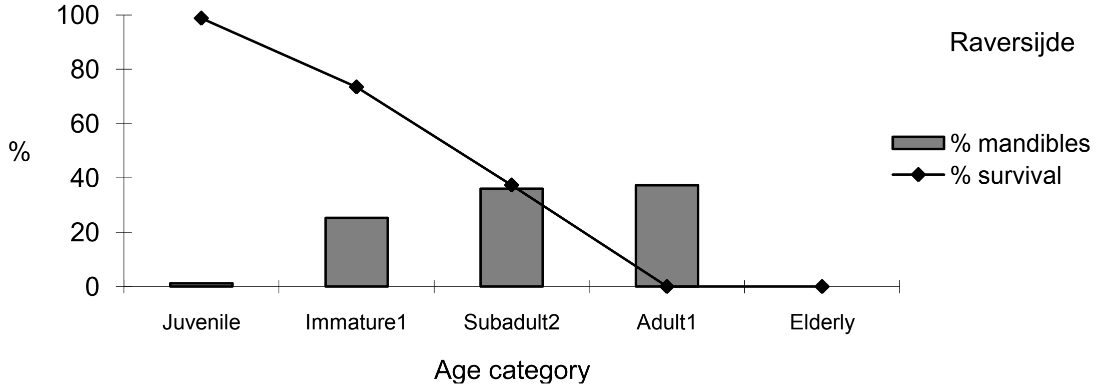


Figure 3.25 Mortality profile of the pig mandibles from Raversijde

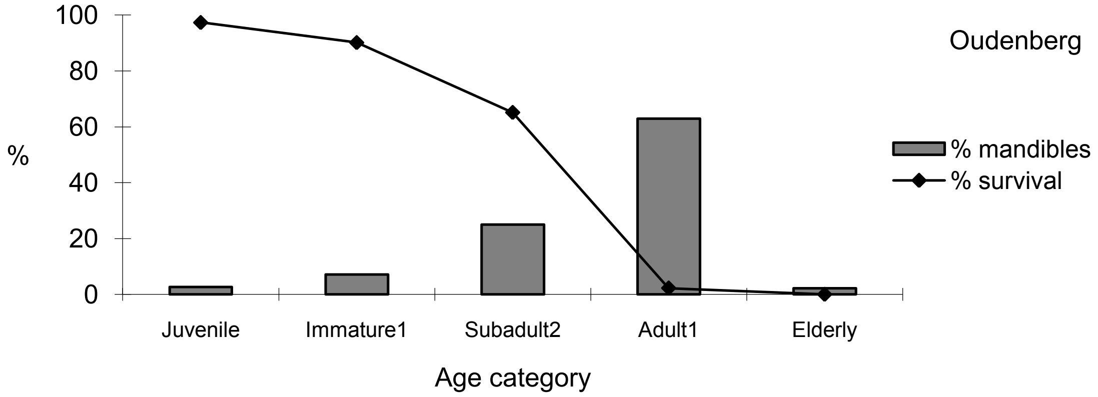


Figure 3.26 Mortality profile of the pig mandibles from Oudenberg

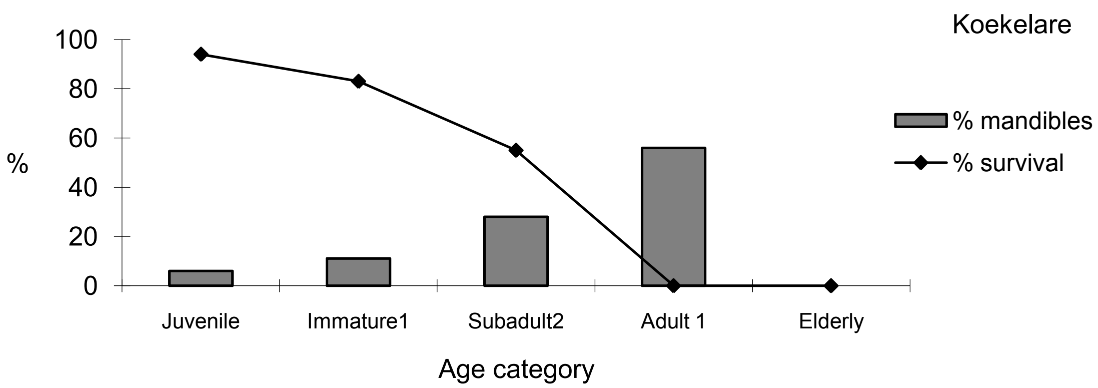


Figure 3.27 Mortality profile of the pig mandibles from Koekelare

The reconstruction of age-at-death data for domestic pigs from a consideration of the occlusal tooth wear and dental eruption data (Figures 3.22-3.27) provides a range of information about possible economic practices at these sites.

It is immediately apparent that for five of the six sites the pattern is relatively similar, with the greatest number of deaths being of adults and, to a lesser degree, sub-adults. At all six sites few elderly pigs survive. Koekelare, despite the relatively small sample (*n=18*) of pig mandibles, still fits well with the common pattern of five of the sites. Raversijde, despite the differences of its location also appears to fit well with this slaughter pattern. Such a slaughter profile is typical of sites of local pig keeping, with most pigs in the medieval period being killed at around these ages (Ryder, 1969:42) when they are at optimum size for meat.

For Veurne (Figure 3.23) a different profile is evident, with the pigs generally being killed far younger than for the other sites, exhibiting a far greater kill of immature and subadults and with far fewer adults surviving to be slaughtered. Pigs do not reach their full size and weight until around two to three years old, and a mortality profile of pigs being killed between 7 and 27-36 months would be expected from a typical medieval domestic site (Greenfield, 2005:21). The pattern of slaughter at Veurne suggests that the pigs are not being utilised to their full nutritional value (corresponding to the 'Adult 1' category representing pigs over two years (O'Connor, 1991:348)) as would be expected in that situation . It is possible that this difference in pattern suggests that Veurne is experiencing greater pressure on the pig population, or that more 'choice' younger pigs are being selected for consumption. Markham (1614 in Albarella and Davis, 1996:30) suggests that pigs between 12-18 months old (corresponding to the Subadult 2 category) are most desirable. This would explain a slightly younger pattern than seen at the other five sites, but such an age selection still does not explain the high levels of 'Immature 1' slaughter.

It is also important to note that Londerzeel shows a particularly low prevalence of Juvenile individuals at site (none present). It is possible that this may suggest importation of pigs into the site when they are somewhat older. The presence of juvenile animals at the other sites may indicate breeding sows in the local area (Bond and O'Connor, 1999:348) and for these sites that an indigenous herd is being kept at the site. This is particularly notable for Raversijde, where uncertainty lies in how the pigs are supported at the site as it indicates that, despite the conditions, local breeding of pigs was occurring rather than pigs being purchased at local urban centres, such as Oostende, and being brought back to the village for consumption.

- *Summary: Mortality profiles identify a clear difference for pigs between Veurne and the other five sites (which all appear remarkably similar). The mortality profiles also potentially identify importation of the pigs into Londerzeel rather than breeding on site. However, a lack of detail because of the broad age categories makes it hard to positively determine the causes of the patterns identified.*

3.9.2.2. Age of death considering mandibular wear stages

The broad age categories examined above may potentially mask subtle and specific differences in husbandry practices which can be more clearly understood through the use of more closely defined age bands (Dobney et al., 2007:125). It is clear that some patterns have been identified using the broad age categories but that the understanding of the precise patterns of ages in the assemblage remains unclear. Mandible wear stage analysis is a commonly used technique where sample sizes are large enough to ensure that any significant patterns would emerge, and it is a useful tool in the zooarchaeologists arsenal (Ervynck et al., 2007:179). This technique is particularly appropriate for large assemblages (Ervynck, 2005:154) where variations in wear can more clearly be seen and it is felt that for five of the six sites the size of sample may lead to very useful information (the sample size at Koekelare means that for this site the use of this technique will be more limited). Grant's (1982) methodology for examining tooth wear data by classifying the pattern of individual tooth wear between teeth within jaws to provide an overall numerical score for the jaw is used. For each tooth row the numerical values given to individual teeth are summarised to produce a single value (Grant Mandibular Wear Stage), which can provide over fifty separate permutations, rather than the five categories examined above.

If data were to cluster in a particular age class it could indicate seasonal slaughter strategies (Reitz and Wing, 1999:179) and provide more detailed information on herd management practices than can be seen through more generalised profiles. It is important to stress that such mandibular histograms do not point to specific calendar months for an age but again identify age ranges, albeit more narrowly defined than in the previous technique and which, to some degree, can be calibrated to age using known eruption times (Ervynck, 2005:168).

It is impossible for zooarchaeologists to verify conclusively whether reproductive cycles are exactly the same in the past as in the present (Reitz and Wing, 1999:181). However, Ervynck (1997) has developed a method of equating patterns identified to seasonality which, although critiqued by some (O'Connor, 2003) as problematic due to the difficulty of precise aging, appears to have had some success in providing information about seasonality of death (Ervynck, 1997; Ervynck, 2005). Therefore, when examining such specific age ranges as mandible wear scores it is impossible to ascribe exact chronological ages to each stage, and 'Mandibular Wear Scores' remain a separate scale, rather than one tied directly to the calendar age of the animal. These mandible wear stage histograms follow the methodology of Dobney et al. (2007) and Ervynck (2005), showing the frequency of individual wear stage values present within an assemblage (Figures 3.28 to 3.38). The technique is not without its problems, and several qualifications need to be considered when examining results derived from these techniques (Dobney et al., 2007:127). Such histograms visually provide a false impression that all wear stages last the same period of time, something which is in reality untrue (Grant, 1982:91).

Some individual wear stages last for a very short amount of time (for example stages A-D), and others may last for a far longer period. Subtle changes in the histograms may therefore reflect pseudo-changes rather than actual changes in patterns, and calibration is necessary to link to ages. For this study, the interpretation of ages follows Ervynck, 2005. In order to combat the problem of observer error and false peaks (Ervynck, 2005:155,167), a three-class running mean calculation (after Ervynck et al., 2007) has been applied to 'smooth' the data and ensure that any 'false' peaks are less likely to bias the interpretation of these patterns (for these adjusted graphs see figures 3.29, 3.31, 3.33, 3.35 and 3.37). Koekelare is more limited, with only 18 examples, and the decision was taken not to apply any 'modification' to the raw numerical scores for this site due to fears of bias because of the small sample numbers involved. Histograms have therefore been produced showing the frequency of jaws with a particular individual wear stage value present within an assemblage and also, for five of the six sites (excluding Koekelare), histograms of these figures with a three-class running mean applied have also been produced, and it is these on which the interpretation has been based for these five sites.

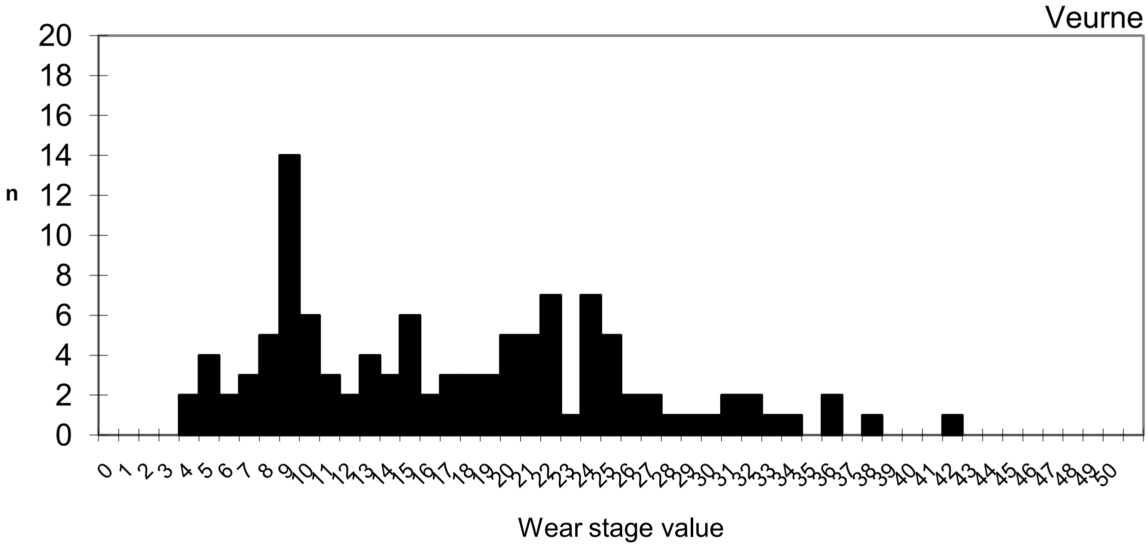


Figure 3.28. Mandible Wear stage histogram for pigs at Veurne without modification (n=number)

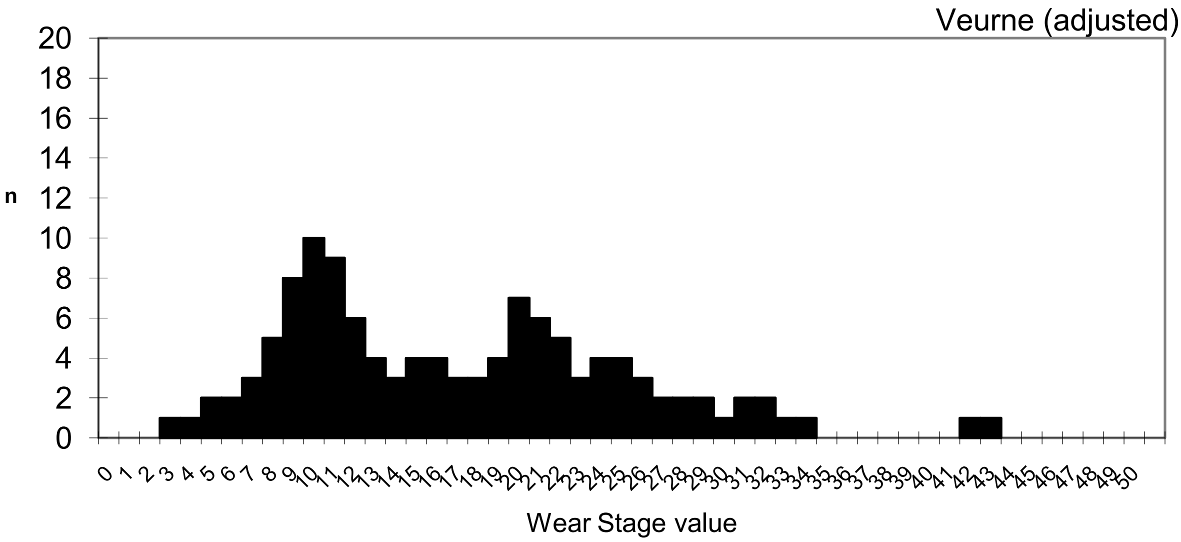


Figure 3.29. Adjusted Mandible Wear stage histogram for pigs at Veurne (n=number)

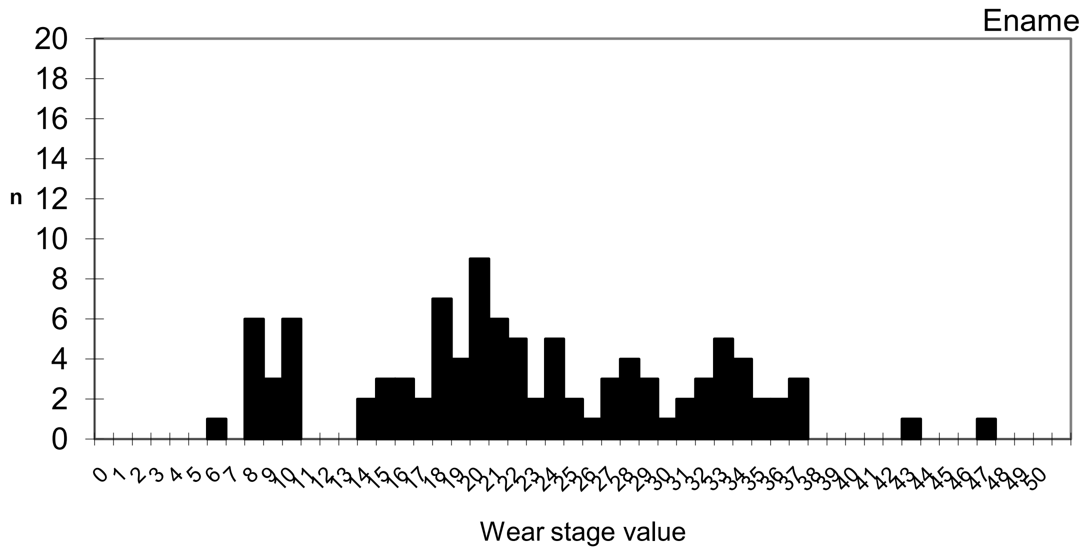


Figure 3.30. Mandible wear stage histogram for pigs at Ename without modification (n=number)

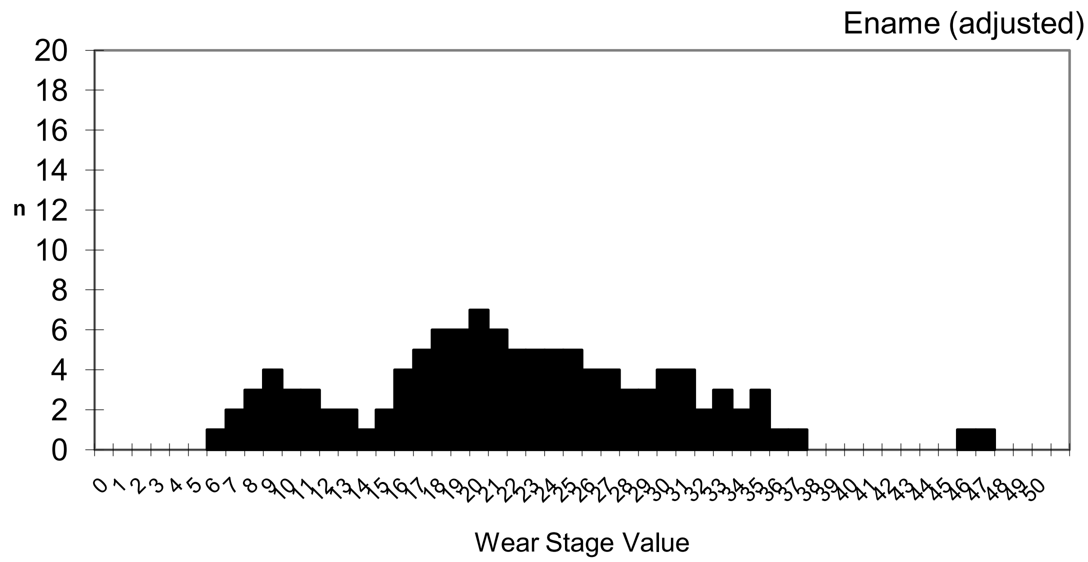


Figure 3.31. Adjusted Mandible wear stage histogram for pigs at Ename (n=number)

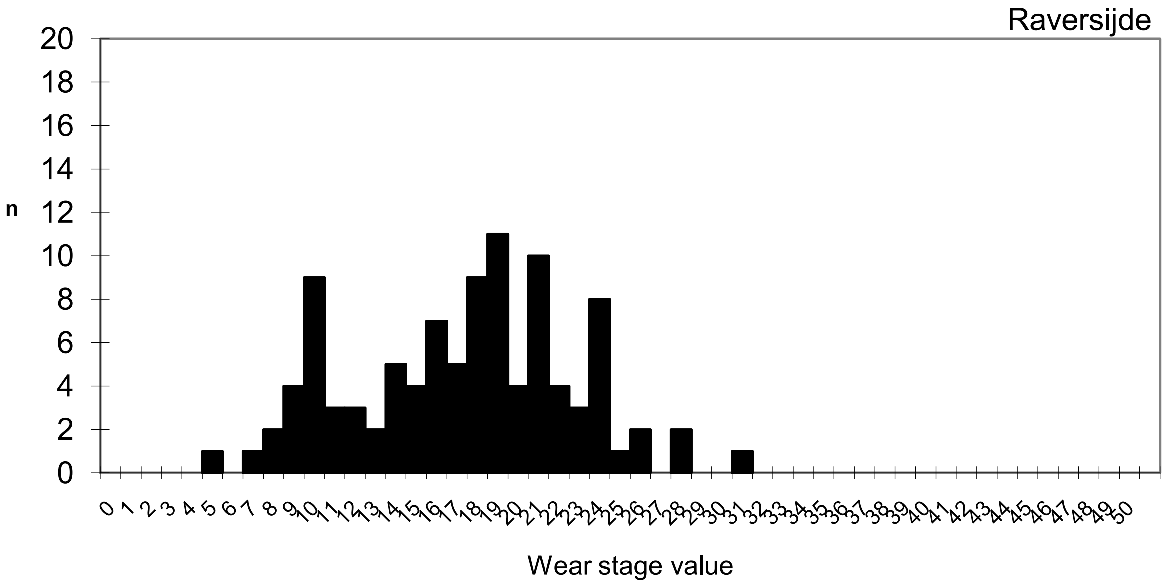


Figure 3.32. Mandible wear stage histogram for pigs at Raversijde without modification (n=number)

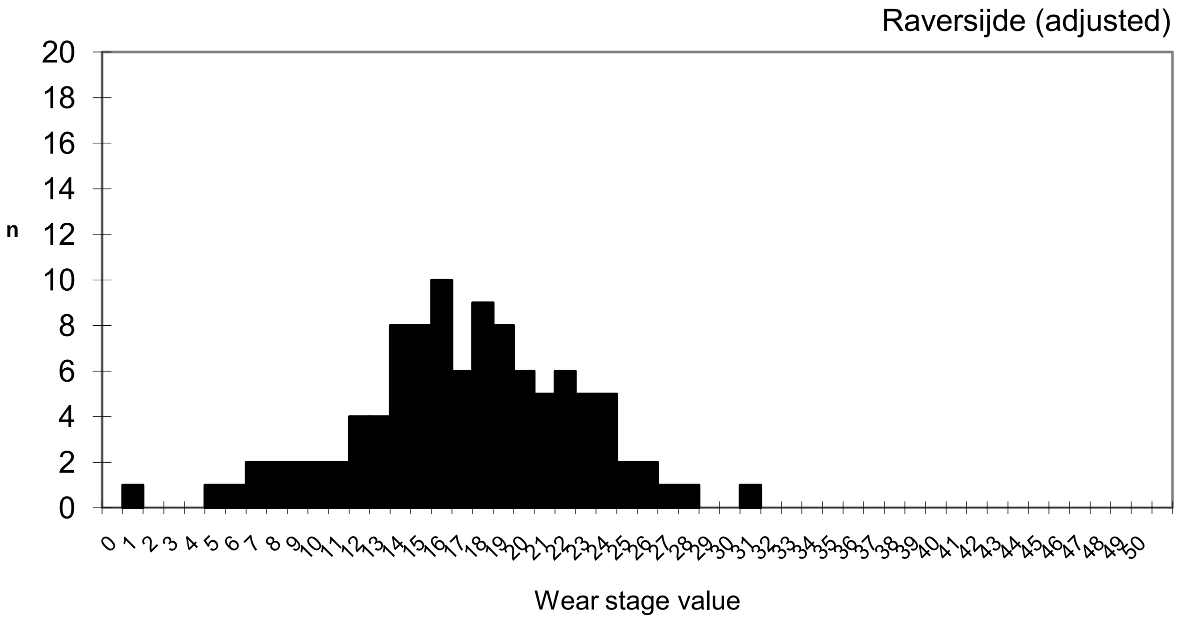


Figure 3.33. Adjusted Mandible wear stage histogram for pigs at Raversijde (n=number)

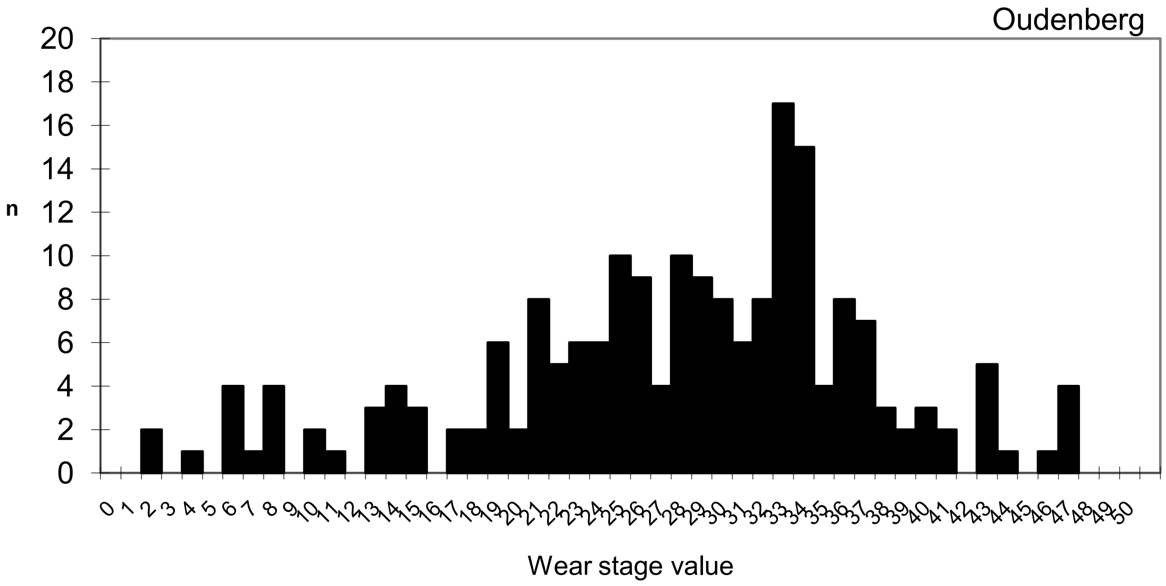


Figure 3.34. Mandible wear stage histogram for pigs at Oudenberg without modification (n=number)

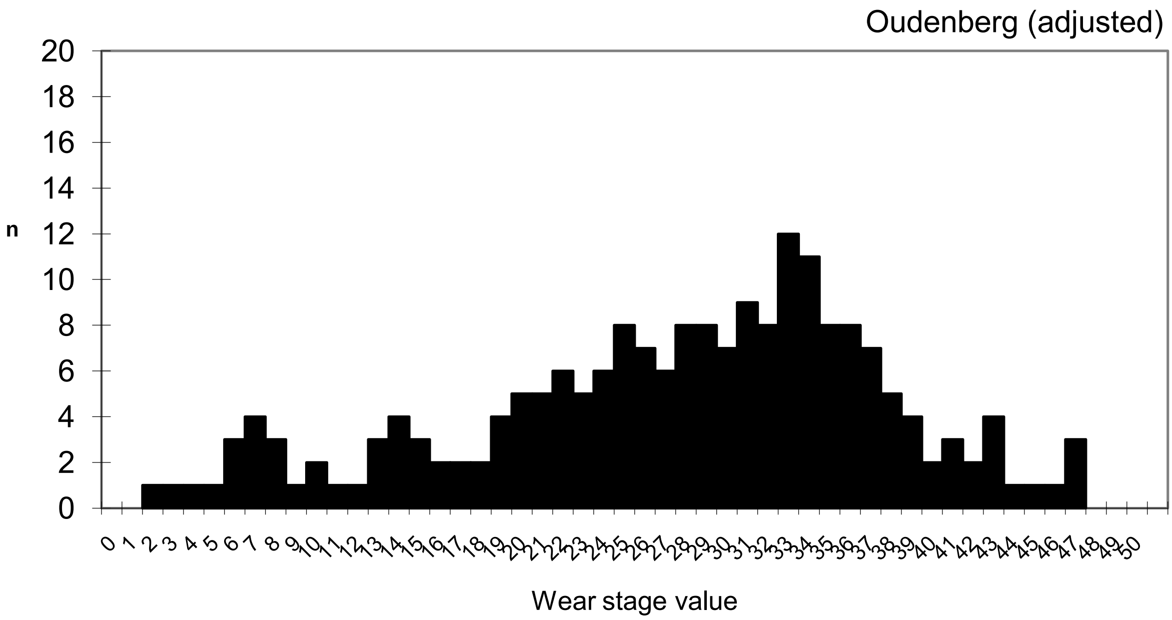


Figure 3.35. Adjusted Mandible wear stage histogram for pigs at Oudenberg (n=number)

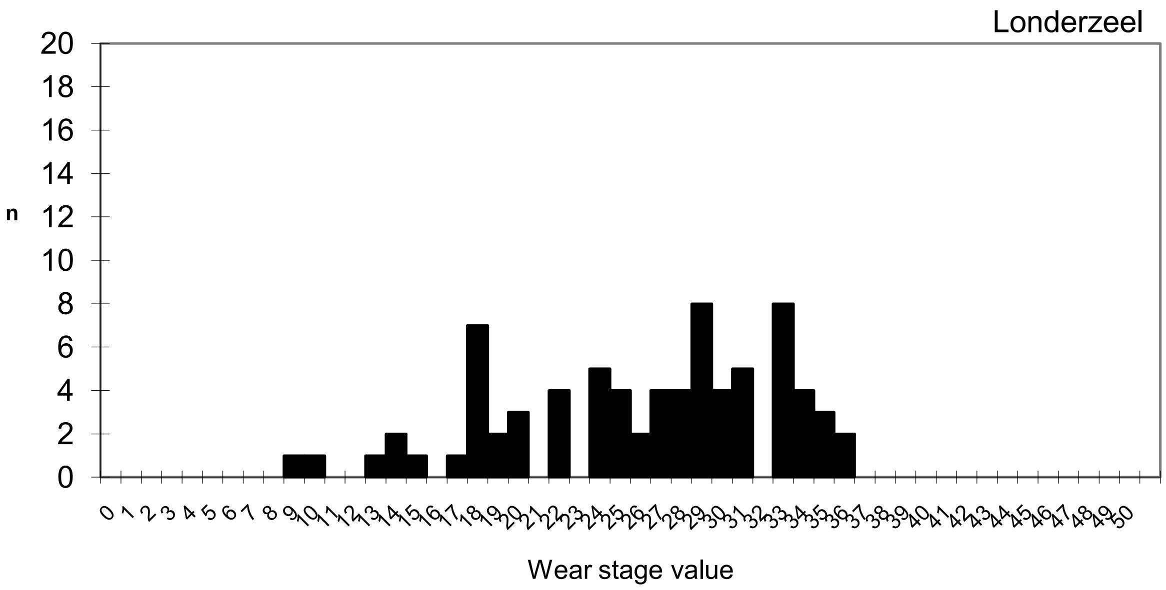


Figure 3.36. Mandible Wear Stage histogram for pigs at Londerzeel without modification (n=number)

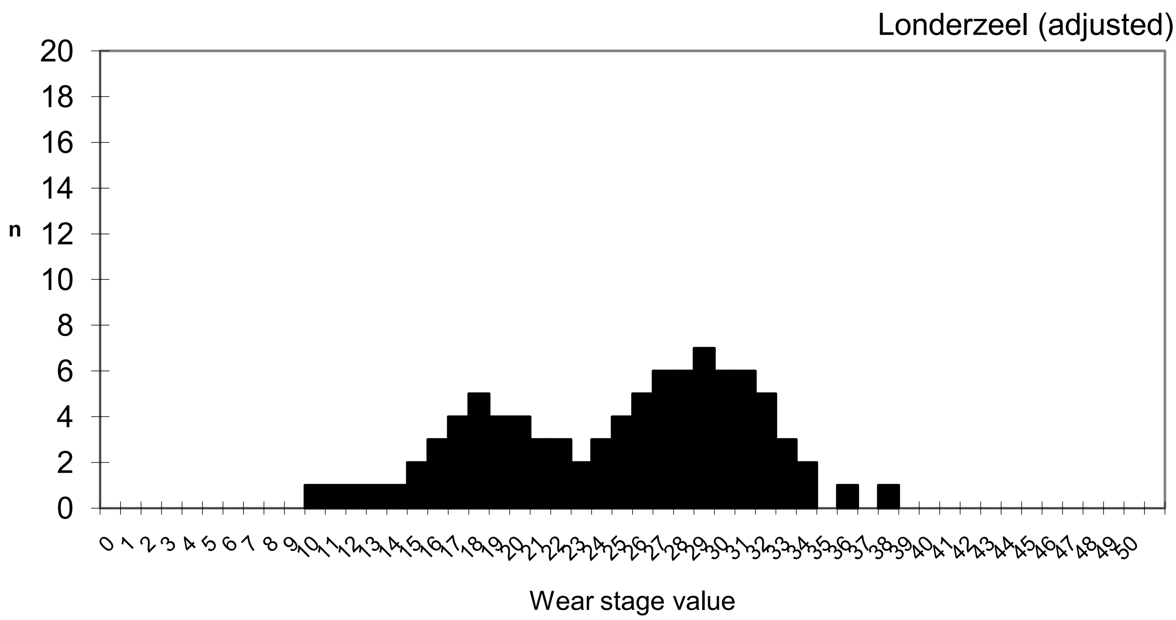


Figure 3.37. Adjusted Mandible wear stage histogram for pigs at Londerzeel (n=number)

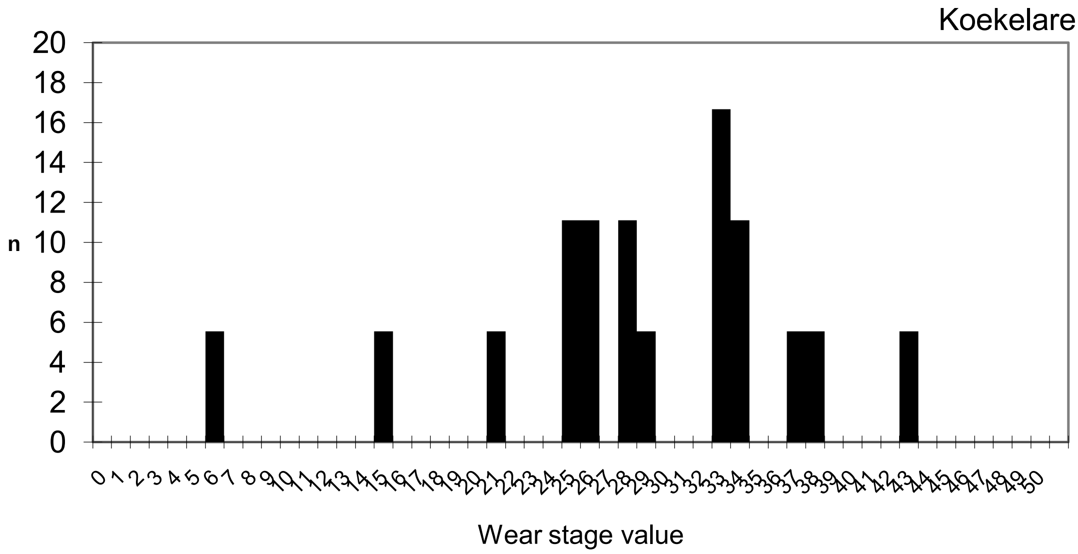


Figure 3.38. Mandible Wear stage histogram for pigs at Koekelare without modification (n=number)

Studies of small samples of the jaws from Veurne, Ename, Raversijde and Londerzeel were previously considered using this methodology (Ervynck et al., 2007:180-181). However, Koekelare and Oudenberg have not previously been subjected to any such investigation, and further jaws were also incorporated into the samples studied for Raversijde.

For Veurne the sequence of peaks suggests a high proportion of young deaths (around Grant Molar Stage 3 onwards), and clear peaks of slaughtering of animals around Grant Wear stage 10 and stage 20 (see Figures 3.28, 3.29). Ervynck (1997) has at Wellin (a Belgian site of similar patterns) suggested that killing just before the first winter could provide an explanation for the stage 10 peak, and the stage 20 peak for the second winter (stage 19 for the Wellin example). At Veurne there is, unlike Wellin, no third winter peak (exhibited at that site at stage 28), suggesting that most of the pigs at Veurne were killed before this time. Timing of the slaughtering to specific seasons suggests that pig kills at this site were not a random event but occurred at the optimum time for yield versus cost (Ervynck, 2005:153). Pigs being slaughtered at the beginning of winter are at their fattest, profiting from the rich autumn food provided in the known forest environs of Veurne. Late autumn-early winter is the optimum time to kill for medieval pigs as often they may lose weight over winter (Ervynck, 2005:153), suggesting a typical medieval forested pig husbandry. For this study the pattern produced is also very similar to that identified for Veurne by Ervynck et al. (2007:181) within the pilot study, also suggesting a high level of reproducibility of the technique. This pattern of death just prior to winter is, as described for Wellin, indicative of a very traditional form of husbandry based around seasonal demand for meat.

As identified in the more broad age consideration of this study, Veurne appears to have a greater emphasis on first winter (young) deaths than second winter, although a sizable number of second winter pigs are also being slaughtered. This trend suggests that despite the targeted seasonality pig slaughter occurred before they had reached their economic potential which would fall at their second or third winters (Ervynck, 2005:153), and indicates either a great demand for their meat or the choice of particularly tender animals for slaughter at this site. It is also notable from the histograms that very young animals are represented, something not identified by Ervynck et al. (2007:181), supporting the theory that the assemblage of pigs was bred locally.

Ename (figures 3.30, 3.31) similarly demonstrates this clear seasonal signal, with first and second winter peaks, and also a third winter peak at around stage 31, similar to the equivalent stage 28 peak at Wellin. Ename has a greater trend of second winter kills than identified at Veurne, with second winter kills being clearly the most prevalent. This fits well with the model of killing of pigs when they reached their full meat potential (Ervynck, 2005:153). The presence again of very young animals, as well as older, suggests a very 'natural' herd composition at this site and a very traditional high medieval husbandry strategy. This is not surprising considering the local environment.

Oudenberg (Figures 3.34, 3.35) again clearly demonstrates a seasonal kill pattern, with peaks around 7, 14 and 31 months. For Oudenberg the peaks are less clear than for the other sites, with the 'third winter' peak in particular being spread over a long period of months, with the apex corresponding to the 'third winter' peak but the spread being far longer than simply a winter kill pattern. The concentration on older pigs suggests a less intensive form of husbandry at this site and that pigs are not being targeted at particular times of the year when they are in peak condition. However, a similar spread was noted at Wellin (Ervynck, 1997:154) and it is possible that this may be due to the difficulties in methodology of accurately aging older mandibles through wear when compared with the more precise aging of younger mandibles through eruption.

For Londerzeel the patterns identifiable from the histogram (Figures 3.36, 3.37) are particularly interesting. There is little evidence of a first winter slaughter peak, although a second winter peak (around stage 18) and a third winter peak (around stage 29) remain.

This suggests that very young animals are absent from this site, and strongly suggests that pigs are imported to the site later in their life rather than being raised in the vicinity (Bond and Bond and O'Connor, 1999:348).

At Raversijde (Figure 3.32, 3.33) the pattern again appears fundamentally different from the other five sites, with one broad peak. This pattern was also identified during the pilot study (Ervynck, 2005:156). The pigs appear to have all been slaughtered when relatively young, but the distribution shows a peak focussed around stage 16, not coinciding with any peaks observed at the other sites or linked to slaughter in winter conditions. This suggests slaughtering of the pigs in the summer rather than during the winter (Ervynck, 1997, Ervynck et al., 2007:181), and that the husbandry of the pigs is not following traditional seasonal practices, providing some support for the idea of semi-confinement, with a choice less concerned about seasonality, but selecting animals around the same age. As Ervynck et al. (2007:181) suggest, this may be based on predetermined 'weight' criteria rather than age. Evidence of very young pigs on site suggests that they were being bred there despite the slaughtering not following 'usual' medieval trends. Evidently we are not seeing animals of a suitable age for killing being imported into site but a very different type of husbandry practice being deliberately employed on the locally kept herd. While the sandy conditions of Raversijde may be affecting the wear of the tooth, making it more likely that the teeth are worn more quickly, these conditions would not affect the eruption dates of the teeth and the majority of the mandibles examined are relatively young and aged by eruption as well as wear. Therefore this can be excluded as a cause for the differing pattern at this site. Ervynck et al. (2007) posit that is possible that this broad peak is due to confusion in the data caused by multiple farrowing at the site. This is also supported by the consideration of hypoplasia data examined in this study (see Chapter 6) which shows some potential indication of more than one farrowing event.

It is difficult to interpret the patterns of Koekelare (figure 3.38) with such confidence as the other sites, due to the limited number of examples. However, it appears that animals of all ages are present on site, and that a concentration of older animals, in their third winter, is suggested, seeming to reflect a very traditional high medieval husbandry policy being employed with a local population.

<u>Summary:</u>

- *Mandible Wear Score patterns clearly show a far greater level of detail than the broader age categories. Patterns identified in the broader age categories, such as the lack of juvenile slaughter at Londerzeel, are confirmed and far more subtle patterns are also noticeable which were invisible using the more general ageing methodology.*
- *For most of the sites, excluding Raversijde, the ageing suggests seasonal culling and a traditional 'high' medieval autumnal slaughter pattern. For Londerzeel, however, there is also a suggestion that while this seasonal slaughter is still adhered to, the pigs are being brought to site rather than bred on site.*
- *Veurne appears to be seeing a particularly young slaughter, around the first winter, indicating a selection of animals not at their full economic potential, although the reasons for this are unclear.*
- *Raversijde appears fundamentally different from the other five sites in its economic strategy. Animals are not being selected in a pattern linked to seasonality, but around a certain age. It is possible that this suggests slaughtering based on reaching a particular weight rather than age, and may hint again at a more controlled husbandry, based around semi-confinement, rather than a more 'natural' pannage system which is strongly influenced by the environmental conditions.*

3.9.2.3. Age of death examined through epiphysial fusion of postcranial elements

Considering the information obtained from the post-cranial skeleton, Figure 3.39 shows the relative proportion of fused epiphyses for various categories of skeletal elements grouped into broad aged groups (after O'Connor, 1989 and following Dobney et al. (2007) with minor modifications, see Appendix 3.2). For pigs, it is clear that the Raversijde pigs are being killed far younger than those at Koekelare, with far fewer surviving into adulthood. There is a particularly large cull for Raversijde between the early and intermediate 1 (1-2 years of age), where almost 60% of the population is killed, and between intermediate 1 and intermediate 2 (2-3 years) where a further 25% are killed. This younger skewing of the pig profile is also reflected in the more detailed tooth eruption and wear considerations, above. For Koekelare it is again apparent that a number of older animals are surviving into adulthood and that the major culling episode comes between intermediate 1 and intermediate 2 (around 30%), with only a small cull between the early and intermediate phases.

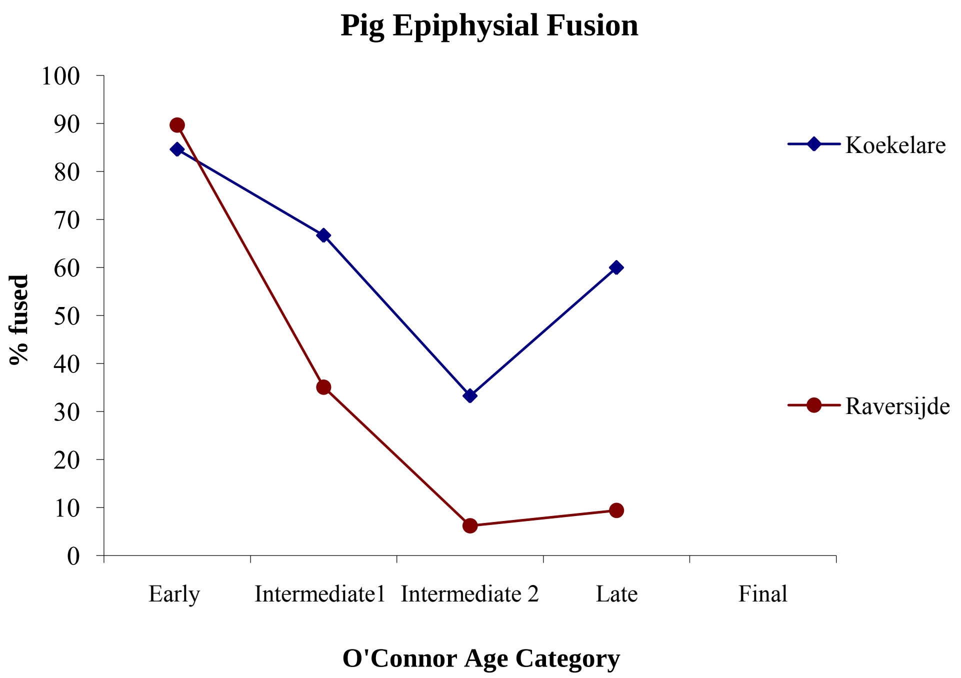


Figure 3.39. Graph demonstrating the age profile of Raversijde and Koekelare pigs as shown through post-cranial epiphysial fusion information.

This age pattern clearly matches that of the cranial (mandible) material (see above), where Raversijde shows a clearly younger profile than Koekelare. The epiphysial fusion data also helps support the more limited mandible evidence from Koekelare, and confirms that the suggestion of a concentration of kills between wear stage 24-34, at the third winter, is reasonable.

- *Summary: Epiphysial fusion data examined from the sites of Raversijde and Koekelare appear to support the evidence from the mandible aging. In the case of Koekelare, which has limited mandible evidence, this secures the interpretation of a third winter peak for slaughter.*

3.9.3. Ageing of the sheep

There were very few sheep/goat mandibles recovered from Koekelare (n=6), and only one mandible identified as sheep/goat was gathered from Raversijde as part of the postcranial examination.

3.9.3.1. Mandible age

Raversijde

The single sheep/goat jaw from Raversijde had the M1 and M2 both erupted but no M3 erupted, meaning that it could be aged to 12-24 months based on the eruption information presented in Amorosi (1989:82-84), and the wear of the teeth present. Recent attempts at redefining age classes using eruption and wear data using these strategies, would however more closely age this mandible to 16-22 months (Greenfield and Arnold, 2008:845).

Koekelare

From Koekelare, six sheep/goat jaws were obtained for examination. These jaws comprised four left sides of the mandible and two right sides of the mandible. Of these jaws not all were of suitable condition for accurate ageing due to fragmentation. One jaw, from context 7/32 KO A 95 III INV 008 ZAK 1, was highly fragmented with only one tooth present (a second molar) which was in too poor a condition for accurate ageing. The ageing of this jaw can only be narrowed down to a time after which the M2 was erupted and in some level of wear, but before the M3 had erupted (this portion of the jaw being present for analysis). This may correlate to an age anywhere between 6-24 months, but no finesse can be given to a more accurate age of the animal.

For the other jaws, more accurate ages were possible due to their being more complete. The ages assigned to these jaws using are summarised below (see Figure 3.40)

Koekelare Context	***Grant Molar Wear Stage (1982)***	***Payne wear stage (1973)***	***Absolute Age (Greenfield and Arnold, 2008).***
7/32 KO A 95 III INV 008 ZAK 1	16-27	D	6-24 months (more accurate definition impossible due to damage to jaw)
1/32 KO A 95 ZAK 3 INV 001	28-36	E	2-4 years (more accurate definition impossible due to only M1 being present from jaw).
4/38 KO A 95- 1 ZAK 4 INV 001	23-28	D	16-24 months
4/38 KO A 95- 1 ZAK 4 INV 001	28-36	E	2-3 years
4/38 KO A 95- 1 ZAK 4 INV 001	32-34	E	2-3 years
4/38 KO A 95- 1 ZAK 4 INV 001	20-22	D	1-2 years

Figure 3.40. Table listing the sheep/goat mandibles at Koekelare, and their identified ages

It is difficult to read too much into such a small sample of jaws in terms of husbandry of the sheep at Koekelare. What is evident from the ageing data, using the age bands suggested by Greenfield and Arnold (2008:847) as a means of aligning the Payne (1973) and Grant

(1982) wear stages into absolute age stages using modern samples, is that a spread of ages from under a year to 2-4 years are present.

The ages of the sheep/goat jaws provide little clear insight into the nature of the husbandry of this species at Koekelare, but does indicate that a range of ages are present on site with both developing and mature animals present. This would be expected where husbandry management of sheep/goat is occurring in the locality, and argues against animals of only a particular age being present or brought into site. However, with so few jaws present from Koekelare it is impossible to give too much importance to these data.

- *Summary: It is difficult to determine much information from the sheep/goat jaws of Raversijde and Koekelare, because of the small sample sizes, beyond that Koekelare has a range of ages present.*

3.9.3.2. Age through epiphysial fusion data

A consideration of the data provided by the state of epiphysial fusion of the post-cranial skeleton provides again a greater body of information for both Koekelare and Raversijde. Using Schmid (1972) and Silver (1969), and grouping the data into ages following the methodology of O'Connor (1989) to provide the age bands for epiphysial fusion for sheep/goat, an idea of age-at death is examined, although more crudely than dental data may provide.

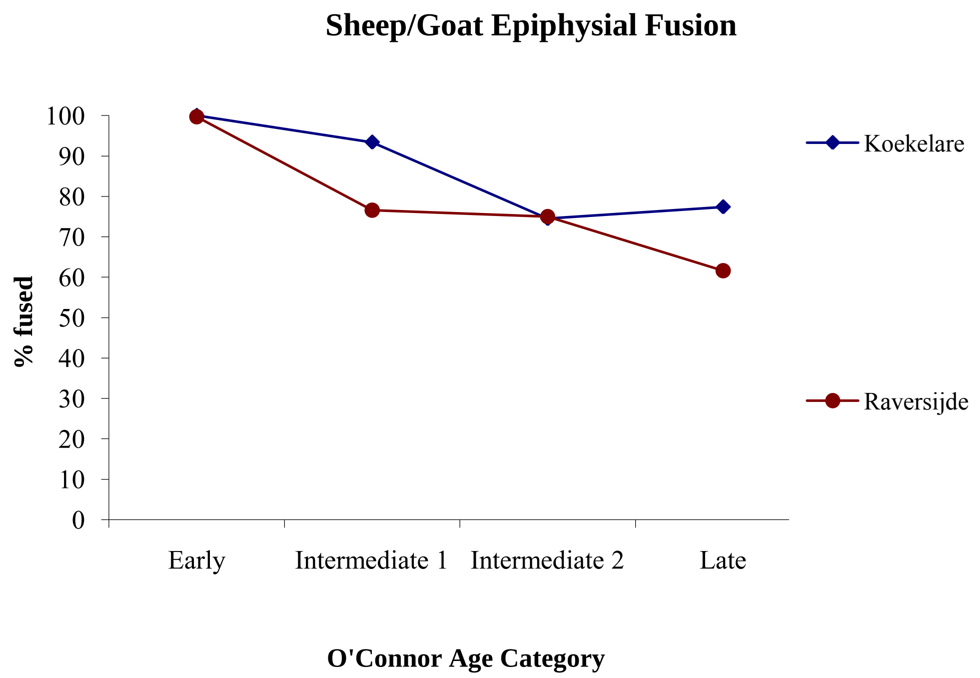


Figure 3.41. Graph demonstrating the age profile of Raversijde and Koekelare sheep/goat as shown through post-cranial epiphysial fusion information.

Figure 3.41 shows the relative proportion of fused epiphyses for various categories of skeletal elements grouped into broad aged groups (after O'Connor, 1989). For sheep/goat it seems that few of the animals were killed by the time 'early' (around 12-18 months) fusion occurs, and that a large majority of the animals appear to survive into adulthood (older than 2.5 years) for both Raversijde and Koekelare. At Raversijde a number of the animals appear culled between 'early' and 'intermediate 1' categories (so between 1 and 2 years of age), and there is a similar percentage of loss between the Intermediate 2 and Late fusion age (between approximately 2-3.5 years). For Koekelare, there is a more apparent decrease between Intermediate 1 and Intermediate 2 stages (between 2-3 years). However, perhaps most significantly, is that for both Raversijde and, more strongly, Koekelare, over 65% of all animals appear to be surviving into adulthood. These age ranges would be expected for a site of wool production where sheep are commonly kept until over 2 or 3 years old (Maltby, 1994:96, Albarella and Davis, 1996:13) with mutton obtained after the animal has finished being utilised for wool and any other secondary products, such as milk (Albarella and Davis, 1996:38). If the animals were being used for meat as the prime product, the age of slaughter would have been much lower (Bond and O'Connor, 1999:33), with a peak between 9 months to 2 years in age (Stein, 1989:89). Therefore, at both Koekelare (and, to a lesser degree of confidence due to the limited sample, Raversijde) it appears wool production is occurring to some degree. Belgium is known, during this period, as a wool production centre and sheep were very important to the Flemish coastal regions (Verhulst, 1999a:34-35; Grant, 1988:150-8) so this use is as expected.

- *Summary: For Raversijde and Koekelare sheep and/or goat samples, the limited number of remains precludes confident interpretation, but the inclusion of epiphysial fusion data does help interpret husbandry at the site. At Koekelare, evidence suggests breeding of the animals in the locality as a wide range of ages are present, with a possible focus on utilising the animals for wool production before killing them as older animals. For Raversijde, even this level of interpretation is to some extent thwarted by the presence of only one mandible sample, although the epiphysial fusion again suggests that wool production is again the primary focus of this animal at the site. Epiphysial fusion consideration perhaps suggests some subtle differences at the time of culling between the sites. However, at both sites the overwhelming pattern is one of survival of animals into adulthood and for both sites this can be interpreted as probably due to wool production of the sheep (which is the most likely species).*

3.9.4. Ageing of the cattle

Ageing of the jaws was based on visual examination of the stage of eruption the teeth were in (using Grigson, 1982:20), the teeth present, and the stages of wear the jaws represented (using Grigson (1982) and Grant (1982)). There was a small sample of cattle jaws from Raversijde for examination (n=10) and a large sample (n=61) from Koekelare.

3.9.4.1. Mandible Age

Raversijde

Records of eruption data and wear were obtained for 10 cattle jaws from Raversijde, seven left and three right. These ranged between juvenile and adult, with no clear clustering of ages (see Figure 3.42). There appears to be a high prevalence of animals slaughtered between 17-24 months age, which would correlate with relatively prime animals used for meat. However, with such a small sample it is important not to place too much emphasis on the interpretation.

Raversijde context	***Grigson (1982) after Higham (1968), age in months***	***Grant (1982) Wear Stage***
Bot 1 Raversijde Doos 1 4430 N&S	5-6	3
Bot 2 Raversijde 4466	24-30	29
Bot 3 Raversijde 4492	18-24	23
RAV 96 BOT 424	18-24	25
96 RAV BOT 66	17-18	17
RAV BOT 97-RAV-48	30-31	30
96 RAV 204	24-30	28
97 RAV BOT 344	36	31
97 RAV BOT 344	18-24	24
Doos 4 4558	18-24	23

Figure 3.42. Table detailing the ages of all identified cattle jaws from Raversijde

For Koekelare, a total of 61 cattle jaws were obtained during primary analysis, a relatively large data set. Although a wide range of ages are represented in the assemblage (from neonatal to elderly individuals), a slight emphasis appears to be on relatively young and, more clearly, on elderly individuals (see Figure 3.43). This suggests that there is limited slaughter of animals in their ‘prime’ meat-bearing age, and that either animals are being used for other purposes at this site, such as traction, or that such animals are leaving the site rather than being slaughtered at this ‘prime’ age. With the consideration of the site as one of cattle-breeding (Ervynck, pers. comm. 2005), it is possible that this age profile reflects cattle being driven out of the site for market at their prime, rather than slaughter on site, and so their carcasses are missing from the assemblage. The elderly being slaughtered may represent animals passed their breeding best.

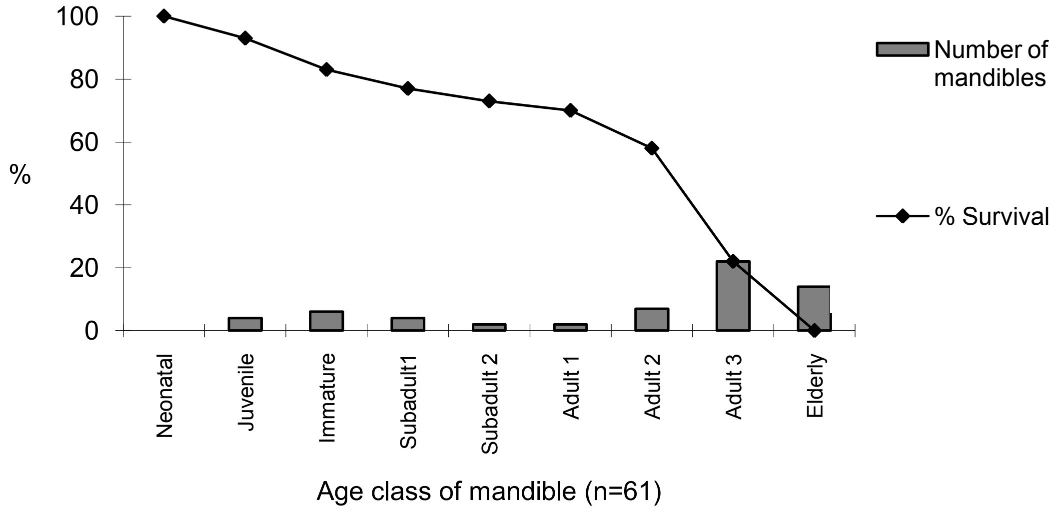


Figure 3.43. Chart showing the age at death profiles for the Koekelare cattle based on dental eruption and occlusal wear (after Dobney, 2007:126)

3.9.4.2. Age through epiphysial fusion data

Epiphysial fusion data were also considered for the cattle from Raversijde and Koekelare (See Figure 3.44). Few animals were killed by the time 'early' elements were fused (around 12-18 months old) from either site. For both, a significant proportion (around 30%) however had been killed by the 'intermediate' stage (between 2-3 years old), a pattern also seen at sites such as Flixborough (see Dobney et al., 2007). It is apparent that after this time, however, there is a major difference in slaughter pattern between the two sites. For Raversijde there is a similarly large cull occurring between the 'intermediate' and 'late' stages (at approximately 3-4 years), whereas at Koekelare there is a far larger collection of animals being kept beyond 4 years.

For Koekelare this prevalence confirms the mandible data that slaughter is not occurring for the Intermediate aged animals, and the patterns are similar to those already outlined for tooth eruption and wear. For Raversijde it is apparent that far fewer older animals are present at the site.

For Koekelare, this slaughter pattern fits well with those of other supply type sites where the 'prime'' cattle of around 30 months (Rackham, 1994:55) are missing. This is particularly well illustrated at Roman Dorchester, which has a large presence of prime animals, but a site from its environs, Owslebury, believed to provide cattle for the urban centre, sees only young and older animals present in the faunal assemblage (Maltby, 1994:94). Wilson (1994:103) similarly identifies a site as a supply centre for an urban area using such an ageing pattern, with the prime ages missing and going for slaughter and consumption elsewhere.

The cattle of Raversijde do not appear to be following this pattern, and there is no indication that the cattle are being bred here to supply the local urban centres. Instead, the pattern is one of consumption for meat, confirming the tentative pattern identified by the mandible data.

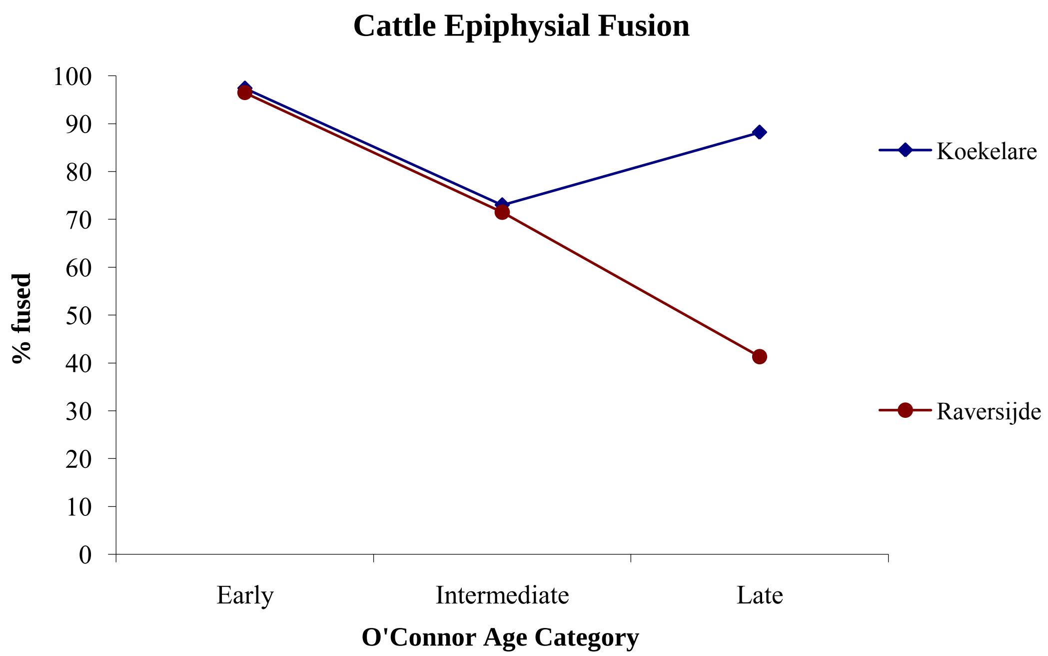


Figure 3.44. Graph demonstrating the age profile of Raversijde and Koekelare cattle as shown through post-cranial epiphysial information.

For both Raversijde and Koekelare, it is clear that for cattle, as well as for sheep/goat, the limited numbers of mandibles precludes interpretation of the husbandry of the animals through this element alone, and only when incorporated with post-cranial evidence do the patterns become clear.

- *Summary:*
    - *For the cattle of Raversijde and Koekelare, use of age at death data has again helped provide significant ideas about the use of the animals at site. Koekelare is identified as a site where the prime cattle are leaving rather than being slaughtered on site, confirming the belief of it as an urban supply centre for cattle. Conversely Raversijde sees a more traditional pattern where the cattle are being slaughtered for meat at a prime age rather than after secondary use.*

3.9.5. Conclusions from Age at Death information

In summary, it is apparent that the age of death of the species on site can provide a vast amount of information about husbandry. It is clear that a combination of techniques provides the greatest insight, and in particular that the inclusion of a consideration of post-cranial elements helps support the more tentative observations from often a limited sample of mandibles. For all three species an understanding of the husbandry occurring on site has been possible. For the pig mandibles, it is clear that similar patterns have been identified when considering the previous pilot study (Ervynck et al., 2007), although the conclusions drawn in this study are somewhat different, illustrating also that such techniques provide reproducible results.

This study has not incorporated the plethora of techniques suggested for ageing parts of animal bone assemblages in specific cases, such as cranial suture closure (Landon et al. 1998:674), horn core layers (Fuller, 1959), tooth crown height (Levine, 1982; Klein et al., 1981), tooth cementum layers (Stallibrass, 1982; Wedel, 2007) and a surplus of other techniques. While these may be useful in specific cases this study illustrates that such 'additional' techniques need to be underpinned by more traditional examinations based on mandibles, which provide the most secure and interpretable information, and that when this information is available it is best to use the widely understood techniques.

3.10. Overall conclusions from using traditional zooarchaeological techniques

From a consideration of traditional zooarchaeological techniques it is apparent that a vast array of information can be gathered, ranging from determining how suitable the assemblages actually are for analysis to information about the species present and the husbandry strategies on site. However, it is also clear that such techniques leave many of the research questions (See Chapter 1) unanswered and, while some clues are given about patterns at the sites further investigation is necessary in order to have confidence in our understanding of what the assemblages are telling us. To that end, more specific and targeted techniques will be employed in the succeeding chapters in order to further investigate these questions in depth. However, it is important to note that from this chapter it is obvious that these targeted techniques should not be selected by the zooarchaeologist in lieu of such traditional methodologies, but that these techniques provide a baseline of information onto which other information from further techniques can be placed and such examinations are ultimately essential for interpretation.

Chapter 4: Biometrical analysis of pig

Osteometry is the taking and analysis of measurements at specific points on bones (Web reference 4.1) such as the greatest length, the greatest width, or the narrowest diameter of diaphyses. Biometrical analysis is a common technique for researchers to employ when analysing the faunal remains from an archaeological site. Indeed, in modern archaeology only the smallest and most poorly preserved assemblages are not measured. Such an analysis of animal bones can be informative in a number of ways (Albarella and Payne, 2005:589). Detailed measurements on particular bones can separate species such as sheep and goat (Boessneck, 1970; Zeder and Lapham, 2010), differentiate between sexes in some species (for example Bartosiewicz, 1984; Higham and Message, 1969), and even identify a further group (castrates) in species such as cattle (Maltby, 1979:37). Biometry can also be useful in determining the presence of adults and/or juveniles within a population (Albarella and Payne, 2005; Payne and Bull, 1988:29), supporting the dental ageing techniques (see Chapter 3). It is also possible to separate wild and domestic forms of certain species, such as pigs (Payne and Bull, 1988) using such measurements. Biometry, however, can only provide so much information. It is generally agreed, for instance, that it is impossible to determine breed from biometry (Maltby, 1979:38), both because definable breeds beyond regional 'types' did not really exist at this time (Ryder, 1969:7; Ryder, 1984:71; Jewell, 1962:159), and also because it is impossible to determine from bones and bone measurements other information necessary for accurate breed identification, such as hide colour.

Dimensions of teeth are often used for considerations of changes in size. Size differences were one of the factors used to identify the presence and date of Medieval and Post-Medieval stock improvements (for instance Maltby, 1979; Albarella, 1997; Armitage, 1984). Post-cranial measurements are also commonly taken and examined, although interpretation is more difficult as these may be more greatly affected by factors such as sexual dimorphism and age-related change (Payne and Bull, 1988:31) as well as environmental factors. Nevertheless, very successful studies have been based on the examination of post-cranial bones. For example, a size increase in the skeletal remains of pigs from the mid-Jomon period in Japan was a crucial indicator in identifying the presence of pig domestication at this time (Dobney et al., 2007:79), alongside other factors such as increasing indicators of physiological stress (Dobney et al., 2007:81).

The linking of developments in husbandry to biometrical size is complex and, while some have argued that a general size decrease occurs as animals are improved (Armitage, 1984; Davis, 1987), others suggest that it is marked by an immediate increase in biometrical size before a steady decrease (Anezaki (2003), Hongo and Anezaki (pers. comm. in Dobney et al., 2007:79). The evolution of species from their wild to domestic form is in any case a gradual and complex process, spanning a long period of time. Species such as the pig can swiftly revert to wild behaviour patterns (becoming feral) within as little as a single generation (Stolba and Wood-Gush, 1989 in Dobney et al., 2007:98), and this level of detail is almost impossible to determine from biometrical data alone. Despite this, a consideration of such data may go some way to clarifying the overall picture.

Information from biometric data also depends on the particular bone and species being examined. For example the metacarpals of cattle are often seen as strongly sexually dimorphic (Higham and Message, 1969; Thomas, 1988), but the tibia is not regarded as such (Higham, 1969:65; Albarella and Davis 2006:458). Similarly, pigs are more variable in measurement than faster moving species, such as gazelle, as they see more post-fusional growth (Davis, 1996:599) This demonstrates the importance of taking and considering the biometry of a variety of postcranial measurements, rather than just using a limited range or measuring only one type of bone (for example long bones), as different measurements may provide information about different things.

A study of the biometry both of teeth and post-cranial elements may potentially provide an insight into the husbandry strategies employed at each site, and allow a consideration of whether the pig assemblages represent a domesticated population, a hunted wild boar population or some combination of both, an issue which has not yet been clarified for these sites. For the assemblages of Raversijde and Koekelare, where both postcranial and cranial material is examined, whether the two sources of biometrical data show any difference will be of particular interest, allowing an evaluation of the potential of biometrical examination to illuminate our understanding of exactly how the pigs at both sites were being kept. The previous examination of six postcranial and teeth measurements are also incorporated (these measurements being scapula GLP, humerus Bd, radius Bp, ulna BPC, femur Bd and tibia Bd) (Ervynck et al., 2007).

4.1. Methodology

	Ervynvck et al. (2007)		*This study*	
Site	***Mandible material?***	***Sample of the full Faunal assemblage?***	***Mandible material?***	***Sample of the full Faunal assemblage?***
Raversijde	✓	6 postcranial spans	✓	✓
Koekelare	×	×	✓	✓
Oudenberg	×	×	✓	×
Londerzeel	✓	6 postcranial spans	✓	×
Veurne	✓	6 postcranial spans	✓	×
Ename	✓	6 postcranial spans	✓	×

Figure 4.1. Table summarizing the types of material examined for biometric data, from each site in this study and the previous pilot study from Ervynck et al. (2007).

For two of the sites, Raversijde and Koekelare, a complete range of the pig assemblage was examined (see Figure 4.1), whereas for the other four sites only mandibles were investigated (see Chapter 3 for summary information). Three of these sites had seen previous measurements of certain bones (Ervynck et al., 2007:190), meaning that all medieval sites considered within this study have now been measured. The examination of biometry incorporated only pig remains, in order to have comparable data from all six sites and because the number of measurements from other species for Raversijde and Koekelare were minimal (the other four sites were not considered for species other than pig).

Zooarchaeologists rarely measure unfused bones when analysing faunal assemblages, as animal bones are continually growing and developing until maturation (Davis, 1996:599) and so differences may simply be due to the incorporation of differing age ranges. The state of fusion of any visible secondary ossification centre was recorded for each element in order to ensure that consideration was given to whether the specimen was suitably mature (as far as it was possible to tell). As juvenile bone is often more porous (Robinson et al, 2003; Waldron, 1987) and more likely to be affected by taphonomy, the appearance of the bone was also assessed. Within this study measurements were only recorded on fused epiphyses where a whole measurement was possible.

Any whole measurements on teeth or bones were measured with 150mm span digital callipers of a ±0.1 industry-standard measure of accuracy, using Von Den Driesch's published series of standardised measurements (Von Den Driesch, 1976). One set of 150mm digital callipers were used throughout to eliminate instrument error, although for measurements exceeding the maximum span of the digital callipers, Vernier callipers of 300mm span were used. It was felt that error induced by changing instruments was far less than that of 'estimating' the length using inappropriately small callipers. Modifications to these standardized measurements were included as recommended by Davis (1992) (mostly additional standard measurements), and additional teeth measurements from Ervynck et al. (2007). The Von Den Driesch methods were used as the dimensions are clear both to measure and record.

Primary zooarchaeological material from two sites, Raversijde and Koekelare, was examined. Both post-cranial and cranial material from the sites was recorded as it was identified. Each assemblage is considered as a discrete single-phase population. Although Koekelare is a multi-phase site, only material from the major occupation period on site has been examined. (See Chapter 2 for dating evidence). Similarly, mandibles from all six sites: Raversijde, Koekelare, Ename, Veurne, Londerzeel and Oudenberg were measured (see Chapter 2 for more details on these sites).

For the biometrical analysis of the faunal assemblages of Raversijde and Koekelare and similarly for the examination of the pig mandibles of all six sites, it was deemed best to use simple descriptive statistical techniques on the measurements (as detailed in Shennan, 1997) to examine the existence of any patterns, and to test the significance of any results observed. This is a strategy advocated by many zooarchaeologists (for example O'Connor, 1995:84) and follows recommendations by statisticians to 'let the numbers speak for themselves' (Moore, 2000:xxxii), avoiding the introduction of excessively complicated statistical techniques unless necessary.

Statistical evaluation may be particularly important given the uncertainties over the conditions of the keeping of pigs at Raversijde and how this may be reflected skeletally. Additionally, the coastal site of Raversijde may have engendered the development of a particular type of pig adapted to the local conditions, whereas at Koekelare we would expect to find a far more traditional form of pig-based on its environment and location (Ervynck, 2006: pers. comm.). When assessing the mandibles, the way in which Raversijde fits into the spectrum of the Belgian sites will help our understanding of the pigs at this most unusual location. Simple statistics explore the average size of the measurements, provide a consideration of the variability of the results and, in doing so, allow a consideration of what biometric data may tell us about the populations.

Statistics used in this examination were calculated using the following definitions and formula:

Min= Minimum value of the range of measurements
Max= Maximum value of the range of measurements
Mean= Average of the range of measurements

This is a measure of the distributions central value. The most common way of measuring the average for a sample, and the method used here, is using the ordinary arithmetic mean (Moore, 2000:29). The arithmetic mean has been calculated in this study using the formula:

$\bar{x} = \frac{1}{n}\sum x_i$ (where $\bar{x}$= the arithmetic mean).

S.D.= Standard Deviation of the mean.

The standard deviation measures spread by looking at how far observations are from their mean and is the square root of the variance (Moore, 2000:38). It has been calculated using the formula:

$$s.d. = \sqrt{\frac{1}{n-1}\sum(x_i - \bar{x})^2}$$

The greater the spread of observations, the larger the standard deviation.

Pearsons Coefficient of variation (%).

One problem with examining the standard deviation statistic is that when comparing between the variation in data of differing sizes (such as different bone measurements), often the larger the value of the mean, the larger the value of the standard deviation (Shennan, 1997:43). This means that the standard deviation figure may suggest that larger measurements are less standardised as their deviation may inherently be larger, rather than being due to a true statistical pattern. To remove this effect it is more appropriate to examine the dimensionless 'Coefficient of Variation' instead, which is calculated by dividing the standard deviation by the mean. This allows a consideration of the difference in spread (Fletcher and Lock, 1994:46) as it produces a standardised measure of dispersion for all measurements (Shennan, 1997:44). In this study the coefficient of variation is presented as a percentage for ease of comparison. The Coefficient of variation as a percentage is calculated using the formula:

$$C\ of\ V\ (\%) = \left(\frac{\sqrt{\frac{1}{n-1}\sum(x_i - \bar{x})^2}}{\frac{1}{n}\sum x_i}\right)100$$

4.2. Variation in the measurements

Variable	*Min*	*Max*	*Mean*	*S.D.*	*N*	*Coefficient of Variation (%)*
Scapula HS	166.7	166.7	166.7	N/A	1	N/A
Scapula DHA	154.7	204.16	176.62	25.2	3	14.27
Scapula Ld	199.65	199.65	199.65	N/A	1	N/A
Scapula SLC	18.28	31.81	24.87	2.29	100	9.2
Scapula GLp	31.92	43.7	39.08	2.46	46	6.3
Scapula LG	24.54	39.72	33.49	2.85	40	8.52
Scapula BG	21.36	33.3	28.55	2.4	57	8.42
Humerus Bp	61.8	62.53	62.17	0.52	2	0.83
Humerus SD	13.47	20.21	16.76	1.58	54	9.43
Humerus BT	25.68	43.5	34.52	3.01	55	8.72
Humerus Bd	37.25	50.48	42.87	3.3	57	7.69
Humerus GL	N/A	N/A	N/A	N/A	0	N/A
Humerus GLC	N/A	N/A	N/A	N/A	0	N/A
Phalanx 1 GL	31.95	49.94	39.15	5.81	37	14.86
Phalanx 1 Bp	10.61	20.99	15.5	3.37	35	21.73
Phalanx 1 SD	8.25	16.55	13.21	2.34	57	17.73
Phalanx 1 Bd	10.24	21.65	16.04	2.82	59	17.61
Phalanx 2 GL	22.83	33.89	28.16	2.91	24	10.34
Phalanx 2 Bp	16.87	21.41	18.33	1.04	25	5.67
Phalanx 2 SD	13.39	18.54	15.31	1.34	26	8.74
Phalanx 2 Bd	14.03	21.87	16.61	1.71	26	10.27
Phalanx 3 DLS	29.72	46.13	39.65	6.72	7	16.95
Phalanx 3 LD	26.51	34.46	31.61	3.26	5	10.3
Phalanx 3 MBS	9.45	15.32	13.48	1.82	8	13.51
Radius GL	N/A	N/A	N/A	N/A	0	N/A
Radius Bp	27.48	35.63	31.37	1.91	68	6.1
Radius SD	15.38	21.89	18.42	1.57	61	8.52
Radius Bd	N/A	N/A	N/A	N/A	0	N/A
Ulna GL	N/A	N/A	N/A	N/A	0	N/A
Ulna BPC	17.95	29.08	24.31	2.37	88	9.76
Ulna DPA	24.05	36.99	30.6	2.43	28	7.94
Ulna SDO	25.72	47.33	38.84	3.96	78	10.19
Pelvis GL	N/A	N/A	N/A	N/A	0	N/A
Pelvis LA	40.32	53.52	44.62	4.32	10	9.67
Pelvis LAR	31.28	51.87	36.73	5.62	11	15.29
Femur GL	N/A	N/A	N/A	N/A	0	N/A
Femur GLC	N/A	N/A	N/A	N/A	0	N/A
Femur Bp	N/A	N/A	N/A	N/A	0	N/A
Femur BTr	N/A	N/A	N/A	N/A	0	N/A
Femur DC	N/A	N/A	N/A	N/A	0	N/A
Femur SD	16.53	20.51	18.47	1.57	5	8.49
Femur Bd	37.22	52.71	43.96	5.97	14	13.58
Tibia Bp	50.44	54.05	51.65	1.67	4	3.24
Tibia SD	17.28	24.23	20.2	1.77	29	8.73
Tibia Bd	26.82	42.69	34.42	3.86	14	11.23
Tibia GL	N/A	N/A	N/A	N/A	0	N/A
Tibia DD	21.1	34.07	29.44	3.64	15	12.36
Patella GL	38.25	38.25	38.25	N/A	1	N/A
Patella GB	19.95	19.95	19.95	N/A	1	N/A
Astragalus GLl	39.93	53.95	48.1	3.06	33	6.35
Astragalus GLm	37.83	53.1	45.17	3.12	32	6.9
Astragalus GB	23.37	31.83	27.99	1.83	31	6.55
Carpal GB	22.74	22.72	22.74	N/A	1	N/A
Naviculo-Cuboid GB	20.53	21.71	20.97	0.65	3	3.09
Calcaneum GL	N/A	N/A	N/A	N/A	0	N/A
Calcaneum GB	20.66	26.68	23.93	1.57	35	6.54

Figure 4.2. Summary statistics for the biometrical data of the postcranial pig material from Raversijde

Variable	*Min*	*Max*	*Mean*	*S.D.*	*N*	*Coefficient of variation (%)*
Scapula HS	N/A	N/A	N/A	N/A	0	N/A
Scapula DHA	N/A	N/A	N/A	N/A	0	N/A
Scapula LD	N/A	N/A	N/A	N/A	0	N/A
Scapula SLC	25.79	27.66	26.47	1.04	3	3.92
Scapula GLp	37.24	37.24	37.24	N/A	1	N/A
Scapula LG	29.62	34.07	31.25	2.45	3	7.84
Scapula BG	28.45	31.72	30.01	1.64	3	5.46
Humerus Bp	N/A	N/A	N/A	N/A	0	N/A
Humerus SD	12.89	17.46	16.45	1.31	12	7.96
Humerus BT	28.33	39.95	34.62	4.33	6	12.51
Humerus Bd	35.1	47.04	42.1	4.65	6	11.03
Humerus GL	N/A	N/A	N/A	N/A	0	N/A
Humerus GLC	N/A	N/A	N/A	N/A	0	N/A
Phalanx 1 GL	N/A	N/A	N/A	N/A	0	N/A
Phalanx 1 Bp	N/A	N/A	N/A	N/A	0	N/A
Phalanx 1 SD	N/A	N/A	N/A	N/A	0	N/A
Phalanx 1 Bd	N/A	N/A	N/A	N/A	0	N/A
Phalanx 2 GL	N/A	N/A	N/A	N/A	0	N/A
Phalanx 2 Bp	N/A	N/A	N/A	N/A	0	N/A
Phalanx 2 SD	N/A	N/A	N/A	N/A	0	N/A
Phalanx 2 Bd	N/A	N/A	N/A	N/A	0	N/A
Phalanx 3 DLS	N/A	N/A	N/A	N/A	0	N/A
Phalanx 3 LD	N/A	N/A	N/A	N/A	0	N/A
Phalanx 3 MBS	N/A	N/A	N/A	N/A	0	N/A
Radius GL	N/A	N/A	N/A	N/A	0	N/A
Radius Bp	28.01	31.32	29.22	1.83	3	6.26
Radius SD	15.4	18.57	17.09	1.6	3	9.34
Radius Bd	N/A	N/A	N/A	N/A	0	N/A
Ulna GL	N/A	N/A	N/A	N/A	0	N/A
Ulna BPC	22.9	33.89	27.15	3.11	16	11.47
Ulna DPA	37.15	40.82	38.74	1.85	3	4.87
Ulna SDO	30.53	43.59	37.42	6.92	4	18.48
Pelvis GL	N/A	N/A	N/A	N/A	0	N/A
Pelvis LA	52.96	72.85	61.7	7.82	6	12.68
Pelvis LAR	49.69	57.84	53.3	3.13	6	5.87
Femur GL	N/A	N/A	N/A	N/A	0	N/A
Femur GLC	N/A	N/A	N/A	N/A	0	N/A
Femur Bp	N/A	N/A	N/A	N/A	0	N/A
Femur BTr	N/A	N/A	N/A	N/A	0	N/A
Femur DC	N/A	N/A	N/A	N/A	0	N/A
Femur SD	17.53	17.53	17.53	N/A	1	N/A
Femur Bd	38.77	38.77	38.77	N/A	1	N/A
Tibia Bp	N/A	N/A	N/A	N/A	0	N/A
Tibia SD	20.82	22.66	21.59	0.95	3	4.42
Tibia Bd	34.22	34.98	34.6	0.54	2	1.55
Tibia GL	N/A	N/A	N/A	N/A	0	N/A
Tibia DD	31.46	31.47	31.47	0.01	2	0.02
Patella GL	N/A	N/A	N/A	N/A	0	N/A
Patella GB	N/A	N/A	N/A	N/A	0	N/A
Astragalus GLl	49.88	46.17	48.25	2.62	2	5.46
Astragalus GLm	47.88	43.42	45.65	3.15	2	6.9
Astragalus GB	27.04	27.04	27.04	N/A	1	N/A
Carpal GB	25.08	25.08	25.08	N/A	1	N/A
Naviculo-Cuboid GB	N/A	N/A	N/A	N/A	0	N/A
Calcaneum GL	87.89	87.89	87.89	N/A	1	N/A
Calcaneum GB	21.61	21.61	21.61	N/A	1	N/A

Figure 4.3. Summary statistics for the biometrical data of the postcranial pig material from Koekelare

When considering the means of the values it is clear that there are some differences between the averages for Raversijde (Figure 4.2) and Koekelare (Figure 4.3) for certain measurements.

The mean pelvis measurements of Raversijde and Koekelare differ to such a degree that it is unlikely that this can simply be explained by sample variation (see Figure 4.4). The average LA measurement for Raversijde is 44.62mm to Koekelare's 61.7mm and the LAR measurement is 36.53mm for Raversijde, in comparison to Koekelare's 53.3 mm.

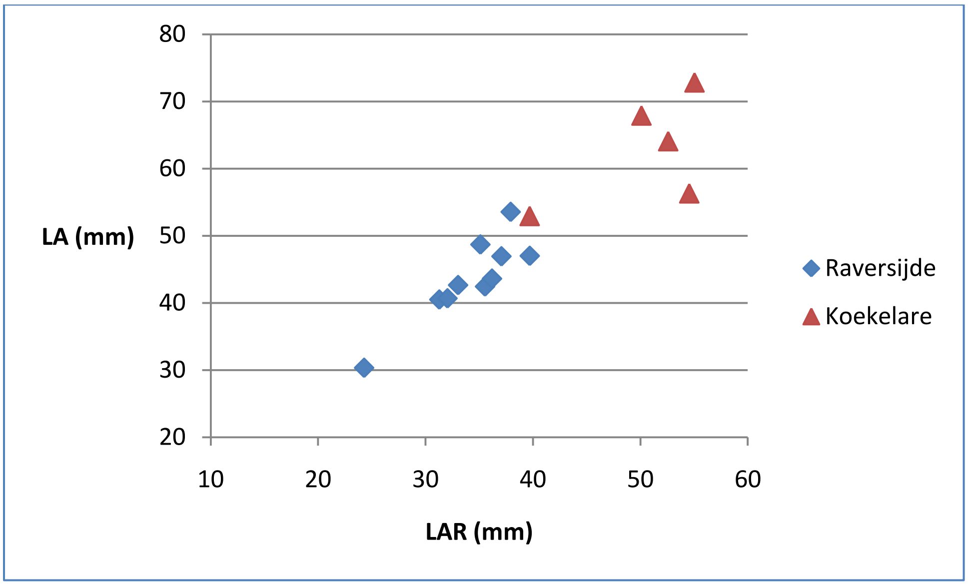


Figure 4.4. Scatter plot demonstrating the clear separation of the pelvis values for Raversijde and Koekelare.

This suggests that the acetabalum for Raversijde is far more gracile (despite the generally larger measurements of their bones) in comparison to Koekelare, and that the conformation of the hip joint is very different in form between the two sites. The figures for the LAR of Raversijde are similar to the 33.3mm of the domesticated pigs at Durrington Walls, England (Albarella and Payne, 2005:598) and so not unusually small. Unfortunately, neither of the assemblages from Koekelare or Raversijde contained any femora suitable for measurement, and so examination of the femur head in order to determine whether this similarly reflects such dramatic differences could not be undertaken. It is difficult to find a logical explanation for such an apparent difference between the sites in just the dimension of the pelvis. There are no comparable archaeological examples for a difference in the pelvis where the cause has not been pathological. From veterinary studies it has been noted that in modern pigs stall-housing is often linked to lameness (Schenck et al., 2008), and believed to be due to the lower activity levels which change the pattern of bone formation. Similarly, larger levels of dietary protein, rapid weight gain and too little vitamin C are all linked to early pelvic fusion (causing under-development of the acetabulum) and hip problems in dogs (Morgan et al., 2000). While it is too large a leap to diagnose the pigs at Raversijde as being stalled by the biometric measurement of the pelvis alone, particularly with such limited sample numbers (see Figure 4.2), this is an intriguing explanation. As will be seen later in the study, pigs at Raversijde appear to be ingesting different protein sources to Koekelare (see Chapter 8), and a different diet alongside more limited activity may be a tentative explanation for this finding. However, far greater research would be necessary into the development of hip joints and the effects of diet and confinement in pigs for this to be 'proven'.

For both Raversijde (Figure 4.2) and Koekelare (Figure 4.3), there is usually a relatively small range within each measurement (around 4 or 5 mm), with a range of above 11 or 12 mm being very unusual. This suggests that the results form cohesive groups (see Figures 4.2 and 4.3). Some individual bones do show far more variation, for example the Raversijde scapula DHA, SLC and Koekelare pelvis LA. In these cases the larger range is probably an inherent product of these being particularly large spans, so any ranges will be similarly larger. This greater variation in some measurements is not surprising. Albarella and Payne's (2005) consideration of variability also determined that the scapula SLC was a particularly variable measurement.

To assess how much variation is present in a 'normal' population Payne and Bull's (1988) study examining variation in pig measurements is used. Original sources of the comparative statistics for the sites (see Figure 4.5) have been obtained from Payne and Bull (1988), but original sources of data are referenced for each site within the table. Kizilcahamam is a modern wild boar population (Payne and Bull, 1988:28), and Mikulčice, a population of domesticated pigs from Czechoslovakia dating from the 6th-10th century AD (Payne and Bull, 1988:33). Gomolava had been identified as a mixture of wild and domestic pig remains from late Neolithic Yugoslavia (Payne and Bull, 1988:34) and Jarmo, Iraq, a site which Payne and Bull concluded represented a heterogeneous site of wild and domesticated pigs, as the variation of its measurements were too wide to form one population (Payne and Bull, 1988:46).

Such figures have previously been used to consider questions of population composition. For example, at Coppergate, York a Coefficient of Variation of 6.4% for the astragalus GLl was argued as low enough to indicate that the number of wild pigs in the sample, as well as any male/female differentiation for this measurement, was small (Bond and O'Connor, 1999:410), and generally a rough average of around 4-6% variation is used to indicate a single population (Simpson et al. 1960 in Albarella and Payne, 2005:592).

	Wild				*Domestic*				*Domestic*				*Mixed wild/dom*				*?*			
	Site: Kizilcahamam (Payne and Bull, 1988)				*Site: Mikulčice (Kratochvíl 1981, 1982)*				*Site: Haithabu (Becker, 1980)*				*Site: Gomolava (Clason, 1979)*				*Site: Jarmo (Stampfil, 1983)*			
Measurement	Mean (mm)	n	St. Dev	C of V (%)	Mean (mm)	n	St. Dev	C of V (%)	Mean (mm)	n	St. Dev	C of V (%)	Mean (mm)	n	St. Dev	C of V (%)	Mean (mm)	n	St. Dev	C of V (%)
M1 length	18.9	18	1.2	**6**										34		**10**		7		**6**
M1 Anterior width	11.5	18	0.39	**3**																
M1 Proximal width	12.5	18	0.46	**4**																
M2 Length	24.9	15	0.92	**4**	18.7	672	1.14	**6.1**						28		**12**		8		**7**
M2 Anterior width	15.4	15	0.53	**3**																
M2 Proximal width	16.3	15	0.61	**4**																
M3 Length	41.1	5			30.3	1191	2.37	**7.8**						24		**20**		5		**12**
M3 anterior width	18.3	5			14.8	1200	0.9	**6.1**												
Scapula GLP	39.4	14	2.59	**6**	34.9	681	2.33	**6.7**	33.8	855	2	**5.92**								
Scapula SLC	25.5	14	2.34	**9**	23.2	682	2.31	**8.7**												
Humerus Bd	46.3	15	2.73	**6**	37.9	1557	2.64	**7**	36.2	2341	2	**5.52**		13		**20**		6		**17**
Humerus BT	32.6	15	1.92	**6**																
Humerus HTC	21.5	15	1.12	**5**																
Radius Bp	32.6	15	1.84	**6**	27.5	1392	1.87	**6.8**	27.8	127	1.9	**6.83**								
Radius Bd	41.3	2			33	140	1.58	**4.8**												
Ulna DPA	47.3	2			35.9	550	2.76	**7.7**												
Ulna BPC									19.5	100	1.4	**7.18**								
Pelvis LAR	34.8	13	1.83	**5**	28.4	734	1.84	**6.5**												
Femur DCP	29.8	3																		
Femur Bd									41.6	255	2.3	**5.53**								
Tibia Bd	33.2	8	1.62	**5**	28.8	999	1.51	**5.3**	27	16.47	1.5	**5.55**								
Calcaneum GL	95.2	2			78.4	335	3.77	**4.8**												
Astragalus GLl	47.4	17	2.7	**6**	40.2	422	2.09	**5.2**						6		**11**		9		**6**

Figure 4.5. Table of summary data of pig measurements from several sites; data reproduced from Payne and Bull (1988) and Becker (1980)

These published Figures (4.5) demonstrate that for a single population, whether modern or archaeological, the Coefficient of Variation is usually around 6-9%. It is evident there is some fluctuation in the level of variation depending on the bone measurement in question. For example, the forelimb variation is greater than that of the hindlimb, probably because the forelimb demonstrates greater sexual dimorphism and age related changes (Payne and Bull, 1988:31). Similarly, the dental width measurements are normally lower in variation than lengths and, although Davis (1996) identifies that teeth are often higher in variation than postcranial material for sheep, it is clear from these figures that this does not appear to be the case for pigs. Species exhibiting even a small amount of sexual dimorphism and age related growth will show some variation, as the range of any measurements will depend not only on the overall size (which may be affected by whether the individual is wild or domesticated), but also on the ages and sexes of the animals included in the collection, and to what degree these factors affect that particular measurement (Felten et al., 1973). For a mixed population of wild and domesticated animals it is obvious that the Coefficient of Variation is demonstrably higher than for single populations (see Figure 4.5), consistently above 10% and even reaching 20% for the humerus distal breadth and M3 length in one population (Payne and Bull, 1988:37).

	Wild	Dom	Mix	Mix?	Dom						
	Kizilcahman	*Mikulcice*	*Gomolava*	*Jamon*	*Haithabu*	*Raversijde*	*Koekelare*	*Ename*	*Veurne*	*Londerzeel*	*Oudenberg*
Measurement	C of V (%)	C of V (%)	C of V (%)	C of V (%)		C of V (%)	C of V (%)	C of V (%)	C of V (%)	C of V (%)	C of V (%)
M1 length	6		10	6		7.2	7.54	9.46	15.4	8.49	8.12
M1 Anterior width	3					6.79	5.54	14.53	23.5	5.24	9.17
M1 Proximal width	4					5.67	5.77	5.41	24.7	8.57	6.9
M2 Length	4	6.1	12	7		7.46	6.06	6.18	12.5	6.01	6.98
M2 Anterior width	3					11.14	6.43	5.67	21.73	5.95	8.48
M2 Proximal width	4					6.56	6.99	7.29	19.6	5.29	7.53
M3 Length		7.8	20	12			8.44	12.85	10.46	7.13	12.57
M3 anterior width		6.1					7.32	8.49	7.15	5.97	7.75
Scapula GLP	6	6.7			5.92	6.3					
Scapula SLC	9	8.7				9.2	3.92				
Scapula DHA						14.27					
Scapula LG						8.52	7.84				
Scapula BG						8.42	5.46				
Humerus Bp						0.83					
Humerus SD						9.43	7.96				
Humerus Bd	6	7	20	17	5.52	7.69	11.03				
Humerus BT	6					8.72	12.51				
Humerus HTC	5										
Radius Bp	6	6.8			6.8	6.1	6.26				
Radius SD						8.52	9.34				
Radius Bd		4.8									
Ulna BPC					7.18	9.76	11.47				
Ulna SDO						10.19	18.48				
Ulna DPA		7.7				7.94	4.87				
Pelvis LA						9.67	12.68				
Pelvis LAR	5	6.5				15.29	5.87				
Femur SD						8.49					
Femur Bd					5.53	13.58					
Tibia SD						3.24					
Tibia DD						8.73	4.42				
Tibia Bd	5	5.3			5.56	12.36	0.02				
Calcaneum GL		4.8				11.23	1.55				
Calcaneum GB						6.54					
Astragalus GLl	6	5.2	11	6		6.35	5.46				
Astragalus GLm						6.9	6.9				
Astragalus GB						6.55					
Naviculo-Cuboid GB						3.09					
Metacarpal Bp						10.6	9.97				
Metacarpal Bd						8.72					
Metacarpal SD						13.06	4.56				
Metacarpal DD						12.07	20.24				
Metacarpal Dp						9.93	8.34				
Phalanx 1 GL						14.86					
Phalanx 1 Bp						21.73					
Phalanx 1 SD						17.73					
Phalanx 1 Bd						17.61					
Phalanx 2 GL						10.34					
Phalanx 2 Bp						5.67					
Phalanx 2 SD						8.74					
Phalanx 2 Bd						10.27					
Phalanx 3 DLS						16.95					
Phalanx 3 LD						10.3					
Phalanx 3 MBS						13.51					
Metatarsal Bp						10.99	7.27				
Metatarsal Bd						9.49	14.92				
Metatarsal SD						10.34	12.87				
Metatarsal DD						9.78	15.28				
Metatarsal Dp						9.2	7.9				

Figure 4.6. Table of summary data for measurements from this study alongside comparative data reproduced from Payne and Bull (1988).

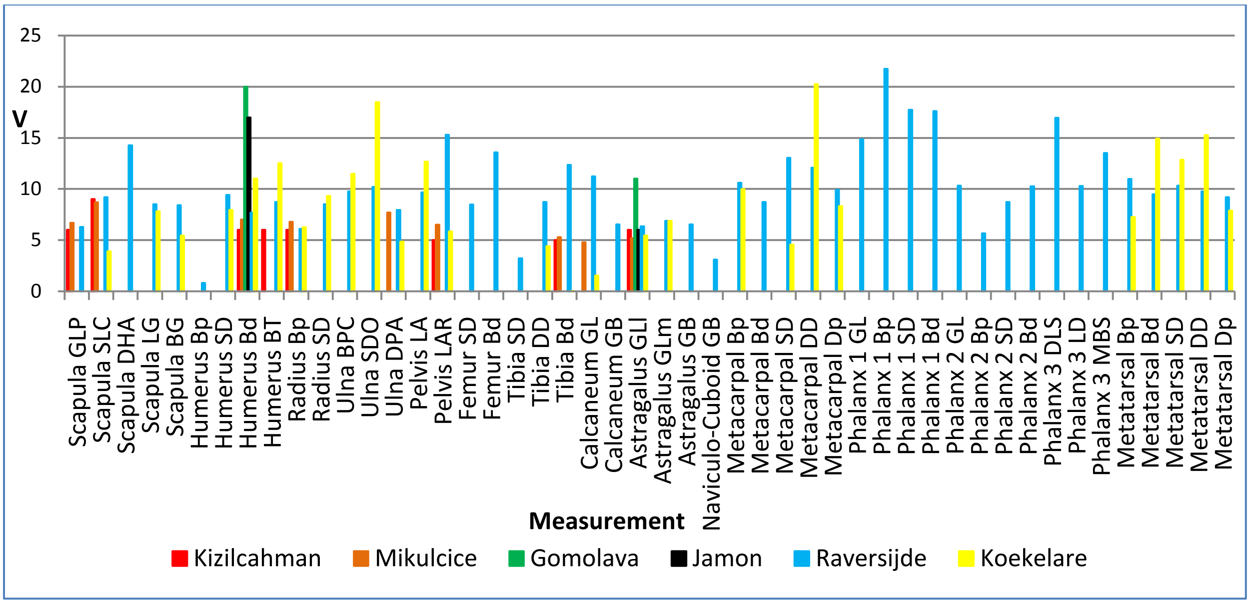


Figure 4.7. Graph displaying the Coefficient of variation (%) data for post-cranial elements only, gathered from the six Belgian sites, in comparison with those of Payne and Bull (1988) where data are available

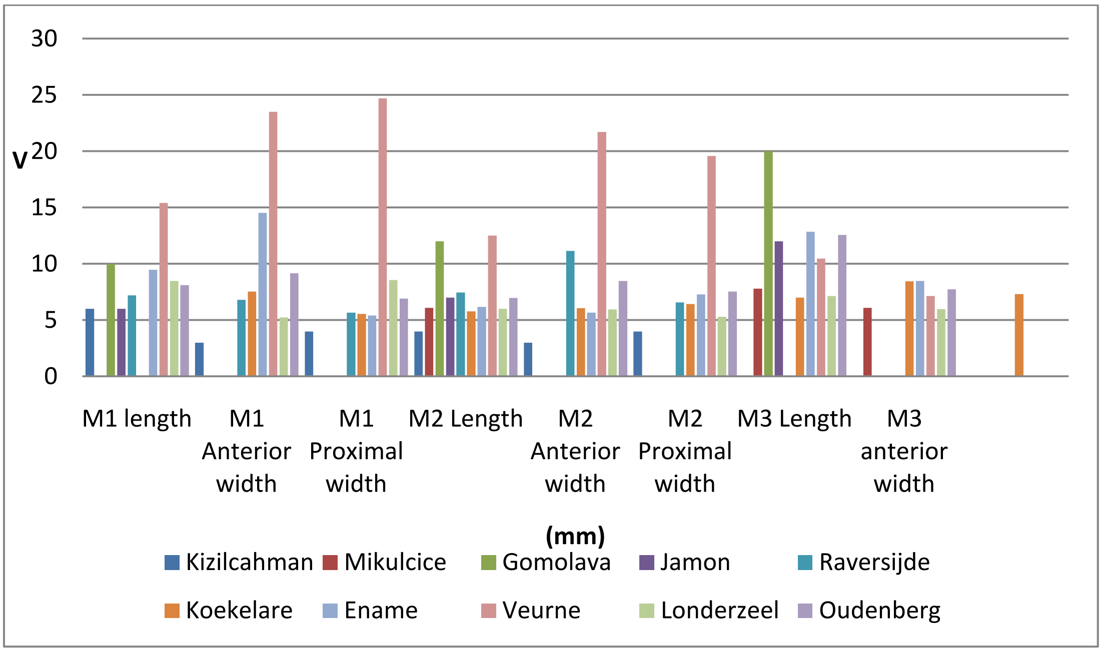


Figure 4.8. Graph displaying the Coefficient of variation (%) data for dental measurements only, from the six Belgian sites in comparison with those of Payne and Bull (1988).

An examination of the summary statistics for Raversijde indicates that, overall, the Coefficient of Variation for many of the measurements is relatively low in comparison to other sites (see Figures 4.6-4.8) and matches most closely to the data for a single population, whether domestic or wild (Figure 4.6). The variation for Raversijde, where there are comparative measurements, is clearly raised for two measurements, the pelvis LAR and the tibia Bd. For the other values with no comparative data (excluding the higher phalange values, see below for discussion) variation at Raversijde ranges from 0.83%

(humerus Bp) to 14.27% (scapula DHA). While this upper limit is still out of the bounds of the measurements of the bones of a single population as determined by Payne and Bull (1988), the sample number is small, as is the number of samples for the lower limit of 0.83% (humerus Bp) (see Figure 4.2). Payne and Bull (1988) did not examine this particular measurement and it is possible that it is one which shows particular variance. In general, the data for Raversijde suggest that a single population of pig is present on the site, which is particularly evident in those data seen as diagnostic of the difference between single and mixed populations by Payne and Bull (1988). Whether the population consists of hunted boar or domesticated pig is impossible to state from these data, and the slightly raised levels of variance may suggest a minor mixing of the population. Interestingly, Payne and Bull hypothesise that if herded and sty kept pigs were mixed in an archaeological assemblage, then bimodality would be detected using variation (Payne and Bull, 1988:37). Mixed keeping is not suggested from the variance in the biometric data, and supports the belief of Ervynck et al. (2007) that pigs at Raversijde were being kept under one general 'care system'.

Due to the smaller sample sizes, at Koekelare the results are more difficult to interpret. For some measurements the Koekelare assemblage exhibits notably small levels of variation (for example the scapula SLC), but often these have particularly small sample numbers (see Figure 4.3). For measurements that Payne and Bull (1988) also examined, the data from Koekelare fall neatly into the range for a single population (see Figures 4.7-4.8). Where there are greater than five samples for Koekelare the Coefficient of Variation is invariably within five percent (and most often within two percent) of that of Raversijde. Considering the limited sample numbers from Koekelare, which will inevitably affect the calculation of variation, it is evident that it also appears to be a single population site. The levels of variation in teeth match closely to those of the single population sites of Payne and Bull (1988) (See Figure 4.8). Where there are comparative measurements from Payne and Bull (1988), the Coefficient of Variation for Koekelare only notably differs for two measurements (the humerus Bd and BT measurements). Considering the evidence from the other measurements, this is not enough to suggest that there are many very differently sized individuals within the population.

The variance data from both Koekelare and Raversijde appear relatively similar in value (see Figure 4.7). While both generally have a little greater variation than those 'single' populations examined by Payne and Bull (1988) or Becker (1980), it is clear that for those measurements which are particularly used to determine mixed populations (such as the humerus distal breadth or astragalus greatest length), they show a demonstrably lower variance and fit well with the ‘single population’ statistics (see Figure 4.5). It is probable that this can be interpreted as populations at both Raversijde and Koekelare which are of predominantly one type of husbandry, but may be incorporating a small number of individuals of other types (for example, wild individuals into a predominantly domestic assemblage).This pattern applies both to the post-cranial measurements (Figure 4.7) and cranial measurements (Figure 4.8). There appears little difference between these for Raversijde and Koekelare, or in the case of the dental measurements between Raversijde and all of the other sites except Veurne.

From a consideration of the coefficient of variation data for all six sites in the dental measurements (something not considered by Ervynck et al., 2007), it is apparent that while five of the sites have very similar variation values, Veurne has a strikingly higher coefficient of variation across all dental measurements except perhaps the third molar (see Figure 4.9). This indicates that, for Veurne, more than one population is present, particularly as the age profile of the site (see Chapter 3) does not demonstrate a marked difference to those from the other sites, and so variable ages cannot be used to explain the difference. The other five sites appear to match much more closely to a single population, with none nearing the levels of the mixed site of Gomolava (see Figure 4.8).

It is also apparent from the data that the variance is generally elevated for phalanges at Raversijde, standing at odds with the general level at the site (Figure 4.7). The variation for one measurement (phalanx 1 Bp) even reaches 21.73% and in general the phalanx variance is over 10%, whereas for most of the other pig measurements at Raversijde the variance was under 10% (see Figure 4.6). This may suggest more inherent variation in phalanges than in other elements of the skeleton, with a range of around 10mm. It is unlikely that this pattern is due to small sample numbers for Raversijde because these element sample numbers are excellent (see Figure 4.4). Unfortunately, no similar size samples for these elements were available for measurement from the Koekelare assemblage, and so no comparison can be made as to whether this pattern only exists at Raversijde, or is a more widespread trend across Belgian pigs.

One explanation for such large variation may be because phalanges were not separated into either fore or hind limbs in the primary examination. If fore and hind feet were inherently slightly different sizes, bimodality would be produced in the results, increasing variation. This bimodality does appear to be visible in the results from both Raversijde and Koekelare (Figure 4.6). It is known that the gait of pigs varies between fore and hind limbs (Von Wachenfelt et al, 2009) and so such a difference in morphology would on reflection be unsurprising. A study of Australian feral pigs by Legge (1999) also indicates differences between the size of fore and hind feet in various measurements (see Figure 4.9), although only based on two samples. Further research is however required to clarify whether this also holds true for pigs in other situations.

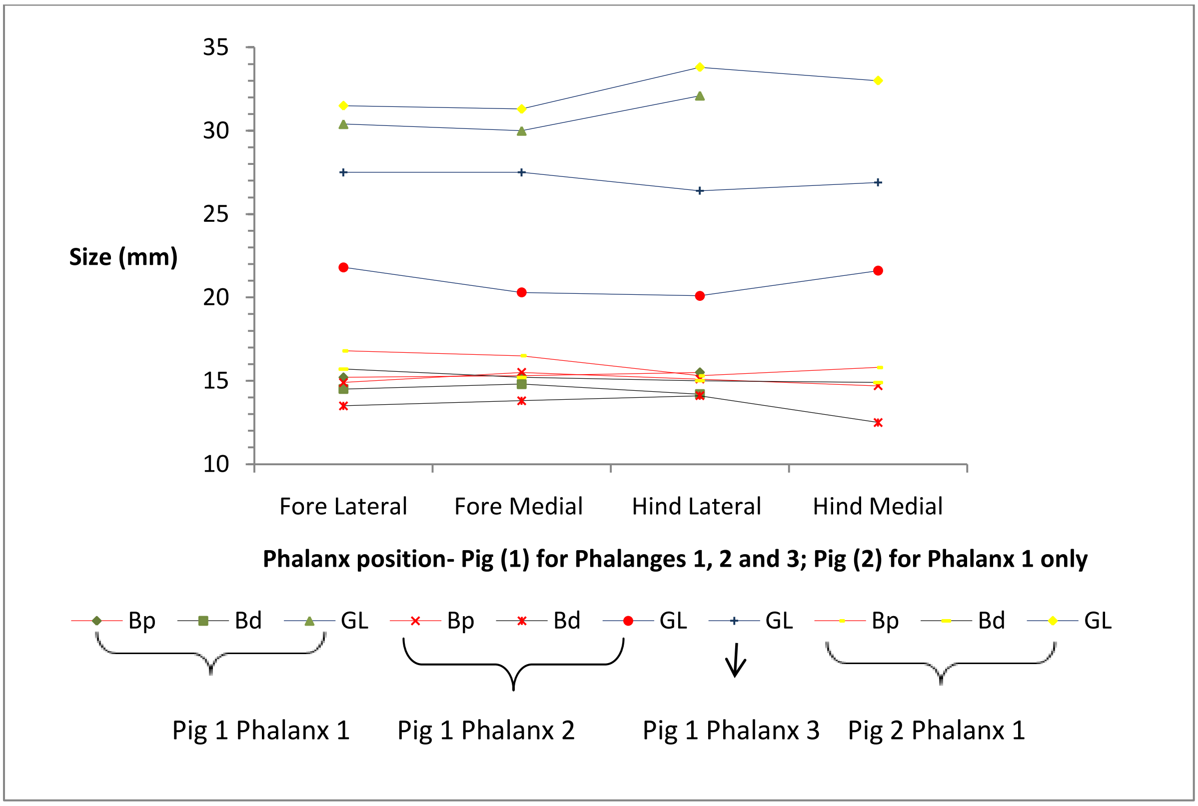


Figure 4.9. Graph showing the size of phalanges of Australian feral pigs dependent on body position (data from Legge, 2009). (Lines included solely to aid the identifcation of related fore and hind phalanx measurements).

There is similarly a suggestion in literature that inner toes can be slightly shorter in pigs than those outside (Nordby, 1939:307). It thus appears that phalanges from varying positions on the foot and body may also induce greater variation in measurements than would normally be expected for a span. This appears to be reflected in the results of this study: it would be extremely unlikely that a pattern of bimodality in population at Raversijde would only reveal itself in the feet and so the pattern of greater variation in this measurement alone cannot be considered indicative of more than one significant population.

- *Summary:*
    - *Raversijde and Koekelare match neatly to data from comparative 'single' populations of one husbandry type when variation in measurements is considered.*
    - *The level of variation at both Raversijde and Koekelare is slightly raised for some measurements and so does suggest some difference between individuals. This may be explained by the natural presence of some sexual dimorphism, individuals of differing ages, or perhaps limited presence of animals out of the normal husbandry type.*
    - *The variation at Veurne for dental measurements demonstrates that this site is experiencing mixing of populations, probably a domestic pig and wild boar combination.*
    - *None of the teeth from the five sites, other than Veurne, suggests a great degree of population mixing.*
    - *The average measurements for the post-cranial material from Raversijde and Koekelare indicate that Raversijde pigs are generally larger, and appear to have some conformation differences.*

4.3. Univariate measurements

An examination of graphical patterns of measurements is important to consider alongside the statistics, as Coefficient of Variation statistics are only meaningful if distribution is unimodal (Albarella and Payne, 2005:593). While the mean and standard deviation statistics illustrate the centre and spread of results, they are not a complete description of the pattern of a distribution (Moore, 2000:44). Measurement distributions, however, can provide a clear and easy way to display data to interpret whether values are grouped or not (Moore, 2000:8, 40). Indeed, it is particularly important in zooarchaeology to consider such non-statistical evidence, as many measurement patterns may be too subtle to identify through statistics. If across many bones there is an apparent pattern, even if too small to be statistically significant, it can also be informative. Small patterns may be the only indicators we have where sample numbers are limited, such as at Koekelare, and such restricted samples are often a particular problem for pig bones because of their fragile and porous nature and also because many of the bones are not fused by the time of slaughter (Albarella and Payne, 2005:589). While interpretations using this technique might not be 'statistically valid' it is important to access what information we can (O'Connor 2000:114).

Histograms of post-cranial measurements are presented for Raversijde and Koekelare (Figure 4.11). This is the simplest representation of information for one variable, to allow interpretation unclouded by manipulation. The measurements of Koekelare are also reproduced as a histogram of the log ratio of Raversijde (represented by 0), using the Simpson et al. (1960:356-358) methodology, where the logarithm of the ratio between a measurement and its standard is correlated (Figure 4.11) (see below for further explanation). This allows a consideration of different patterns of distribution between the two sites, and may highlight differences noted in the statistical examination. Raversijde has been chosen as the site to use for the standard rather than Koekelare, because its larger sample numbers mean that its average value is probably more accurately calculated.

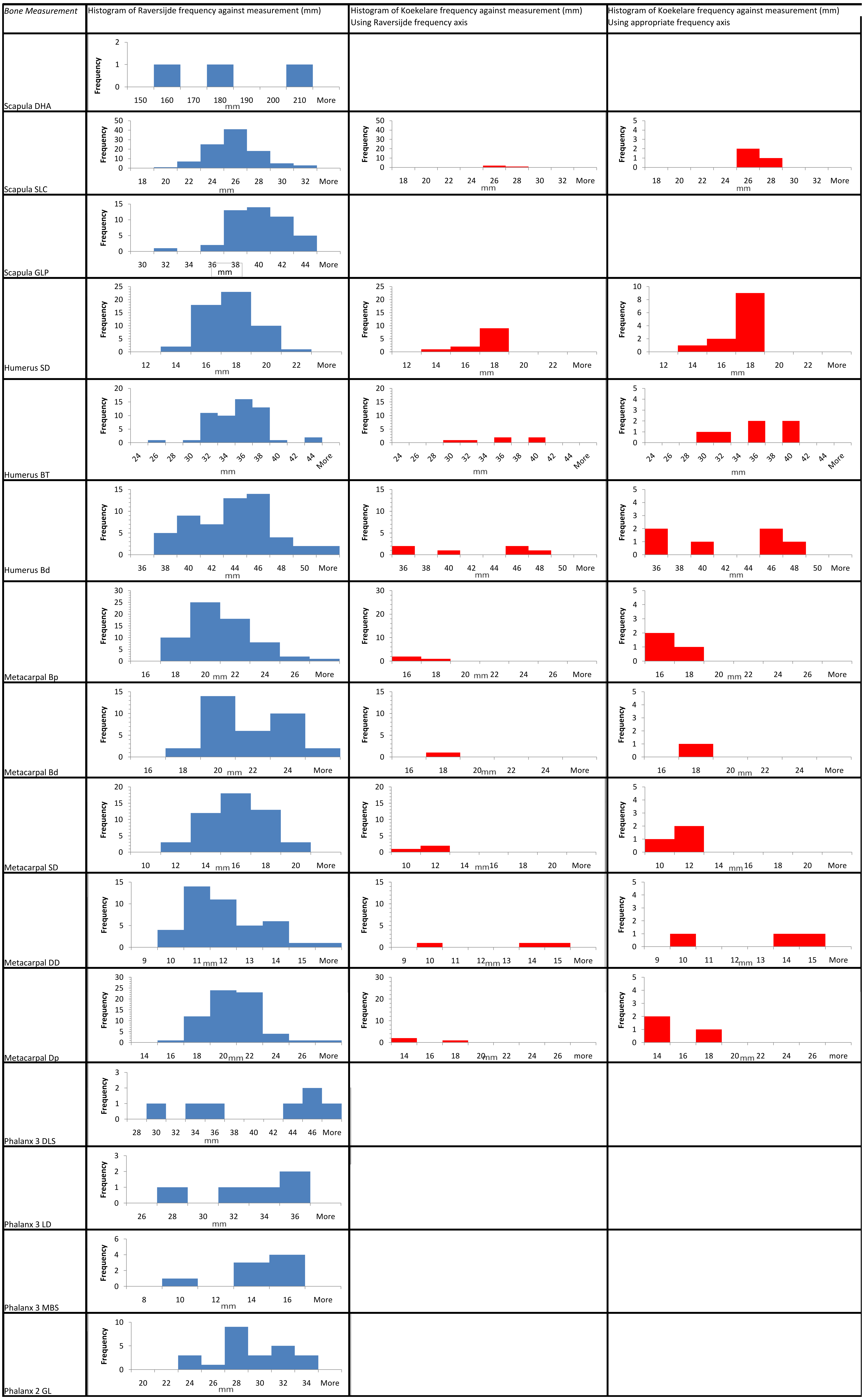


Figure 4.10 The Univariate histograms of bone measurements for Raversijde and Koekelare.

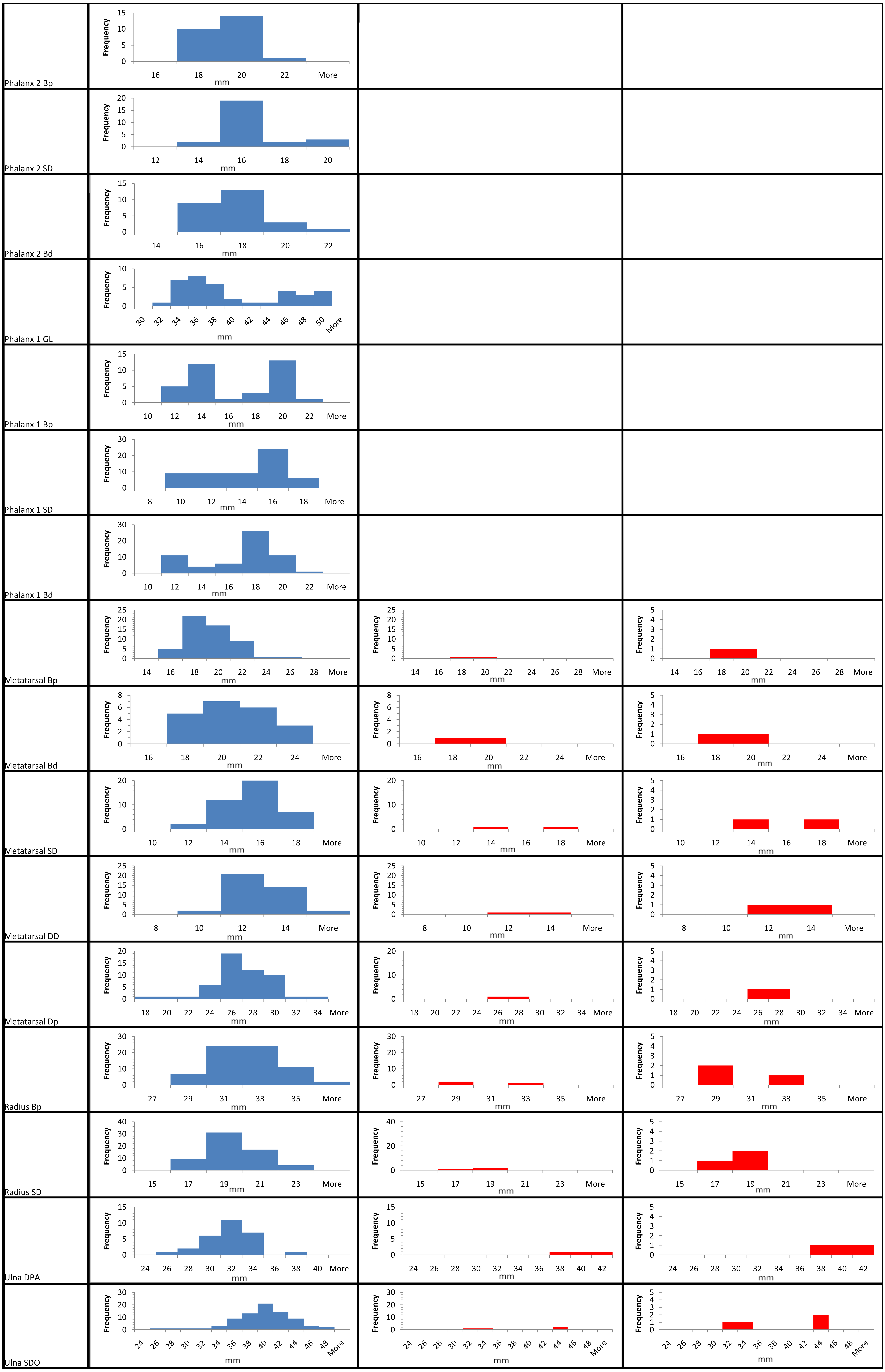


Figure 4.10 The Univariate histograms of bone measurements for Raversijde and Koekelare.

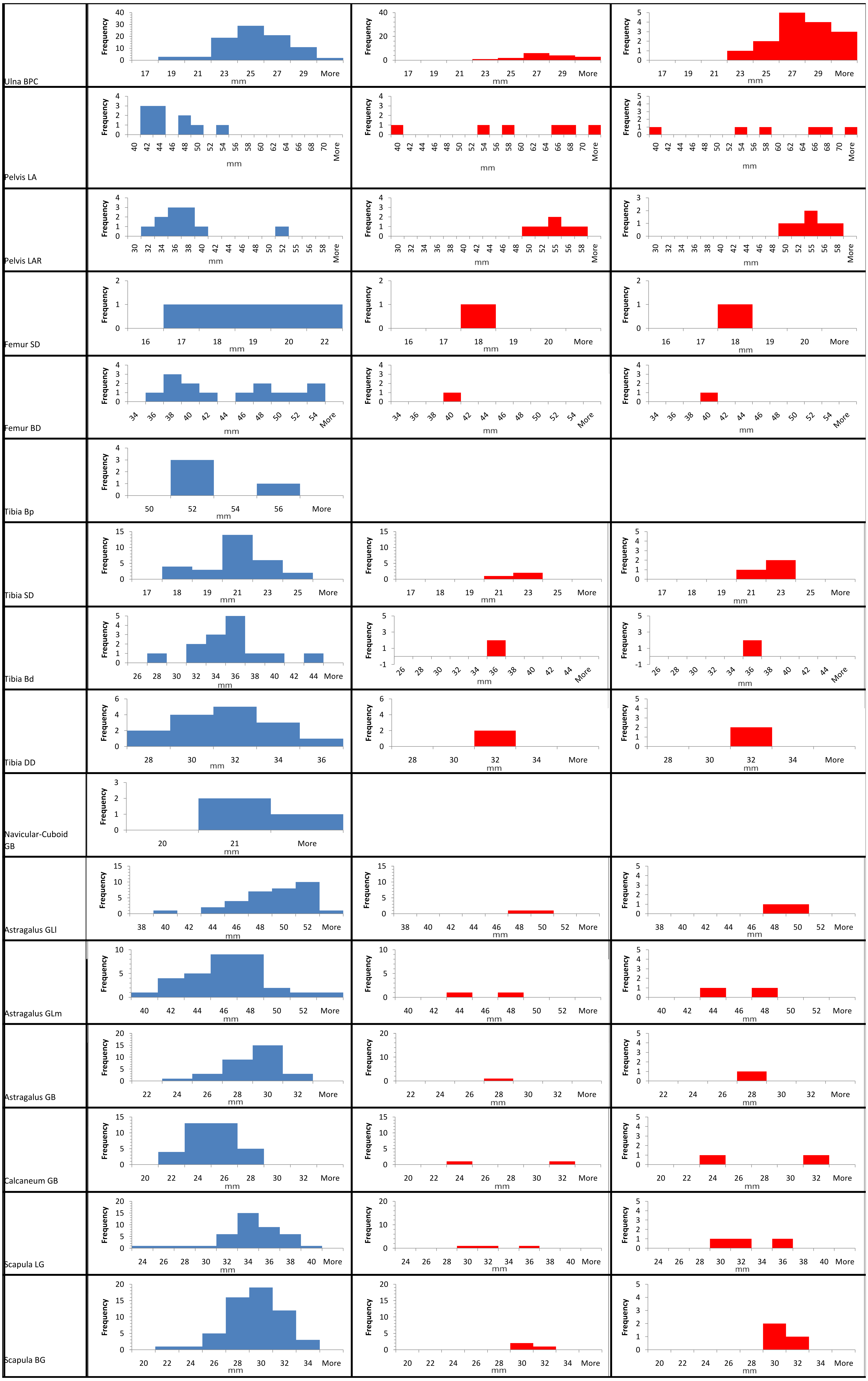


Figure 4.10 The Univariate histograms of bone measurements for Raversijde and Koekelare.

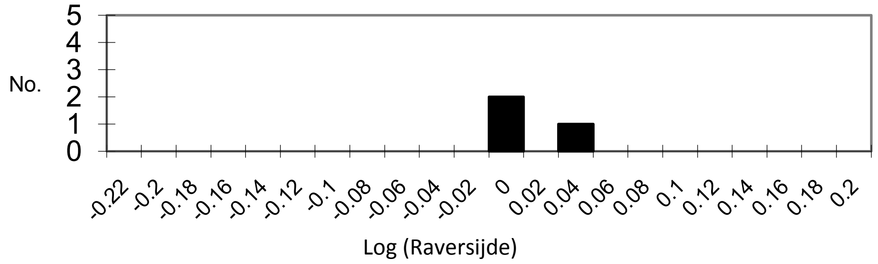
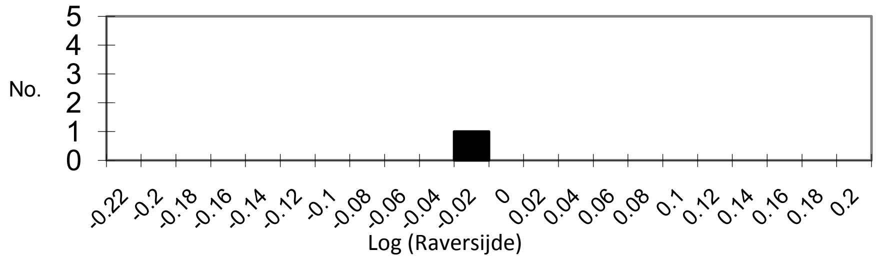
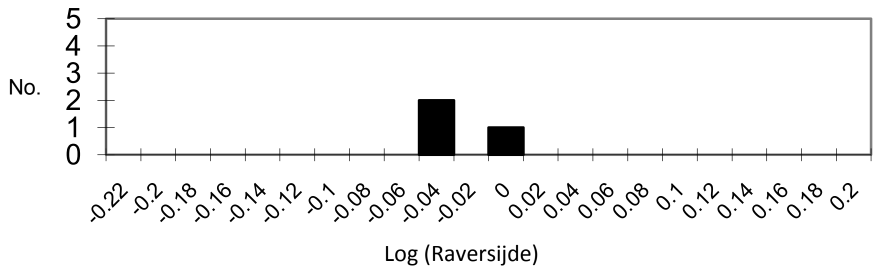
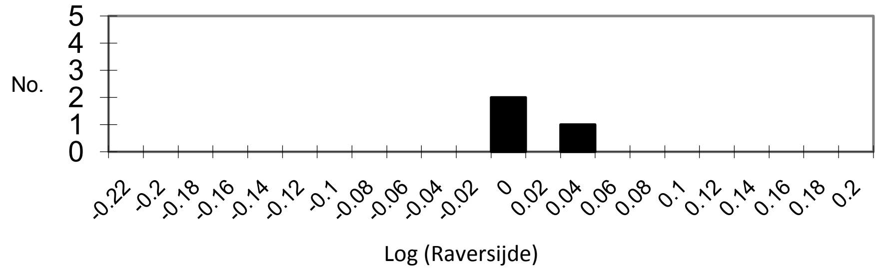
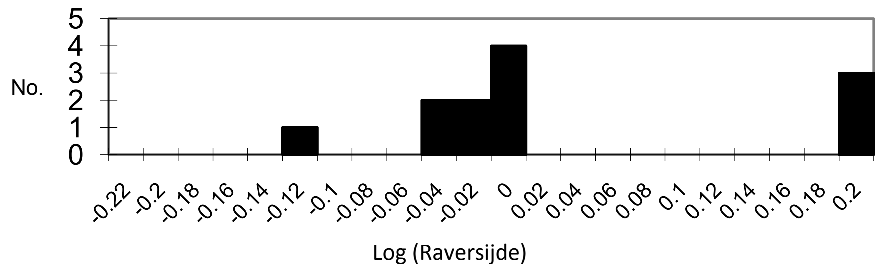
An examination of the univariate histograms demonstrates more clearly than the statistics that, for the postcranial material, the measurements of Raversijde are often larger than those of Koekelare (See Figure 4.10) which is not unexpected as the bones from Raversijde was identified as particularly robust in comparison to other medieval sites during the Ervynck et al. (2007) study.

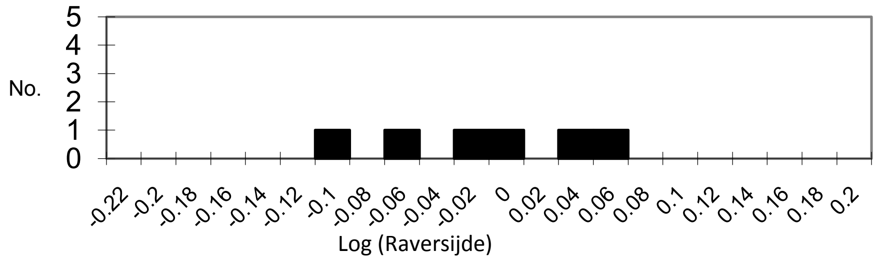
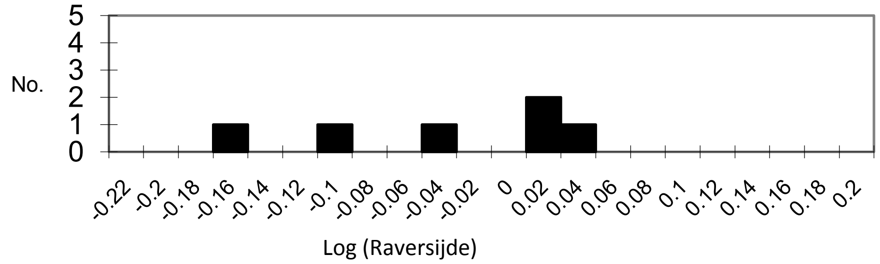
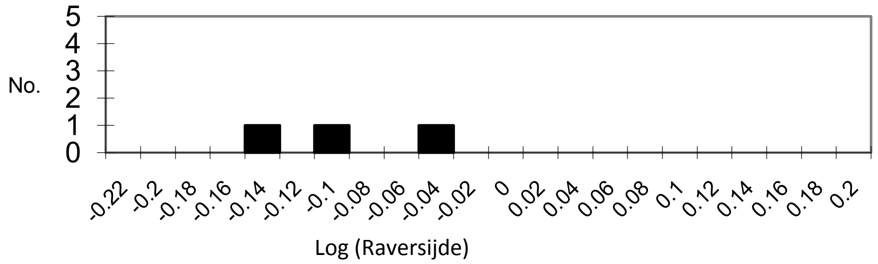
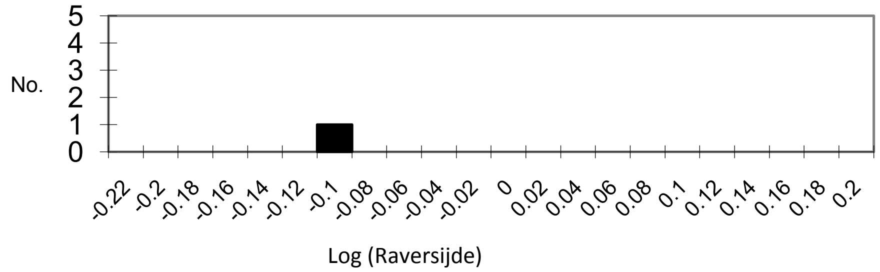
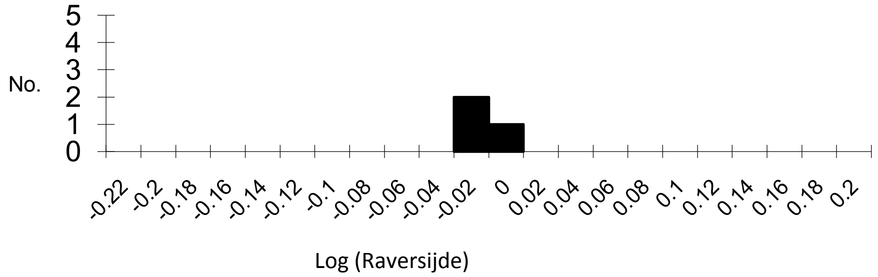
An examination of the distribution of bone size can also be useful in determining whether there are particular clusters in size within elements. Bones of similar ages should equate to approximately similar sizes (Albarella and Payne, 2005:589), and so if there is clear separation of groups it may be due to age; bones increase rapidly in size with age in young pigs as the diaphysis lengthens by the deposition of new bone (Payne and Bull, 1988:29, Legge et al., 1991:49). Post-fusion there is less difference in growth, although some elements such as the humerus and radius do show some evidence of post-fusion growth (Albarella and Payne, 2005:595) and the scapula shows a lot (Payne and Bull, 1988:29). As the pigs are predominantly juvenile (see Chapter 3 for further discussion of age profiles), and still contain elements with unfused/ fusing at their epiphyses, it would be expected that if there were two age groups in the population the measurements would also separate into two clear groups relating to each of the ages. This follows the theory used by Legge et al., to successfully show discontinuous seasons of culling in sheep at Chesterford Roman Temple, Essex (Legge et al., 1991:56). Similarly, groupings may suggest the inclusion of more than one population, for example a mixed wild and domestic population. When considering bone measurements as a means of determining differing age groups within an assemblage, certain bones are known to show the greatest increase with age such as the scapula SLC, long bone shaft widths (SD), and lengths of the radius and humerus (GL) (Albarella and Payne, 2005:596, 598, Payne and Bull, 1988:30). If age was a factor these would be expected to show this most clearly.

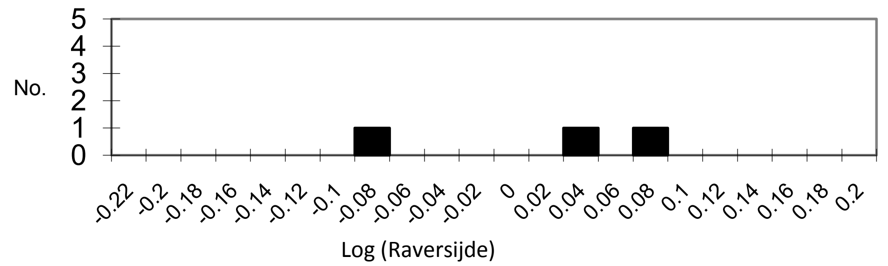
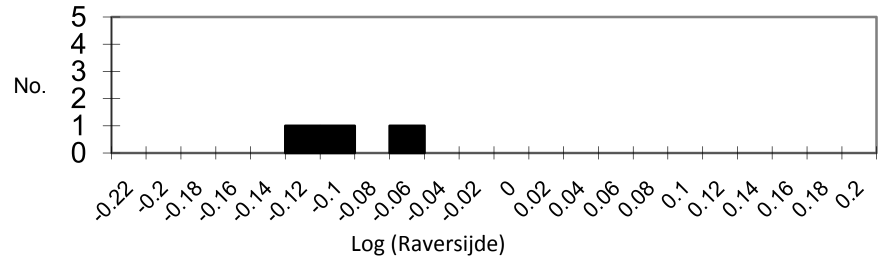
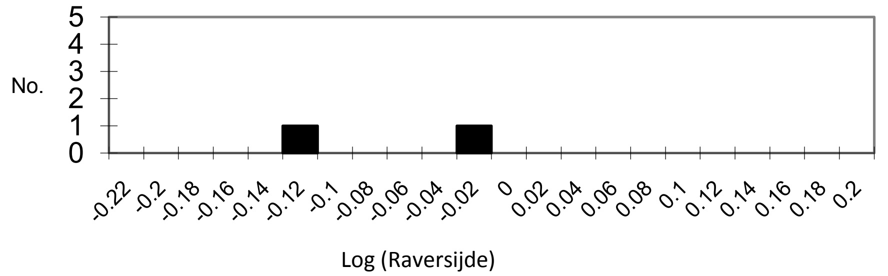
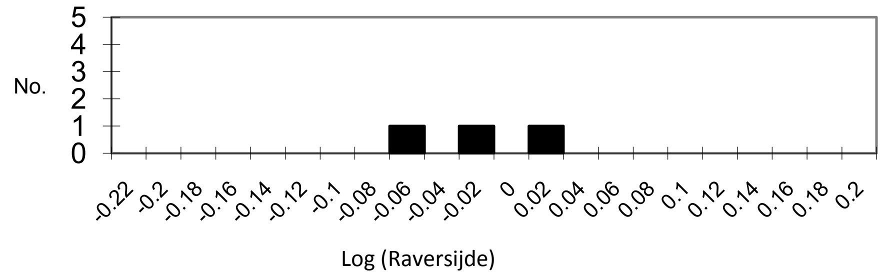
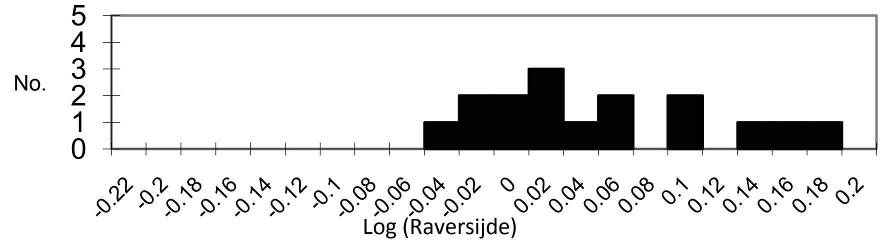
The majority of the bones for Raversijde appear to show unimodal distributions (see figure 4.10) with one dominant group present. While measurements of spans which are particularly age related, from the radius and humerus (the greatest lengths), were unfortunately not present to be measured due to fragmentation of the material, none of the examined shaft widths show any differentiation into separate groups and so it is unlikely that there are two distinct age populations or indeed populations which differ in husbandry. Spans which show the most age variation, such as the humerus SD and scapula SLC, both of which grow rapidly over the first years of pigs lives (Albarella and Payne, 2005), show clear unimodal distributions for Raversijde and it is apparent that the single age profile (see Chapter 3) is also demonstrated through the postcranial measurements. Similarly the tibia Bd which is commonly believed to be less affected by age demonstrates a clear unimodal distribution for Raversijde (there were insufficient samples from Koekelare) supporting the suggestion of a single 'type' of population, whether domestic or wild. For both Koekelare and Raversijde larger outliers are apparent in some measurements (for example the Metacarpal DD) and these may provide some evidence of wild individuals in a predominantly domestic population for both sites.

While there is no striking evidence from the data from the two groups, which would suggest that there are two populations, there are some intriguing patterns within the univariate plots for Raversijde which can less easily be explained. For the first and third phalangeal and femur measurements there does appear to be a suggestion of a secondary group appearing. While it was noted that there was considerable variation in phalange lengths, this is probably not on its own a significant pattern, considering the problem with phalanx measurements previously discussed. The cause of such a pattern for the femur is less clear, but is unlikely to be significant considering it is the only measurement to portray this pattern.

For Koekelare the graphs are more spread, often not showing a distinctive unimodal bell curve. However, this is probably a product of the limited number of specimens and it is evident that the results are in reality no more varied than from Raversijde.

	Log ratio histogram of variation in measurement of Koekelare against the average of Raversijde as standard using the log ratio technique
Scapula SLC	
Scapula GLP	
Scapula LG	
Scapula BG	
Humerus SD	

Humerus BT	
Humerus BD	
Metacarpal Bp	
Metacarpal Bd	
Metacarpal SD	

Metacarpal DD	
Metacarpal Dp	
Radius Bp	
Radius SD	
Ulna BPC	

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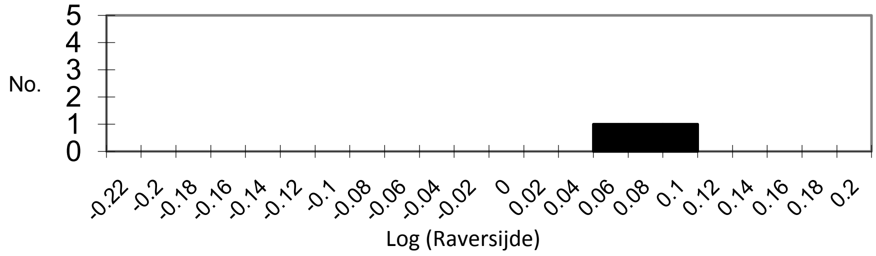
<tr><td>Ulna DPA</td><td>
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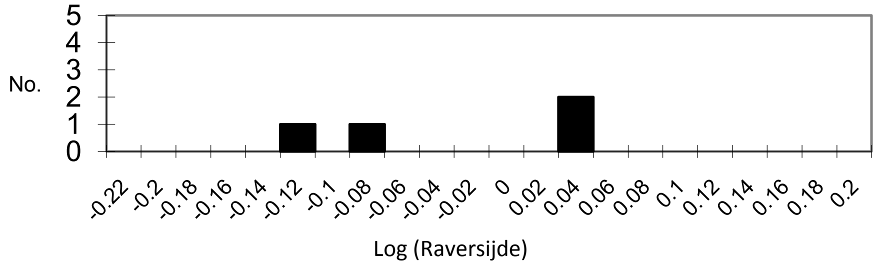
<tr><td>Ulna SDO</td><td>
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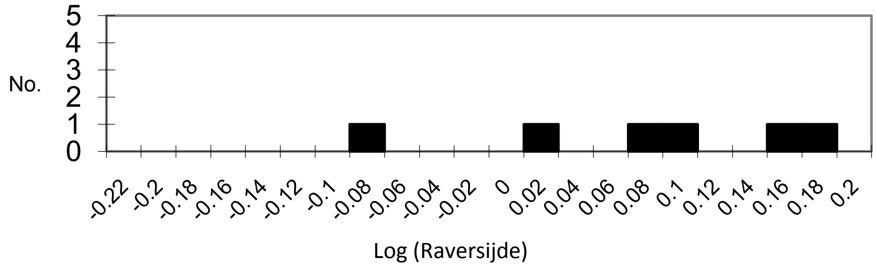
<tr><td>Pelvis LA</td><td>
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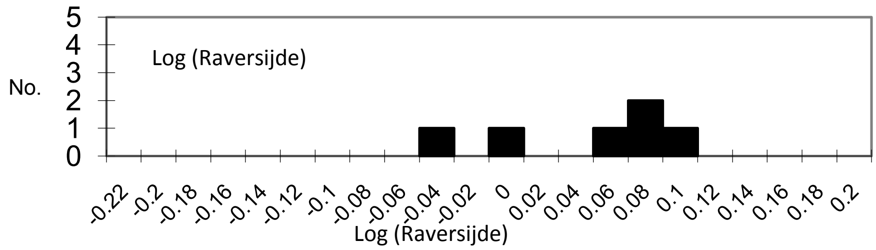
<tr><td>Pelvis LAR</td><td>
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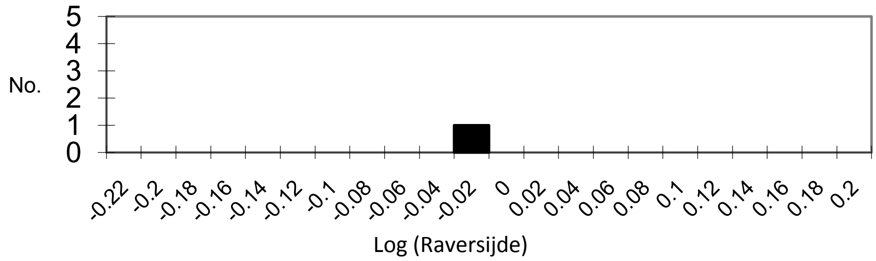
<tr><td>Femur SD</td><td>
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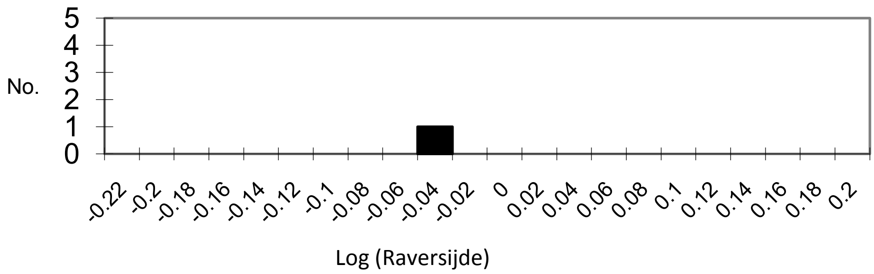
<tr><td>Femur Bd</td><td>
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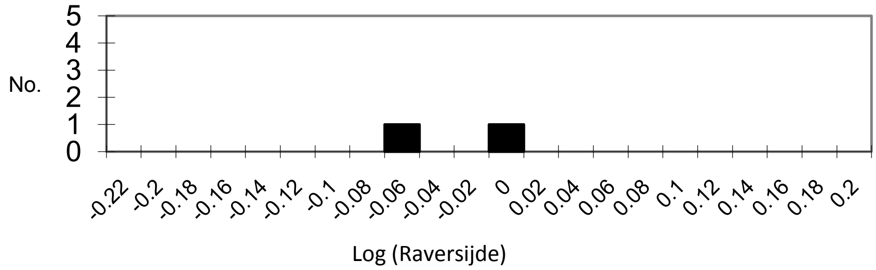
<tr><td>Metatarsal Bp</td><td>
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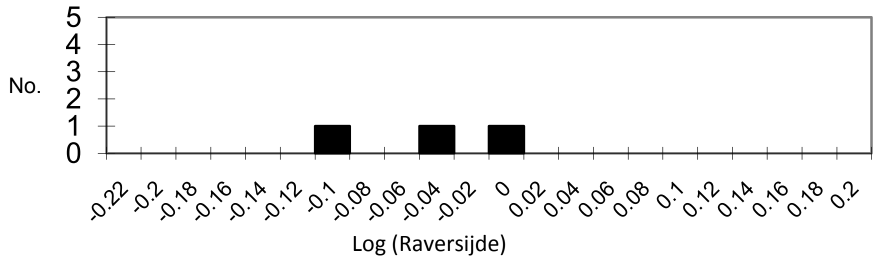
<tr><td>Metatarsal Bd</td><td>
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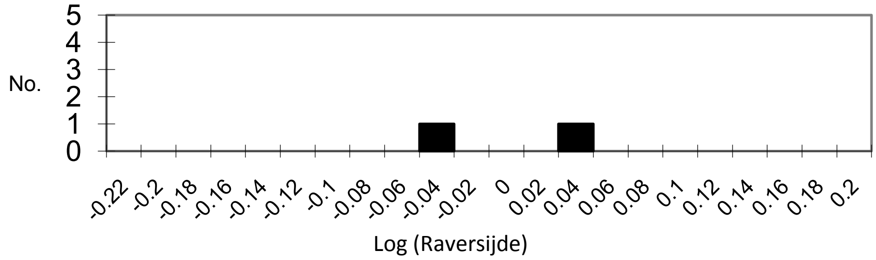
<tr><td>Metatarsal SD</td><td>
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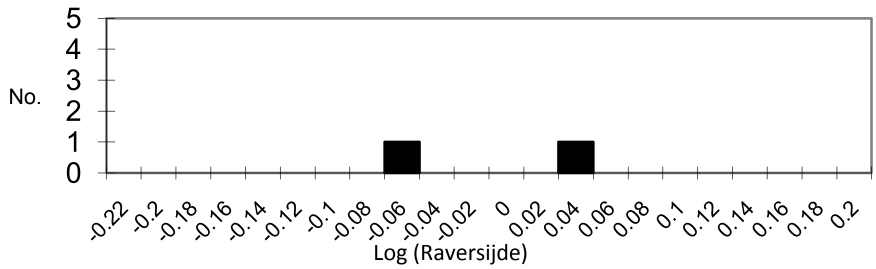
<tr><td>Metatarsal DD</td><td>
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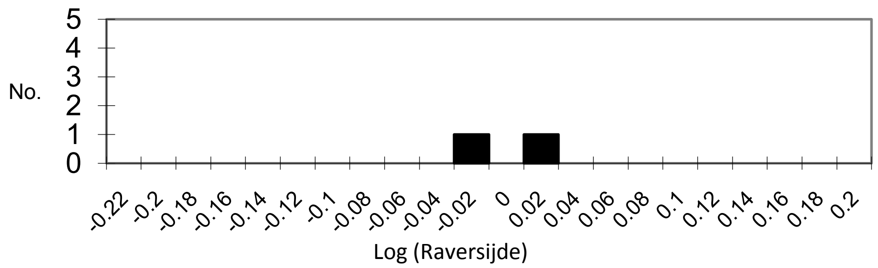
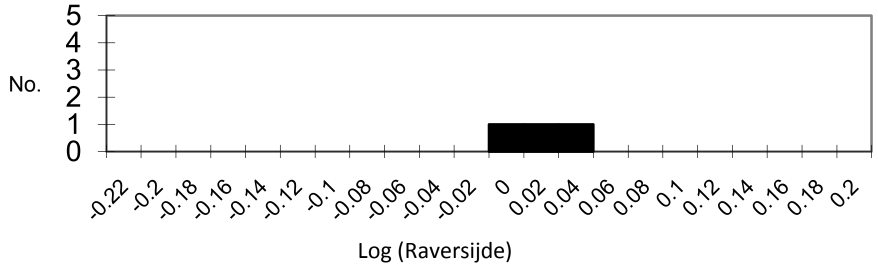
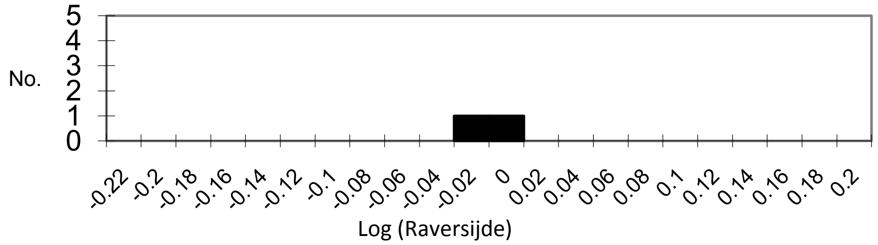
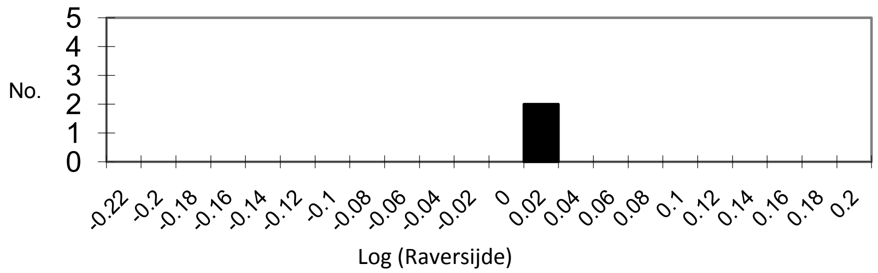
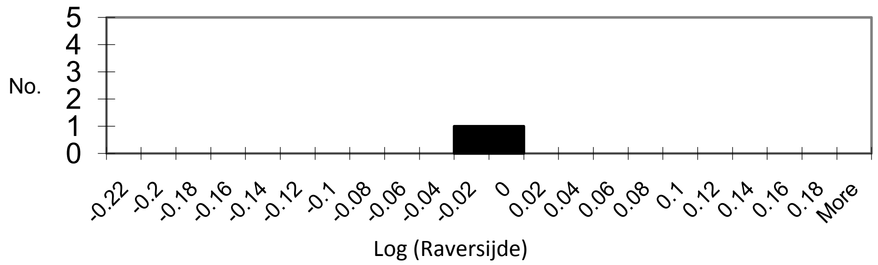
Metatarsal Dp	
Tibia SD	
Tibia Bd	
Tibia DD	
Astragalus GL	

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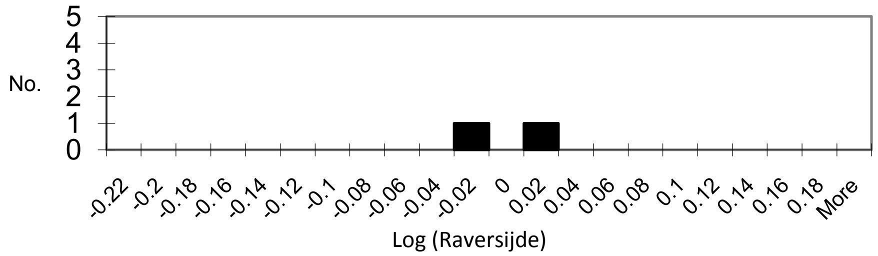

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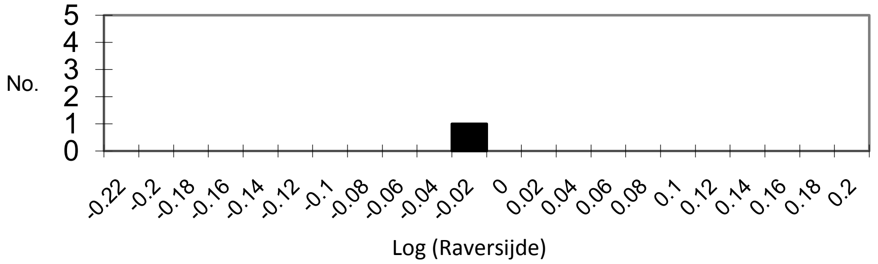

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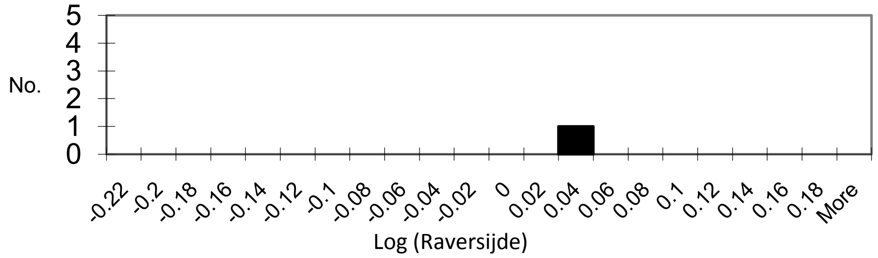


Calcaneum GB

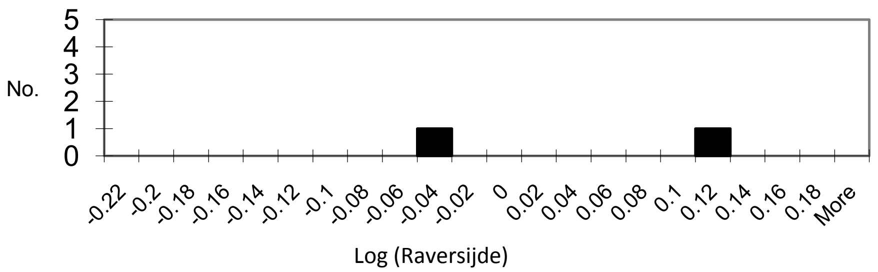


Figure 4.11 The measurements of Koekelare as a histogram of the log-ratio of Raversijde.

The graphs of the log ratios of Koekelare against the average of Raversijde (Figure 4.11) are the clearest demonstration of the difference in size of Raversijde animals when compared to a pig population which was hypothesised to be kept under normal medieval conditions, Koekelare (Ervynck, 2006: pers. comm.). These graphs provide a quick graphical examination of the variation of Koekelare from Raversijde, as well as demonstrating the differing conformation patterns identified through the mean statistical analysis (see section 4.2). This postcranial osteometry corroborates the pattern identified by Ervynck et al., (2007:186) that Raversijde bones have a larger and more robust conformation in comparison to yet another medieval Belgian site. As Ervynck et al. (2007:189) noted, given the context of Raversijde, this cannot be explained by a dominance of wild boar bones among the pig remains. However, what was not identified in this earlier study was any differences in conformation between the sites. The larger measurements of the ulna and pelvis for Koekelare (illustrated in Figure 4.11) are in marked comparison to its generally smaller size. With Raversijde showing similar sizes in pelvis to the domestic population of Durrington Walls (Albarella and Payne, 2005), the question remains whether this demonstrates a difference in conformation at Koekelare or at Raversijde. However, considering Raversijde's otherwise unusually large dimensions (see Section 4.2 and 4.6) and Koekelare's trend more towards the norm, the difference is more likely to be at Raversijde- as discussed in Section 4.2.

<u>*Summary:*</u>

- *Univariate statistics again show that Raversijde is of a larger and more robust conformation than Koekelare, mirroring the earlier findings of Ervynck et al. (2007) against other medieval Belgian pig populations, and they also show a slightly different conformation, with a more gracile pelvis. The location of Raversijde is unlikely to host a wild boar population (Ervynck et al., 2007:189) and so the reason for this difference is unclear.*
- *There is no visual identification of obviously separate groups within the material. This confirms the evidence of the variation of the measurements, that there is only one major population at each of the sites.*
- *Univariate distributions demonstrate such differences between Raversijde and Koekelare which statistical analyses suggest, but find difficult to identify clearly, particularly with the small sample numbers at Koekelare. The distributions match the data (for example in pelvis size), but reveal the patterns more clearly.*

4.4. General Log-Ratio analysis

It was only possible to gather relatively small sample sizes from the primary analysis of Raversijde and Koekelare for many of the measurements, and it is apparent that this has hindered the biometrical interpretation to some degree. Combining the different measurements through the use of a size index scaling technique (Meadow, 1999) to create a greater database of measurements to consider, is thus a useful technique to employ. Where numbers of individual measurements are very limited, the log ratio method allows a number of datasets to be combined, which allows us to produce larger samples for comparison (Meadow, 1999 and Albarella, 2002). This enables investigation to take place into whether there is any uniformity in the variation from the norm at Koekelare and Raversijde, and also to consider how both assemblages vary in relation to the standard chosen, providing further information about shape and size (Davis, 1996:595,607; O'Connor, 2000:117). The relative size of the various data sets in comparison to a designated standard is calculated as the decimal logarithm of the ratio between the measurement and its standard (Simpson et al, 1960; Payne and Bull, 1988, Davis, 1996). This may be particularly useful to consider in the conformation differences noted above.

Because of the combination of measurements statistical testing is precluded on log values as it is probable that more than one measurement from the same individual is included within the analysis. This is likely for bone measurements, as often more than one measurement may have been obtained from a single bone during primary collection, and therefore only visual examination and interpretation can be employed.

The standard used in this study is an assemblage of domestic pigs from the Late Neolithic site of Durrington Walls in England, studied originally by Albarella and Payne (2005). This site is chosen because of the large number of measurements and secure methodology of the measurements at this site, with the site having been interpreted as a large homogenous sample of domesticated pigs (Albarella and Payne, 2005:590). The site also has a similar age profile to both Raversijde and Koekelare, with few juvenile or elderly specimens and slaughter at a predominantly immature age. This means that those bone measurements greatly affected by age (such as the scapula SLC) are expected to be of measurements of roughly similar age and so added variability through differing age profiles will be limited.

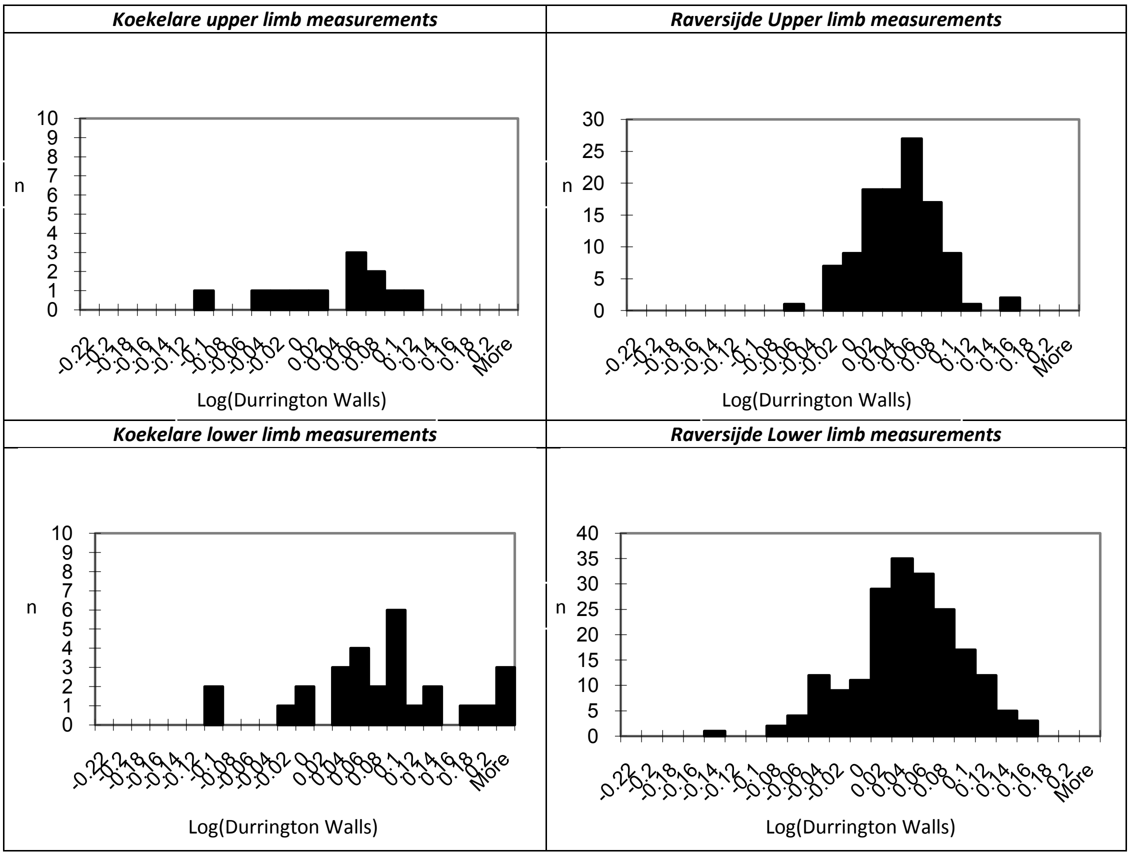


Figure 4.12 Log ratios of the number of upper and lower limb measurements of Raversijde and Koekelare against Durrington Walls, as a standard.

A consideration of the measurements of lower and upper limb elements for Koekelare and Raversijde against the Durrington Walls standard demonstrates some interesting patterns (see Figure 4.12). For Koekelare, the upper limb measurements are spread, with measurements both smaller and larger than the domestic standard but approximately centring around this standard value. While it is impossible to determine exactly where the main trend would fall, there are few indications that it would be significantly larger than that of the standard (a domestic population). The greater number of measurements from Raversijde however appear to indicate a clear bell-shaped curve, with measurements larger than both the domestic standard used (Durrington Walls), and the apparent Koekelare trend. Again, neither of the sites suggest dual populations or even any very large outliers.

For the lower limbs, the measurements from Koekelare again show spread. The main peak is demonstrably of larger values than the standard but, as well as some much larger measurements, there are also some much smaller measurements included (see Figure 4.12). In comparison, for Raversijde almost all the measurements trend larger than Durrington Walls.

The Koekelare upper limbs thus appear similar in size to Durrington Walls, but the lower limbs appear to be notably larger. Raversijde shows a more consistent pattern, being demonstrably larger for both. This pattern is particularly intriguing when considered alongside the conformation pattern discussed earlier. In order to explore this further the pig biometrical information is also compared (Figure 4.15) for six postcranial measurements using the site of Haithabu as standard. This was the site utilised for log ratio examination of Raversijde with a number of other Belgian sites by the Ervynck et al. (2007) study. Given the questions raised by comparing with Durrington Walls, it was important to see whether the patterns identified in the original study (see Figures 4. 13 and 4.14) were replicated within this wider assemblage examination, and also to consider Koekelare alongside these samples on this basis. Haithabu is a 9th century trading settlement, of a somewhat earlier date but has very similar environmental conditions to Raversijde and Koekelare.

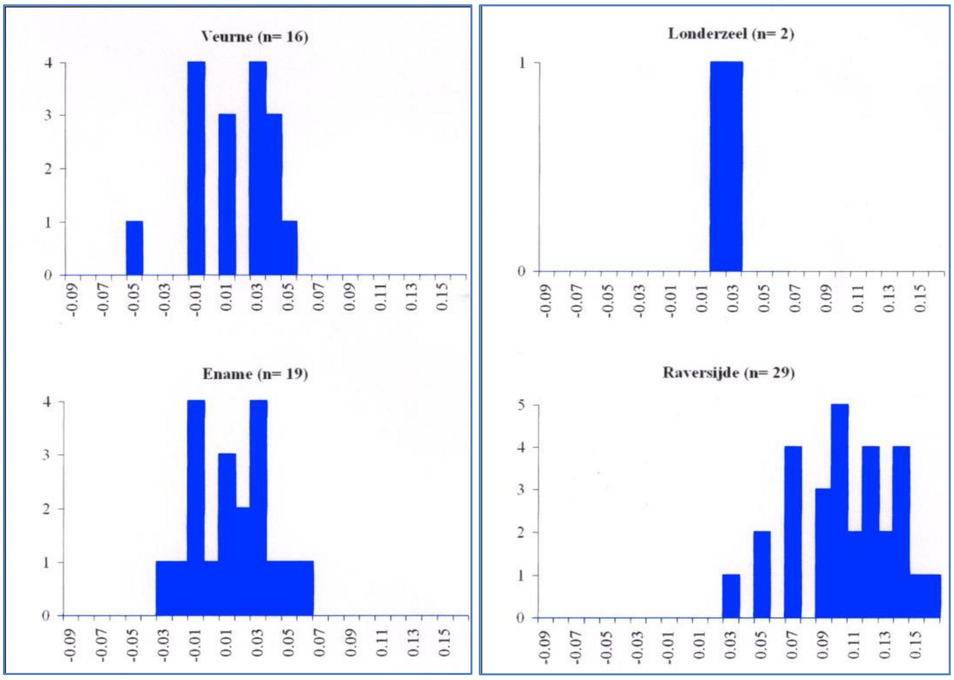


Figure 4.13 Comparison of log ratios of the astragalus length (GLl) only for four of the sites, examined in the pilot study using Haithabu, Denmark (Becker, 1980) measurements as the standard. Reproduced from Ervynck et al. (2007: 188).

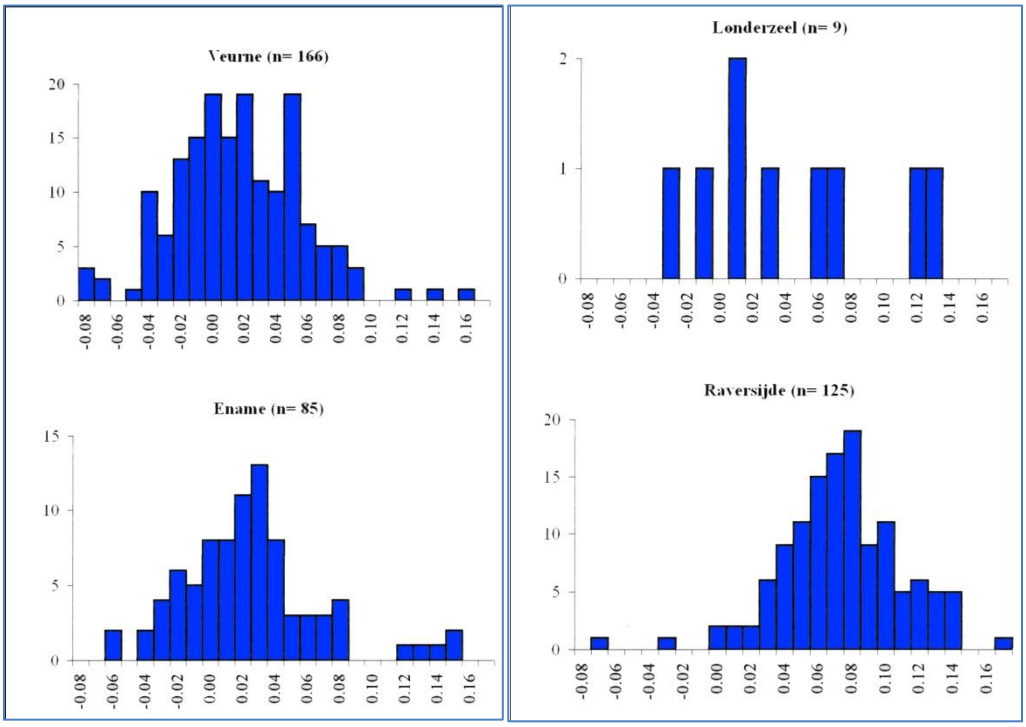


Figure 4.14 Comparison of log ratios of all six postcranial measurements taken by Ervnyck et al. (2007) for four of the sites examined in the pilot study using Haithabu, Denmark (Becker, 1980) measurements as the standard. Reproduced from Ervynck et al. (2007: 188).

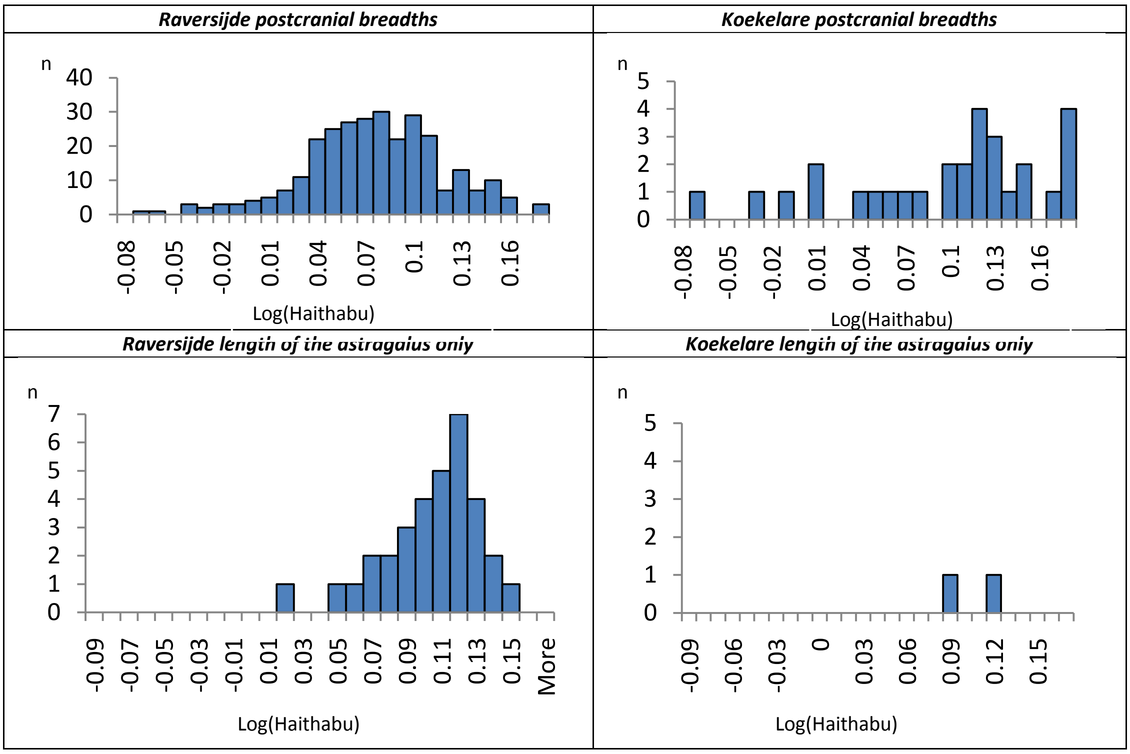


Figure 4.15 Comparison of log ratios of combined postcranial measurements as taken in this study, and the length of the astragalus (GLl) only for Raversijde and Koekelare. Using Haithabu (Becker, 1980) measurements as the standard.

This comparison reaffirms the results of the pilot study from Raversijde but with the inclusion of a wider range of postcranial measurements. It is apparent (Figures 4. 13, 4.14 compared with 4.15), that there are very similar patterns seen for Raversijde between this study and the earlier findings of Ervynck et al. (2007). To obtain matching patterns at two completely separate examination times removes any uncertainty about experiment error causing errant patterns (for at least the six postcranial breadth measurements examined both here and within the pilot study). This similarly provides greater confidence that the unusual patterns at Koekelare are not errors of measurement.

The log ratios demonstrate that the Raversijde pig is of a more robust and taller conformation than those of Veurne, Ename and Londerzeel (three sites which in the original study roughly conform to the Haithabu standard). The astragalus measurement alone, which allows us to examine only the stature and height of the animals rather than robusticity, again compared with the average value of the Haithabu population (see Figures 4.13 and 4.15) similarly suggests that the animals from Raversijde were taller than the animals from Ename, Veurne and Londerzeel. This is also the case for Koekelare, although with such a limited sample it is important not to over-interpret this statistic. For Raversijde, this supports the interpretation of Ervynck et al. (2007:189) that animals are both more robust, but also taller.

Ename, Veurne and Londerzeel were originally identified (Ervynck et al., 2007:189) as very typical medieval sites and so Raversijde’s difference from them is notable and warrants further investigation (Ervynck et al., 2007:189). However, from this study it is also apparent that the Koekelare pig is also much larger than those at these three contemporary Belgian sites, something quite unexpected (see figure 4. 13, 4.14). The choice of Koekelare as a comparative to Raversijde for postcranial material was to provide another site where it was anticipated the pig faunal material was relatively normal for Belgium at this time (Ervnyck, 2006: pers. comm.) because the focus of the site was cattle breeding. Koekelare was expected to mimic the other ‘typical’ medieval sites of Veurne, Ename and Londerzeel. For the remains to be substantially larger (both taller as well as more robust) at Koekelare was not predicted, even though for many of the measurements Koekelare pigs still plot smaller than Raversijde (see above), and Raversijde is demonstrably the more extreme of the pair

This emphasises the importance of examining more than just two sites within a study such as this; an examination of Raversijde and Koekelare alone without placing the sites into a wider faunal context would have meant that only the subtle variations between the two sites would be considered, and patterns perhaps dismissed. Due to the environment around the site and surrounding landscape of Raversijde it is extremely unlikely that the high log ratio values for Raversijde can be explained by a wild boar population (Ervynck et al., 2007:189), and similarly for the cattle breeding centre of Koekelare this seems very unlikely particularly bearing in mind the other findings of this study.

This postcranial log-ratio pattern was originally identified as a way of illustrating the difference between Raversijde pigs and the Belgian 'norm', and provided for Ervynck et al. (2007) one of the key early pieces of evidence of unusual treatment of the pigs there (Ervynck et al., 2007:189). This study demonstrates that more complex patterns and variations are occurring in the Medieval period than would have been anticipated, especially within such a relatively small geographic area.

- *Summary:*
    - *A comparison identifies differences in both Raversijde and Koekelare from the other medieval pigs studied by Ervnyck et al. (2007).*
    - *The measurements of Raversijde all trend larger than the Durrington Walls standard and, of more relevance, the Belgian sites of Veurne, Ename and Londerzeel*
    - *For Koekelare the upper limb measurements are similar to the measurements of the other Belgian sites, but the lower limbs are systemically larger, although not as large as Raversijde.*
    - *These findings demonstrate how important it is that studies do not exist in a vacuum but are related and compared to other sites in the same area.*

4.5. Tooth dimensions

As has been previously discussed, given the context of the site and the surrounding landscape of Raversijde, it is extremely unlikely that the large measurements from Raversijde can be explained as representing wild boar. Similarly, the morphology of the teeth reflects domesticated pigs, with a reduced third molar for all samples. However, it is useful to also consider the evidence from tooth measurements, to ensure this hypothesis is correct as well as to determine whether the patterns identified in the post-cranial material continue. This may be particularly telling as teeth are far less susceptible than bones to environmental change (Albarella, 1997:21). For example, data from Dobney et al. (1996) demonstrates much larger bones in post-medieval improved animals but only slightly larger teeth (Dobney et al., 1996 in Albarella, 1997:25), believed to be linked to a higher level of nutrition as well as genetic differences. For this study, with the identification of potentially different nutritional sources at Raversijde to the other sites (see Chapters 7 and 8), the information from the biometry of the teeth will be particularly useful.

Previous examination of the dental measurements from Raversijde, Veurne, Ename and Londerzeel as part of the Ervnyck et al. (2007) study had identified that Raversijde appeared to plot much larger in tooth size than the other medieval Belgian sites (see Figure 4.16). It was felt important, particularly considering the conformation differences identified with Koekelare, to see how Koekelare plotted against the other sites and whether pigs there had larger teeth as well as larger postcranial measurements.

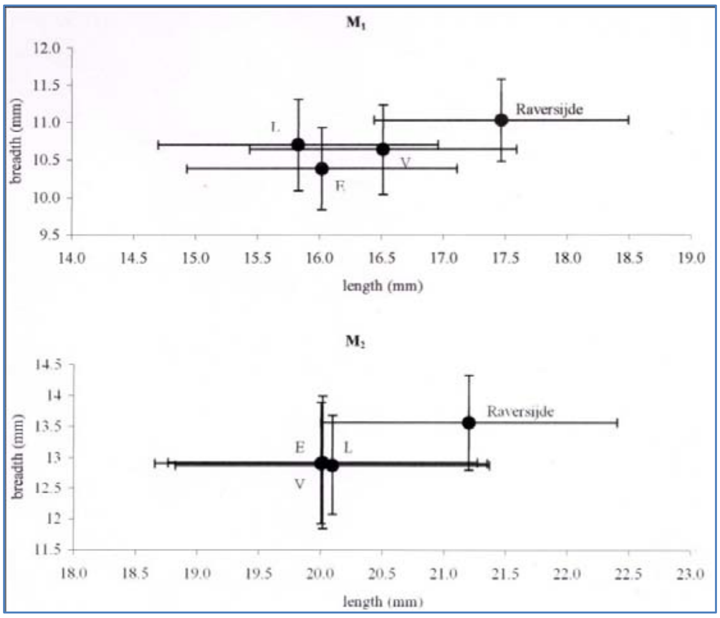


Figure 4.16. Graphs reproduced from Ervynck et al. (2007:187) for the tooth dimensions of the mandibular molars per site (V=Veurne, E=Ename, L=Londerzeel).

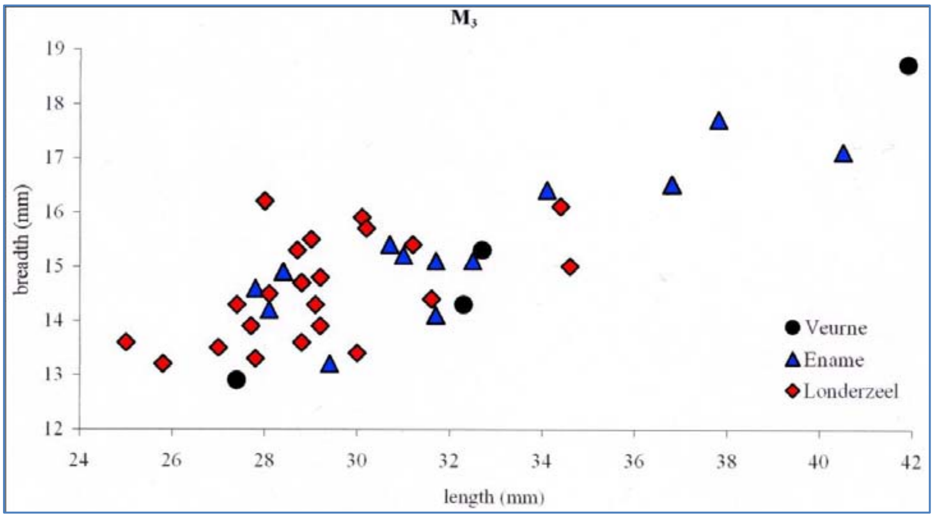


Figure 4.17. Graph reproduced from Ervynck et al. (2007:187) for the tooth dimensions of the third mandibular molars per site.

In this study standard measurements of all lower molars were taken. The tooth measurements taken include the maximum buccal-lingual breadths of all pillars of all three molars (M1, M2 and M3) when fully erupted at the widest part of the tooth crown, as well as the maximum crown length of these teeth. This follows the usual standard measurement practice of Von Den Driesch (1976), the basis for this study's measurements. Certain studies, such as Yablokov (1974:75) have demonstrated that the coefficient of variation in teeth is typically higher than in the post-cranial skeleton (5-10% of comparison to 3-5% to postcranial elements in Yablokov's study of sheep skeletons), although others (Rowley-Conwy et al., n.p.:52-53) suggest that for pigs the teeth variation is generally lower than for the post-cranial skeleton. It is clearly therefore important to not consider the coefficient of variation using the same scale as for the post-cranial skeleton because of differences between the two. Statistics for tooth measurements are summarised below (Figure 4.18).

	M1AW	*M1PW*	*M1L*	*M2AW*	*M2PW*	*M2L*	*M3AW*	*M3MW*	*M3PW*	*M3L*
	Londerzeel									
N	57	55	59	57	60	58	30	21	13	18
Min	9.08	9.38	13.56	11.32	11.36	17.26	12.99	13.10	7.65	25.51
Max	11.42	16.13	19.21	14.20	14.58	22.11	16.12	15.73	12.28	33.03
Mean	10.08	10.79	15.70	12.94	13.02	20.08	14.80	14.35	10.32	28.57
StDEV	0.53	0.92	1.33	0.72	0.69	1.21	0.88	0.65	1.26	2.04
V	5.24	8.57	8.49	5.95	5.29	6.01	5.97	4.50	12.17	7.13
	Oudenberg									
N	71	70	76	83	85	86	42	33	27	30
Min	8.30	9.34	11.27	8.12	11.54	17.72	13.84	13.01	8.58	26.16
Max	15.92	14.12	19.34	16.97	17.60	26.71	19.05	19.28	16.29	44.75
Mean	10.35	11.05	16.26	13.41	13.83	21.31	15.43	15.11	11.74	33.03
StDEV	0.95	0.77	1.32	1.14	1.04	1.49	1.20	1.43	1.99	4.15
V	9.17	6.92	8.12	8.48	7.53	6.98	7.75	9.45	16.94	12.57
	Raversijde									
N	68	66	65	55	48	49				
Min	9.27	9.99	14.67	11.87	10.45	14.30				
Max	13.29	13.07	22.18	23.23	15.06	24.69				
Mean	10.40	11.00	17.59	13.67	13.53	21.19				
StDEV	0.71	0.62	1.27	1.52	0.89	1.58				
V	6.79	5.67	7.20	11.14	6.56	7.46				
	Ename									
N	67	65	70	57	57	60	17	11	9	12
Min	8.73	9.19	10.53	10.96	11.08	17.05	13.19	13.46	10.02	26.97
Max	17.65	12.08	17.92	14.94	16.66	23.17	17.74	18.04	14.30	40.47
Mean	9.97	10.35	15.83	12.50	12.92	20.17	15.08	14.95	11.69	31.57
StDEV	1.45	0.56	1.50	0.71	0.94	1.25	1.28	1.63	1.57	4.06
V	14.53	5.41	9.46	5.67	7.29	6.18	8.49	10.91	13.43	12.85
	Veurne									
N	93	88	90	50	43	46	11	7	5	7
Min	8.66	9.13	12.65	10.95	11.58	17.56	12.66	12.70	8.92	26.01
Max	35.91	36.95	43.44	38.93	39.29	47.08	18.60	18.58	15.11	43.53
Mean	11.02	12.07	17.70	14.19	14.14	21.47	15.97	16.55	12.16	35.00
StDEV	5.18	5.96	5.45	6.16	5.54	5.37	2.28	2.23	2.63	7.30
V	47.00	49.39	30.80	43.45	39.20	24.99	14.29	13.45	21.60	20.85
	Koekelare									
	M1AW	M1PW	M1L	M2AW	M2PW	M2L	M3AW	M3MW	M3PW	M3L
N	8	8	8	4	4	4	4	1	1	2
Min	9.2	9.01	14.7	12.20	11.36	17.26	12.99	15.2	11.8	33.12
Max	10.85	14.12	17.5	14.80	14.58	22.11	16.12	15.2	11.8	33.03
Mean	10.18	10.57	16.29	13.00	12.97	19.69	15.3	15.2	11.8	33.1
StDEV	0.56	0.61	1.23	0.84	0.91	1.19	1.12			2.79
V	5.54	5.77	7.54	6.43	6.99	6.06	7.32	N/A	N/A	8.44

Figure 4.18. Table of summary statistics for tooth measurements from pigs at the six Belgian sites taken as part of this study.

These measurements demonstrate that for both Raversijde and Koekelare variation appears relatively low, and around the norm of that of the other Belgian sites. However, it is also apparent that Veurne has a distinctively high coefficient of variation.

From a comparison of the mean average of the tooth measurements from the six sites it is evident that pigs from Raversijde have larger teeth for the first and second molars, something also noticed in the earlier (Ervynck et al., 2007) study (see Figure 4.15). Unfortunately, due to the young nature of the jaws it was impossible to determine whether this pattern was likely to continue for the third molar. For the third molar, Veurne has demonstrably larger morphometry, both in breadth and width, with length in particular being significantly greater than for the other sites. The third molar sees the greatest spread of results, with a range of over 5 mm in average molar length from the largest site (Veurne) to the smallest site (Londerzeel). This clearly reflects the nature of the sites, with Veurne probably seeing the inclusion of wild, and thus larger, animals, Londerzeel seeing the presence of only relatively small domesticated specimens, and Ename seeing a greater size spread. This is especially evident when examining the third molar measurements only (see Figure 4.17). It is important to note that some jaws from Veurne were also observed to have the 'wild' form of third molar (with additional cusp), again providing evidence of there being a mix of wild and domestic forms in the pig population at this site.

It is important to compare the molar widths, as molar lengths are more problematic in interpretation due to potential size modification later in life. This may be particularly useful to consider when interpreting Londerzeel, which has trends to relatively small tooth measurements but has an older age profile (See Chapter 3) in comparison to the other sites. However, Londerzeel trends smallest in all third molar measurements, not just length. It is difficult, however, to interpret the sizes of the teeth from examining such raw figures and they are perhaps best reproduced in graphical form for examination, to see how different the patterns really are, and ensuring that we do not over-interpret the statistics.

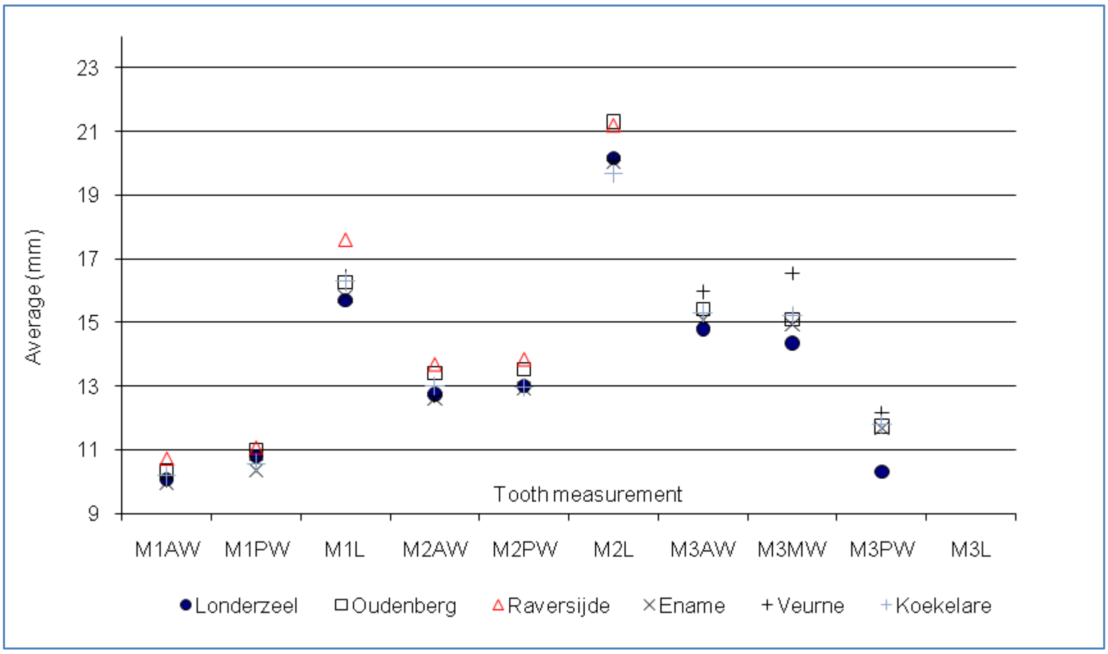


Figure 4.19. The average (mm) for tooth measurements of various teeth, for the six Belgian sites examined in this study.

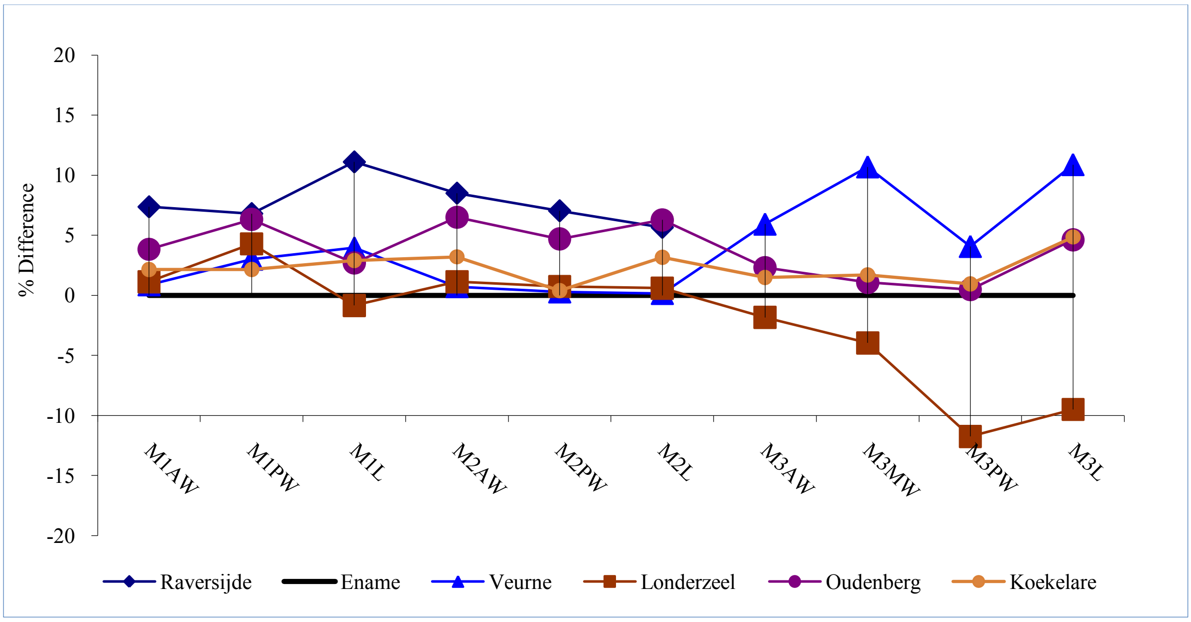


Figure 4. 20 The percentage difference of the pig teeth measurements, using Ename as the comparative.

From this graphical analysis (Figures 4.19 and 4.20) it is apparent that, while Londerzeel does trend 'small', this is particularly notable for the third molar (both in widths and length) and reflects the pattern emerging in the Ervnyck et al. (2007) study for the third molar. For the first and second molar measurements this pattern is not obvious, the sites all cluster relatively close together- within at most two or three millimetres (for the lengths) and even smaller differences for the widths. If we discount the M3 measurements, Londerzeel is only smallest for the M1 length, and this difference is relatively negligible. Ename, Londerzeel and Veurne exhibit similar trends to each other, and Raversijde is the least ‘typical’ site. Often Ename is marginally the smallest in measurements (on the M1AW, M1 PW, M2AW, M2PW, M2L).

Raversijde clearly has the largest first and second molars (Figure 4.20), both in width and length, but a lack of data precludes us from interpreting whether this pattern would continue for the third molar. Oudenberg, a site with similar conditions although of a much earlier date, also plots relatively large for the first and second molars but at a more ‘usual’ size for the third molar. This is contrary to patterns observed elsewhere (for example Bond and O’Connor, 1999:391) which show that greater dental attrition caused by more abrasive soil (as would be expected from the sandy conditions) may produce smaller tooth measurements. However, perhaps the most significant pattern is that Koekelare, despite its larger postcranial measurements (see previous sections of this chapter) is plotting relatively similarly to the other Belgian sites in terms of its tooth measurements.

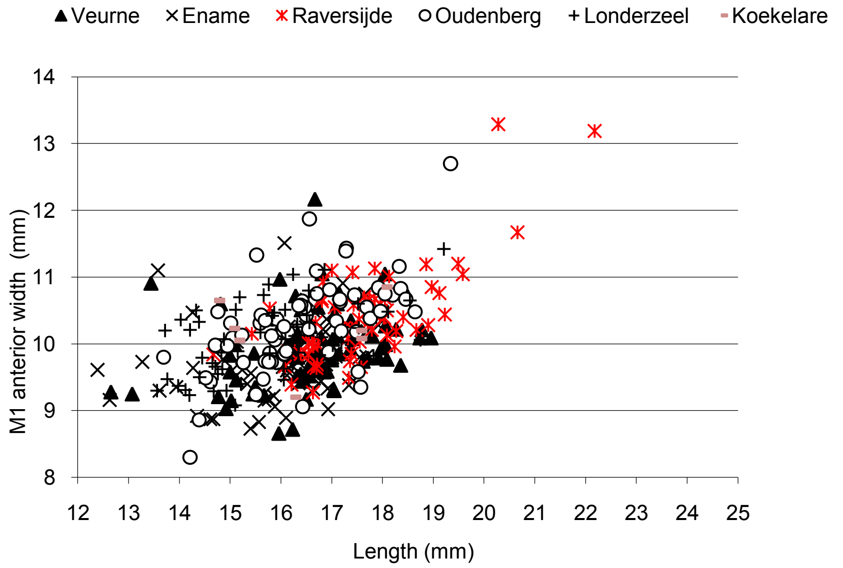
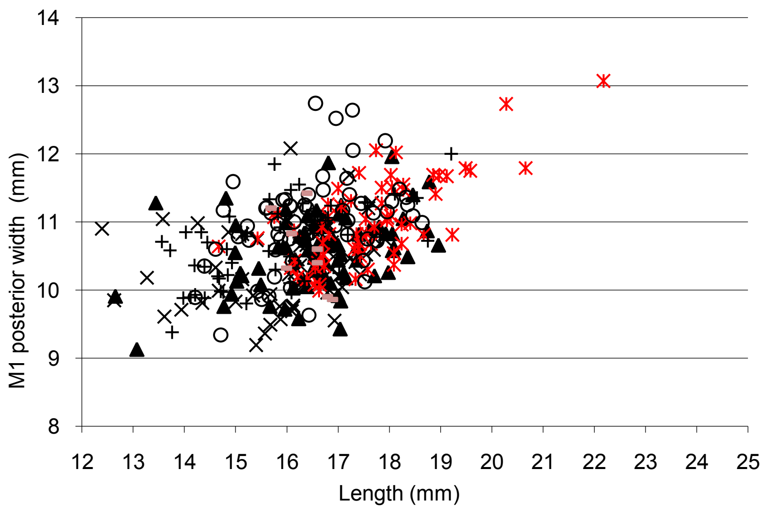
<table>
<tr><th>Graph</th><th>Graph showing the measurements of the first molar for pig jaws at the six Belgian sites.</th></tr>
<tr><td>M1 length against anterior pillar (pillar 1) width</td><td>
</td></tr>
<tr><td>M1 length against posterior pillar (pillar 2) width</td><td>
</td></tr>
</table>

Figure 4. 21 The tooth dimensions of the first mandibular molar per site, for pig

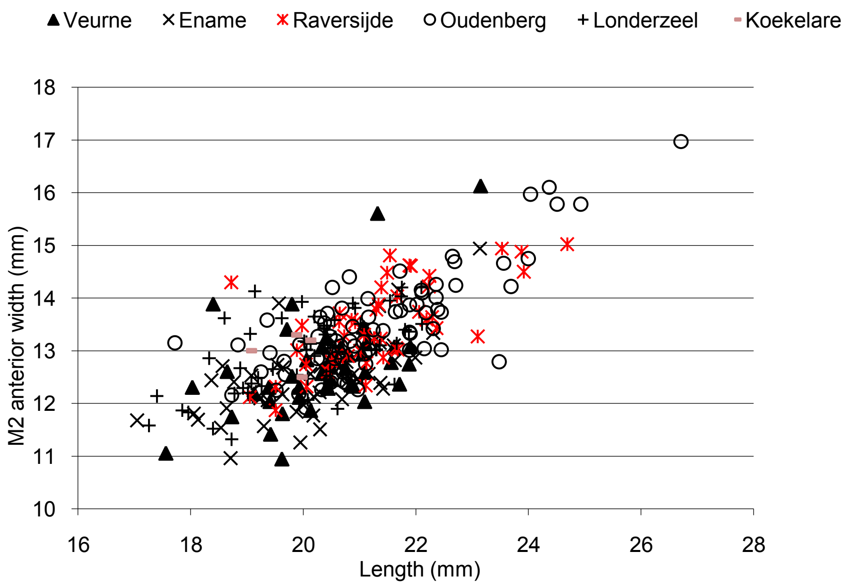
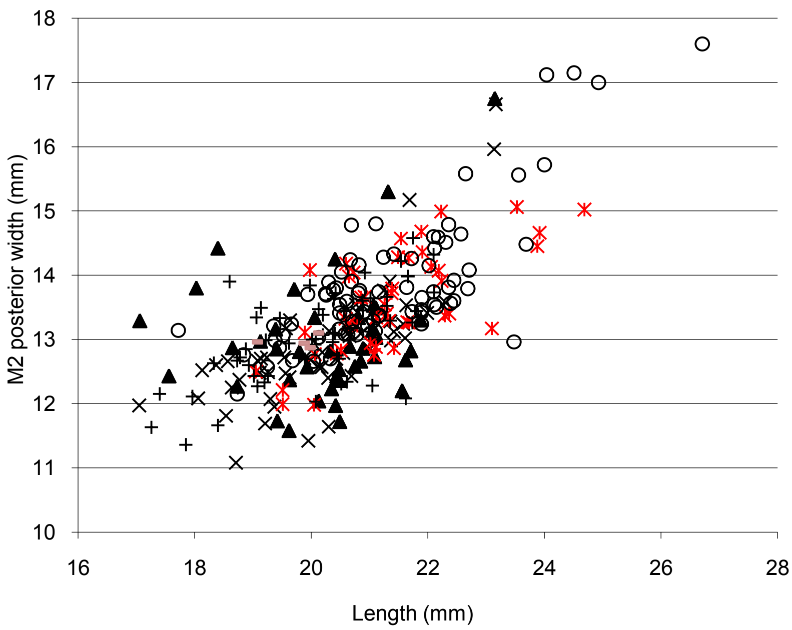
Graph	***Graph showing the measurements of the second molar for pig jaws at the six Belgian sites.***
M2 length against anterior pillar (pillar 1) width	
M2 length against posterior pillar (pillar 2) width	

Figure 4.22 The tooth dimensions of the second mandibular molar per site, for pig

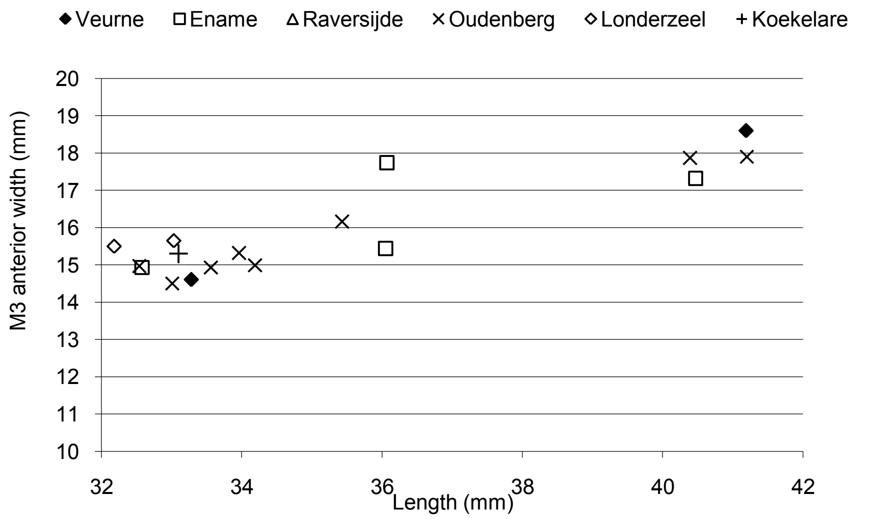
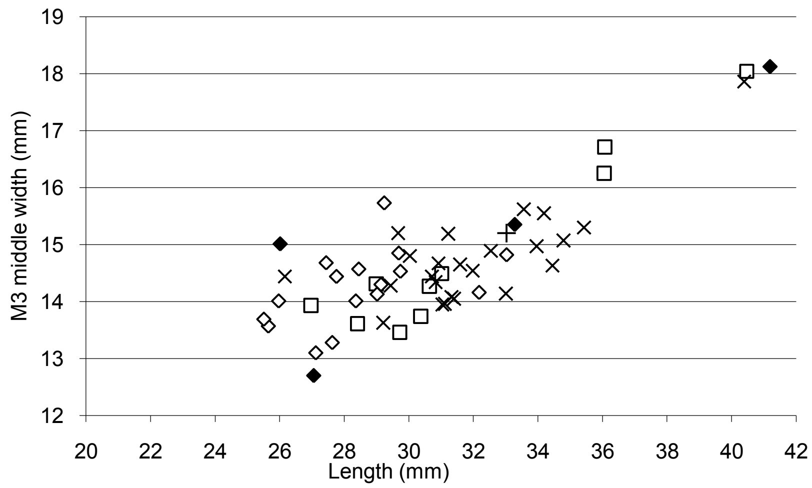
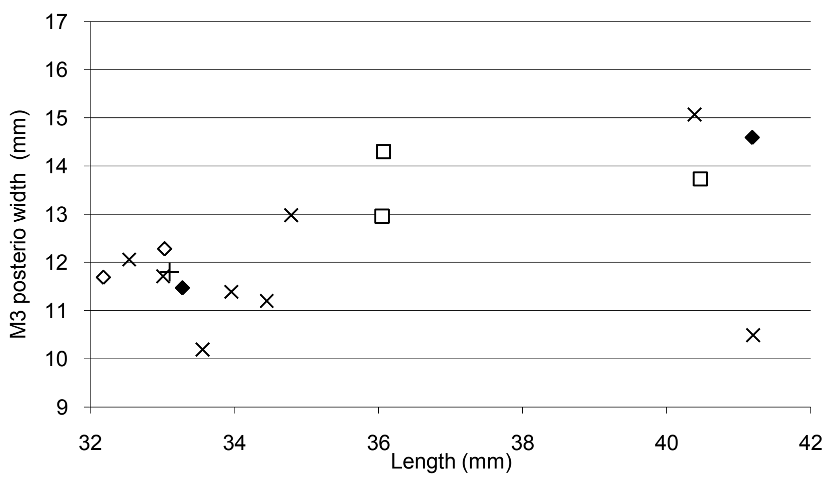
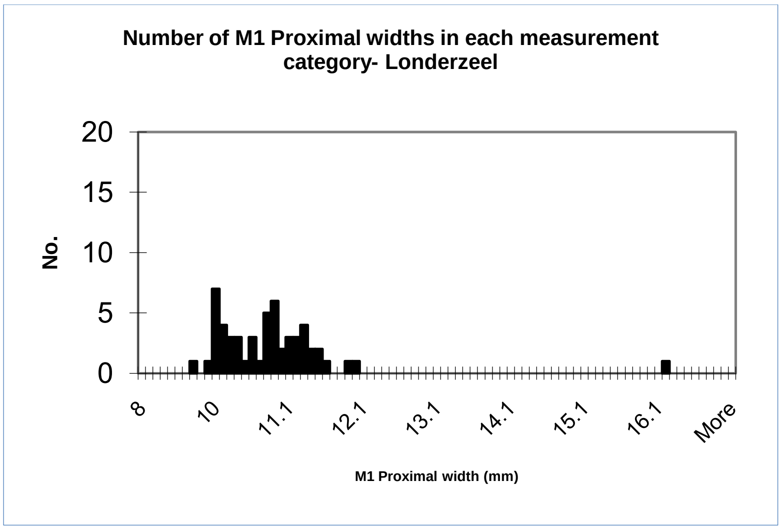
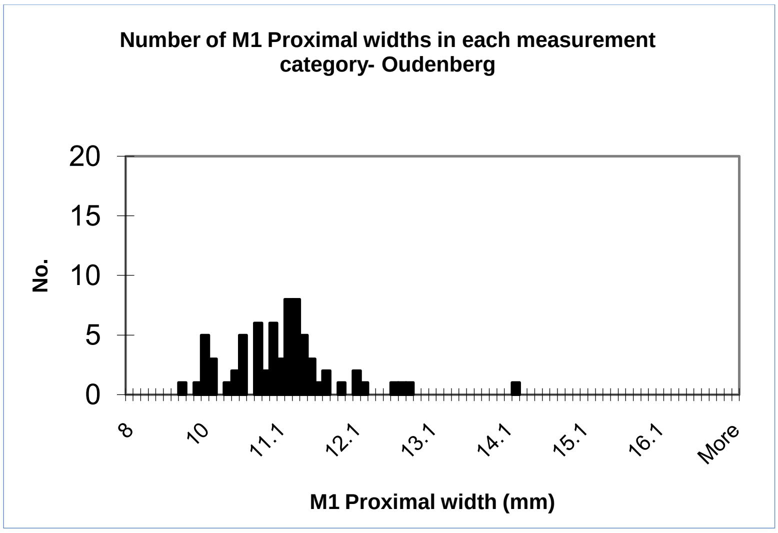
Graph	***Graph showing the measurements of the third molar for pig jaws at the six Belgian sites.***
M3 length against anterior pillar (pillar 1) width	
M3 length against middle pillar (pillar 2) width	
M3 length against posterior pillar (pillar 3) width	

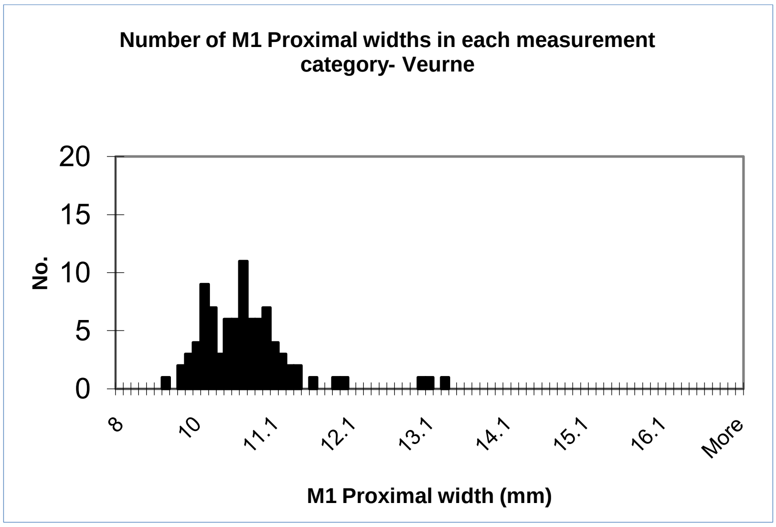
Figure 4.23 The tooth dimensions of the first mandibular molar per site, for pig

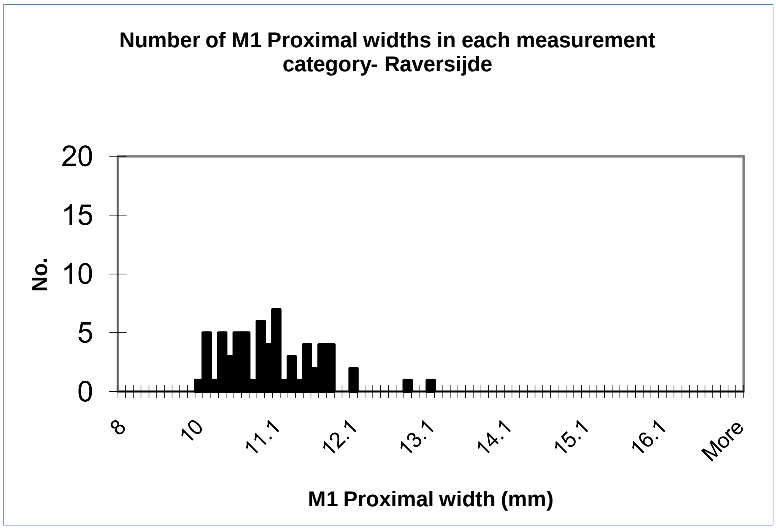
A study of the raw data presented as scatter plots (Figures 4.21-4.23) demonstrates that for all of the molars, while they generally cluster, there are some larger outliers which may be interpreted as 'wild' because of the level of their separation in size; some of the smaller outliers may however represent large domesticated males or wild-domestic hybrids. Raversijde appears to demonstrate this most clearly for the first molar (Figure 4.21), while Oudenberg also shows some obvious larger outliers for the second molar. It is also apparent for the first and second molars that Raversijde, while often overlapping with the sizes for the other sites, does appear to skew more widely (see Figures 4.21 and 4.22), with the measurements falling in the top third of the spread for the other sites.

For the third molar the pattern is particularly clear for the five sites where third molars were present to be measured. The measurements separate into two groups with a small number of individuals from Oudenberg, Veurne and Ename appearing much larger. It is likely these are indicating the incorporation of wild boar into a measurement group of mostly smaller, domesticated, animals. This confirms the earlier interpretation that there is a modest mix of husbandry types at these sites but domesticated pig predominates. Perhaps surprising is that Veurne does not demonstrate a more even split into two separated groups, considering its greater variation in measurements, but instead appears merely to be seeing a generally larger spread rather than a more even wild/domestic polarisation.




Number of M1 Proximal widths in each measurement category- Oudenberg
No.
20
15
10
5
0
8
10
11.1
12.1
13.1
14.1
15.1
16.1
More
M1 Proximal width (mm)


Number of M1 Proximal widths in each measurement category- Veurne
No.
20
15
10
5
0
8
10
11.1
12.1
13.1
14.1
15.1
16.1
More
M1 Proximal width (mm)


Number of M1 Proximal widths in each measurement category- Raversijde
No.
20
15
10
5
0
8
10
11.1
12.1
13.1
14.1
15.1
16.1
More
M1 Proximal width (mm)

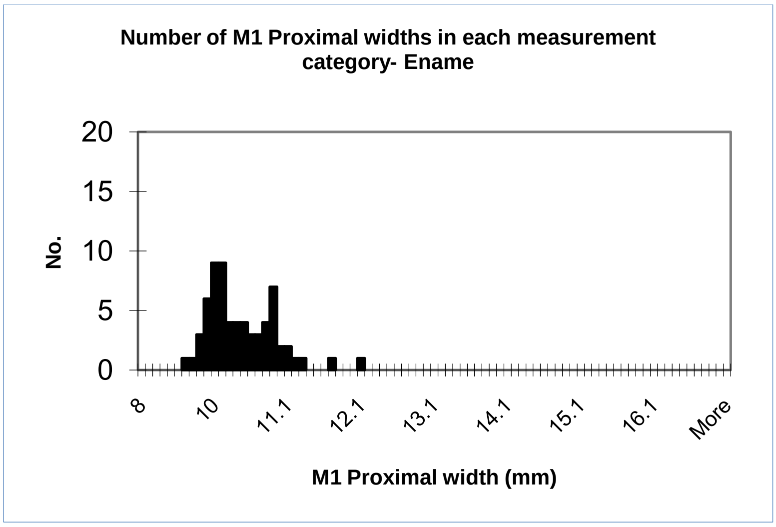


Figure 4.24 Histograms of M1 tooth measurements where outliers can clearly be seen (mm)

A consideration of the histograms of the first molar measurements again demonstrates this limited number of outliers for all of the sites for each measurement type (see Figure 4.24). It is probable these are either large males, wild boar or domesticated-wild hybrids, and an examination of the univariate statistics adds little to the analysis other than demonstrating that for the five sites it appears there is a dominant, single, morphologically smaller population and some larger outliers. This suggests that the main group, because it is smaller, is probably representing a major domestic population in each case. The Koekelare histogram was not reproduced as the small number of samples means it is impossible to interpret.

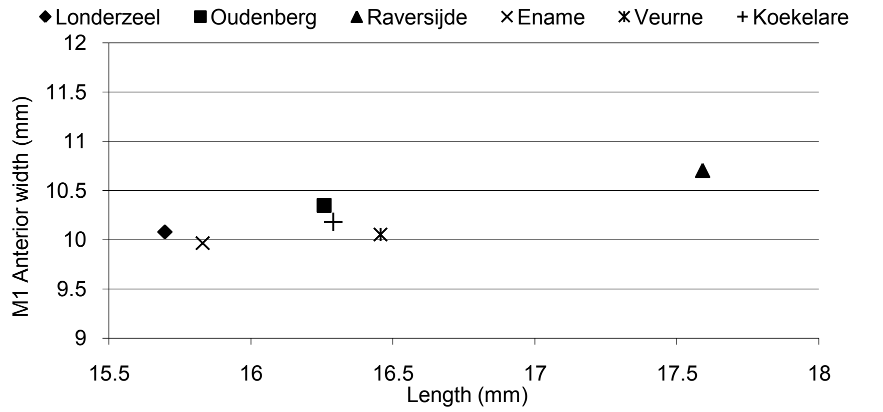
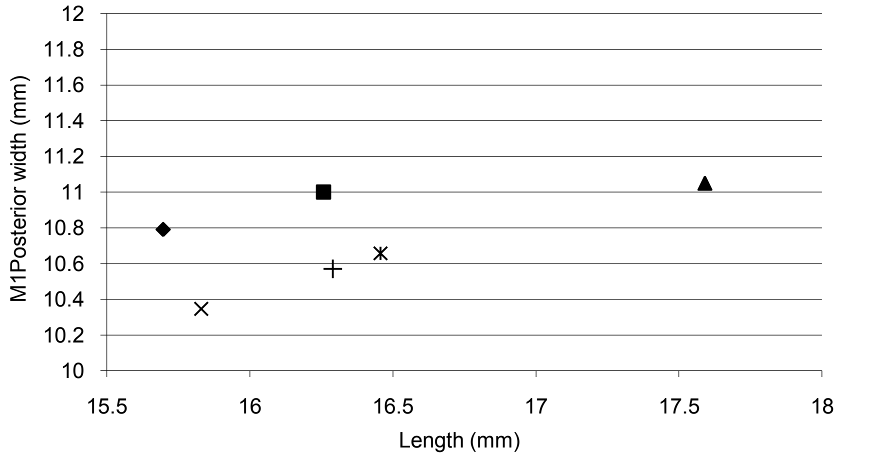
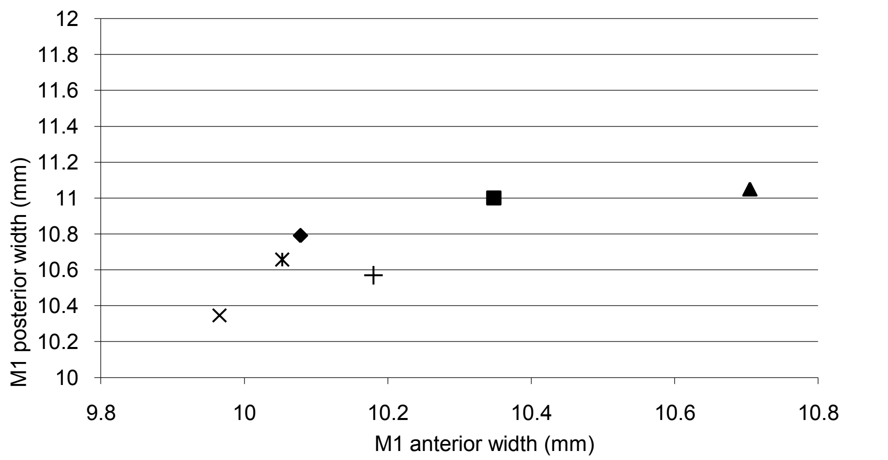
Graph	***Graph showing the average measurements of the first molar for pig jaws at the six Belgian sites.***
M1 length against anterior pillar (pillar 1) width	
M1 length against posterior pillar (pillar 2) width	
M1 anterior pillar (pillar 1) width against posterior pillar (pillar 2) width	

Figure 4.25 Average tooth dimensions of the first mandibular molar per site

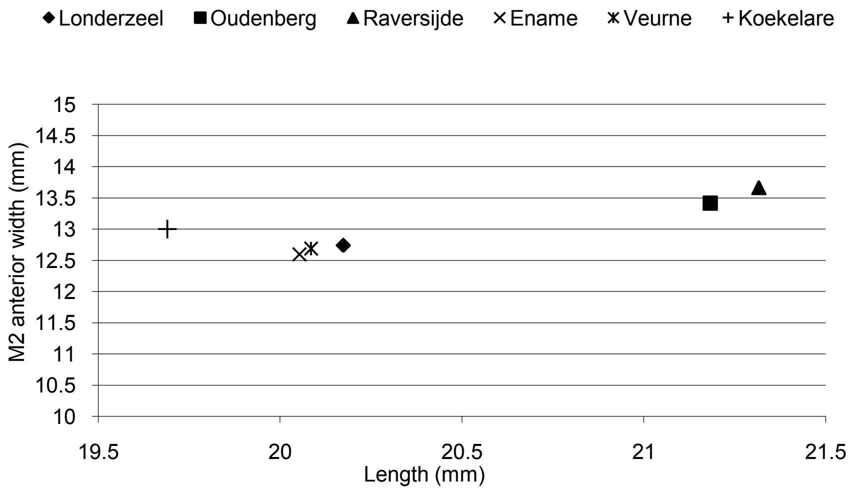
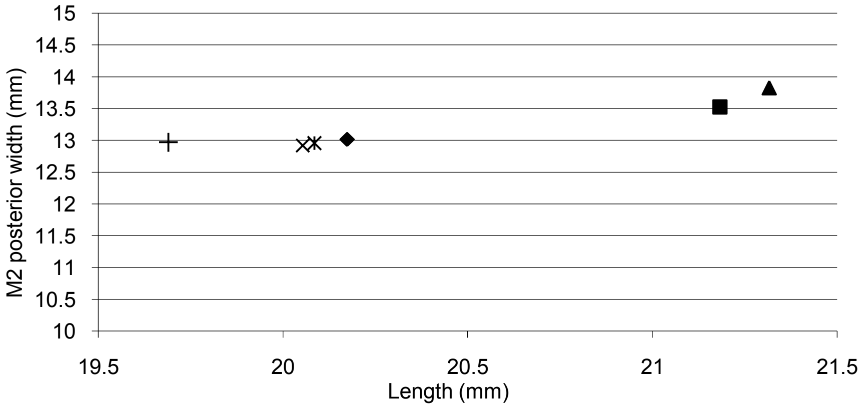
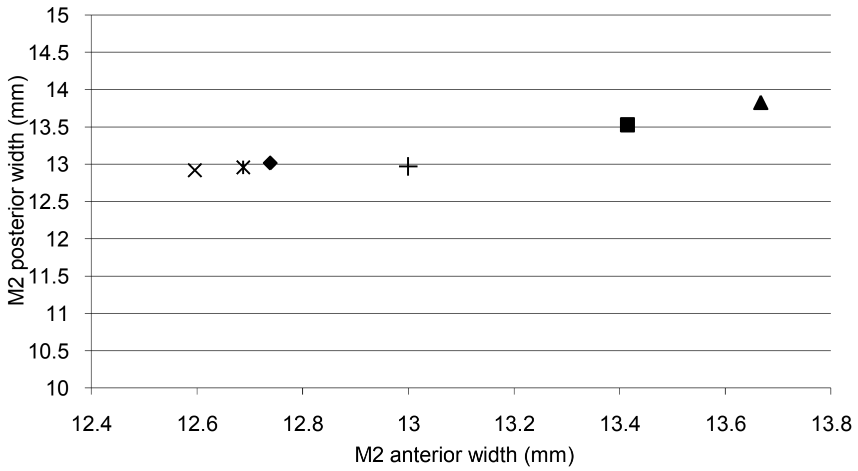
Graph	***Graph showing the average measurements of the second molar for pig jaws at the six Belgian sites.***
M2 length against anterior pillar (pillar 1) width	
M2 length against posterior pillar (pillar 2) width	
M2 anterior pillar (pillar 1) width against posterior pillar (pillar 2) width	

Figure 4.26 Average tooth dimensions of the second mandibular molar per site

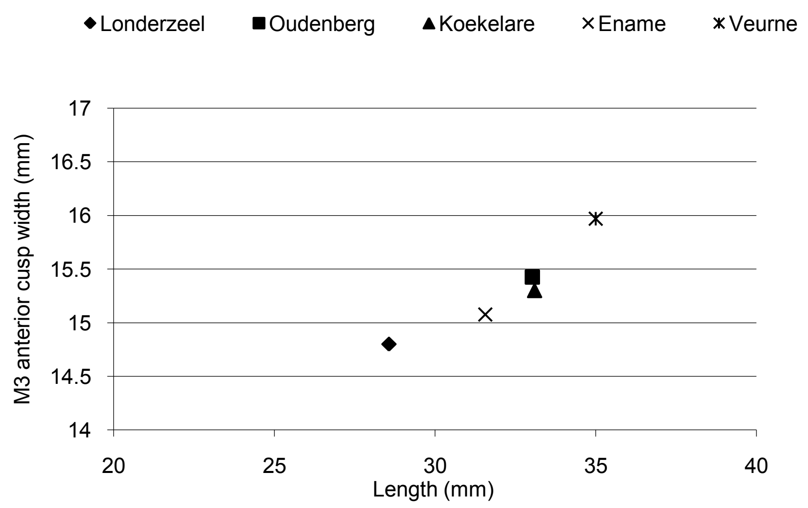
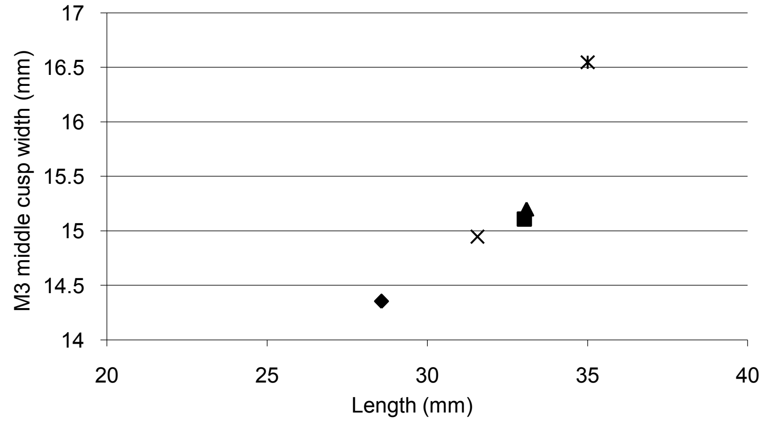
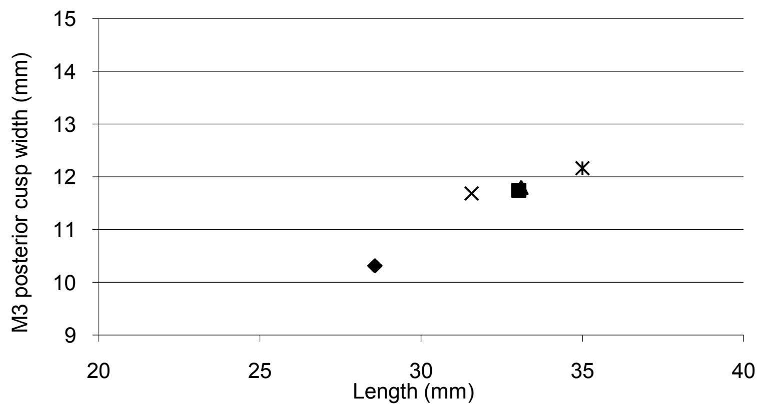
Graph	***Graph showing the average measurements of the third molar for pig jaws at the six Belgian sites.***
M3 length against anterior pillar (pillar 1) width	
M3 length against middle pillar (pillar 2) width	
M3 length against posterior pillar (pillar 3) width	

Figure 4.27 Average tooth dimensions of the third mandibular molar per site

When examining the average measurements of the molars, rather than the scatter plots Raversijde is shown even more clearly to plot separately from, and appear much larger than, the other sites. It is apparent that Koekelare clusters with the other four sites, rather than Raversijde, meaning that despite its larger post-cranial conformation pig teeth are very similar to those of the other medieval Belgian sites. Oudenberg also appears to separate as larger in terms of length, if not width, which is perhaps not surprising considering its earlier date. For the third molar (Figure 4.27) the picture is less clear, although it is obvious that Veurne in particular appears much larger.

- Summary:
    - *Tooth measurements show that, although Raversijde pigs are unlikely to be wild based on tooth morphology and environment, they are also much larger. This supports the Ervynck et al. (2007) findings.*
    - *While the Raversijde tooth measurements for pigs are larger, they often overlap those of the other sites, but their distribution is clearly skewed to a larger size.*
    - *Pigs at Koekelare despite their larger post-cranial elements plot alongside the other Belgian sites, excluding Raversijde, for tooth measurements.*
    - *Pigs at Veurne have a high variation in tooth measurements, particularly in M3 length. This suggests the assemblage incorporates a significant number of both wild and domestic specimens.*
    - *Pigs at Londerzeel in particular have a small third molar, and this is supported by a particularly small jaw depth (see Section 4.6.).*

4.6. Depth of Jaw

An examination of the averages for the jaws (see Figure 4.28) also reflects other variations in morphology between the different sites. For Oudenberg the width of the jaw above the M3 is much larger on average than for the other sites (on this figure, trendlines are not used to suggest trends between the measurements, but for visual ease in determining any differences between the jaws). This suggests the existence in the Oudenberg assemblage of some very robust jaws when mature, perhaps indicating the presence of wild boar or larger males. However this is not supported by the data from the dental measurements (see Section 4.6 above) where Oudenberg plots smaller than Raversijde (whose pigs are almost certainly domesticated) and the tooth morphology at Oudenberg does not suggest a large presence of wild boar, with third molars being of domesticated pig form. The pig jaw widths at Raversijde, Oudenberg and Londerzeel appear somewhat larger than those of Veurne, Ename and Koekelare, although excluding the unusual jaw width above the M3 for Oudenberg it is evident that Raversijde exhibits the larger jaws in all measurements. For Veurne the width below the dp4/P4 is also notably smaller than at the other sites where, for the other sites it plots close to the width between the M1 and M2. The jaw width (in some studies known as the jaw depth) is defined as the distance from the base of the erupted tooth to the bottom of the jaw, as described in Von Den Driesch (1979).

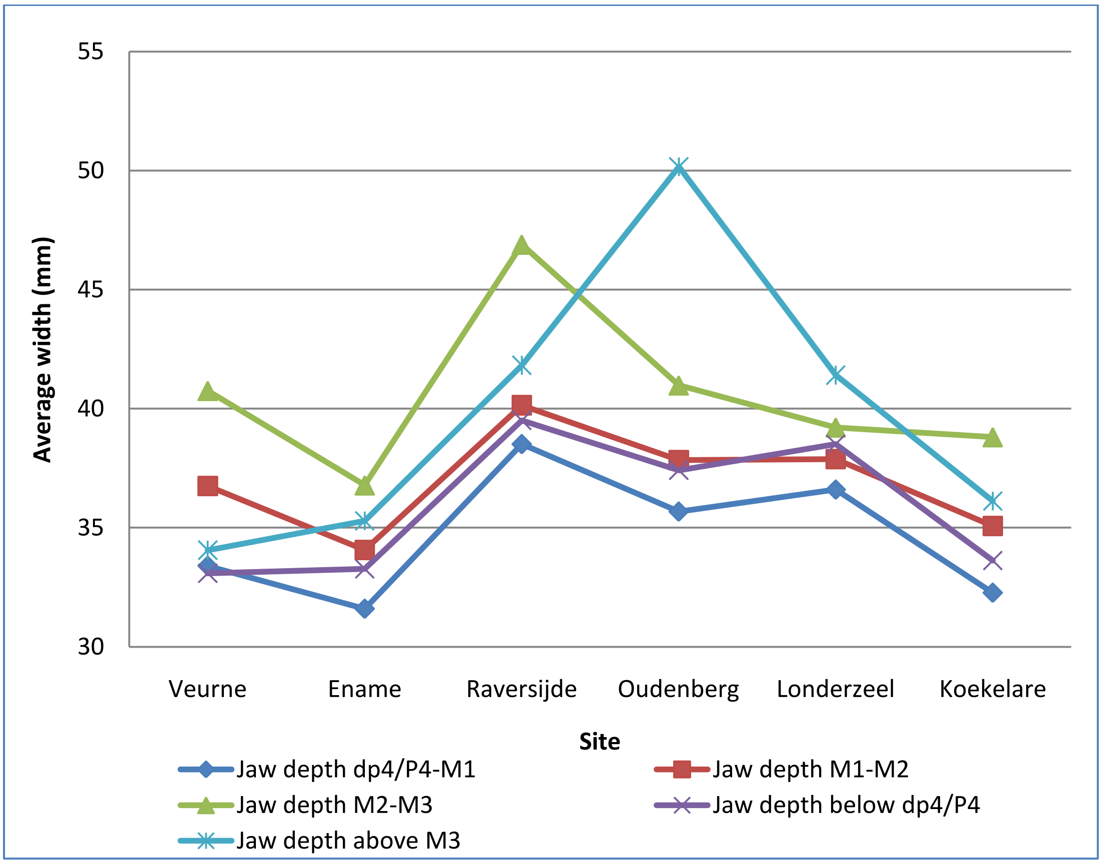


Figure 4.28 Graph showing the average jaw depth for the pigs jaws at the six Belgian sites at various points of the jaw

Perhaps this consideration of jaw width (jaw depth) best serves to illustrate the difficulties of examining measurements when they are known to be associated with a large age range. An examination of the pattern of measurements on erupted teeth and mature postcranial bones can, to some degree, remove this level of uncertainty and allow a more confident interpretation. All that can be confidently determined from this particular measurement is that the greater variation in the jaw widths may be a product of a wide variety of ages and that patterns may, or indeed may not, be due to the age make up of the populations. That pigs at Raversijde have the largest jaws (except in one measurement for Oudenberg) may potentially reflect a better feeding regime if it is assumed that nutrition affects bone growth (Rowley-Conwy, 2008: pers. comm.), but it is difficult to be certain. It is apparent the pigs at Raversijde are getting differing protein in the diet (see Chapter 8), and so with the suggestion of supplemented feeding it is unsurprising that they may be receiving substantially more or better nutrition than the other sites. Pond et al. (1990) demonstrate that an unsuitable or insufficient diet can affect postnatal growth, particularly if insufficient protein is present. Both Raversijde and Londerzeel appear to exhibit food supplementation for pigs (see Chapter 2), and it is possible that the jaw width pattern seen relates to the effects of better nutrition for these sites, both of which are higher. Oudenberg was not included in the isotopic study (details of which are given in Chapter 2), however, and a larger width only above the third molar, this site may be reflecting a different feeding regime, suggesting more nutrition later in life.

This measurement again illustrates the differences between all six of the archaeological sites. It has identified the presence of very robust and large jaws at Oudenberg, and to a lesser degree Londerzeel. It also identifies that, even though we cannot obtain any M3 measurements, Raversijde plots relatively large in the site's jaw width measurements and so pigs there are likely to have had a generally larger jaw morphology, mirroring their postcranial and dental measurements. Koekelare, again appears to demonstrate that in its cranial measurements the pigs plot relatively small, despite their larger post-cranial stature.

- <u>Summary:</u>
    - *Jaws of pigs at Oudenberg are particularly wide above the M3, suggesting a robust jaw. This may be being affected by the age range of the population, but may also be related to better nutrition.*
    - *The pigs of Raversijde are believed to have been having supplementary nutrition (see Chapter 8), and this may be resulting in better nutrition and thus better jaw growth, fitting well with overall generally larger stature. The age range of pigs at Raversijde is particularly young, and so this cannot be used to explain the larger jaw size.*

4.7. Conclusions

If nothing else, this consideration of the biometry of cranial and postcranial pig remains emphasises the fact that one cannot escape variation in any sort of archaeological examination of animal bones. Animal bones can vary in size due to a number of factors, and it is impossible for us to wholly eliminate sources of variation to specifically identify the cause of any patterns. In any measurement the overall pattern and the presence of any striking outliers or deviations was considered. For Raversijde and Koekelare it was identified that both were single populations, with no apparent evidence of major other pig populations as would be expected if they were a significant mix of wild and domestic pig. However, both have outliers, suggesting that one or two wild individuals may be present, something true in varying degrees for all of the sites for tooth measurements. The measurements of both assemblages for post-cranial elements were remarkably similar, and have been shown to fall outside the range of other Belgian faunal assemblages of the time. This was particularly unexpected for Koekelare, which was predicted to be a very 'typical' faunal assemblage. The size difference is especially notable at Raversijde, which had no suitable environment for local wild boar populations, meaning that the population is likely to be of domesticated pigs of particularly large stature rather than wild boar. Intriguingly, it has been determined that while Koekelare is large in terms of postcranial elements, it plots more as would have been anticipated for mandible measurements which were smaller in comparison to Raversijde, suggesting a different morphology. This is corroborated when compared to other Belgian sites using a standard, where Koekelare appears different to them in lower but not upper limbs.

An interesting pattern identified from the biometry is the larger and more robust conformation of the Raversijde pigs compared to those of Koekelare in terms of the skeleton, and similarly is reflected in their teeth in comparison to Koekelare, Oudenberg, Veurne, Ename and Londerzeel. This is curious when considered alongside the evidence of the health and physiological stress of the population (see Chapter 5). It is often traditionally assumed that greater human interference in species leads directly to a size decrease in the skeleton, because of greater stress to animals. For example Herluf Winge identified domestication due to a size difference (in Ervynck et al., 2007:138). However, it is clear zooarchaeologically that the linking of size to stress is more complex than this early understanding. For example, Anezaki (2003) notes an increase in biometrical size before a steady decrease, associated with a shift towards greater human interference. There is certainly no evidence in Raversijde of thwarted growth in the bones, suggesting a suitable level of nutrition has been attained and that any indicators of stress are not due to nutritional factors.

Biometry has highlighted how 'different' Raversijde appears from the more typical Medieval sites in its vicinity at this time even in such traditional methods of assessment, and it has also tested the levels of consistency shown between the other sites. Sites of a similar time period (Veurne, Ename, Londerzeel and Koekelare), and sites at a similar environmental location (Raversijde, Oudenberg) were considered. This comparison suggests that Raversijde displays differences from the others which are not primarily due to environmental variables, or due to the date of the site, but through other factors affecting the skeleton, such as diet and nutrition. The indication is that Raversijde is seeing a particularly good level of nutrition leading to greater skeletal development.

It is important to at least consider this relationship between the larger pig size and the diet of the animals on site at Raversijde, which could vary dramatically from the more traditional pannaged diets seen on other sites. The pattern of seasonal fishing is known from many fishing sites throughout Northern Europe (for example, Van Neer et al. 2004; Enghoff, 1996). If the pigs were consuming large quantities of fish at certain times of the year, as seems likely (see isotopic results in Chapter 2) then perhaps the greater food availability and added protein of the waste products provided a more advantageous diet which increased skeletal size in comparison to the other sites. Reduced fishing due to the severe winter storms of Northern Europe is known to have led to seasonal food shortages (Enghoff, 1996), which may explain the physiological stress indicators seen in the teeth (see Chapter 6), even though, in general, greater food amounts are available. While this remains conjecture it might suggest one explanation for this rather unexpected biometric pattern.

Many of the measurements taken in this study of biometry are not usual for the average animal bone reports. Analysis of phalanges, for example, are rarely attempted due to time constraints and lack of information that they would provide. The decision to incorporate the full gamut of recommended measurements as published in Von Den Driesch (1976), and the patterns identified within some of these more unusual measurements, emphasises the importance of considering whether the discard of some of these measurements is actually valid. If these unusual measurements had not been taken, the patterns identified within this study would not have been seen so clearly. Overall, while some of the evidence from the biometry of both the bones and the teeth is unexpected and in some cases difficult to explain, as Davis (1996:593) notes, the 'measurement of bones and teeth clearly have an important role in zooarchaeology'. As well as providing information about the conformation of the type of pigs (wild or domestic) present in the assemblages, they also provide confirmation of the range of difference that is possible between populations across relatively small geographical distances. It is evident that biometry, as a traditional technique, provides a great deal of information but can also raise a great many questions.

Chapter 5: Cranial and Post-cranial Pathologies

5.1. Pathologies at Raversijde and Koekelare (excluding the pig jaws)

For this chapter on pathology all of the Raversijde and Koekelare faunal assemblages were analysed for evidence of pathology (all species included in this examination), and for the four sites where pig mandibles alone were analysed, these pig mandibles were considered for dental pathologies alongside those pig mandibles of Raversijde and Koekelare.

5.1.1. Introduction

Zooarchaeological analyses of faunal assemblages often look for any evidence of the health of the individual animals when examining the bones and teeth (Baker and Brothwell, 1980; Vann and Thomas, 2006). Such examinations have taken place since the mid 18th century (for example Marsigli, 1726; Esper, 1774) up until the present day, (for example Bartosiewicz, 2008). Traditionally they consider the evidence for any unusual gross morphological changes in the faunal material, aiming to establish an understanding of their causes, such as disease, injury or inheritance (Thomas and Mainland, 2005:1). These are termed ‘pathological changes’, *pathos* meaning suffering (Roberts and Manchester, 2003:1) and are expressed through forms such as abnormal bone formation, bone destruction, abnormal density or changes in size or shape (Ortner, 2003:45). While there has been an attempt to move away from an ‘interesting specimens’ approach in recent years (Thomas and Mainland, 2005; Miklíková and Thomas, 2008) in assemblages of predominantly disarticulated remains this is difficult, with individual bones/teeth being identified and described in site reports but often no further work being carried out. In reality, the study of animal palaeopathology is still very much in its infancy (Chhem and Brothwell, 2007:70, Baker and Brothwell, 1980:1), or as one researcher described it ‘an inchoate discipline pursued by a relatively small number of analysts’ O’Connor (2000:98).

The interpretation of the meanings of any pathological conditions beyond a simple description is always difficult (Dobney et al., 2007:187) as most conditions lack a simple aetiology (Grimm, 2008:50). There has also been far more work undertaken on the understanding of palaeopathology in human rather than animal remains (Mays, 2002:128), leaving the zooarchaeologist at somewhat of a disadvantage. In an assemblage of animal bones the consideration of the presence of any congenital traits or recognisable acquired pathological conditions in teeth and bones can provide information regarding aspects of these animals’ development and their health (Dobney et al., 2007:181). These insights may contribute to our understanding of the use of a species, how they were kept and how they were treated (Grimm, 2008:50, Thomas and Mainland, 2005:1). Equating individual observations to the information they provide about the population in general is particularly complex, especially when pathological examples in the assemblage are relatively low in number. Illnesses are not the only causes of pathological change. Bacterial disease, sudden trauma/injury, specific activities, genetic defects and the context of the wider environment in which the animal is living (space, access to open air, diet) can all have an impact (Mays, 2002:125). For Bartosiwicz (2008) the level of pathological conditions in an assemblage of sheep alongside their small size was a clear indicator of stress from a new environment (Bartosiwicz, 2008:3). It is also important for the zooarchaeologist to remember that animal husbandry is a balance. Through interacting with human groups the overall condition of animals may be improved and food supplemented, but a denser or more restricted population may lead to a greater chance of infection (Baker and Brothwell, 1980:3, Mays, 2002:125,128). It is clear that any interpretation extrapolated from pathological evidence needs to be cautious, a process which will be aided by the use of an explicit methodology (Thomas and Mainland, 2005:5).

Disease is an 'integral and inescapable part of life' (Manchester, 1983:xi) and it is vital to remember that any population will inevitably have a base-line level of disease within it, particularly when a range of ages of animals are present. Therefore, any pathology in isolation is not an indicator that the assemblages are unhealthy. It is also however true that the more animals are stressed, the more disease is prevalent (Baker and Brothwell, 1980:28). This makes pathology in an overall assemblage a worthwhile area to investigate and an area particularly useful for this study. The collation of obvious pathological information is standard within modern faunal studies and has had notable success in providing significant information about populations (Brothwell, 1981:231). For example, in zooarchaeology increased amounts of pathological exostoses on phalanges (Higham et al., 1981) or the unusual broadening of metapodials in cattle (Higham et al., 1981; Bartosiewicz, 1993; Bartosiewicz et al., 1994, 1997; Johannsen, 2005 and Groot, 2005) have been used as an indicator of traction and draught cattle use. Similarly transhumance, stalling, dairying, penning and stock density have all been identified by pathological features in case studies by zooarchaeologists (for example, horse domestication by Levine et al., 2000, Levine, 1979). For pigs in particular, Crabtree (1990) have identified injuries on the distal tibiae as related to the Anglo Saxon practice of tethering for restraint.

If within this study it is possible to identify large amounts of pathology in the faunal remains of sites, such pathology may elucidate particular husbandry practices. However, if one site exhibits a significant degree of difference in the levels of pathology to the others, it may suggest varying levels of stress between the populations, even if the exact interplay of causes, husbandry and environment, cannot be exactly determined. If there are low levels of pathology this may similarly suggest that the animals are being kept in better health or perhaps indicate the removal of unhealthy members of the population before the skeletal remains were affected (Waldron, 2008:10).

5.1.2. Methodology:

Identification of the cause of any pathology is very much reliant upon the analysts' interpretation of what defects may mean with reference to other examples where traits have similarly been exhibited and identified. This is often hampered by the lack of significant zooarchaeological studies examining pathological changes in modern animal populations for comparison (Grimm, 2008:50, Dobney et al., 2007: 185), the low number of instances per site and lack of consistency in recording techniques making comparable published data difficult to find (Thomas and Mainland, 2005:2). Additionally zooarchaeologists often have no consistent training in recognising pathological features (Waldron, 2008:2) and taphonomy may also be a problem (Bartosiewicz, 2008:69). However, as we have seen, this does not mean that such studies are not worth doing.

The identification of any pathology took place during the primary analysis of each specimen from the assemblages, with an individual field in the database to record presence (and description) or absence, to ensure this line of enquiry was not overlooked. Changes were identified based on the shape, appearance and form of the specimen from a visual study for any deviations from the 'norm'. When identified, a description was created of the form, accompanied by sketch diagrams or digital colour photographs (taken on a Canon Powershot A590 IS) to aid later consideration and identify the bone or tooth portion affected (as recommended by Waldron, 2008:21). In this thesis the evidence of any pathology, or unusual appearance to bone or tooth which suggested deviation from usual development, was recorded and described using the nomenclature of Ortner (2003:49-50) to describe location and distribution and to give a descriptive summary of the abnormal features present, in particular whether proliferative or erosive in nature, or both (Waldron, 2008:20). These observations were later examined with reference to relevant literature (in particular Baker and Brothwell, 1980; Luff and Brothwell, 1993, Waldron, 2008) to assist insight into the types of pathology present and what such forms may mean.

No prior judgement of the causes of the pathology was made at the time of its recording and 'diagnosis' of possible aetiology occurred only during the analysis. This ensured that descriptions of the pathologies were unlikely to be influenced by any causal presumption. Inevitably some pathology may have been missed as identification relied on a single researcher's (the author's) examination of the faunal remains. It is impossible for there to be complete confidence that all instances were identified in any assemblage examined by only one observer (Kieser et al., 1990; Harris, 2008:40). However, this is the same for any study by an individual rather than a failing of this study in particular. Additionally, while the faunal assemblages studied were relatively clean (the jaw samples in particular had been substantially cleaned), there was a fine level of dirt and dust covering the material examined in Belgium from both Raversijde and Koekelare (see Figure 5.1) which may have occluded any very subtle pathologies in the collection. It is however felt that good attention was paid to examining each specimen for any pathology in a methodical and thorough fashion and that no major instances will have been missed, and similarly that the bones were generally of good enough condition (see Chapter 2) for identification to be attempted in a methodical way (poor condition of bone remains may make it harder to identify lesions- Waldron, 2008:21). It is believed that this analysis of the frequencies of pathologies may prove informative, as has been determined for other studies of pathology on archaeological bones using similar visual research methods (for example, Grimm, 2008:51).

Figure 5.1. Image of a typical context of faunal remains from Raversijde or Koekelare being examined in Belgium. The fine layer of dirt present is clearly visible on the plastic protective material on the table.

As Johannsen (2005) notes, it is often impossible to identify the early stages of a pathology before the condition has deviated dramatically from the normal range of appearance making these examples almost undetectable. Therefore, the instances of pathologies may have been higher than those actually identified. Similarly it is important to stress that only the bones are available for analysis, the surrounding tissues and cartilage where it is likely the original problem originated have disappeared, and therefore it is only possible to identify examples where the change has been drastic enough to affect the bone, with more subtle pathologies being lost to archaeological examination(Manchester, 1983:21). In cattle, for example, the frequency of tuberculosis causing bone legions is only 10% of all cases of the disease (Mays, 2002:130) and for pigs 30% (Lignereux and Peters, 1999 in Mays, 2002:130).

Linear enamel hypoplasia is a very specific type of pathological dental condition. The study of this pathology requires a more detailed quantitative methodology (following the protocol of Dobney and Ervynck (1998)) as it may provide more information due to its specific nature than a generalised examination can yield. The analysis of this pathology is dealt with in a separate chapter (see Chapter 6) as an in-depth study. It is important to emphasise that while it is not contained within this chapter on more general 'pathologies' this does not mean there was no evidence.

5.1.3. The Analysis

Overall, there are very few instances of pathology in the bones from Raversijde and Koekelare. Pathologies are present in 3 of the 3571 post-cranial bones examined from Raversijde (0.08%), and 5 of the 1565 examined from Koekelare (0.32%). These figures are unsurprising for sites where domestic animal species are killed at relatively young ages as often pathologies develop as animals age. The two medieval sites of Emden and Hedeby-Harbour for example have 0.08% and 0.2% of bones with clear pathological changes respectively (Grimm, 2008).

For the post cranial material there was no evidence of pathology on any species other than the three main domesticates (cattle, sheep/goat and pig). For example, no evidence of pathology was found on the horse or dog remains. However there were very limited numbers of remains from other than the three main domesticate groups (see Chapter 3 for details) and so it is likely that this is a reflection of the very small numbers of bones.

5.1.3.1. Sheep/Goat

For sheep/goat there was only one instance of pathology. This took the form of eburnation inside the right acetabulum of the pelvis in a specimen from Raversijde (Raversijde context 97 RAV 358). Eburnation appears as a 'shiny' patch on the articular surface and occurs when the cartilage covering the bones in a joint wears away and bone rubs on bone (Grimm, 2008:50). This is often a condition associated with age-related osteoarthritis (Hamilton-Dyer, 2010, Waldron, 2008:33), or repeated over-rotation of the hip (Grimm, 2008:51) and is likely here to show the presence of a relatively old individual. The exact aetiology is unknown but in individuals of increasing age it is increasingly likely that the joints may be affected. Osteoarthritis is multifactorial in origin and age, genetics, sex, race, trauma and movement can all be factors in its cause (Waldron, 2008:28).

There were no instances of pathology on any of the sheep/goat remains from Koekelare. This means that in reality it is impossible to conclude much more than that there is probably evidence of one instance of an age-related disease. It would certainly be unwise to use one specimen to extrapolate to the entire population, although it does suggest that animals were not slaughtered immediately upon encountering problems such as lameness. There was no evidence of any pathological changes of joints in the sheep such as arthropies of the proximal radius/distal humerus which may suggest penning ('penning elbow') (Siegel, 1976), caused by rough handling or confinement of these species. This absence is not however definitive proof that these animal were not penned, but no indications that they were penned is demonstrated by the pathologies of the bone material.

5.1.3.2. Cattle

The cattle from both Raversijde and Koekelare exhibit instances of pathological changes on their bones. The majority of the bone fragments, however, produced no evidence of pathology, possibly implying that the majority of the animals were slaughtered in good health, although it is important to remember that many diseases do not affect bone (Bard, 1999:730). Most examples of pathology are evidence of degenerative joint disease with only one example suggestive of an injury (the example from Raversijde). This is, as anticipated as for most European domestic sites, expected and that joint diseases would be the most prevalent pathology, followed by dental defects, such as enamel hypoplasia, and trauma.

From Raversijde there was one instance of pathology on a cattle bone (context Bot 2, 4470). This was on the proximal epiphysis and shaft of a fused radius/ulna, with the pathology concentrating around the radius/ulna proximal joint, where an arthropathy (disease of the joint) with a moderate amount of secondary bone growth around the joint had formed. The bone growth is relatively moderate and would not have resulted in complete bone fusion. This pathology has in the past been commonly termed ‘penning elbow’ when exhibited in specimens from sheep (for example, Dobney et al., 2007:185), and is seen as indicative of damage caused by some type of trauma to the elbow joint (potentially dislocation, an external blow or a severe strain), which may have occurred during rough handling or confinement of the animals, and potentially in severe cases elbow dysplasia. Again, with only one example of this type of injury, it would be injudicious to conclude that at Raversijde the cattle were being penned as it may have been caused by an isolated injury resulting in dislocation. Indeed any attributed causes are somewhat speculative (Dobney et al., 2007:185) and further studies are needed before we can determine that confinement was the probable cause of these pathologies.

From Koekelare there were five instances of pathology on cattle bones. These specimens were a naviculo-cuboid bone (from context KO 95 A.1.010), a third phalanx (10/32 Koekelare A III 199 INV 007 Zak 7), a jaw (Koekelare gracht handvers) and two metapodials: a metatarsal (KO 125/A/001/3 OK) and a metacarpal (KO 95/A/III/008/5/OK). There were no instances of trauma.

The naviculo-cuboid exhibited modification of the bone on the distal articular surface with bone growth, pitting and grooving, creating an unusual articulation. This has been identified (Grimm, 2008:52; Daugnora and Thomas, 2005) as suggestive of spavin (chronic osteoarthritis), a result of excessive compression of the joint, where over time the cartilage in the joint becomes compressed, erodes and causes new bone growth which eventually results in fusion (Baker, 1984). The degree of development of the defect is not sufficiently advanced in this example to suggest complete fusion of the joint and stiffness was probably not advanced. However, spavin is painful in the early stages (Grimm, 2008:52) and it is possible that the animal was slaughtered for this reason. Spavin is now recognised to not be solely related to traction as was traditionally seen as the cause (Baker, 1984:253). Von Den Driesch (1976), for example, suggests that spavin also occurs in animals with little exercise and Bartosiewicz et al. (1997) have also demonstrated that spavin was not exclusively related to use of animals for traction. At Koekelare, hypothesised to be a cattle breeding centre, it is unlikely that the cattle were being used for traction and so we are possibly either seeing an older individual’s presence or evidence of the close confinement of the cattle due to the large numbers on a relatively small site. This conclusion is supported by the fact that there are no other indications of traction use from the bones, for example evidence of splayed medial condyles on metapodials (Dobney et al., 1996:39, Albarella and Davis, 1994:27).

Two metapodials (one metacarpal, one metatarsal) both exhibited very similar changes caused by arthropathy on the proximal surface, again diagnostic of possible chronic osteoarthritis. Neither of these examples saw pitting and grooving in the articular surface, but solely osteophytes around the articular surface, and so it is likely that the arthritis is at a relatively early stage (Waldron, 2008:34). This may suggest slaughtering due to the painful condition, before it had progressed too far. This is perhaps not surprising where the main focus of the site is meat as there is little sense in keeping an animal, unless for breeding purposes, when it is losing condition and it is unlikely that the animals would have been strong enough to travel any distance on the hoof to market, particularly where they may have been rejected or realised only a low price (Maltby, 1979:40).

A third phalanx presented evidence of the degenerative joint condition *Osteochondritis Dissecans* (OCD) within the joint surface of the proximal articulation. This took the form of a relatively small lesion, probably the result of the herniation of joint cartilage through the articular surface of the bone due to improper calcification (Lovell, 1997:140). Again the cause of such lesions is not fully understood by zooarchaeologists but it is believed that they are the result of sudden trauma or stress to the joint (Milgram, 1978; Lovell, 1997:140) of either a macro or micro nature (Waldron, 2008:154), although others have also tentatively identified a possible link to nutritional deficiency (Gibson, 2010; Aldred, 1998). It would have been relatively painful, possibly causing stiffness of the joint (Waldron, 2008:154). It is possible the animal was again killed due to being lame and therefore unable to travel to market, or because of deteriorating conditions- in modern animals this condition has led to reduced meat yield (Frantz et al., 2006:142) and has been found in other archaeological examples, for example at Danebury (an Iron Age site in Hampshire, England) (Brothwell, 1995:219).

One cattle jaw presented a malocclusion, with the right hand third molar coming through misplaced and at a 45^{o} angle to its normal position (possible evidence of overcrowding of the teeth). Dental defects are often identified as a condition which may arise from poor nutrition (Maltby, 1979:40,54). Periodontal disease (disease affecting the gum and bone which support the teeth) was also observed in this specimen from Koekelare, under the second and third molars. There was no evidence of dental defects in cattle jaws from Raversijde, although this may be a factor of the very small sample sizes rather than a complete absence. With only one instance of dental defects at Koekelare, it is not possible to conjecture whether poor nutrition was or was not a systemic problem for the population as this individual may have been prevented from eating or obtaining the correct nutrition because of some individual problem. The fact that there are 60 jaws displaying no signs of dental defect suggests that nutrition was overall relatively good for cattle and alongside the lack of disease within the remains suggests a good level of health in the population, although again with such small samples it is ill-advised to read too much into the data.

It is interesting that, with the exception of the jaw, all the instances of pathology come from lower leg elements. The incidence of conditions which may have caused lameness or stiffness of the joint perhaps reflects natural injuries, potentially caused by confinement in an area of unsuitable size or crowding, and it is possible these individuals were killed because of their injuries, although again it is important not to infer too much from such small sample numbers.

It is also important to emphasise that, although there are a greater number of instances from Koekelare (five in comparison to one from Raversijde), this does not necessarily represent poorer health or conditions for the Koekelare cattle. The sample of cattle is much smaller from Raversijde than Koekelare (see Chapter 3) and so the frequency of pathology is in reality little different at Koekelare compared to at Raversijde.

5.1.3.3. Pigs:

There are no instances of any pathological changes on any of the post-cranial pig material examined from Koekelare. There is only one instance of pathology at Raversijde, a second phalanx (context 97 RAV 318) which exhibited a very small amount of bone growth around the proximal articular joint surface, perhaps suggesting some trauma to this joint. The jaws of the pigs from Raversijde and Koekelare are examined later in this chapter for pathology, alongside the jaws of four other sites.

Common pig problems suggestive of housing include forms of inflammation such as osteomyelitis, an infection of the bone or bone marrow. Modern evidence suggests that these are a result of abrasions and occur in a relatively high number of housed pigs due to unsuitable living conditions, and where present implies that pigs have been fattened for at least part of their life indoors (Baker, 1984:256). The absence of any evidence of these, however, does not necessarily preclude this form of husbandry keeping from these sites, but merely does not provide any supportive evidence that stalling or housing is occurring.

5.1.4. Conclusion from Raversijde and Koekelare post-cranial material

Overall, from the analysis of the primary material of these two sites there was no evidence from any species of clear signs of healed trauma, such as broken or fractured bones, through either natural healing or with outside help, as has been identified on some archaeological bones from similar periods elsewhere (for example a sheep metatarsal from Ghent, which displayed indications of having healed due to human intervention (Udrescu and Van Neer, 2005:30)). Degenerative conditions were relatively rare in the populations examined, probably because most of the animals had not attained an elderly age. There were only a few instances of degenerative joint disease, with the greatest concentration being in the cattle of Koekelare. It is difficult to read too much into such a scarce number of examples of pathology and, beyond suggestions of potential slaughter due to painful conditions, there is little further that can be concluded.

Most of the bones showed no pathological conditions. This may suggest that the animals were relatively healthy when slaughtered, although it must be remembered that many conditions will leave no mark on the bones and so cannot be identified (Bard, 1999:730). For this study with its particular focus on health in the populations it is of particular interest that the pigs at Raversijde and Koekelare were evidently not suffering or exhibiting pathologies on their post-cranial skeletons. Indeed, the signatures of malnutrition, summarised broadly as osteoporosis, bone deformation and lesions (Davies, 2002:86), are simply not present.

- *<u>Summary:</u> Levels of pathologies on post-cranial bones at both Raversijde and Koekelare are low for all three major domesticates. There is no evidence of particularly high frequencies of disease or injury at either of the sites, just a limited number of individual cases.*

5.2 Pathologies of the Pig mandibles

5.2.1. Introduction

An area of pathology often mentioned in passing in zooarchaeological reports but rarely examined except anecdotally is that of the abnormalities of jaws, both of the dental arcade and the alveolar bone of the mandible. Teeth provide unique contact with the external environment and so, of all the skeleton, the teeth and jaws have the best potential for reconstructing details about health and nutrition (Levitan, 1985:41). Often this area is seen as too complex to interpret as pathologies have no single clear cause (Davies, 2002:87) and are also extremely difficult to classify. Although some research has been carried out into the causes and prevalence of dental defects, beyond specific types of hypoplasias such as linear enamel hypoplasia for other species (such as Murray and Shaw, 1979), there are few general accounts of such pathologies for pigs (Davies, 2002:80, Levitan, 1985:41). Site reports often mention that dental disease is a common abnormality found in animal bone remains and may even touch upon the types of disease observed and include descriptions of such specimens 'with some jaws displaying overcrowding and occasionally the crooked setting ot [sic] the cheek teeth' (Maltby, 1979:59). Often, however, any abnormalities are simply described broad terms such as 'poor planes of nutrition', and little further analysis or investigation into their cause takes place, even when it is acknowledged that they may reflect the diet and nutrition of domesticated livestock in the past (Davies, 2002:80). This is alongside evidence of other factors entering the body via the mouth, such as toxins, parasites etc. which may complicate the picture (Levitan, 1985:41).

Oral defects are linked to those affecting the rest of the skeleton, with any deficiency condition being as likely to affect alveolar bone as any other part of the skeleton. Indeed, mandibular bone survives well in the archaeological record (Ortner, 2003:64), which makes it a particularly valuable resource. Teeth are less sensitive to deficiencies than bone (Luke et al., 1981:304-5) and so a subtle picture can even be built when there is mandible growth retardation but no dental problems. Only in very recent years have there been more focused attempts to quantify the types of dental diseases seen, beyond noting their frequency. Dobney et al. (2007), for example, attempted to examine the frequency of a variety of types of dental problems, although even here the consideration is relatively broad. Levitan (1985) provides a brief introduction of, and forms a basis for, the choice of many of the categories of dental defect which are being examined here.

With such a large collection of jaws available in this study it is pertinent to consider in more depth those features that zooarchaeologists often group simply as 'dental defects' and describe relatively crudely, in addition to specific defects more commonly explored in recent years. One such dental pathology, linear enamel hypoplasia, has been dealt with in a separate chapter (see Chapter 6). A related examination of dental microwear (the detailed pattern of wear exhibited on the tooth surface) may also prove a useful corollary to these studies of pathology to provide information about the varying diets and circumstances of animals between sites and any causal factors (Davies, 2002:81, Baker and Britt, 1984:412). This is examined in Chapter 7. Dental microwear and pathology are closely linked; for example, dental microwear helped identify the cause of unusual levels of periodontal disease from the sheep of North Ronaldsay, Orkney, identifying that the gingival irritation was due to greater ingestion of sand (Baker and Britt, 1984:412). Therefore, it is important to remember that pathological evidence does not exist in a vacuum, and the findings of the data from all these areas of analysis will be later considered together (Chapter 9). For this study, a wider examination than the normal zooarchaeological recording of obvious pathologies is undertaken to consider all forms of evidence from the zooarchaeological remains in a holistic fashion.

The same jaws have been examined for this study as will be included in the examination of linear enamel hypoplasia, geometric morphometrics and dental microwear. The jaws from Raversijde examined as part of the primary analysis of faunal material (undertaken by the author) have been combined with a larger collection of jaws from Raversijde, (selected by Belgian archaeologists from the faunal material for such an analysis), increasing the sample size for this site dramatically and allowing greater statistical analysis to be undertaken. Unfortunately, this was not possible for Koekelare and so the number of jaws for this site being included in the analysis remains small, comprising those that were identified during the primary material study (n=18), and reflecting the paucity of pig remains within the faunal assemblage. Jaws were also provided from the sites of Ename, Veurne, Londerzeel, Oudenberg and Koekelare for inclusion in this study.

5.2.2. Terminology used

To describe the position or direction of 'pathology' within the jaws a descriptive terminology based on Hillson (2005) was used. This included the use of Hillson's suggested shorthand for tooth type (dp4 for deciduous fourth premolar, for example), although this study did not incorporate the super/subscript form suggested to define maxillary and mandibular teeth within the descriptions (Hillson, 2005:12), and because of this there is a focus on the mandible. Notation forms such as ‘T’ for tilting, ‘O’ for overlapping, ‘L’ for lingual and ‘B’ for buccal were employed in the recording of any defects to describe the type quickly but accurately, along with the positional notes such as > meaning ‘towards this side’, when appropriate. For example M1 > B denotes M1 pushed towards the buccal side. The direction of movement was recorded following Hillson’s terminology (see Figure 5.2) specifically for areas or directions within the oral cavity. This differs somewhat from terms used more generally for parts of the skeleton, allowing a more precise description of direction of movement or area of the jaw under discussion. This notation form has been replicated in the tables included in this chapter, for brevity (Figures 5.4 to 5.9).

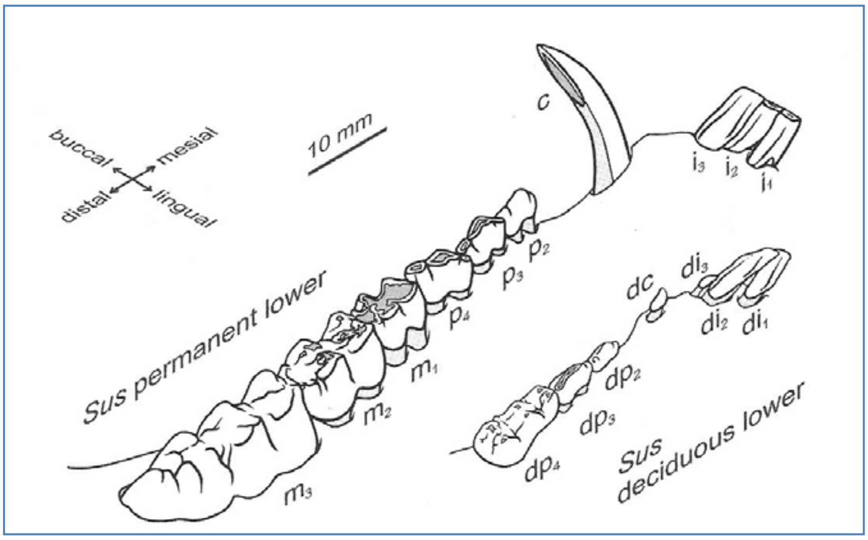


Figure 5.2. *Sus* lower left permanent and deciduous dentitions, illustrating the terminology used to describe teeth and directions within the jaw (Hillson, 2005:129)

When discussing in more detail the particular cusps of the pigs’ teeth, the terminology of comparative anatomy adapted by Hillson (2005:15) from Henry Fairfield Osborn (1907) is used (see Figure 5.3 for an illustration of their labelling on a ‘hypothetical’ tooth). These are terms now almost universally used when labelling of cusps is required in zooarchaeological studies (Hillson, 2002, 2005; Weiss, 1990), allowing the effective labelling of not only the cusps but also the folds between them, and allowing this study to be easily related to other examinations.

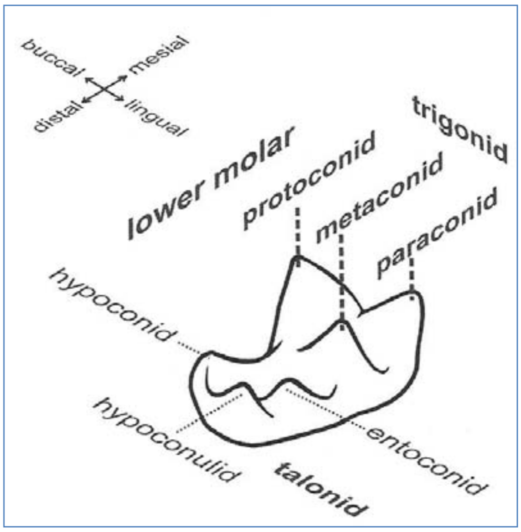


Figure 5.3. A hypothetical tooth, illustrating the terms used for the various cusps (Hillson, 2005:14).

5.2.3. Types of 'Dental defect'

Five categories of defect were defined in order to consider the various frequencies of 'types' of dental defect in more detail, and to determine whether such frequencies vary between populations as well as what they may mean: tooth alignment, unusual wear, plaque/calculus, ante-mortem tooth loss and any other defect which didn't fit into these first four categories. These categories were an attempt to split the usual dental defects identified on zooarchaeological teeth into logical 'type' groups, albeit as we will see ones which are often related and interconnected. While Levitan (1985) was used as a basis for the choice of many of these forms of defect, there is one notable exclusion in this study. Abnormal discolouration of the teeth is not considered because of the problems due to the possibility of artificial post-deposition pigmentation.

5.2.3.1. Tooth alignment

The deviation of teeth from their expected position in their jaw is known as malocclusion, defined as 'the incorrect positioning of one or more teeth within the jaws' (Brothwell, 1991:27). Salter (1874) views dental malocclusion in mammals as often linked to domestication (in Brothwell, 1991:27) and this is a view still commonly held today (for example, Johnson and Porter, 2006; Okuda et al., 2007, Hillson, 2005:284), supported by evidence from highly bred varieties of dog, like the Pekinese, which exhibit extreme examples of malocclusion in their jaw (Brothwell, 1991:29). There are a large number of much milder variants, often linked to jaw shortenings, in other breeds of domesticated dogs (Coley in Brothwell, 1991:29). Similarly, as far back as Darwin (1868), limited pig snout growth caused by poor development is identified as leading to dental malocclusion. Antemortem loss or absence of teeth (also examined within this study) may also cause tooth malalignments (Aitchison and Spence, 1984:292). Such malalignments have been described, albeit rarely, in previous zooarchaeological reports. For example Fabiš et al. (2008:68) identify cases of rotation and atypical wear among pig jaws.

As well as domestic breeds having higher frequencies than their wild counterparts, many aspects of occlusion can vary within a domesticated species as malocclusion is also related to the forces applied to the jaw; environment therefore also has a substantial role (Hillson, 2005:15). For this study, it is this variation which is particularly of interest, as the jaws come almost entirely from domesticated pigs (see Chapter 4 for discussion). Overcrowding is a particular type of malocclusion which is often ascribed to poor nutrition (Maltby 1979:54). With pigs, for example, there have been a series of experiments examining the effects of malnourishment on the dental arcade. Tonge and McCance (1973) determined that a calorie deficient diet retarded the growth of the jaw bone but did not affect the overall growth of teeth. This led to overcrowding, displacement and malocclusion of the teeth in the pigs (Tonge and McCance, 1973:1) which caused a poor bite with the upper occlusal surface. Luke et al (1981:304-5) similarly identified abnormal crowding, displacement and rotation in continually malnourished pigs. Where the pigs were subjected to only a discrete period of malnutrition, the mandible bone grew later to a normal size (only 4% smaller than the average after rehabilitation and within 'normal' variation of tooth jaws) (Luke et al., 1981). This later jaw growth did not, however, correct misalignments created during the period of malnutrition, regardless of the greater amount of space in the dental arcade (Luke et al., 1981:304-5). This was similarly noted by Tonge and McCance, even when the pigs had received good nourishment for several years after the period of malnutrition (Tonge and McCance, 1973:12). McCance et al. (1961) also noted malocclusions in undernourished pigs where there were no other abnormalities in tooth formation beyond a small delay in the time of tooth development; teeth grew to the same size as in fully nourished pigs (with the exception of the third molar, where crown size was a little reduced (28% on average)) and so tooth size cannot be seen as a factor directly demonstrating nutrition. It is clear these more subtle differences need to be investigated further as indicators of poor nutrition.

Nutrition also affects tooth alignment once teeth are erupted. Tooth looseness, leading to the abnormal alignment of incisor and cheek teeth, has been identified as closely related to the occurrence of periodontal disease and probably caused by it, which is itself particularly affected by diet and nutrition (Davies, 2002:82; Rudge, 1970:265). New Zealand goats on a phosphorous deficient diet had problems of periodontal disease and unequal wear, which led to other abnormalities of dental alignment (Rudge, 1970).

Instances of tooth crowding, visible through teeth overlapping, tipping, rotating or being displaced, may therefore provide an insight into a new line of investigation for the zooarchaeologist, with frequency potentially varying between sites for different conditions. In this study, the intention is not only to note the gross presence of such features, but also to consider the prevalence of the types of malocclusion, something not previously studied. Both minor examples (considered as within the 'normal' range of variation for a jaw) and major (considered as extreme differences to the normal arrangement of teeth in the jaw) are recorded, to consider not only dramatic deviations from the expected but also subtle changes. Only teeth are recorded, rather than tooth sockets, following the recommendations of Brothwell (1991).

In this study the types of alignment deviation has been split into a number of specific categories to examine whether there are any variations between different sites:

> Rotation of the tooth: Classified as where the antero-distal alignment diverged from that of the tooth row, i.e. where the tooth was rotated out of normal alignment, even though its overall positioning in the tooth row may have been normal. Where the mesial end of the tooth was further to the lingual side of the jaw than expected, this was termed 'lingual to buccal' (notated as (l/b) in the tables produced) and, similarly, when the mesial end of the tooth was further to the buccal side of the jaw this was termed 'buccal to lingual' (b/l). When recording any instances during the primary examination of the mandibles this was written as (for example) M1 (l/b).
>
> While tooth rotation is an area not often examined in zooarchaeology, there have been a limited number of studies seeking to quantify positional abnormalities in tooth rows, albeit with no generally accepted methods of recording (Brothwell, 1991:34). Colyer and Sprawson (1953), for example, suggest a complex methodology of classifying abnormalities to determine the cause, which they conclude was relatively unsuccessful as often the cause of the localised malocclusion remains unknown. Brothwell (1991:31) similarly investigates the implementation of a complex technique to record the angles of tooth rotation. However, even here there is no generally accepted method of recording such

differences, which causes problems when analysing the results. For this study a simpler methodology of describing rotation was used, merely recording its presence rather than attempting to measure the exact angle of rotation. This is intended to provide a relevant level of information without being so complex that it cannot be implemented elsewhere.

Tipping: This term was used for another form of crowding of the tooth row, where the z-axis of the tooth was not perpendicular but instead the tooth was tipped to the side (lingual or buccal) or front or back (mesial or distal), in some cases with the exposure of roots on the side the tooth was tipping away from. This was notated as (for example), M1 T B, meaning that the first molar was tilted towards the buccal side of the jaw.

Overlapping: Classified as another form of crowding, as it is believed (Rowley-Conwy, 2010: pers. comm.) that rotation, displacement, tipping and overlapping are all different manifestations of overcrowding of the tooth row. Overlapping was identified in this study where teeth are crowded together so that they overlap each other. This was notated as (for example) M1-M2 O, meaning that the M1 and M2 overlap. This is differentiated from displacement due to this *overlap* of teeth at their interface.

Diastema: Where there was a notable gap (diastema) between teeth in the tooth row this was recorded. This was notated as (for example) M1-M2 Gap, meaning that there was a notable diastema between the first and second molars.

Displacement: Where the whole tooth may still be in expected alignment with the tooth row, but the entire tooth is displaced out of the line of the row where it would normally fall. This is notated as (for example) M1 > B, meaning that the M1 was displaced to the buccal side of the tooth row (see Figure 5.11 for an example).

Minor alignment differences are likely to be part of natural variation between individuals, and it is rare for any tooth row to be perfectly aligned as each individual has a slightly different conformation (Osborne, 1967:943). It is important to also remember that a tooth may experience more than one locational fault, for example being rotated *and* tipped. Examples have been denoted in the records (Table 5.5 to 5.10) as minor (within the bounds of normal variation) by the placement of the symbol % next to their description, and major differences signified by *. Minor differences represent examples of a rotation of less than 45 degrees from the 'ideal', minor displacement (only a small amount out of the 'ideal' tooth row alignment), small amounts of tipping (less than 10 degrees from the 'ideal'), and small gaps. Such subtle differences have still been recorded in this study to see whether patterns are visible within such minor changes, which are normally put down to natural individual variation. The 'major' alignment differences, such as displacement of the tooth, major rotation or clear crowding, will be considered separately from these as it is recognised that only these manifestations can be stated to represent 'true' dental defects. Therefore two different levels of severity of defect have been recorded in the data within this category.

5.2.3.2. Instances of unusual wear of the teeth:

Within any population there will be examples of unusual or extreme wear of teeth, often attributed to a poor 'bite' (or alignment of the occlusal surface) between the mandible and the maxilla. Pigs are omnivorous (Hillson, 2005:128) with molars containing broad occlusal surfaces which naturally wear down rapidly. A consideration of the frequency of such instances of unusual wear, and the variation between sites, may reveal subtle differences which are rarely considered. The wear of the teeth is known to sometimes, although not always, affect the occurrence of periodontal disease (Davies, 2002:81) which can itself affect malocclusion. Notes were taken on instances of odd wear describing its position, whether, for example, it concentrated only on one cusp or covered the whole tooth, if there was any direction to the wear (was it sloping in a particular direction), and any other details deemed necessary. Extreme wear, whether too much or too little, was anything judged to be different from the 'expected'. For this study this was taken to be when the teeth did not fall within the limits expressed by the Grant Wear Stages (1982) overall ageing for that jaw. Unusual wear may be caused by the type of grazing or fodder available, the substrate on which the grazing is found, the presence of hard minerals within soil/fodder, and stock density (Miles and Grigson, 1990: 491-2). A study of feral pigs in California noticed a far greater number of cases of periodontal disease than normal, attributing this to their diet of twigs and acorns causing irritation (Miles and Grigson, 1990), and so it is clear that diet can affect jaws in a number of ways. However, as Luke et al. (1981) state, extreme wear due to malpositioning may also occur because of poor nutrition. Differences between sites, particularly when considered alongside the evidence gained from microwear, may provide greater understanding of exactly how the jaws vary, and possible explanations.

5.2.3.3. Calculus

Dental calculus, (or 'calcified tartar' or plaque) on teeth is rarely studied the in archaeological literature. It is found in a wide variety of mammals (Dobney and Brothwell, 1986:55), although its presence in pigs in particular has been little studied. Often for faunal remains its presence is mentioned incidentally, if at all (Lieverse, 1999:225). The creation of calculus is linked to diet, as fermentable carbohydrates in the diet are converted to tartar by the enzymes of flora naturally existing within the mouth and the salivary glands, and when tartar is mineralised it may be identified from archaeological specimens as it adheres to the teeth as a relatively hard deposit (Waldron, 2008:240; Lieverse, 1999:219). Calculus survives well in the archaeological environment although it may potentially be lost through over-zealous cleaning (Dobney and Brothwell, 1986:56), and its presence is often linked to caries as the plaque bacteria ferments sugars in the diet, causing caries.

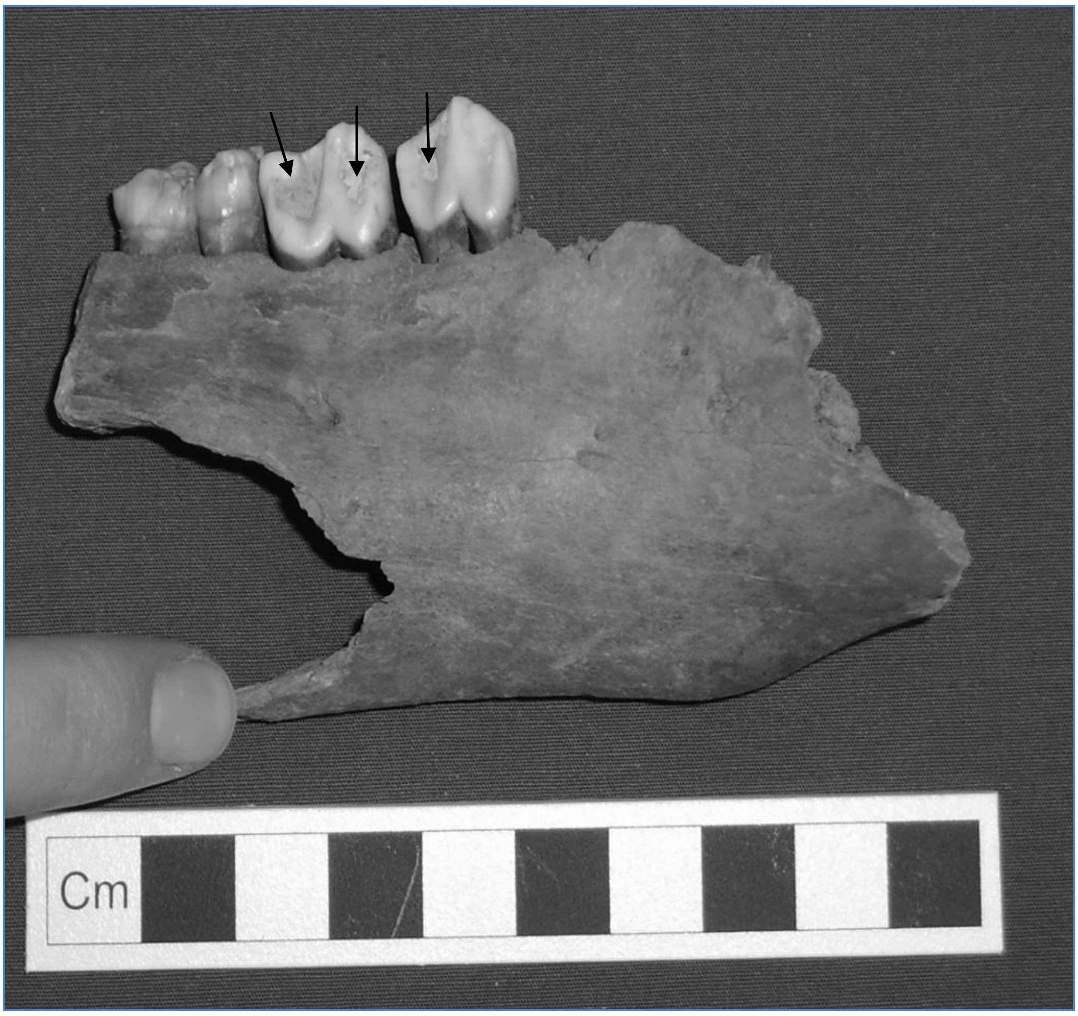


Figure 5.4. Calculus preserved on Raversijde jaw premolars

Factors affecting the build up of tartar include the food consumed, for example in rats calculus was more prevalent on diets of high carbohydrates (Baer and White, 1966) as well as other factors of the oral environment such as irritation to the gum by fibrous food fragments or periodontal disease (Jubb et al.1993 in Davies, 2002:81) and the soil substrate. The pH of the mouth may also affect the build-up of calculus as the more alkaline the environment the more likely mineralization will occur and therefore preservation (Lieverse, 1999:219). In humans this often means plaque is more prevalent on the lingual side of the dental arcade as this is the most alkaline area of the mouth (Waldron, 2008:241) and is close to the salivary glands (Lieverse, 1999:220). Similar patterns have been identified on sheep (Levitan, 1985:58) although the predisposition to the lingual side is less clear and the calculus can equally be exhibited on premolars and molars for this species. Tartar build-up may cause gum tissue irritation and eventually chronic inflammation and infection, and if it gets too severe alveolar bone may even be affected and begin to be reabsorbed (Baker and Brothwell, 1980:153, Davies, 2002:81), causing other oral problems, such as caries. There is however some discussion about whether calculus is really causing periodontal disease or only exacerbating its presence by becoming a bacterial reservoir (Levitan, 1985:46). Any instances of tartar surviving were identified and recorded. The tooth on which it occurred was recorded (for example M1), and where the tartar was only observed on one side this was also noted (for example M1 L was used to denote tartar on the M1, lingual side only).

5.2.3.4. 'Other'

This category consisted of any other examples of differences from the norm and particularly included were any instances of:

> Pathology on the mandible bone itself, any unusual enamel defects (other than linear enamel hypoplasia), as well as any other identifiable features which did not fit into any of the other three categories. Periodontal disease is an inflammatory condition that begins as gingivitis and as we have seen is sometimes caused by the development of plaque (Davies, 2002:81). At its most serious periodontal disease can cause the loss of alveolar bone and areas of thinner bone, and these alongside tooth loss may be a sign of periodontal disease. Formation of new bone may also be indicative of periodontal disease (Waldron, 2008:240). While this is less known to affect pigs (studies have shown that it is present in sheep and cattle), the signs of periodontal disease such as recession of alveolar bone around tooth roots may suggest the presence of a fairly severe case of this problem (Baker and Brothwell, 1980:81). Any instances of pathology were recorded, based on visual observations, with a description of these notable features of the teeth or jaw provided, detailing

location and type. This means that only the most severe forms of dental abscess will be recognised, as it is difficult to identify small abscesses unless radiographs are used to examine the interior of the mandible bone (Levitan, 1985:45). However, for this study, the identification of severe abscesses of the alveolus will at least allow us to determine severe cases of this problem at a level where they would have affected the individual.

Caries (Carious lesions). The causes of these are multifactorial (Waldron, 2008:237) although they need a combination of plaque and fermentable carbohydrates which creates an acid environment. This demineralises the tooth tissues, and leads to the formation of caries, which appear as cavities with rough, jagged edges (Davies, 2002:83). For example, prehistoric Hawaiian poi dogs have been identified to have been fattened on a starch rich diet, these feeding practices creating numerous caries (Miles and Grigson, 1990:479). It is not, therefore, unusual to study in archaeology, although more commonly studies are based on human dental remains (for example Hillson, 2001; Lukacs and Largaespada, 2006, and Mays, 1998). Boars fed on a sucrose rich diet suffer from caries, in particular on the first molar as this will have been exposed for a longer time to the diet than other molars which erupt later (Miles and Grigson, 1990:480). However, caries prevalence is not an area often examined for pigs and it is not thought to commonly occur with a natural diet. Wild animals in unsuitable conditions are thought more likely to have caries (Davies, 2002:82) and, where there are other defects in the enamel (such as hypoplasia, thinness and poor mineralisation), the chance of carious lesions developing is more likely (Davies, 2002:82) as the teeth are inherently weaker. This is therefore an important avenue to investigate whether the diet of the pigs at the sites was of a type to induce caries.

Poor enamel. Episodes of stress from poor nutrition or pathology during development may interrupt the normal growth of tooth enamel and bone (Dobney and Ervynck, 2000:597, Jubb et al., 1993:139). Other factors may also have an impact, including diet, disease and climate if they are severe enough to affect the individual's development (Bogin, 1999). This may show as pits which are often smooth edged (Davies, 2002:83), furrows (including linear enamel hypoplasia) or large areas of missing enamel (Waldron, 2008:244), which may even affect the whole tooth, known as ameologenisis imperfecta (Hillson, 2005:169). The occurrence of a low number of instances of these examples of poor enamel are not considered an unusual feature of teeth from archaeological assemblages (Hillson, 2005:168-9). The jaws were examined for hypoplastic defects using the Federation Dentaire Internationale (FDI) Developmental Defects of Enamel Index (1982, 1992) criteria and Clarkson and Mullane (1989) modifications for reference. However, for this study, identification of their presence was descriptive because of problems of broken teeth and soil occluding the use of such an index, as it was intended to be used on complete mandibles. These features are recorded in a different way to furrows (linear enamel hypoplasia) because they cannot be linked chronologically in quite the same way (Hillson, 2005:174).

5.2.3.5. Ante-mortem tooth loss or non-development

It is important to identify any instances of antemortem tooth loss. Tooth loss may be caused by trauma (to tooth or to jaw), impaired jaw growth (Johnson, 2006) extraction, caries/abscess or periodontal disease, and can in severe cases even lead to starvation (Davies, 2002:81). In humans, nutritional deficiencies such as scurvy have also been identified as a possible factor (Waldron, 2008:238). In some cases the tooth may never have developed, something which is particularly associated with nutritional or hormonal deficiencies or neoplasms (Brothwell, 1991:28, Andrews and Noddle, 1975). Antemortem tooth loss can be recognised by the regrowth of bone where the original gap has been lessened by tooth movement and the sockets show evidence of remodelling (Davies, 2002:82, Waldron, 2008:239). Where there is also a recession of alveolar bone, periodontal disease may be implicated as a cause of the tooth loss, although interpretation must be cautious. The loss of a tooth, as well as indicating possible problems for the individual, may also lead to tooth misalignment (Aitchison and Spence, 1984) and so is important to quantify in order to consider it as a factor. It is similarly important to remember that often the loss of molars is more likely to be recorded as the anterior part of the jaw is preferentially more likely to be damaged or lost (Davis,2002:82).

5.2.4. Other notation used in the tables:

'NTP' signifies No Tooth Present for examination. This did not preclude the examination of bone morphology of the jaw, or alignment where root holes were visible. Similarly, 'N/A' signifies 'not applicable' and is used in instances of a single tooth, unseated in the mandible. It is impossible to determine alignment information, but information can still be gathered about Wear and Tartar presence (and 'Other' changes on the tooth, if not the bone associated). This is used to reference such teeth within the recording.

'-' in teeth listed- where a dash ('–')is used, all teeth between the two designated are involved. For example P4-M3, means the teeth P4, M1, M2, M3 are involved, unless otherwise stated

5.2.5. Tables summarising tooth problems identified, in notation form

For each jaw examined a record was created of any instances of pathology, as described above. These tables are produced below, (Figures 5.5-5.10), and represent the raw data of the analysis.

Veurne			
Alignment	*Wear*	*Tartar*	*Other*
% M1>B %O: P4, M1, M2	M1-M2 unusually worn	-	Bone recession on the jaw under M2 pillar 2, on buccal side; and M2 pillar 1 on both sides of the jaw.
*M1 and M2> B *O:P4-M1, overlapping *M1-M2 misalignment, not good fit.	M1-M2 where meet a large amount of wear. Due to alignment problem causing poor fit with Maxilla?	-	-
%P4 L/B	-	-	Bone growth on the jaw at the base of the P4, buccal side.
%M1>B % M1 TL %P4 L/B	-	P2-4	-
-	-	-	-
-	-	-	Bone 'lip' produced on jaw under P3-M2, buccal side.
-	M1 protoconid, extreme wear sloping towards buccal. Due to misalignment with Maxilla?	P3-4 B	M2 Enamel formation problems.
%P3>L	-	-	-
-	P3 and P4 Extreme Sloping wear towards Distal	-	P4 and M1 Enamel formation problems
%dP3>L	-	-	-
%M2>L	M1 lingual top of roots worn	P2-3 B	-
-	-	-	-
%P3-P4 O %P4>B	-	P3-4 B	-
-	M2 hypoconulid wear sloping towards distal, very worn.	-	-
-	M2, Sloping wear towards lingual side- into roots	-	-
-	-	P2-4	M2 buccal side Enamel formation problems P3-P4 large number of hypoplasias
-	dP3-4	-	dP4 large number of hypoplasias
-	-	-	-
-	M1 Wear sloping towards buccal	-	-
%dP3>L	-	-	-
%dP4>B	-	-	-
*P3 L/B	-	-	-
%P3-4 O %P4>B	M1 Wear sloping towards buccal	P2-3 L	-
-	-	P3-4 B	-
*M1>L	-	-	-
-	-	-	-
-	M1 Pillar 1 buccal side unusually worn	-	dP4 roots have many holes in them
%M2>L	-	-	-
-	dP4 Cusp 2 Very worn	-	-
-	-	-	-
%M2>L	-	-	-
-	-	-	-
-	-	-	-

-	-	-	-
%dP3>L	dP4 very variable wear across tooth	-	-
-	-	-	-
-	-	-	-
-	dP4 roots are polished at top	-	-
%dP3>L	dP3 Extreme wear M1 Pillar 1 extremely worn M2 Pillar 2 similarly extremely worn: Misalignment with Maxilla?	-	-
-	-	-	dP4-M1 Bone recession buccal side
-	M1 Pillar 1 extremely worn	-	-
%P4 L/B %O P4-M1	M1 and P3 unusual wear	P3-4	-
-	M1 Roots Lingual side very worn at top	-	-
-	-	P3-4	-
%P4>B	-	-	P4 odd morphology (Cusp 1 has additional facet to it). Enamel formation problems
*M1>L To extent that lingual C1 root is pushed through bone and exposed *P4-M1 O %P4>L	-	P3-4	-
%P4 L/B	M1 extremely worn	-	-
-	M1 Pillar 1 extremely worn	-	-
-	-	-	-
%dP3>L	-	-	-
*M1>B *P4 B/L	M1-2 Roots worn at top, Lingual side	-	M1 deformed shape. Pillar 1 very small in all dimensions
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
%M2 T L	M1 Pillar 2 Very worn.	-	-
%dP4>L	dP4 very worn, especially back cusp- into the dentine	-	-
%P4 L/B	-	-	-
-	M1 protoconid very worn to buccal side dP4 similarly worn Misalignment with Maxilla?	-	-
*dP4 T B *dP3-dP4 O	-	-	-
* P4 T B %P4 B/L	-	-	-
%P4 B/L	-	-	-
% M1 T B	-	P4	M1 Enamel problems
-	-	dP2-4	-
%M1>L	M1 protoconid sloping wear towards buccal side	-	-
-	-	-	-
-	dP4 Middle Cusp particularly worn	-	-
-	-	P3-4	-
%M2 B/L	M1 C2 hardly worn dP4 Cusp 2 very worn on buccal side	-	-
-	-	-	-
-	-	-	-
-	-	-	Bone recession underneath dP4 site Jaw very s- curved in profile
%dP3-dP4 large gap between	dP4 Cusp 3 wear towards buccal side. M1 wear towards buccal side	-	Prominent bone growth under dp2-dp4 position
*M2 T L *dP4-M1 O	M1 wear affected from crowding towards buccal and mesial very worn	-	-
-	-	-	Prominent ridge of bone growth lingual side along tooth row

-	-	-	-
-	M1 Pillar 1 wear sloping towards distal	-	-
-	-	-	-
%M1>B	-	-	-
-	M1 Cusp 1 wear to buccal side extreme	-	-
-	-	-	-
-	-	-	-
%P3 B/L	M2 Buccal side greater	-	-
%P4 B/L	-	P3-4	-
-	-	-	-
%M2>B %M2-3 O	M2 much wear, sloping towards lingual side	-	-
-	-	-	-
-	-	-	-
-	-	-	-
%P4 B/L %M2>L	M1 worn towards buccal side	-	-
-	dP4, between Cusps 2 and 3 there is much wear between	-	-
-	-	-	-
-	-	-	-
%M1-M2 O	-	-	-
-	-	-	-
-	-	-	dP4 and M1 twisted roots
-	-	P3-4 B P2 L	-
%P4 B/L	-	P3-P4	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	NTP	NTP	-
-	-	-	M1 pillar 1 and 2 and M2 pillar 1 roots withered Bone growth of ridge under M1-M2 Lingual side of jaw
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	NTP	NTP	-
-	-	-	-
-	-	-	-
-	NTP	NTP	-
-	-	-	-
-	NTP	NTP	-
-	-	-	-
%P3 L/B	-	-	-

Oudenberg			
Alignment	*Wear*	*Tartar*	*Other*
-	-	-	-
-	-	P3 B P4	-
-	-	-	-
-	-	-	-
%M1>B	-	P3B	-
-	-	-	-
-	M1 protoconid worn towards bucco-mesial	-	S-shaped jaw
%P4B/L	-	-	-
*M1 B/L *P4 B/L *M1>B %M1 TB	M1 pillar 2 very worn	-	-
-	-	-	-
%M1>B %M1-M2 O	M2 worn on mesial aspect due to crowding	-	-
%M1>B	-	P4B	-
%M2-M3 O	-	-	-
-	-	-	-
-	-	-	-
-	M1 and M2 extreme wear	-	-
-	-	-	-
%M2>L	M1 worn towards buccal side	P2-4 B	-
-	-	-	-
-	-	P2 L P2-3 B	-
-	-	P3 B	-
-	-	-	-
%P4 L/B	M1 pillar very worn into dentine	-	-
-	-	-	-
-	-	-	-
-	-	-	-
%M2>L	-	-	-
-	-	-	-
-	-	P3B	-
%M1>B	-	-	-
-	M1 protoconid sloping towards buccal	-	-
%dP2>B	-	dP2-3 B	-
%M2>B	M2 very worn	-	-
-	-	-	-
-	dP4 very worn towards distal	-	-
%P2-P3 gap	-	-	-
-	-	-	-
-	M2 pillar 2 more worn	-	-
-	-	-	-
N/A (single tooth)	-	-	-
N/A (single tooth)	-	-	-
-	-	-	-
%M1>B	-	-	-
-	-	-	-
-	-	-	-
-	P3 sloping towards distal	P3-P4 B	-
%P3 TB	-	-	-
-	-	-	-
%M1>L %P4 L/B	-	-	-
-	-	-	-
-	-	P3 B	-
-	-	-	-
-	-	-	-
*M1 T B *M1-M2 Gap	-	-	-

-	-	-	-
-	-	-	-
%P4>L %P3 B/L	-	P2-4 B	-
-	-	-	-
-	-	P3-4 B	-
-	-	-	-
*P4 B/L %P3 B/L	-	P2-3 B	P4 has odd morphology on buccal side
-	M2 worn towards buccal	-	-
-	-	P4 B	-
-	-	-	-
-	-	-	-
*P4 B/L	-	P4 B	-
-	M1 pillar 2 very worn	-	-
-	NTP	NTP	-
-	M1 extremely worn	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
%P4 B/L %P3-4 O	M2 pillar 2 very worn	-	-
%M2 B/L	M1 very worn towards Lingual	-	-
-	-	-	-
-	M1 worn towards Buccal	-	-
%P4 B/L %P3 B/L	-	P3	-
-	M2 pillar 2 completely worn away	-	-
-	-	-	M2-M3 very twisted roots
-	-	-	-
-	-	-	-
%M2>B	-	-	-
-	-	-	-
-	-	-	-
%M1>B %I3 displaced very high, towards Canine	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
N/A	-	-	-
-	-	-	-
%M2>B	-	-	-
-	-	-	-
-	-	-	-
%P4 B/L	-	P3 B	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
N/A	-	-	-
%P4>L	-	-	-
N/A	-	-	-
-	M2 pillar 2 not worn in centre M3 pillar 1 not worn in centre	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

%M1>B	M1 worn more to lingual	-	-
-	-	-	-
-	-	-	-
%P4 B/L %M1>B	-	P3-4 B	-
%P4 B/L	-	-	-
-	-	-	-
-	-	-	-
%P4 B/L %M1>B	M2 pillar 2 worn towards lingual	-	-
*M3>L	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
%M1 B/L %M1>B	-	-	-
*P2-3 Gap	-	P2-3 P4 B	-
-	-	-	-
-	-	-	-
%P3 B/L %P4-M1 O %M1-M2 O	M1 extremely worn	-	-
-	-	-	-
-	-	-	-
-	-	-	
-	M3 paraconid slope towards lingual	-	-
-	-	P4 B	-
-	P4 worn towards distal	P2-4 B	-
%P4 L/B	-	P2 B	-
%M1>B	-	-	-
%M2>B	M2 hypoconulid extremely worn	-	-
N/A	-	-	-
-	-	-	-
N/A	M3 much wear on pillar 2	-	-
-	-	-	-
%P4 B/L	-	P2 P3-4 B	-
-	-	-	-
-	-	-	-
%dp4>B	-	-	-
%M2>B	M3 pillars 1 and 2 very worn	-	-
-	-	-	-
-	-	P3 P4 B	-
-	-	-	-
%P4-M1 Gap	M1 pillar 2 extremely worn	-	-
%P4 L/B %P4-M1 O	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
%M2 L/B %M3 T B	-	-	Buccal side of jaw bumpy bone growths
%P4 L/B	-	P4 B	-
-	-	-	-
%M2>B	M3 extremely worn buccal side of hypoconid	-	Bone recession under M2-M3
-	-	-	-

*M1>B %M1 TB	M1 very worn	P3 B	-
%P4 B/L	-	-	Tooth morphology of M3 odd- Pillar 2 and 3 have a large gap between the cusps
-	-	-	-
-	-	P2-3 B	-
-	M1 Pillar 2 very worn, sloping to distal	P3-4 B	-
-	-	-	-
%P4 B/L %M2 B/L %P4-M1 O	-	P3-4 B	-
-	-	-	-
-	-	-	-
-	-	-	-
-	M1 Pillar 1 very worn to mesial	-	-
%P2>B	-	-	-
-	-	-	-
-		-	-
-	-	-	-
-	M1 hypoconid very worn	-	-
%P4 L/B	-	P3-4 B	-
%M1>L	-	-	-
%P4>L	-	P3 B P4	-
-	-	-	-
-	-	-	-
-	M2 Pillar 2 slope towards distal	-	-
-	M1 Pillar 1 buccal side	-	-
-	P3 sloping towards distal	P2-4 B	-
-	-	-	-
P4 T P	-	-	Bone recession under M1-M2
-	M2 very worn towards buccal side	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
%dP3>L	-	-	-
-	-	-	-
-	-	-	-
%M3>L	M2 Pillar 2 excessive wear	-	-
-	-	-	S-shaped jaw
*M1>B %P4 B/L %M1 TB %M2 TB	-	-	-
%M1>B	-	-	-
%P4 B/L %M1>L	-	P3 B	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
%P4 B/L	M3 Pillar 3 extremely worn	-	-
-	M2 buccal side worn more	-	-
-	-	-	-

-	-	-	-
-	-	-	-
%P2-3 O	-	-	-
-	-	-	Morphology of M3- Pillar 3 very narrow
%M3 L/B	-	-	-
%M2 T L	-	-	-

Londerzeel			
Alignment	*Wear*	*Tartar*	*Other*
%P3 B/L %P4 B/L	-	-	-
%P3 B/L %P4 B/L	M1 excessively worn	P3	-
%P4B/L	-	-	-
%P3-P4 O	-	P4	Bone growth on lingual side of tooth row.
*P4 B/L	-	-	-
%P4 L/B	M1 metaconid unworn in the centre- poor fit with Maxilla?	-	-
%P4>B	-	-	-
-	-	-	-
-	-	P3	-
-	-	-	-
%M1>B %P4B/L	-	-	Bone growth on bottom of jaw, very lumpy
%M3>L	-	-	M2 hypoconid very deeply indented- malformed
-	M1 extremely worn	P4	-
-	-	-	-
%P4-M1 O %M2>B	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
*M1>B, roots exposed through bone on B side	-	-	-
%P4B/L	-	-	-
%P4B/L	-	-	Recession of bone under M1-M2
*P3 B/L %P4-M1 O	P3 and P4 extremely worn, both sloping towards the distal, into the dentine.	P4	-
-	-	-	-
%M1>B %M2L/B	-	P4	-
%P4 B/L	-	-	-
*P4B/L	-	-	-
-	-	-	-
%P4-M1 O	P4 back cusp too little wear. M1 wear sloping to distal	P3-4	-
-	M2 more wear on hypoconid	-	Rough bone growth on lingual side under tooth row
%M1 B/L	-	-	-
-	-	-	-
-	-	-	-
*P4 B/L *M1 TB %P4-M1 O	-	-	-
%M1>B	-	-	-
-	-	-	-
-	M1 hypoconulid excessive wear	-	Bone recession under M1
%M3>L	-	P3	-
%P4 B/L %P4-M1 O	M1 and M2 buccal wear greater than lingual	-	-
%P4 B/L	-	-	-

%M1 TB			
%P4 B/L	-	-	-
-	-	-	-
%M1>B %P4 L/B	-	-	Bone growth inside the jaw near M3
-	-	-	-
%M1>B	-	-	-
-	-	P2-4	-
%M1 T M %Gap M1-M2	-	-	-
-	-	-	-
-	-	-	-
%M2>B	M1 very worn hypoconulid	-	-
*P4 B/L %M2 T B and M %M2 B/L	-	-	S-shaped Jaw
%P4 B/L	-	-	-
-	-	-	Bone growth around teeth buccal side. Bone recession under M3
%P3-4 O	-	-	M3 withered roots Bone recession under M1 and M2 Buccal side
%P4 B/L	-	P3-4 B	-
-	-	-	-
*P4 B/L	P4 and M1 reduced wear Lingual side	P4 B	-
%M2-3 Gap	-	P3-4 B	-
%M1>B	M1 hypoconulid, sloped towards lingual	-	-
-	-	-	-
%M1>B	-	-	-
%P4-M1 O	-	-	M1 withered roots
-	M1 very worn	-	-
-	-	-	-
%P4 B/L	M1 worn towards Buccal	-	-
-	-	-	-
-	-	-	-
%P4 B/L %M1>B	-	-	-
%P3-4 Gap	-	-	-
%P4 B/L	-	P3 L	-
%P4 B/L	M1 Pillar 2 excessive wear	-	-
*M1>B *M1 TB %P3-4 Gap	M1 very worn to buccal side	-	-
-	-	-	-
%dP4>B	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Ename			
Alignment	*Wear*	*Tartar*	*Other*
-	-	-	-
-	-	-	-
%P4 L/B	M3 Pillar 1 little worn on lingual side	-	-
-	-	-	-
%P4 L/B %P4-M1 O	M1 more wear on hypoconid	-	-
-	-	-	-
%M2>B	-	-	-
-	-	-	
-	-	-	-
-	-	-	-
*M1>B	M1 peaks left on both cusps	-	-
%P4 L/B %M2 L/B	-	P3-4	-
-	-	-	-
-	M2 Pillar 1 less worn than expected	-	-
%P4 L/B	-	dP3-dP4	-
%P4 L/B %M1>B	-	-	-
-	-	-	-
*M1>B *P4-M1 O	-	-	-
%P4 B/L	-	-	-
-	-	-	-
-	-	-	-
*P4 B/L %P4-M1 O	M1 very worn	-	-
-	M1 Pillar 1 worn sloping towards buccal side	-	-
-	-	-	-
-	-	-	-
-	-	-	Bone growth buccal side of jaw dP3-4 twisted roots
*M1>B %M2-M3 O %M3 L/B	M1 very worn M2 paraconid little worn	P4	-
-	-	-	-
-	-	-	-
%dp3-4 O	-	-	-
-	-	-	-
-	M1 paraconid much wear	-	-
-	M2 very worn	M1	-
%P4 L/B *M1-M2 O	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
%M2>L	-	-	-
-	-	-	-
-	M2 Pillar 1 very worn	-	-
-	NTP	NTP	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
%M1>L	-	-	S shaped jaw
-	-	-	-
-	-	-	-
-	M1 very worn	-	-
-	-	-	-
-	-	-	-

-	-	-	-
-	P3 very worn sloping towards mesial	-	-
-	NTP	NTP	-
-	-	P3-4	-
*M3 B/L	-	-	-
-	-	-	-
%P4 B/L	M2 Pillar 2 lingual side less worn	-	-
-	NTP	NTP	-
-	-	M1	-
-	-	-	
-	-	-	-
%M1>B %P4 B/L	M1 Pillar 2 very worn	P4 B	-
-	M1 protoconid very worn on buccal side	-	P4 roots very twisted
-	-	P4 B	-
-	NTP	NTP	-
-	M1 worn towards buccal side	P4	-
-	-	-	-
-	-	-	-
-	-	-	-
-	M1 protoconid worn towards buccal side	-	-
-	-	-	-
-	NTP	NTP	-
%M1 B/L %P4 B/L	M1 and M2 wear to top of roots Lingual side	-	-
-	-	P3-4	-
-	-	-	-
%M1 B/L	M2 Pillar 2 very worn M1 Pillar 1 very worn towards lingual	-	-
-	-	-	-
-	-	-	-
-	NTP	NTP	-
-	-	-	-
%M1>B	-	P2 P3-4 B	-
-	-	-	-
-	NTP	NTP	-
*M1>B	M2 more wear towards buccal side	-	-
-	-	-	-
-	-	-	-
*M2>B %M3>L	-	-	-
%M1>B	M1 Pillar 1 very worn	P4 B	-
%M1>B	M2 protoconid worn towards buccal	-	-
%M1>B	M1 Pillar 1 worn towards distal	-	-
-	-	-	-
%M1>B %P4 B/L	-	P4 B	-
%P4 B/L	-	P4 B	-
%P4 B/L %P3>L %P4-M1 O	M1 very worn	P3-4	-
-	-	-	-
%M1>B %P4 B/L	-	-	-
-	-	P4 B	-
%M2>L	-	P3-4	-
-	NTP	NTP	-
-	-	-	-

-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	NTP	NTP	-
-	-	-	-
*P4 B/L %M1>B	-	-	-
%P4-M1 O	-	P4 B	-
-	-	-	-
-	-	-	-
-	-	P4 B	-
-	-	-	-
-	-	-	-
%P4 B/L	-	-	-
%P3 L/B	-	-	-
%P4 B/L	-	-	-
%P4-M1 O	M1 very worn towards buccal side	P4	Antemortem loss of P3
-	-	-	-

Koekelare			
Alignment	*Wear*	*Tartar*	*Other*
-	M1 protoconid worn towards buccal side	P3-P4	-
-	-	-	-
-	M1 wear towards Buccal side	-	-
%M1 B/L %P4 B/L		-	-
-	-	-	-
-	-	-	-
%M1 B/L	M1 protoconid very worn towards lingual	-	-
-	-	-	-
-	NTP	NTP	-
%M1>B	-	-	-
-	-	-	-
%M1>B	-	P2-P3 P4 B	-
-	-	-	-
-	-	-	-
*M1>B	M2 very worn	-	-
-	M1 Pillar 1 very worn	-	-
-	M2 protoconid worn towards buccal	P4 B	-
%M1>B	M1 Pillar 1 very worn	-	-

Raversijde			
Alignment	*Wear*	*Tartar*	*Other*
%M1 L/B %M2>B	M1 excessive wear	-	-
-	-	-	-
-	M2 Pillar 1 very worn	-	-
-	-	-	-
%dP2-dP3 gap	-	-	P4 hypoplasias near roots
-	-	-	-
-	dP4 worn more to buccal side than lingual	-	-
%P3 L/B	-	-	-
%M1 L/B	-	-	-
-	NTP	NTP	-
%M2>L %P3-4 Gap	M2 Pillar 2 very worn	-	-
%dP4 L/B	-	-	-
-	M1 very worn	P4 B	-
%M1 L/B	-	P3 P4 B	-
-	-	-	-
-	-	-	Bone recession under dP3
-	-	-	-
%P4 B/L	-	-	-
-	-	-	-
-	-	-	-
*P3 B/L *P4 B/L *P3-P4 O	M1 worn more to lingual side than buccal	-	-
-	-	-	-
-	-	-	-
%dP2>B	-	-	-
-	-	-	Bone growth under P4
-	-	P3-P4 B	-
-	-	-	-
-	-	P4 L	-
-	M1 worn more greatly on buccal side	-	-
-	-	-	-
-	-	-	-
-	-	-	-
*P4 B/L	M1 Pillar 1 very worn	-	-
%P4 B/L %M1 > B	M1 worn more greatly on buccal side	P3-P4 B	-
%dP3-dP4 O	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	P3-P4 B	-
N/A	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	dP4 very worn (broken distal cusp) dP3 wear sloping towards distal	-	-

%M1>B	P4 very worn towards distal	P3-P4 B	M2 enamel formation problem to top part of cusp
-	-	-	-
-	-	-	-
%P2-P3 Gap %P4 L/B %M1 L/B	-	-	Bone growth underneath M3
-	-	-	-
-	-	-	-
* M1-M2 gap	-	-	-
%dP4-M1 gap %dP4 >B %ddP4 B/L	-	-	-
%dP4 L/B	dP3 worn towards mesial	-	-
%P4 B/L	-	P3-P4 B	-
%P4 B/L %M1 B/L	-	-	-
-	-	-	-
%P4 >B	M1 pillar 2 extremely worn		Bone recession under P3 M1 abnormal enamel formation on lower part of tooth . Many hypoplasias, and also very small pillar 2.
-	-	-	-
-	-	-	M2 poor Enamel formation on surface
%P4 B/L	-	P3 B	-
*P4 B/L	-	-	-
-	M1 greater buccal side	-	-
N/A	-	-	-
-	-	-	-
N/A	-	-	-
%M1>B	-	-	-
-	P3 very worn	-	-
-	-	-	-
N/A	-	-	-
-	-	-	-
-	-	-	-
-	-	-	M1 poor enamel development. Many Hypoplasias over all tooth surface
N/A	-	-	-
*M1-M2 gap %M1>L	-	-	-
-	-	-	-
-	-	-	-
-	M1 more worn towards buccal side	-	-
-	-	-	-
%P4 B/L	-	-	Hypoplasias on P3 and P4 lingual sides
-	-	-	-
-	-	-	-
-	-	-	-
-	M2 protoconid extreme wear	-	-
%M1>B	-	-	-
-	-	-	-
-	-	-	-

-	-	-	-
%M2>B	-	-	Bone growth under M3
%dP4>B	-	-	-
-	M1 wear towards the middle of the tooth greater	-	-
%dP4>B %dP42-dP3 gaps	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	M1 pillar 2 very worn	-	-
-	M1 protoconid and M2 hypoconid very worn towards buccal side	-	Recession of bone under M1
%M1>B	M1 protoconid very sloped towards buccal side	-	Very porous bone into which teeth are set
-	-	-	-
-	M2 more worn on buccal side	-	-
-	-	-	-

Figure 5.5-5.10. Tables summarising all examples of dental pathology from the jaws of the six Belgian sites

5.2.6. Analysis of the pathology in the pig jaws

Every site from which jaws alone were examined as part of this thesis (Ename, Veurne, Londerzeel and Oudenberg) exhibited examples of pathological changes or developmental problems within the jaws (see Figures 5.5-10). These ranged from dramatic evidence of bone growth on the jaws to minor alignment flaws in the tooth rows. Similarly, the sites of Koekelare and Raversijde, from which both post-cranial and cranial material was examined, showed pathological changes within some of the jaws. Instances of pathology ranged across all 'categories' of dental defect , described above, in all six sites. A consideration of the jaws of Koekelare and Raversijde reveals that dental defects were the most common pathology in the pigs. This is not unexpected, because the teeth are the only parts of the skeleton meeting the external environment, oral pathologies are expected to be more common than other forms of bone pathology (Levitan, 1985:41).There is only one instance at Raversijde of post-cranial pathology and none at Koekelare, but both exhibit multiple jaw pathologies.

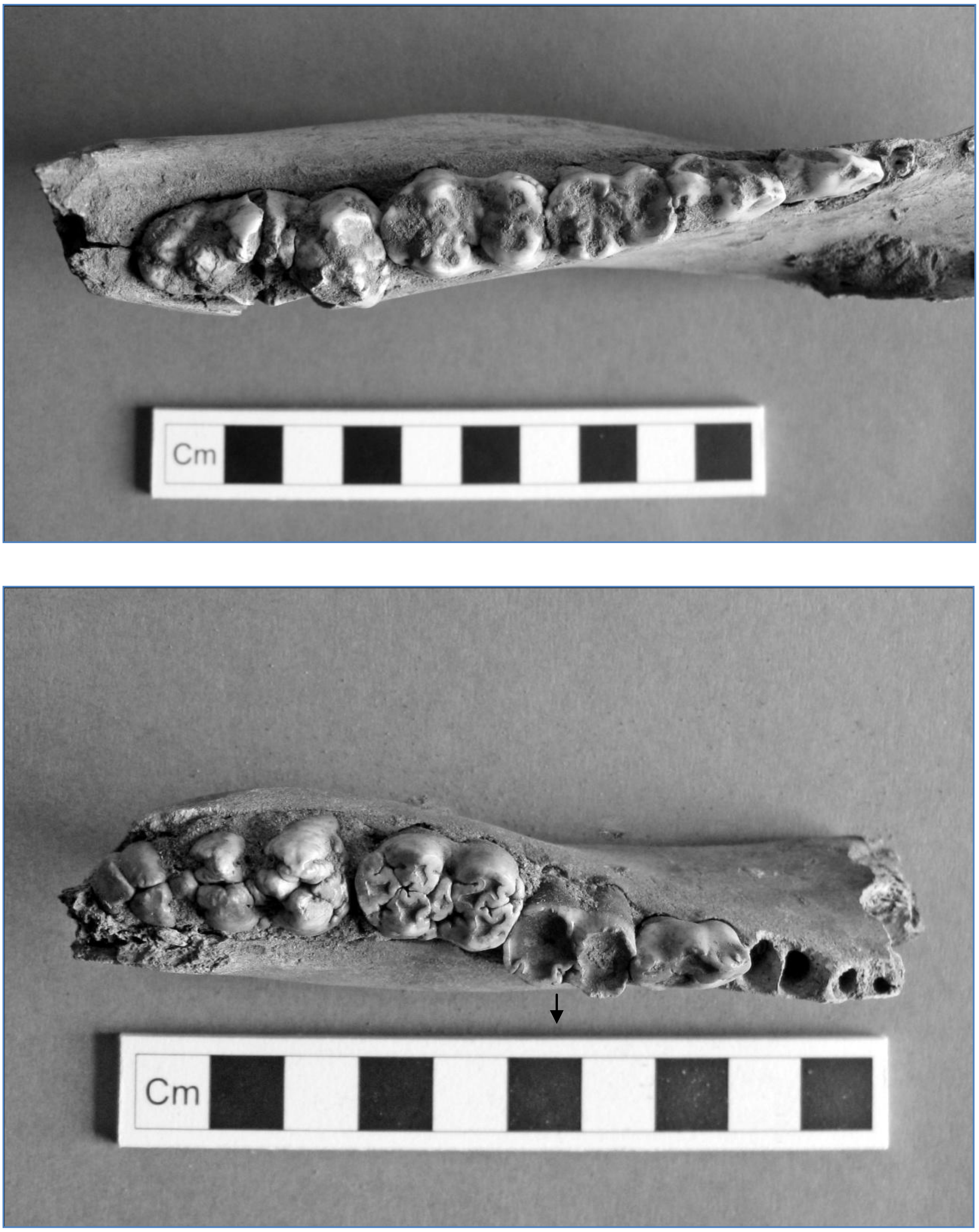


Figure 5.11. Picture of a Veurne Jaw with an example of a first molar slightly displaced towards the Buccal side (below), in comparison with a Veurne jaw showing good alignment of the tooth row (Above).

5.2.6.1. Overall levels of dental pathology

It is important to consider the overall levels of pathologies between the six sites to see whether they exhibit any differences in prevalence.

	Veurne	***Ename***	***Oudenberg***	***Londerzeel***	***Raversijde***	***Koekelare***
Alignment Only	16	14	27	22	15	3
Wear Only	13	7	17	1	11	2
Tartar Only	5	6	10	2	3	0
Other Only	6	1	3	1	4	0
Alignment +Wear	12	11	13	7	5	2
Alignment + Tartar	5	7	18	5	3	1
Alignment + Other	2	1	3	7	3	0
Wear + Tartar	0	2	3	1	1	2
Wear + Other	3	1	1	2	1	0
Tartar + Other	1	0	0	0	0	0
Alignment + Wear + Tartar	3	3	2	4	1	0
Alignment + Wear + Other	3	0	1	0	1	0
Wear + Tartar + Other	1	0	0	0	0	0
Alignment + Tartar + Other	1	0	1	1	0	0
Alignment +Wear + Tartar + Other	0	1	0	0	1	0
None	47	68	113	23	55	8

Figure 5.12. Table of the count of jaws for each site containing dental defects in one, or more than one particular category

From Figure 5.12 it is apparent that the jaws from all six sites are likely to exhibit certain patterns of defect. For example, the presence of 'Tartar+ Other' features together are far less common than any other two types of feature combined, such as either 'Alignment+Tartar' or 'Alignment+Wear' categories. It is also evident that individual dental defects occur far more commonly on their own than in conjunction with other defect types. Alignment problems alone is clearly the most prevalent category for the jaws across all six sites.

It is difficult however to compare between the sites using raw data because of the different sample sizes at each site. It is perhaps more useful to consider the percentage of each category within each site (see Figure 5.13).

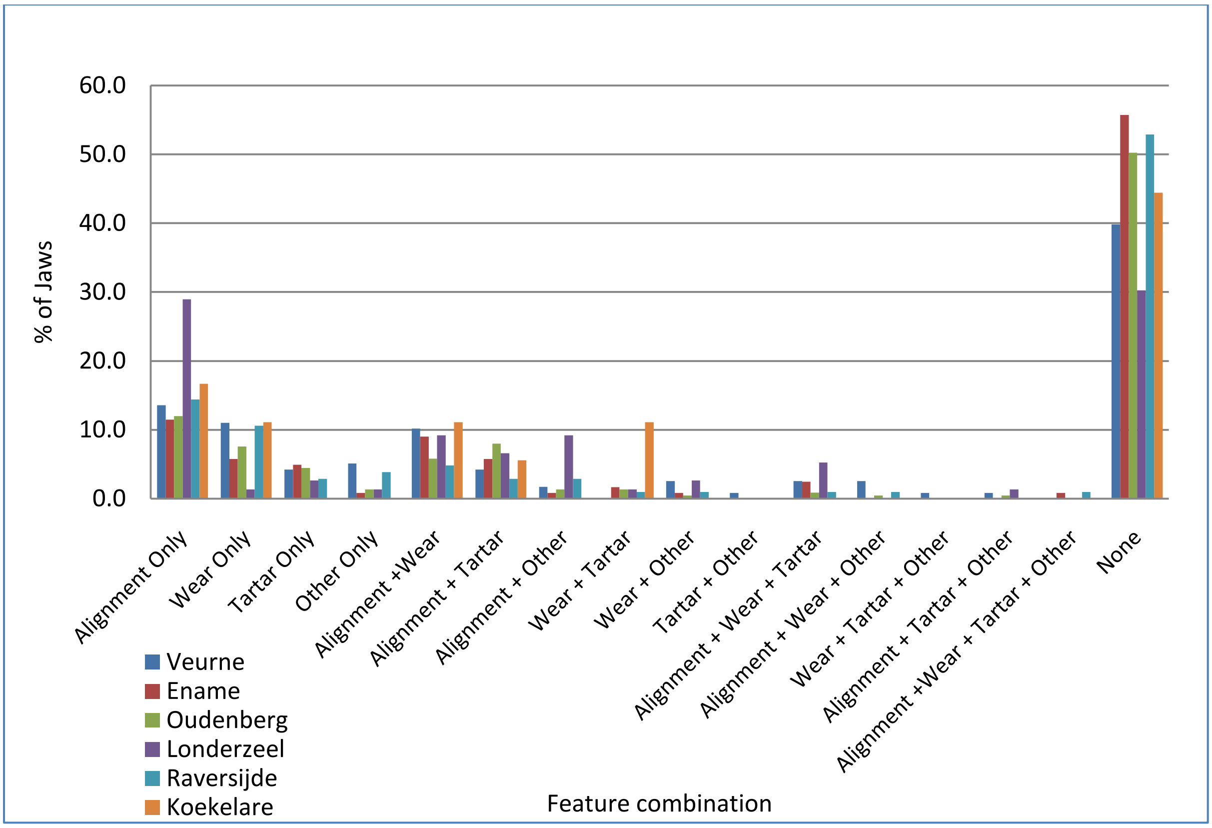


Figure 5.13. Graph displaying graphically the percentage of each sites jaws displaying a particular combination of features.

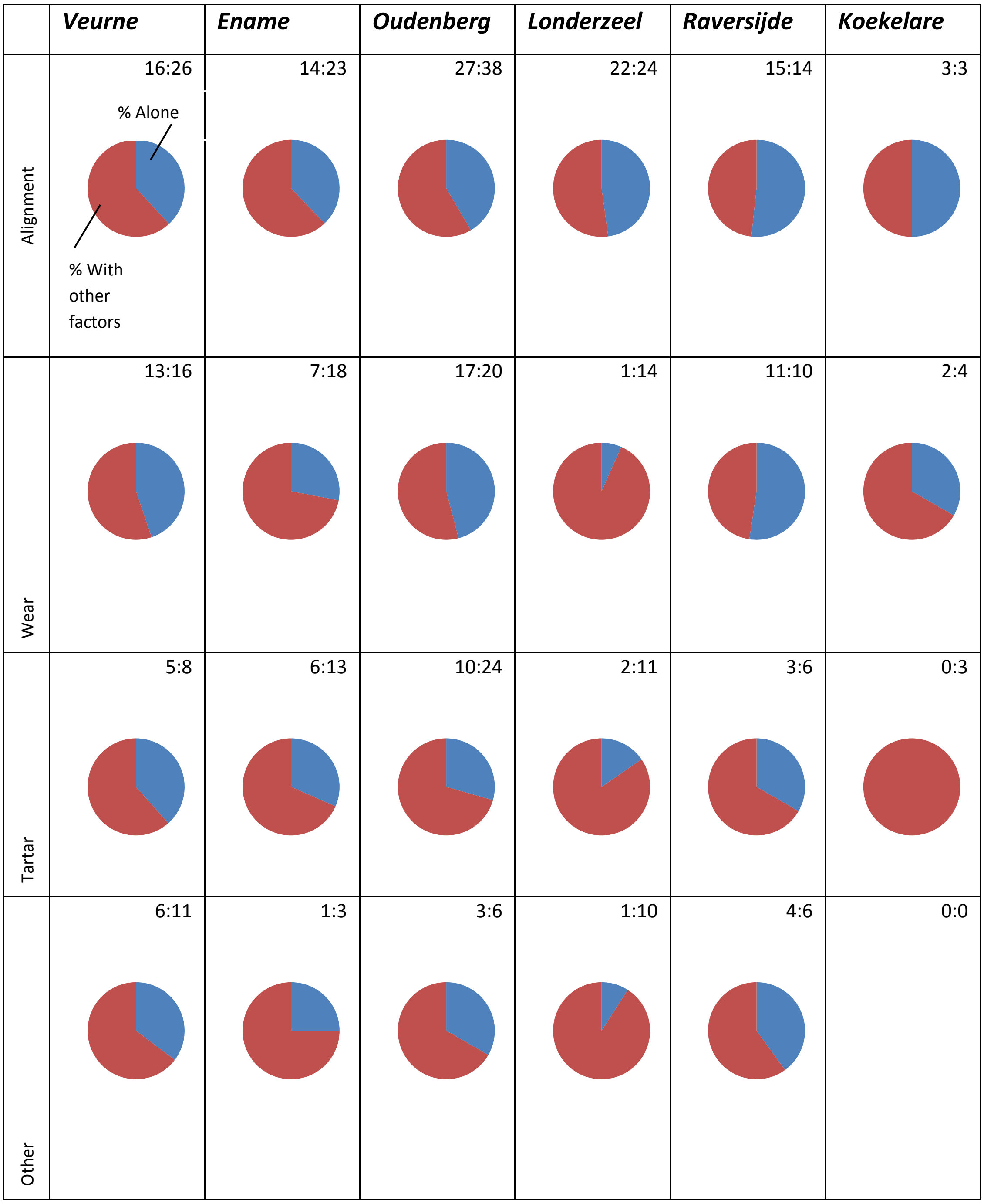
From Figure 5.13 we can more easily see that there are some general patterns of similarity across all of the six sites. Three of the six sites contain more jaws without defects than jaws with defects; Ename, Oudenberg and Raversijde (55.7, 50.3 and 52.9% respectively) with Koekelare (44.4%) and Veurne (39.8%) also still showing a clear prevalence for jaws to display no features. All six sites contain more examples with a 'single' category of jaw defect than jaws containing defects in multiple categories.

There are also, however, some clear differences between the sites. Londerzeel contains a notably smaller percentage of jaws with no identified abnormalities (30.3%). Ename contains the highest percentage of jaws with no abnormalities (55.7%). However, this is not strikingly larger than the other four sites. Londerzeel however, does appear clearly to have a significantly larger percentage of jaws containing abnormalities which may be interpreted as indicating the pigs at Londerzeel are experiencing greater amounts of developmental stress.

Very few jaws contain three or all four types of 'defect'. Where there are three defect types they are more often 'Alignment+Wear +Tartar' than any other combination. This may perhaps be explained by the links between these three, with alignment problems causing malocclusion and unusual wear, and tartar potentially affecting alignment by loosening teeth. Similarly, developmental dystrophies may decrease wear resistance, leading to greater levels of wear (Levitan, 1985:43). This is true for all six sites, as is the less frequent occurrence of the 'Other' category (even though this incorporates a wide variety of features). All the sites exhibit low percentages of jaws containing tartar alone, all at roughly the same proportions (see Figure 5.13), and the proportions of 'Alignment +Wear' and 'Alignment + Tartar' are very similar across all six sites. The majority of jaws have only one category of problem, with two being relatively common, but any more than this is unusual. This is perhaps surprising considering how inter-related many of the categories of dental defect are.

Although there are many similarities between the sites, there are also identifiable differences between them. Londerzeel (which as we have already noted has a greater prevalence of jaws with defects than the other sites) has a larger percentage of jaws with alignment problems (28.9%) than any other site (range of 11.5-16.7%). This site has more not only in terms of alignment alone, where the pattern is most striking, but also in the 'Alignment + Other', and 'Alignment +Wear+ Tartar' categories. The other five sites appear relatively similar to each other with few obvious differences. Veurne and Raversijde have a greater proportion of jaws containing examples of 'Other' defects alone than the other four sites. However, the percentages are still very small, and closer examination is necessary to consider whether this is a pattern of any significance (see later in this chapter for a closer consideration of the forms of 'Other' defects).

Koekelare also has a striking proportion of jaws containing 'Wear+Tartar'. This may be attributed to the small sample size from this site. If the sample of jaws available had been bigger, it is entirely possible that Koekelare would have fallen into line with the other sites, and so this difference should be treated with caution.



	Veurne	Ename	Oudenberg	Londerzeel	Raversijde	Koekelare
Alignment	16:26	14:23	27:38	22:24	15:14	3:3
Wear	13:16	7:18	17:20	1:14	11:10	2:4
Tartar	5:8	6:13	10:24	2:11	3:6	0:3
Other	6:11	1:3	3:6	1:10	4:6	0:0

Figure 5.14. Table presenting raw count ratios and pie charts of the percentage of each 'defect' category alone:with other factors

Figure 5.14 presents the ratio of jaws from each site with a single defect, to those with others. It is apparent that for ‘Alignment’, the ratio of jaws is very similar across all six sites, with no appreciable differences. The jaws are as likely to present alignment problems on their own as to contain other types of feature. For other categories, however, the patterns are more variable between sites. Londerzeel is again quite different in all categories other than ‘Alignment’ and is far more likely to have jaws exhibiting multiple categories of problems. This again suggests that there is a clear difference between Londerzeel and the other five sites. The other sites have few discernable differences between them. The 'Wear' category in particular shows a small variation, with Ename and Koekelare exhibiting a near 1:2 ratio, and Veurne, Raversijde and Oudenberg closer to a 1:1 ratio. However in comparison to the difference between all of these sites and Londerzeel these differences do not appear very dramatic. Similarly, for 'Tartar', four of the other five sites exhibit very similar ratios, with Koekelare showing a very different (0:3) pattern that perhaps again may be attributed to small sample size.

The patterns of ratios for different categories within the sites are often very similar. For example, Veurne and Ename both exhibit very similar ratios across each of the four categories as, to a lesser degree, do Oudenberg and Raversijde. Koekelare is again more divergent possibly as a result of its sample size. Londerzeel remains the most strikingly different with its ratios in 'Alignment' demonstrably different to the other categories, although for the other three categories there is perhaps greater similarity with the results from the other sites. This suggests that the pig mandibles across all six sites are displaying some uniformity in jaw defects and the ways they display them, which is not affected by any differences in living conditions or husbandry between the sites. Further studies to examine any variation from this 'norm' elsewhere may help determine whether this is just a common pattern for archaeological pig assemblages.

	Veurne	***Ename***	***Oudenberg***	***Londerzeel***	***Raversijde***	***Koekelare***
Number of jaws with 4 categories of defect	0	1	0	0	1	0
Number of jaws with 3 categories of defects	8	3	4	5	2	0
Number of jaws with 2 categories of defects	23	22	38	22	13	5
Number of jaws with 1 category of defects	40	28	57	26	33	5
Number of jaws with 0 categories of defects	47	68	113	23	55	8
Average number of defects per jaw where 1 or more defects exist	1.55	1.57	1.29	1.6	1.41	1.5
Average number of defects per jaw, including jaws with no defects (only including jaws that are relevant for all four categories- excluding those with no bone or all teeth missing).	0.93	0.70	0.64	1.19	0.66	0.83
Average number of defects per jaw where each tooth is counted more than once if it exhibits a defects in more than one way (for example tilted *and* moved to buccal, or overlapping *and* tartar). Only jaws with all four categories available are counted.	1.44	0.93	1.45	0.92	0.91	1.11
Average number of defects per jaw where teeth are only counted once even if in the same category twice or if they are in more than one category. (For example, M1 tilted, rotated and has tartar it would still only be counted once) Only jaws with all four categories available are counted.	1.22	0.74	1.22	0.72	0.77	1.00

Figure 5.15. Table collating the number of jaws with a certain number of defects, not examining the type of problem.

When considering only the number of categories of defect within each jaw, without examining the type (see Figure 5.15), two things are notable. Londerzeel again clearly demonstrates its unusually low number of jaws without problems: it is the only site to have fewer jaws with no defects than jaws with a single defect. All of the other sites are relatively similar in their patterns (see Figure 5.16). It is not surprising that there are fewer jaws with a larger number of categories of problem as these may represent the most stressed individuals.

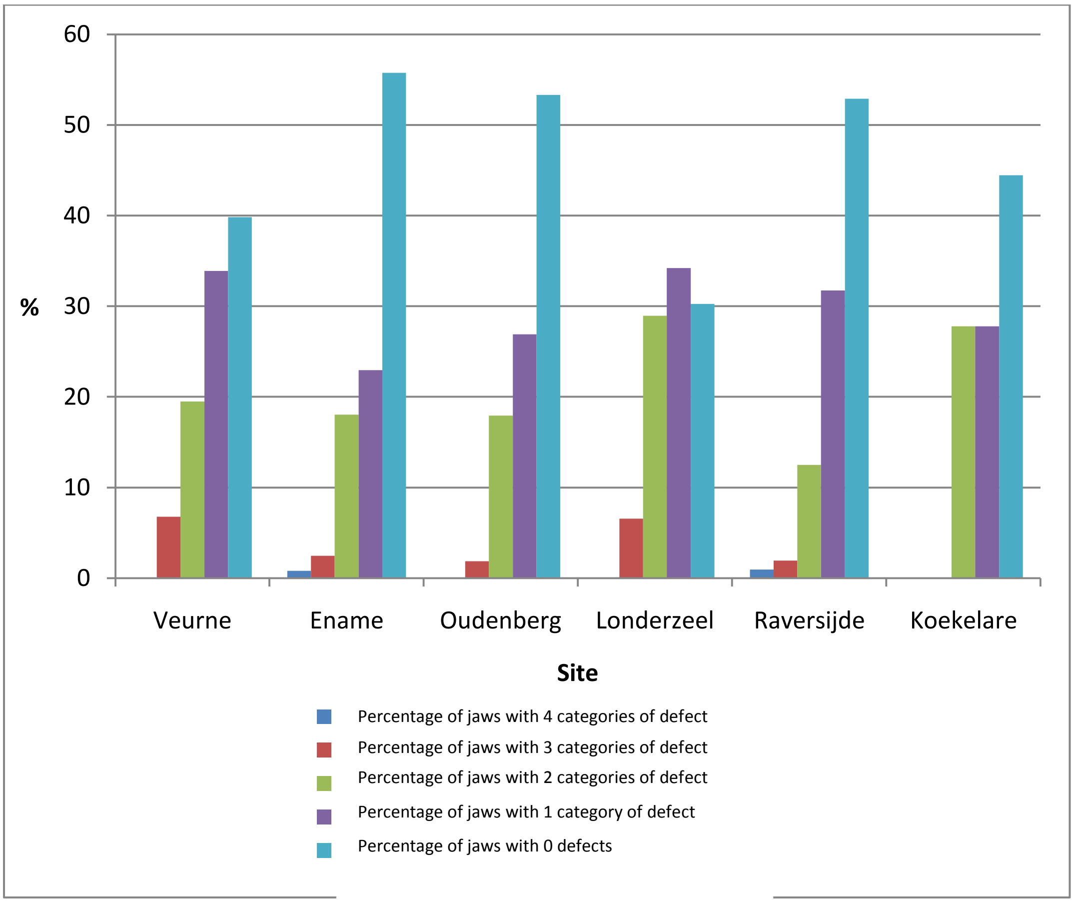


Figure 5.16. Histograms demonstrating the percentage of jaws from each site with a number of categories of defect

For sites other than Londerzeel, the trend appears to be that the greater the number of categories the fewer jaws exhibited all of them (see figure 5.16). This demonstrates that, in general, most pig jaws in an assemblage are likely to have on average only one or two categories of defect. There is, however, no way to quantify whether those containing the average number of problems are unstressed or stressed individuals, and further investigation into whether such frequencies are usual for pigs would be useful to help interpret these findings.

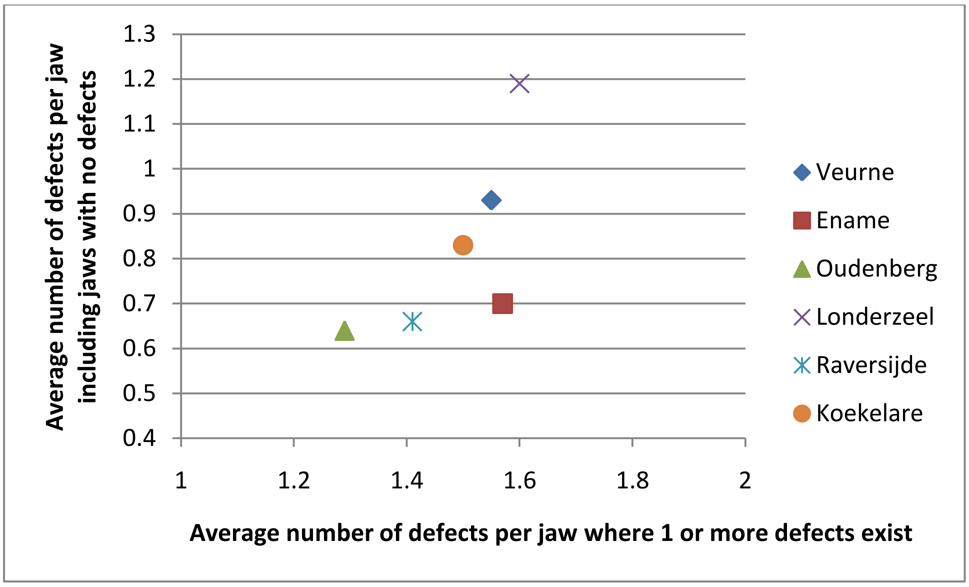


Figure 5.17. Graph comparing the average number of categories of problems per jaw calculated in two different ways

When considering the average number of categories of defects per jaw, there is relatively little difference between any of the sites for jaws where one or more problems exist (see Figure 5.17). There is greater variation when those with no defects are included, with Londerzeel clearly separating higher up the chart. Oudenberg, Raversijde and Ename have relatively few defects per jaw, perhaps suggesting lower levels of stress than the others. However, contradicting this suggestion is the fact that Ename falls to the right of Oudenberg and Raversijde having proportionally more defects where one or more defects exist. If Ename followed the trend of the other sites it would have an average closer to 1.4 than 1.6. This again emphasises the difficulties in interpretation. No comparable studies are available to shed light on this. These results may be demonstrating that Londerzeel is the 'most' stressed and Oudenberg is the 'least' stressed site, based on the average number of defects from the jaw. However, with no knowledge of comparable variation it is difficult to know how exactly to interpret these patterns. While it would be expected from our understanding for the sites for Raversijde to exhibit a large number of defects, reflecting the evidence of the hypoplasia analysis (see Chapter 6), this is clearly not evident, suggesting that the pigs are getting the nutrition they need but experiencing stress in other ways. However, the large number of defects from Londerzeel is particularly interesting, as this site was hypothesised to have poor foraging environs for pigs, leading to a supposition that the pigs at this site may be stalled (see Chapter 2). From this pathology evidence it does appear that the pigs are experiencing some deficiency affecting tooth development, which does suggest some nutritional problems. Ename in the pilot study (Ervnyck et al., 2007) was also identified as a site where, despite the good conditions for pannage, pigs seem to be exhibiting large numbers of hypoplasias. This was interpreted as possibly due to forestry management, with a lack of acorns, meaning the pigs may be unable to source good food, and it is perhaps this that is being reflected in the high level of problems for this site. However, why for Ename this high level only manifests where one or more problems exist is unclear, and it is important not to interpret too definitively from such uncertain trends.

This consideration of the number of 'instances' of a dental defect may count a tooth more than once. It is also therefore important to consider the average number of instances of teeth with problems, rather than just categories, so that if a tooth is 'defective' in more than one way (e.g. tipped as well as rotated) then this tooth is only counted once. When comparing the average numbers for both number of 'categories' and 'teeth', it is clear (see Figure 5.17) that there is a linear relationship. Where there are several defects per jaw it makes no difference whether 'teeth' or 'categories' are counted separately. This demonstrates that the averages are not affected dramatically by teeth with one problem being predisposed to have other types (for example, abnormal wear as a 'type' being caused by malocclusion which is independently identified on the jaws as a separate 'feature' type).

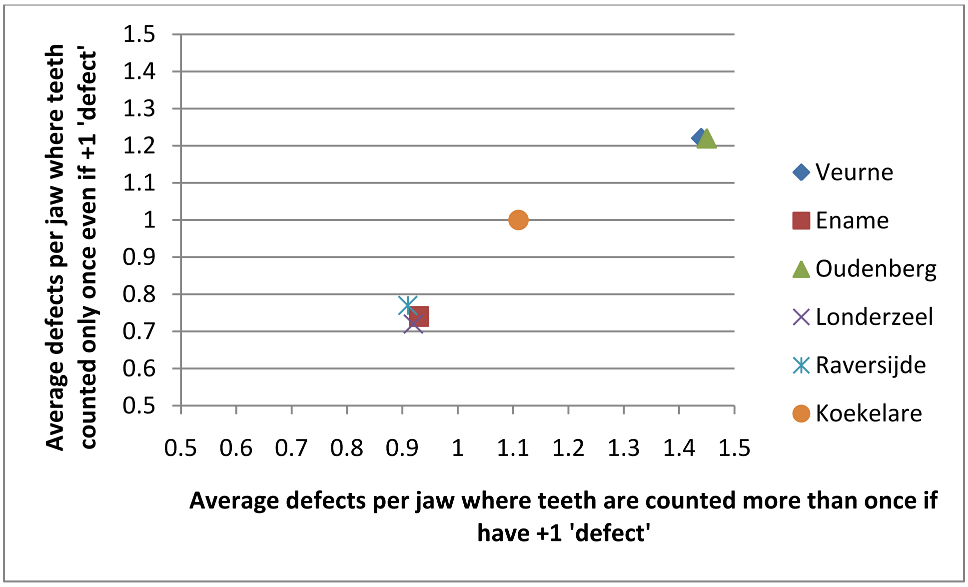


Figure 5.18. Graph illustrating the average number of 'instances' per jaw and the average number of teeth with any defects for each site.

When examining the average number of defects per jaw (see Figure 5.18) the sites appear to separate into two groups. Raversijde and Ename have a low average number of defects per jaw however it is counted (less than one on average), whereas Oudenberg and Veurne appear to have a greater average number of defects per jaw (over 1.2/1.4, dependent on the way calculated) and Koekelare is situated between the two groups. The low average of Londerzeel is particularly notable, as we have previously identified this as being a site with a large number of jaws containing categories of defects. Evidently these defects are often alone in order to establish such a low average in comparison to the higher value when considering the number of categories of defect present. Londerzeel therefore appears therefore to have a greater number of jaws experiencing categories of problems but at a lower 'intensity' of defects per jaw.

This separation into two groups deserves greater investigation, as it may suggest that pigs at the sites of Oudenberg and Veurne are experiencing greater stress in contrast to the earlier findings from considering the number of categories the jaws present in (see above), with more examples of stress per jaw where a category occurs than the other sites. This means that they must often be experiencing problems in the same categories, but with greater numbers of examples per jaw.

- *Summary:*
    - *Individual dental defects are more common than multiple. Having 1 or 2 defects per jaw where any are present is most common.*
    - *Alignment problems are the most common type.*
    - *It is usual for around 50% (range 40-56%) of jaws in a population to contain no examples of problems.*
    - *Londerzeel has a lower percentage of jaws containing no defects than the other five sites (which are similar).*
    - *Londerzeel jaws are more likely to have multiple categories of defects.*
    - *Londerzeel jaws have a higher percentage of jaws containing alignment problems. These alignment problems affect the data, meaning the jaws are more likely to have multiple categories of defects, there are more jaws with defects etc.*
    - *Londerzeel defects often affect single teeth and there is not on average a higher number of teeth affected in the jaws.*
    - *Ename jaws have more examples of multiple categories of defects than expected.*

Because of the differences between the lines of 'overall' evidence discussed above it is important to investigate the various types of defect in more detail. This will be done by examining the patterns of each of the four categories separately:

5.2.6.2. Tooth Alignment

Site	***Percentage of jaws (bone and tooth both present) showing alignment (crowding) problems***	***Percentage of jaws containing multiple defect (including more than one type of defect affecting the same tooth)***
Veurne	34.4%	10.7%
Ename	30.3%	11.5%
Oudenberg	29.4%	8.7%
Londerzeel	59.2%	18.4%
Raversijde	31.3%	9.09%
Koekelare	33.3%	5.56%

Figure 5.19. Summary of the percentages of jaws containing teeth misaligned to the tooth row from various sites

Some jaws from all the sites studied show some alignment problems (see Figure 5.19). With the exclusion of Londerzeel, which is discussed below, the percentage of jaws having one or more teeth with alignment problems have similar values, with a range from 29.4% at Oudenberg to 34.4% at Veurne. The percentage of jaws containing multiple examples of alignment problems (for this calculation a tooth was counted more than once if it exhibited two 'types' of malocclusion, e.g Tilting as well as Displacement) is relatively low, ranging between 5.6% (Koekelare) and 11.5% (Ename), if the more divergent value of Londerzeel (18.4%) is excluded.

Londerzeel has a much higher percentage of jaws showing alignment problems (59.2%), and similarly of multiple alignment problems (18.4%), where more than one tooth (and the intersection of this tooth with its abutting neighbours) is involved in alignment problems. When displayed graphically (see Figure 5.20) it clearly separates from the other sites in terms of alignment problem frequencies. It is difficult to explain this, other than it may suggest that Londerzeel sees greater amounts of malnutrition, poor health or some other form of problem leading to limited growth of the mandibular bone and therefore a greater number of malocclusions. However, if this was the case, the jaws from Londerzeel should show a high level of other types of dental defect, but this is not the case (see below). It appears, however, that it is these divergent alignment values which are biasing the data for the overall frequency of defects, as discussed above.

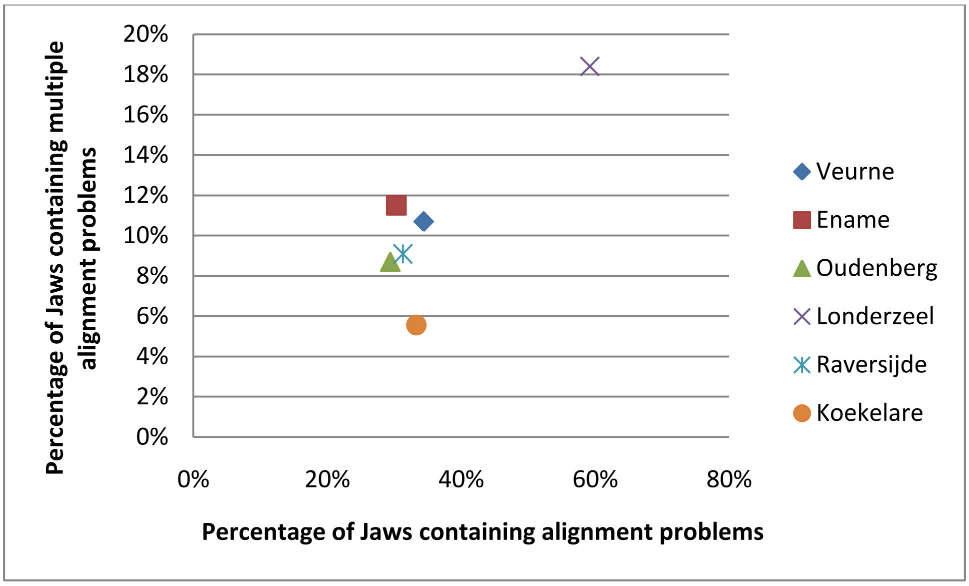


Figure 5.20. Graph illustrating the percentage of jaws containing alignment problems against those containing only multiple examples of alignment problems, per site.

Figure 5.20 shows that Koekelare has relatively few jaws containing multiple alignment problems, although the proportion of jaws with alignment problems is similar to those of the other sites, excluding Londerzeel. However this pattern is again probably an outcome of the small sample numbers (only *n=18*) and it is likely that in reality it groups with the other four sites. The difference is not statistically significant when calculated using the Student T-Test. For four (possibly five) of the six sites there is a clear frequency of alignment problems to which all four sites are close. In the absence of comparative data from elsewhere, it therefore appears that this is the ‘normal’ pattern. Londerzeel is the divergent site and can perhaps be interpreted as having the most stressed pigs. Londerzeel clearly has a greater number of multiple alignment problems, even though in general Londerzeel displays a lower than usual amount of multiple features per jaw (see Figure 5.21). It appears that alignment in particular is illustrating stress (perhaps nutritional), whereas other types of jaw pathology may not be picking up this pattern.

Figure 5.21 presents a more detailed breakdown of the severity of the types of alignment malocclusions.

Site	***Number of jaws containing 'major' alignment problems***	***Number of examples of major alignment problems***	***Percentage of the 'total number of jaws in the sample' which have major misalignments***	***Percentage of 'jaws with misalignments' that have alignments beyond 'normal' variation.***	***Percentage of all alignment flaws that are 'major'***
Veurne	8	15	6.6%	19%	26.3%
Ename	9	10	7.4%	24.3%	18.9%
Oudenberg	7	10	3.2%	10.9%	11.24%
Londerzeel	8	10	10.5%	17.8%	16.1%
Raversijde	5	7	4.8%	16.1%	16.3%
Koekelare	1	1	5.6%	16.7%	14.3%

Figure 5.21. Table showing the numbers of minor versus major misalignments for each site

'Major' is defined as having gross alignment problems: for example, rotation of the teeth present being beyond 45 degrees, and clear displacement of the tooth out of the tooth row, whereas 'Minor' is defined as noticeable alignment problems, but not beyond these boundaries. Most of the sites have a small percentage of jaws with major misalignments, around 4-7% for all jaws (Figure 5.21). When considering only the jaws that have some form of malocclusion around 10-19% of these are major, suggesting that major misalignments are more likely to occur where there are also other alignment flaws. Even Koekelare, despite its small sample size, fits well into the range of results.

Londerzeel also fits well in two of the three instances in Figure 5.21, despite the differences identified previously in the overall percentage of jaws containing defects. The ratio of major: minor alignment problems for Londerzeel fits well with the other sites, it is the overall frequency of such problems which is elevated. In this more detailed breakdown, the site of Oudenberg shows a variant pattern, having lower numbers of major defects in comparison to minor, and a lower percentage of jaws containing these major examples. This may suggest that Oudenberg experienced particularly little nutritional stress affecting alignment in comparison to the other sites.

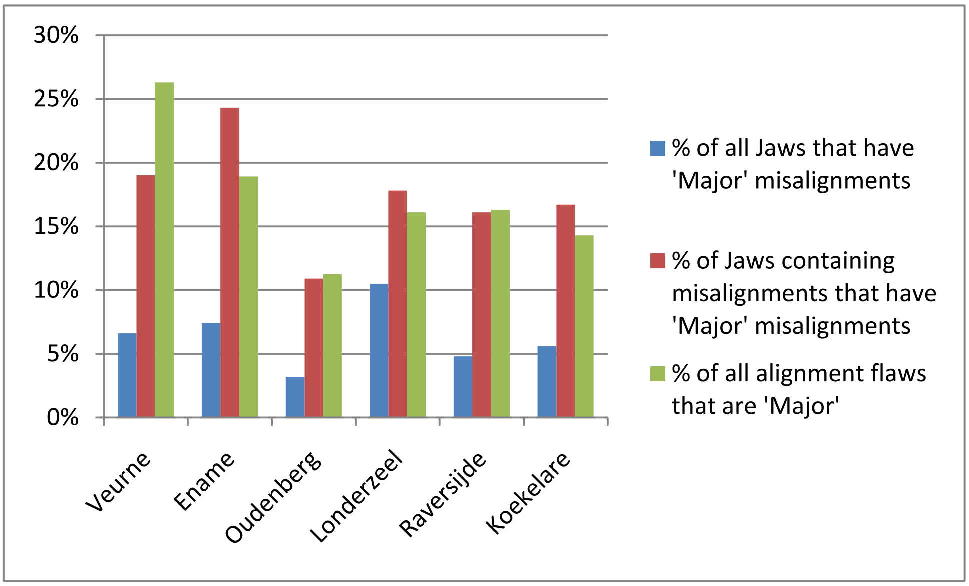


Figure 5.22. Graph demonstrating the number of jaws with major misalignments in a number of categories

However, it is unclear whether this difference is due to natural variation, or is a more significant pattern because the lack of comparative studies means that it is impossible to know the 'normal' level of natural variation. It is evident however that most of the sites show similar levels of major and minor alignment defects.

Veurne and Ename have a slightly greater tendency for mandibles that have misalignments to have more major misalignments, and also for a greater percentage of all alignment flaws to be major (Figure 5.22). However, the percentage of jaws overall which have major misalignments is approximately the same as at other the sites. Such differences are subtle and again may simply reflect natural variation.

	Sites											
	Veurne		***Ename***		***Oudenberg***		***Londerzeel***		***Raversijde***		***Koekelare***	
Flaw	Major	Minor	Major	Minor	Major	Minor	Major	Minor	Major	Minor	Major	Minor
Overlapping	4 (26.6%) [6.6%]	7 (15.2%) [11.5%]	2 (22.2%) [3.8%]	7 (15.9%) [13.2%]	0	8 (10.3%) [9.0%]	0	8 (15.7%) [12.9%]	1 (16.7%) [2.7%]	1 (3.2%) [2.7%]	0	0
General Misalignment	1 (6.7%) [1.6%]	0	0	0	0	0	0	0	0	0	0	0
Gap (Diastema)	0	1 (2.2%) [1.6%]	0	0	2 (18.18%) [2.2%]	2 (2.6%) [2.2%]	1 (9.0%) [1.6%]	3 (5.9%) [4.8%]	2 (33.3%) [5.4%]	4 (12.9%) [10.8%]	0	0
dP2>B	0	0	0	0	0	1 (1.3%) [1.1%]	0	0	0	1 (3.2%) [2.7%]	0	0
dP3>L	0	5 (10.9%) [8.2%]	0	0	0	1 (1.3%) [1.1%]	0	0	0	0	0	0
dP4>L	0	1 (2.2%) [1.6%]	0	0	0	0	0	0	0	0	0	0
dP4>B	0	1 (2.2%) [1.6%]	0	0	0	1 (1.3%) [1.1%]	0	1 (2.0%) [1.6%]	0	3 (9.7%) [8.1%]	0	0
P2 > B	0	0	0	0	0	1 (1.3%) [1.1%]	0	0	0	0	0	0
P3>L	0	1 (2.2%) [1.6%]	0	1 (2.3%) [1.9%]	0	0	0	0	0	0	0	0
P4>L	0	1 (2.2%) [1.6%]	0	0	0	3 (3.8%) [3.4%]	0	0	0	0	0	0
P4>B	0	3 (6.5%) [4.9%]	0	0	0	0	0	1 (2.0%) [1.6%]	0	1 (3.2%) [2.7%]	0	0
M1>L	2 (13.3%) [3.3%]	2 (4.3%) [3.3%]	0	1 (2.3%) [1.9%]	0	3 (3.8%) [3.4%]	0	0	0	1 (3.2%) [2.7%]	0	0
M1>B	2 (13.3%) [3.3%]	3 (6.5%) [4.9%]	4 (44.4%) [7.5%]	9 (20.5%) [17.0%]	3 (27.27%) [3.4%]	12(15.4%)[13.5%]	2 (18.1%) [3.2%]	7 (13.7%) [11.3%]	0	5 (16.1%) [13.5%]	1 (100%) [14.3%]	3 (50%) [42.9%]
M2>L	0	4 (8.7%) [6.6%]	0	2 (4.5%) [3.8%]	0	2 (2.6%) [2.2%]	0	0	0	0	0	0
M2>B	1 (6.7%) [1.6%]	1 (2.2%) [1.6%]	1 (11.1%) [1.9%]	1 (2.3%) [1.9%]	0	6 (7.7%) [6.7%]	0	3 (5.9%) [4.8%]	0	2 (6.5%) [5.4%]	0	0
M3>L	0	0	0	1 (2.3%) [1.9%]	1 (9.1%) [1.1%]	1 (1.3%) [1.1%]	0	2 (3.9%) [3.2%]	0	0	0	0
P3 L/B	1 (6.7%) [1.6%]	1 (2.2%) [1.6%]	0	1 (2.3%) [1.9%]	0	0	0	0	0	1 (3.2%) [2.7%]	0	0
P3 B/L	0	1 (2.2%) [1.6%]	0	0	0	4 (5.1%) [4.5%]	1 (9.0%) [1.6%]	2 (3.9%) [3.2%]	1 (16.7%) [2.7%]	0	0	0
dP4 L/B	0	0	0	0	0	0	0	0	0	1 (3.2%) [2.7%]		
dP4 B/L	0	0	0	0	0	0	0	0	0	1 (3.2%) [2.7%]		
P4 L/B	0	5 (10.9%) [8.2%]	0	6	0	6 (7.7%) [6.7%]	0	2 (3.9%) [3.2%]	0	1 (3.2%) [2.7%]	0	0
P4 B/L	1 (6.7%) [1.6%]	5 (10.9%) [8.2%]	1 (11.1%) [1.9%]	11 (25%) [20.8%]	3 (27.3%) [3.4%]	13(16.7%)[14.6%]	5 (45.5%) [8.1%]	16(31.4%)[25.8%]	2 (33.3%) [5.4%]	5 (16.1%) [13.5%]	0	1 (16.7%) [14.3%]
M1 L/B	0	0	0	0	0	0	0	0	0	3 (9.7%) [8.1%]		
M1 B/L	0	0	0	2 (4.5%) [3.8%]	1 (9.1%) [1.1%]	1 (1.3%) [1.1%]	0	1 (2.0%) [1.6%]	0	1 (3.2%) [2.7%]	0	2 (33.3%) [28.6%]
M2 L/B	0	0	0	1 (2.3%) [1.9%]	0	1 (1.3%) [1.1%]	0	1 (2.0%) [1.6%]	0	0	0	0
M2 B/L	0	1 (2.2%) [1.6%]	0	0	0	2 (2.6%) [2.2%]	0	1 (2.0%) [1.6%]	0	0	0	0
M3 L/B	0	0	0	1 (2.3%) [1.9%]	0	1 (1.3%) [1.1%]	0	0	0	0	0	0
M3 B/L	0	0	1 (11.1%) [1.9%]	0	0	0	0	0	0	0	0	0
P3 T B	0	0	0	0	0	1 (1.3%) [1.1%]	0	0	0	0	0	0
dP4 T B	1 (6.7%) [1.6%]	0	0	0	0	0	0	0	0	0	0	0
P4 T B	1 (6.7%) [1.6%]	0	0	0	0	0	0	0	0	0	0	0
P4 T P	0	0	0	0	0	1 (1.3%) [1.1%]	0	0	0	0	0	0
M1 T L	0	1 (2.2%) [1.6%]	0	0	0	0	0	0	0	0	0	0
M1 T B	0	1 (2.2%) [1.6%]	0	0	1 (9.1%) [1.1%]	3 (3.8%) [3.4%]	2 (18.2%) [3.2%]	2 (3.9%) [3.2%]	0	0	0	0
M1 T P	0	0	0	0	0	0	0	1 (2.0%) [1.6%]	0	0	0	0
M2 T L	1 (6.7%) [1.6%]	1 (2.2%) [1.6%]	0	0	0	1 (1.3%) [1.1%]	0	0	0	0	0	0
M2 T B	0	0	0	0	0	1 (1.3%) [1.1%]	0	0	0	0	0	0
M3 T B	0	0	0	0	0	1 (1.3%) [1.1%]	0	0	0	0	0	0
I3displacement	0	0	0	0	0	1 (1.3%) [1.1%]	0	0	0	0	0	0
Total number	***15***	***46***	***9***	***44***	***11***	***78***	***11***	***51***	***6***	***31***	***1***	***6***

Figure 5.23. Number of major and minor alignment defects for each site. Figures in round brackets () represent the percentage of all the major or minor flaws, if relevant, in that particular category for that site. Figures in square brackets [] are the percentage of all defects from the site (combining major and minor).

The closer break-down of the types of alignment problems being exhibited in Figure 5.23 shows that the fourth premolar (P4) and first molar (M1) are the most consistently misaligned elements both in terms of rotation and displacement. It is difficult to provide an explanation for this although the interface of premolar to molar may merely be more predisposed towards problems. This may be because of the P4 erupting up against M1 (first molar fully erupted by c. 7 months and the fourth premolar by c. 16 months (Rowley-Conwy 1993:180)) where, if the jaw is not sufficiently long, malalignment must inevitably occur. Other teeth developing around this age are evidently not being as affected (for example, P2 and P3), but this may be due to less inherent crowding further forward in the mouth. Periodontal disease is also known to affect occlusion and so this may also be a contributing factor. This pattern therefore suggests that any problems the pigs are seeing is affecting them from a relatively young age.

- <u>*Summary:*</u>
    - *The P4 and M1 are the most commonly affected teeth.*
    - *Oudenberg has a low number of major alignment defects.*
    - *Londerzeel has a higher percentage of jaws showing alignment problems, and a higher percentage with multiple alignment problems despite the lower overall percentage of multiple defects per jaw.*
    - *Alignment appears to particularly clearly be highlighting differences between Londerzeel and the other sites.*

It is generally believed (Rowley-Conwy, pers. comm. 2010) that all forms of malocclusion are simply different outcomes of the same problem: the movement of teeth to positions they should not occupy, caused by crowding of the jaw. This does not, however, mean that a variety of factor's cannot be involved, and so it is important to consider the information about the pattern of tooth alignment from the various sites in order to see how these dental defects are manifesting themselves. If the frequency of different types of malocclusion varies between the sites, it may suggest that the causes are more complex than simply 'crowding' for ill-defined reasons. As we have seen (Chapter 3), the age profiles of pigs from all six sites are overall relatively similar with few elderly or juvenile examples, and so age can be discarded as a reason for differences seen between the sites.

General Misalignment

There is only one instance of general misalignment of the teeth, from Veurne. This consisted of a very slight exhibition of problems such as rotation and overlapping teeth all at very subtle levels and too small to record even as a 'minor' defect. However this was still enough to have caused a poor fit with the maxillary teeth leading, (in the authors opinion) to a poor bite and unusual wear. There are no other examples from any of the other sites suggesting that this sort of generalised low level misalignment is uncommon.

Overlapping:

Oudenberg has a relatively low number of jaws (10.3%) with examples of overlapping teeth (see figure 5.23). Londerzeel (15.7%), Veurne (15.2%) and Ename (15.9%) have a similar but larger proportion of jaws containing this defects (albeit Londerzeel displays no 'major' examples). This suggests that there are three relatively 'high frequency' sites, Veurne, Ename, and Londerzeel, a much 'lower frequency' site, Raversijde (3.2%), and a 'mid frequency' site, Oudenberg. Sample size at Kokelare is small, and the jaws contain no examples of overlapping teeth.

At Veurne and Ename many of the major defects are 'overlapping' types. Indeed, for Veurne this is the most frequent type of defect. At the other sites, however, most defects are rotation of premolars or molars displaced to either side of their normal alignment in the jaws. This often involves the M1, possibly suggesting some growth retardation in the jaw around the time of its development. Indeed, when including the minor 'overlapping' events, the M1 is very often involved, for example in 81.8% of the cases from Veurne. There is a greater range of teeth involved in overlapping at some of the other sites, such as Ename. However, the M1 is still often involved, with the P4-M1 interface being the most commonly affected at all sites. No jaw from any of the sites exhibits more than one example of crowding.

Diastema between teeth

Pigs at Oudenberg, Londerzeel and Raversijde have a greater percentage of diastema (gaps) between the teeth than Veurne and Ename, and pigs at Oudenberg and Raversijde contain far fewer instances of crowding than the other sites (see above). At Veurne there is only one instance of an overlarge diastema between the teeth and that is a minor flaw. Ename has no examples. However, the numbers of actual examples are small (in single digits- see Figure 5.23) and so it is again important not to over interpret this data. It is possible that the patterns suggest a difference between sites with high numbers of diastema, low numbers of overlapping and vice versa. Further investigation with a greater range of archaeological and modern examples is needed to see whether this is more widely the case, but such an assertion would seem logical as gaps between the teeth suggest a relatively uncrowded jaw, whereas overlapping is a sign of crowding of the jaw. It is also important to remember that 'Overlapping' is only one demonstration of crowding.

The diastema defects are exhibited across all areas of the tooth row. Pigs at Londerzeel, for example, exhibit four instances: P3-P4 (twice), M1-M2, and M2-M3. Pigs at Raversijde present a number of jaws with diastema between the teeth at M1-M2, dP2-dP3 (twice), P2-P3, dP4-M1, P3-P4 and a major M1-M2 diastema. This suggests that the occurrence of diastema between teeth is not related to a particular event occurring at the time of tooth development, but that something more long-term or variable is affecting jaw development in this way. While there is only the one instance of the third molar being involved at any of the sites, this may simply be due to the relatively young age at death represented in most of the jaws examined. There are proportionally far fewer jaws with the third molar present than the other teeth and therefore far fewer instances .

Pigs at Raversijde clearly have a higher number of diastemas (gaps) than all the other sites (see Figure 5.24 for an example). This suggests that there was no nutritional stress during growth because the mandible has grown to full size. This may therefore tentatively indicate that the pigs at Raversijde received a notably better diet or lifestyle than those at the other five sites, which exhibit higher frequencies of crowding. This is surprising considering the environmental conditions at Raversijde which would probably have made life extremely difficult for free-range pigs. This may be an indication that a different sort of husbandry was occurring at this site. Stall-keeping is a husbandry technique that has been suggested for the pigs of Raversijde (Ervynck, pers. comm. 2006) because of the lack of a suitable environment for pigs to range in. Large amounts of stress were thought to have affected the pigs, revealed by their linear enamel hypoplasia (LEH) (see Chapter 6).

Figure 5.24. Jaw from Raversijde exhibiting a relatively small diastema between two molars

This original identification of great levels of stress makes the lack of nutritional stress suggested here by the other jaw defects particularly surprising, and may indicate that the pigs at Raversijde *are* experiencing stress (as demonstrated by the LEH), but that it is not nutritional stress (as demonstrated by the greater propensity for diastema). One such form of stress might be stalling which, if correct, is demonstrated here for the first time. This seems to indicate that the more inclusive examination of a wider number of dental defect types, even if at a relatively 'low-tech' level, can add to the information which can be obtained from these pigs.

Displacement of teeth

Sites	***Instances of minor movement to lingual side***	***Instances of major examples of movement to lingual side***	***Total number of instances of movement to the lingual side***	***Instances of minor movement to buccal side***	***Instances of major movement to the buccal side***	***Total number of examples of movement to the buccal side***
Veurne	14	2	16	8	3	11
Ename	0	5	5	10	5	15
Oudenberg	10	1	11	21	3	24
Londerzeel	2	0	2	11	2	13
Raversijde	2	0	2	12	0	12
Koekelare	0	0	0	3	1	4

Figure 5.25. Breakdown of the types of displacement of teeth out of the tooth row, for all sites

There are no real differences in the number of major examples of buccal and lingual displacement (Figure 5.25). However, for minor tooth movement it is evident that the teeth are far more likely to move towards the buccal side. At Ename, the predisposition is 3:1, and this is true for all the other sites except Veurne, where 11 have moved to the buccal and 16 to the lingual side. It is important to emphasise that this pattern is not visible in the 'major' examples, but in subtle variations from the ideal tooth position. Most of the major examples of displacements are on molar teeth, predominantly the M1 and to a lesser extent also the M2.

Rotation of the Teeth

Site	*Number of instances of teeth rotated in the tooth row*	*Number and percentages of instances involving molars*	*Major examples*	*Number and percentages of teeth rotated B/L*	*Number and percentages of teeth rotated L/B*
Veurne	15 (incl. 2 major)	1 [6.7%]	P4: B/L P3:L/B	8 (53.3%)	7 (46.7%)
Ename	24 (2)	5 (incl. 1 major) [20.8%]	M3: B/L P4: B/L	15 (incl. 2 major) (62.5%)	9 (37.5%)
Oudenberg	32 (4)	6 (1) [18.8%]	M1: B/L P4: B/L (3 examples)	24 (4) (75%)	8 (25%)
Londerzeel	29 (4)	4 [13.8%]	P4: B/L (5) P3: B/L	26 (4) (89.6%)	3 (10.3%)
Raversijde	20 (4)	5 [25%]	P3: B/L P4: B/L (2 examples)	12 (60%)	8 (40%)
Koekelare	3 (0)	2 [66.6%]	0	3 (100%)	0

Figure 5.26. Table illustrating the data on the rotation of pigs teeth in the jaws for all six sites.

At Veurne (see Figure 5.26) there are few instances involving the molars (6.7% compared to over 13% for all other sites). Koekelare has a greater percentage, although this may be again due to the limitations of a very small sample. This demonstrates again, however, that at Veurne the displacement pattern differs from that at the other sites in a number of subtle ways. At all sites (other than Koekelare) the majority of rotations involve the P4 (18 out of 24 at Ename, 11 out of 15 at Veurne), although both premolars and molars can exhibit this, and it appears that this tooth appears particularly predisposed to rotation, presumably again due to crowding (see Figure 5.27 for an example of slight rotation).

Figure 5.27. Fourth premolar rotated very slightly on a jaw from Raversijde

For all sites there is a tendency for the teeth to rotate B/L, and all major examples of rotation are in this direction. Again, Veurne differs, having a far more 'even' rotation with the number of teeth rotating to B/L only slightly (53.3%) more than those rotated L/B (46.7%). Therefore, Veurne differs both with regard to teeth affected and the direction of rotation. The other five sites are much more similar to each other.

Tilting of teeth

At all sites there are relatively few examples of tilting of the teeth in any direction (see Figure 5.23). There are no examples of tilting at Koekelare, Ename or Raversijde. At Oudenberg there are nine examples of tilting of the teeth (4.1% of the population): one towards the lingual side, seven to the buccal side (1 major), and one towards the front of the jaw. There appears to be a pattern of tilting towards the buccal side; Londerzeel exhibits five examples of tilting (all molars) with four towards the buccal side, and one towards the front of the jaw. Veurne is however again different. There are six examples of tilting from this site: three towards the lingual and three to the buccal side. Of these, three demonstrate a relatively high level of tilting- two towards the buccal (a dP4 and a P4) and one to the lingual (M2), deviating from the vertical axis by over ten degrees.

Summary of Alignment patterns

There seems therefore to be a predisposition of teeth to move towards the buccal side and possibly tilt towards that side (although this pattern is less clear), and rotate B/L. Generally, there is little variation between the sites, although it appears Veurne differs from the other five sites in very understated ways. What trends that there are may only be natural variation and it is difficult to conclude much of significance. However, it is still apparent that for most forms Veurne is differing from the other five sites. An examination of all types of 'crowding' shows therefore that there are subtle patterns and differences between the sites in how the tooth row becomes crowded, even if we do not as yet have the ability to interpret them clearly.

- *Summary:*
  - *Overlapping often involves the M1.*
  - *Pigs at Oudenberg, Londerzeel and Raversijde have a greater percentage of diastema, and at Oudenberg and Raversijde have fewer instances of crowding in general.*
  - *Pigs at Raversijde have a particularly high percentage of diastema*
  - *Veurne teeth are equally likely to rotate B/L and L/B, whereas the other sites are more likely to rotate B/L.*
  - *There are no discernable differences in Displacement, General Misalignment or Overlapping between the sites, Tilting is relatively rare*
  - *Veurne displacement is particularly unlikely to involve molars (7%) in comparison to the other sites (14% or above).*
  - *Rotation is most likely to involve P4.*
  - *Veurne teeth are equally predisposed to tilt to the buccal or the lingual side, whereas the other sites have a predisposition to tilt to the buccal.*

5.2.6.3. Abnormal Wear

Site	***Number of Jaws containing examples of unusual wear***	***Number of examples of unusual wear***
Veurne	34 (29.6%)	44
Ename	25 (22.1% of relevant jaws)	28
Oudenberg	40 (17.9%)	42
Londerzeel	15 (19.7%)	19
Raversijde	22 (21.2%)	23
Koekelare	7 (41.2%)	7

Figure 5.28. Table presenting the collated data for unusual wear at all six Belgian sites

Abnormal wear is defined as that outside the Grant definitions for the age of that jaw, or with a particularly sloping or otherwise unusual profile. Pigs at Veurne, Oudenberg, Londerzeel and Ename all have relatively few multiple examples of abnormal wear (Figure 5.28). Raversijde only has one example and Koekelare has none. Therefore, it is clear that at these six sites there is no pattern of wear of whole jaws being affected by misalignment (malocclusion) of one or two teeth.

These instances of odd wear all seem to be explicable as the result of tooth crowding, diastema, or malalignments in the maxilla, leading to abnormally greater wear in certain places. There are few examples of lesser levels of wear than anticipated: at Veurne there is one example, five at Ename, one at Oudenberg and four from Londerzeel. There are no examples of lesser wear from Raversijde or Koekelare. The pattern is evidently that where there is unusual wear on the jaws, it is generally a greater amount of wear rather than less. Where less wear is partial it is always less wear on the lingual side (supporting also the propensity of greater amounts of wear to be on the buccal side of the jaw), although it is more usual to just have generally less tooth wear over the whole surface.

Both premolars and molars exhibit unusual amounts of wear (Figure 5.29). There are however clearly more molar problems than premolar for all six sites. It is evident that the first molar (M1) exhibits the most examples of unusual wear on all sites (followed by M2), although this may be related to the ages of the jaws and so relative frequencies between teeth are perhaps misleading. However, Johnson (2006) in an examination of culled sows identified that there was a predisposition for M1s to experience unusual wear in modern populations. It is possible that this may also be the case for past populations, and these examples appear to support that theory.

Unusual wear patterns seem to exhibit a trend towards excessive buccal rather than lingual wear (for example, in 47.6% of examples at Veurne it is towards the buccal, with only 14.3% examples towards the lingual). However, from all sites many of the examples also show equal wear without direction. From detailed examination of the teeth, the conclusion of the author is that many of these examples of wear are related to poor bite, resulting in unexpected wear patterns. The trend for greater wear on the buccal side of the M1 perhaps suggests a predisposition towards an over-bite in some pigs. There is no evidence of Veurne being ‘more even’ in its wear distribution than the other five sites despite its differing patterns in alignment problems (see above).

Tooth	Examples from Veurne	Examples from Oudenberg	Examples from Ename	Examples from Londerzeel	Examples from Raversijde	Examples from Koekelare
dP3	1 example of wear into the root (1)				1 example very worn sloping towards distal 1 example very worn sloping towards mesial (2)	
P3	1 sloping to distal 2 Excessive wear (3)	2 example very worn towards distal (2)	1 example very worn sloping towards the mesial (1)	1 example extremely worn (1)	1 example extremely worn (1)	
dP4	2 examples of wear into the root 1 example of wear to buccal side 3 example of Excessive wear Cusp 2 1 example of Excessive wear Cusp 2 buccal side 2 example of Excessive wear Cusp 3 1 example of Excessive wear Cusp 3 buccal side 1 Excessive wear (7)	1 example very worn towards distal (1)			1 example very worn to buccal side 1 excessively worn (2)	
P4	1 sloping to distal (1)	1 example very worn towards distal (1)		1 example extremely worn (1)	1 example very worn towards distal (1)	
M1	6 Excessive wear towards Buccal 1 Excessive wear towards Buccal and Mesial 2 example of wear into the root, Lingual side only 3 Excessive wear 1 Excessive wear to Lingual 1 Pillar 1 only, towards proximal 3 Pillar 1 towards Buccal side 3 Excessive wear Pillar 1 only 1 Excessive wear Pillar 2 only 1 Excessive wear where crowded with M2 (22)	1 example Pillar 1 sloping towards bucco-mesial 1 example Pillar 1 very worn towards mesial 3 example Pillar 1 sloping towards buccal 2 example wear towards lingual side 2 example wear towards buccal side 1 example Pillar 1 very worn 4 example Pillar 2 very worn 1 example Pillar 2 sloping towards lingual 4 example extreme wear (19)	4 example generally excessive wear 2 example Pillar 1 worn towards the buccal side 1 example Pillar 2 buccal side extreme wear 1 example Pillar 2 very worn 1 example Pillar 1 very worn 1 example Pillar 1 very worn towards distal 3 example worn towards buccal side 2 example Pillar 1 worn towards Lingual side 1 example worn into roots, Lingual side (16)	3 example excessively worn 1 example M1 Pillar 2 very worn 3 example worn more buccal side 1 example wear sloping towards distal 3 example M1 Pillar 2 lingual side excessive wear (11)	2 example excessively worn 1 example worn more on lingual side 5 example worn more on buccal side 1 Pillar 1 very worn 3 Pillar 2 very worn 1 example very worn to the centre of the tooth (13)	1 example M1 Pillar 1 worn more buccal side 1 example M1 greater wear on buccal side 1 example M1 Pillar 1 very worn towards lingual side 2 example M1 Pillar 1 very worn (5)
M2	1 Excessive wear 1 example of wear Pillar 2 towards distal 3 Lingual side 1 Buccal side 1 Excessive wear Pillar 2 1 Excessive wear where crowded with M1 (8)	1 example worn on mesial 2 example extreme wear 4 example Pillar 2 very worn 1 example Pillar 2 very worn towards distal 1 example Pillar 2 worn towards buccal side 3 example wear towards buccal side (12)	1 example generally excessive wear 1 example Pillar 1 very worn 1 example Pillar 1 very worn towards buccal side 1 example Pillar 2 very worn 1 example worn towards buccal side 1 example worn into roots, lingual side (6)	1 example more wear on bucco-distal cusp 1 example worn more buccal side (2)	2 Pillar 1 very worn 1 example Pillar 2 very worn 1 Pillar 1 very worn on buccal side 1 example very worn towards buccal side (5)	1 example M2 very worn (1)
M3		1 example Pillar 1 sloping towards lingual 2 example Pillar 2 very worn 1 example Pillar 1 and 2 very worn 1 example Pillar 3 very worn (5)				

Figure 5.29. Details of the types of unusual wear for each site

Extreme tooth wear can result from the form of fodder available to the livestock, the substrate on which the food is found, the presence of any hard minerals in any associated soil, and stock density (Miles and Grigson, 1990:101). Therefore, while no clear patterns have emerged from this consideration of wear, it is important to examine whether there are any differences between the six sites at the microlevel and whether this can reveal any differences between them in terms of diet.

It is clear that the wear patterns are the same across all sites, suggesting that we may be seeing the natural ambient pattern for cases of unusual dental wear in pigs, and no site differences are reflected in this gross consideration. This is perhaps confirmed by Johnson's study (2006) which, although his sows exhibit far higher general levels of jaw defects than these sites (85% showing dental lesions, and 63% unusual molar wear), they still seem to exhibit similar trends. The lack of any difference between the sites suggests that this is not a useful form of defect to consider for the differentiation of jaws, or the consideration of jaw 'pathology', at least in this instance. The jaws wear results appear very similar between sites even when the jaws appear to be differing markedly in other respects. This is perhaps unsurprising considering that tooth wear is a complex process, dependent on a number of details such as masticatory function, the physical consistency and chemical constitution of the diet, tooth eruption timing and sequence, tooth form and the tooth position in the dental arcade (Williams and Woodhead, 1986:109).

(N.B. percentages for this section and the tartar section were calculated only on jaws with teeth present to prevent the effect on the percentage results of including mandible bones without teeth (which would naturally lower the percentages.

- *Summary:*
    - *It is rare for there to be many teeth in the jaw to be affected by abnormal wear.*
    - *Abnormal wear can in all cases be attributed to malalignments.*
    - *Generally there is more abnormal wear than less.*
    - *The M1 is most likely to exhibit unusual wear then the M2.*
    - *Abnormal wear is more likely on the buccal than the lingual side, but it is often on both.*
    - *There are no obvious differences between the sites.*

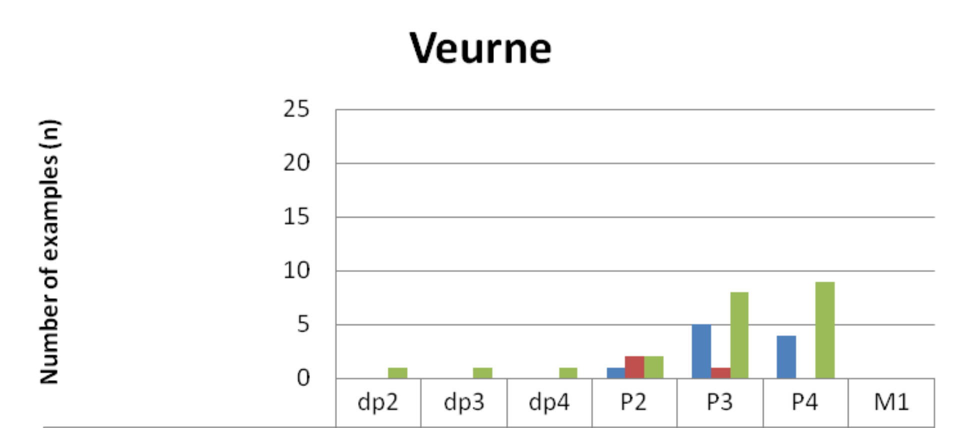
5.2.6.4. Tartar/Plaque

Tartar has been linked to weakened immune systems (with individuals with weakened immune systems exhibiting greater amounts of plaque), although, as we have seen, it is also based very much on diet. Plaque can be identified in humans as supragingival (above gum) and subgingival (below gum). However, such terminology is not used here due to the difficulties of accurately identifying such positions on archaeological teeth. Plaque encourages infection around tooth socket margins which can then become eroded and osteitic, meaning that there is a link with periodontal disease, which is often caused by the development of tartar. This may cause periodontitis (inflammation of the bone leading to bone recession) (Baker and Brothwell, 1980:73), and the associated problem may even cause some alignment problems due to loosening of the teeth. It is thus important to consider how frequently tartar is present in association with a consideration of the frequency of such defects.

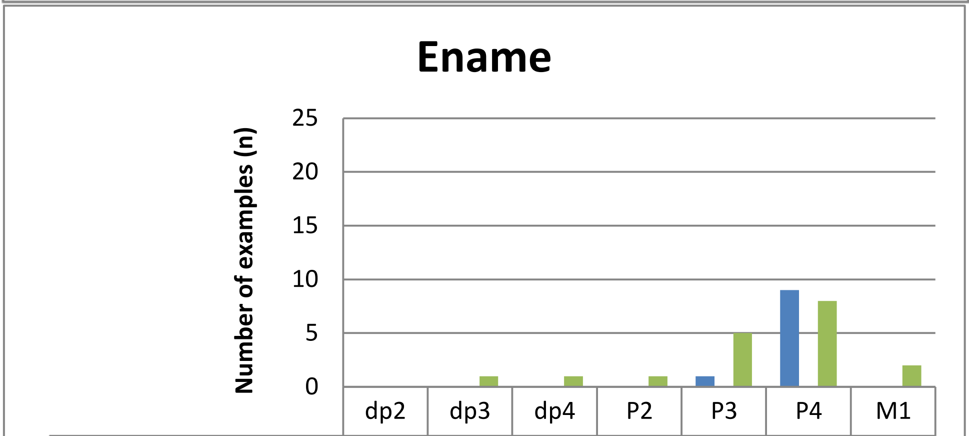
	Veurne	*Ename*	*Oudenberg*	*Londerzeel*	*Raversijde*	*Koekelare*
P2-4 Both Buccal and Lingual sides	2	0	1	1	0	0
P2-4 Buccal only	0	0	3	0	0	0
P2-4 Lingual only	0	0	0	0	0	0
P3-4 Both Buccal and Lingual sides	6	5	3	1	0	1
P3-4 Buccal side only	4	1	5	2	3	0
P3-4 Lingual side only	0	0	0	0	0	0
P2-3 Both Buccal and Lingual sides	0	0	1	0	0	1
P2-3 Buccal side only	1	0	3	0	0	0
P2-3 Lingual side only	1	0	0	0	0	0
P4 Both Buccal and Lingual sides	1	3	2	4	0	0
P4 Buccal side only	0	8	7	1	2	2
P4 Lingual side only	0	0	0	0	1	0
dP2-dP4 Both Buccal and Lingual sides	1	0	0	0	0	0
dP2-dP4 Buccal side only	0	0	0	0	0	0
dP2-dP4 Lingual side only	0	0	0	0	0	0
P2 Both Buccal and Lingual sides	0	1	0	0	0	0
P2 Buccal side only	0	0	1	0	0	0
P2 Lingual side only	1	0	1	0	0	0
P3 Buccal side only	0	0	9	0	1	0
dP2-dP3 Buccal side only	0	0	1	0	0	0
P3 Both Buccal and Lingual sides	0	0	1	3	1	0
P3 Lingual side only	0	0	1	0	0	0
dP3-dP4 Both Buccal and Lingual sides	0	1	0	0	0	0
M1 Both Buccal and Lingual sides	0	2	0	0	0	0

Figure 5.30. Table collating the raw counts of the presence of tartar, for all six sites.

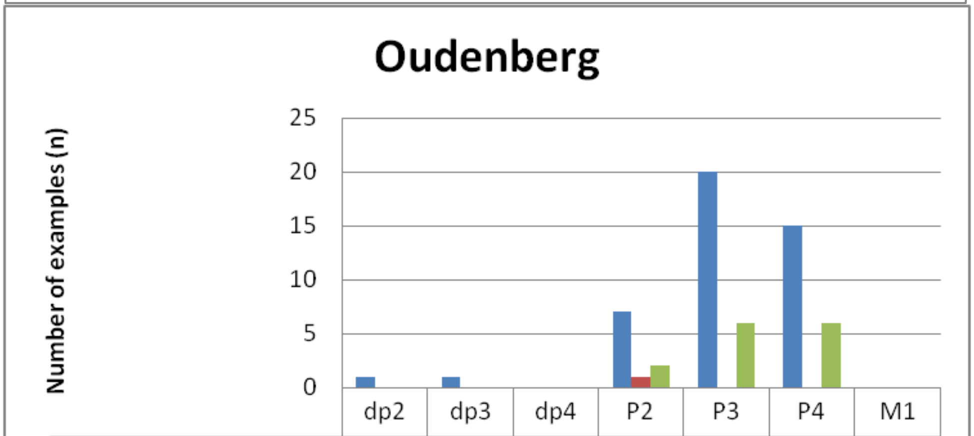
For this study of tartar, interpretation of results is hindered by being dependent on incomplete jaws, as it is reliant on the particular teeth that are present and therefore, while the above table (Figure 5.30) is a summary of what is observed, it is difficult to derive patterns. It has therefore been presented graphically for ease of interpretation (Figures 5.31-5.36).



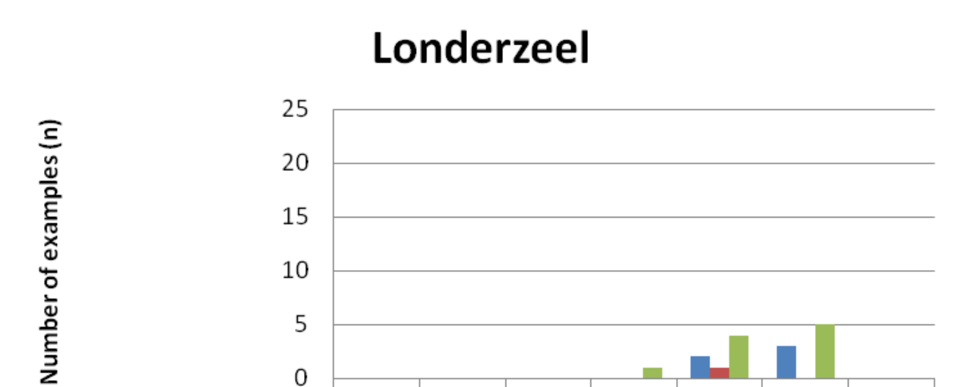
	dp2	dp3	dp4	P2	P3	P4	M1
Tartar Buccal side only				1	5	4	
Tartar Lingual Side only				2	1		
Tartar Both sides	1	1	1	2	8	9	



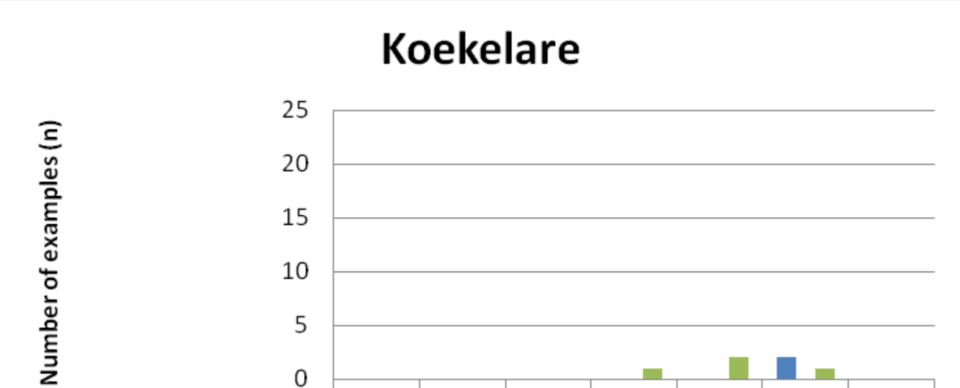
	dp2	dp3	dp4	P2	P3	P4	M1
Tartar Buccal Side Only					1	9	
Tartar Lingual Side Only							
Tartar Both Sides		1	1	1	5	8	2



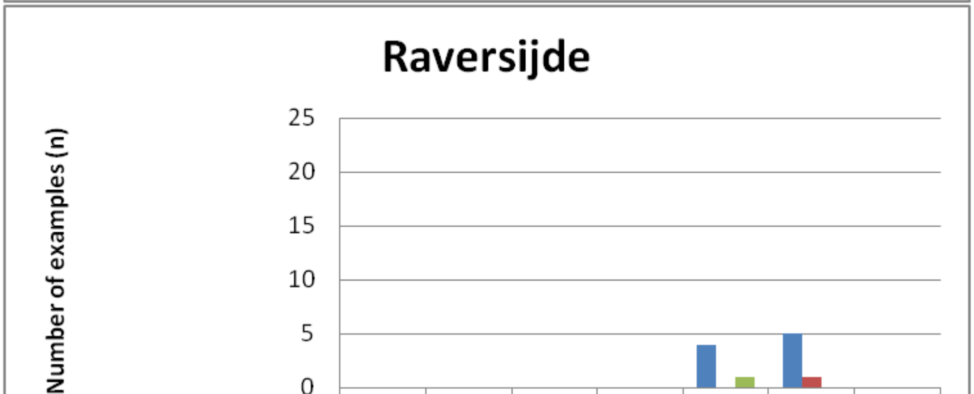
	dp2	dp3	dp4	P2	P3	P4	M1
Tartar Buccal Side only	1	1		7	20	15	
Tartar Lingual Side only				1			
Tartar Both sides				2	6	6	



	dp2	dp3	dp4	P2	P3	P4	M1
Tartar Buccal side only					2	3	
Tartar Lingual side only					1		
Tartar Both sides				1	4	5	



	dp2	dp3	dp4	P2	P3	P4	M1
Tartar Buccal side only						2	
Tartar Lingual side only							
Tartar Both sides				1	2	1	



	dp2	dp3	dp4	P2	P3	P4	M1
Tartar Buccal side only					4	5	
Tartar Lingual side only						1	
Tartar Both sides					1		

Figure 5.31-5.36. Graphs displaying the placement of tartar on teeth in the jaw

This examination (See Figures 5.31-5.36) shows that teeth from the four sites of Veurne, Ename, Londerzeel and Koekelare are more likely to have tartar present on both sides of the tooth. The next most frequent is to have it on the buccal side alone, with few instances of calculus on the lingual side alone at any of the sites. However, for Oudenberg and Raversijde, there is a predisposition towards tartar on the buccal side alone rather than on both sides in contrast to the other sites.

A predominance of tartar for one side or the other is not really surprising. In humans plaque is most common on the buccal side of upper molars and the lingual side of lower incisors, thought to be related to the positioning of the salivary glands (Roberts and Manchester, 2003:72). However, a variation in pattern between sites is less easily explained. It may suggest some subtle dietary difference between these sites, but it is impossible to conclude this confidently from tartar evidence alone. Both Oudenberg and Raversijde are both based in challenging coastal dune regions (see Chapter 2), and perhaps some environmental factor at this type of location is causing the differing tartar pattern. Differences between diet at the six sites will be further examined through dental microwear (see Chapter 7).

	Veurne		***Ename***		***Oudenberg***		***Londerzeel***		***Raversijde***		***Koekelare***	
Tooth	Tartar Buccal side (solely or also on Lingual as well)	Tartar Lingual side (solely or also on Buccal as well)	Tartar Buccal side (solely or also on Lingual as well)	Tartar Lingual side (solely or also on Buccal as well)	Tartar Buccal side (solely or also on Lingual as well)	Tartar Lingual side (solely or also on Buccal as well)	Tartar Buccal side (solely or also on Lingual as well)	Tartar Lingual side (solely or also on Buccal as well)	Tartar Buccal side (solely or also on Lingual as well)	Tartar Lingual side (solely or also on Buccal as well)	Tartar Buccal side (solely or also on Lingual as well)	Tartar Lingual side (solely or also on Buccal as well)
dP2	1	1			1							
dP3	1	1	1	1	1							
dP4	1	1	1	1								
P2	3	5	1	1	9	3	1	1			1	1
P3	13	9	6	5	26	6	6	5	7	1	2	2
P4	13	9	17	8	21	6	8	5	7	1	3	1
M1			2	2								

Figure 5.37. Table presenting the total number of sides of a particular tooth containing tartar, for all six sites

It may also be informative to consider the gross quantities of tartar on either aspect of the tooth (see Figure 5.37) to consider if there is a difference. Here it is evident that there is a preference for tartar to be on the buccal side at all sites, and even those sites which generally have it on both sides. This may therefore be the natural deposition pattern for tartar on pigs. Only four molars exhibit examples of tartar from the entire six sites (all from

Ename). Tartar is exhibited on both deciduous and permanent teeth so this does not appear to be a limiting factor, but it appears that tartar generally affects premolars rather than molars. It may be informative for future studies to, as recommended by Dobney and Brothwell (1986), also consider the position and thickness of the tartar levels in further detail in order to gather even greater understanding about the deposition of the tartar.

- *Summary:*
    - *Tartar is for most sites most likely to appear on both sidesof the tooth than one alone; if it is on one side it is most likely however to be the buccal.*
    - *Raversijde and Oudenberg, however, are more likely to have tartar on the buccal side alone than on both sides.*

5.2.6.5. Other pathologies of the Mandible

Included in the examination was not only an assessment of unusual features of the teeth, but also a consideration of the mandibular bone itself. A number of pathologies were observed and fall into several categories (see Figures 5.38 and 5.39)

It is probable that, again, Koekelare contains no example of other jaw problems due to the small number of samples (*n=18*).

	Veurne	***Ename***	***Oudenberg***	***Londerzeel***	***Koekelare***	***Raversijde***
Bone destruction	3 (16.6%)	2 (28.6%)	2 (20%)	4 (30.85)	0	3 (23.1%)
Bone growth	5 (27.7%)	1 (14.3%)	1 (10%)	5 (38.5%)	0	3 (23.1%)
Tooth malformation	7 (38.9%)	1 (14.3%)	3 (30%)	1 (7.7%)	0	6 (46.2%)
Tooth root malformation	3 (16.6%)	2 (28.6%)	2 (20%)	2 (15.4%)	0	0
Overall jaw change	0 (0%)	1 (14.3%)	2 (20%)	1 (7.7%)	0	1 (7.7%)

Figure 5.38. Table collating the raw counts and percentages of each type of 'other' pathology on the jaws

	Veurne	*Ename*	*Oudenberg*	*Londerzeel*	*Koekelare*	*Raversijde*
Bone recession:	3 examples 1 example of recession under dp4, also S-Shaped jaw 1 example of recession under M2, on both sides of the jaw for Pillar 1, only on the buccal side for Pillar 2 1 example of recession under the dp4 and M1, buccal side only		2 examples Under M2 and M3 Under M1-M2	4 examples Under M1-M2 on tooth row Under M1 Under M3 Under M1-M2 buccal side of the tooth row only.	No examples	3 examples Under dp3 Under M1 Under P3
Bone growth:	5 examples 1 example under the dp2-dp4 area 1 example along the tooth row on the lingual side of the jaw 1 example under the P4 area of the Mandible, buccal side only 1 example between the P3-M2 on the buccal side only 1 example of Bone growth under the M1-M2, Lingual side	1 example Buccal side of the jaw	1 example Buccal side of jaw 'bumpy' bone growths	5 examples On lingual side of tooth row On lingual side of tooth row On the bottom of the jaw, lumpy bone growth On lingual side of jaw, near the M3 Around teeth on buccal side	No examples	3 examples Under dP4 Under M3 (two examples)
Tooth malformation: (morphology/enamel formation problems/hypoplasias)	7 examples: M1 Enamel formation problems P4 odd morphology (extra part to Cusp 1), and Enamel formation problems M1 odd morphology (narrowing to Pillar 1) dP4 Enamel formation problems M2 Enamel formation problems dP4 and M1 Enamel formation problems M2 Enamel formation problems P3-4 hypoplasias	1 example Missing P3	3 examples P4 odd morphology on buccal side A M3 with large gap between Pillars 2-3 A M3 with a very narrow Pillar 3	1 example M2 Pillar 2 malformed	No examples	6 examples P4 with hypopalsias M1 poor enamel development P3-P4 with hypoplasias M2 poor enamel formation M1 hypoplasias and a small Pillar 2 M2 poor enamel formation
Tooth Root malformation:	3 examples dP4 holes in roots dP4 and M1 twisted roots M1 (Both Pillars) and M2 (Pillar 1 only) withered roots	2 examples dP3-dP4 twisted roots P4 roots	1 example A M2 and M3 with very twisted roots	2 examples M3 withered roots M1 withered roots	No examples	
Overall Jaw morphology		1 example S shaped Jaw	2 examples Very S-shaped jaw	1 example S- shaped Jaw	No examples	1 example Of very porous alveolar bone on jaw

Figure 5.39. Table collating the various types of 'other' jaw pathologies for the six sites

Tooth malformation (Enamel and Root)

From this examination it is clear that Veurne, Oudenberg and Raversijde exhibit a proportionally larger amount of tooth formation problems than the other sites. This pattern may be influenced by the relatively small number of examples, particularly for Oudenberg, where this is only one sample extra than those in most other categories (See Figure 5.39). For Raversijde, Oudenberg and Veurne, however, the difference is relatively clear (46.2%, 38.9% and 30% of all 'other' problems), and it is probable that these are 'true' patterns. These sites are all relatively coastal (Oudenberg and Raversijde being directly upon the coast, and Veurne in the local Polder region, see Chapter 2). Enamel hypoplasias are often termed a non-specific 'indicator of stress' and are defined as deficiencies in enamel matrix composition (Goodman and Rose, 1990:281). Whether this reflects a common genetic propensity to formation problems in the coastal region of Flanders at this time is impossible to definitively state. Raversijde has been identified previously as having a large number of linear enamel hypoplasias (something which is examined more deeply in the next chapter), and so displaying other malformations of the enamel is perhaps not unexpected with stress affecting the enamel amelobasts. These defects occur while the teeth are developing and remain during adulthood, being caused by localised trauma, hereditary anomalies, or systematic stress such as illness or a nutritional deficiency. Many factors can cause them (see Hillson, 1986 for an overview) and so it is difficult to interpret these data alone.

There are also instances of tooth root malformation identified, particularly at Veurne and Raversijde. Malformation of tooth roots in humans can be caused by leprosy (Danielsen, 1970; Baker and Brothwell, 1980:77) and other infectious diseases, and it is probable that this is similarly a reflection of problems during the period of tooth formation for the individual in the same way as enamel hypoplasias. These results may therefore be indicating that these sites in particular are experiencing problems with conditions during the time period of tooth formation.

Caries (Carious legions):

There is no evidence for caries on any of the teeth from the six sites. This is perhaps unsurprising, given the expected 'natural' diet the pigs would be expected to be eating, and particularly if the assumption for most of the sites is that pannage was the primary husbandry type. While few studies have been undertaken on the prevalence of caries in past archaeological pig populations where an aberrant diet is not being anticipated, the identification of caries on archaeological pig mandibles is relatively rare in literature and so this absence is not unexpected. This perhaps confirms that the diet of all six sites, whether different or not, did not contain significant levels of sugar or simple carbohydrates (often a factor in the creation of caries (National Research Council, 1989:638)). The relatively young age of many of the mandibles will also be relevant, as it is possible if the population had on average been older that more would have been identified.

Bone remodelling (recession and growth):

It is also evident that there are few examples of extreme bone modification affecting the overall bone morphology. Where this occurs it takes the form of a curvature of the mandible in all instances, except one from Koekelare. This 's-shape' is perhaps indicative of a subtle difference in breed or morphology, and may be emphasised by robust growth of the pulp cavity in larger males, rather than a true pathology, as the bone appears healthy.

For Koekelare, the bone formation problem in one example along much of the tooth row suggests some greater bone developmental problem, causing inflammation of the bone and giving it a porous appearance (Baker and Brothwell, 1980:67). Such bone has elsewhere (Powell et al., 1973) been identified as suggesting bone remodelling, again probably due to some non-specific disease or deficiency in the individual.

Bone growth and bone destruction both occur at relatively similar rates, and there is no observable variation in their placement on the jaw between sites, or frequency of occurrence. Both bone recession (loss) and bone growth have elsewhere been linked to periodontal disease (Baker and Brothwell, 1980:373). Similarly, if nutrition is severely limited, growth may not only cease but other problems may also occur. Recession can increase with age in all species, and because the first molar is often one of the oldest teeth in the jaw, recession is more likely here (Watson, 1986:130). This pattern appears reinforced by this study. The relatively low frequencies herein fit well with the limited amount of tartar build up, and perhaps suggest that the overall dental condition of the pigs from all sites examined was good. One of the fundamental signs of periodontitis is the loss of alveolar bone (Regezi et al., 2000:144 in Ortner, 2003:593) which undermines the tooth support structure. All examples here appear to show this relatively general loss of alveolar bone in an area, rather than a specific periodontal abscess. Their general location on the buccal sides is unsurprising, as the alveolar plate is thinner on this side and so is more susceptible to reabsorption (Watson, 1986:130) There are no dramatic examples of alveolar recession from any of the six sites.

Extra teeth (supernumary) present/ Antemortem tooth loss:

There is only one recorded example, from Ename, of antemortem tooth loss, with alveolar bone healing over the tooth site. This is often a feature associated with periodontal disease (Davies, 2002:82, Baker and Brothwell, 1980:74) and other archaeological studies (for example Andrews and Noddle, 1975) have investigated such problems. Other factors such as impaired development due to nutritional deficiencies, or indeed trauma, can also cause this (Davies 2002:82). Antemortem tooth loss can also cause tooth misalignment, but with only one instance of this here this is clearly not the cause of the majority of the cases within this study. It is possible that further instances of this would have existed within the population but they have not been identified due to the fragmentary nature of archaeological samples (Baker and Brothwell, 1980:39). However, it does seem that antemortem tooth loss (or failure to develop) is not a significant problem for any of the six sites examined.

Similarly, other archaeological studies have identified the presence in some jaws of supernumerary (extra) teeth, such as Bökönyi (1974) who identified a horse with an extra incisor (Baker and Brothwell, 1980:39). No examples have been identified from any of the pig mandibles within this site.

- *Summary:*
    - *Pigs at Raversijde, Oudenberg and Veurne have a proportionally large amount of tooth formation problems.*
    - *There are few examples of caries on any of the teeth.*
    - *There are few examples of bone remodeling; where present it is suggestive of limited periodontal disease. This fits well with the tartar evidence.*
    - *There are few examples of supernumary teeth or antemortem tooth loss.*

5.3. Overall Conclusions

Site	***Pattern***	***Summary of possible cause, or information provided***
Raversijde and Koekelare	Levels of pathologies on post-cranial bones at both Raversijde and Koekeleare are low for all three major domesticates.	There is no evidence of particular frequencies of disease or injury at either of the sites, just a limited number of individual cases
Londerzeel	Londerzeel has a lower percentage of jaws containing no defects than the other five sites (which are similar).	Evidence of stress, possibly nutritional affecting development?
Londerzeel	Londerzeel jaws are more likely to have multiple categories of defects	Evidence of stress, affecting mandible development?
Londerzeel	Londerzeel jaws have a higher percentage of jaws containing alignment problems. These alignment problems affect the statistics meaning the jaws from this sites are more likely to have multiple categories of defects, there are more jaws with defects etc.	Alignment problems (particularly crowding) caused by stunted mandible growth, itself caused by nutritional problems or other inhibiting factor?
Ename	Ename jaws have more examples of multiple categories of defects than expected	Possibly suggesting some form of nutritional stress, but unclear
Oudenberg	Oudenberg has a low number of major alignment flaws	Site potentially experiencing less stress, but maybe in the bounds of natural variation?
Londerzeel	Londerzeel has a higher percentage of jaws showing alignment problems, and a higher percentage with multiple alignment problems despite the lower overall percentage of multiple defects per jaw	Because of poor mandible bone growth due to malnutrition or poor health/conditions perhaps?
Londerzeel	Alignment appears to particularly clearly be identifying differences between Londerzeel and the other sites.	
Raversijde	Raversijde has a particularly high percentage of diastema and less crowding in general	Good nutrition/diet/lifestyle, no thwarted bone growth.
Veurne	Veurne teeth are equally likely to rotate B/L and L/B, whereas the other sites are more likely to rotate B/L	Unknown
Veurne	Veurne displacement is particularly unlikely to involve molars (7%) in comparison to the other sites (14% or above).	Unknown
Veurne	Veurne teeth are equally predisposed to tilt to the buccal or the lingual side, whereas the other sites have a predisposition to tilt to the Buccal.	Unknown
Raversijde and Oudenberg	Raversijde and Oudenberg are more likely to have tartar on the buccal side alone than on both	Due to coastal environmental conditions?
Raversijde, Oudenberg and Veurne	Raversijde, Oudenberg and Veurne have a proportionally higher amount of tooth formation problems.	Due to coastal vicinity?

Figure 5.40. Summary of the findings from a consideration of pathology

What is perhaps most obvious from a detailed consideration of pathology is that there are patterns evident between the sites but that these are certainly not easy to interpret in all cases.

It is evident that for all categories of dental defect, where a jaw has one type there is an increased likelihood of another, reinforcing the supposition that problems rarely exhibit in just one form but may be reflected in the jaw in a variety of ways. In considering the differences between sites, while an examination of dental variation has provided evidence of patterns between the six sites as well as clear areas of similarity, the lack of comparative studies,(both for pigs and more generally), limits our ability to provide a confident interpretation. It is evident, however, that malocclusions are not related in these six sites to the size of the jaw alone, something similarly determined elsewhere for humans (Foley and Cruwys, 1986:8) but that there are more subtle differences.

Similarly, it is clear that there are some overall trends which all the sites exhibit. These include the greater number of malocclusions than other types of defects and the general average of there to be around 1-2 defects per jaw, (with the vast majority of jaws not presenting any pathological problems). When considering alignment in more detail, there is a tendancy for malocclusion to trend towards the buccal side, and rotate B/L rather than L/B. Where there are examples of abnormal wear on the teeth often this appears to be in isolated teeth rather than in whole tooth rows. Tartar appears predisposed to be deposited on the buccal side of the jaw over the lingual. It is entirely likely that these could represent merely ‘natural’ or normal patterns found in pig jaws, but further studies in this area would be desirable.

This study has, however, also successfully highlighted some possibly significant variation, with a number of sites exhibiting trends within different categories (Figure 5.40). Alignment problems appear particularly significant in reflecting differences between the six sites. Londerzeel presents a different pattern to the other Belgian sites by having a larger prevalence of jaws with defects than the other sites and a very low number of jaws with no problems at all, in particular those of the ‘alignment’ type and a greater propensity to have jaws with multiple problems. This site, in particular, appears to exhibit the greatest number of examples which may be put down to poor mandible growth, possibly caused by the all-encompassing ‘stress’, whether this be nutritional, as suggested by the poor environmental surroundings (see Chapter 2), or for some other reason.

The other particularly notable pattern is that of Veurne, which as well as showing slightly greater tendencies for major misalignments appears to be experiencing a very different type of alignment problem to the other sites. Whereas the other sites all trend towards the buccal side, both in displacement, tilting and rotation, pigs at Veurne exhibits far more even trends towards either side. Similarly the teeth involved differ, with there being a lower number of molars involved for Veurne. These patterns are less explicable and, beyond some subtle differences causing different trends in the formation of the jaw, perhaps different masticatory forces being required and affecting the tooth row, it is difficult to know how to interpret such small but persistent patterns.

Pigs at Raversijde, despite portraying a number of dental differences in other areas (see Chapter 6), are not dramatically different from the other sites in terms of other forms of pathology represented. From the examination of different types of pathology within this part of the study, it is clear that Raversijde does not exhibit stress through malocclusions as would often be expected if stress was of dietary origin and affecting jaw growth, although the dental defects of the enamel of the teeth (hypoplasias) are still present. Indeed, the greater levels of diastema for this site could be used to indicate that Raversijde is one of the sites with less inhibited pig growth. It is just possible that this study has identified a methodology to determine that Raversijde is exhibiting stress (see Chapter 6), but of a non-dietary nature and so not being reflected in overall mandible formation, due to a differing husbandry from the other sites.

Figure 5.41. Jaw from Raversijde showing no evidence of alignment problems or overcrowding

The consideration of pathology in the post-cranial skeleton shows that the levels of pathology are low at both Koekelare and Raversijde, albeit fitting percentages found for medieval sites elsewhere. The lack of heightened pathologies, even in the Raversijde pig population, reflects that the animals are perhaps not stressed to an extreme level. This examination, in collaboration with the evidence from the mandible, also demonstrates that the mandible is affected in more subtle ways to those of the skeleton at large, presenting a much larger level of 'small' pathologies. Because of the greater amount of research which zooarchaeology has provided into post-cranial pathologies, however, individual examples of pathologies can be tentatively provided with an explanation and so, despite the smaller amount of data, the interpretation of post-cranial pathologies is actually much clearer than in the mandibular study.

Further areas of related interest should also be considered for future work as. For example, Dobney and Brothwell (1986, 1988) have had success in using a Scanning Electron Microscope to locate microscopic food debris in calculus on animal and human teeth. Considering that food type is directly related to periodontal disease (Roberts and Manchester, 2003:63), determining the food preserved in tartar in the mouth and the condition of the teeth is perhaps an important line for zooarchaeologists to investigate. Similarly, radiographic examination of excavated pig mandibular rami for 'Harris lines' may also provide greater information about how stress is affecting mandible growth (Baker and Brothwell, 1980:46) and would perhaps also be a useful avenue to consider. Harris lines, otherwise known as growth arrest lines, are lines of increased bone density that are formed due to growth arrest caused by an interruption in growth, one of the causes of which may be stress (White, 2001). Langenbach et al (2006) have begun investigating the mechanics of how the pig jaw moves, something which again may provide useful insights into how the different data here fit together. Research groups such as the ICAZ Palaeopathology Working Group (Miklíková and Thomas, 2008) have identified pathology as an area where much progress is imminent due to the development of these techniques, and this study perhaps reinforces the potential of such investigations. It is also equally obvious that there is a wealth of unexplored information uncovered by such an examination and that this is an area which really deserves to be better understood, as it may contribute greatly to zooarchaeologists understanding of sites. In particular, an understanding of how such pathologies related to each other and are affected by each other will allow interpretation of individual patterns to be greatly clarified. This was something recommended two decades ago when Brothwell (1991:30) argued that suitable methodologies must be designed to permit comparisons and establish normality in terms of dental alignment and occlusion through a better body of data; it is apparent that this has yet to be achieved but may be vital for future studies.

Chapter 6: Linear Enamel Hypoplasia

Linear Enamel Hypoplasia is examined on the teeth from pigs of the six sites considered in this research: Raversijde, Koekelare, Londerzeel, Ename, Veurne and Oudenberg.

6.1. Background to the study of Linear Enamel Hypoplasia

6.1.1. Introduction

Mammal teeth can provide a great deal of significant information about the individuals from which the dental material was once part (see Chapters 5, 7 and 8 for other examples). Similarly, when studying an assemblage they can also provide information on a much broader scale about the population of the species that is being examined. Teeth can supply information ranging from the age profile of the population (Chapter 3) to providing indications about its diet (Chapter 7). As we have previously seen, dental pathologies in general can provide insights into the past lives of the animals (Chapter 5) and in particular the dental pathology called linear enamel hypoplasia (**LEH**) has been successfully employed on both human and animal remains within the archaeological field to study their health.

LEH studies use the existence and frequency of tooth defects as a proxy for the consideration of the levels of physiological stress within a population (Dobney et al., 2007:58). Similar to the examination of skeletal studies for the presence of skeletal 'stress', such as Harris lines in post-cranial remains, hypoplasias in teeth represent a deficiency in the growth of calcified tissue (Dobney and Ervynck, 2000:27). Unlike bones, however, tooth enamel is not remodelled over life (Budd et al, 2000:687) and so they present a fixed picture that is not later modified once growth has ended. Because of this it is possible to extrapolate from the presence of these deficiencies an analysis of an individual's living conditions when they were young as the hypoplasias develop over the growth period of the teeth (Ervynck and Dobney, 1999:1), without concern about later remodelling.

Dental hypoplasias have been successfully examined in a variety of archaeological studies, from the Inuit in Alaska (Guatelli-Steinberg et al., 2004), to Neanderthals in Europe (Ogilvie et al., 2005) and from giraffe (Franz-Odendaal, 2004) to pigs (various, see this chapter). As a dental indicator of generalized physiological or nutritional stress LEH studies developed predominantly within the field of anthropology. Neanderthals were one of the first species to have LEH specifically examined (Guatelli-Steinberg, 2001; Guatelli-Steinberg et al., 2004, Jelinek, 1994; Brennan, 1991; Hutchinson et al., 1997), while there are similarly many LEH studies in modern human populations examining differing social stress or health (for example, Goodman et al., 1988). In zooarchaeology the examination of LEH has expanded into the field of animals as well as humans (for example Mead, 1999; Niven, 2000; Witzel et al., 2006, Dobney and Ervynck 2000, Franz-Odendaal et al., 2003) although these studies are far more recent in development than for human remains (Franz-Odendall et al, 2003:102), and the technique is still not employed as standard for archaeological animal remains. For this study an examination of stress is particularly pertinent considering the different environments identified that pertain to the samples studied, and the evidence from a study of general dental pathologies (Chapter 5). It will be particularly intriguing to examine whether patterns identified in Chapter 5 as due to stress are also mirrored here in a pathology *known* to reflect stress.

6.1.2 What are Enamel Hypoplasias?

Enamel hypoplasias of teeth are created by the disruption of ameologenesis, the process of crown formation (Witzel et al., 2006:93, Magnell and Carter, 2007:43). Interruption to the formation of tooth enamel is caused by a specific event or factor affecting ameloblasts, the specialised cells that lay down the enamel matrix of the tooth during amelogenesis (Franz-Odendaal et al., 2003:102). This event causes a larger than normal group of these ameloblasts to be disabled, leading to cessation of the production of enamel matrix along the actively developing area of enamel (Witzel et al., 2006:107). This results in a reduction in the amount or the thickness of the enamel (Witzel et al., 2006:93) on the part of the tooth which is developing at that time. This cessation is visible typically as a difference in the appearance of the tooth enamel at the area developing at the time of the problem (see Figure 6.1). Once enamel is secreted a maturation phase begins, which means that the enamel becomes inert to any further changes, other than those from external damage such as by physical or chemical abrasion (Dobney and Ervynck, 2000:598, Goodman and Armelagoss, 1985:504). This means that the hypoplasia within the developed tooth surface is effectively preserved (Guatelli-Steinberg et al., 2004:65) and it is this preservation in stasis which allows the hypoplasia to be later identified and examined by researchers, who can have confidence that it has not been later modified.

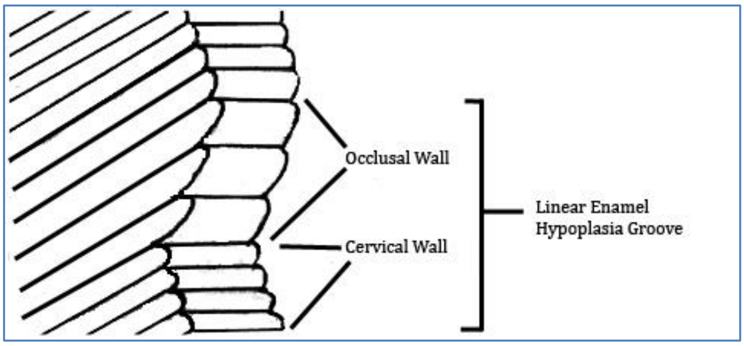


Figure 6.1. Illustration of a LEH defect showing the 'groove' effect of the perikymata of the occlusal and cervical walls caused by 'pausing' of ameolgenesis. This illustration is based on Hillson and Bond (1997) and adapted from Guatelli-Steinberg et al., 2004.

Disruption to the secretion of the enamel matrix can lead to a variety of developmental defects known collectively as enamel hypoplasias, including LEH. All types of hypoplasia have been identified in teeth from a variety of species, including domestic mammals such as cattle (Kierdorf et al., 2006) and, particularly relevant to this study, pigs (Wietzel et al., 2006, Kierdorf et al., 2009). Hypoplasias can manifest themselves visually in a number of forms: from single pits or groups of pits (which themselves can vary from a few clustered pits to many pits scattered over large areas of the tooth crown (Wietzel et al., 2006:96)), to extreme cases of extended areas of thinner than usual enamel or even areas where enamel is completely missing (Littleton and Townsend, 2005:101). In exceptional cases hypoplasia can affect the whole enamel thickness implying that the maturation was interrupted permanently, although this is unusual (see Figure 6.2 for a number of examples of differing types of hypoplasia on pig teeth). However, more commonly the affected ameloblasts return to normal after the disruption and the hypoplasia is restricted to one or more discrete areas (Hillson, 1996:171).

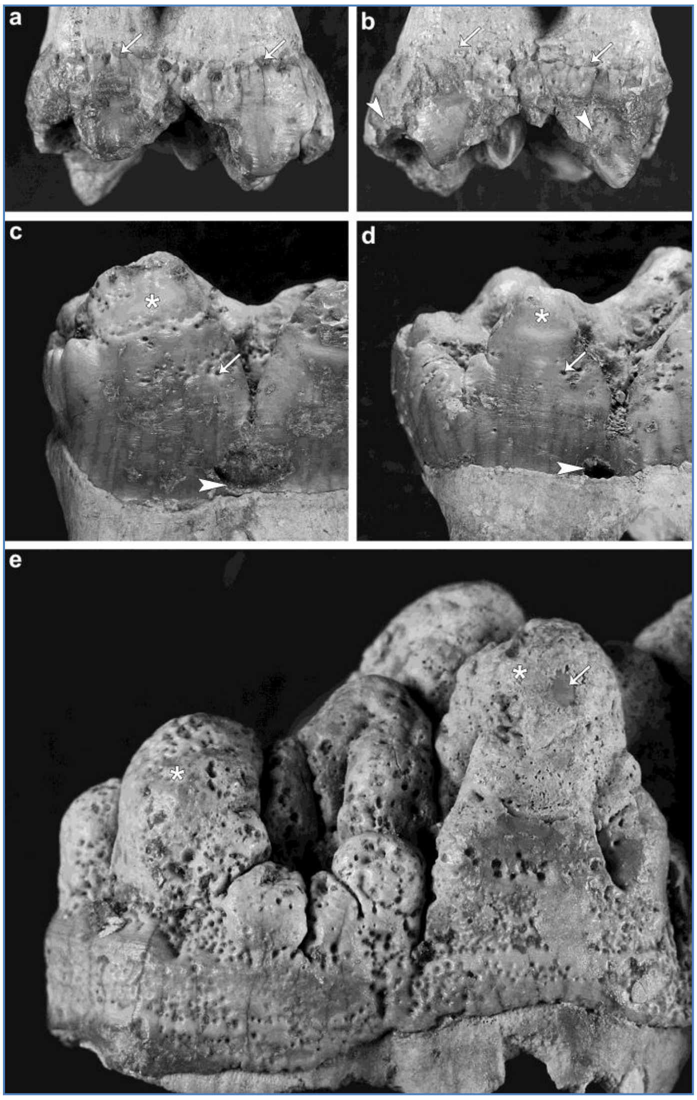


Figure 6.2. Pig molars demonstrating a variety of forms of hypoplasia. Figure a) lingual and b) buccal views of a Pig M1, with arrows highlighting hypoplastic enamel defects and arrowheads showing posteruptive enamel defects. Figure c) shows a Lingual view (mesial lobe) and (d) buccal view (distal lobe) of a pig M2 with arrows highlighting pit-type hypoplastic enamel defects, and asterisks plane-type hypoplastic enamel defects, with arrowheads show post-mortem enamel defects. Figure e) provides a buccal view of central and distal lobes of a pig M3 which contains extended crown areas covered with cementum (asterisks), the arrow highlights a small area of cuspal enamel surface not covered by cementum. Numerous pit-type hypoplastic defects are scattered over the tooth crown. This picture is reproduced from Kierdorf et al., (2009).

Despite the various forms of hypoplasias which can be exhibited in tooth enamel this study will focus exclusively on the examination of linear enamel hypoplasia. LEH's are a particular type of hypoplasia which take the form of horizontal lines or grooves where the enamel thickness is deficient on the external surface of the tooth crown across the span of the tooth (Dobney et al., 2007:58, Ervynck and Dobney, 1999:1). After recovery of the ameloblasts from the disturbance, the formation of tooth crown continues normally, leaving a line of thinner enamel 'sandwiched' between the normal thicknesses, observed by human eye as a line or depression (Palubeckaite, 2001:76) (See figure 6.3).

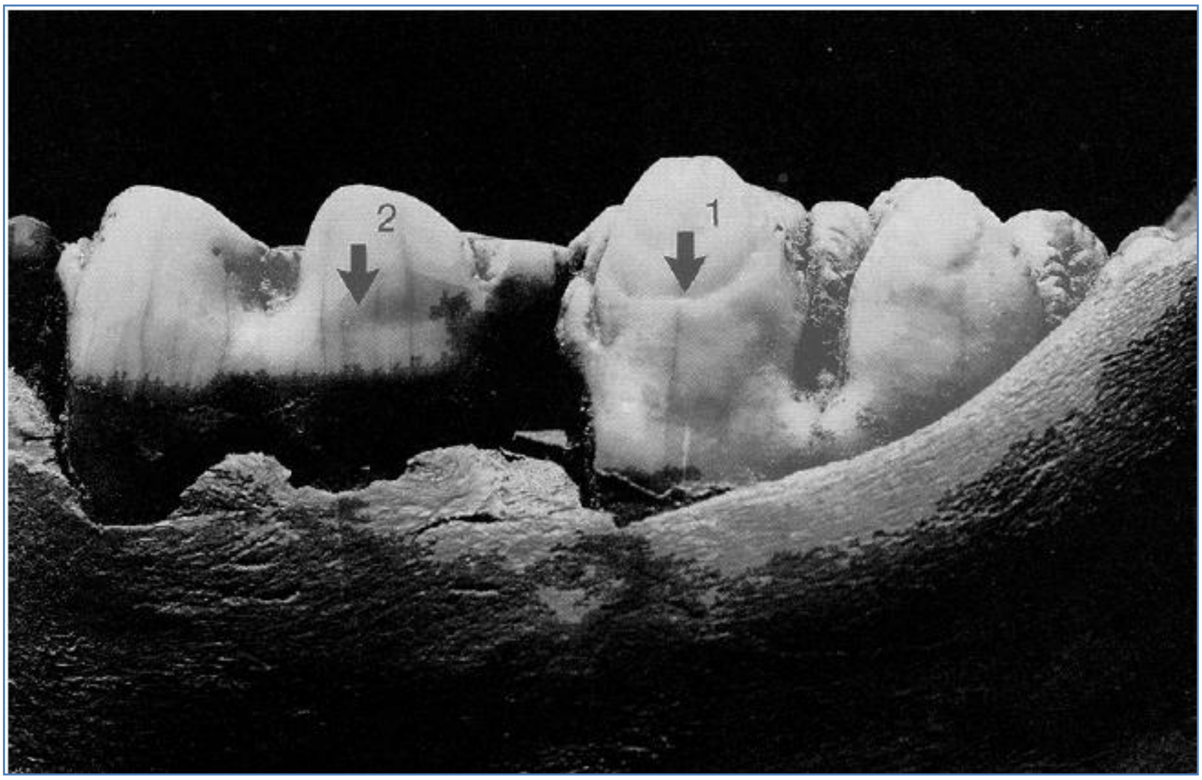


Figure 6.3. Linear Enamel Hypoplasias (LEH) on the lingual surface of the posterior Pillar of a M2 (2) and an anterior Pillar of a M3 (1) of a medieval domestic pig from Belgium, reproduced from the pilot study (Dobney and Ervynck, 2000:598).

There may be one or several lines produced on a tooth, dependent on the number of periods of disturbance. Archaeology has focused on LEH because, unlike other types such as single hypoplastic pits, LEH defects are clearly associated with enamel growth layers (Hillson and Bond, 1997 in Martin et al., 2008:362) as linear defects formed along the 'growing front' of the tooth's development. This gives them the advantage over other hypoplasias in that they can be clearly identified as forming with regularity over time (Fitzgerald, 1998). Where knowledge of tooth development timings for the species in question is secure this can provide information on the timing of LEH production, and when patterns are identified across a population consideration can be given into what this may mean. LEH manifests as a line or groove of varying width or depth running parallel to the Cemento-Enamel Junction (**CEJ**), and can be represented by either depressions (either shallow or deep) (Dobney and Ervynck, 1998:265) or very crisply defined lines or grooves (see Figure 6.4). Multiple occurrences can be present on one cusp, potentially very closely together (Figure 6.4). In unusual cases LEH can take the form of a clearly horizontal line of pits, although in most cases a continuous line is visible. In order to cause a linear enamel hypoplasia the responsible stressor must have been of a magnitude great enough to reach a threshold level severe enough, to disrupt the ameloblast for a period of time extensive enough, to manifest a visible linear defect (Goodman and Rose 1990, Franz-Odendaal et al., 2003:102).

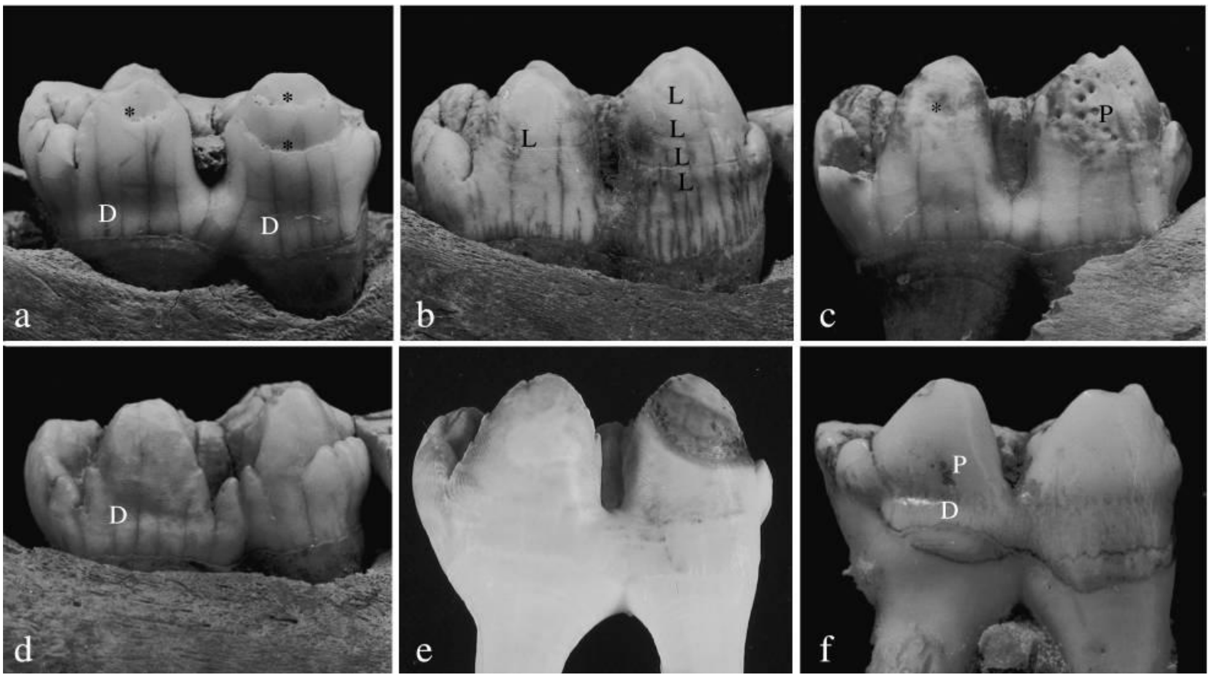


Figure 6.4. Pigs teeth showing Left (a-c) and Right (d) Second Molars of domesticated pigs, and Left (e-f) Wild boar in various views. Different types of hypoplastic enamel defects are marked, D= depression-type defects, L= linear defects, P=Pit defects, *= Plane-type defects. At approximately 2.5x Magnification. (Reproduced from Witzel et al., 2006).

6.1.3. A consideration of the causes of Linear Enamel Hypoplasia

All forms of enamel defect represent deviation from the 'normal' enamel development of the teeth and, where they are replicated across a number of different teeth forming within the jaw at the same time, their appearance is interpreted as indicating systemic physiological stress during that period of tooth formation (Martin et al., 2008:362). Stress episodes that occur at a specific age affect all the teeth developing at that precise time, rather than just a single tooth, as ameloblasts are halted concurrently across all developing enamel (Franz-Odendall et al, 2003:102). Factors which have been identified as having an impact on the presence of hypoplasias in enamel across many mammalian species include malnutrition or dietary deficiencies, metabolic disorders, inherited or infectious diseases (Pindborg 1970 in Palubeckaite, 2001:76), and encompass any other prohibitive factor which affects the healthy development of the individual (see Hillson, 1996; Goodman and Rose, 1990; Hillson and Bond, 1997 and Ten Cate, 1994 for more detailed explorations of the causes of hypoplasias). Hypoplasias can be caused by nutritional deficiencies (Psoter et al., 2005, Goodman et al., 1991, 1987; Liversidge et al., 1993, Zhou and Corruccini, 1998), systemic disease (Kierdorf et al., 2006:1691), or other physiological or mental stress factors. The variety of forms of hypoplasia have also all been linked to differing forms of physiological stress occurring during the period of development of the teeth. Different hypoplasia types have specific origins or causes within tooth development (Sarnat and Moss, 1985 in Dobney et al., 2007:58, Kierdorf et al., 2006:1691) as stress can encompass a variety of forms.

LEH has often been specifically linked to stress factors such as nutritional stress (Goodman and Rose 1990; Dobney and Ervynck 2000, Dobney et al., 1997), birth stress (Goodman and Rose 1990; Mead 1999, Lukacs et al., 2001), weaning stress (Goodman and Rose 1990; Dobney and Ervynck, 2000 and in humans Wright, 1997), and even stress associated with calf-cow separation (Mead 1999). LEH in pigs is clearly visually identifiable when the depth is greater than roughly 200 µm, which points to their cause being relatively moderate levels of stress rather than being produced by any minor ailment (Risnes, 1998:346). Studies have suggested that for pigs a LEH may most often reflect a prolonged period of under-nutrition (Wietzel et al, 2006:108) such as at birth, weaning, and in winter conditions (Dobney et al., 2002; Dobney and Ervynck, 1998, 2000; Van Poucke et al., 2009), and these patterns have been identified in many different types of pig population (Dobney and Ervynck, 2000). Even if the specific cause eludes us, LEH is still a useful means for assessment of timing and intensity of stress during the period in which an individual’s dentition is formed (Kierdorf et al., 2006:1690).

The prevalence and intensity of enamel hypoplasia in domestic animals has even been linked to the identification of different husbandry practices (Kierdorf et al., 2006:1690), particularly pertinent for this study. Dobney et al. (2001) for example used LEH to examine the husbandry practices employed on pigs at the Neolithic site of Çayönü Tepesi, a site considered to potentially be one of the oldest domestication sites of pigs in Western Asia. Here it was determined that while it is not easy to use LEH to show a clear dichotomy of ‘wild’ or ‘domestic’ pigs, the increasing occurrence of linear hypoplasias can be used to establish a gradual intensification of the relationships between humans and pigs at the site (Dobney et al., 2001:49). This hypothesis was not solely based on increasing frequency of LEH over time (Dobney et al., 2001:47) but also a growing trend towards younger ages at death of the pigs (so a more managed population), shorter tooth length and smaller body size; this perhaps best demonstrates why a multi-technique approach is important.

Within this study LEH is not being used to attempt to define the difference between domestic and wild animals, but is one of a number of techniques considering the evidence for differences between alternative husbandry techniques in predominantly domesticated animals (as identified not only from knowledge of the area in this time period, but also from the form of the jaws, which adhere largely to a domestic pig mandible configuration). Any differences in pattern therefore may help clarify variations in husbandry even if the exact causes remain elusive.

6.1.4. Why the examination of dental hypoplasias is particularly appropriate for this study

Dental enamel consists of approximately 96% inorganic constituents and is the most highly mineralized tissue of the mammalian body (Nanci, 2003 in Witzel et al., 2006:93), making it its hardest tissue (Guatelli-Steinberg, 2001:138) and one of the most durable parts of the body (Hughes and White, 2009:263). It is the least likely to be damaged by common butchery techniques or even taphonomic damage such as dog gnawing, which concentrate on the more meaty parts of the animal (Payne and Munson, 1985). The risk of post-mortem damage to the surface is similarly limited in comparison to other skeletal materials. Because of this, teeth are commonly found well preserved on archaeological sites which makes them an excellent material for examination in this study.

Another advantage of tooth enamel for study is that it does not repair or remodel itself once formed (Witzel et al., 2006:93, Franz-Odendaal et al., 2003:102) unlike other materials within the body such as bone, which remodel themselves throughout the life of the individual (Raisz, 2004:44). This means that enamel disruptions are an excellent medium through which to examine developmental stress as they are indelibly and permanently recorded in the tooth enamel (Witzel et al., 2006:93, Martin et al., 2008:362) and provide the possibility of a temporal consideration that an examination of features such as Harris lines on bones cannot achieve. Enamel matrix secretion starts at the cusp tip of the growing tooth crown (Wietzel et al., 2006:106) and gradually proceeds as a series of ‘sleeves’ in a sequential pattern (Dobney and Ervynck, 2000:598) towards the cervical part of the tooth (see Figure 6.5). Hypoplasias therefore often appear as a line or patch of unusual enamel banded horizontally across the tooth, in locations which can be linked to the age of the growing animal.

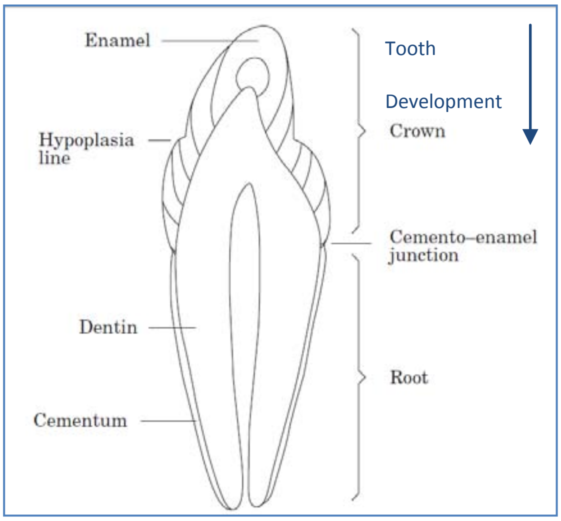


Figure 6.5. Longitudinal section through a tooth showing major dental structures and the direction of tooth development from tip to base (figure adapted from Dobney and Ervynck, 2000:598).

Features near the tip, or cusp, of the tooth can thus be confidently identified as older (produced earlier in the development of the tooth) than those lower down the tooth nearer to the cemento-enamel junction (Dobney and Ervynck, 2000:598). Therefore, those hypoplastic lines that occur lower down the tooth are younger (produced later in the life of the animal) than those closer to the cusp. This means that the analysis of LEH may yield information about not only the general health of past populations during the period of their life when their teeth develop (Goodman et al., 1980; Skinner and Goodman, 1992 in Franz-Odendall et al, 2003:102), but also about the specific chronology of these events.

For pigs the development of teeth is well understood both for modern and archaeological varieties. Magnell and Carter (2007) examined a number of radiographs of modern wild boar in order to more accurately ascertain how the positions of linear enamel hypoplasia relate to the developmental sequence of teeth in pigs. Although questions remain about the validity of projecting the exact ages and development patterns of modern animals onto archaeological species, particularly using such a relatively small sample as a baseline, the findings do provide broad information about the development of jaws of pigs, for example showing that the formation of tooth crowns is not as slow and continuous a process as previously thought (Magnell and Carter, 2007:45). Instead the process has been found to be one where the earlier mineralisation takes place rapidly, within a few months, but the completion of the crown is more gradual and occurs over a relatively longer period of time. This has confirmed what has long been assumed from extrapolation from human models, that hypoplasias measured and recorded in the whole upper part of the crown may have developed within a few months of each other, whereas on the lower third of the crown the defects may represent hypoplastic events occurring over a much longer period. On the lower crown for pigs hypoplastic lines even less than three millimetres apart may be caused by periods of stress several months apart (Magnell and Carter, 2007:46). Similar patterns of tooth development have also been seen in other species, such as humans and red deer (Brown and Chapman, 1991; Hillson, 1996 in Magnell and Carter, 2007:45), and are thought to be common for tooth growth in most mammals (Butler, 1967:845). This, combined with traditional understandings of the sequence of pig tooth development (for example Grant (1982) and Bull and Payne (1982), illustrated in figure 6.6), means that we now have a good idea of exactly how pigs' teeth develop and a solid basis for interpreting hypoplasia within this study, even if an exact age for each line cannot be given.

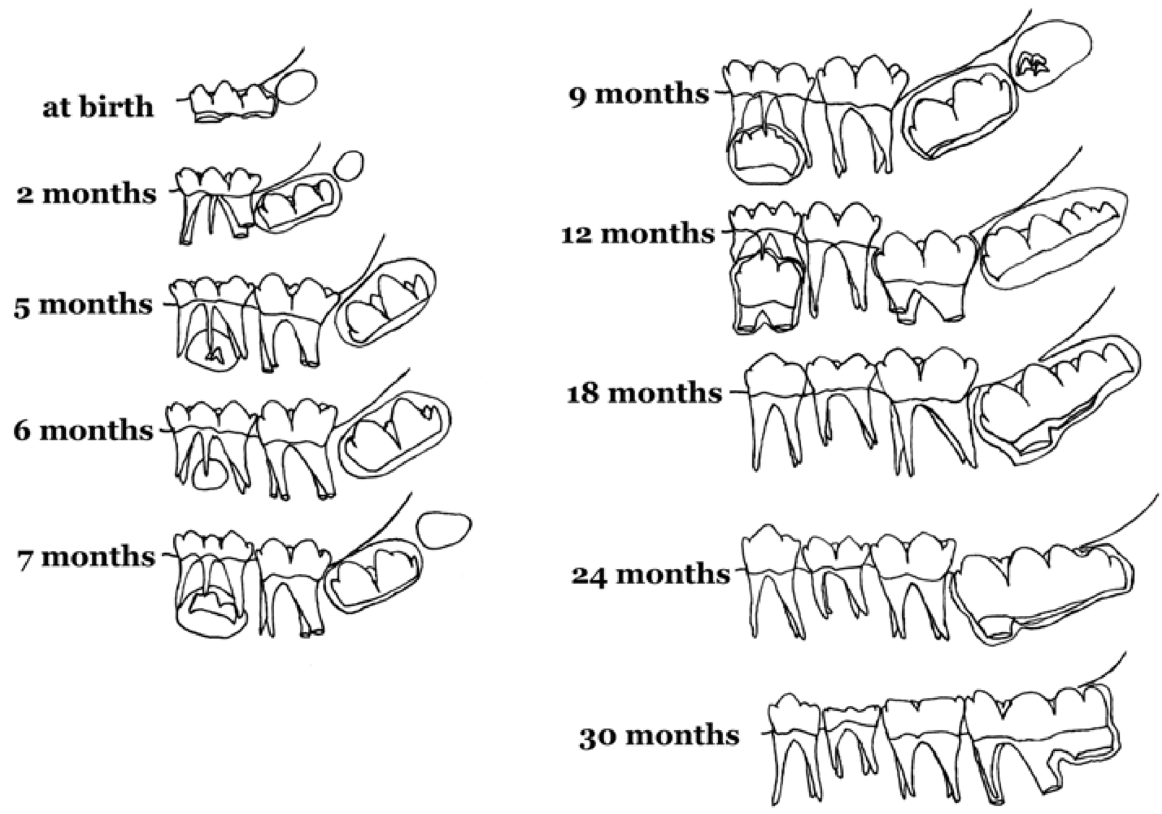


Figure 6.6. Diagram illustrating the development of permanent mandibular molars in wild boar, with ages. (Reproduced from Magnell and Carter, 2007:46)

An additional reason for the study of LEH, rather than just hypoplasia in general is that clear and straightforward methodologies have been developed over recent years for the examination of dental pathologies within both modern and archaeological samples. Linear enamel hypoplasia is a commonly examined phenomenon in anthropological studies (Magnell and Carter, 2007:43), and is one which is becoming more commonly examined in archaeological studies both within human osteoarchaeology, where it has been studied as standard since the 1990's (Buikstra and Ubelaker, 1994), and more recently within zooarchaeology. The specific choice of examination of LEH, therefore, not only provides a method which gives a source of chronological information, but it also means that a far greater body of work is available to aid its interpretation than for other forms of hypoplasia. Other indicators of stress from dental material, for example the level of interglobular spaces (see Mellanby, 1927; Seeto and Seow, 1991), have been identified but these are often less easy to record and analyse. When compared to enamel hypoplasias, all other indicators have had relatively little work done on them and have generally focused on humans or non-human primates (Hillson, 1996) rather than the species being examined here, and so they are not deemed appropriate techniques to explore.

6.1.5 Linear enamel Hypoplasia in pigs

Problems have been experienced in studies of species with hypsodont dentition such as cattle, sheep, goat, horses and rabbits (Kierdorf et al., 2006:1643). These teeth are commonly covered with cementum and this precludes direct inspection of the enamel (Kierdorf et al., 2006:1691) as it can lead to the filling of hypoplastic enamel defects with cementum, also meaning that identification of the teeth can become difficult and inaccurate (Kierdorf et al., 2006:1694). The study of LEH is however far more successful in mammals such as pigs where the tooth crowns are not normally covered with cementum (Kierdorf et al., 2009:1643) as there is nothing to occlude the lines from measurement. The focus on pigs means that this drawback which can be a problem for some species is not an issue for this study and that this feature is suitable for study.

For pigs, LEH studies are an area of particular interest as it has been determined to be neither a rare or even unusual phenomenon for either domesticated or wild pigs (Dobney et al., 2001). Pig teeth are similar in morphology to those of humans (Lopes et al, 2006:548), and it is perhaps this which has enabled the use of an anthropological methodology for human teeth to adapt particularly easily to investigating pig remains (Dobney and Ervynck, 2000:27). Studies of LEH in pigs range from examining the evidence for the beginning of domestication (Dobney et al., 2001, 2004), to identifying instances of LEH in medieval pig populations (Dobney et al, 2002), to factors affecting modern pigs (Kierdorf et al, 2000; 2004) as well as many other examples. Considerable variation can exist between populations dependent on particular husbandry strategies on sites (Dobney et al., 2004) and LEH can also be used to explore these in more detail.

LEH studies have been carried out on archaeological pig remains since the late 1990's with the first major studies of LEH on pig molars being published at this time (for example Ervynck and Dobney, 1999), although LEH has been recognised on pig molars since much earlier (Dobney, 1983 and Luff and Brothwell, 1993 for example). LEH has not only been used to establish a better understanding of the presence of stress events in various populations, but in some studies has identified a supposed shift in pig husbandry from herding within forested environments to rearing in a more confined environment. This was shown through the increase and then decrease in LEH exhibited by archaeological pig populations towards the end of the Middle Ages (Dobney and Ervynck 1999 in Dobney et al., 2002:36). This was hypothesised as being caused by greater human interference, initially causing sub-optimal husbandry conditions (increasing LEH frequency) before conditions improved as the husbandry becomes more adapted (decreasing LEH frequency). These studies of changing husbandry are especially relevant to this examination, where we are looking to develop an understanding of the living conditions of pig populations on various Belgian medieval sites. For Raversijde and Londerzeel, in particular, questions have been raised about the conditions in which the pigs were being kept. Using comparisons with the other sites, where confidence is greater than a less assisted husbandry was employed, it is hoped that it may be possible to determine whether the potentially styed populations exhibit similar LEH patterns to the other sites, or very different ones. A general comparison between all the sites may provide further information about the differences, even where the husbandry techniques are believed to be the same or similar, enhancing our understanding of how stressed the pigs at the six sites actually were and whether any clear patterns are identifiable in these periods of stress.

Some studies, for example Sarnat and Schour (1941), have suggested that propensity for hypoplasia can also change within each tooth for different breeds of a species. The highest density of hypoplasias on tooth crowns is often just cervical to the midpoint which may suggest that developmental rates among different breeds may have some influence over the ability of the crown to record stressful events (Goodman and Armelagos, 1985:503). However, the common consensus from studies of assemblages with known environments is that LEH is due mainly to the chronological pattern of environmental stressors over the development of the tooth (Massler et al ,1941; Goodman and Armelagos, 1985:503; Infante and Gillespie, 1974:1059) rather than a varying pattern of resistance dependent on breed. This therefore should be of limited concern to this study.

Within a jaw different types of teeth differ in susceptibility to hypoplasia. According to the Goodman and Armelagos' (1985) study, anterior teeth (in particular mandibular canines), are the most sensitive to growth disruption and so are most likely to show the largest number of instances of LEH (Goodman and Armelagos, 1985:503). These teeth are affected by relatively low levels of stress, and surveys that focus on these particularly sensitive teeth may be seeing the general incidence and distribution of relatively minor stress as well as more potentially significant episodes within the time period of the tooth development (for example see Wright 1997, Goodman and Rose 1990). This makes it difficult to distinguish the meaningful from more trivial and causal factors for these teeth and so these teeth do not appear appropriate for study. Posterior molar teeth are now believed to provide the clearest information about variations in timing and magnitude of stress as they are less predisposed to experience ameloblastic disruption, and thus develop hypoplasias only when a higher threshold of stress is reached (Wright, 1997 in Palubeckaite, 2001:76). The examination of posterior teeth is therefore now seen as providing the most suitable information about significant events in the youth of the individual, and their examination provides the common methodology in LEH studies. For this study the occurrence of individual LEH events will be observed and measured on the permanent mandibular molars (M1, M2, M3), as these are felt to be the most pertinent to examine to provide the level of information required for such an analysis (Dobney et al., 2007:60). Because different teeth develop at different times in an animal's life and display stress differently, each tooth type can only be examined with their counterpart in other individuals rather than compared with any other tooth within a mandible (for example a first molar should only be compared to another first molar) and this practice will be adhered to in the examination, with each cusp of each tooth only being compared with its equivalent. Permanent teeth are examined in this study as the growth period of molar crowns develops in a continuous and uninterrupted early period of the animal's life (Dobney and Ervynck, 1998:264). In pigs the first molar crown begins to develop in utero and is completed at around one month after birth, the second crown developments at around birth and is complete roughly seven months later, whereas the crown development of the third molar begins around the third month after birth and ends much later at circa thirteen months of age (Dobney and

Ervynck, 1998:264). This means that information is provided about stresses in the early life of the animal, which is particularly appropriate in this study as the age profiles from most of our sites (see Chapter 3) have a high proportion of younger pigs. The overlapping development of teeth in pigs is also particularly useful as related LEH lines will be expected at different positions on consecutive teeth.

Because of the large amount of work undertaken on LEH in pigs, archaeologists have even been able to provide hypotheses for the causes of LEH present at similar heights on tooth crowns (Dobney et al., 2007:59). LEH often occurs in similar patterns across populations which are exposed to comparable conditions, as unlike human populations pigs are often born in a particular farrowing season (Lauwerier, 1983:486-7). Because of our understanding of molar development zooarchaeologists have interpreted the common occurrence of two discrete peaks of LEH on the first permanent molar (M1) as related in pigs to birth and weaning events, respectively (Dobney et al., 2002:36, 2001:52, 2007:59). Under-nutrition caused by scarce food and harsh conditions in the first winter of the pig's life is thought to contribute to the occurrence of a discrete LEH peak on the second molar (Ervynck et al., 2001:52, Dobney et al., 2002:36, 40). This often appears as a particular form of LEH, presenting as horizontal grooves with rounded edges in the cervical half of the lingual crown surface of the second molar (Dobney and Ervynck, 1998, 2000; Dobney et al., 2002). Similarly, a broad peak on the M3 is possibly linked to the pig's second winter (Dobney et al., 2001:52, 2002:40, 2007:59), although this is less certain. This knowledge allows studies such as this to provide a greater analysis of what the gross pattern of occurrence of LEH on pig teeth of a population may mean, and is a particular strength of the technique. For stall fed pigs these winter peaks may not be present, and instead more generalized patterns of stress with no temporal link may be displayed. It would be expected for roaming, rooting pigs that LEH lines will reflect these seasonal patterns as they are directly experiencing seasonal conditions.

6.1.6. Summary of the validity of studying LEH in this examination

LEH can therefore be examined quantitatively by a study of a sample of jaws for an overall picture of the herd as well as any individual's experience of stress, and to evaluate any differences between archaeological populations of pigs at the six sites examined within this study. As we have seen, these findings may here, as in other studies, provide evidence for any varying husbandry practices. A consideration of the location of the LEH on the teeth can perhaps enable a detailed picture to be built up of the timing of stress for varying populations such that the nature of some possible causes can be explored in more depth. This makes the technique ideal for incorporation within this study considering its research aims.

6.2. Methodology used for the examination of Linear Enamel Hypoplasia

6.2.1. Justification for the methodology chosen in this study

The methodology for the measurement and recording of instances of LEH in the pig jaws predominantly followed that of Dobney and Ervynck (1998), developed specifically for pig teeth and which was itself developed based on methodologies used earlier for human teeth (Dobney and Ervynck, 1998:264). This is recognised as a protocol which is easy to employ, objective and straight-forward (Ervynck and Dobney, 1999:1). Some studies are now entering the published literature which examine LEH through a study of the microstructure of the tooth and in particular the variance of thickness in enamel (Witzel et al., 2006:94), or through processing images of the teeth in a variety of ways to highlight enamel opacities (Smith, 2006). However, these techniques are still uncommon as well as often being damaging to the specimens in question. Although these may provide additional information, more 'usual' visual examination of macroscopic depressions in enamel using methodologies such as Dobney and Ervynck (1998) is not only an effective way of accurately interpreting information about stress in populations, but is an established and successful working methodology with a wide body of other work having employed it for the species. It was therefore decided to apply this more common macroscopic analysis as the one most likely to be effective and yield suitable information.

6.2.2 Specific points about the LEH methodology employed within this study

LEH data results, including the heights and details of any LEH present, were recorded onto a proforma before being transferred for analysis to a Microsoft Excel (2007) Database. LEH was recorded and examined within a wider analysis of each individual jaw which assessed details such as the teeth present, eruption status and wear stages for ageing purposes, tooth dimensions and other pathologies or abnormalities. Notes were taken of any other hypoplastic features identified during the examination for LEH, identifying their location and providing a description of their type as well as other forms of pathologies or abnormalities (see Chapter 5).

LEH defects were identified by examination with the naked eye under both natural and fluorescent background lighting, and a positional secondary localised light source located at an oblique angle to highlight the often subtle grooves (Lukacs et al., 2001:1162). A LEH defect was identified as a marked groove or line in the enamel (Goodman et al., 1980), or as a series of pits, but only where they were displayed in a clear horizontal formation (Dobney and Ervynck, 1998). This study took place in the zooarchaeological laboratories at Durham University. The pig jaws were slowly rotated and moved during examination under the light source to allow any grooves to be identified (Dobney and Ervynck, 1998:265, Lukacs et al., 2001:1162). Instances of enamel defect were also confirmed when necessary by gently running a dental probe over the surface as recommended by studies such as those by Lukacs (Lukacs, 1989:263) and Goodman and Armelagos (1985:504). This also helped identify whether the flaw was indeed hypoplastic or caused by another feature, such as caries, where the external surface is lost and dentine eventually exposed (Littleton and Townsend, 2005:101). A desk-mounted magnifying glass with a magnification of x2 magnification was used in some instances to visually enhance the defect to confirm its presence where identification was uncertain, following the methodology of Martin et al. (2008:363) and Guatelli-Steinberg et al., (2004:71). Measurement of the width of the hypoplasias was not considered, because this can be affected by variable factors such as the perikymata spacing in the area of the tooth in which the defect forms, and also the variety of type of perikymata (cervical or occlusal) (Hillson and Bond, 1997 in Guatelli-Steinberg et al., 2004:74). It would be impossible to measure this accurately without more specialised equipment and it was felt that any information gained would be very limited. This is a variable not commonly explored in hypoplasia studies and there would be little supporting data to place any findings within a wider context. This was therefore felt unnecessary to explore as the information gained from ‘typical’ LEH methods should provide appropriate findings for these research questions.

Linear enamel hypoplasia was examined on each relevant tooth solely from the lingual surface, as the crown grows to its greatest height on this side in lower teeth and so lines are at their most separated and thus most easily identified and recorded. Morphologically the lingual side of a pig molar is also a relatively flat side of the tooth, making the taking of height measurements with callipers as simple and as accurate as possible (Dobney and Ervynck, 1998:265). For recent studies this is the accepted aspect to use for this purpose (Dobney and Ervynck, 1998:265). The molars were divided into anterior and posterior pillars for the first and second molars and anterior, middle and posterior pillars for the third molar. LEH was examined and recorded for each individual cusp. This is particularly relevant as development is often slightly later on the posterior pillar than the anterior, and so hypoplasia lines produced at the same time are exhibited lower on the posterior (Dobney and Ervynck, 1998:265). Therefore LEH identified from different pillars are not directly comparable, in the same way that different molars are not directly comparable. It is also useful to consider each cusp separately, as studies have illustrated marked differences between the cusp and LEH frequencies present, based on times of development. For example, the anterior pillar of the first molar often has fewer LEH's, possibly linked to its early development in uterus (Ervynck and Dobney, 1999:6). The measurements of LEH were taken from the lowest point of the LEH line (Dobney and Ervynck, 1998:268). Digital 6-inch callipers were used with an industry-standard precision of 0.05mm.

As previously discussed, only the permanent molars of the lower jaw were analysed. This ensured that teeth from the upper jaw were not providing a replica of data from the lower jaws being examined (any physiological stress would affect tooth crowns on both developing at the same time) and also because mandibular tooth rows are usually better preserved than maxilla (Dobney and Ervynck, 1998:264). A selection policy of solely mandibles ensured the likelihood of a better preserved sample than if the maxilla were also included. The position of an instance of LEH was recorded each time by measuring the distance between the cemento-enamel junction and the lowest point of the groove in as straight a line as possible on the lingual surface of each cusp (rather than an oblique measurement), following the methodology of Martin et al. (2008). Measurements were only taken if the CEJ was visible on the cusp in order to ensure that complete measurements were taken and that the tooth was not too immature to portray a complete picture.

In anthropological studies there has been no evidence of statistically significant differences in frequency and severity of hypoplasia between the different sexes (Goodman et al. 1980; Lanphear 1990; Infante and Gillespie, 1974:1055) albeit some studies have suggested that very subtle differences may in fact exist between them. For example in humans Infante (1974); El-Najjar et al. (1978); Van Gerven et al. (1990); Iregren (1992); Zhou (1995) and King et al. (2005) all argue that males may present with more LEH because of their greater biological sensitivity to stress factors. However, Goodman et al. (1987), May et al. (1993) and Gurri et al. (1996) argue the reverse, that in fact females may be more predisposed to

LEH. If there are any differences it is clear therefore that they are subtle! For pigs, no studies have determined a difference between the sexes in either LEH or tooth development sequence (Magnell and Carter, 2007:45), or indeed any clear differences within the general morphological form of teeth (other than sexually dimorphic canines and possible size differences of fully-grown teeth) (Payne and Bull, 1998:31; Dobney et al., 2001:52). Jaws of both sexes have therefore been incorporated within this study and considered together. It is not expected that sex ratios will have had a significant effect upon comparisons (Dobney et al., 2001:52). The decision to include both sexes follows that of other pig hypoplasia studies, including that from which the main methodology is based (Dobney and Ervynck, 1998).

Studies (for example: Skinner, 1996) where single teeth have been included have discovered that results were biased as it was difficult to accurately account for the replication of individuals through the number of affected teeth. When results were adjusted statistically to take into account the replication of possible individuals, the patterns identified were discovered not to be significant (Skinner, 1996:842). It is now believed that in order to have confidence in results it is far better to limit analysis to jaws rather than include individual teeth. For this study, no individual teeth were measured but only teeth contained within a jaw. This also meant that if a tooth had experienced damage, or was worn, other teeth were available to produce a clearer picture as often there is an overlap in the developmental age at which consecutive teeth in a mandible are created.

Mandibles from both sides of the jaw were considered in this study, which may cause some replication of LEH results from the presence of two samples representing the same individual, where both sides of the jaw counted as two separate samples. This is the usual strategy to follow in the study of linear enamel hypoplasias, however, and follows the policy of Dobney and Ervynck (1998:265). Dobney and Ervynck (1998) examined the problems of using both sides of the jaw and the potential doubling of results, and determined that it was unlikely to be a significant factor, arguing that it was more important to get a large enough sample for analysis. This was a particular consideration for this study, with sites such as Koekelare having relatively few pig mandibles and where most of the pig jaw material of the assemblage had to be used to create the sample. This use of both sides of the jaw was deemed necessary in order to get a sample large enough for confidence to be able to be placed in the results. It was thus concluded that it was a justifiable strategy to use jaws from both sides in this instance, because of both the low likelihood in reality of any pair of the samples representing an individual twice and also the frequent use of this policy elsewhere without any apparent problems. It is important to remember that archaeological material will have been lost, discarded elsewhere or not excavated at all and so, while it is impossible to definitively state that the examined samples do not contain duplicates, this is believed unlikely to be a problem of a scale great enough to be significant here (Dobney and Ervynck, 1998 and Lukacs, 1999:357). Indeed the inclusion of just jaws rather than single teeth in the analysis limits this likelihood further.

Only one recorder (the author) measured the dentitions. Some of the jaws had been previously examined for linear enamel hypoplasia (Ervynck, et al., 2007: see section 6.3.1 for details), but these test samples of material were supplemented in this study with other jaws, along with further sites (Koekelare and Oudenberg). Because of small differences between the measuring techniques of individuals, which rely on an observer's judgment for identification and recording, the enamel hypoplasia frequency data of different researchers is not directly comparable in many instances (Danforth and Gilberti, 1992). Therefore, although some of these jaws had been included in previous studies of LEH, all jaws included in this study were examined by the author for their LEH data to ensure a continuity of methodology and comparability.

Attrition (dental wear) of the tooth surface of the teeth may be a problem in LEH studies due to the potential loss of hypoplastic lines through tooth wear. Certain LEH lines may be missing through being worn away and therefore their data made permanently irretrievable (Dobney and Ervynck, 1998:264). At the site of Flixborough, Yorkshire, England, for instance, a greater amount of severe wear within the population in general is thought to explain the lower amounts of LEH on the M1 observed on this site when compared to others (Dobney et al., 2002:38). A consideration of the differing age profiles of the jaws suggest that this should be a limited problem for this study, with few elderly jaws included in the examination from any of the sites (see Chapter 3).

The total cusp height was also measured on all cusps and considered on unworn cusps (those recorded as stages u, a or b in Grant Wear Score), as recommended by Dobney and Ervynck (2000:599)). This was measured from the tip of the crown to the lowest point of the CEJ (as defined by Hillson 1996: 12) using the same digital callipers as for the measurement of hypoplasia. This measurement was taken to provide a comparative between populations of their unworn tooth cusp height, as recommended by Dobney and Ervynck (1998:270). If the measurements are not statistically different between populations it may be possible to directly compare the positions of LEH on the teeth between the populations. Data on unworn tooth heights in pigs is virtually non-existent and it is important to consider the possibility of differences in LEH timing caused by variation in total tooth height between different assemblages (Berti and Mahaney, 1992 in Skinner, 1996:846). In order to completely ensure that any variation in tooth height between populations does not adversely affect interpretation, an index may need to be employed if there are statistical differences in total tooth height (following Dobney and Ervynck 1998:270), using one of the populations as a standard for which the other LEH heights are adjusted to allow populations to be truly comparative. The necessity for this will be considered within the analysis (see Section 6.3).

6.3 The Analysis of Linear Enamel Hypoplasia:

6.3.1. Summary statistics:

For four of the sites examined as part of this study, work had previously occurred on a sample of the jaws (see Figure 6.7 for details and references) where information was collected on the occurrence and frequency of LEH, although the height of LEH lines had only been considered in the cases of Londerzeel and Ename, and for Raversijde only the first and second molars were considered (Dobney and Ervynck, 2000). In this study these jaws have been reassessed to allow them to be comparable with data provided from this study, as discussed above, and in the case of Raversijde further jaws were incorporated into the sample. Two additional sites, Koekelare and Oudenberg, were also added to the data pool, not having been previously examined. The inclusion of further Belgian sites into a wider study of Belgian pig material is something identified as desirable to help interpret the patterns of these previous studies(Ervynck et al., 2007:193).

Collection	***Number of M1***	***Number of M2***	***Number of M3***	***Total teeth***	***Reference***	***This study***
Veurne	53	33	12	98	Ervynck et al., 2007	Reassessed
Ename	97	89	37	223	Ervynck and Dobney 1999	Reassessed
Londerzeel	66	66	46	178	Ervynck and Dobney 1999	Reassessed
Raversijde	75 (+75)	69 (+49)	4 (+3)	148 (	Dobney et al., 2002	Further mandibles added in, and reassessed
Oudenberg	Not previously considered (90)	Not previously considered (104)	Not previously considered (72)	N/A	Not previously considered	Assessed for first time
Koekelare	Not previously considered (13)	Not previously considered (17)	Not previously considered (9)	N/A	Not previously considered	Assessed for first time

Figure 6.7. Summary of sample sizes of pig jaws from sites used in this study, but also previously considered elsewhere, with references. (Numbers in brackets represent the additional samples incorporated in this study)

Due to the relative amount of pig remains at the various sites examined within this study (see Chapter 3) the number of mandibles available and suitable for analysis ranged from 225 jaws at Oudenberg to 18 at Koekelare. It is important to emphasize that these do not represent the total number of jaws excavated from these sites but the number gathered to produce a suitable sample size for examination. The number of samples analysed for each archaeological site within this study are presented in summary below (see Figure 6.8).

Site	***Number of mandibles***	***Number of M1***	***Number of M2***	***Number of M3***	***Total number of teeth***
Ename	122	97	89	37	223
Veurne	122	53	33	12	98
Londerzeel	76	66	66	46	178
Oudenberg	225	90	104	72	266
Raversijde	180	150	118	7	275
Koekelare	18	13	17	9	39
Totals	**743**	**743**	**1423**	**1014**	**1079**

Figure 6.8. Summary of the total number of mandibles and teeth examined within this study from each site (following that of Lukacs et al., 2001:1620).

For Koekelare there were notably fewer samples available for analysis than for any of the other sites represented within this study. This is partly due to the fact that the jaws for analysis from Koekelare were collected as part of the examination of the primary faunal assemblages of Raversijde and Koekelare undertaken by the author. Whereas for Raversijde this retrieved sample was further supplemented by additional jaws selected for analysis from the Raversijde faunal assemblage during the previous investigation. The predominant reason for the low sample number of jaws from the site of Koekelare is, however, the paucity of pig remains within the faunal assemblage (see Chapter 3 for a discussion of the frequency of pig remains within the assemblage). Where present the mandibles were often too young for the third molar to be fully erupted and so these teeth are in particular limited in number. The restricted number of specimens available from Koekelare is not believed to be sufficient to preclude the site’s inclusion in this examination. Studies of LEH have been successfully carried out using very small sample numbers and have still found meaningful data; for example Kierdorf et al. (2009) examined only three samples in their pig study. The limited numbers at Koekelare, however, do mean that the data should be analysed and interpreted with particular care. It is apparent that in general all tooth types are available in the samples for study and that from five of the six sites a large number of teeth were available.

The jaws obtained were not chosen based on any consideration of state of condition (Ervynck, 2006: pers. comm.), ensuring that there was no bias in the sample selected due to the risk of preferential survival of jaws with certain properties (for example the larger, more robust examples (Nicholson, 2005)). This selection trend was continued when obtaining the jaws to study from Koekelare and the additional jaws for Raversijde. For these, any pig jaws present were included, providing as large a selection for examination as possible with no deliberate preferential isolation of jaws of particular preservation. This study can be confident that there was therefore no bias in the quality of jaws examined and that as far as possible the jaws represent the true assemblages on site.

6.3.2. A pilot study examining the potential for accurate and replicable measurement of LEH lines

The first stage of the analysis of linear enamel hypoplasia on the pig mandibles was to examine intra-tooth measurement error (the level of error inherent in taking the measurements using the methodology chosen). It was imperative to consider this prior to the main analysis of the linear enamel hypoplasia in order to ensure that measurement of the hypoplastic lines was replicable (Hillson, 1996:263).

		Veurne	***Veurne***	***Veurne***	***Veurne***	***Veurne***	***Veurne***	***Oudenberg***
		M1 anterior cusp	M1 posterior cusp	M2 anterior cusp	M2 posterior cusp	M3 anterior cusp	M3 middle cusp	M3 posterior cusp
Example 1	Measurement 1	1.5	1.31	2.54	4.72	7.21	5.87	2.33
	Measurement 2	1.48	1.29	2.55	4.71	7.2	5.88	2.31
	Measurement 3	1.51	1.3	2.55	4.72	7.2	5.89	2.3
Example 2	Measurement 1	2.36	0.63	4.02	5.8	4.83	8.53	3.09
	Measurement 2	2.37	0.61	4.04	5.78	4.81	8.56	3.08
	Measurement 3	2.39	0.62	4.03	5.79	4.83	8.57	3.09
Example 3	Measurement 1	2	2.57	1.64	2.36	4.37	1.42	2.3
	Measurement 2	2.03	2.55	1.66	2.37	4.38	1.43	2.31
	Measurement 3	2.01	2.55	1.65	2.38	4.36	1.44	2.32
Example 4	Measurement 1	6.74	6.54	2.74	2.69	2.88	12.89	6.04
	Measurement 2	6.74	6.56	2.72	2.67	2.89	12.88	6.05
	Measurement 3	6.72	6.55	2.71	2.67	2.88	12.86	6.05
Example 5	Measurement 1	4.98	1.42	8.81	1.14	1.94	1.97	3.77
	Measurement 2	4.99	1.43	8.83	1.13	1.96	1.95	3.78
	Measurement 3	4.98	1.44	8.83	1.12	1.96	1.96	3.78

Figure 6.9. Summary data of the replicated measurements of LEH lines taken as part of the pilot study to consider the potential user-error.

For the first five examples of a tooth cusp from Veurne all relevant measurements were taken three times (see Figure 6.9). By replicating measurements on the same teeth in this way it is possible to examine only error introduced by operating techniques (Payne and Bull, 1988). These measurements were taken from the jaws as a pilot study prior to the main LEH analysis in order to determine whether there was any significant variation between the takings of each measurement. This is particularly important in the case of LEH where for lower portions of the cusp a difference of only a few millimetres can represent a time gap of some months apart. The confidence in the level of accuracy in measurement achieved therefore needs to be high. The third molar (M3), due to its late development, has proportionally relatively few examples within any of the assemblages, and so it proved impossible to obtain five examples of the posterior M3 pillar from Veurne. Therefore, measurements for the M3 posterior pillar were taken from Oudenberg teeth to examine whether measurements on this pillar were reproducible.

	M1 anterior cusp Example 1	*M1 anterior cusp Example 2*	*M1 anterior cusp Example 3*	*M1 anterior cusp Example 4*	*M1 anterior cusp Example 5*
Mean	1.496667	2.373333	2.013333	6.733333	4.983333
Standard Error	0.008819	0.008819	0.008819	0.006667	0.003333
Median	1.5	2.37	2.01	6.74	4.98
Standard Deviation	0.015275	0.015275	0.015275	0.011547	0.005774
Sample Variance	0.000233	0.000233	0.000233	0.000133	3.33E-05
Skewness	-0.93522	0.93522	0.93522	-1.73205	1.732051
Range	0.03	0.03	0.03	0.02	0.01
Minimum	1.48	2.36	2	6.72	4.98
Maximum	1.51	2.39	2.03	6.74	4.99
Sum	4.49	7.12	6.04	20.2	14.95
Count	3	3	3	3	3
Confidence Level(95.0%)	0.037946	0.037946	0.037946	0.028684	0.014342
	M1 posterior cusp Example 1	***M1 posterior cusp Example 2***	***M1 posterior cusp Example 3***	***M1 posterior cusp Example 4***	***M1 posterior cusp Example 5***
Mean	1.3	0.62	2.556667	6.55	1.43
Standard Error	0.005774	0.005774	0.006667	0.005774	0.005774
Median	1.3	0.62	2.55	6.55	1.43
Standard Deviation	0.01	0.01	0.011547	0.01	0.01
Sample Variance	0.0001	0.0001	0.000133	1E-04	0.0001
Skewness	0	0	1.732051	0	2E-13
Range	0.02	0.02	0.02	0.02	0.02
Minimum	1.29	0.61	2.55	6.54	1.42
Maximum	1.31	0.63	2.57	6.56	1.44
Sum	3.9	1.86	7.67	19.65	4.29
Count	3	3	3	3	3
Confidence Level(95.0%)	0.024841	0.024841	0.028684	0.024841	0.024841

	M2 anterior cusp Example 1	M2 anterior cusp Example 2	M2 anterior cusp Example 3	M2 anterior cusp Example 4	M2 anterior cusp Example 5
Mean	2.546667	4.03	1.65	2.723333	8.823333
Standard Error	0.003333	0.005774	0.005774	0.008819	0.006667
Median	2.55	4.03	1.65	2.72	8.83
Standard Deviation	0.005774	0.01	0.01	0.015275	0.011547
Sample Variance	3.33E-05	0.0001	0.0001	0.000233	0.000133
Skewness	-1.73205	-4E-13	2E-13	0.93522	-1.73205
Range	0.01	0.02	0.02	0.03	0.02
Minimum	2.54	4.02	1.64	2.71	8.81
Maximum	2.55	4.04	1.66	2.74	8.83
Sum	7.64	12.09	4.95	8.17	26.47
Count	3	3	3	3	3
Confidence Level(95.0%)	0.014342	0.024841	0.024841	0.037946	0.028684

	M2 posterior cusp Example 1	M2 posterior cusp Example 2	M2 posterior cusp Example 3	M2 posterior cusp Example 4	M2 posterior cusp Example 5
Mean	4.716667	5.79	2.37	2.676667	1.13
Standard Error	0.003333	0.005774	0.005774	0.006667	0.005774
Median	4.72	5.79	2.37	2.67	1.13
Standard Deviation	0.005774	0.01	0.01	0.011547	0.01
Sample Variance	3.33E-05	1E-04	0.0001	0.000133	1E-04
Skewness	-1.73205	0	-2E-13	1.732051	9.99E-14
Range	0.01	0.02	0.02	0.02	0.02
Minimum	4.71	5.78	2.36	2.67	1.12
Maximum	4.72	5.8	2.38	2.69	1.14
Sum	14.15	17.37	7.11	8.03	3.39
Count	3	3	3	3	3
Confidence Level(95.0%)	0.014342	0.024841	0.024841	0.028684	0.024841

	M3 anterior cusp Example 1	*M3 anterior cusp Example 2*	*M3 anterior cusp Example 3*	*M3 anterior cusp Example 4*	*M3 anterior cusp Example 5*
Mean	7.203333	4.823333	4.37	2.883333	1.953333
Standard Error	0.003333	0.006667	0.005774	0.003333	0.006667
Median	7.2	4.83	4.37	2.88	1.96
Standard Deviation	0.005774	0.011547	0.01	0.005774	0.011547
Sample Variance	3.33E-05	0.000133	1E-04	3.33E-05	0.000133
Skewness	1.732051	-1.73205	0	1.732051	-1.73205
Range	0.01	0.02	0.02	0.01	0.02
Minimum	7.2	4.81	4.36	2.88	1.94
Maximum	7.21	4.83	4.38	2.89	1.96
Sum	21.61	14.47	13.11	8.65	5.86
Count	3	3	3	3	3
Confidence Level(95.0%)	0.014342	0.028684	0.024841	0.014342	0.028684
	M3 Middle cusp Example 1	*M3 Middle cusp Example 2*	*M3 Middle cusp Example 3*	*M3 Middle cusp Example 4*	*M3 Middle cusp Example 5*
Mean	5.88	8.553333	1.43	12.87667	1.96
Standard Error	0.005774	0.012019	0.005774	0.008819	0.005774
Median	5.88	8.56	1.43	12.88	1.96
Standard Deviation	0.01	0.020817	0.01	0.015275	0.01
Sample Variance	1E-04	0.000433	0.0001	0.000233	0.0001
Skewness	0	-1.29334	2E-13	-0.93522	0
Range	0.02	0.04	0.02	0.03	0.02
Minimum	5.87	8.53	1.42	12.86	1.95
Maximum	5.89	8.57	1.44	12.89	1.97
Sum	17.64	25.66	4.29	38.63	5.88
Count	3	3	3	3	3
Confidence Level(95.0%)	0.024841	0.051711	0.024841	0.037946	0.024841

	M3 Posterior cusp Example 1	M3 Posterior cusp Example 2	M3 Posterior cusp Example 3	M3 Posterior cusp Example 4	M3 Posterior cusp Example 5
Mean	2.313333	3.086667	2.31	6.046667	3.776667
Standard Error	0.008819	0.003333	0.005774	0.003333	0.003333
Median	2.31	3.09	2.31	6.05	3.78
Standard Deviation	0.015275	0.005774	0.01	0.005774	0.005774
Sample Variance	0.000233	3.33E-05	0.0001	3.33E-05	3.33E-05
Skewness	0.93522	-1.73205	-2E-13	-1.73205	-1.73205
Range	0.03	0.01	0.02	0.01	0.01
Minimum	2.3	3.08	2.3	6.04	3.77
Maximum	2.33	3.09	2.32	6.05	3.78
Sum	6.94	9.26	6.93	18.14	11.33
Count	3	3	3	3	3
Confidence Level(95.0%)	0.037946	0.014342	0.024841	0.014342	0.014342

Figure 6.10. Table summarising descriptive statistics for the pilot study considering the evidence for any user-error introduced by measurements.

As shown by the descriptive statistics (Figure 6.10), this study finds a low level of variability between different 'takes' of the measurement of any LEH line. No cusps show any statistically significant differences between any of the replicated tooth measurements. Therefore we can be confident for all cusps that the measurement of data is unaffected by operator error. This outcome was expected based on the findings of previous analyses of tooth measurements using similar techniques, for example Lunt (1969), Barret et al. (1963) and Kieser and Groeneveld (1991), who all found minimal differences between replicated tooth measurements. However, these studies were specifically examining measurements of the whole tooth, rather than the methodology employed in measuring linear enamel hypoplasia, and so it was important to ensure that similar confidence was obtained in this specific instance.

The level of variation does fluctuate somewhat between the teeth, but in general remains remarkably low. Some such variation is almost inevitable when examining something as difficult to measure as LEH where judgments are being taken as to the lowest point of the feature, the exact position of the cemento-enamel junction, and a measurement taken along the perpendicular axis of the two (Dobney and Ervynck, 1998:266). What this pilot study shows clearly is that this minor variation is not significant enough to affect the confidence that we can have in the actual measurements taken, and therefore any patterns seen within these, and particularly between sites, is unlikely to be attributable to error of measurement.

It is clear that no cusps are either more accurate or inaccurate to measure than the others. Therefore, this pilot study confirms that there should be little concern about the validity of the measurements of the hypoplastic lines identified as part of this study on any pillars or teeth along the tooth row. It is apparent that the measurements are easily reproducible, suggesting a relatively high level of accuracy is attainable using these methodologies and conditions.

A corollary to this pilot study, however, is that for the M3 the limited number of samples for three of the six sites under examination (Veurne, Raversijde and Koekelare) will inevitably make interpretation difficult, as there are fewer examples from which to determine patterns. However, from the findings of this study using Oudenberg, from which an examination of variation was possible, the results suggest that the level of reproducibility of the measurements taken is high.

Failing to find evidence that there is a difference does not definitively conclude that there is no difference, a principle sometimes described by the maxim '*Absence of evidence is not evidence of absence*' (Altman and Bland, 1995:482), and therefore some caution must still be employed when examining the findings of the main study. It is important not to use this pilot study as absolute confirmation that there is no variance introduced by a relatively subjective methodology relying on human assessment. It is evident, however, that for this study all statistical evidence suggests that there is no obvious difference in the amount of variation caused by measuring teeth between the sites, and therefore the sites should be relatively comparable with regard to this error source.

6.3.3. Linear Enamel Hypoplasia in the assemblages studied

When considering linear enamel hypoplasia it is important to look at two lines of enquiry.

Firstly, the frequency of LEH in the mandibles from each site (section 6.3.3.1.). In general, it has been argued that wild boars show fewer LEH lines than do domestic pigs (Dobney et al., 2004) and that pigs kept in more controlled husbandry conditions often exhibit different patterns of LEH to those seeing a more 'natural' lifestyle (Ervynck et al., 2007).

This wild/domestic difference in frequency of linear enamel hypoplasia lines has also been applied to domestic breeds in the medieval period (Ervynck and Dobney, 1999), with traditionally reared domestic pigs exhibiting fewer LEH lines than those in more adverse conditions.

Secondly (Section 6.3.3.2.), it is important to consider the exact heights of the LEH lines exhibited in each assemblage as these have been identified as indicative of stress at certain periods of life.

6.3.3.1. The frequency of LEH lines between the sites

The calculation of frequency can still be affected by bias due to age composition variances, as different teeth show a propensity to demonstrate different frequencies of LEH lines (Ervynck and Dobney, 1999:5). This is not believed to be a significant problem for this study, as the age compositions are relatively similar between the six sites (see Chapter 3). Dobney and Ervynck (2000:602) demonstrate that when more elderly jaws are examined there is no apparent obscuring of any LEH lines due to occlusal wear, and so it can be assumed that the a consideration of the general pattern of LEH frequency can be employed without needing to take into account the age of each jaw, beyond noting that the age profiles of the sites are similar and so this should also not be a factor.

In general, it is believed that there is a normal level of LEH frequency for pigs kept in good conditions but that many of the options adopted within pig husbandry regimes (such as increasing population density beyond the areas carrying capacity or foraging in poor environments etc.) cause less favourable living conditions for domestic herds. The physiological stress caused by poor conditions is reflected in higher levels of LEH (Ervynck et al., 2007:190) and so an examination of frequency can explore this in some detail. The frequency of LEH lines will be examined for the six sites per pillar of each, because previous studies (for example Ervynck and Dobney, 1999:6) have identified marked differences between the frequency on different tooth cusps, as well as between teeth. This is probably linked to tooth crown development being slightly different for each cusp. For the M3 in particular this may be a problem. Therefore, this study follows these earlier studies in incorporating a way to include data on each pillar separately. To compare the average relative frequency of LEH for each site an index is therefore employed to take into consideration the different frequencies for each cusp, after Ervynck and Dobney (1999:6)

$\text{Index}_{(\text{site A})} = \text{average}\ [F_{(\text{tooth x, cusp y})(\text{site A})} / F_{(\text{tooth x, cusp y})(\text{all sites})}]$

The standard deviation of the average, per site, demonstrates the variation between teeth and cusps at this site.

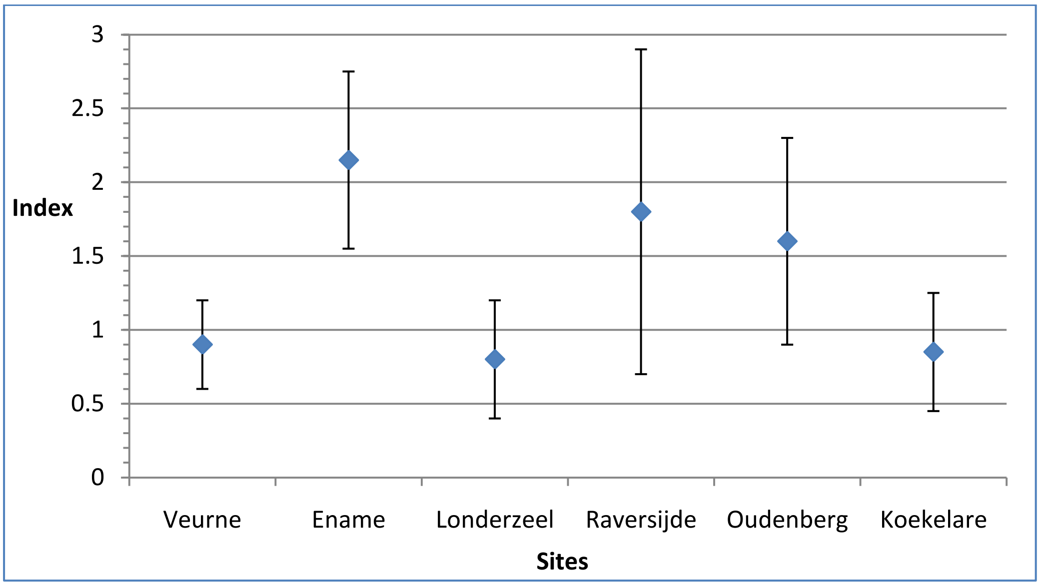


Figure 6.11. Linear Enamel Hypoplasia Index (After Erynck and Dobney, 1997:191 and Ervynck et al., 2007:191) for the sites studied in this examination. (Error bars represent the mean plus or minus for the standard deviation)

When considering Figure 6.11, it is apparent that the propensity for LEH is similar at Veurne, Londerzeel and Koekelare. LEH is a frequent occurrence across the populations studied, but some sites have higher frequencies of LEH on them than others, with Ename, Raversijde and Oudenberg all having higher levels of LEH than the very similar 'group' of Veurne, Londerzeel and Koekelare (similar both in terms of LEH Index, and in terms of standard deviation).

If, as discussed above, the degree of undernutrition is directly related to the frequency of LEH lines on molars it is apparent that the pigs at Veurne, Londerzeel and Koekelare appear to be enjoying better feeding conditions than on the other three sites. Because the sites examined in this study are from an area of similar climatic conditions (all sites being within a relatively small area of each other with no major topographic changes) it is unlikely that climatic variation caused this sort of stress, and it is more probable the type of environment or lifestyle the pigs are experiencing that is causing these patterns, something also concluded by Ervynck and Dobney (1999:6). The lower values perhaps best represent the typical LEH frequency of a domestic pig population kept in a 'traditional' semi-natural woodland regime, as they are similar to those of pigs kept in primary forested environments and also those of wild boar (Ervynck et al., 2007:190), with suitable foraging opportunities (meaning that these comparative pigs are known to not be experiencing excessive foraging problems).

The higher frequency of LEH in Ename, despite the wooded environs, has previously been interpreted as reflecting poor feeding conditions for the herds due to degraded local woodland and large numbers of pigs being kept here (pork appearing to be a very important meat supply for the site) (Ervynck and Dobney, 1999:7, Ervynck et al., 2007:191). Environmental information for the site of Ename suggests a highly managed woodland environment, with little opportunity for pannage due to the young age of the trees. Pollen analysis has shown a very low frequency of oak pollen, supporting this theory, as young oak trees do not produce pollen (Dobney et al., 2007:191). Historical evidence similarly suggests that the forest most probably comprised of young trees at the time of settlement (Tack et al., 1993 in Dobney et al., 2007:191). It is possible that the pig herds being run at the site exceeded the carrying capacity of the environs and so they were experiencing nutritional and physiological stress. Factors affecting LEH in pigs may include deforestation, intensification of habitat exploitation and specific husbandry regimes such as penning or stalling animals (Ervynck and Dobney, 1999:2); considering the environmental conditions it seems likely that this is the case for this site.

Oudenberg can similarly be seen to have a high frequency of LEH, although not quite as high as the sites of Raversijde and Ename. This can perhaps again be related to the environmental conditions of the site (see Chapter 3) which, although containing some forest for foraging, is still a relatively coastal site which may conceivably be causing stress for the animals.

The standard deviation for Raversijde (Figure 6.11) is so large that any calculation of a mean is probably a 'meaningless' figure, and it is significantly larger than that of any of the other five sites. It is possible that this high LEH frequency relates to the position of the site, similar to the elevated signal identified at Oudenberg. However, the strikingly large standard deviation, as well as the greater LEH frequency than even at Oudenberg, is perhaps suggestive that something else is the cause. It is important to consider the frequency at the six sites by examining frequencies from each tooth and cusp individually, to determine whether more detailed patterns can clarify the causes for such different LEH frequencies between these six sites. This may identify whether the large standard deviation of Raversijde was caused by a varying pattern of differences from the other sites. If, as

Dobney et al.(2002:45) suggest, the pattern of Raversijde varies from those of the other sites then the equation used to create the index (based on the averaging of all sites) may be affecting the standard deviation of Raversijde. In order to clarify this, it is important to consider the LEH frequency for each tooth (and indeed each cusp) separately.

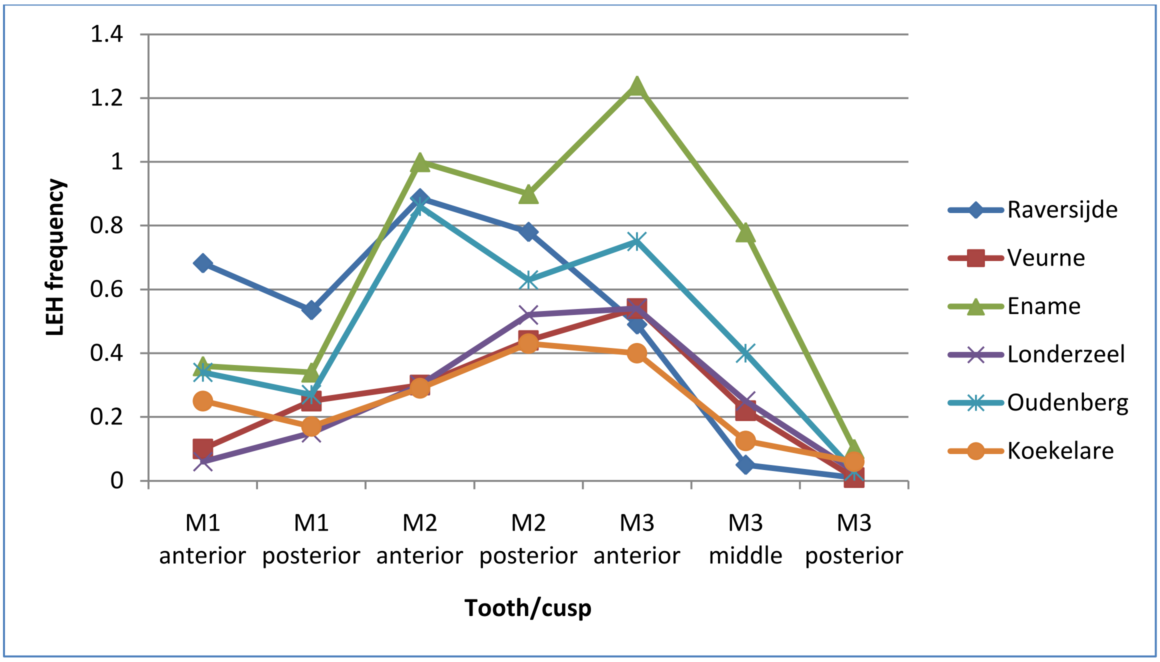


Figure 6.12. Frequency of Linear Enamel Hypoplasia (average number of lines observed per cusp) along the tooth row for each site (after Ervynck et al., 2007:192).

From Figure 6.12 it is apparent that the pigs of Raversijde in this study exhibit a very different pattern to those of the other five sites, with a higher average number of lines on the M1, and a lower number on the M3. The low values obtained for the M3 may be influenced by the small number of samples available for that tooth (Figure 6.8), although Koekelare has a similar number of samples and does not display such a marked difference.

For all sites (except Ename which exhibits greater stress on the M3 than the M2) the M2 exhibits a greater amount of stress than the M1 or M3, suggesting that for those Belgian animals stress more often occurred during their first winter than their second, in marked contrast to the wild examples of Southern Scandinavia for example (Rowley-Conwy and Dobney, 2007:150), and wild examples elsewhere. This is often a frequency pattern seen in domesticated pigs rather than wild boars, hypothesised to be because of foraging in less productive environments, resulting in higher levels of physiological stress and LEH (Ervynck et al., 2007:190). This confirms the biometric data (Chapter 4) which suggests the populations are predominantly of domesticated pigs at all sites.

It is also evident from this consideration (6.12) that differences in frequency are apparent between pillars of the same tooth, but there is a greater variation between teeth with each pillar of each molar showing relatively similar patterns, something also noted by Dobney and Ervynck (2000:602). A particularly great amount of variation is clearly apparent for the third molar. This may be due to difficulties with measurement of this tooth (Dobney and Ervynck, 2000:600). Even when the third molar is fully erupted, often the cemento-enamel junction and the M3 posterior pillar is obscured by the ascending ramus of the lower jaw. This makes observation and measurement of any LEH lines very difficult for this pillar and may explain its extremely low frequency value for the second and third cusps, a trend also identified in earlier studies. The low amount of variance observed for this tooth in the pilot study suggests results on the third molar are replicated accurately, however, so therefore this difficulty may be caused through an identification rather than a methodological problem.

The more frequent occurrence of LEH on the M1 for Raversijde is likely to be linked to stress caused by birth and weaning (see following section) (Dobney et al., 2002:46), and it is possible this is created by a differing form of husbandry causing particular stress at these times.

- <u>Summary:</u>
    - *Ename shows a high frequency of LEH, potentially caused by environmental conditions.*
    - *The two newly examined sites of Oudenberg and Koekelare both show a similar LEH frequency pattern, Koekelare appearing close to that of Veurne and Londerzeel.*
    - *Oudenberg has a particularly high level of LEH, the second highest after Ename, suggesting higher levels of physiological stress at this site than the norm, potentially caused by environmental conditions.*
    - *Koekelare plots with the 'normal' levels of LEH frequency and it seems a clear 'norm' for Medieval pannaging pig signal is identifiable.*
    - *Raversijde ,with the addition of further samples, displays a very different LEH frequency pattern across the teeth and cusps, suggesting that pigs at the site are experiencing different types of stress. This is leading to the creation of greater amounts of LEH on specific teeth (in particular the M1)*

rather than generally heightened levels of LEH as seen at Oudenberg and Ename.

6.3.3.2. The height of the LEH lines from the assemblages

In order to investigate why such differing values occur for the two sites of Ename and Raversijde, a more in depth assessment of the LEH values for all of the sites is needed. In calculating the frequencies of LEH within the populations, the heights of the LEH are not explicitly considered. It is therefore also important to examine these data, an area of interest also examined by Dobney and Ervynck (2000); and Dobney et al. (2002) and Ervynck et al. (2007) for Ename, Raversijde and Londerzeel, although in LEH studies in general it is traditionally more common to only consider LEH frequency.

For pigs, previous studies of linear enamel hypoplasia have identified some general trends for LEH lines to fall at certain points on the tooth. These are summarized below (Figure 6.13).

Tooth and LEH line	***Approximate height***	***Cause***
M1 peak 1	Anterior cusp, around 5mm (clear line) Posterior cusp, around 5mm (less marked line)	Birth
M1 peak 2	Anterior cusp, around 2.5mm (less marked line) Posterior cusp, around 2.5mm (clear line)	Weaning
M2 single peak	Anterior cusp, around 3mm Posterior cusp, around 3mm	First winter (if assume March-April birth, as is normal for Belgium (Freckop, 1958). Doesn't suggest double farrowing population as peak would be higher on the tooth
M3 complicated LEH patterns	Broad concentration on the lower half of the crown	Second winter (c. 18-23 months old)

Figure 6.13. Summary of the interpretation for the trends of LEH heights on molars, (as defined by Dobney et al., 2002)

As LEH is linked predominantly to physiological stress caused by nutrition (see earlier in this Chapter), it has proved possible to interpret the cause of these hypoplastic lines (see Figures 6.13 and 6.14), with the presumption being that, because of this link to nutrition, their cause is unlikely to be due to other causes of stress such as mating (Dobney and Ervynck, 2000:605). Because enamel is gradually deposited from the tip of the tooth towards the root during crown formation, LEH can be considered alongside the chronology of tooth development and the seasonal life cycle of the medieval domestic pig (Dobney and Ervynck, 2000:602). This has been explored in previous studies using comparisons with McCance et al. (1961) with their ‘undernourished’ data (with the presumption that early domestic pigs are more comparable to these data than modern improved breeds). If it is presumed that the birth season for the domestic pig is spring, and indeed in Belgium the birth period has been more narrowly defined as between March and April (Frechkop, 1958), it is potentially possible to link LEH lines to specific months (see Figure 6.14).This interpretation of peaks from Dobney and Ervynck (2000) will be used in this study to consider the patterns of peaks on cusps.

Similar studies have identified a LEH line caused by weaning in humans very successfully (Sarnat and Shour, 1942), and so this linking of LEH lines to specific causes is not without precedence. Both birth and weaning are events of nutritional as well as physiological stress, with growth of pigs, as well as humans, often slowing for a period after weaning (Lucas, 1962 in Dobney and Ervynck, 2000:603).

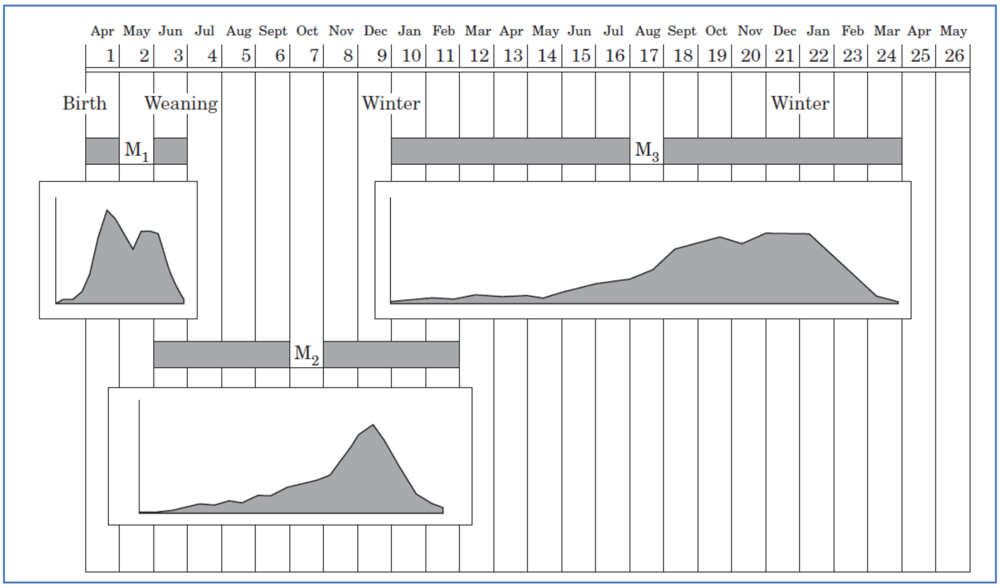


Figure 6.14. Representation of the occurrence of LEH compared with major events in the life cycle of the pre-modern breed domestic pig (solid bar indicates tooth formation, graphs indicate LEH height frequency distribution calculated from a number of archaeological sites, ranging from Neolithic to Late medieval). Figure reproduced from Dobney and Ervynck (2000:605).

From a consideration of the time of development of the tooth and the pattern at which the LEH fall, it does appear that, in general, the height of pig LEH lines correlate neatly with a seasonal pattern and that the explanations provided for them do seem very feasible (Dobney and Ervynck, 2000).

For this study a paucity of samples from Koekelare and a generally low number of third molars for a number of sites, mean that an accurate calculation of mean crown height on unworn teeth was difficult to obtain. A decision was thus taken to compare the LEH heights for each cusp without adjustment for differences between unworn crown height, because it was determined that it would be difficult to obtain an accurate figure for each cusp and site. In previous studies, mean crown height of teeth from cusps on teeth from sites with similar age distributions has not been found to differ significantly between sites (Dobney and Ervynck, 2000:599), and similar methodologies have been employed. Cusp C of the third molar, however, has been excluded because of the methodological problems described earlier, following the methodology of Dobney and Ervynck, 2000:600).

Calculations are based on the running means (moving average) of the values of the individual height classes recorded, calculated in Microsoft Excel 2007. This follows the methodology of Dobney and Ervynck (2000:601), and the use of this calculation enables comparison with the results obtained during that study to see whether a different researcher can produce similar findings. The use of running means also smoothes variation linked to individual specimens, which is particularly significant for Koekelare with its relatively small sample numbers, and highlights underlying trends, making it extremely useful for this examination.

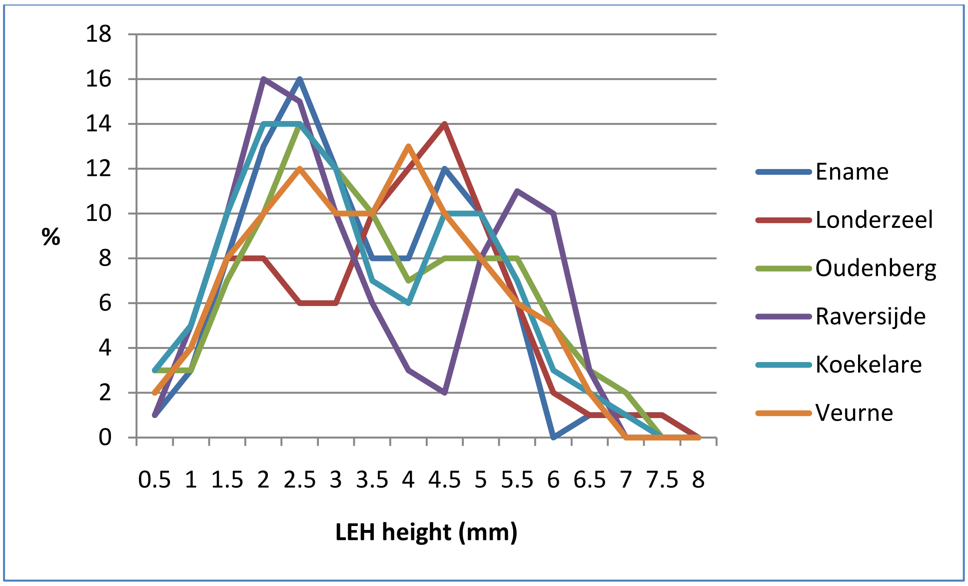


Figure 6.15. Frequency distribution of LEH heights for each assemblage (as running mean) for M1 anterior cusp

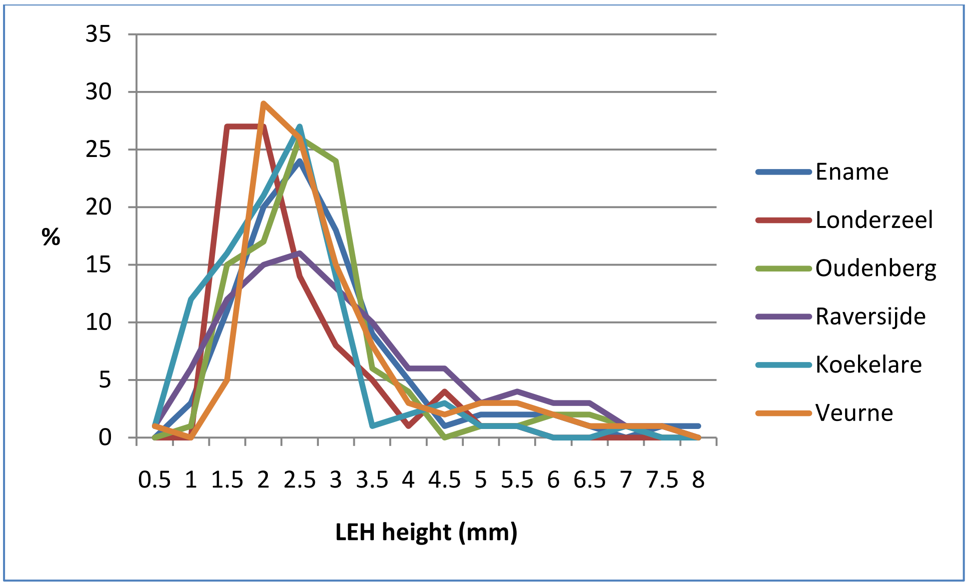


Figure 6.16. Frequency distribution of LEH heights for each assemblage (as running mean) for M1 posterior cusp

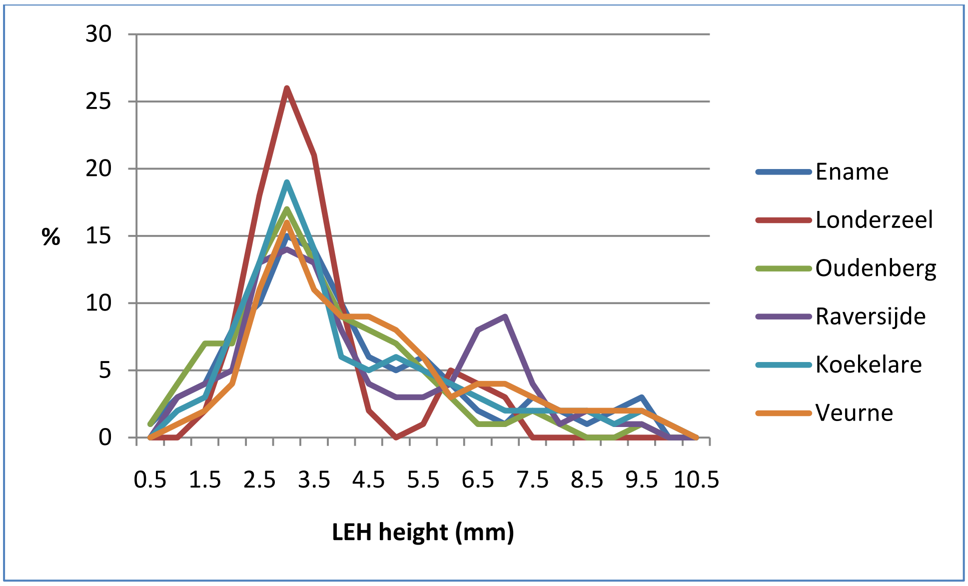


Figure 6.17. Frequency distribution of LEH heights for each assemblage (as running mean) for M2 anterior cusp

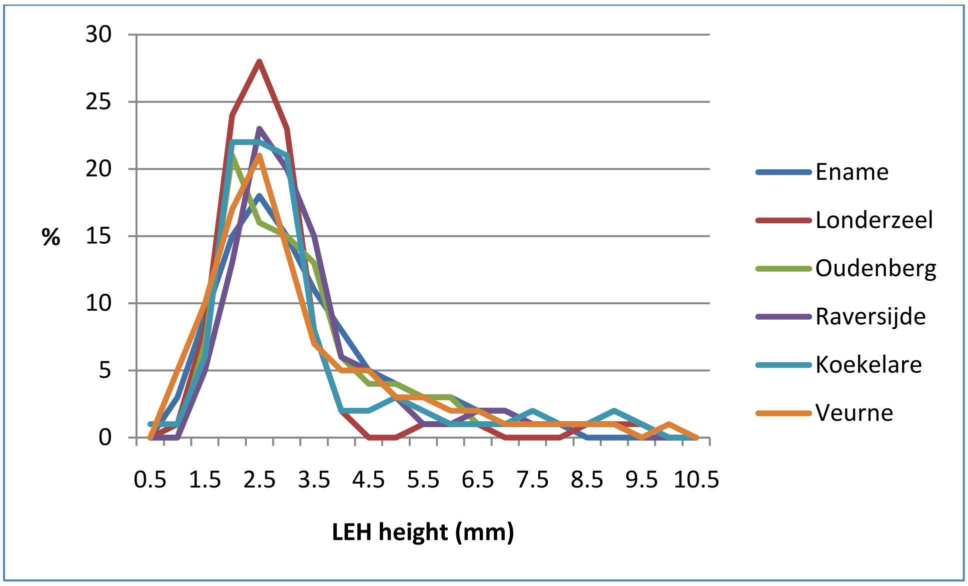


Figure 6.18. Frequency distribution of LEH heights for each assemblage (as running mean) for M2 posterior cusp

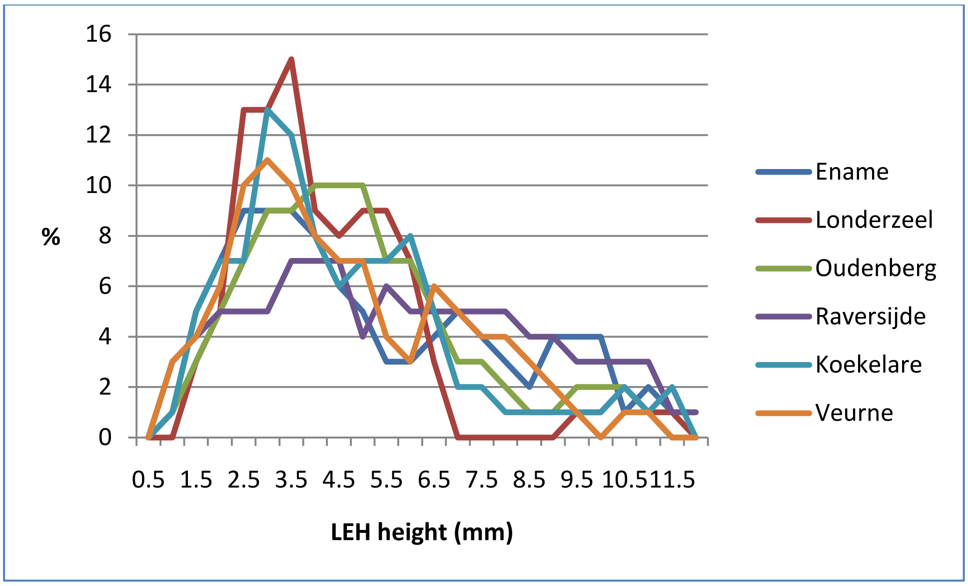


Figure 6.19. Frequency distribution of LEH heights for each assemblage (as running mean) for M3 anterior cusp

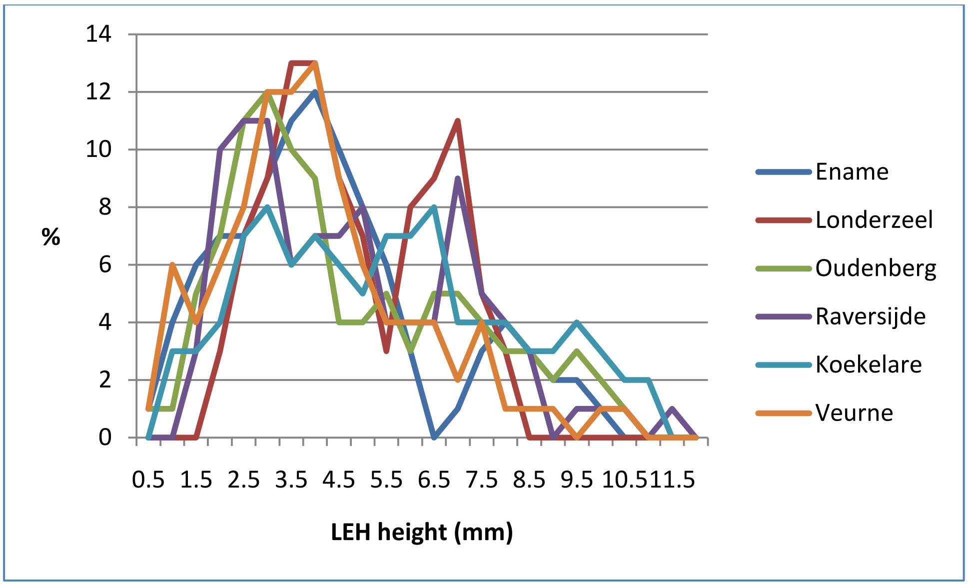


Figure 6.20. Frequency distribution of LEH heights for each assemblage (as running mean) for M3 middle cusp

Figures 6.15-6.20 (after Dobney and Ervynck, 2000) demonstrate that the location of the peaks on the distribution curves for the sites are in general relatively consistent, despite the frequency variation between the sites. This suggests that the pattern of the placement of LEH on the tooth is not something which changes between every site. When considering the height of the LEH lines, it is clear they fit neatly with the patterns identified by Dobney and Ervynck, (2000:602) and Dobney et al., (2002:38) for the height of the LEH lines of other comparative sites previously examined.

All six Belgian sites show an overall LEH pattern which may be interpreted as stress caused by natural life events, such as birth (M1), and first and second winters (M2 and M3). Oudenberg shows relatively high peaks at these points in comparison to the other sites, but it is clear that it is still experiencing very similar seasonal trends to the other 'normal' sites.

Raversijde, however, does also appear to have some variations from the patterns produced by the other five sites. Despite having very similar environmental conditions to Oudenberg, the peaks at which the LEH lines fall are at notably different heights to the other sites for the first molar, and particularly notable on the anterior cusp. For the posterior cusp the spread of LEH is somewhat more generalized across the teeth than the other sites. This confirms that the frequency pattern identified at Raversijde is caused by something other than environmental conditions, as otherwise it would also be expected at Oudenberg .

As we have previously considered (see Chapter 3), the site of Raversijde contains an environment not best suited for the raising of pigs. It has been suggested elsewhere that the pigs may have been kept in (semi-) confinement and fed human dietary refuse and leftovers from the fishing industry, something which remained something of a traditional practice in Flanders until the middle of the 20th century (Dobney et al., 2002:37). This suggestion of a use for fishing waste is also supported by the stable isotope analysis of the bones (see Chapter 8). The impact of such a drastically different food source from that normally available to pigs may provide some indication that the conditions are not optimal at this site, and goes some way to explain the difference in LEH line distribution for the M1, where the weaning peak in particular appears somewhat delayed when compared to the other five sites, which together with the heightened frequency of LEH suggests that the pigs are experiencing greater levels of stress.

For the second molar at Raversijde there are also notable differences to the LEH patterns of the other sites. There appears to be a second peak on the M2 anterior cusp, around 7mm in height which the other five sites do not show. It is clear that for all sites the 'first winter' peak on the M2 is relatively consistent. If double-farrowing was occurring, previous studies have suggested that there would be a secondary LEH peak higher on the crown of the M2 (for those born later in the year and so younger going into this first winter), although for pigs no examples of such husbandry have been previously identified through LEH heights. It is possible however that this is being seen here, as Raversijde has a higher peak on the anterior cusp of the M2, although this is not present on the posterior cusp. While further comparisons would be desirable, in particular with pig populations with second farrowings, this is not something previously identified and again suggests a different form of husbandry at Raversijde. For pigs of this young age to make it through their first winter in such hostile conditions it is likely that some form of protection was indeed necessary, and may have involved some form of containment, even if this was only partial.

For all six sites the third molar is much more variable, and no clear patterns between any of the sites are apparent. For Koekelare, a site not previously examined in LEH studies, LEH heights strikingly mirror those at Veurne and Londerzeel, and again suggest a relatively free-range form of husbandry. This confirms what is understood of the enivrons of the site and provides evidence suggesting that the husbandry at this site created limited stress.

For Veurne, Ename, Londerzeel, Koekelare and Oudenberg it is apparent that the patterns of LEH frequency across the tooth row do indeed follow the same form, and that the similarity is very clear (see Figures 6.15-6.20). This means that analysis of the overall stress present for these sites is directly comparable, and that it is likely that the husbandry regime the pigs were subjected to was roughly equitable between each site. The pigs were obviously affected by seasonality, but this can only suggest that the regimes were similar; it does not prove that they were exactly the same (Dobney et al., 2002). As has been determined elsewhere (for example, Dobney et al., 2004), it is proposed that two discrete LEH peaks on the first permanent molar (M1)clearly visible in these sites were caused by birth and weaning, and that under-nutrition during the first winter contributed to the single distinct LEH peak on the M2 for all sites (Dobney et al., 2004:197). A broad peak on M3 may reflect the animal's second winter (Dobney and Ervynck, 2000; Dobney et al., 2002), although with such limited samples this is harder to identify. These values show little deviation from this pattern which is similar from wild boar to loosely domesticated pig populations. The presence of few other repeating LEH lines perhaps suggests that the husbandry regimes employed at these sites were not particularly stressful; this fits well with what is know medieval pannage techniques.

It is obvious that Raversijde appears to show a markedly different pattern of LEH frequency. In particular the M1 shows an extremely high LEH frequency in comparison to the other sites, and overall the pig population at Raversijde reflect a very different pattern of LEH to the other sites included in this comparison although it still has a seasonal signature, and so is not being shielded completely from such stressors. In previous studies where this unusual sequence of LEH at Raversijde has been noted, this has been explained as evidence for a marked difference in husbandry and/or living conditions of the Raversijde pigs when compared with other medieval pig populations, such as those examined within this study. This difference in lifestyle for the Raversijde pigs is not only supported by the very different LEH pattern, but also the significantly greater variation and a higher averaged index values than those of the other sites. Interestingly Raversijde follows the wild boar pattern of fewer anterior hypoplasias on the M3 cusp than on the M2 posterior cusp (see Dobney et al., 2007:192 for comparison of a sample of Raversijde LEH compared with wild boar values), whereas all the other sites show an increase in hypoplasia on the M3 anterior cusp.The LEH pattern at Raversijde is otherwise, however, very different from the wild populations (see Dobney et al., 2007:192) with much heightened LEH values in comparison to the frequency of LEH on wild boar, as well as the pattern being very different to pigs on the domesticated sites examined within this study. Whether this reflects employment of husbandry practices of much greater stress in early life than those at the other Belgian sites, or a population reflecting a variety of husbandry techniques in the data, it is difficult to say.

6.4. Discussion of the patterns identified in this study

When the overall results of the LEH study are considered it is evident that, by themselves, they provide significant if not definitive information for achieving this study's aim of exploring husbandry techniques at the six Belgian sites. The incorporation of LEH height information for all sites, rather than just considering the frequency of LEH, has also significantly added to the level of understanding of the sites.

It is apparent that when the results of the six sites are considered together a number of patterns are evident. The four previously studied sites show similar patterns to those identified in the original study (Ervynck et al., 2007:192). This similarity is itself significant, showing not only that the addition of extra samples into the study has not affected any patterns identified, but also that a different researcher has managed to independently produce the same results, despite the relatively subjective methodology. This confirms that inter-observer error is clearly not a significant problem for this technique, something not previously examined in this way, and means that linear enamel hypoplasia studies can be done with more confidence when comparing results from different researchers. The addition of sites from which LEH has not previously been examined, Koekelare and Oudenberg, has provided important information for the interpretation of the husbandry of these other four Belgian sites.

Oudenberg

Oudenberg in particular shows a relatively high frequency of LEH, falling between Ename and the other sites. Crucially, the pattern of LEH heights on individual cusps for this site follow that of four of the sites, interpreted as due to seasonal conditions met during traditional ranging pig husbandry, and the patterns are certainly different from those of the suspected stalled pigs of Raversijde. The study of Oudenberg therefore confirms the supposition that the patterns identified at Raversijde (both in this study and previous work) are not due to environmental conditions caused by the coastal location of Raversijde. If this was the case then Oudenberg would be expected to show a similar signature to this site rather than falling in line with the more inland sites. An interpretation of the relatively high frequency of LEH at Oudenberg can be based on a similar argument to Ename, that the higher frequency of LEH reflects the stress caused by the less than ideal environmental conditions and in this case its coastal location (see Chapter 3). For Oudenberg this also confirms that pigs were probably not being imported into the Roman site later in their life from more comfortable surroundings as they show a high LEH frequency on the M1 (so from a young age). The pattern of LEH is therefore not affected by environmental conditions in terms of where LEH heights fall but only reflects seasonal (probably nutritional) shortcomings. However, the general problems of the surroundings are reflected only in the overall LEH frequency (more jaws exhibit evidence of stress).

Koekelare

The Koekelare LEH data plot close to the pattern of hypoplasia for pigs identified as being kept using traditional pannaging techniques, and a low number of LEH’s. This suggests that, despite the intensive cattle breeding focus of the site, the pigs are being treated in a relatively ‘normal’ fashion for the time. This reinforces the evidence for there being a ‘normal’ frequency of LEH in medieval pigs under traditional husbandry techniques, supporting the previous patterns from Veurne and Londerzeel which are also shown in this study. The inclusion of Koekelare again highlights the difference seen in Ename and also Raversijde (which not only exhibits a higher frequency of LEH than the norm but also a different pattern). For Londerzeel, Veurne and Koekelare differences are minimal when examining the frequency of LEH, and the height on the tooth the LEH is present at. The similarity of these signatures allows them to provide a ‘type’ for the typical herded domestic pig LEH pattern in Medieval pigs in good conditions, supported by our understanding of the environmental evidence for the local areas which confirms that it has a suitable setting for this sort of husbandry (see Chapter 3).

Londerzeeel

The Londerzeel pig assemblage again shows a low frequency of LEH. This suggests herding in well-forested environments, with the patterns being remarkably similar to those of not only Veurne but also, as we have also seen from this study, Koekelare. While Ervynck and Dobney (1999) suggests that this could be due to the keeping of pigs in confinement or semi-confinement, from the evidence of this study this does not seem likely, as the data from the site plots similarly to two sites from where it is believed from their data and surroundings a more traditional pannage-based husbandry was likely practised. For Londerzeel this 'typical' pattern is somewhat more unexpected than for the other sites, as it was previously believed from historical analysis that the area was much deforested at this time.The LEH height patterns from Londerzeel imply a clearly seasonal influence, which the 'stalled' pigs of Raversijde pigs are not displaying so clearly, and similarly the LEH frequency from Londerzeel is particularly low rather than high which does not suggest the pigs are experiencing nutritional stress during their early life. It may be possible that the inhabitants of Londerzeel are keeping the pigs in confinement or semi-confinement but without the stresses that such a regime appears to be imposing upon Raversijde (argued by Ervynck and Dobney, 1999). However, the plain presence of a 'seasonal' nature to the LEH height values and the similarity to the evidence of sites interpreted as pannaged pigs suggests that, if there is any more intensive management, it is at least not protecting them from the rhythm of natural conditions. The microwear evidence from Londerzeel (see Chapter 7) also suggests that while pig diet is different to the other sites, with some softer food incorporated, it is not suggestive of confinement. It appears therefore that the earlier suggestion from data on Londerzeel LEH, 'good quality' stalling is not supported with evidence from the incorporation of further sites. This will be explored further in Chapter 8, where all methodological approaches are discussed together.

Ename

The high LEH frequency at Ename identified in Ervynck et al. (2007:193) continues in this study and it is likely the theories suggested within that study are correct, that the management of the forest was detrimental to pig-herding as it left the area severely degraded. Pollen analysis further supports this theory, and the forest management techniques employed may have left the forest environment less than optimum in providing sustenance for a pig population (Dobney et al., 2007:193). It is likely therefore that the LEH signal of Ename reflects husbandry techniques comparable to those of the other Belgian sites of Oudenberg, Koekelare, Londerzeel and Veurne. The heights and LEH frequency per cusp show very similar patterns, but for the pigs in this particular location this was not an ideal husbandry technique which led to a greater level of physiological stress which is reflected through the teeth.

At Ename the seasonally based pattern of LEH heights is similar to the other sites (excluding Raversijde), and it is thought the high LEH frequency does not represent a different form of husbandry, but that it reflects the difficulty of the habitat.

This study demonstrates that even in 'presumed' forest-dwelling pigs of medieval times there can still be variation in how the lifestyle affects the health of the animals, and it is important not to just consider pannaged pigs in the medieval period as always experiencing the same level of nutritional stress due to their overall environment. This study of LEH has confirmed that deviation from a 'signal' of LEH frequency suggestive of normal medieval pannage is likely to be significant, as the addition of Koekelare has confirmed the identification of a 'normal' profile which Ename just does not fit.

Raversijde

It is immediately obvious that the data from population of pigs at Raversijde varies dramatically from the other sites examined within this study. From the LEH evidence it appears that the Raversijde population is being kept under a different husbandry regime, having not only a different pattern of LEH frequency (greater in earlier life) but that this is based upon differing LEH heights, particularly for the first two molars. This is a pattern previously identified from the frequency of LEH, and the addition of further data has further confirmed and strengthened the hypothesis that this is the case. When examining the height and frequency of the hypoplasias in terms of patterns rather than overall values it is clear that, for this study, only Raversijde out of the six sites shows any deviation from the seasonality identified by Dobney and Ervynck (2002). This study has addressed the possibility posed by Ervynck et al. (2007:193) that this may be due to variation in geographic location, but it is clear with the inclusion of LEH data from Oudenberg that this is not the case. It is evident that not only does Oudenberg fail to mirror the Raversijde pattern, instead conforming to a more seasonal signature, it confirms that the Raversijde LEH pattern is not due to environmental stress (which the Oudenberg pigs would also have shared) but that the cause is something different. What is happening at Raversijde is not only more stressful (with a raised frequency of LEH in comparison to the other sites) but it also does not present the seasonal LEH signals as we would expect from a differing husbandry regime. This suggests that the husbandry regime employed at Raversijde was not a system which left the pigs exposed to winter conditions, or the nutritional stresses of this time of year, but yet was one causing a relatively high level of stress in other ways, despite the pig's being protected from nutritional stresses across the year. It seems reasonable that this highlights the emergence of a different form of husbandry to that of the other sites, such as semi- or total- confinement in sties.

- Summary:
    - *The LEH signatures of the five sites excluding Raversijde are remarkably similar.*
    - *Raversijde appears to have a delayed LEH peak on the first molar (interpreted as weaning) in comparison to the other five sites, and a secondary peak on the anterior cusp of the M2 which may provide evidence for a double-farrowing, with a proportion of the pigs entering winter at a younger age, so the LEH peak for the first winter is higher on the tooth.*
    - *Despite the greater amount of stress identified at Ename and Oudenberg, neither of these sites appear to be experiencing differences in the pattern of stress, purely the frequency.*
    - *Similarly for Londerzeel, there is no evidence from the LEH heights that the pigs are experiencing a differing pattern of husbandry to the other four sites (excluding Raversijde) and the stress that they are experiencing appears seasonal.*

6.5. Conclusions

While further examination of other sites with known domestic pig husbandry techniques or environmental conditions would be useful to add to the body of data and aid interpretation, it is clear that the study of LEH has provided some key insights to the varying husbandry conditions across these archaeological assemblages. For a relatively low-technology (LEH recording), intensive technique the level of information provided is significant. While specific husbandry techniques cannot be directly identified through LEH patterns, differences between regimes on sites can, and explanations for variance can be considered and formulated. The addition of Oudenberg has helped clarify doubts over whether Raversijde varies due only to the location of the site, and the incorporation of Koekelare has similarly provided further grounding for the interpretation of Veurne, Ename and Londerzeel. New comparative examples from pig populations experiencing confinement, and/or twice-yearly farrowing times, would be particularly beneficial to help the interpretation of the data from Raversijde, which remains tentative at present. However, the incorporation of the two sites within this study have added greatly to confidence in interpreting LEH 'signals' in Belgian medieval pigs, and the consideration of all sites in terms of LEH heights as well as LEH frequency has similarly confirmed many proposed patterns. Similarly, the re-running of the measuring for the four sites previously studied has also provided important information for the wider field of linear enamel hypoplasia studies, suggesting that the incorporation of other researcher's data for comparison is not as problematic as originally believed, with the patterns identified in this study being very similar to those identified elsewhere.

- *Summary:*
    - *LEH frequency and LEH height information work together to give a clearer broader picture.*
    - *Veurne, Londerzeel and Koekelare appear to show a relatively 'normal' forested pig signature.*
    - *Ename and Oudenberg both exhibit higher levels of stress (LEH frequency), but very seasonal LEH height patterns. This is interpreted as due to environmental conditions.*
    - *Raversijde shows both differing LEH frequency, and LEH height patterns to the other five sites. This is possibly due to double-farrowing and/or semi-confinement husbandry practices, but further comparisons are necessary to confirm interpretation.*

Chapter 7: Dental Microwear Analysis

Dental Microwear is examined on the teeth from pigs of the six sites considered in this research: Raversijde, Koekelare, Londerzeel, Ename, Veurne and Oudenberg.

7.1. Introduction

An important consideration for the six sites investigated in this study is what information can be obtained about the dietary habits of the pigs. This is particularly relevant for Raversijde where the conditions in which the pigs were being kept are unclear. For the other five sites the supposition is of the existence of a more 'usual' medieval foraging pig with less direct involvement by humans for its dietary needs. This however remains conjecture based on the site's locales and environmental conditions (see Chapter 2), as well as our prevailing understanding of pig husbandry in the period which is based mainly on historical documentary sources. At the present time confirmation of diet using scientific methods is largely lacking. However, a technique which in recent years has been employed for the reconstruction of ancient diet both for human and animal remains (Mainland, 1998:1259), and so may well be useful to answer this question here, is the analysis of dental microwear (shortened to microwear for the rest of this chapter). Indeed, dental microwear has been described by one study as 'one of the most effective ways of inferring the diets of past vertebrates' (Schubert et al., 2006:303).

7.1.1. What is Microwear?

The study of microwear is based on the theory that surface detail is lost from the tooth surface and relevant detail is created through contact with abrasive particles from either food and/or the environment entering the mouth, as any particles harder than enamel wear away the enamel of the tooth surface (Hillson, 1996:231,240). Indeed, as soon as a tooth reaches occlusion it begins this process of being worn down (Teaford, 2007:346, Teaford, 1988:1146). Microwear can be defined as those microscopic polished, scratched or pitted appearances produced by both abrasives in food and by the forces that act on teeth during the feeding process (Willams et al., 2009:11194). Eating food is often accompanied by the accidental consumption of airborne dust and dirt through feeding which may also cause such microwear. Wear patterns on teeth for pigs may provide indications as to the presence of any differences in the diets of the species (Alberella et al., 2006:219; Mainland et al., 2007, 89).

Fully mature enamel contains only a tiny organic component (Glimcher et al., 1990 in Hillson, 1996:228) and this means that teeth are exceptionally resistant to degradation, (Hillson, 1996:228) particularly on sites where preservation is good (see Chapter 2 for details of the assemblages examined in this study). Teeth are among the most robust parts of the vertebrate skeleton and are considered to survive better than most other skeletal elements of archaeological samples (Hillson, 1986, King et al, 1999) making them an excellent material to study.

The microwear technique is employed in this study with the intention of illuminating the diet of the archaeological pig remains examined. While the examination and interpretation of ancient material is expected to be less clear-cut than that of modern examples, differences in diet between archaeological populations have been determined in other species. Mainland (1998) carried out such an analysis with sheep remains where clear differences were shown to be evident, and there would appear to be no significant hindrance to similar techniques being employed with pigs, with studies from Vanpoucke et al (2009) and Wilkie et.al. (2007) having already done this type of analysis.

7.1.2. The development of Dental Microwear analysis, and its relevance for this study

The study of microwear was originally developed by anthropologists for studies of human and non-human primate teeth (for example Teaford and Walker, 1984; Rose and Ungar, 1998, Teaford, 1994, Romero and De Juan, 2005), and such examinations have ranged from non-human primates to historic modern humans (Ma and Teaford, 2009, Teaford and Lytle, 1996). More recently, a relationship between diet type and the pattern of microwear has been demonstrated for several modern mammal species (for example Beuls et al., 2000; Mainland and Halstead, 2004, Mainland 2003, 2006, 2007). In recent years microwear use has even expanded to investigate such diverse topics as the diet of dinosaurs (Williams et al., 2009, Schubert and Ungar, 2005), rodents (Nelson et al., 2005, Hautier et al., 2009), elephants (Capozza, 2001:529) and aquatic vertebrates (Purnell et al., 2006). Research into the diet of domestic livestock has largely focused on cattle, sheep and goats (Mainland, 1998:1259). Palaeodietary studies have only relatively recently begun to consider the diet/nutrition of more complex omnivorous species, such as pigs, and to assess the technique's potential for helping to clarify targeted questions such as husbandry in archaeological populations (Van Poucke et al., 2009:137).

Interpretation of microwear in archaeological specimens is based on analogy with patterns seen in animal microwear associated with diets of modern animals, and so it is important to establish variation in modern individuals with relevant diets (Mainland, 2003:1513). Differences in diet such as folivory (leaf-eating) versus frugivory (fruit-eating) and browsing versus grazing (Walker et al., 1978, Solounias and Hayek, 1993, DeMiguel et al., 2008) as well as more subtle, seasonal or short term variations in diet have been explored. Research on modern mammal species suggests that several of these dietary variables could be clearly distinguished using microwear, for example, browsing versus grazing (Solounias and Hayek, 1993,Walker et al., 1978). Teaford and Walker (1984) demonstrated that various types of monkeys and orangutan can be differentiated from feeders of softer food, such as gorilla, and other types of monkey by the increased density of pits and broader scratches on the teeth of those with a harder diet. Mainland (1998:1259) has explored more subtle issues such as 'upland versus lowland' and 'seasonality in diet' using microwear. In recent years its success in using modern data to compare with various archaeological studies has become apparent (for example DeMiguel et al, 2008; Merceron et al., 2005). For pigs a variety in microwear patterns has been determined to successfully reflect different husbandry strategies in both modern (for example Ward and Mainland, 1999) and archaeological populations (for example Wilkie et al., 2007; Van Poucke et al, 2009). The analysis of microwear seems particularly apposite to use in this study where diet may provide important indicators in assisting the explanation of some of the other patterns being identified through the other techniques, with references to husbandry (for example, tooth alignment, see Chapter 5).

It is however important to note that the pattern of microwear changes rapidly during an individual's life (Teaford 1991) and is more complex than being affected solely by the food being deliberately eaten. Microwear is believed to only represent the food eaten just before death (Hillson, 1996:239, Grine 1988), and some researchers believe there could even be a complete turnover within hours (Romero and De Juan, 2005:6), a few days (Teaford, 2007:351, Merceron et al., 2010:7), or at the most weeks (Teaford and Lytle, 1996; Grine and Kay, 1988; Mainland and Halstead, 2004:104). It may therefore be difficult to reconstruct diets which are pointedly seasonal or comprised of varying foodstuffs and it certainly makes it difficult to consider annual dietary patterns (Teaford and Walker, 1984). Pigs are omnivores and will naturally consume a large variety of different foods. As well as grasses and other foliage, their diet can include acorn and beech mast, roots and tubers, insects, earthworms, carrion and even rats, reptiles and young birds (Grigson 1982, Dardaillon 1987 in Ward and Mainland, 1999). Indeed as well as eating plants, some other influences in their diet appear a necessity - Rose and Williams (1983) demonstrate, for instance, that earthworms appear a required part of the diet for good health. For pigs, therefore, the differences may be more complex as their diet is naturally relatively varied.

Ward and Mainland's (1999) seminal work on pigs, nevertheless, successfully revealed that clear differences are visible in the microwear of modern pigs reared on a stall-fed diet compared with that of rough grazing (free-range) rooting pigs. A greater number of microwear features were found among the free-range animals (potentially attributed to the greater ingestion of soil by the animals), a pattern similar to that found in non-human primates (Ungar and Teaford, 1996) and sheep (Mainland, 1998). Therefore, while the identification of microwear in pigs is likely to be complex, due to their rooting behaviour, it is apparent that it can be interpreted. Microwear studies have in some instances been proven as successful for archaeological pig specimens as they have on modern pig populations (Ward and Mainland, 1999). Wilkie et al. (1997) examined three English pig bone assemblages ranging from Late Iron Age to Medieval to consider the types of diet suggested by their microwear, because a range of management strategies from stall-fed to free ranging urban animals was anticipated on contextual and historical grounds between the sites. This study confirmed Ward and Mainland (1999)'s earlier interpretation that pigs that forage outdoors are associated with heavily striated enamel surfaces whereas indoor-reared pigs have relatively higher frequencies of pitted features (because of an absence of abrasive grit particles in the diet). This establishes the potential of the technique for archaeological pig samples. Indeed, as has been summarised recently, microwear may be a 'useful adjunct to approaches such as hypoplasia....which allow insight into diet/management over the lifetime of the individual' (Mainland, 1998 and Thomas and Mainland, 2005 in Van Poucke, et al. 2009:138).

7.2. Methodology

The methodology used in this study for the examination of the microwear of pigs' teeth was learned during an intensive training course and during consultations with Ingrid Mainland (University of Bradford, 2006), a very experienced researcher in this technique. It was closely based on the major microwear studies of pigs' teeth (Ward and Mainland, 1999; Wilkie et al. 2007), which was itself developed from similar techniques used on other species, in particular non-human primates (Walker and Teaford, 1989). This enabled the results of these studies to be placed in a wider context and interpreted with reference to other related studies.

7.2.1. Identifying Suitable Specimens

Only the mandibles of the pigs were used during this analysis, as maxillary and mandibular wear, although similar, is variable (Teaford and Walker, 1984). The use of both maxillary and mandibular teeth would be confusing and lead to a lack of clarity in any results. The mandible was chosen as it is more often recovered intact within an archaeological context than the maxilla, and in this study mandibles were already being examined for other features, meaning that the same jaws could be analysed consistently using all techniques. Only teeth associated with a mandible were chosen, in common with other methodologies (Hautier et al., 2009:184).

Pig mandibles were required to have second molars (M2) in eruption, and to be in a state of tooth wear defined on the Grant Wear Stage (Grant, 1982) as between *a* and *e*, as teeth in wear for only a short time show greater feature density than teeth that have been in wear for longer (Hillson, 1996:237), and are therefore more appropriate for study. The mechanics of mastication may also change once extreme wear is being exhibited, affecting the nature of microwear and making these teeth incompatible for comparison. Indeed, at greater wear stages the particular relevant facet may even be completely obliterated (Grant, 1982 in Van Poucke et al., 2009:139). Most of the pigs in these Belgian sites are relatively young (see Chapter 3), and so consideration of a relatively young age-range is also specifically appropriate. Post-mortem damage or wear on the teeth is to some extent inevitable, either through burial or excavation, cleaning, storage or the handling of specimens, but can usually be identified through a departure from the expected patterns of microwear on the wear facet (Hillson, 1996:237-238). Such features created are often very 'sharp' in comparison to true microwear. As Teaford (2007:346) describes it, 'wear patterns caused during chewing are laid down in regular patterns at specific locations on teeth....by contrast, when a tooth is buried in the ground it is subject to wear at innumerable unusual locations and angles'. Teeth were not specifically examined for post-mortem damage to eliminate them, indeed most examples are likely to be only visible microscopically, although teeth with obvious damage were not included in this study.

These criteria lead to the elimination of a number of the mandibles available from consideration. Overall 251 specimens were suitable for analysis from the six sites, based on the presence of the second molar and relevant tooth wear stage; some were also excluded due to visibly damaged enamel surfaces. Unfortunately no examples of the appropriate tooth/cusp wear were available for Koekelare and so this site could not be included. Figure 7.1 presents the total jaws examined from the six sites.

Site	***Total Number available for analysis***
Veurne	49
Londerzeel	47
Raversijde	47
Oudenberg	60
Ename	48
Koekelare	0

Figure 7.1.The total number of jaws available for analysis from each of the six sites, with M2 available and in an appropriate wear stage.

7.2.2. Creating the casts from the teeth

Casts were taken of the relevant area for all the potential specimens. A negative impression of the enamel of the bucco-posterior cusp of the lower M2 for each jaw was first taken by placing a polyvinysiloxane over the relevant portion of the tooth using a cartridge plunge dispenser- this is a fast-drying silicone based elastomere of medium viscosity dental impression material, used predominantly in dentistry to create detailed tooth impressions. This study used Coltene President's Jet, (Regular Body) as it is a dental impression material widely used in anthropology for finely detailed work (Hillson, 1996:229) and faithfully reproduces microscopic surface details. Care was taken to avoid getting air trapped between the tooth and the material (as cautioned by Schmidt, 2008:2). The second molar was selected as this is the tooth erupting at an age which makes it likely to be present in a larger number of jaws at a suitable level of wear, and is a tooth which is often used for microwear studies, allowing the results to be placed into a wider research context.

The polyvinysiloxane was left to harden, for approximately five minutes, until it was non-malleable using a dental pick. It was then removed from the tooth surface and cut down with a scalpel to isolate the area required. The buccal and lingual sides of the negative cast of the cusp were marked to prevent any potential for confusion about the orientation of the cusp for analysis (as recommended by Mainland, pers. comm. 2006). The preliminary cast from a tooth surface was automatically discarded. This was because it was likely to have picked up any extraneous dirt adhering to the tooth surface which may have concealed the microwear present. This is a technique recommended as standard by Hillson (1996:297) as a final process of cleaning away any trapped dirt. Three casts (copies) were then taken for each specimen in case of problems of the casting rendering any of the samples unusable. Casts were taken within the zooarchaeological laboratories at the University of Durham, with stringent attempts being made to ensure the area was kept clear of dirt to prevent the inclusion of particles within the negative casts.

The cast negatives were then placed in an individualised putty support (also created from a polyvinysiloxane material) to hold the negative in a position for the tooth surface area to be exposed for insertion of the resin to create a positive model of the tooth cusp.

A form of araldite, Araldite MY753 (modified bisphenol A epoxy resin bisphenol A-(epichlorhydrin with Dibutyl phthalate)) and a related hardener, Hardener HY956, (modified aliphatic polyamine, 20-30% Triethylenetetramine) were mixed in a ratio of 0.5 grams of Hardener to 2.5 grams of Araldite, using scientific scales to measure the correct amounts into a mixing container. The two ingredients were then blended and combined through manual manipulation, with the mixture being stirred slowly for 5 minutes. The speed was important to prohibit the introduction of air bubbles which would render the sample useless for replicating the microwear striations of the surface, (see Figure 4 for an example of a 'failed' cast).

The araldite mixture was introduced into the negative cast and any visible bubbles gently dislodged. Samples were then placed into a drying cabinet for 2-3 days under a gentle heat. These positives were created within the Conservation Laboratories, Department of Archaeology, Durham University.

Each of the four copies of each specimen was created using a different batch of araldite mixture to ensure that, if there was a problem with any batch of araldite, whole samples would not be lost to potential analysis (as recommended by Mainland, pers. comm., 2006). These were then stored in tightly sealed plastic specimen bags until analysis took place to limit the introduction of dirt or dust into the vicinity of the replicas. The storage of the positives, still within the moulds, meant that the introduction of microscopic dirt particles onto the surface of the positive replicas was limited.

7.2.3. Selection of specimens for analysis

A random selection was made from the positive casts created for analysis in the Scanning Electron Microscope (**SEM**). The sample choice of specimens was entirely randomised (within those jaws of suitable age and condition for analysis) to ensure that no preferential selection of a particular age range was employed. The only basis used in selection was that a similar number of specimens should be chosen from each site to ensure that sample sizes from each site were roughly comparable.

7.2.4. Preparation of the samples for analysis in the Scanning Electron Microscope

To prepare the positive cast for analysis by the SEM, the resin positives selected were eased away from the negatives. A visual inspection took place for any indication that the cast was unsuccessful. For example, any with visible areas of bubbles preserved in the araldite were discarded as unsuitable for analysis, as these air bubbles would mask the detail required. Similarly any indications of soil deposits on the surface resulted in a rejection of that cast. Those samples to be examined were mounted onto 0.5” aluminium specimen stubs using adhesive ‘dots’ (see Figure 7.3). The tooth was oriented with the occlusal surface of the tooth uppermost so that it would be facing the electron beam. The alignment of the buccal side of the cusp was marked onto the stubs in order to ensure the image of the cusp could be rotated for accurate alignment off this reference point once in the SEM.

A total of 88 cusps out of the 753 (251x3) available were analysed in the SEM, this number being the maximum that could be processed in the time allotted to the project on the electron microscope and taking into account the probability of the rejection of some failed casts. Only one cast for each sample was selected, however, so that in reality the 88 samples were selected from 251 (there being three options for each cast). The ‘version’ of the cast used was chosen on a rotating basis as a caution against batch problems with the araldite. Another batch of seven samples was also analysed in the SEM, but images were unsuccessful due to a machine filament malfunction.

A register was created linking the SEM stub number to the relevant jaw sample number (Figure 7.2) to ensure that no confusion was created about which sample was from which jaw.

Site	Jaw Number	Side of Jaw	M2 suitable?	If not, why	Sample taken?	Cast 1 taken/discard?	Cast 2 taken?	Cast 2 number	Cast 3 taken?	Cast 3 number	Cast 4 taken?	Cast 4 number	Cast analysed in SEM (image created?)
Veurne	1	L	Y		Y	Y	Y	s1a	Y	s1b	Y	s1c	
Veurne	2	L	Y		Y	Y	Y	s2a	Y	s2b	Y	s2c	
Veurne	3	R	Y		Y	Y	Y	s3a	Y	s3b	Y	s3c	
Veurne	4	R	Y		Y	Y	Y	s4a	Y	s4b	Y	s4c	
Veurne	5	L	Y		Y	Y	Y	s5a	Y	s5b	Y	s5c	
Veurne	6	L	Y		Y	Y	Y	s6a	Y	s6b	Y	s6c	
Veurne	7	L	Y		Y	Y	Y	s7a	Y	s7b	Y	s7c	S7b- Poor cast
Veurne	8	R	N	Not erupted									
Veurne	9	L	N	Not erupted									
Veurne	10	L	N	Not erupted									
Veurne	11	L	Y		Y	Y	Y	s11a	Y	s11b	Y	s11c	
Veurne	12	L	N	Not erupted									
Veurne	13	L	Y		Y	Y	Y	s13a	Y	s13b	Y	s13c	S13c- Poor focus but can analyse
Veurne	14	L	Y		Y	Y	Y	s14a	Y	s14b	Y	s14c	
Veurne	15	R	Y		Y	Y	Y	s15a	Y	s15b	Y	s15c	
Veurne	16	L	Y		Y	Y	Y	s16a	Y	s16b	Y	s16c	S16a- Poor focus and cast problems
Veurne	17	R	N	Insufficient wear									
Veurne	18	R	N	Not erupted									
Veurne	19	R	Y		Y	Y	Y	s19a	Y	s19b	Y	s19c	
Veurne	20	L	N	Insufficient wear									
Veurne	21	L	N	Not erupted									
Veurne	22	L	Y		Y	Y	Y	s22a	Y	s22b	Y	s22c	
Veurne	23	L	Y		Y	Y	Y	s23a	Y	s23b	Y	s23c	S23b
Veurne	24	R	N	Cusp damaged									
Veurne	25	L	N	Not erupted									
Veurne	26	L	N	Not erupted									
Veurne	27	L	N	Missing									
Veurne	28	R	Y		Y	Y	Y	s28a	Y	s28b	Y	s28c	
Veurne	29	L	N	Not erupted									
Veurne	30	L	Y ?	Damage to ant. cusp not affecting post. cusp?	Y	Y	Y	s30a	Y	s30b	Y	s30c	S30c- Poor cast but just analyseable
Veurne	31	L	Y		Y	Y	Y	s31a	Y	s31b	Y	s31c	
Veurne	32	R	Y		Y	Y	Y	s32a	Y	s32b	Y	s32c	S32a
Veurne	33	L	Y		Y	Y	Y	s33a	Y	s33b	Y	s33c	S33b
Veurne	34	R	Y										
Veurne	35	R	N	Not erupted									

Veurne	36	R	N	Not erupted									
Veurne	37	R	N	Not erupted									
Veurne	38	R	N	Not erupted									
Veurne	39	R	Y		Y	Y	Y	s39a	Y	s39b	Y	s39c	
Veurne	40	R	N	Not erupted									
Veurne	41	L	N	Not erupted									
Veurne	42	L	Y		Y	Y	Y	s42a	Y	s42b	Y	s42c	S42c- Poor cast and large amounts of dirt, s42b OK
Veurne	43	R	Y		Y	Y	Y	s43a	Y	s43b	Y	s43c	
Veurne	44	L	Y		Y	Y	Y	s44a	Y	s44b	Y	s44c	
Veurne	45	L	Y		Y	Y	Y	s45a	Y	s45b	Y	s45c	S45b- Poor cast and dirt
Veurne	46	R	N	Not present									
Veurne	47	L	Y		Y	Y	Y	s47a	Y	s47b	Y	s47c	
Veurne	48	L	Y		Y	Y	Y	s48a	Y	s48b	Y	s48c	S48a- Poor cast
Veurne	49	R	Y		Y	Y	Y	s49a	Y	s49b	Y	s49c	
Veurne	50	R	N	Not erupted									
Veurne	51	R	N	Not erupted									
Veurne	52	R	Y		Y	Y	Y	s52a	Y	s52b	Y	s52c	
Veurne	53	R	N	Not erupted									
Veurne	54	R	N	Not erupted									
Veurne	55	R	N	Not erupted									
Veurne	56	L	Y		Y	Y	Y	s56a	Y	s56b	Y	s56c	
Veurne	57	R	N	Missing									
Veurne	58	R	Y		Y	Y	Y	s58a	Y	s58b	Y	s58c	S58c- Poor cast and focusing problems
Veurne	59	L	N	Not present									
Veurne	60	L	Y		Y	Y	Y	s60a	Y	s60b	Y	s60c	
Veurne	61	L	N	Not erupted									
Veurne	62	L	N	Not erupted									
Veurne	63	R	Y		Y	Y	Y	s63a	Y	s63b	Y	s63c	S63a- Slight focus problem but analysis
Veurne	64	L	N	Tooth missing									
Veurne	65	R	Y		Y	Y	Y	s65a	Y	s65b	Y	s65c	
Veurne	66	R	N	Tooth missing									
Veurne	67	R	N	Not erupted									
Veurne	68	L	N	Not erupted									
Veurne	69	R	N	Not erupted									
Veurne	70	R	N	Tooth missing									
Veurne	71	R	Y		Y	Y	Y	s71a	Y	s71b	Y	s71c	

Veurne	72	R	N	Not erupted									
Veurne	73	L	N	Tooth missing									
Veurne	74	R	Y		Y	Y	Y	s74a	Y	s74b	Y	s74c	
Veurne	75	R	N	Tooth missing									
Veurne	76	R	N	Not erupted									
Veurne	77	L	N	Tooth missing									
Veurne	78	R	Y		Y	Y	Y	s78a	Y	s78b	Y	s78c	
Veurne	79	L	N	Not erupted									
Veurne	80	R	N	Not erupted									
Veurne	81	L	N	Not present									
Veurne	82	L	N	Not erupted									
Veurne	83	R	Y		Y	Y	Y	s83a	Y	s83b	Y	s83c	
Veurne	84	R	Y		Y	Y	Y	s84a	Y	s84b	Y	s84c	
Veurne	85	R	N	Not erupted									
Veurne	86	L	N	Not erupted									
Veurne	87	R	Y		Y	Y	Y	s87a	Y	s87b	Y	s87c	S87c- Poor cast
Veurne	88	R	N	Tooth missing									
Veurne	89	L	N	Not erupted									
Veurne	90	L	Y		Y	Y	Y	s90a	Y	s90b	Y	s90c	
Veurne	91	L	N	Not erupted									
Veurne	92	L	N	Not erupted									
Veurne	93	L	N	Not erupted									
Veurne	95	R	Y		Y	Y	Y	s95a	Y	s95b	Y	s95c	
Veurne	96	R	N	Not erupted									
Veurne	97	L	Y		Y	Y	Y	s97a	Y	s97b	Y	s97c	
Veurne	98	R	Y		Y	Y	Y	s98a	Y	s98b	Y	s98c	S98a- Some dirt but able to analyse
Veurne	99	R	N	Insufficient wear									
Veurne	100	R	N	Insufficient wear									
Veurne	101	L	N	Not erupted									
Veurne	102	R	N	Not erupted									
Veurne	103	L	Y		Y	Y	Y	s103a	Y	s103b	Y	s103c	S103b
Veurne	104	L	N	Tooth missing									
Veurne	105	R	N	Tooth missing									
Veurne	106	L	N	Not erupted									
Veurne	107	R	Y		Y	Y	Y	s107a	Y	s107b	Y	s107c	S107a- Focusing problems
Veurne	108	L	N	Tooth missing									
Veurne	109	R	N	Tooth missing									
Veurne	110	R	N	Tooth missing									

Veurne	111	L	Y		Y	Y	Y	s111a	Y	s111b	Y	s111c	
Veurne	112	L	Y		Y	Y	Y	s112a	Y	s112b	Y	s112c	S112b and s112a- Post mortem damage, dirt and poor cast
Veurne	113	L	N	Tooth missing									
Veurne	114	R	N	Tooth missing									
Veurne	115	R	N	Tooth missing									
Veurne	116	R	N	Tooth missing									
Veurne	117	L	N	Tooth missing									
Veurne	118	R	N	Tooth missing									
Veurne	119	R	N	Tooth missing									
Veurne	120	L	N	Tooth missing									
Veurne	121	L	N	Tooth missing									
Veurne	122	R	N	Not erupted									
Ename	1	L	N	Not worn enough	N								
Ename	2	L	N	Not erupted	N								
Ename	3	L	N	M2 missing	N								
Ename	5	L	N	Too worn	N								
Ename	7	L	N	Too worn	N								
Ename	9	L	N	M2 missing	N								
Ename	10	L	N	Too worn	N								
Ename	12	L	Y		Y	Y	Y	s12a	Y	s12b	Y	s12c	S12b- Poor cast and dirt. Post mortem damage in areas
Ename	13	L	N	Too young	N								
Ename	14	L	Y		Y	Y	Y	s14a	Y	s14b	Y	s14c	
Ename	15	L	Y		Y	Y	Y	s15a	Y	s15b	Y	s15c	
Ename	16	L	Y		Y	Y	Y	s16a	Y	s16b	Y	s16c	S16a
Ename	17	L	N	Damaged	N								
Ename	18	L	Y		Y	Y	Y	s18a	Y	s18b	Y	s18c	S18b- Poor cast and dirt, also post mortem damage
Ename	19	L	Y		Y	Y	Y	s19a	Y	s19b	Y	s19c	
Ename	20	L	Y		Y	Y	Y	s20a	Y	s20b	Y	s20c	
Ename	21	L	N	Not erupted	N								
Ename	22	L	N	Not erupted	N								
Ename	23	L	Y		Y	Y	Y	s23a	Y	s23b	Y	s23c	23c- Post mortem damage and poor focusing
Ename	24	L	Y	Just enough wear	Y	Y	Y	s24a	Y	s24b	Y	s24c	
Ename	25	L	Y		Y	Y	Y	s25a	Y	s25b	Y	s25c	
Ename	26	L	Y		Y	Y	Y	s26a	Y	s26b	Y	s26c	

Ename	27	L	N	Not present	N								
Ename	28	L	N	Not present	N								
Ename	29	L	Y		N								
Ename	31	L	N	Not erupted	N								
Ename	32	L	Y		Y	Y	Y	s32a	Y	s32b	Y	s32c	S32b
Ename	33	L	Y		Y	Y	Y	s33a	Y	s33b	Y	s33c	S33c
Ename	34	L	N	Not present	N								
Ename	35	L	N	Not erupted	N								
Ename	37	L	N	Not erupted	N								
Ename	38	L	Y		Y	Y	Y	s38a	Y	s38b	Y	s38c	S38a
Ename	40	L	Y		N								
Ename	41	L	Y		Y	Y	Y	s41a	Y	s41b	Y	s41c	
Ename	42	L	Y		Y	Y	Y	s42a	Y	s42b	Y	s42c	
Ename	43	L	N	Too old	N								
Ename	44	L	N	Not erupted	N								
Ename	45	L	N	Not present	N								
Ename	46	L	N	Not erupted	N								
Ename	47	L	N	Too much wear	N								
Ename	48	L	N	Not erupted	N								
Ename	49	R	Y		Y	Y	Y	s49a	Y	s49b	Y	s49c	S49b
Ename	50	?	N	Not present	N								
Ename	51	R	N	Not present	N								
Ename	52	L	Y		Y	Y	Y	s52a	Y	s52b	Y	s52c	
Ename	53	L	N	Not present	N								
Ename	54	L	N	Not present	N								
Ename	55	L	Y		Y	Y	Y	s55a	Y	s55b	Y	s55c	
Ename	56	L	N	Not present	N								
Ename	57	L	N	Not present	N								
Ename	58	L	Y		Y	Y	Y	s58a	Y	s58b	Y	s58c	S58c
Ename	60	L	N	Not present	N								
Ename	61	L	N	Not present	N								
Ename	62	L	N	Not present	N								
Ename	63	L	N	Not present	N								
Ename	64	L	N	Not present	N								
Ename	65	R	N	Not present	N								
Ename	66	L	Y		Y	Y	Y	s66a	Y	s66b	Y	s66c	
Ename	67	L	N	Not present	N								
Ename	69	R	Y		Y	Y	Y	s69a	Y	s69b	Y	s69c	
Ename	70	R	N	Not present	N								
Ename	72	R	N	Not present	N								
Ename	73	R	Y		Y	Y	Y	s73a	Y	s73b	Y	s73c	

Ename	74	R	N	Not present	N								
Ename	75	R	N	Not present	N								
Ename	76	R	N	Not erupted	N								
Ename	77	R	N	Not present	N								
Ename	78	R	N	Not present	N								
Ename	79	R	N	Not present	N								
Ename	80	R	Y		Y	Y	Y	s80a	Y	s80b	Y	s80c	
Ename	81+ 82	Bot h	N	Not present	N								
Ename	83	R	Y		N								
Ename	84	R	N	Not present	N								
Ename	85	R	N	Not present	N								
Ename	86	R	N	Not present	N								
Ename	87	R	N	Too worn	N								
Ename	88	R	N	Not present	N								
Ename	89	R	N	Not present	N								
Ename	90	R	Y		Y	Y	Y	s90a	Y	s90b	Y	s90c	
Ename	92	R	N	Not erupted	N								
Ename	94	R	N	Too young	N								
Ename	95	R	N	Not present	N								
Ename	98	R	Y		Y	Y	Y	s98a	Y	s98b	Y	s98c	S98b- Dirt and poor focusing
Ename	99	R	Y		Y	Y	Y	s99a	Y	s99b	Y	s99c	
Ename	100	R	N	Not present	N								
Ename	101	R	N	Not present/ide ntifiable	N								
Ename	102	R	Y		Y	Y	Y	s102a	Y	s102b	Y	s102c	
Ename	103	R	N	Not present	N								
Ename	104	R	N	Not erupted	N								
Ename	105	R	N	Too worn	N								
Ename	106	R	Y		Y	Y	Y	s106a	Y	s106b	Y	s106c	S106c
Ename	107	R	Y		Y	Y	Y	s107a	Y	s107b	Y	s107c	S107b- Poor cast and dirt
Ename	108	R	Y		Y	Y	Y	s108a	Y	s108b	Y	s108c	
Ename	109	R	N	Not erupted	N								
Ename	110	R	Y		Y	Y	Y	s110a	Y	s110b	Y	s110c	
Ename	111	R	Y		Y	Y	Y	s111a	Y	s111b	Y	s111c	S111c
Ename	112	R	Y		Y	Y	Y	s112a	Y	s112b	Y	s112c	
Ename	113	R	Y		Y	Y	Y	s113a	Y	s113b	Y	s113c	
Ename	114	R	Y		Y	Y	Y	s114a	Y	s114b	Y	s114c	S114b
Ename	115	R	N	Not present	N								
Ename	116	R	Y		Y	Y	Y	s116a	Y	s116b	Y	s116c	S116a- Poor cast and dirt
Ename	117	R	N	Not present	N								
Ename	118	R	Y		Y	Y	Y	s118a	Y	s118b	Y	s118c	S118c- Poor cast and

													appears too young
Ename	119	R	N	Not erupted	N								
Ename	120	R	N	Not erupted	N								
Ename	121	R	N	Insufficient wear	N								
Ename	122	R	N	Insufficient wear	N								
Ename	123	R	Y		Y	Y	Y	s123a	Y	s123b	Y	s123c	S123b
Ename	124	R	N	Not present	N								
Ename	126	R	N	Damaged	N								
Ename	127	R	Y		Y	Y	Y	s127a	Y	s127b	Y	s127c	
Ename	129	R	Y		Y	Y	Y	s129a	Y	s129b	Y	s129c	
Ename	130	R	Y		Y	Y	Y	s130a	Y	s130b	Y	s130c	S130a- Poor cast and focusing
Ename	131	R	N	Too young	N								
Ename	132	R	N	Too worn	N								
Ename	133	R	Y		Y	Y	Y	s133a	Y	s133b	Y	s133c	
Ename	134	R	N	Not present	N								
Ename	135	R	Y		Y	Y	Y	s135a	Y	s135b	Y	s135c	
Ename	137	R	Y		Y	Y	Y	s137a	Y	s137b	Y	s137c	
Ename	139	R	Y		Y	Y	Y	s139a	Y	s139b	Y	s139c	
Ename	141	R	Y		N								
Ename	142	R	Y		Y	Y	Y	s142a	Y	s142b	Y	s142c	
Raversijde	2	R	Y		Y	Y	Y	RAVs2a	Y	RAVs2b	Y	RAVs2c	S2b
Raversijde	3	R	Y		Y	Y	Y	RAVs3a	Y	RAVs3b	Y	RAVs3c	
Raversijde	4	R	Y		Y	Y	Y	RAVs4a	Y	RAVs4b	Y	RAVs4c	S4c- Poor cast
Raversijde	5	R	N	Damaged	N								
Raversijde	6	R	Y		Y	Y	Y	RAVs6a	Y	RAVs6b	Y	RAVs6c	
Raversijde	7	L	Y		Y	Y	Y	RAVs7a	Y	RAVs7b	Y	RAVs7c	
Raversijde	Unnumbered	L	N	Not erupted	N								
Raversijde	Unnumbered	R	N	Not present	N								
Raversijde	Unnumbered	L	N	Not present	N								
Raversijde	Unnumbered	L	N	Broken	N								
Raversijde	9	L	Y		Y	Y	Y	RAVs9a	Y	RAVs9b	Y	RAVs9c	
Raversijde	10	R	Y		Y	Y	Y	RAVs10a	Y	RAVs10b	Y	RAVs10c	S10c- Some areas of poor cast but examinable
Raversijde	11	L	N	Not erupted	N								
Raversijde	12	L	N	Not present	N								

Raversijde	13	L	Y		Y	Y	Y	RAVs 13a	Y	RAVs 13b	Y	RAVs13c	S13a- Poor cast
Raversijde	14	L	Y		N								
Raversijde	15	L	N	Not erupted	N								
Raversijde	16	R	Y		Y	Y	Y	RAVs 16a	Y	RAVs 16b	Y	RAVs16c	S16b- Some poor casting but examinable
Raversijde	17	L	N	Broken	N								
Raversijde	18	L	N	Not erupted	N								
Raversijde	19	L	Y		Y	Y	Y	RAVs 19a	Y	RAVs 19b	Y	RAVs19c	
Raversijde	20	R	Y		Y	Y	Y	RAVs 20a	Y	RAVs 20b	Y	RAVs20c	
Raversijde	21	L	N	Not present	N								
Raversijde	22	R	N	Too young	N								
Raversijde	23	L	Y		Y	Y	Y	RAVs 23a	Y	RAVs 23b	Y	RAVs23c	S23a
Raversijde	24	R	N	Not present	N								
Raversijde	25	R	N	Not erupted	N								
Raversijde	26	R	N	Not present	N								
Raversijde	27	R	N	Not present	N								
Raversijde	28	R	N	Too young	N								
Raversijde	29	L	N	Not present	N								
Raversijde	30	R	Y		Y	Y	Y	RAVs 30a	Y	RAVs 30b	Y	RAVs30c	
Raversijde	31	R	N	Broken	N								
Raversijde	32	R	Y		Y	Y	Y	RAVs 32a	Y	RAVs 32b	Y	RAVs32c	
Raversijde	33	R	N	Not erupted	N								
Raversijde	34	R	N	Damaged	N								
Raversijde	35	L	N	Not worn enough	N								
Raversijde	36	L	N	Too young	N								
Raversijde	37	R	N	Not present	N								
Raversijde	38	R	N	Not worn enough	N								
Raversijde	39	L	N	Not present	N								
Raversijde	40	R	Y		Y	Y	Y	RAVs 40a	Y	RAVs 40b	Y	RAVs40c	S40c
Raversijde	41	L	Y		Y	Y	Y	RAVs 41a	Y	RAVs 41b	Y	RAVs41c	S41b
Raversijde	42	R	Y		Y	Y	Y	RAVs 42a	Y	RAVs 42b	Y	RAVs42c	
Raversijde	43	L	N	Not present	N								
Raversijde	44	R	N	Not present	N								
Raversijde	45	L	Y		Y	Y	Y	RAVs 45a	Y	RAVs 45b	Y	RAVs45c	
Raversijde	46	R	Y		Y	Y	Y	RAVs 46a	Y	RAVs 46b	Y	RAVs46c	
Raversijde	47	L	Y		Y	Y	Y	RAVs 47a	Y	RAVs 47b	Y	RAVs47c	S47a- Some post mortem damage but can analyse
Raversijde	48	R	Y		Y	Y	Y	RAVs 48a	Y	RAVs 48b	Y	RAVs48c	S48c
Raversijde	49	L	Y		Y	Y	Y	RAVs 49a	Y	RAVs 49b		RAVs49c	S49a- Focusing

													problems
Raversijde	50	R	N	Broken	N								
Raversijde	51	R	Y		Y	Y	Y	RAVs 51a	Y	RAVs 51b	Y	RAVs5 1c	S51b and c- Focusing problem, post mortem damage and dirt
Raversijde	52	R	N	Not worn enough	N								
Raversijde	53	L	N	Not present	N								
Raversijde	54	R	Y		Y	Y	Y	RAVs 54a	Y	RAvs 54b	Y	RAvs54 c	S54b
Raversijde	55	R	N	Cusp missing	N								
Raversijde	56	L	Y		Y	Y	Y	RAVs 56a	Y	RAVs 56b	Y	RAVs5 6c	S56a
Raversijde	57	R	N	Odd enamel- no enamel at cusp top	N								
Raversijde	58	R	Y		Y	Y	Y	RAVs 58a	Y	RAVs 58b	Y	RAVs5 8c	S58a- Poor sputter coating
Raversijde	59	R	Y	Odd wear?	Y	Y	Y	RAVs 59a	Y	RAVs 59b	Y	RAVs5 9c	S59b
Raversijde	60	L	N	Not present	N								
Raversijde	61	L	Y		Y	Y	Y	RAVs 61a	Y	RAVs 61b	Y	RAVs6 1c	
Raversijde	62	R	N	Not present	N								
Raversijde	63	L	N	Cusp missing	N								
Raversijde	64	R	N	Cusp missing	N								
Raversijde	65	L	Y		Y	Y	Y	RAVs 65a	Y	RAVs 65b	Y	RAVs6 5c	
Raversijde	66	R	N	Not present	N								
Raversijde	67	L	N	Not present	N								
Raversijde	68	R	N	Broken cusp and immature	N								
Raversijde	69	R	N	Not erupted enough (1/2)	N								
Raversijde	70	R	N	Not worn enough	N								
Raversijde	71	L	N	Too young	N								
Raversijde	(72)	L	N	Broken	N								
Raversijde	72	R	N	Too young	N								
Raversijde	73	R	N	Not erupted	N								
Raversijde	74	L	Y		Y	Y	Y	RAVs 74a	Y	RAVs 74b	Y	RAVs7 4c	S74c
Raversijde	75	R	N	Not erupted	N								
Raversijde	76	L	Y		Y	Y	Y	RAVs 76a	Y	RAVs 76b	Y	RAVs7 6c	
Raversijde	77	L	Y		Y	Y	Y	RAVs 77a	Y	RAVs 77b	Y	RAVs7 7c	
Raversijde	78	R	Y		Y	Y	Y	RAVs 78a	Y	RAVs 78b	Y	RAVs7 8c	
Raversijde	79	L	Y		Y	Y	Y	RAVs 79a	Y	RAVs 79b	Y	RAVs7 9c	
Raversijde	80	R	N	Broken	N								
Raversijde	81	L	Y	?	Y	Y	Y	RAVs	Y	RAVs	Y	RAVs8	

				Damaged				81a		81b		1c	
Raversijde	82	L	Y	? Too young	Y	Y	Y	RAVs 82a	Y	RAVs 82b	Y	RAVs8 2c	S82b- Poor cast
Raversijde	83	R	N	Cusp damaged	N								
Raversijde	84	R	N	Not present	N								
Raversijde	85	L	N	Not present	N								
Raversijde	86	R	Y		Y	Y	Y	RAVs 86a	Y	RAVs 86b	Y	RAVs8 6c	
Raversijde	87	R	N	Not present	N								
Raversijde	88	L	Y		Y	Y	Y	RAVs 88a	Y	RAVs 88b	Y	RAVs8 8c	
Raversijde	89	L	N	Not present	N								
Raversijde	90	L	Y		Y	Y	Y	RAVs 90a	Y	RAVs 90b	Y	RAVs9 0c	
Raversijde	91	L	Y		Y	Y	Y	RAVs 91a	Y	RAVs 91b	Y	RAVs9 1c	S91a
Raversijde	92	L	N	Cusp damaged	N								
Raversijde	93	L	Y		Y	Y	Y	RAVs 93a	Y	RAVs 93b	Y	RAVs9 3c	S93b- Post mortem damage
Raversijde	94	R	Y		Y	Y	Y	RAVs 94a	Y	RAVs 94b	Y	RAVs9 4c	
Raversijde	95	R	Y		Y	Y	Y	RAVs 95a	Y	RAVs 95b	Y	RAVs9 5c	
Raversijde	96	R	Y		Y	Y	Y	RAVs 96a	Y	RAVs 96b	Y	RAVs9 6c	
Raversijde	97	L	N	Damaged	N								
Raversijde	98	L	Y		Y	Y	Y	RAVs 98a	Y	RAVs 98b	Y	RAVs9 8c	
Raversijde	99	R	Y		Y	Y	Y	RAVs 99a	Y	RAVs 99b	Y	RAVs9 9c	
Raversijde	100	L	N	Broken	N								
Oudenberg	3	L	Y		Y	Y	Y	PIG 29/3a	Y	PIG 29/3b	Y	PIG 29/3c	
Oudenberg	4	L	Y		Y	Y	Y	PIG 29/4a	Y	PIG 29/4b	Y	PIG 29/4c	
Oudenberg	1		N	Maxilla M2	N								
Oudenberg	2	L	N	Broken	N								
Oudenberg	3	l	N	Too Damaged, possibly too worn	N								
Oudenberg	4		N	Not erupted	N								
Oudenberg	5	L	N	Tooth missing	N								
Oudenberg	6	R	Y		Y	Y	Y	PIG 30/6a	Y	PIG 30/6b	Y	PIG 30/6c	S306c
Oudenberg	1	L	N	Too worn	N								
Oudenberg	2	R	Y		Y	Y	Y	PIG31 /2a	Y	PIG31 /2b	Y	PIG 31/2c	31/2a- Poor cast and dirt
Oudenberg	3	R	N	Damaged cusp	N								
Oudenberg	1	R	N	Too worn	N								
Oudenberg	2	Both	N	Not present	N								
Oudenberg	3	L	N	Not present	N								
Oudenberg	1	R	N	Too worn	N								
Oudenberg	2	L	Y		Y	Y	Y	PIG 33/2a	Y	PIG 33/2b	Y	PIG 33/2c	
Oudenberg	3	R	Y		Y	Y	Y	PIG 33/3a	Y	PIG 33/3b	Y	PIG 33/3c	

Oudenberg	4	L	N	Not present	N								
Oudenberg	5	L	N	Not present	N								
Oudenberg	6	L	N	Not present	N								
Oudenberg	7	L	N	Not present	N								
Oudenberg	8	R	N	Not present	N								
Oudenberg	9	R	N	Not present	N								
Oudenberg	1	R	Y		Y	Y	Y	PIG 34/1a	Y	PIG 34/1b	Y	PIG 34/1c	
Oudenberg	2	L	Y		Y	Y	Y	PIG 34/2a	Y	PIG 34/2b	Y	PIG 34/2c	
Oudenberg	3	R	Y		Y	Y	Y	PIG 34/3a	Y	PIG 34/3c	Y	PIG 34/3c	
Oudenberg	4	R	Y		Y	Y	Y	PIG 34/4a	Y	PIG 34/4b	Y	PIG 34/4c	S34/4b
Oudenberg	5	L	Y		Y	Y	Y	PIG 34/5a	Y	PIG 34/5b	Y	PIG 34/5c	34/5a- Post mortem damage and poor cast
Oudenberg	6	R	N	Not present	N								
Oudenberg	7	L	N	Not present	N								
Oudenberg	8	R	N	Too worn	N								
Oudenberg	9	R	N	Not erupted	N								
Oudenberg	10	R	N	Tooth missing	N								
Oudenberg	1	R	Y		Y	Y	Y	PIG 35/1a	Y	PIG 35/1b	Y	PIG 35/1c	
Oudenberg	2	R	N	Too worn	N								
Oudenberg	3	R	N	Too worn	N								
Oudenberg	1	R	Y		Y	Y	Y	PIG 36/1a	Y	PIG 36/1b	Y	PIG 36/1c	
Oudenberg	2	L	N	Too young	N								
Oudenberg	1	R	N	Tooth missing	N								
Oudenberg	2	L	N	Damaged cusp	N								
Oudenberg	3	L	N	Too worn	N								
Oudenberg	4	R	N	Not erupted	N								
Oudenberg	5	L	N	Not preset	N								
Oudenberg	6	R	N	Not present	N								
Oudenberg	7	R	Y		Y	Y	Y	PIG 37/7a	Y	PIG 37/7b	Y	PIG 37/7c	35/7c- Poor cast and dirt
Oudenberg	8	L	Y		Y	Y	Y	PIG 37/8a	Y	PIG 37/8b	Y	PIG 37/8c	
Oudenberg	1	L	Y		Y	Y	Y	PIG 38/1a	Y	PiG 38/1b	Y	PIG 38/1c	
Oudenberg	2	L	N	Too worn	N								
Oudenberg	3	R	N	Too young	N								
Oudenberg	4	L	N	Too young	N								
Oudenberg	1	R	N	Not present	N								
Oudenberg	2	L	N	Not present	N								
Oudenberg	3	L	N	Cusp damaged	N								
Oudenberg	1	R	N	Not present	N								
Oudenberg	1	L	Y		Y	Y	Y	PIG 41/1a	Y	PIG 41/1b	Y	PIG 41/1c	

Oudenberg	2	L	Y		Y	Y	Y	PIG 41/2a	Y	PIG 41/2b	Y	PIG 41/2c	
Oudenberg	3	R	Y		Y	Y	Y	PIG 43/3a	Y	PIG 43/3b	Y	PIG 43/3c	
Oudenberg	4	L	Y		Y	Y	Y	PIG 41/4a	Y	PIG 41/4b	Y	PIG 41/4d	
Oudenberg	5	L	N	Not present	N								
Oudenberg	6	R	N	Not present	N								
Oudenberg	7	R	N	Not present	N								
Oudenberg	8	R	N	Not present	N								
Oudenberg	9	R	N	Not present	N								
Oudenberg	1	Front of Jaw	N	Not present	N								
Oudenberg	2	R	N	Too worn	N								
Oudenberg	3	R	N	Too worn	N								
Oudenberg	4	L	N	Not present	N								
Oudenberg	5	R	N	Broken	N								
Oudenberg	6	R	N	Not erupted	N								
Oudenberg	7	L	N	Not present	N								
Oudenberg	1	R	N	Not present	N								
Oudenberg	2	L	N	Too worn	N								
Oudenberg	3	R	N	Too worn	N								
Oudenberg	4	R	N	Not present	N								
Oudenberg	1	L	N	Not present	N								
Oudenberg	2	R	Y		Y	Y	Y	PIG 1/2a	Y	PIG 1/2b	Y	PIG 1/2c	
Oudenberg	3	R	N	Too worn	N								
Oudenberg	4	R	N	Not present	N								
Oudenberg	5	L	N	Not present	N								
Oudenberg	6	R	N	Broken	N								
Oudenberg	7	R	Y		Y	Y	Y	PIG 1/7a	Y	PIG 1/7b	Y	PIG 1/7c	
Oudenberg	1	R	N	Not present	N								
Oudenberg	2	L	N	Too worn	N								
Oudenberg	3	L	N	Broken	N								
Oudenberg	4	R	Y		Y	Y	Y	PIG 2/4a	Y	PIG 2/4b	Y	PIG 2/4c	S2/4c
Oudenberg	5	L	N	Not present	N								
Oudenberg	6	R	Y		Y	Y	Y	PIG 2/6a	Y	PIG 2/6b	Y	PIG 2/6c	
Oudenberg	7	L	Y		Y	Y	Y	PIG 2/7a	Y	PIG 2/7b	Y	PIG 2/7c	
Oudenberg	8	R	Y		Y	Y	Y	PIG2/8a	Y	PIG2/8b	Y	PIG2/8c	S2/8a
Oudenberg	5	L	Y		Y	Y	Y	PIG 29/5a	Y	PIG 29/5b	Y	PIG 29/5c	
Oudenberg	6	L	Y		Y	Y	Y	PIG 29/6a	Y	PIG 29/6b	Y	PIG 29/6c	
Oudenberg	7	L	Y		Y	Y	Y	PIG 29/7a	Y	PIG 29/7b	Y	PIG 29/7c	
Oudenberg	8	L	Y		Y	Y	Y	PIG 29/8a	Y	PIG 29/78b	Y	PIG 29/8c	
Oudenberg	9	R	N	Too worn	N								

Oudenberg	1	R	N	Too worn	N								
Oudenberg	2	L	N	Not erupted	N								
Oudenberg	3	R	N	Not present	N								
Oudenberg	4	?	N	Not present	N								
Oudenberg	1	L	N	Not present	N								
Oudenberg	2	R	N	Too young and cusp broken	N								
Oudenberg	3	L	N	Too worn	N								
Oudenberg	1	R	N	Not present	N								
Oudenberg	2	Both	N	Not present	N								
Oudenberg	3	L	N	Not present	N								
Oudenberg	4	R	N	Not present	N								
Oudenberg	5	L	N	Not present	N								
Oudenberg	6	R	N	Too worn	N								
Oudenberg	1	L	Y		Y	Y	Y	PIG 5/1a	Y	PIG 5/1b	Y	PIG 5/1c	5/1a
Oudenberg	2	L	Y		Y	Y	Y	PIG 5/2a	Y	PIG 5/2b	Y	PIG 5/2c	
Oudenberg	3	R	Y		Y	Y	Y	PIG 5/3a	Y	PIG 5/3b	Y	PIG 5/3c	
Oudenberg	4	R	Y		Y	Y	Y	PIG 5/4a	Y	PIG 5/4b	Y	PIG 5/4c	
Oudenberg	5	L	N	Too worn	N								
Oudenberg	6	Both	N	Not present	N								
Oudenberg	7	L	N	Not erupted	N								
Oudenberg	1	R	N	Too worn	N								
Oudenberg	1	R	N	Not present	N								
Oudenberg	2	R	N	Not present	N								
Oudenberg	3	L	N	Not worn enough	N								
Oudenberg	1	L	N	Not worn enough	N								
Oudenberg	2	R	N	Not present	N								
Oudenberg	3	R	N	Not present	N								
Oudenberg	4	R	N	Too worn	N								
Oudenberg	1	L	N	Not present	N								
Oudenberg	2	R	N	Not present	N								
Oudenberg	3	L	N	Too worn	N								
Oudenberg	4	R	Y		Y	Y	Y	PIG 9/4a	Y	PIG 9/4b	Y	PIG 9/4c	9/4c- Poor cast and dirt
Oudenberg	5	L	Y		Y	Y	Y	PIG 9/5a	Y	PIG 9/5b	Y	PIG 9/5c	
Oudenberg	1	Both	N	Not present	N								
Oudenberg	2	Both	N	Not present	N								
Oudenberg	3	L	N	Too worn	N								
Oudenberg	4	R	N	Not present	N								
Oudenberg	5	L	N	Not present	N								
Oudenberg	6	Both	N	Not	N								

				present									
Oudenberg	7	L	N	Not present	N								
Oudenberg	8	R	N	Not erupted enough	N								
Oudenberg	9	R	N	Not present	N								
Oudenberg	10	L	N	Not present	N								
Oudenberg	11	L	N	Not present	N								
Oudenberg	1	Both	N	Not present	N								
Oudenberg	2	R	Y		Y	Y	Y	PIG 11/2a	Y	PIG 11/2b	Y	PIG 11/2c	
Oudenberg	3	R	Y		Y	Y	Y	PIG 11/3a	Y	PIG 11/3b	Y	PIG 11/3c	
Oudenberg	4	R	Y		Y	Y	Y	PIG 11/4a	Y	PIG 11/4b	Y	PIG 11/4c	
Oudenberg	1	R	N	Not worn enough	N								
Oudenberg	2	L	N	Not present	N								
Oudenberg	3	R	N	Not erupted	N								
Oudenberg	4	R	Y		Y	Y	Y	PIG 12/4a	Y	PIG 12/4b	Y	PIG 12/4c	S12/4b
Oudenberg	5	L	N	Not present	N								
Oudenberg	6	R	N	Not present	N								
Oudenberg	7	L	N	Not erupted	N								
Oudenberg	8	L	N	Damaged	N								
Oudenberg	9	L	N	Not erupted	N								
Oudenberg	10	L	N	Not present	N								
Oudenberg	1	R	N	Not present	N								
Oudenberg	2	Both	N	Not present	N								
Oudenberg	1	R	N	Too worn	N								
Oudenberg	1	R	Y		Y	Y	Y	sPIG15/1a	Y	sPIG15/1b	Y	sPIG15/1c	
Oudenberg	2	R	Y		Y	Y	Y	sPIG15/2a	Y	sPIG15/2b	Y	sPIG15/2c	15/2b- Dirty cast
Oudenberg	4	L	Y		Y	Y	Y	PIG 15/4a	Y	PIG15 /4b	Y	PIG15/ 4c	
Oudenberg	5	L	N	Not present									
Oudenberg	6	L	N	Not present	N								
Oudenberg	7	R	N	Too worn	N								
Oudenberg	8	L	N	Not present	N								
Oudenberg	1	R	Y		Y	Y	Y	PIG16 /1a	Y	PIG16 /1b	Y	PIG16/ 1c	
Oudenberg	1	L	Y		Y	Y	Y	PIG17 /1a	Y	PIG17 /1b	Y	PIG17/ 1c	
Oudenberg	2	L	N	Too worn	N								
Oudenberg	3	Both	N	Broken	N								
Oudenberg	4	L	N	Not present	N								
Oudenberg	5	L	N	Broken	N								
Oudenberg	6	R	N	Not erupted	N								
Oudenberg	7	Both	N	Not present	N								

Oudenberg	8	L	N	Too young	N								
Oudenberg	9	R	N	Not present	N								
Oudenberg	10	R	N	Not present	N								
Oudenberg	11	R	N	Too young and broken	N								
Oudenberg	12	R	N	Not present	N								
Oudenberg	13	R	N	Too young	N								
Oudenberg	14	R	N	Not present	N								
Oudenberg	15	R	N	Not present	N								
Oudenberg	1	R	N	Damaged	N								
Oudenberg	1	Both	N	Not present	N								
Oudenberg	2	L	N	Not erupted	N								
Oudenberg	3	R	N	Not present	N								
Oudenberg	4	R	N	Not present	N								
Oudenberg	1	R	Y		Y	Y	Y	PIG20/01a	Y	PIG20/01b	Y	PIG20/01c	S20/01b - Some dirt but still can analyse
Oudenberg	2	R	N	Too worn	N								
Oudenberg	3	L	N	Not present	N								
Oudenberg	4	Both	N	Not present	N								
Oudenberg	5	R	N	Damaged	N								
Oudenberg	6	L	N	Not present	N								
Oudenberg	7	R	N	Too worn	N								
Oudenberg	8	R	N	Not present	N								
Oudenberg	9	R	N	Not present	N								
Oudenberg	10	R	N	Not present	N								
Oudenberg	1	L	N	Not present	N								
Oudenberg	2	Both	N	Not present	N								
Oudenberg	3	R	Y		Y	Y	Y	PIG21/3a	Y	PIG21/3b	Y	PIG21/3c	
Oudenberg	4	R	Y	? Damaged	Y	Y	Y	PIG 21/4a	Y	PIG 21/4b	Y	PIG 21/4c	
Oudenberg	1	R	Y		Y	Y	Y	PIG 22/1a	Y	PIG 22/1b	Y	PIG 22/1c	
Oudenberg	1	L	Y		Y	Y	Y	PIG 23/1a	Y	PIG 23/1b	Y	PIG 23/1c	
Oudenberg	2	R	N	Damaged	N								
Oudenberg	1	L	Y		Y	Y	Y	PIG24/1a	Y	PIG24/1b	Y	PIG24/1c	
Oudenberg	2	L	Y		Y	Y	Y	PIG24/2a	Y	PIG24/2b	Y	PIG24/2c	S24/2a
Oudenberg	3	L	N	Not present	N								
Oudenberg	4	L	N	Not present	N								
Oudenberg	1	L	N	Not present	N								
Oudenberg	2	R	Y		Y	Y	Y	PIG25/2a	Y	PIG25/2b	Y	PIG25/2c	
Oudenberg	3	L	N	Not present	N								
Oudenberg	4	R	Y		Y	Y	Y	PIG25/4a	Y	PIG25/4b	Y	PIG25/4c	25/4c- Poor cast and

													focusing problems
Oudenberg	5	R	N	Not present	N								
Oudenberg	1	R	Y		Y	Y	Y	PIG 26/1a	Y	PIG 26/1b	Y	PIG 26/1c	
Oudenberg	2	R	N	Not present	N								
Oudenberg	3	L	Y		Y	Y	Y	PIG26 /3a	Y	PIG26 /3b	Y	Pig26/3 c	
Oudenberg	1	L	Y		Y	Y	Y	PIG 27/1a	Y	PIG27 /1b	Y	PIG27/ 1c	
Oudenberg	2	R	N	Too worn	N								
Oudenberg	1	R	Y		Y	Y	Y	PIG28 /1a	Y	PIG28 /1b	Y	PIG28/ 1c	
Oudenberg	2	L	N	Not erupted	N								
Oudenberg	3	L	N	Not present	N								
Oudenberg	4	R	N	Not present	N								
Oudenberg	5	L	N	Not present	N								
Oudenberg	6	L	N	Not present	N								
Oudenberg	1	L	Y		Y	Y	Y	PIG29 /1a	Y	PIG29 /1b	Y	PIG29/ 1c	S29/1b
Oudenberg	2	L	Y		Y	Y	Y	PIG29 /2a	Y	PIG29 /2b	Y	PIG29/ 2c	
Londerzeel	33	L	Y	Too worn	N								
Londerzeel	34	L	Y		Y	Y	Y	s34a	Y	s34b	Y	s34c	
Londerzeel	35	R	Y		Y	Y	Y	s35a	Y	s35b	Y	s35c	
Londerzeel	36	L	N	Too worn	N								
Londerzeel	37	L	Y		Y	Y	Y	s37a	Y	s37b	Y	s37c	
Londerzeel	38	L	Y		Y	Y	Y	s38a	Y	s38b	Y	s38c	
Londerzeel	39	L	Y		Y	Y	Y	s39a	Y	s39b	Y	s39c	S39c- Failed cast
Londerzeel	40	R	N	Damaged	N								
Londerzeel	41	R	Y	? Too young	Y	Y	Y	s41a	Y	s41b	Y	s41c	
Londerzeel	42	R	Y		Y	Y	Y	s42a	Y	s42b	Y	s42c	
Londerzeel	43	R	Y		Y	Y	Y	s43a	Y	s43b	Y	s43c	
Londerzeel	44	R	N	Too worn	N								
Londerzeel	45	L	N	Not erupted	N								
Londerzeel	46	L	Y	?Too worn	Y	Y	Y	s46a	Y	s46b	Y	s46c	
Londerzeel	47	L	Y	Possibly damaged- only 2 taken	Y	Y	Y	s47a	Y	s47b	N		S47a
Londerzeel	48	R	N		N								
Londerzeel	49	L	N	Not present	N								
Londerzeel	50	R	Y		Y	Y	Y	s50a	Y	s50b	Y	s50c	S50c- Focusing problem, poor cast?
Londerzeel	51	R	Y		Y	Y	Y	s51a	Y	s51b	Y	s51c	
Londerzeel	52	R	Y		Y	Y	Y	s52a	Y	s52b	Y	s52c	
Londerzeel	53	L	N	Too worn	N								
Londerzeel	54	L	Y		Y	Y	Y	s54a	Y	s54b	Y	s54c	
Londerzeel	55	L	Y		Y	Y	Y	s55a	Y	s55b	Y	s55c	
Londerzeel	56	L	Y		Y	Y	Y	s56a	Y	s56b	Y	s56c	S56a- Failed cast
Londerzeel	57	L	N	Not	N								

				erupted									
Londerzeel	58	R	N	Not present	N								
Londerzeel	59	R	Y		Y	Y	Y	s59a	Y	s59b	Y	s59c	
Londerzeel	60	R	N	Not present	N								
Londerzeel	61	R	N	Not present	N								
Londerzeel	62	R	Y		Y	Y	Y	s62a	Y	s62b	Y	s62c	
Londerzeel	63	L	Y		Y	Y	Y	s63a	Y	s63b	Y	s63c	
Londerzeel	64	R	N	Not present	N								
Londerzeel	1	R	Y		Y	Y	Y	s1a	Y	s1b	Y	s1c	
Londerzeel	2	R	Y		Y	Y	Y	s2a	Y	s2b	Y	s2c	
Londerzeel	3	R	N	Too worn	N								
Londerzeel	4	L	N	Damaged	N								
Londerzeel	5	L	Y		Y	Y	Y	s5a	Y	s5b	Y	s5c	S5b- Failed cast
Londerzeel	6	R	Y		Y	Y	Y	s6a	Y	s6b	Y	s6c	
Londerzeel	7	L	Y		Y	Y	Y	s7a	Y	s7b	Y	s7c	
Londerzeel	8	R	N	Not present	N								
Londerzeel	9	L	N	Not present	N								
Londerzeel	10	L	Y		Y	Y	Y	s10a	Y	s10b	Y	s10c	
Londerzeel	11	R	Y		Y	Y	Y	s11a	Y	s11b	Y	s11c	
Londerzeel	12	R	N	Too worn	N								
Londerzeel	13	R	N	Damaged	N								
Londerzeel	14	R	Y		Y	Y	Y	s14a	Y	s14b	Y	s14c	S14c- Poor cast, just analysable
Londerzeel	15	R	N	Not present	N								
Londerzeel	15	R	Y		Y	Y	Y	s15a	Y	s15b	Y	s15c	
Londerzeel	16	L	Y		Y	Y	Y	s16a	Y	s16b	Y	s16c	S16a- Failed cast
Londerzeel	17	R	N	Too worn and ? Damaged	N								
Londerzeel	18	R	Y		Y	Y	Y	s18a	Y	s18b	Y	s18c	
Londerzeel	19	R	Y		Y	Y	Y	s19a	Y	s19b	Y	s19c	
Londerzeel	20	R	Y	? Wear- Only 2 samples taken	Y	Y	Y	s20a	Y	s20b	N		S20a
Londerzeel	21	R	Y		Y	Y	Y	s21a	Y	s21b	Y	s21c	S21a- Bounce on sputter but just analysable
Londerzeel	22	L	Y		Y	Y	Y	s22a	Y	s22b	Y	s22c	
Londerzeel	23	R	Y		Y	Y	Y	s23a	Y	s23b	Y	s23c	S23c- Failed cast
Londerzeel	24	R	N	Too worn	N								
Londerzeel	25	R	N	Too worn	N								
Londerzeel	26	R	Y		Y	Y	Y	s26a	Y	s26b	Y	s26c	
Londerzeel	27	R	Y		Y	Y	Y	s27a	Y	s27b	Y	s27c	S27b
Londerzeel	28	L	N	Not present	N								
Londerzeel	29	L	N	Not worn enough	N								
Londerzeel	30	R	Y		Y	Y	Y	s30a	Y	s30b	Y	s30c	
Londerzeel	31	L	Y		Y	Y	Y	s31a	Y	s31b	Y	s31c	S31a- Failed cast and dirt

													particles
Londerzeel	32	R	Y		Y	Y	Y	s32a	Y	s32b	Y	s32c	
Londerzeel	65	R	Y		Y	Y	Y	s65a	Y	s65b	Y	s65c	S65b
Londerzeel	66	L	Y		Y	Y	Y	s66a	Y	s66b	Y	s66c	
Londerzeel	67	L	Y		Y	Y	Y	s67a	Y	s67b	Y	s67c	S67c- Too dirty
Londerzeel	68	R	Y		Y	Y	Y	s68a	Y	s68b	Y	s68c	
Londerzeel	69	L	Y		Y	Y	Y	s69a	Y	s69b	Y	s69c	
Londerzeel	70	R	Y		Y	Y	Y	s70a	Y	s70b	Y	s70c	
Londerzeel	71	R	N	Not worn enough	N								
Londerzeel	72	R	N	Not erupted	N								
Londerzeel	73	L	N	Not present	N								
Londerzeel	74	R	Y		Y	Y	Y	s74a	Y	s74b	Y	s74c	S74b Failed cast
Londerzeel	75	R	N	Not present	N								
Koekelare	1	L	N	Not present	N								
Koekelare	2	R	N	Not erupted	N								
Koekelare	3	R	N	Too worn	N								
Koekelare	4	R	N	Not present	N								
Koekelare	5	R	N	Damaged	N								
Koekelare	6	L	N	Too worn	N								
Koekelare	7	R	N	Not present	N								
Koekelare	8	L	N	Not present	N								
Koekelare	9	R	N	Not present	N								
Koekelare	10	L	N	Damaged	N								
Koekelare	11	L	N	Not present	N								
Koekelare	12	L	N	Not worn enough	N								
Koekelare	13	L	N	Not erupted	N								
Koekelare	14	L	N	Not present	N								
Koeklare	15	L	N	Damaged	N								
Koeklare	16	L	N	Too worn	N								
Koekelare	17	L	N	Not worn enough	N								
Koekelare	18	L	N	Cusp broken	N								

Figure 7.2. Table listing the total number of jaws from the six Belgian sites under examination, identifying those available for microwear analysis and the numbers given (Jaw number relates to original examination numbering)

7.2.5. Sputter Coating of the Positives

The positive casts created are an insulating material and so, if left untreated, an electrical charge can build up during examination in the Scanning Electron Microscope causing a deflection of the electron beam. As this would render analysis impossible, the specimens were first coated with a very thin conducting layer of gold in order to make the samples 'visible' to the Scanning Electron Microscope, a technique known as 'sputter-coating' (goldpalladium is also suitable for use) (Hillson, 1996:314). For this study this process took place in the Department of Earth Sciences, University of Durham, under the supervision of Helen Riggs (Technician, Department of Earth Sciences). The positive samples mounted on stubs were gold-coated in a vacuum, using an Emitech Ltd. K550 with a TK842 gold target (60mm x 0.1 mm x 1 mm) vented with Argon (Figure 7.3). Due to concerns that heat might damage the expoxy resin replicas during sputter-coating (Riggs, pers. comm. 2007), the unit was run in short bursts of 30 seconds. Each of the samples was sputter-coated four times, after sample runs on the casts determined that this was the appropriate level of coating to allow them to be properly examined and to faithfully reproduce microfeatures.

Figure 7.3. Gold-coated epoxy resin cast, mounted on stub and ready for analysis in the SEM

7.2.6. Analysis of the samples with the Scanning Electron Microscope

The high resolution positive casts were then examined for microwear with a Scanning Electron Microscope (SEM) to create a photomicrograph for analysis. Analysis of the samples took place in the Electron Microscopy Laboratories, Department of Earth Sciences, Durham University using an XL30ESEM TMP Scanning Electron Microscope with an Electron Column of 5.00kV, and a Spot size (HV) of 4 (High Vacuum, with a Filament current 2.5 A, Emission Current: 100 µA), following the methodology developed with Ingrid Mainland at Bradford University in 2006.

Once the sample was located for analysis within the SEM the image was oriented so that the lingual side of the cusp was aligned to the top of the screen, under a magnification of c.20-30 x. This ensured that all samples were accurately aligned in the same direction so that data produced were comparable. The focus and contrast/brightness resolution was adjusted to establish the best image and an image at this magnification was taken in order to note the exact area on the facet from which the image for analysis was to be taken (avoiding any areas of damage).

The specific area of the tooth for analysis was then selected and an image of the enamel surface area at 500x magnification was created, with the SEM being taken to 1000x magnification to focus the image, and then zoomed out, creating a sharper image for analysis (Mainland, pers. comm. 2006). A magnification of x500 allowed the measurement of relatively small microwear features (Hillson, 1996:233) and is standard for microwear studies of this type.

It is important to select a single wear facet for study (Hillson, 1996:234) as facet position and role in mastication can significantly affect dental microwear patterns (Romero and De Juan, 2005:3); it is always important to examine the same area using a homologous cusp. The general area chosen for examination in this study was the lingual area of facet 9 of the hypoconoid on the bucco-posterior cusp of the second molar (see Kay, 1977 for details of the facet numbering system). This is due to its use in the vast majority of microwear studies since the very earliest non-human primate studies (Teaford, 1988; Ward and Mainland 1999). The image was taken as centrally as possible on this facet, albeit avoiding any areas of obvious damage, dirt or poor casting. The aim was for a flat area all in focus with no areas of odd contrast of artefacts apparent and generally representative of the facet (see Figure 7.4 for diagram of where photomicrographs were taken from). Where necessary, the analysis moved lingually to avoid aberrant features and maximise the chances of obtaining microwear, but minimising post-mortem artefacts (as recommended by Williams et al., 2009:1). This small variation of movement on the facet has been shown not to make any difference to results (Mainland, pers. comm. 2006). Facet 9 is an area involved in crushing food, rather than tearing it, as the lingual surface of the buccal lower molar cusp grinds against the buccal surface of the lingual upper molar cusp in a relatively uniform grinding movement (Hillson, 1996:234). This pattern of use is particularly suitable for study because, where tearing facets are used, there is a tendency for large scratches on the buccal surface to occur, which can lead to confusing multiple striations that are hard to analyse (Mainland, pers. comm. 2006). Microwear features are also relatively prevalent on facets involved in crushing actions (Romero and De Juan, 2005:6; Hillson, 1996:234), and are specifically more frequent on facet 9 than facets 3 and 4 in non-human primate species at least (Teaford and Walker, 1984:195).

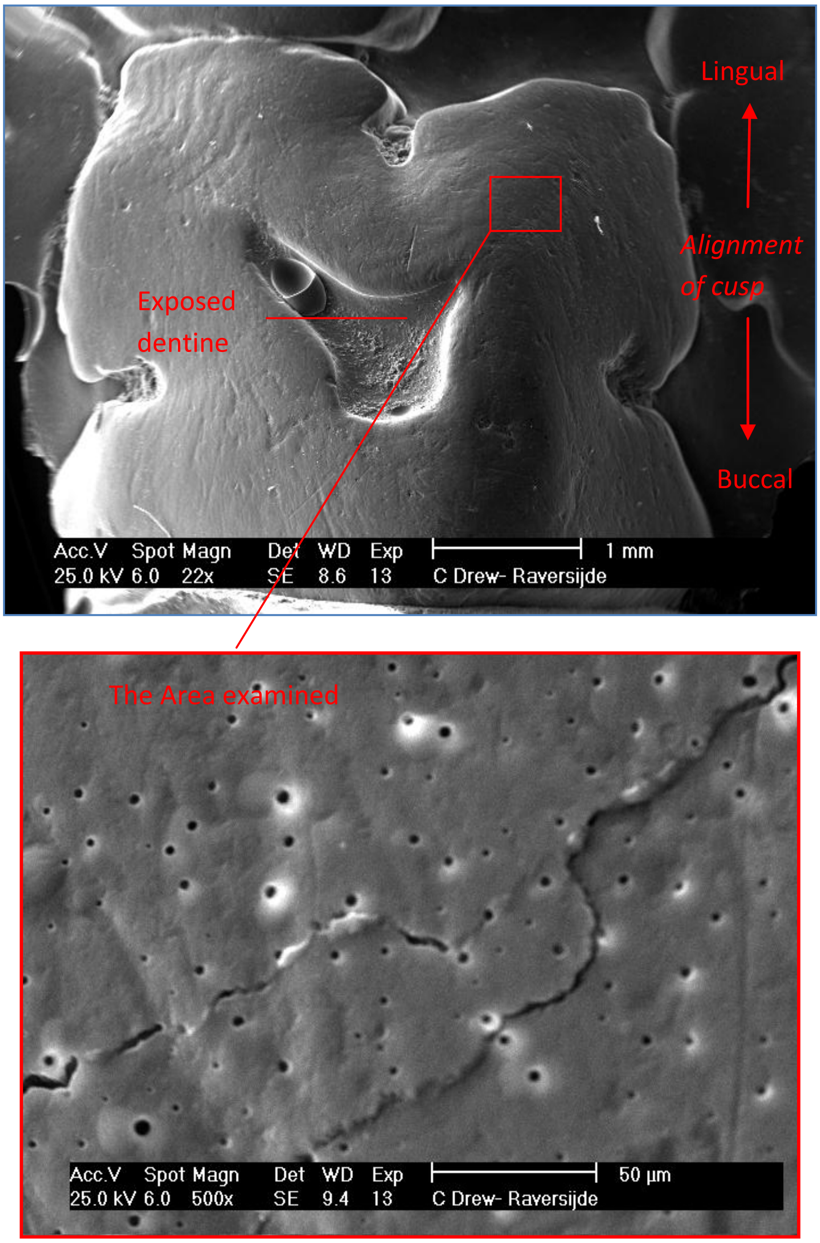


Figure 7.4. Photomicrograph illustrating the sample location (facet 9) of the bucco-posterior cusp of a mandibular M2 (after Wilkie et al. 2007). The magnification of the sample area illustrates a casting failure on one of the araldite positives from Raversijde, shown by the air bubbles and cracking covering the surface. This image was not analysed.

An assessment was also undertaken of the sample under the SEM prior to taking the image, to ensure that the sample was not too young, too dirty, damaged or showing casting problems, and also that evidence of microwear was clearly visible. If the sample appeared suitable then an image (.tiff file) was taken for analysis. Up to three attempts were made to get a suitable image for each sample. If no suitable image was possible, a note was made as to the cause of this decision (methodology developed with Mainland, Bradford University:2006, see Figure 7.2). Replica failure is not unusual. In Ward and Mainland's

(1999) study four micrographs were rejected because of poor quality caused by casting artefacts (1999:27), leaving only nine for study (a 66% success rate in casting). This is a problem that can be anticipated with this technique even when every precaution has been taken (for example, using a different mix for each replica of a cast). The failure rate experienced in this study was roughly similar to Ward and Mainland's (1999), see Figure 7.5 for details, and the final number of samples were very similar to those used successfully in other microwear studies.

Site	***Number of samples from which a photomicrograph was suitable to be analysed***
Londerzeel	5 (11 other samples rejected for poor casting/poor focussing/dirt)
Raversijde	13 (8 other samples rejected for poor casting/poor focussing/sputter problems/dirt/post-mortem damage)
Oudenberg	9 (6 other samples rejected for poor casting/dirt)
Veurne	9 (10 other samples rejected for poor casting/focus problems/dirt)
Ename	10 (8 other samples rejected for poor casting/focus problems/post-mortem damage)
Koekelare	0 (No suitable samples)

Figure 7.5. Summary of the number of photomicrographs taken and suitable for analysis

7.2.7. Analytical techniques

The images were analysed using the microware programme Microwear 4.2, developed by Ungar (1995, 2002). This is a semi-automated image analysis system designed specifically for the analysis of microwear images. A mouse-driven pointer was used to define features, marking the end points of the longest and shortest axis of the feature, and images were examined on a 17 inch TFT display set at a screen resolution of 1024 x 768 pixels. The microware computer software can perform a refined analysis to characterise the profile of microwear (Reinhard and Danielson, 2005:981). An attempt was made to be consistent in what was recorded from each image, for example under a diameter of roughly 0.7 µm no pits were recorded, at this size they are too small to take measurements accurately (Mainland, 2006:pers. comm.). However, as analysis relies on the visual identification of features on an image, this was necessarily an area in which some small variation may occur. The maximum length and breadth were always recorded. A policy was employed of not including features unless they could be traced all the way around (i.e. features were excluded if eroded at the edges), and if the measurements went off the screen the features were measured to the edge of the screen as standard.

Microwear features in mammal studies are commonly divided by analysts into two groups of features, either 'pits' or 'scratches'. These features are points on a continuum, and the division between them is relatively arbitrary to allow analysis to take place (Hillson, 1996:237). However, the policy of dividing the features into such categories has proved successful. Pits are round scars with a relatively equal length and breadth, whereas scratches are longer scars with a longer length than breadth (Gordon, 1982). Various microwear researchers have used specific criteria to define these features in different ways (see Figure 7.6), and no objective definition has been developed for this categorisation, although it appears over recent years that the four to one length: breadth ratio has become the usual definition employed (Solounias and Hayek, 1993:422). For this study the definition of the length: breadth ratio as 4:1 is used as this is the criteria most commonly adopted for quantitative microwear studies (Teaford, 1994 and Walker and Teaford, 1989) and is used by Ward and Mainland (1999), Wilkie et al. (1997) and Van Poucke et al. (2009) in the three studies on microwear on modern/ancient pigs which are the most important comparisons for this study.

Type	***Proportions Length: Breadth***
Pits	1:1 to ....
Scratches	>2:1 (Gordon, 1988), >4:1 (Grine and Kay, 1988, Romero and De Juan, 2005; Schmidt, 2009; De Miguel et al., 2008, Ward and Mainland 1999) or >10:1 (Teaford and Walker, 1984)

Figure 7.6. Table demonstrating the various criteria for identification of microwear features as pits or scratches, after Gordon 1988, with additions from other studies.

7.3. Analysis of the results of the microwear study

There were two areas of interest for this study. Firstly, did pigs at the five Belgian sites differ in any significant way from each other (and what does this suggest about variations in diet), and secondly how do these results compare with the wider data for modern and archaeological pigs with known diet? For this second question data from all five sites were compared to the archaeological and modern material analysed for the publications of Ward and Mainland (1999), Wilkie et al. (2007) and Van Poucke et al. (2009). These are the only examples of European pig microwear data currently published.

The relationship between quantitative microwear variables and diet is explored using simple univariate descriptive statistics, undertaken in SPSS 15.0 and Excel 2007, where necessary. The statistical significance of any differences identified was assessed using the Student's T-Test and the Mann Whitney- U Test (non-parametric) for those variables that were not normally distributed. This methodology follows that of earlier microwear studies on mammals (for example, Ward and Mainland, 1999:27, Wilkie et al., 2007, Teaford and Walker, 1984:293).

Site	*Number of Striations*	*Number of PIts*	*Total number of features*	*%pits*	*%striations*	*Mean feature length*	*Mean feature breadth*	*Mean Pit length*	*Mean pit Breadth*	*Mean Striation length*	*Mean Striation breadth*
Raversijde	63.85	109.9	168.92	65.07	37.80	7.56	3.21	5.07	2.33	14.91	1.78
Veurne	34.78	42.33	77.11	54.71	45.29	11.53	2.34	5.58	2.48	19.54	2.13
Oudenberg	59.89	58.22	118.11	49.50	50.50	9.55	1.97	5.01	2.26	14.02	1.70
Ename	53.4	51	104.4	48.01	51.99	11.15	2.09	5.06	2.37	16.74	1.84
Londerzeel	52.6	35	87.6	40.02	59.98	10.86	2.01	5.24	2.33	14.54	1.80

Figure 7.7. Summary of the data from the five sites examined for microwear.

It is important before examining the microwear patterns identified within this study (see Figure 7.7 for a summary) to summarise the patterns other researchers have used to identify different husbandry patterns in pigs (Figure 7.8).

Reference	*Findings of study*
Ward and Mainland (1999)	• Free-range pigs exhibit a higher number of microwear features than stall-fed pigs • Average feature breadth is larger in stall-fed pigs although there is overlap. • There are a greater predominance of pits over striations in stall-fed pigs (78% in comparison to 70%), although both types of husbandry have a greater number of pits than striations
Vanpoucke et al. (2009)	• Smaller pits and striations than the Ward and Mainland (1999) and Wilkie et al. (2007) study. • Small pits formed due to consumption of a soft diet. More difficult to examine however as little data for food texture is available (144) but Sagaloss pigs indicate a soft non-abrasive diet, although may also be affected by geology. • Pit relative frequency is due to level of abrasives consumed (more soil ingestion more striations) • Small features and intermediate percentage of pits means ‘soft’ diet and, ruling out geology, probably stall-fed pigs.
Wilkie et al. (2007)	• Higher relative frequency of pits means less access to grit. • Archaeological pigs had larger features in general than modern • Smaller pit breadth (around 3.89-4.24) means soft textured food. • Rooting pigs have higher striation frequency and smaller microwear features.

Figure 7.8. Table summarising other studies into pig microwear

A clear difference is evident in microwear patterning between the five sites. Raversijde is characterised by having a largely pitted surface with occasional striations (65% pits), whereas Londerzeel is the opposite (40% pits), and the other sites range in-between. This is particularly interesting as Ward and Mainland (1999) have argued for a relationship between pit frequency and level of rooting in suids (Figure 7.8). Grazing primates are associated with few pits and smaller features due to the consumption of fine abrasives, causing scratches across the teeth (striations), whereas frugivores have been associated with a higher frequency of pits and larger features due to hard objects requiring harder forces and therefore different masticatory mechanics to cause different microwear patterns (see Teaford, 1994 and Daegling and Grine, 1999). When displayed graphically (Figure 7.9) these results suggest that pigs at Raversijde are most reflective of a 'pitted' pattern with less grit ingested. Here there were a higher percentage of pits, but at Londerzeel the pattern is most suggestive of rooting pigs (higher frequencies of striation). This means that the evidence of microwear for Londerzeel does not support the suggestion that the pigs were stalled at this site. Pigs at Oudenberg, the other site on extremely sandy coastal conditions, have a much higher percentage of striations than pigs at Raversijde, which suggests a difference other than environmental conditions is being demonstrated in the data.

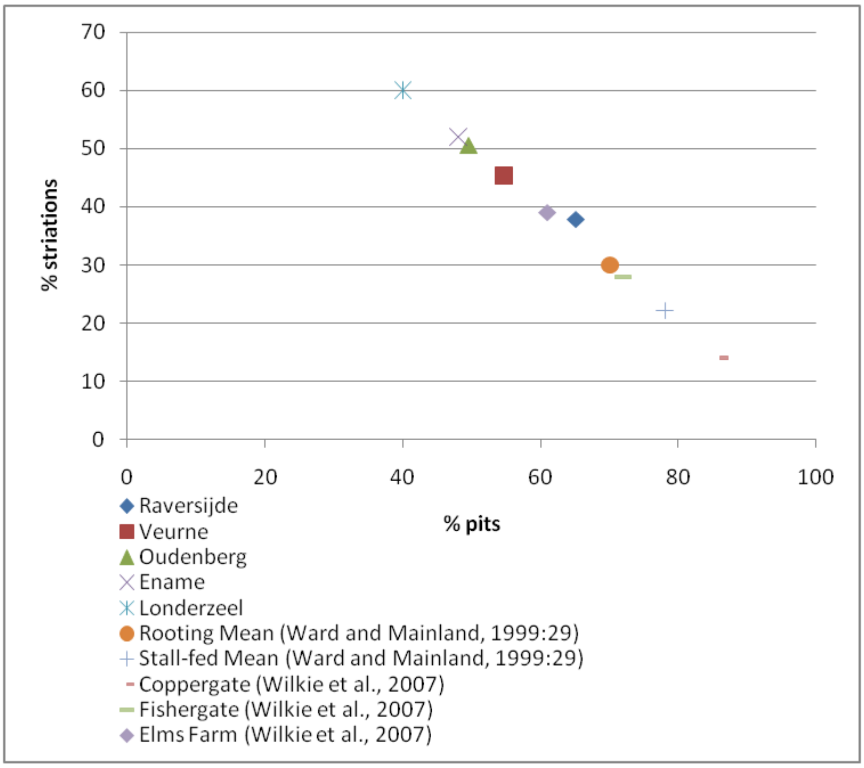


Figure 7.9. Graph considering the ratio between the pits and striations at various sites, including data from Ward and Mainland (1999).

Such trends need to be compared using univariate statistics to consider whether such differences are really significant. A smaller percentage of pits than even the rooting mean for all five sites is somewhat surprising, as pits (generally of smaller size) have traditionally been identified as the predominant feature for both rooting and stall-fed pigs (although rooting pigs have significantly fewer) (Ward and Mainland, 1999:28). For some of the sites, pits are even the lesser of the two feature types. This is particularly apparent when compared graphically to the other available suid microwear data (Figure 7.9), which demonstrate clearly that all five Belgian sites fall outside the boundaries of rooting-stalled pigs as measured by Ward and Mainland (1999), and only one site, Raversijde, falls within the boundaries of the other archaeological pig data examined.

While this may be interpreted as suggesting all five sites demonstrate a 'rooting' means of obtaining their diet, it is the author's opinion that there may be other explanations for this pattern. Firstly, inter-observer error: The measurement of microwear features is by the nature of the technique interpretive, relying on the observer's judgement as to the location and dimensions of features, something many microwear studies (for example, Scott et al., 2006) have highlighted as a problem when comparing data between sites. While this may go some way to explaining the differing values, this explanation is not entirely satisfactory. During training for use in this technique, the author undertook an inter-observer error study of a number of 'sample' pictures with Ingrid Mainland (one of the authors providing the modern measurements), and it was demonstrated that inter-observer error was not significant for the majority of the images. Similarly, Grine et al. (2002) demonstrated that when using the same methodology inter-observer error was not a significant problem, and recommended that with the use of a similar methodology a database of results may be easily referenced by other researchers. Therefore, it is unlikely inter-observer error is the cause for such dramatic differences in results.

Secondly, it is important to consider the geology and soil of the sites being examined. The modern stall-fed pigs in Ward and Mainland's (1999) study consumed soft food (commercial feed of 'pig nuts') on hard floors with no likelihood of grit present. Modern rooting pigs browsed in paddocks largely free of vegetation, with their diet consisting of whatever they could obtain through rooting (grasses and ruderal weeds, worms, insects etc.) and supplemented with commercial pig nuts (Ward and Mainland, 1999:26). While this study certainly demonstrates that rooting increases the number of striations, it is perhaps naive to expect archaeological data to 'fit' with these very modern husbandry types. For the five Belgian sites it is evident that the local environments were very different to the modern comparisons (see Chapter 2). The greater proportions of striations in these five sites in comparison to Ward and Mainland's (1999) may be due to the general consumption of a different diet to that of modern pigs, as the pits are often believed to be linked to the reduction of hard foods with a crushing action (Hiiemae, 1978 in Ward and Mainland, 1999:29). All sites are on relatively sandy soil (see Chapter 2 and Appendix 7.3), although Raversijde and Oudenberg have particularly extreme soil conditions, being situated on coastal sand dune environs and so this may perhaps explain why all sites have greater numbers of striations than the modern comparatives, due to differing conditions and greater abrasiveness of the soil particles from these Belgian sites.

It is important to consider the possibility that pigs at Raversijde are the least 'rooting' type within the context of its geological/soil type environment. At Ename and Londerzeel the soil type is quite similar (see Appendix 7.3), but the environs of Raversijde, and Veurne are notably different. While Veurne is on polder soil, which is relatively silty, Raversijde and Oudenberg are, or were at the time, coastal with wind-blown sand dunes building up during this period very close to the site for Raversijde (Pieters, 2006; Pieters et al., 1998), and Oudenberg showed a very similar environment. The fact that Raversijde, despite the greater prevalence of striation-causing grit in its environment, has the *lowest* number of striations, makes the findings more intriguing than if geology had not been considered. This also provides a corollary to the 'pure' consideration of the other published data, that it is important to compare the patterns/trends, rather than expecting the values to neatly fit within the values of other sites. Wilke et al. (2007) encountered similar problems when attempting to fit their data with the modern examples (see Figure 7.9). The values for pigs at Elms Farm had a much higher proportion of striations than the modern comparatives, but they still argued that this represented a stall-fed site based on other criteria. This examination places Londerzeel as the most likely example of a 'rooting' pig site in the continuum of the Belgian pigs, and the data clearly do not support the suggestion that this site had stalling. Microwear analysis appears to reject the tentative suggestion of the pilot study that semi-confinement was occurring at the site (Ervynck et al., 2007:193) which is also supported with evidence from other techniques investigated in this study (see Chapter 8). It seems that at Londerzeel the pigs were being kept in a more natural, rooting husbandry situation even if traditional pannage does not provide an adequate explanation for everything that was happening at this site. It may be that this suggests an importation of pork reared in more suitable environments. However, there is no documentary evidence of this, and the large volume of pig remains suggests that this is unlikely, and that pigs were either being brought onto site and reared, or, as the age at death data suggests, being reared on site. Nevertheless, a clear understanding of their husbandry is not yet apparent, being not stalled but also not in a traditional environment for pannage either.

This problem raises a significant question for consideration in this study, i.e. problems with the comparison of data from different studies. Where do you draw the 'definitive' difference between different types of diet? While statistically significant differences may be obvious, at what point between the values of Raversijde (the most 'like' the stall-fed pattern) and Londerzeel (the most 'like' the rooting pattern) should one define sites as being 'rooting' or 'stall-fed' (or a combination of both husbandry methods)? In particular, if Londerzeel is defined as 'rooting', and Raversijde as 'stalled', are the three middle values (significantly different from both Raversijde and Londerzeel, but not significantly different from each other) definable as 'mixed'? Or is Londerzeel affected by the more forested environs and we are seeing dietary difference based on location of the sites?

It is also important to look at these patterns within the context of other microwear studies, to consider how variable such data is. Dental microwear analysis is reliant on using modern known-diet populations as an analogy (Wilkie et al. 2007). Other than the pilot study on stall-fed and rooting pigs by Ward and Mainland (1999) and the works by Wilkie et al. (2007) and Van Poucke et al. (2009), there has been little work published on diet-related microwear in modern pigs. This means that when considering interpretation of the microwear it is important to also consider trends documented in other species, a methodology followed successfully by Wilkie et al. (2007). Most other studies are based around non-human primates (Teaford 1994, Daegling and Grine 1999). While this is not ideal, because differences in mastication are likely to have some impact on microwear patterning in each species, there appears to be sufficient consistency in microwear patterning across mammals to allow some confidence in the ability to use it in this way (Romero and De Juan, 2005:5). When data from non-human primate species with known diet is added (see Figure 7.10), it is clear that the pig microwear data clusters relatively closely together, and is demonstrably separate from the primate data. As well as emphasising the necessity in building up a database of microwear patterns for known diet in the species being examined, as clearly using data from other species is again showing obvious differences, this also demonstrates that the variation seen within the results of the pig data is reasonable for such studies, with dietary differences within primates seeing similarly sized differences between them.

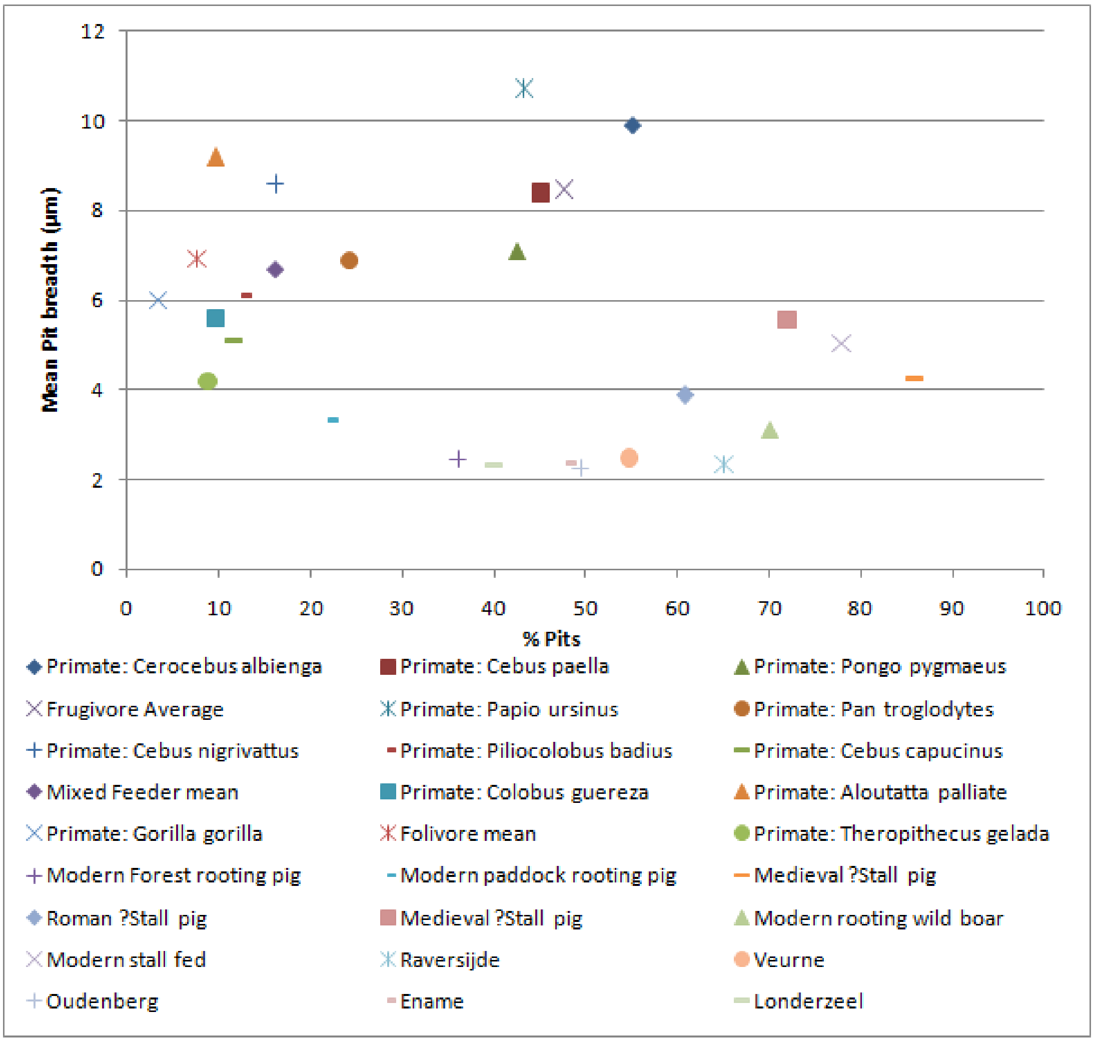


Figure 7.10. Graph comparing pit frequency and mean pit breadth in a number of species (data incorporated from Wilkie et al., 2007)

Microwear data, presented as box-plots, for length and height measurements from the five archaeological samples, were analysed to provide an easy graphical way to display symmetry and any patterns of biased data (see Figures 7.11-14). The box-plot for breadth shows measurements are all relatively similar across all five sites (Figure 7.11). Veurne and Ename show slightly greater amounts of variation in breadth measurements, but overall all five sites display very similar findings. The breadth variable appears normally distributed for all five sites (something also demonstrated by low standard deviation values: see Figure 7.16).

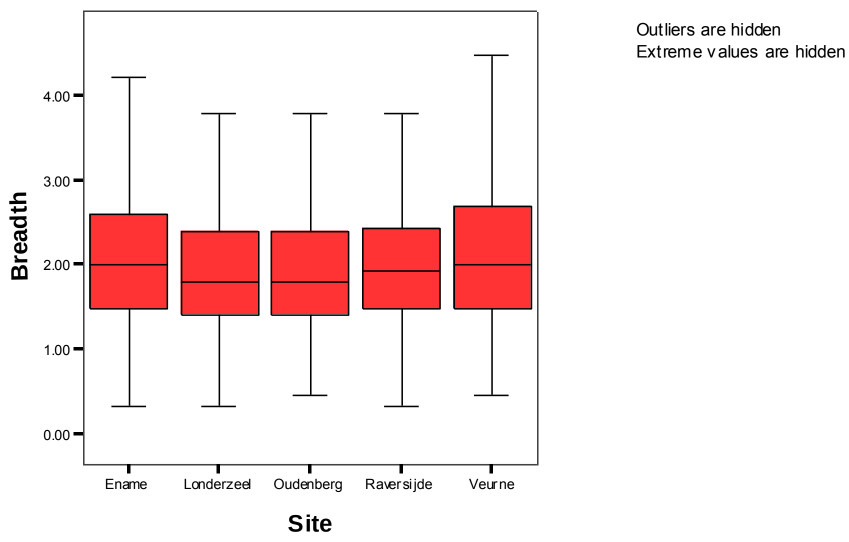


Figure 7.11. Box-plots showing the distribution of breadth measurements (µm)

When considering box-plots for breadth measurements that also display outliers (Figure 7.12), Veurne in particular appears to show a significant number of large outliers, suggesting that it has a larger number of wide features. For each of the five sites, all outliers fall to the larger side of the plots. This may indicate that Veurne is demonstrating a number of wider features, although not enough to significantly skew the relatively 'average' mean (see Figure 7.7). Raversijde, in comparison, does not present a large number of larger outliers but has the largest mean for feature breadth, suggesting a greater uniformity about its results. Indeed, other than Veurne, the other sites similarly show low numbers of outliers. This low variation in these four sites perhaps suggests less dietary choice and a more homogenous diet causing less diversified microwear (Van Poucke et al, 2009:149), although the variation at Veurne is less easily explained, with its cause being unclear and needing further investigation. It is possible that this may be suggestive of a greater variation in diet, although from the environmental conditions known from the area (see Chapter 2) the need for this is less obvious. Perhaps one explanation may be that while it is assumed the pigs were ranging in the forested environs to one side of the area (towards the Flanders interior), some were also kept on the more difficult polder conditions, and so the combination of two areas caused a greater variation in results. However, this is only conjecture and greater research is necessary into the variety of pig husbandry signatures to test this hypothesis.

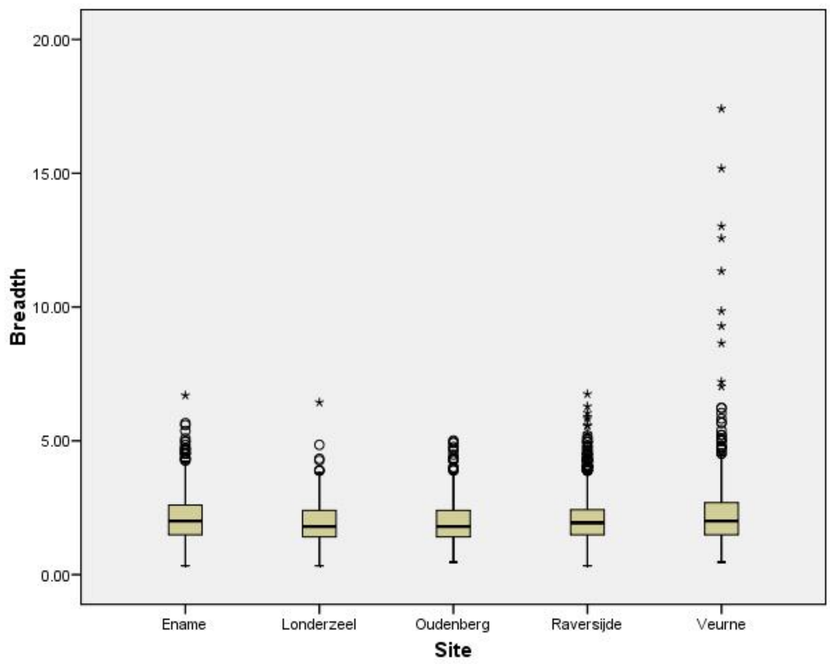


Figure 7.12. Box-plots showing the distribution of breadth measurements (µm), including outliers

The normal distribution for the breadth measurements of the microwear features demonstrated by these box plots (confirmed by the low standard deviation for the measurements in all sites) allows consideration of this variable using parametric tests (Students T-test) with some confidence, because they assume that data is normally distributed. These are preferable over non-parametric tests, where it is possible to use them as they are more likely to identify significance where differences exist.

For the microwear length measurements the box-plots certainly suggest there are more apparent differences between the sites (see Figure 7.13), in contrast to breadth (Figure 7.11). This can also be seen in the means for the feature data, although it is apparent that this variation is due to variation in striation length, with pit length means being remarkably similar across the five sites (see Figure 7.7). Veurne in particular demonstrates a large mean for striation lengths.

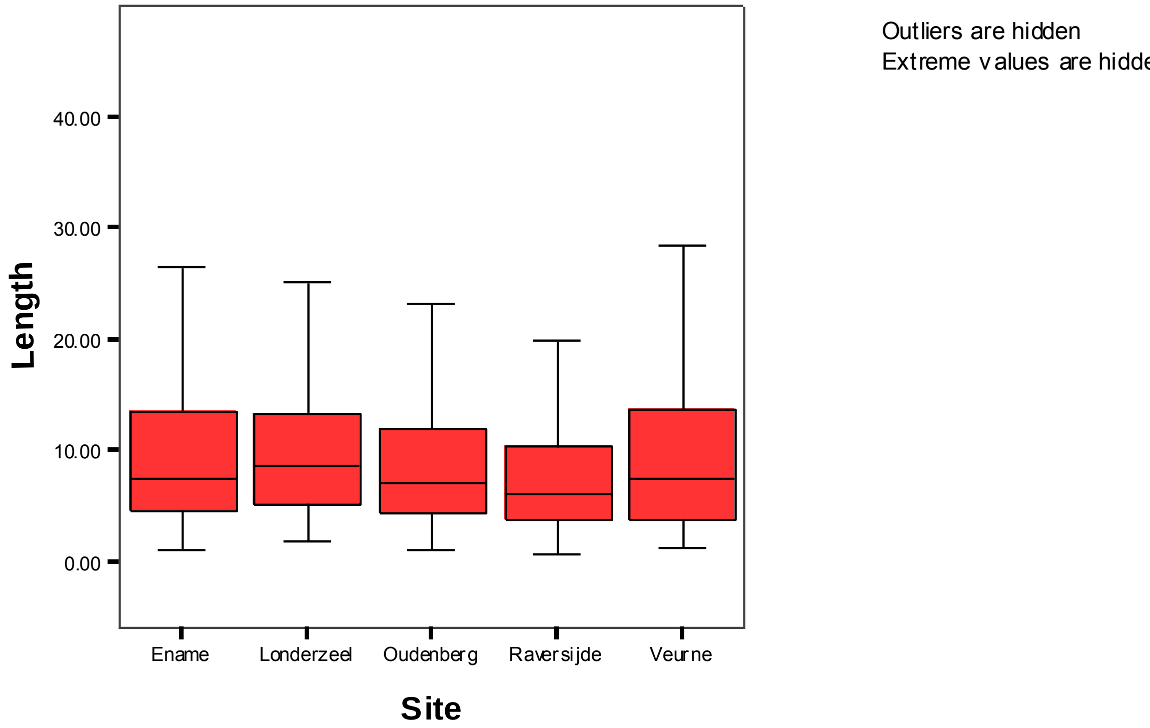


Figure 7.13. Box-plots showing the distribution of length measurements (μm)

In contrast to breadth, length is skewed with a larger tail towards large sizes. This is also reflected in the standard deviation of this measurement, (see Figure 7.16) and is clearly visible in histograms for the measurements where a normal curve has been applied (see Figure 7.15). This distribution is also particularly well expressed in the box-plots showing outliers (Figure 7.14). It is evident that for all five sites there are a number of larger outliers. Again, however, Veurne and Ename have more of these, suggesting greater variation at these sites.

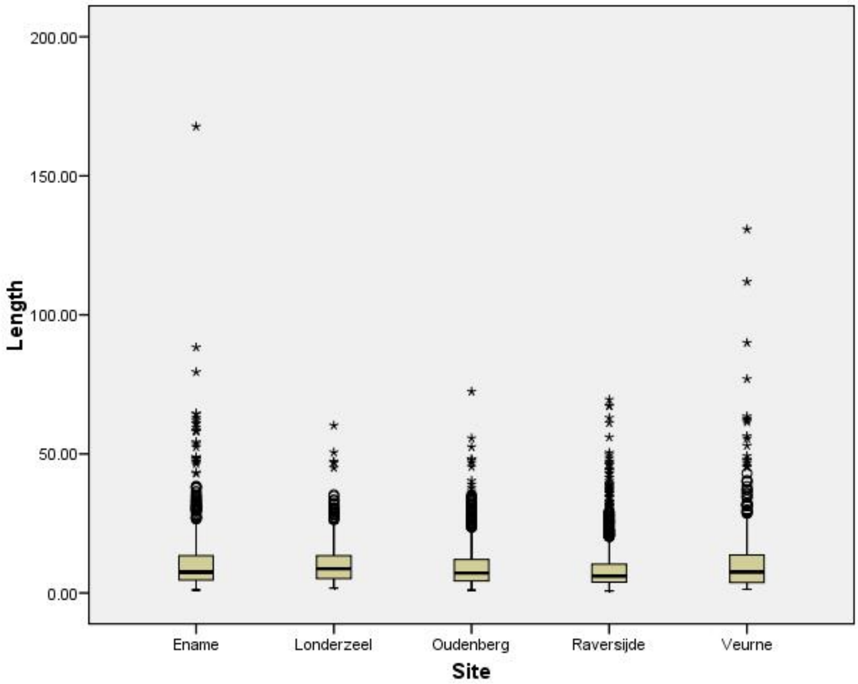


Figure 7.14. Box-plots showing the distribution of length measurements (µm), including outliers

Overall these box plots suggest that Veurne and Ename have more larger features than the other sites, even if the majority are of a similar size. Considering both length and breadth, Veurne and Ename do not display longer but narrow, or wide but short features, but have outliers that are large in both aspects, suggesting a generally larger type of feature, Veurne displaying this more greatly than Ename. When considering the mean values (Figure 7.7) it is apparent that this is particularly influenced by the striation measurements, as the pit values are remarkably similar across all five sites.

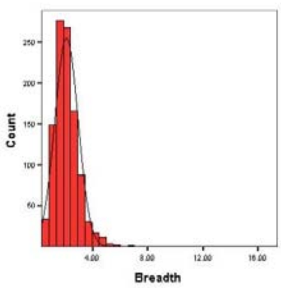
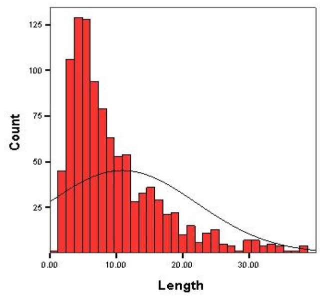
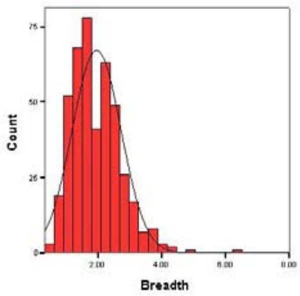
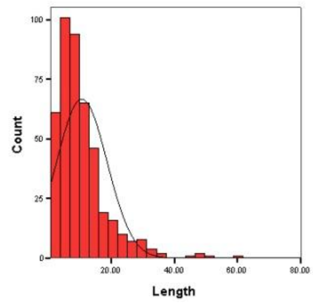
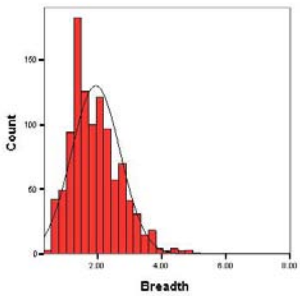
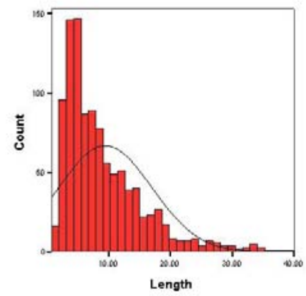
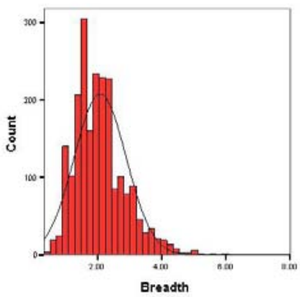
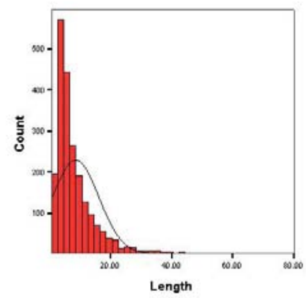
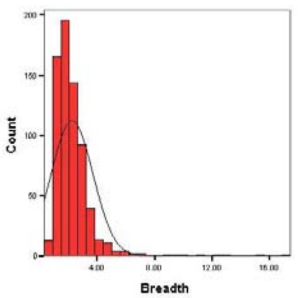
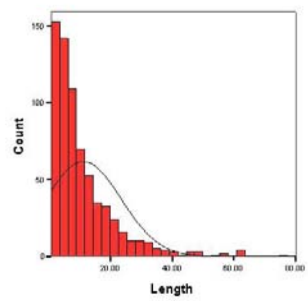
	Breadth	***Length***
Ename		
Londerzeel		
Oudenberg		
Raversijde		
Veurne		

Figure 7.15. Histograms of distribution of breadth and length measurements of strirations, with normal curve for both length and breadth measurements in each of the five sites

	Site	*N*	*Mean (µm)*	*Std. Deviation*	*Std. Error Mean*
Length	Ename	1044	10.89	11.17	0.35
	Veurne	694	11.24	12.23	0.46
	Raversijde	2196	8.60	7.59	0.16
	Oudenberg	1063	9.44	7.55	0.23
	Londerzeel	438	10.67	7.98	0.38
Breadth	Ename	1044	2.10	0.85	0.03
	Veurne	694	2.28	1.45	0.06
	Raversijde	2196	2.08	0.81	0.02
	Oudenberg	1063	1.95	0.76	0.02
	Londerzeel	438	1.96	0.77	0.04

Figure 7.16. Table summarising the descriptive statistics for the five Belgian sites, both feature types combined together.

An examination of the descriptive statistics for the five sites demonstrates that the mean values are relatively similar for the five sites, and that there is a level of overlap between the values from all sites. The features are of very similar sizes across all the five sites and do not demonstrate any 'obvious' differences in either length or breadth measurements from a simple glance at the general sizes (Figure 7.13).

As well as looking at such graphical presentations, it is therefore important to examine the data from the five sites to consider whether any identified differences between them are statistically valid (see Figure 7.17). For this study the scientific convention of significance being $p < 0.05$ (95%) was applied (following Ward and Mainland, 1999). Because of the lack of a normal distribution, the Students T-test is an inappropriate test to use to examine differences between sites, and a non-parametric test with no presumption of a normal distribution must instead be employed to the length measurements to consider their significance. For this study the Mann-Whitney U-test (also known as the Wilcoxon Rank-Sum test) was used. The Mann-Whitney test is based on the rank order of the cases rather than their value.

Site		Students T-test: Length differences significant?	Students T-test: Breadth differences significant?	Mann Whitney U-Test: Length differences significant?	Mann Whitney U-Test: Breadth differences significant?
Ename	Londerzeel	N	Y*	N	Y**
Ename	Oudenberg	Y**	Y***	Y*	Y***
Ename	Raversijde	Y***	N	Y***	N
Ename	Veurne	N	Y*	N	N
Londerzeel	Oudenberg	Y*	N	Y***	N
Londerzeel	Raversijde	Y***	Y*	Y***	Y*
Londerzeel	Veurne	N	Y***	Y*	Y**
Oudenberg	Raversijde	Y*	Y***	Y***	Y***
Oudenberg	Veurne	Y**	Y***	N	Y***
Raversijde	Veurne	Y***	Y**	Y***	N

Figure 7.17. Table summarising the significance of differences in measurements for the five sites in comparison to each other. Relevant columns (based on distribution) are highlighted. Asterisks indicate variables where clear and significant differences are evident between the sites *=p<0.05, **=p<0.01, ***=p<0.001, following scientific convention

It is evident from the assessment of the statistical significance for the feature values together that clear microwear patterning is being shown from the five sites (see Appendices 7.1 and 7.2 for data for the statistical test data, including p-values summarised in Figure 7.17). This allows rejection of the null hypothesis that there is no difference in mean breadth/length between microwear features from several sites. Most authors refer to **statistically significant** as $P < 0.05$ and **statistically highly significant** as $P < 0.001$ (less than one in a thousand chance of being wrong), and for a number of the results the statistical difference is indeed highly significant.

These results show not only the expected differences between Raversijde and the other four sites, but that a greater number of the sites vary from each other, demonstrating greater variability in microwear than anticipated. Londerzeel is one of the more similar sites to the others, particularly to Ename and Veurne, where it is not exhibiting statistically different length measurements, and again this supports the evidence that Londerzeel is not a site exhibiting any sign of a differing husbandry technique. Instead of grouping with Raversijde in a ‘stalled’ microwear pattern, Londerzeel is strongly statistically different from this site and far more similar to the other Belgian sites.

Site	***Feature type***		***Sites***
Ename	Feature breadth	Is statistically larger than	Londerzeel, Oudenberg
Ename	Feature length	Is statistically larger than	Oudenberg, Raversijde
Veurne	Feature breadth	Is statistically larger than	Ename, Londerzeel, Oudenberg, Raversijde
Veurne	Feature length	Is statistically larger than	Londerzeel, Raversijde
Londerzeel	Feature length	Is statistically larger than	Oudenberg, Raversijde
Raversijde	Feature Breadth	Is statistically larger than	Londerzeel, Oudenberg
Oudenberg	Feature length	Is statistically larger than	Raversijde

Figure 7.18. Summary of the statistically significant differences between the sites in terms of measurements

These differences clearly need investigation in greater detail. It is evident that all sites display at least one measurement that is larger than those of another site. Oudenberg and Londerzeel display more longer but narrower features than Raversijde; Ename displays more generally larger (in length and breadth) features than Oudenberg, wider features than Londerzeel and longer features than Raversijde. Veurne has significantly broader features than all the other sites, and its features are statistically larger than the sites of Londerzeel and Raversijde in general (see Figure 7.19). It is evident that these values, as discussed, are affected by geology and so it is important to interpret the pattern of results rather than attempt to fit them exactly to the values of their modern counterparts.

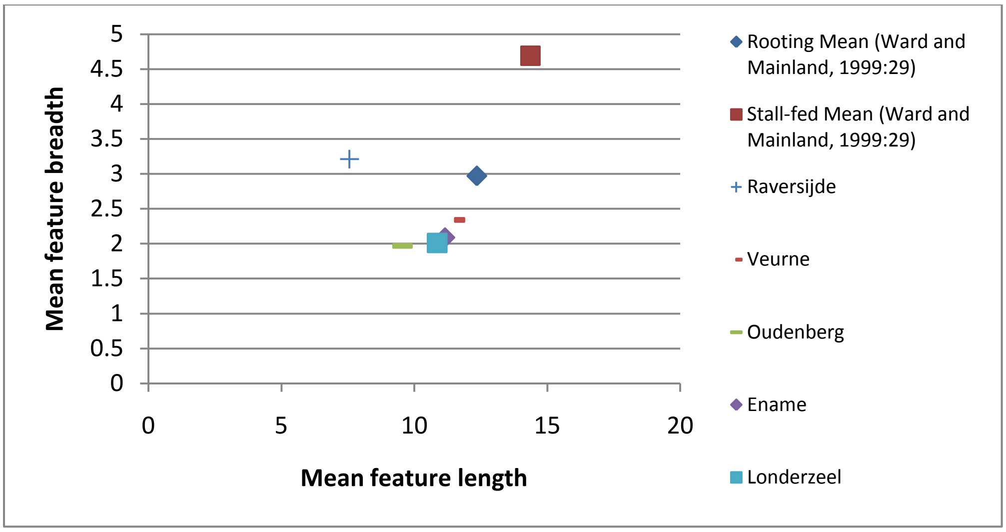


Figure 7.19. Chart comparing the mean feature breadth and mean feature length for the Belgian sites in comparison to the modern comparatives of Ward and Mainland (1999)

These patterns may be influenced by the differing ratios of pits and striations contained within the microwear from the different sites which, as we have already seen, shows considerable variation (also see Figure 7.16). This may be influencing the significance in the values of the sites overall, and it is thus important to consider the nature of pits and striations from each site and how each type of feature varies (see Appendix 7.5 for details of these tests).

		Students T-test	
Site		***Length differences significant?***	***Breadth differences significant?***
Ename	Londerzeel	N	N
Ename	Oudenberg	N	Y**
Ename	Raversijde	N	Y*
Ename	Veurne	N	N
Londerzeel	Oudenberg	N	N
Londerzeel	Raversijde	N	N
Londerzeel	Veurne	N	Y**
Oudenberg	Raversijde	N	N
Oudenberg	Veurne	N	Y**
Raversijde	Veurne	N	Y*

Figure 7.20. Table showing sites demonstrating statistical significance between pit features in length and breadth measurements (μm)

Site		Students T-test	
		Length differences significant?	***Breadth differences significant?***
Ename	Londerzeel	Y**	N
Ename	Oudenberg	Y***	Y***
Ename	Raversijde	Y***	Y*
Ename	Veurne	Y*	N
Londerzeel	Oudenberg	N	N
Londerzeel	Raversijde	N	N
Londerzeel	Veurne	Y***	Y*
Oudenberg	Raversijde	N	N
Oudenberg	Veurne	Y***	Y***
Raversijde	Veurne	Y***	Y**

Figure 7.21. Table showing sites demonstrating statistical significance between striation features in length and breadth measurements (µm).

From these statistical considerations (Figures 7.20 and 7.21) it is apparent that none of the sites vary greatly in the length of their pits, and so this is a variable which can be largely discarded in considering dietary microwear (a similar lack of statistical variation for this variable is apparent in the other pig studies). It is similarly apparent that pigs at Raversijde do not display evident differences from all the other sites; for example, there are no significant differences between Oudenberg or Londerzeel in any of the measurements.

Site	***Feature type***		***Sites***
Ename	Pit breadth	Is statistically larger than	Oudenberg, Raversijde
Veurne	Pit breadth	Is statistically larger than	Londerzeel, Oudenberg, Raversijde
Ename	Striation length	Is statistically larger than	Londerzeel, Oudenberg, Raversijde
Veurne	Striation length	Is statistically larger than	Ename, Londerzeel, Oudenberg, Raversijde
Ename	Striation breadth	Is statistically larger than	Oudenberg, Raversijde
Veurne	Striation breadth	Is statistically larger than	Londerzeel, Oudenberg, Raversijde

Figure 7.22. Summary of the statistically significant patterns determined for the five sites when considering pit and striation measurements separately.

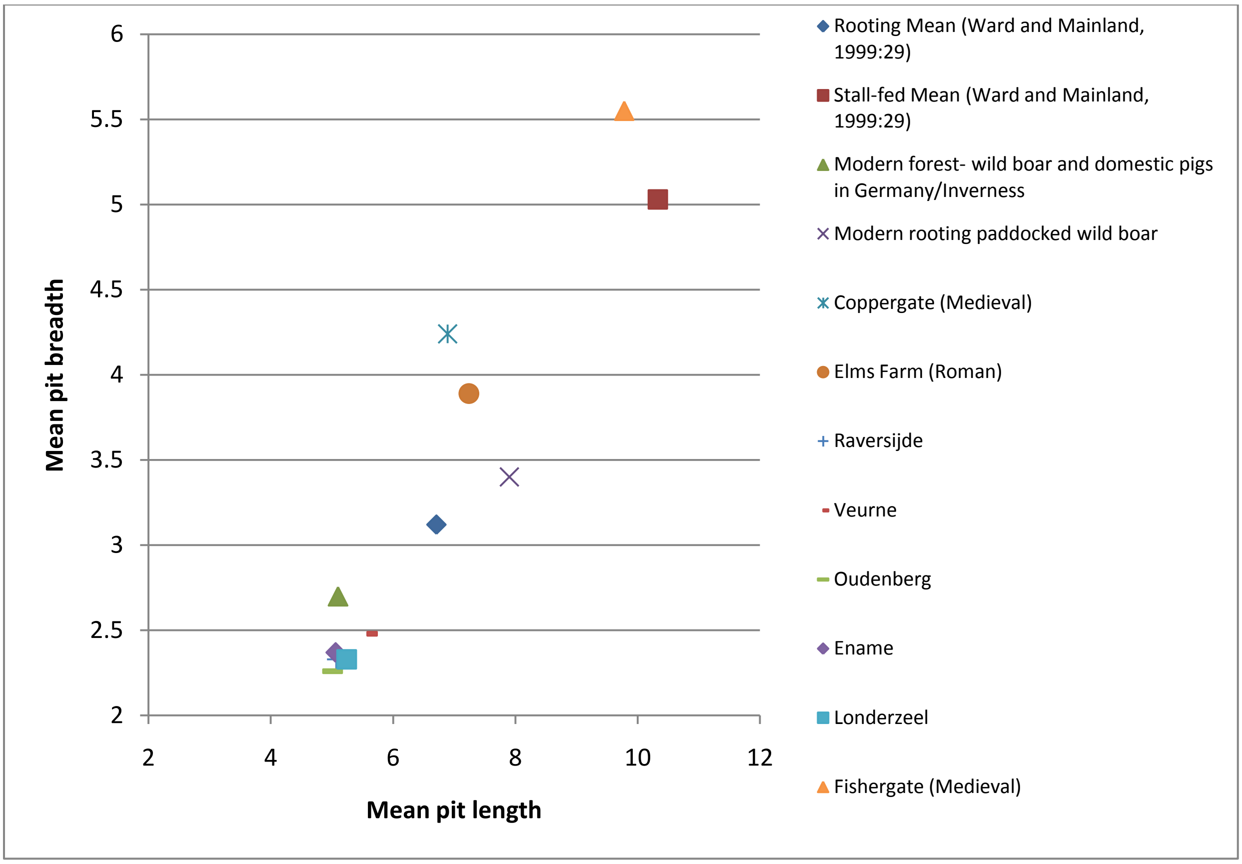


Figure 7.23. Chart comparing mean pit length and mean pit breadth (um) for the Belgian sites and other comparatives

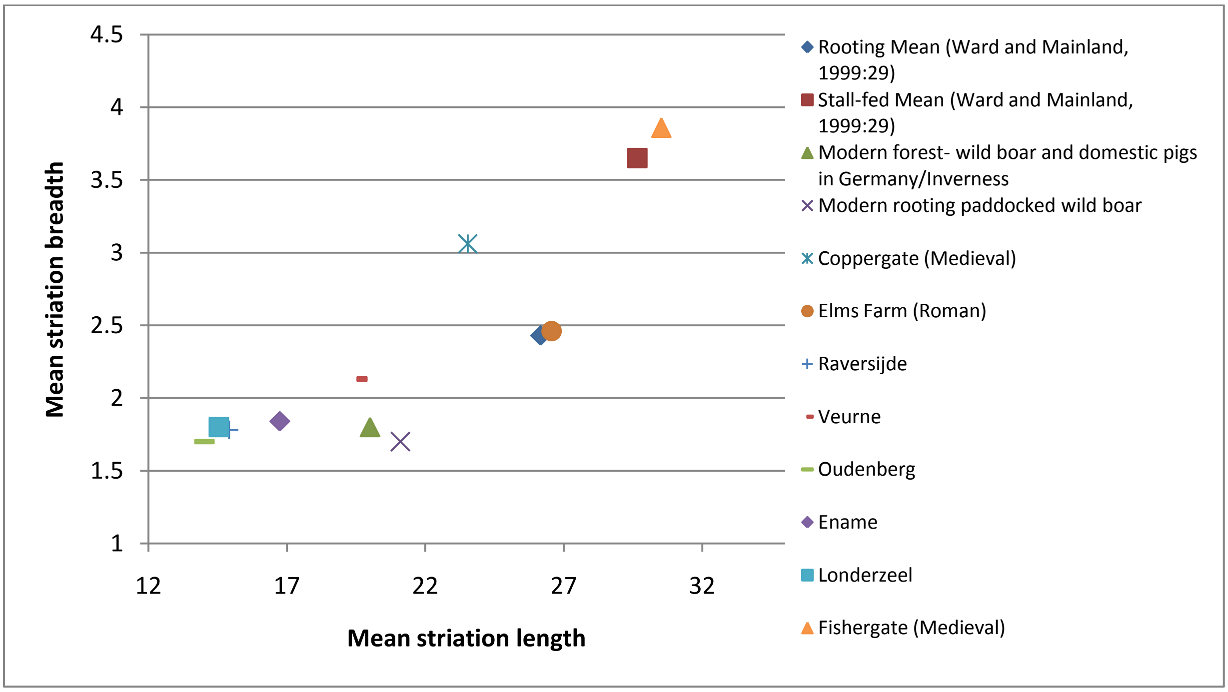


Figure 7.24. Chart comparing mean striation length and mean striation breadth (um) for the Belgian sites and other comparatives

These findings do not appear to follow the patterns of wider microwear features on stall-fed pigs identified by Ward and Mainland (1999), when considered graphicall,y not only alongside the patterns of pit frequency (Figure 7.25), but also when comparing the dimensions of the features (Figures 7.23 and 7.24). Ename and Veurne, the two sites with statistically larger pit breadths, are sites which in terms of pit frequency do not appear to demonstrate an obviously 'stall-fed' signature. For non-human primates, Teaford (1994) equated large pits with the occasional ingestion of large grit particles and abrasives, and similar patterns have also been identified in sheep (Mainland, 1994). Ward and Mainland (1999:30) indeed appear somewhat at a loss to explain their pattern. It is possible therefore that Ward and Mainland's finding is due to the stall-fed pigs being fed food of particularly large particle size. The fitting of these data into the wider patterns seen in non-human primates and other mammals (Figure 7.10 and for pigs alone 7.25), alongside the information from the pit frequency, may be suggesting that Ename and Veurne are providing a signature for grazing on rougher ground. The fact that Londerzeel is not also displaying this pattern, despite it having the most 'rooting' signature based upon pit frequency, perhaps suggests that the pigs were feeding on softer food but still rooting (see Chapter 2). This is perhaps the clearest evidence from the microwear that Londerzeel is presenting some evidence of human assisted husbandry. There is clearly no suggestion from the microwear patterns that the pigs at Londerzeel are being removed from their environment, with pit frequency suggesting rooting. However, from the size of their pits, their diet reflects softer food than would be expected for a foraging pig. Perhaps this is indicating the pigs of Londerzeel are having a supplemented diet (which would support the suggestions of the archaeologists that pigs at Londerzeel needed additional support due to the harsh environment). However, it was supplied not in pens or styes, but in more natural surroundings, something Wilkie et al. also acknowledge as a possible explanation for some of the patterns they saw (Wilkie et al., 2007).

As we have seen (Figure 7.10) for non-human primates, pit relative frequency and pit breadth are the most diagnostic features of broad dietary adaptations, and pit frequency has been linked to the level of rooting suids. These two factors together may therefore provide the 'best' evidence to determine the diets of pigs at the five Belgian sites (Figure 7.25).

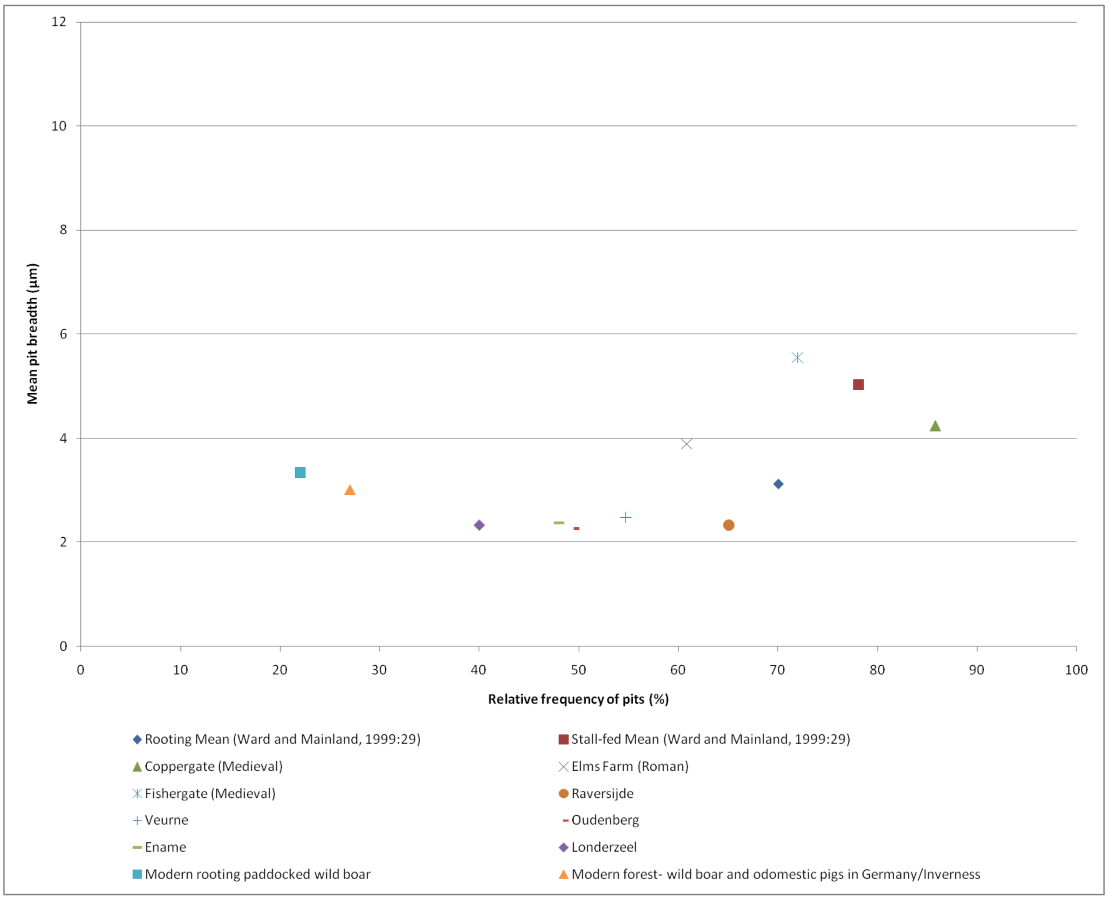


Figure 7.25. A comparison of the relevant frequency of pits and mean pit breadth for the five Belgian sites and other pig data (from Ward and Mainland, 1999 and Wilke et al. 2007).

The incorporation of further pig data for these variables (provided by Wilkie et al., 2007) demonstrates that the data from different environments provides dramatically different results (see Figure 7.25). Modern rooting by paddocked and forested wild boar appears very different to the rooting pigs of Ward and Mainland (1999). With the incorporation of these data it is clear that Raversijde plots the most closely to both the 'stall-fed' sites of Ward and Mainland (1999) and the archaeological examples identified as stall-fed of Elms farm, Coppergate and Fishergate. In comparison, Londerzeel plots most closely to the rooting examples (excluding the Ward and Mainland data), a result not expected from archaeological theories about pig keeping, but one fitting with the other evidence provided from the faunal remains. Oudenberg and Ename plot closely together graphically, despite the statistically significant differences between them, and their differing environmental conditions, whereas Veurne plots somewhat closer to the stalled pigs. The extent to which pigs rely on rooting within the soil for sustenance varies according to the availability and quantity of above ground food, increasing when food is scarce (Bolton 1954, Dardaillon 1987 in Ward and Mainland, 1999:30) and so some of this variation will naturally be due to food supplies in various areas. If food is more plentiful for Veurne, Oudenberg and Ename it may also explain their differences to Londerzeel. As Bolton (1954:58) notes 'sows will not work harder for their food than they have to' and this supports neatly the environmental evidence that conditions for pig keeping at Londerzeel would have been more constrained than at the other sites (see Chapter 2). At Raversijde it is known that food would not be plentiful in the environs, given its unsuitability for pig raising, and so the lack of a rooting indication in the microwear data, if not explicitly suggesting stalling, clearly suggests food supplementation, so that the pig would not need to root even if it were practically possible.

7.4. Conclusions

- *Summary:*
    - *Raversijde appears to represent the nearest to a 'stalled' pig signature of the five sites examined.*
    - *Londerzeel does not appear to have evidence of 'stalling', but has a suggestion of supplementary feeding of the pigs at this site.*
    - *Oudenburg, Veurne and Ename seem to represent rooting pigs, with variations explained by differing soil conditions.*
    - *Veurne may be seeing pigs kept in disparate environmental conditions incorporated into the faunal assemblage, and identified due to variability in features, but is hard to be conclusive about this.*
    - *All sites show a large degree of variation from each other and other comparatives, and it is clear that dental microwear for pigs is a study area with much potential but also needing greater research to be more confident in interpretations.*

Microwear in the Belgian sites is certainly different from that evident in both modern pigs and in those archaeological pigs previously studied. From a graphical consideration of the ratio of pits (ratio length: breadth ≤4.1) to striations (>4.1), it is evident that pits are less dominant in the Belgian sites than in the modern examples of Ward and Mainland (1999), or in the 'stall-fed on hard floor' Iron Age/Medieval pigs of Wilkie et al. (2007).

It is perhaps imprudent to use this to state that the Raversijde pigs were definitively 'stalled', despite the fact that of all the five sites it plots closest to them . It would also be imprudent to suggest that the other sites, which all exhibit rooting characteristics, necessarily had 'rooting' pigs when all the sites fall outside the comparative values. Indeed, it may be that all five sites had rooting pigs, or that all five sites are on a continuum between rooting and stalled, a point particularly relevant for Londerzeel where the evidence suggests a softer diet than expected, if a naturally foraging but still a rooting pattern. However, the evidence while not definitive is indeed compelling: the prevalence of small pits reflects a soft-textured diet, and Raversijde has the largest number of pits and smaller striations than many of the other sites. It is also clear from this study that the other suggested 'stalled' site, Londerzeel, is not exhibiting any definitive evidence of this husbandry technique being employed.

This study has also highlighted other considerations for microwear studies. It is apparent that geology and environment is a more important factor than has previously been understood, and that this may go a significant way to explaining the differences between the various studies. It is also evident that a greater number of examples of microwear related to known diet are required to clarify the picture presented for pig studies so far. For Raversijde in particular, the lack of striations is made more significant when it is remembered that Raversijde is situated on the sandy coast of Belgium. This trend is even more striking than it would first appear, as it would be expected that if diet was the same at all sites, purely based on environmental conditions, Raversijde should have *more* striations and plot closely to Oudenberg. Oudenberg, a site of similar environmental conditions, is seeing a greater concentration of narrow striations, far more expected microwear for 'rooting' on a sandy substrate. Raversijde, however, does not mirror this typical pattern. Perhaps because of this, Raversijde may be seen as providing good evidence for being a standard for microwear patterns in Medieval stalled pigs (or at the very least, pigs receiving food supplementation) in the period before their death. Similarly, the technique can be seen to be very successful at defining the more nuanced site of Londerzeel which, it appears, is receiving soft food supplementation but in more free-range conditions. It is evident that the suggestion put forward of the pigs at Londerzeel being stalled or confined (Ervynck et al., 2007:173) is not confirmed from the microwear data although a differing diet at Londerzeel is.

Perhaps most striking from this study is the variation between all of the five sites. Each is statistically different from the others in some way. This suggests variation in diet between all of the sites, even those in geologically similar areas. Grant (1982) and Ward and Mainland (1999:30) both noted that pigs exhibit very variable gross tooth wear patterns, and this study seems to support this finding. It is evident that this area needs further research as while, for example, the data from Raversijde may be seen as a probable ‘standard’ for the identification of Medieval stalled pigs, it is only relevant for pigs being stalled in very sandy conditions, and indeed can only really be compared to sites with similar environmental conditions.

It is apparent that all sites display at least one measurement that is larger than those of another site. Oudenberg and Londerzeel display more longer but narrower features than Raversijde, Ename displays more generally larger (in length and breadth) features than Oudenberg, wider features than Londerzeel and longer features than Raversijde. Veurne has significantly broader features than all the other sites and its features are statistically larger than the sites of Londerzeel and Raversijde in general. Clearly the picture is confused and these differences certainly need investigation in greater detail, something recognised in previous literature for suids (Ward and Mainland, 1999:31).

The field of dental microwear studies is still one which is rapidly developing, although it nevertheless has come far since its beginnings fifty years ago (Teaford, 2007:345). A particular challenge is to standardise techniques for microscopy, recording, measuring and counting features. Growing automation helps to ensure that variables such as magnification, feature classification and size are appropriately controlled, and is allowing more observers to view teeth in a uniform fashion, lowering the likelihood of inter observer discrepancies (Grine et al., 2002 in Schmidt., 2008:2). While the basic methodology is agreed, different studies vary in detail and recording methods are slow (Hillson, 1996). There remains some discussion even on exactly where on the continuum researchers should differentiate between ‘pits’ and ‘striations’, although it appears that in recent years a workable consensus has begun to be reached in this debate. New methods of analysis are emerging in the field and it is clear that in the next decade the methodology used here is likely to have been superceded by one of several developing techniques. A particularly likely development of the future is microwear texture analysis, which is based on 3D surface data and specific computer-controlled statistical analysis rather than the subjective identification of individual features, meaning that it is theoretically less affected by observer error (Merceron et al., 2010:1, Schmidt, 2008:4). Alternatively, Teaford (2007) has argued that analysis at a lower magnification of 35x seems to show greater reproducibility than at 500x, and allows larger areas to be covered to obtain more representative coverage for the tooth (Teaford, 2007:358). Analysis of the buccal surface, not complicated by mastication, may similarly be a focurs to give further understanding of the size of particles involved in the diet for individuals (Ungar and Teaford, 1996 in Ward and Mainland, 1999:29).

In conclusion, dental microwear is becoming a key tool in the study of ancient diet (Teaford, 1994) both in early humans and non-human primates, and also more recently in explorations into the diet of archaeological livestock (Ward and Mainland, 1999:25). As Romero and De Juan (2005:15) assert, greater research into the measurements used in microwear analysis of living species for correlation with certain aspects of diet to give a wider set of comparative measurements would be a great boon for the field. The technique has already had some success and, as in this study, seems to provide a 'valuable and insightful approach for the investigation of diet in ancient livestock' (Mainland, 1998:1270), even though, as Teaford proclaims, despite all the developments we still only have 'tiny windows into a complex world' (Teaford, 2007:356), a sentiment holding perhaps particularly true for our five sites.

Chapter 8: Pigs might Sty?: A discussion of the findings of the study

Throughout this study the findings from each technique have been assessed and the information that they provide has been analysed. However, it is also important to draw these individual strands together and to consider the success of this study with reference to its overall aims and research questions, as well as to summarise the more detailed findings of this combined strategy. It is particularly important to establish whether we have discovered a methodology for determining if medieval pigs are experiencing confinement in stalls or stys, or whether they are engaged in more traditional free-ranging behaviour. To do this, it is necessary to evaluate the evidence from the analyses to see what is suggested about conditions at each of the sites and, for the medieval sites, to what extent any appear to diverge from the expected medieval pannage of Northern Europe at that time. It is essential to use this information to establish if any of the more scientific techniques add significantly to the knowledge of the assemblages, and indeed if we now know more than we would have from the traditional analysis alone. If it is determined that this approach has provided greater information, it needs to be established whether it was one technique or a combination that has unlocked the data. Similarly, to consider whether it was the specific circumstances of the sites being investigated and the quality of their assemblages, or the more widely encompassing methodology, which allowed us to illuminate the historic husbandry.

8.1. Discussion of the six Belgian sites

Veurne

Veurne represents a feudal township from the province of West Flanders and sits some six kilometres inland from the coast, close to the French border. While it is a loosely coastal environment, of polder land with coastal sand intrusions, it has a wooded hinterland to the hilly south of the settlement which was believed to have provided very suitable conditions for keeping pigs under the traditional pannage system at the time from which the faunal remains date (10^{th}-11^{th} century). Only pig mandibles were examined from this site.

Veurne	
Traditional techniques	• The mandible ageing and mandible wear score patterns suggest a medieval autumn slaughter. Unexpectedly Veurne appears to exhibit a concentration of culling around the first winter, meaning the pigs are not allowed to reach their full economic potential. • The findings match those of the Ervynck et al. (2007) paper, but it is still difficult to interpret the age pattern as what we know of the social background of Veurne does not suggest it to be a high status site where people are more likely to be consuming very young, tender, animals.
Biometry	• There is a great amount of variability in the size of the teeth, suggesting a dual population (probably of wild and domestic), although the overall size of the teeth is not generally large. • This suggests that both hunted wild pigs and domesticated pigs (potentially kept in a free-ranging style) were incorporated into the diet at this site.
Pathology	• The mandible pathology from Veurne is unexpected with a greater tendency for major misalignments, and of quite a different type to the other sites.
Linear Enamel Hypoplasia	• Suggests Veurne has a typical 'forested' signature with little stress beyond seasonal.
Microwear	• Indicates rooting, but with a surprising amount of variability.
Other techniques	• Isotopic analysis suggests an omnivorous mixed diet, although some examples display a significant level of animal protein in the diet.

Figure 8.1. Summary of the findings of this study for Veurne

For Veurne, the mandible pathology was a surprise, with the presumption prior to analysis being that Veune would prove a very typical domesticated medieval assemblage. While as a whole the mandible pathology is difficult to interpret, Veune appears to exhibit a greater tendency for major misalignments and of quite a different type to the other sites (Chapter 6). These trends, while small, were persistent, although beyond being able to suggest that different masticatory forces may be in evidence affecting the tooth row; without any clear comparative data it is difficult to conjecture much more. It is possible that this pattern is being affected by the incorporation of mandibles of wild pig (identified through traditional biometric techniques), who may display a differing trend in pathologies to domesticated pigs.

It is thus apparent that the addition of further techniques to those employed by traditional analyses has established far greater levels of information for Veurne, but also left us with even more questions to answer. With the information from the jaw pathology, LEH and microwear all suggesting an unusually variable diet, and the biometry showing a significant variation in the size of the animals, is it likely that we are seeing dual husbandry at this site, with both true wild boar and domesticated pigs present. The isotopic evidence certainly suggests that some of the animals might have been experiencing some supplementary feeding, which is perhaps reasonable if there were greater pressures on the herd as may have been caused by the growing urbanization focused around Veurne, as well as at other Flemish cities at this time. Why the population was so reluctant to maintain the pigs past the first winter peak is less clear, and perhaps this growing urbanization provides the only explanation, meaning that they were having to slaughter pigs young to meet food demand; however, this remains a somewhat unsatisfactory and speculative explanation. It is unlikely that such a peak can be caused by the wild boar contingent of the assemblage, with the very selective age distribution being difficult to achieve through hunting.

Veurne was anticipated to be a very typical medieval site in its husbandry, but even the traditional zooarchaeological techniques suggest that something more complex was going on at this site. It is only with the addition of the pathological and isotopic evidence which started to provide some suggestion for the patterns displayed. While the addition of the techniques helps us to clarify some of the inconsistencies at Veurne, the study fails to answer the riddle of the age profile satisfactorily, with no obvious explanation determined for why the animals were slaughtered so young.

Ename

Ename was a rural village situated in East Flanders on the eastern bank of the river Scheldt in the Flemish Ardennes. It sits on wet clay with surrounding higher, wooded, elevations. It is believed that the local forest has always played a large part in the life of the local inhabitants, with this woodland being used by the whole community to graze their animals. The site was selected for this study because, like Veurne, it was thought to represent very traditional pig husbandry. The assemblage dates from the High Medieval period in the 14th century. Ervynck et al. (2007) noted very high linear enamel hypoplasia levels during their preliminary study, and postulated that this might have been caused by a change to the woodland management after a period of reforestation (circa 1290), meaning that the environment might not have actually been as pig friendly as had been anticipated. It was hoped that this study would be able to provide further evidence. Only mandibles were examined from this site.

Ename	
Traditional techniques	• The mandible ageing and wear suggest a traditional European medieval slaughter pattern focusing on the second and third winter peaks.
Biometry	• Only teeth were examined from Ename. The teeth measurements show low variation and appear to match well with others of the Belgian sites.
Pathology	• The mandible pathology identifies that Ename jaws have more examples with multiple categories of problems than the other sites. This might indicate some form of nutritional stress, but further investigation is needed.
Linear Enamel Hypoplasia	• The jaws exhibit a high frequency of LEH. The height of the LEH indicates that the stress is seasonally based, similar to the other Belgian sites (excluding Raversijde) • LEH indicates stress from seasonal environmental conditions, probably caused by the degraded local woodland.
Microwear	• The microwear indicates a typical rooting pig signature.
Other techniques	• The isotope ratio matches generally well with a herbivorous signal and a largely plant based diet.

Figure 8.2. Summary of the findings of this study for Ename

The addition of the further techniques appears to confirm the findings of the pilot study, that Ename appears to be a traditionally husbanded pig population where animals are raised until optimum meat bearing age, but under some nutritional stress, probably due to the 14th century changes to woodland management strategy at Ename. There is little evidence of any wild boar inclusion into the deposited faunal assemblage, which is as expected. Therefore, while Ename out of the six sites examined perhaps provides the most 'expected' results, and the most 'normal' signature for medieval pannaged pigs, it is apparent that even at this site there are subtle variations which have been identified by this holistic approach, providing greater information about the circumstances of the pigs.

Oudenberg

This site was represented by a faunal assemblage from a late 4th century Roman 'Saxon Shore' fort located 15k northwest of Brugge in Western Flanders. At the time that the assemblage at Oudenberg was deposited, the landscape consisted of clay based salt marsh with coastal dunes. This site was included as, despite the difference in periods, it appeared a reliable comparison site for Raversijde in terms of environment, being in a relatively similar location. Only jaws were examined as part of this study.

Oudenberg	
Traditional techniques	• The mandible ageing and wear scores indicate a traditional autumnal slaughter pattern, peaking around the second and third winters.
Biometry	• The size of the teeth is on average relatively large, although not separate from those of the medieval Belgian pigs. This suggests the pigs were of larger than average stature, but there is no evidence we are seeing a wild population from this site. • The small amount of variation suggests a single population.
Pathology	• The site exhibits a low number of major alignment flaws, but groups with both Raversijde and Veune in having a proportionally higher number of tooth formation problems than the other sites.
Linear Enamel Hypoplasia	• Oudenberg has a relatively high LEH frequency, although not as high as the 'stressed' sites of Ename or Raversijde. • The LEH signature is seasonal, indicating the stress the pigs are experiencing is due to the environmental conditions. Given the coastal location this is not unexpected.
Microwear	• The microwear appears to indicate that these were rooting pigs, and they display a signature for animals rooting in a sandy substrate, with a concentration of narrow striations.

Figure 8.3. Summary of the findings of this study for Oudeneberg

Oudenberg was included in this study as a useful comparative for the 'unusual' site of Raversijde, as a site in a very similar location, although with a slightly more heavily-wooded hinterland, meaning it did not quite match the extreme conditions of Raversijde. The techniques employed in this study identify the pigs as a single population, and that they were not experiencing undue stress due to the location. The microwear analysis is particularly useful when compared to Raversijde, with Oudenberg appearing to portray a very different, and more expected, sandy signature. Indeed, the differences between Raversijde and Oudenberg demonstrate that something different must be happening in the husbandry for Raversijde not to show the 'sandy' microwear pattern that was evident from Oudenberg. Intriguingly, Oudenberg alongside Raversijde and Veurne has a higher proportion of tooth formation problems. With all three of these sites being relatively coastal, it is possible that this study has identified a skeletal indicator for such conditions, although further study is necessary to evaluate this. We can be confident that these results signify pigs which exhibit some raised levels of stress due to the environmental conditions, but that they are not being kept in any atypical form of husbandry for this period.

Londerzeel

A medieval 14th century wealthy castle site at Londerzeel provided an assemblage containing a large proportion of pig. Londerzeel is set in an area which, by the time the assemblage was deposited, is believed to have been almost completely deforested (Verhulst, 1990). It is known that herding in the forest was very important to Londerzeel in earlier periods and it has been postulated that, by the 14th century, deforestation and a bourgeoning population had caused a change in pig husbandry from free roaming to penned.

Londerzeel	
Traditional techniques	• Both mandible ageing and wear indicates a lack of juvenile slaughter at Londerzeel although the culling pattern remains seasonal. There is little evidence of a first winter peak although a second and a third winter peak are both evident. It is possible that this suggests that very young animals are absent from the site, and that pigs are being imported later in their lives rather than being raised in the vicinity.
Biometry	• The biometry of Londerzeel shows that the dental measurements are particularly small, indicating a domesticated population. • The variation in measurements suggests that Londerzeel is formed of a single domestic population, with a few intrusions from large individuals which probably represent wild boar.
Pathology	• The mandible pathology from Londerzeel shows a larger prevalence of jaws with defects than the other sites, and very few jaws without any problems at all. • Londerzeel demonstrates a greater propensity to have jaws with multiple problems and a significant number of these relate to alignment. The site appears to exhibit the greatest number of examples which can be put down to poor mandible growth, which may be caused by nutritional stress.
Linear Enamel Hypoplasia	• The frequency of LEH gives every indication that these animals are experiencing the typical environmental stress of a medieval pannaged pig, similar to Ename. • There is no evidence from the LEH heights that the pigs are experiencing other stress than that which is seasonal in character. • If the level of nutrition is indeed directly related to LEH lines on the molars then Londerzeel appears to be enjoying good feeding conditions. The Londerzeel pigs show a low frequency of LEH lines suggesting herding in well forested environments.
Microwear	• Microwear analysis indicates the pigs of Londerzeel were rooting pigs. Indeed, this site is the most indicatively rooting when matched with comparative sites. • The microwear does however suggest that the animals may be receiving some ‘softer’ food.
Other techniques	• Stable Isotopic analysis defines the Londerzeel pigs as having a mixed omnivorous diet, combining both plant and animal protein sources.

Figure 8.4. Summary of the findings of this study for Londerzeel

Despite the questions over the suitability of the environment for the pigs at Londerzeel this combination of techniques appears to demonstrate that they are free ranging. The combination of two of the new techniques (microwear and stable isotopic analysis) seems to suggest dietary supplementation within this free range environment, something which could not have been identified using biometric and pathological analyses alone. Indeed, only in concert does the evidence from any of these techniques appear to make sense.

A picture of the animals at Londerzeel as free roaming, but also fed a supplementary diet, would appear to sit well with the historical (Chapter 2) as well as the faunal evidence for the site. It would be beneficial to place the evidence within a context of further investigations, such as further isotopic analysis to consider the evidence for importation, as the ageing evidence does raise questions over whether the data being analysed really reflects a local Londerzeel signature or that of pigs imported from elsewhere.

However, as discussed, microwear is replaced relatively rapidly on the tooth surface (see Chapter 7) and so this at least is likely to reflect recent consumption before death and so the local conditions, with its homogeneity suggesting that a local signature is being seen. The evidence from an analysis of the variability of the biometric measurements (see Chapter 4) suggests a ‘single’ population, and so perhaps this site more than any of the other five is left ‘unsolved’, with some sources of evidence such as the age profile of the assemblage suggesting potential pig importation into the site, and others a very local rearing.

Koekelare

Koekelare is identified as a 15th century cattle breeding centre from an inland site in West Flanders, set in a landscape of marine clay and sand intrusions on an elevated site. A full range of the faunal assemblage was examined, allowing an investigation of the postcranial as well as the mandibular evidence.

Koekelare	
Traditional techniques	• Both the NISP and MNI analyses show an assemblage comprising the three major domesticated mammal species, cow, pig and sheep/ goat, and dominated by cattle remains. • There were no unusual butchery practices employed on the site although the pigs were less heavily butchered than both the cattle and sheep/goat (the same is also true of Raversijde and is probably normal practice). • There was a comparative absence of head, feet and lower limb elements. Despite the epiphysial age distribution showing some juveniles in the assemblage this could indicate the importation of pork with secondary processing on site. • A particular issue for this study was the lack of available complete mandibles from this site when compared to the total amount of pig remains. • When the pig mandibles were aged the animals appear to demonstrate the expected early winter seasonal cull with a significant third winter peak. • Epiphysial fusion analysis supports the mandible aging for the pigs as well as indicating that the sheep were being husbanded for wool and then culled as older animals for mutton. The evidence for cattle similarly seems to confirm the cattle breeding hypothesis, with a relative lack of 'prime' age cattle remains on site (being exported live to market).
Biometry	• The pigs at Koekelare exhibit larger post-cranial elements than expected in comparison to other Flemish medieval sites. However, the teeth are a relatively typical size for domesticated medieval pigs. • While the postcranial elements are larger than at the other sites, it is clear they are not as large as at Raversijde.
Pathology	• There were very low levels of post cranial pathology present, and the available mandibles were really too few to attempt a meaningful pathology review of teeth and mandible. However, there appear to be no unexpected patterns for a site of this time.
Linear Enamel Hypoplasia	• Koekelare plots within the 'normal' levels of LEH frequency and with the height of LEH lines appears to demonstrate a 'forested' pig signature. Animals appear to be being adequately fed and not undergoing any other causes of stress other than the usual seasonal trends.
Microwear	• Unfortunately there were no appropriate specimens to allow a microwear analysis to take place
Other techniques	• No further information was provided by any other techniques, although the potential for such techniques for this site was acknowledged.

Figure 8.5. Summary of the findings of this study for Koekelare

Koekelare as a site is perhaps indicative of some of the issues present when analyzing pig remains, which often consist of immature animals and have particular problems with preservation. Samples were often insufficient for any one element type to allow an in-depth examination on it alone. Koekelare, while a potentially useful site to attempt to provide another 'normal' signature, does not in reality have enough samples to allow any firm conclusions to be drawn. Particularly interesting, however, are the post-cranial size differences at this site, which hint that yet another of the sites exhibits unexpected differences from the others. The suggestion of potential pig imports is, as with Londerzeel, difficult to deal with when we are attempting to look at site husbandry. Again, however, the variation in biometry results suggests that if pigs are being imported, they are of relatively similar type. Other than the size of some skeletal elements, and the suggestions of possible differing conformation, it is clear that there are few indications to suggest that Koekelare does not fit well with a domestic pig signature, with the pigs being raised in a traditional manner.

Raversijde

This represents the site where, after the 2007 study, Ervynck et al. proposed that indeed 'pigs might sty'. To positively identify a medieval site where stalling is taking place has not been previously achieved in Belgium, and has only been tentatively suggested elsewhere. An expanded analysis utilizing other modern techniques to try to provide this identification was one of the main aims of this study, as to date there has been no evidence at Raversijde of the control of the animals found on site. It is apparent from other data that they must have been experiencing a large amount of human interference in their lives in order for them to survive.

Raversijde was a late medieval 15th century fishing village set in a coastal dune and clay based marshland in West Flanders. As with Koekelare, this study was able to examine a complete faunal assemblage rather than just the mandibles.

Raversijde	
Traditional techniques	• NISP and MNI analyses indicated an assemblage comprising the three main domesticated mammals found at most north west European medieval sites: cattle,sheep/goat and pigs. • The pig presence at Raversijde is substantial which is surprising as the coastal dune conditions would not favour the 'pannaging' pig, the husbandry usually practiced at that period. • The pattern of butchery appears typical for the period. • The mandible ageing and mandible wear scores mark out Raversijde as fundamentally different to the other five sites. Animals are not being culled in a pattern linked to seasonality but seemingly around a certain age or weight. This in itself may hint at a more controlled husbandry based around semi confinement rather than a system driven by the seasons and the environment. • The epiphysial ageing of the pigs confirms the mandible data. For sheep, as at Koekelare, wool production appears to be the primary consideration with animals surviving well into adulthood and being then culled for mutton. The Raversijde cattle are being slaughtered apparently for consumption on site when the animals are at their prime meat bearing age, meaning that Raversijde seems to reflect a typical Medieval village focus.
Biometry	• The pigs at Raversijde are notably larger (both taller and more robust) than at any of the other sites. This is notable in both post-cranial elements and also tooth measurements.
Pathology	• There is no significant evidence from the post cranial pathology, which may in itself suggest the good condition of the animals. Raversijde does not exhibit any materially different pathologies on the teeth and mandibles than the other sites. • There is no evidence of dietary stress suggested by malocclusions (caused by affected jaw growth) and it has the greatest diastema levels of all of the sites, which might only be expected with a fully developed jaw. While it is difficult to be too diagnostic from this mandible pathology, it would seem to suggest that if the pigs at Raversijde are experiencing stress, it is not dietary as it is not affecting their growth.
Linear Enamel Hypoplasia	• Raversijde displays a very different LEH frequency pattern across the teeth and cusps to all of the other sites. • The placement of the LEH lines (especially on the M1) suggests that the pigs here are experiencing different types of stress to the generally heightened seasonal levels seen at Ename and Oudenberg. • There also appears to be a second peak on the M2 anterior cusp which the other five sites do not exhibit which is postulated to indicate a second farrowing. If this were indeed true then it seems inconceivable that such young pigs would have been able to survive their first winter without some environmental protection, which might involve some form of containment.
Microwear	• The microwear analysis is particularly illuminating for the Raversijde pigs, with the animals representing the closest pattern to a 'stalled pig' signature as suggested by the available comparatives. • The lack of striations is striking when it is remembered that Raversijde is on the sandy Flanders coast, and under normal circumstances would expect more microwear, not less, if the pigs were rooting on this substrate. • From an environmental perspective we would expect a similar signature to Oudenberg, which it clearly does not have.
Other techniques	• Evidence from stable isotope ratios seems to send mixed signals. Of those samples analysed by Ervynck et al (2007) two demonstrated an obviously herbivorous signal, three seemingly having a mixed diet which contained some animal protein and a marine element, and two which clearly had a strong marine element combined with terrestrial animal protein, rather than herbivorous material. • This lack of any dietary consistency sits more comfortably with the idea of stall fed animals consuming waste than it does with medieval pannage.

Figure 8.6. Summary of the findings of this study for Raversijde

At Raversijde, there were far more questions about the nature of the husbandry than for any of the other five sites . While Ervnyck et al. (2007) identified some differences in this site when compared to other Belgian medieval sites, they were unable to ‘prove’ that this was due to stalling. In this study, with the additional techniques and extended analyses for biometry and ageing, it does appear that we have been successful in identifying the first zooarchaeological ‘signature’ for medieval stying pigs, at least for an environment similar to Raversijde. Slaughter not based around seasonality, the potential of second farrowings, no significant seasonal dietary stress and generally low levels of microwear (but a large amount of other stress exhibited through hypoplasia),a differing diet and physically larger animals apparently thriving in an environment which is particularly alien to them, mean that no other explanation appears anywhere near as plausible. It is this very combination of evidence from a number of techniques, rather than any one technique alone which is particularly diagnostic and allows interpretation to go much further than that of Ervynck et al.’s (2007) pilot study.

8.2. The state of understanding about pig husbandry determined by this study

It is clear that while this study has had marked success in identifying stalling in pigs by using a comprehensive range of techniques on their faunal remains, perhaps as important is the way it has identified subtle differences between the sites examined. It is evident that all of the sites differ from an ‘expected’ signature in some form. This raises questions about the assumptions that are made about what a ‘medieval pig’ is, as with this much variation, even over such a limited geographical area it seems that archaeologists should not be presuming any one, all-encompassing, signature in studies such as these. Indeed, it particularly highlights the level of caution which should be employed in comparisons between sites or when using any site for the interpretation of others, as it is apparent that we should be expecting significant inter-site variation (albeit potentially in very subtle ways). Indeed, this examination has also shown that a portfolio of techniques combined together can provide far more detailed information about the story on site, which would not be identified by traditional zooarchaeological techniques. For example, the identification not of stalling, but of a supplemented diet, could never have been determined without the use of targeted additional techniques. For a site such as Londerzeel, these would not have normally been employed when analyzing the assemblage, and questions are therefore raised by this study about how much information is being missed when we examine faunal remains.

For Raversijde, and to a lesser extent for Londerzeel, it is apparent that the use of such techniques has enabled the identification of a clear 'signature' of a medieval pig experiencing greater human interference than would be expected from a traditional free ranging husbandry.

8.3. A consideration of the success of the techniques

Having evaluated all the different sources of information employed in this study for each site, and considered the overall interpretation of husbandry which can be gathered from them, it seems appropriate to look at the techniques that were used as part of the collaborative approach, and evaluate how effective they individually seemed towards meeting our objectives.

8.3.1.Traditional Faunal Analysis Techniques

It is always difficult to consider the interpretation of an assemblage without the general context being provided by a substantial faunal analysis. Indeed, for some of the sites from which mandibles alone were examined, the lack of an easily available traditional analysis almost certainly hindered the clarity of the interpretation from some of the other techniques. NISP and MNI certainly underpin our view of what seems to be happening at sites such as Raversijde and Koekelare, the mix of species, the consideration of whether they are domestic through age profiles and biometry, and a consideration of whether they are similar to other known sites in the area and time. Very basic techniques perhaps, but they are clearly diagnostic and necessary for an overall understanding of how animals are living from any archaeological faunal assemblage.

Skeletal element distribution provides fundamental data about the animals on site. It can indicate both importation and exportation, and certainly for a study attempting to illuminate husbandry techniques evidence of importation of either live animals or carcasses is a pre-requisite of an analysis. Mandible ageing has also proved a particularly important tool, albeit that a lack of detail because of broad age categories can make it difficult to positively determine the causes of patterns identified. Tooth wear patterns show a far greater level of detail than just examining eruption alone, and their more subtle analysis helped to confirm patterns alongside the broader age categories, such as the lack of juvenile slaughter at Londerzeel.

Epiphysial fusion is a much cruder technique and clearly only works effectively for younger animals. However, as in the case of Koekelare which has limited mandible evidence, it can prove crucial in establishing the age of death patterns of the livestock. Mandible and epiphysial ageing work well in combination, complementing each other when both sources are available. On their own however mandibles provide the most secure and interpretable information when they are available.

The lack of any post cranial pathologies at either Raversijde or Koekelare suggested that the animals in the assemblage were relatively healthy but little else in this particular instance.

It is evident that these techniques provide the bedrock of information which is vital to any zooarchaeological analysis. However, it is also apparent that by only using these techniques the full picture would have remained, at the very least, partially obscured for all of the six sites examined here.

8.3.2. Further techniques

Mandible pathology would seem to be an exciting area where a new methodological approach has demonstrated that a great amount of information could be available at a relatively low cost for zooarchaeological analysis. Every site exhibited examples and differentpatterns of pathological changes or developmental problems in the pig jaws, and certainly dental defects are probably the most common pathology found in pigs. The commonality of pathology is not unexpected considering both that teeth are the only parts of the skeleton meeting the external environment and their unique developmental process. Being one of the more robust elements of the skeleton, teeth provide a good potential source of information. The examination demonstrated that the teeth and mandibles are affected more subtly than the post cranial skeleton and exhibit a large number of small pathologies. However while research has taken place on post cranial pathology, mandibular studies still have provided very little comparative data, leaving their interpretation far more difficult to place into a wider research field. It would be useful in the future to be able to revisit these analyses with better diagnostic information, as it is clear that there is further information to be gained from mandible pathology which is thwarted by the lack of study in the area.

While further investigation of sites with known domestic husbandry and/or environmental conditions would significantly help interpretation it is clear that linear enamel hypoplasia has provided some intuitive insights into the husbandry at our six sites. While specific techniques cannot be directly identified through the LEH pattern, differences between regimes can, and interpretations based upon these differences can be formulated. The LEH height signatures proved particularly useful and provided important information, for instance about the potential for a second farrowing at Raversijde. As a relatively low tech and cost effective way of providing significant levels of information, this technique again appears one which provides good information for interpretation relatively simply.

All sites show an overall LEH pattern which could be interpreted as stress caused by natural life events. The differences between them shows that, even in a presumed medieval forest dwelling, there can still be variation in how life style affects the health of animals, and that it is important not to presume all pigs under any husbandry regime necessarily experience equal levels of nutritional and environmental stress. The re-examination of the sites from the Ervynck et al. (2007) study has demonstrated that there is an excellent level of reproducibility of LEH measurements, and that a different researcher has independently reproduced the same results despite the technique's relatively subjective methodology. This suggests that comparing LEH results from different researchers should not be presumed to be as problematic as had been previously suggested, legitimately opening up the comparison of LEH between sites.

Microwear was similarly successful in illuminating differences between sites although its interpretation has been hampered by a lack of reliable comparative. Microwear from the Flemish sites is certainly different from that evident in both modern pigs and those archaeological pigs previously studied. It is evident that geology and environment are more important factors than has been previously understood, which may go some way to explaining the differences between various sites and it is an area which needs to be explored in greater detail. The modern stall fed pigs in one of the few comparative studies consumed soft food (pig nuts) on hard floors with no likelihood of intrusion of grit, and similarly the modern 'browsing' pigs were kept in paddocks largely free of vegetation other than grass, and supplemented with pig nuts. It would be foolhardy to believe that medieval pigs, such as those examined in this study, are likely to experience conditions which would bring them anywhere near these signatures, and it is clear that further research into microwear on pigs teeth under different dietary regimes urgently needs to be carried out. However, despite this, the information that was actually generated in the analysis was both sound and diagnostic, and has allowed us to more narrowly define some of the standard signatures. Raversijde for example is likely to provide a reliable signature for medieval stalled pigs which can be used in future studies, even if it is only really relevant to a sandy coastal environment. Significant advances continue to be made in this field with microwear texture analysis allowing 3D surface data to be collected and computer controlled statistical analysis to be done, rather than any subjective identification of individual features coming to the fore. It is clear that this field, while still developing, may in future have a lot to offer zooarchaeology. On balance, microwear is an excellent informative technique, but probably is more useful when targeting sites where specific questions about diet are being asked, rather than used as standard, considering its costly nature. A similar view holds true for stable isotopes ratios which certainly provided useful data, particularly to indicate a marine diet for some of Raversijdes' animals.

This study has demonstrated that the use of a coordinated range of techniques can provide a much clearer indication of husbandry. The combination of LEH and microwear was particularly useful, with their combined data clarifying questions that would have remained unsolved if only one or the other had been used. Perhaps the finding of paramount importance to be taken from this study is not necessarily the efficacy of each of the methods, but how a combination of some, relatively simple, targeted techniques can identify differences in even the most 'normal' of assemblages. It is clear that our presumptions about the 'typical' faunal assemblage need to be challenged.

As well as developments to the techniques directly employed within this study on the six faunal assemblages there are a number of other techniques available to zooarchaeologists which may also contribute information to help to define the nature of any stress and/or the husbandry identified for archaeological animals.

Alongside dental microwear and multi-isotope analysis there are a number of other approaches being developed in zooarchaeology which help elucidate the question of diet from archaeological remains. One of these is the evidence of microscopic traces of food trapped within the calculus of the teeth of the animal which may preserve evidence of the surrounding environment and the food eaten (Henry and Piperno, 2008:A12) and can be examined using X-Ray microanalaysis (Fox et al., 1996:101). The composition of dental calculus has already been used successfully to examine the diet and feeding ecology of archaeological animals (Britton, 2009:13-14; Dobney and Brothwell, 1986, 1987, 1988; Armitage, 1975, Gobetez and Bozarth, 2000, 2001), Neandertals (Henry and Piperno, 2008; Madella et al., 2002) and modern humans (Arensberg, 1996; Fox et al., 1996). Dental calculus examination is nevertheless still an embryonic technique in archaeology. Methods for recovering microfossils from dental calculus are not yet firmly established (Britton, 2009:14), and the current methodology has been demonstrated to be potentially extremely damaging to the surface of the teeth (Boyadjian et al., 2007), as well as being difficult to interpret with any degree of confidence. Furthermore, post-depositional damage has been shown to significantly affect the success of the technique, causing problems for older specimens as well as those particularly taphonomically damaged (Henry and Piperno 2008). Such obstacles need to be overcome before such techniques are suitable for the majority of archaeological investigations and little specific work has as yet focused on pigs (Twiss, 2006 being one of the few examples), something problematic when considering that calculus formation can vary dramatically between species even if they have similar diets (Weaver, 1964:75). In future years as such techniques develop and become established they may provide another avenue which is useful to investigate, particularly alongside the evidence from dental microwear, to consider the details of the diet of individuals and populations from archaeological faunal assemblages, and also potential variations in the diet of animals either temporally or geographically.

Another zooarchaeological technique currently undergoing rapid development is the field of Geometric Micromorphometrics (**GMM**), which is the quantitative summary of size and shape differences (Bookstein, 1991:3, see Zelditch et al., 2004 for a comprehensive introduction and Adams et al., 2004 for an overview of the history of the development of the technique). GMM uses parametric and multivariate statistics in order to consider such variation in shapes (Moore and McCabe, 1998 and Hair et al., 1998). In recent years it has been developing primarily as a tool in the field of biology and anthropology, especially focussing on non-human primate and modern human skeletal morphology (O'Higgins, 2000:103) and modern imaging techniques, such as laser scanning, are used to obtain accurate 3D measurements (O'Higgins, 2000:105), replacing the calliper measurements on which the technique was first used. Problems of measurement error are very easy to introduce into GMM studies (Arnqvist and Martensson, 1998:77), and it is only in very recent years that concerns about variation due to inaccurate measurement have been quelled.

For animals, the greatest emphasis has been on using GMM to examine has variation in breeds of rodent (for example Fadda and Corti, 2001; Klingenberg et al., 2004; Cardini et al., 2005) or monkeys (for example Cardini et al., 2007; Cardini and Elton, 2008 and Mitteroecker et al., 2005). Studies in GMM presently seem to focus on cranial material, although the field is beginning to widen to incorporate further skeletal elements, for example variation in human footbones (Kidd et al., 1996).

For pig studies GMM has as yet played a far more limited role, particularly with regard to archaeological samples (Cucchi et al., 2009:508). It has principally been employed to examine the question of identifying wild versus domesticated pigs in modern samples (a topic of current postgraduate research by J. Owen at the Archaeology Department, Durham University) and as a means to counter some of the problems identified using biometrical size changes (Albarella et al., 2009) .Similarly, GMM work on pig molars to consider domestication is also a topic of very recent consideration (Cucchi et al., 2009).

While the inclusion of geometric micromorphometrics into this study was considered it was determined that the technique was not yet advanced enough for pigs to enable a study of suitable quality to be carried out as part of this investigation. Further investigation into a better understanding of the development pattern of pigs, and the variables affecting such development is needed before such techniques can be confidently employe. GMM is a technique which may have a useful future application for this particular field of study to consider how the variation in elements is affected by nutritional or life stressors, but the field is not mature enough for any results to be interpreted confidently at this time.

It is apparent therefore that there are further techniques which could potentially be applied to studies such as this. Many of these techniques are very early in their development and a review of such studies has demonstrated that while they may in future provide useful information, they still require significant development before they can be viewed as common zooarchaeological techniques. For example, Mainland et al. (2007) investigate a means for differentiating pigs from wild boar through bone histomorphometry (through the shape of the bone cross-section and density of osteons). Although such techniques seem promising for investigations such as this, at present they exists almost completely in isolation.

8.4. Evaluation of whether the aims and research questions have been answered

It is important to revist the original aims of the study and determine if the findings have been able to at least begin to address the questions stated.

- *To consider the reliability of the traditional morphological approach to faunal assemblages and to assess whether this provides an appropriate level of information. To look at whether a more scientific approach can unlock information obscured by the traditional methodology and to assess the level of information such an approach provides. To begin to propose a new protocol for zooarchaeological research and widen its realistic objectives.*

This analysis has gone a long way to address these issues both in terms of the traditional approach, which inevitably has limitations but has been shown to provide the bedrock of any analysis, and certainly in terms of demonstrating the enhancement that some of the more scientific approaches bring to interpretation, not only independently but also when used in concert. The precise nature of any new protocol may take somewhat longer to identify as issues of pragmatism and cost will debar some of the techniques that were used here, but it has been demonstrated that many relatively simple additions can provide further insights into faunal assemblages.

- *To determine whether increasing confinement of pigs in the medieval period can be identified through a zooarchaeological analysis and whether this can be positively differentiated from stress caused by unsuitable conditions through their skeletal remains.*

This study appears to have met this research brief in full, with analysis of pigs at Raversijde allowing us to demonstrate, with relative confidence, a site of heightened human input interpreted through a zooarchaeological analysis. Indeed, the stress at Raversijde can clearly be interpreted as different from 'usual' dietary seasonal stress and, by using a combination of techniques, the cause of this distress has been defined.

- *To develop a new methodological approach for recording and interpreting subtle pathologies of the teeth and to evaluate whether this provides any meaningful information about displaying stress in the skeleton.*

This study proposes a workable methodology for mandible pathology analysis, which demonstrates that it can identify differences in patterns of pathology between sites. This is a low cost, low-tech, procedure which is within the bounds of most practitioners. While clear interpretation of subtle differences remains elusive due to the lack of other comparative data, when we can elucidate some of these patterns I am certain that such a methodology will evolve into a technique which can provide substantial and exciting insights.

- *To expand on the investigation in Ervynck et al. (2007)'s study, which raised questions about the husbandry of several Belgian sites through reassessing their original data, employing further techniques and incorporating additional sites into the study. Specifically, to clarify whether the differences identified for the site of Raversijde are due solely to its marginal natural environment or due to differences in the keeping of the pigs caused by the agricultural transition of this period. Also using this wider gamut of techniques to identify the husbandry being employed at Londerzeel, of which Ervynck et al. (2007) raised a number of questions but could not resolve.*

It is clear that the situations at both Raversijde and Londerzeel have been illuminated. Not only has human interference at both sites been identified, but it has also been established that the two sites were experiencing quite different husbandry styles, with Londerzeel demonstrating food supplementation in a relatively 'natural' lifestyle and Raversijde seeming to have a much more contained husbandry, masking environmental seasonality.

- *To demonstrate how 'extreme' conditions for animals may not only represent extreme geographical or climatic conditions but that other conditions may also induce stress, in particular how human influence into the lives of animals may affect their skeletal remains beyond more long-term morphological changes.*

The combination of techniques has been able to demonstrate the effect of variable conditions in animals lives, both through gross changes and more subtle indicators, and it was possible to identify the effect of human intervention separately from the wider environmental factors.

- *To examine the six Belgian sites forming the basis of this study with reference to the wider research context of each technique, and to provide conclusions about the husbandry employed at each site for pigs through an assessment of their dental material.*

At all of the six Flemish sites, greater detail of the lives of the pigs has certainly been uncovered, fulfilling one of the major research aims. While this examination has not always been able to answer all the questions raised about the life of the pigs, and indeed has also seen the posing of some new questions, it is evident that in all cases we know more about what was happening at the site than at the commencement of the study and so, to some degree, it can be considered a success.

- *To consider the implications of the findings of the study, assessing the relationship between the information from the techniques and examining how they complement or challenge each other. Concluding whether it has been possible to develop a methodological approach that will allow the specific cause of a variance of 'stress' in an animal population to be identified.*

This has been a more complex question to address as the efficacy of combinations of techniques has varied from site to site, and this study has highlighted that there does not seem to be a 'one fits all' solution. However, in all cases we identified a palette of techniques which seemed to identify the specific stress factors in that particular population very successfully. It would be perhaps naive to imagine that any particular combination of techniques could answer all questions on any archaeological site, and it is important to remember that this study was at its heart examining relatively specific areas. Whether such a methodology would enhance interpretation for other archaeological sites, periods or species is certainly not to be presumed, but perhaps this study goes some way to providing some reasons for why archaeologists should evaluate further the techniques they feel are necessary to provide the required information when examining assemblages, rather than just automatically selecting a 'traditional' range of options.

In summary, it is apparent that this thesis has provided an insight into each of the research questions, as well as addressing the overall aims of the study. While it has not always been able to determine the exact husbandry of each site, the findings demonstrate considerable potential for future studies and have identified a number of key areas, both methodological and theoretical, deserving of further investigation by future studies.

Chapter 9: Conclusions

9.1. Limitations of the study and future directions of research

While it is clear that the aims and objectives of this study, to provide a set of techniques to attempt to define the cause of differing husbandry through pigs skeletal remains, have been achieved to a significant extent there have inevitably been limitations within the current work. Many of these have been assessed for the individual techniques within each relevant chapter (see Chapters 2-7) but it is also important to evaluate any overall limitations of the study.

Firstly, there are a number of specific issues relating to the sites used within this investigation. Although a large volume of data were analysed for all sites, if further data had been gathered from Koekelare, greater support may have been given to its interpretation, particularly if a greater number of jaws had been present to be examined. However, this is an issue for most archaeological sites, and indeed such limited datasets are a very common problem with zooarchaeological interpretation.

While Oudenberg, as a site of apparent geographic similarity to Raversijde, allowed us a pragmatic comparison site for the effect of the environment on pigs, the temporal difference was a problem. Data from a site in a similar environmental situation but also contemporary to Raversijde would have been invaluable for comparative purposes, without questions being raised about whether differences were due to differences in the animals because of the periods from which they derived.

The addition of further isotopic analysis would have been beneficial to consider the question which has been raised through the evidence in this study into the importation of animals to Londerzeel and Koekelare, and similarly provide further evidence for the diet of the pigs at Koekelare. However, this was beyond the scope of the current project in terms of study scale, timing and finance, but is an avenue now currently being explored for these specific assemblages after recognition of its potential.

The methodology has provided a strong basis for the interpretation of archaeological data from pigs in the medieval period, but there are limitations for its wider application.

Primarily these issues revolve around the necessary emphasis of this examination on a specific form of 'stress' at a particular time period. The technique of using a combination of more scientific approaches on data from a number of sites where husbandry practices were believed to differ, clearly worked for this example. While this clarity of focus was essential to evaluate the use of such techniques, rather than merely adding data which lacked direction, it was this specificity of the research which was successful. This particular palette of techniques really needs to be reviewed in a much broader field, in regard to other archaeological sites and questions, in order to determine how relevant such a methodology would be in determining husbandry in other situations. This study therefore is really very much a first approach, using a specific case study, and it is clear that in order to demonstrate its efficacy for other research further work needs to be done.

A number of the lines of enquiry that were considered are, in reality, involve expensive and time-consuming techniques and it is beyond the scope of the findings of this study to expound their use as a standard methodology for analysis, despite their success here. Nevertheless, this investigation did incorporate other relatively inexpensive methods that were also shown to provide a great amount of information and be relatively practical to employ, such as recording linear enamel hypoplasia. Similarly, it is entirely possible that mandible pathology analysis could provide another such cost effective method to understand faunal assemblages. This study has highlighted that awareness needs to be raised about the potential of a variety of forms of pathology rather than the focus on LEH which has existed in zooarchaeology until now. However, it has also been demonstrated that considerable work needs to be done in this area before we can establish just how reliable any data is for this technique (if indeed the data is diagnostic at all). There are very few similar studies which can be used to evaluate the mandible pathology data that was gathered, leaving it standing very much on its own in interpretation.

There is no doubt that this study demonstrates the great potential that a multi stranded approach has for the zooarchaeologist as, in this instance, it appears to have identified a clear 'indicator' for the growing confinement of pigs in the medieval period. However, a wider application of these techniques in combination is necessary to verify this 'indicator', to ensure it holds for all geographical and temporal conditions, or whether it is quite specific to pigs at these sites. Indeed, it is also important to stress that the findings of this study demonstrate relevance not only to researchers within the medieval period. The future incorporation of post-medieval material, in particular, may also add greatly to the work begun in this study, and provide a wider field of data in which it may be placed. It is one of the strengths of this research that, while the focus here is on the medieval period, the techniques investigated are not only applicable to data from this period. Indeed, such a wider context of sites would be a useful direction for this research to take in future.

Probably of greatest urgency is the need for an enhanced field of comparative knowledge for many of the techniques in which to place these examples as, especially for animals, to date such studies are at present embryonic. Similarly, these combined techniques could be applied to archaeological fauna from a range of dates and different species, to examine how effective the strategy is, or whether only extraneous data is produced.

The examination of historical evidence, while clearly useful for this study, was limited both geographically and inevitably in term of the periods from which evidence was gathered because of the focus of this study. Documentary sources for continental sites do not exist in comparable depth to those in evidence in England (Woolgar et al., 2006:1). While West Flanders was fortunate in that it has well documented links to England, which has a husbandry which is well understood and in many ways is known to mirror that of the Low Countries, a further, extensive, historical examination of Western European husbandry of the time would be helpful to future research. Additionally, historical sources often focus on greater households or specific social types, such as monasteries, and it is important to try to find sources that look beyond these for examples from more ‘typical’ rural or urban areas of the types that we have investigated here (Woolgar et al., 2006:4).

This study has been the first application of a number of techniques relative to pig husbandry, and has produced an extensive comparative data set for archaeological studies of dental microwear from sites from which interpretation of husbandry is now relatively clear. Previously only modern studies, or very tentatively interpreted archaeological pig samples had been examined, and this research goes much further than such insights. However, it is clear that further studies in such areas would again be useful to provide a greater database of comparatives in order to more easily interpret dental microwear at other archaeological sites.

From this analysis, it is not feasible to identify an exact combination of methodologies to suggest a ‘perfect’ technique for defining husbandry practice in past populations, as so many specific factors affect every site. It however, highlights a need for more work on the fundamentals of techniques such as dental microwear (from which those often used as 'types' have been identified as potentially problematic), before studies of this type can produce higher-resolution results. Further baseline studies for the techniques would be useful for different areas and times to better understand the relationships exhibited.

The results of this study are very promising, but a great deal of work is clearly still required to take it from a local study to wider application. Each methodology has highlighted issues which need resolving, but in combination they have been shown to have the potential to present a powerful tool for the reconstruction of animal history.

9.2 Overall Conclusions

Throughout this study it is has been shown that the addition of further techniques to those seen as standard in archaeological faunal assemblage analyses highlights that assemblages have both striking and subtle differences from each other, despite their geographic or temporal similarities. It has also been demonstrated that often these subtleties would not be identified by traditional techniques alone. With the sites chosen for this study, it was anticipated that only two, Raversijde and Londerzeel, were likely to vary dramatically from the overall medieval 'type' of pig. However, a far more detailed picture has emerged than that. Such detail has allowed a far more nuanced interpretation to be built for each site. Indeed, for coastal stalled pigs a reliable signature has been confidently identified, an extremely useful comparative for future studies.

The body of information from each of the techniques (Chapters 2-7) has been amalgamated in Chapter 8 to provide a picture of life for the pigs at each of the six Flemish sites. In zooarchaeology it is rare to be able to interpret without any corollaries, which has lead to caution about the level at which we can 'conclusively' determine the exact cause of husbandry. However, it is still obvious that multiple techniques has enabled, for the first time, not only the identification of human intervention at the sites but also provided some answers to what form these interventions may have taken. Without synthesis of the further techniques employed with a traditional morphological analysis, it is apparent that there would have been insufficient data to reach such an understanding.

This investigation has also developed a new methodology for the consideration of dental pathologies beyond that of linear enamel hypoplasia, which is the dental lesion most commonly examined. This technique showed particularly exciting potential, and this pilot study may lead in future years to the creation of a technique which can provide true insight into the husbandry of animals. Further techniques have also been identified that, while still in their infancies at present, may also indicate some of the potential in future research of this type, and signpost some of the directions that such future research may take.

Additionally, this study has highlighted the necessity for archaeologists to explore what is meant by a 'typical' domesticated pig, even within a relatively confined time period, and challenges the presumption that there is any one clear type. One could conjecture that this would hold true for other species. Whereas subtle differences between sites are always expected, to see such diagnostic differences between all six sites when adding further techniques has not only added layers of information, but demonstrates that we need to explore our expectations of 'normality' and 'difference', with faunal assemblages shown to be far more variable than anyone would have anticipated.

Therefore, while this research has focused on pigs and a particular cause of stress in this species, it is clear that there is great future potential for this methodology to not only be extended to other domesticated species, but also used to investigate a wide range of important archaeological issues about animal husbandry. These are questions which have, until now, been left unanswered. It is hoped that this research has provided the foundation for the future of such a multi-stranded methodology, and that its potential impact for significant zooarchaeological questions has been substantially demonstrated.

Frontispiece

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Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?						
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Bone discounted as very poor condition										
Koekelare	21	10/32 Koekelare A III 199 INV 007 ZAK 8	Loose in box	Bone discounted as very poor condition										
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	BOT KO 94 U /4.BOT /45	Bos	Astragalus	R	All	F	GL	58.66	DL	52.31	Bd	39.14
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	Astragalus	R	All	F	GL	58.98	DL	55.77	Bd	38.67
Koekelare	15	Koekelare gracht zeef +881 047	KO 88.1.047	Bos	Astragalus	L	All	F	GL		DL		Bd	36.50
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 89.1001	Bos	Astragalus	R	All	F	GL	77.85	DL	69.09	Bd	45.86
Koekelare	10	Koekelare Oosthof 1990	KO 90 2 & 3 23/025	Bos	Astragalus	L	All	F	GL		DL		Bd	39.50
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT /44	Bos	Astragalus	L	All	F	GL		DL	54.12	Bd	
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A III 007	Bos	Astragalus	L	All	F	GL	63.16	DL	57.20	Bd	38.95
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	KO 95- A III.002.ZAK 8	Bos	Astragalus	R	All	F	GL	62.24	DL		Bd	
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	ko93.055 612 bot	Bos	Astragalus	L	All	F	GL	65.13	DL		Bd	39.43
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	ko93.055 612 bot	Bos	Astragalus	R	All	F	GL	67.20	DL	57.90	Bd	39.30
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Astragalus	R	All	F	GL		DL		Bd	46.92
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Astragalus	R	All	F	GL		DL		Bd	41.27
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Astragalus	L	All	F	GL		DL	61.07	Bd	37.47
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Astragalus	L	All	F	GL		DL	57.81	Bd	
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Astragalus	R	All	F	GL		DL		Bd	42.33
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Astragalus	R	All	F	GL		DL		Bd	42.07
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Astragalus	R	All	F	GL		DL		Bd	45.97
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Astragalus	L	All	F	GL		DL		Bd	44.79
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Astragalus	L	All	F	GL		DL	52.04	Bd	35.41
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Astragalus	L	All	F	GL		DL		Bd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Astragalus	R	All	F	GL	61.00	DL		Bd	38.20
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Astragalus	R	All	F	GL		DL		Bd	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Astragalus	R	All	F	GL	65.14	DL	64.06	Bd	
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Astragalus	L	All	F	GL		DL	59.73	Bd	
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	Bos	Astragalus	L	All	F	GL	64.93	DL		Bd	41.60
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	Bos	Astragalus	L	All	F	GL	61.96	DL		Bd	
Koekelare	15	Koekelare gracht zeef +881 047	KO 88.1.047	Bos	Calcaneus	R	All	F	GL	86.50	GB	36.61		
Koekelare	10	Koekelare Oosthof 1990	KO 90 3/23 022	Bos	Calcaneus	R	All	F	GL		GB	34.64		
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	Calcaneus	L	M	U	GL		GB	42.56		
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A 007 Beenderen/14	Bos	Calcaneus	L	M	F	GL		GB	41.59		
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.I.ZAK/9	Bos	Calcaneus	L	M	U	GL		GB	44.94		
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	Ko 95 A.III 003 Bovenpuinlaag Beenderen/21	Bos	Calcaneus	R	M	U?	GL		GB	43.76		
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.VI. INV 002 ZAK/22	Bos	Calcaneus	R	All	F	GL		GB	47.75		
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Bos	Calcaneus	L	All	U	GL	110.23	GB	37.32		
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Calcaneus	L	All	F	GL	118.45	GB	41.12		
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Calcaneus	R	All	F	GL	124.52	GB	42.19		
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Calcaneus	R	All	?	GL		GB	44.12		
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Calcaneus	R	All	?	GL		GB			
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Calcaneus	L	All	U	GL		GB			
Koekelare	6	16/32 KO A 95 III ZAK 25/18	Loose in box	Bos	Calcaneus	L	All	?	GL		GB			
Koekelare	6	16/32 KO A 95 III ZAK 25/19	Loose in box	Bos	Calcaneus	L	All	F	GL	114.83	GB	35.74		
Koekelare	6	16/32 KO A 95 III ZAK 25/20	Loose in box	Bos	Calcaneus	R	All	U	GL		GB			

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?														
Koekelare	6	16/32 KO A 95 III ZAK 25/21	Loose in box	Bos	Calcaneus	R	All	?	GL		GB	31.14										
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Calcaneus	L	All	U	GL		GB	41.54										
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Calcaneus	L	All	U	GL	108.41	GB	43.30										
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Calcaneus	R	All	F	GL		GB											
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Calcaneus	R	All	U	GL		GB	44.29										
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Calcaneus	R	All	?	GL		GB	39.69										
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Calcaneus	R	All	F	GL		GB	43.87										
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Calcaneus	L	All	?	GL		GB	37.88										
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Calcaneus	L	All	?	GL		GB	43.67										
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Calcaneus	L	All	F	GL	125.64	GB	40.00										
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Calcaneus	L	All	?	GL		GB	42.18										
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Calcaneus	R	All	F	GL		GB	41.81										
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Calcaneus	L	All	U	GL		GB	42.69										
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Calcaneus	L	M	F	GL		GB	37.06										
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Calcaneus	L	All	U	GL	108.76	GB	32.50										
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Calcaneus	R	All	U	GL	106.33	GB	39.20										
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	Bos	Calcaneus	L	M	U	GL		GB	36.68										
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	Bos	Calcaneus	L	All	F	GL		GB	45.44										
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	Bos	Calcaneus	L	M	F	GL		GB	47.40										
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Calcaneus	L	M	?	GL		GB	43.31										
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	Calcaneus	R	All	U	GL		GB	46.39										
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Calcaneus	L	All	U	GL		GB	37.92										
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	Carpal	R	All	F	GB	33.34												
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II 011 BOT	Bos	Carpal	?	All	F	GB	26.49												
Koekelare	6	16/32 KO A 95 III ZAK 25/46	KO 95 A III INV 006 ZAK 25	Bos	Carpal	L	All	F	GB	43.44												
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.V 004 BOT	Bos	Carpal	?	All	F	GB	34.52												
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1 o spaade BOT /30	Bos	Carpal	?	All	F	GB	27.98												
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Carpal	R	All	F	GB	33.58												
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Carpal	?	All	F	GB	41.26												
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Carpal	?	All	F	GB	31.93												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Carpal	L	All	F	GB	24.30												
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Carpal	?	All	F	GB	19.52												
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Carpal	?	All	F	GB	21.64												
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Carpal	?	All	F	GB	32.62												
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Carpal	?	All	F	GB	29.07												
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	Bos	Carpal	R	All	F	GB	34.52												
Koekelare	10	Koekelare Oosthof 1990	90 KO 3/23 036	Bos	Femur	L	P	F	GL		GLC		Bp		BTR		DC	46.31	SD		Bd	
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	Femur	R	PM	F	GL		GLC		Bp		BTR		DC	43.01	SD		Bd	
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	Femur	R	MD	UD	GL		GLC		Bp		BTR		DC		SD		Bd	74.13
Koekelare	10	Koekelare Oosthof 1990	KO 90 3/23 022	Bos	Femur	R	P	F	GL		GLC		Bp		BTR		DC	39.35	SD		Bd	
Koekelare	10	Koekelare Oosthof 1990	KO 90 3/23 030	Bos	Femur	L	MD	F	GL		GLC		Bp		BTR		DC		SD		Bd	84.94
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Bos	Femur	R	PM	F	GL		GLC		Bp		BTR		DC	40.73	SD		Bd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?														
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Femur	R	M	U (D), ?P	GL		GLC		Bp		BTR		DC		SD	30.53	Bd	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Femur	R	MD	FD	GL		GLC		Bp		BTR		DC		SD	35.42	Bd	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Femur	R	MD	FD	GL		GLC		Bp		BTR		DC		SD	39.48	Bd	91.36
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Femur	?	PM	FP	GL		GLC		Bp		BTR		DC	46.42	SD		Bd	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Femur	R	PM	F	GL		GLC		Bp		BTR		DC	43.41	SD		Bd	
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	Femur	R	PM	BAll FUSING T	GL		GLC		Bp	90.91	BTR		DC	39.51	SD		Bd	
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	BOT KO 93 U GRACHT /33	Bos	Humerus	L	M	?	GL		GLC		Bp		SD	36.39	Bd	75.24	BT			
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Bos	Humerus	L	MD	F	GL		GLC		Bp		SD		Bd	67.49	BT	64.70		
Koekelare	38	24/32. Koekelare 1994. Various details see sheet	KO 94 J 14. BOT	Bos	Humerus	R	MD	F	GL		GLC		Bp		SD		Bd		BT	66.57		
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT /44	Bos	Humerus	R	MD	F	GL		GLC		Bp		SD		Bd		BT	72.72		
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A III.009	Bos	Humerus	R	M	?	GL		GLC		Bp		SD	30.06	Bd		BT			
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 V 002	Bos	Humerus	R	M	?	GL		GLC		Bp		SD	29.62	Bd		BT			
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Humerus	R	M	?	GL		GLC		Bp		SD	33.25	Bd		BT			
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Humerus	?	PM	U (P)														
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD	30.37	Bd		BT			
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD		Bd	86.67	BT	73.92		
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD		Bd		BT			
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD	27.30	Bd		BT			
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Humerus	L	PM	FD	GL		GLC		Bp	86.16	SD		Bd		BT			
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Humerus	L	MD	FP	GL		GLC		Bp		SD	26.01	Bd		BT			
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Humerus	L	D	FD	GL		GLC		Bp		SD		Bd		BT	63.95		
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Humerus	R	PM	FP	GL		GLC		Bp		SD		Bd		BT			
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD	29.32	Bd	64.92	BT	69.33		
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD	29.92	Bd	70.66	BT			
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD		Bd		BT			
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Humerus	L	MD	FD	GL		GLC		Bp		SD	33.38	Bd	70.42	BT	68.01		
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Humerus	L	MD	FD	GL		GLC		Bp		SD	26.93	Bd	69.89	BT	65.50		
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Humerus	R	D	FD	GL		GLC		Bp		SD		Bd	82.00	BT	73.27		
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD	30.80	Bd	77.62	BT	68.01		
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Humerus	L	MD	FD	GL		GLC		Bp		SD		Bd		BT			
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Humerus	L	MD	FD	GL		GLC		Bp		SD	27.75	Bd		BT	66.05		
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Humerus	L	MD	FD	GL		GLC		Bp		SD	25.18	Bd		BT	60.15		
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Humerus	L	M	?	GL		GLC		Bp		SD	34.91	Bd		BT			
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Humerus	L	M	?	GL		GLC		Bp		SD	29.15	Bd		BT			
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Humerus	L	MD	F	GL		GLC		Bp		SD	28.48	Bd		BT			
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Humerus	R	MD	F	GL		GLC		Bp		SD	28.62	Bd	68.00	BT	63.96		
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Humerus	R	MD	F	GL		GLC		Bp		SD	34.17	Bd	77.91	BT	75.59		
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	Humerus	L	PM	F	GL		GLC		Bp	72.08	SD		Bd		BT			
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Humerus	L	D	FD	GL		GLC		Bp		SD		Bd		BT	75.70		
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Humerus	R	M	?	GL		GLC		Bp		SD	33.66	Bd		BT			
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Humerus	R	M	F	GL		GLC		Bp		SD	29.45	Bd		BT			
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD		Bd	74.39	BT	68.03		
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD		Bd	72.36	BT	68.30		
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD		Bd	74.97	BT			

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																										
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD		Bd	72.66	BT	67.20														
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD	32.96	Bd	77.66	BT	68.00														
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	L	M	?	GL		GLC		Bp		SD	33.19	Bd		BT															
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	L	MD	FD	GL		GLC		Bp		SD		Bd	71.59	BT	66.01														
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	L	M	F	GL		GLC		Bp		SD	26.56	Bd		BT															
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	L	MD	FD	GL		GLC		Bp		SD	31.68	Bd	74.40	BT	70.26														
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	L	MD	FD	GL		GLC		Bp		SD	28.34	Bd	65.78	BT	66.46														
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	L	MD	FD	GL		GLC		Bp		SD		Bd	66.27	BT	61.80														
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	L	MD	FD	GL		GLC		Bp		SD		Bd	80.08	BT	74.34														
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	R	D	FD	GL		GLC		Bp		SD		Bd		BT	64.37														
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	R	MD	FD	GL		GLC		Bp		SD	28.52	Bd		BT															
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	R	M	FD	GL		GLC		Bp		SD	35.79	Bd		BT															
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	R	M	FD	GL		GLC		Bp		SD	31.22	Bd		BT															
Koekelare	17	Koekelare gracht handverz	Unmarked bag	Bos	Humerus	R	M	FD	GL		GLC		Bp		SD		Bd		BT															
Koekelare	10	Koekelare Oosthof 1990	90 KO 2 & 3 044 ONOLERIN	Bos	Jaw	L	All	M1 M2 M3	M1L	24.81	1AW		M1PW	16.90	M2L	27.05	M2AW	16.52	M2PW	16.93	M3L	38.83	M3AW	16.50	M3MW	15.17	M3PW	10.43						
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	BOT KO 93 U GRACHT /33	Bos	Jaw	L	All	M1 M2 M3C1E	M1L	26.04	M1AW	12.90	M1PW	13.81	M2L	28.35	M2AW	13.16	M2PW	12.61														
Koekelare	15	Koekelare gracht zeef +881 047	KO 88.1.047	Bos	Jaw	L	All	M2E M3? NP	P4L	20.58	P4W	11.58	M1L	21.72	M1AW	13.65	M1PW	13.75	M2L	23.50	M2AW	14.84	M2PW	13.74										
Koekelare	10	Koekelare Oosthof 1990	KO 90 3 & 2/ 23. 033	Bos	Jaw	L		M3E	M2L	25.34	M2AW	14.07	M2PW	12.98	M3L	35.40	M3AW	14.87	M3MW	12.70														
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.062.U6.1o spade.BOT/37	Bos	Jaw	R	All	M2 M3C2E	M2L	27.45	M2AW	12.85	M2PW	11.85																				
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.062.U6.1o spade.BOT/37	Bos	Jaw	R	All	M1 M2 M3	M1L	21.67	M1AW		M1PW	14.26	M2L	24.85	M2AW	14.95	M2PW	13.92	M3L	34.70	M3AW	14.72	M3MW	13.94	M3PW	7.77						
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	Jaw	R	All	P4 M1 M2 M3	P4L	19.21	P4AW	12.20	M1L	22.12	M1AW	12.78	M1PW	14.24	M2L	25.48	M2AW	14.17	M2PW	14.20	M3L	33.73	M3AW	13.90	M3MW	13.51	M3PW	6.80			
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II 011 BOT	Bos	Jaw	R	All	P4 M1 M2 M3	P4L	20.39	P4W	12.58	M1L	21.09	M1AW	13.31	M1PW	14.75	M2L	23.99	M2AW	15.56	M2PW	14.94	M3L	34.80	M3AW	15.16	M3MW	15.02	M3PW	7.43			
Koekelare	6	16/32 KO A 95 III ZAK 25/52	KO 95 A III INV 006 ZAK 25	Bos	Jaw	L		F	M2L	22.81	M2PW	15.18	M3L	35.35	M3AW	15.56	M3MW	14.00	M3PW	8.20														
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.II.013 BOT	Bos	Jaw	L	All	P4 M1 M2 M3	P4L	21.79	P4W	13.85	M1L	22.52	M1AW	13.59	M1PW	14.77	M2L	25.86	M2AW	13.71	M2PW	14.32	M3L	36.17	M3AW	14.10	M3MW	13.14	M3PW	7.64			
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	Jaw	R	All	M2 M3	M2L	23.97	M2AW	15.75	M2PW	15.46	M3L	36.75	M3AW	16.23	M3MW	15.11	M3PW	8.14												
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	Jaw	L	All	M2 M3	M2L	25.68	M2AW	15.41	M2PW	14.83	M3L	35.94	M3AW	15.37	M3MW	14.32	M3PW	9.49												
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 V 002	Bos	Jaw	R	All	P4 M1 M2 M3N	P4L	18.96	P4W	11.58	M1L	22.18	M1AW	12.40	M1PW	13.73	M2L	24.90	M2AW	13.93	M2PW	13.92										
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1o spaade BOT /30	Bos	Jaw	R	All	P4 M1 M2 M3	P4L	21.41	P4W	13.68	M1L	20.22	M1AW	13.96	M1PW	14.91	M2L	24.68	M2AW	15.75	M2PW	15.55	M3L	38.67	M3AW	12.88	M3MW	11.69	M3PW	6.38			
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1o spaade BOT /30	Bos	Jaw	R	All	M2 M3	P4L		P4W		M1L		M1AW		M1PW		M2L	25.42	M2AW	13.62	M2PW	14.27	M3L		M3AW	14.07	M3MW		M3PW				
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	Bos	Jaw	R	All	M1 M2 M3	M1L	21.28	M1AW	13.09	M1PW	13.88	M2L	21.87	M2AW	14.09	M2PW	14.64	M3L	34.57	M3AW	15.37	M3MW	14.19	M3PW	9.05						
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Jaw	L		M1	M1L	21.79	M1AW	14.98	M1PW	14.44																				
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Jaw	L		M3E	M1L	24.26	M1AW	11.63	M1PW	10.70	M2L	25.49	M2AW	11.11	M2PW	10.75														
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Jaw	L		M3E	M1L	26.54	M1AW	13.69	M1PW	13.85	M2L	26.76	M2AW	15.06	M2PW	13.09														
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Jaw	L		M3E	M2L	24.37	M2AW	14.69	M2PW	14.44	M3L	34.44	M3AW	13.18	M3MW	14.05	M3PW	7.64												
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Jaw	L		M3E	M1L	20.60	M1AW	14.23	M1PW	14.47	M2L	22.72	M2AW	15.98	M2PW	15.58	M3L		M3AW	15.82	M3MW	14.44	M3PW							
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Jaw	L		M2 M3	M2L	23.18	M2AW	14.99	M2PW	13.99	M3L	35.40	M3AW	14.92	M3MW	13.28	M3PW	7.77												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Jaw	R	M3	M3	M3L	35.27	M3AW	12.00	M3MW	12.87	M3PW	6.87																		
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Jaw	R	M3	M3	M3L	39.54	M3AW	16.39	M3MW	15.03	M3PW	8.62																		
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Jaw	L	M3	M3	M3L	36.69	M3AW	15.02	M3MW	13.45	M3PW	8.49																		
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Jaw	R		M3W	M3L	35.24	M3AW	14.92	M3MW	13.65	M3PW	7.56																		
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Jaw	R		M3W	M2L	25.89	M2AW	14.38	M2PW	14.43	M3L	34.04	M3AW	14.31	M3MW	14.41	M3PW	NE												

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																											
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Jaw	R		M3W	M2L	25.23	M2AW	14.73	M2PW	15.00	M3L	33.90	M3AW	13.66	M3MW	13.03	M3PW	6.78														
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M2 M3 CE	P4L		P4W		M1L	27.46	M1AW	13.03	M1PW	12.75	M2L		M2AW		M2PW		M3L		M3AW		M3MW		M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M3E	P4L		P4W		M1L	23.37	M1AW	14.02	M1PW	15.07	M2L	25.71	M2AW	16.61	M2PW	17.05	M3L	36.74	M3AW	16.68	M3MW	15.69	M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M3E	P4L		P4W		M1L	26.10	M1AW	13.22	M1PW	14.04	M2L		M2AW		M2PW		M3L		M3AW		M3MW		M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M2 M3 NP	P4L		P4W		M1L	20.69	M1AW	13.50	M1PW	14.11	M2L	23.06	M2AW	15.50	M2PW	14.56	M3L	34.55	M3AW	16.25	M3MW	14.43	M3PW	7.40			
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M3E WONKY	P4L	21.65	P4W	12.23	M1L	23.72	M1AW	13.01	M1PW	13.95	M2L	26.47	M2AW	14.40	M2PW	13.69	M3L	34.28	M3AW		M3MW		M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M3C2 HALF	P4L		P4W		M1L	25.84	M1AW	14.17	M1PW	14.01	M2L	27.01	M2AW	13.85	M2PW	13.35	M3L		M3AW		M3MW		M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M3E	P4L		P4W		M1L	22.57	M1AW	13.76	M1PW	14.21	M2L	24.30	M2AW	13.93	M2PW	13.51	M3L	32.94	M3AW	14.04	M3MW	12.89	M3PW	8.91			
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M2E M3 NE	P4L	20.77	P4W	13.15	M1L	23.00	M1AW	14.78	M1PW	14.40	M2L	27.25	M2AW	15.16	M2PW	13.54	M3L		M3AW		M3MW		M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M1 M2 E P4 V	P4L		P4W		M1L	22.55	M1AW	11.80	M1PW	12.54	M2L	25.70	M2AW	12.15	M2PW	12.21	M3L		M3AW		M3MW		M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M3E	P4L	20.29	P4W	10.22	M1L	23.42	M1AW	13.02	M1PW	13.55	M2L	24.67	M2AW	13.51	M2PW	11.70	M3L		M3AW	12.37	M3MW		M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M3E	P4L	20.21	P4W	12.46	M1L	21.17	M1AW	13.87	M1PW	15.24	M2L		M2AW		M2PW		M3L		M3AW		M3MW		M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	L	All	M1 E NP	P4L		P4W		M1L	21.93	M1AW	13.42	M1PW	13.91	M2L	26.72	M2AW	14.18	M2PW	14.08	M3L	36.29	M3AW	14.55	M3MW	12.57	M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	R	All	M3E	P4L		P4W		M1L	22.81	M1AW	14.11	M1PW	15.12	M2L	25.91	M2AW	16.05	M2PW	16.76	M3L	37.33	M3AW	16.30	M3MW	15.16	M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	R	All	M3C2E	P4L		P4W		M1L	22.48	M1AW	12.38	M1PW	13.13	M2L	25.82	M2AW	12.08	M2PW	11.52	M3L		M3AW	12.03	M3MW		M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	R	All	M3E	P4L		P4W		M1L		M1AW		M1PW		M2L	22.90	M2AW	14.02	M2PW	16.04	M3L	35.04	M3AW	14.97	M3MW	13.60	M3PW	6.46			
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	R	All	M3E WONKY	P4L	20.97	P4W	11.34	M1L	23.74	M1AW	13.80	M1PW	14.24	M2L	26.96	M2AW	14.81	M2PW	14.47	M3L		M3AW		M3MW		M3PW				
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	R	All	M3E	P4L		P4W		M1L		M1AW		M1PW		M2L	21.90	M2AW	15.02	M2PW	15.36	M3L	33.02	M3AW	15.48	M3MW	14.49	M3PW	10.30			
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	R	All	M3E	P4L		P4W		M1L	19.74	M1AW	12.76	M1PW	11.94	M2L	22.16	M2AW	11.77	M2PW	13.60	M3L	33.71	M3AW	12.10	M3MW	12.83	M3PW	6.49			
Koekelare	13	Koekelare gracht handver 2	Loose in box	Bos	Jaw	R	All	M3C2 E	P4L		P4W		M1L	22.35	M1AW	13.35	M1PW	13.07	M2L	23.86	M2AW	16.15	M2PW	15.58	M3L	32.78	M3AW	13.25	M3MW	11.52	M3PW	5.76			
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Jaw	L	All	M2 M3	M2L	26.19	M2AW	15.82	M2PW	14.36	M3L	37.73	M3AW	15.46	M3MW	14.45	M3PW	8.40														
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Jaw	R	All	M1 M2 M3 C1E	M1L	22.71	M1AW	14.29	M1PW	14.08	M2L	24.11	M2AW	14.17	M2PW	12.19																
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Jaw	R	All	M1 M2 M3	M1L	20.49	M1AW	13.22	M1PW	14.37	M2L	22.26	M2AW	15.11	M2PW	15.76	M3L	35.65	M3AW	16.12											
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Jaw	R	All	P4 M1 M2 M3	P4L	20.84	P4W	12.71	M1L	22.54	M1AW	13.51	M1PW	14.82	M2L	23.61	M2AW	15.53	M2PW	15.32	M3L	37.67	M3AW	15.70	M3MW	14.48	M3PW	9.80			
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Jaw	R	All	P4 M1 M2 M3	P4L	18.51	P4W	13.31	M1L	22.47	M1AW	14.02	M1PW	14.37	M2L	24.39	M2AW	14.97	M2PW	15.81	M3L	36.79	M3AW	14.49	M3MW	14.49	M3PW	7.35			
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Jaw	R	All	P4 M1 M2 M3	P4L	20.11	P4W	14.11	M1L	23.57	M1AW	14.23	M1PW	14.63	M2L	26.13	M2AW	15.06	M2PW	15.40	M3L	36.36	M3AW	14.48	M3MW	13.91	M3PW	7.84			
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Jaw	L	All	M1 M2 M3 C3N	M1L	23.11	M1AW	13.18	M1PW	13.46	M2L	23.85	M2AW	13.68	M2PW	12.85	M3AW	12.11													
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	Bos	Jaw	R	All	M2 M3	M2L	23.31	M2AW	15.23	M2PW	15.22	M3L	35.05	M3AW	15.18	M3PW	14.85	M3PW	9.53													
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Jaw	L	All	P4 M1 M2 M3	P4L	19.95	P4W	12.07	M1L	19.71	M1AW	13.58	M1PW	14.63	M2L	23.89	M2AW	16.22	M2PW	15.45	M3L	34.18	M3AW	15.44	M3MW	14.66	M3PW	7.81			
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Jaw	R	All	M1 M2 M3	M1L	20.35	M1AW	12.70	M1PW	13.55	M2L	22.58	M2AW	14.60	M2PW	14.64	M3L	33.85	M3AW	14.06	M3MW	13.14	M3PW	7.78						
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Jaw	L	All	M1 M2 M3NP	M1L	24.68	M1AW	15.56	M1PW	15.90	M2L	27.77	M2AW	16.41	M2PW	15.01																
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	Jaw	L	All	M2 M3	M2L	25.62	M2AW	16.10	M2PW	15.90	M3L	33.98	M3AW	14.69																		
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	Jaw	R	All	M1 M2 M3 C1E	M1L	23.31	M1AW	13.16	M1PW	14.07	M2L	23.20	M2AW	12.87	M2PW	12.15																
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	Jaw	R	All	P4 M1 M2 M3N	P4L	18.52	P4W	12.48	M1L	20.67	M1AW	13.60	M1PW	14.84	M2L	23.48	M2AW	14.83	M2PW	14.70											
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MC	?	MD	FD	Bp		Bd	47.43	Bd2	42.27	SD		GL		DD		Dp		Dd	29.05											
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MC	L	PM	FPUD	Bp	40.40	Bd		Bd2	45.21	SD	23.14	GL		DD	22.14	Dp	41.95	Dd												
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Bos	MC	R	PM	FP	Bp	55.71	Bd		Bd2		SD		GL		DD	20.28	Dp	32.79	Dd												
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	BOT KO 93.U. gracht/36	Bos	MC	L	PM	F	Bp	57.40	Bd		Bd2		SD		GL		DD		Dp	33.88	Dd												
Koekelare	28	31/32 KO-95-A various details see sheet	BOT KO 95 A. V	Bos	MC	?	MD	FD	Bp		Bd	51.83	Bd2	46.90	SD		GL		DD		Dp		Dd	28.35											
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 125 A/ 001/3 OK	Bos	MC	L	All	F	Bp	54.01	Bd	54.16	Bd2	49.48	SD	30.33	GL	195.72	DD	20.93	Dp	32.73	Dd	29.15											
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 125 A/ 001/3 OK	Bos	MC	L	All	F	Bp	52.68	Bd	51.59	Bd2	47.55	SD	28.27	GL	197.46	DD	20.89	Dp	32.56	Dd	31.69											

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?																		
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 125 A/ 001/3 OK	Bos	MC	L	All	F	Bp	53.63	Bd	52.69	Bd2	48.07	SD	29.08	GL	187.09	DD	19.83	Dp	33.71	Dd	28.46
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 125 A/ 001/3 OK	Bos	MC	L	All	F	Bp	55.19	Bd	55.25	Bd2	50.56	SD	29.08	GL	203.38	DD	21.87	Dp	34.49	Dd	29.19
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 125 A/ 001/3 OK	Bos	MC	R	All	F	Bp	55.71	Bd	55.33	Bd2	50.37	SD	28.27	GL	201.56	DD	21.75	Dp	32.27	Dd	31.36
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 125 A/ 001/3 OK	Bos	MC	R	All	F	Bp		Bd		Bd2		SD	30.15	GL		DD	21.07	Dp		Dd	31.79
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 125 A/ 001/3 OK	Bos	MC	R	All	F	Bp	54.02	Bd	54.45	Bd2	53.02	SD		GL	209.82	DD		Dp	35.60	Dd	30.11
Koekelare	15	Koekelare gracht zeef +881 047	KO 88-1-047	Bos	MC	L	All	F	Bp	52.21	Bd	53.13	Bd2	49.84	SD	30.82	GL	202.20	DD	20.69	Dp	33.61	Dd	30.07
Koekelare	15	Koekelare gracht zeef +881 047	KO 88-1-047	Bos	MC	L	All	F	Bp	57.00	Bd	56.44	Bd2	52.85	SD		GL	198.29	DD	22.88	Dp	37.06	Dd	32.62
Koekelare	15	Koekelare gracht zeef +881 047	KO 88-1-047	Bos	MC	R	All	F	Bp	59.99	Bd	59.18	Bd2	50.72	SD	30.86	GL	214.82	DD	23.26	Dp	35.05	Dd	32.92
Koekelare	10	Koekelare Oosthof 1990	KO 90 2 & 3/23 040	Bos	MC	L	PM	FP	Bp	48.15	Bd		Bd2		SD		GL		DD		Dp	25.79	Dd	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 ?opkuls gracht rond motte OK 31	Bos	MC	L	All	F	Bp	51.32	Bd	52.63	Bd2	48.46	SD	26.19	GL	195.43	DD	19.44	Dp	33.58	Dd	29.69
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 ?opkuls gracht rond motte OK 32	Bos	MC	R	All	F	Bp	54.06	Bd	55.26	Bd2	53.31	SD	29.68	GL	205.47	DD	21.26	Dp	33.83	Dd	33.16
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 061 U1 41 OK	Bos	MC	R	All	F	Bp	47.39	Bd	48.04	Bd2	43.72	SD	22.93	GL	198.61	DD	17.85	Dp	29.66	Dd	28.53
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 061 U1 41 OK	Bos	MC	R	All	F	Bp	51.68	Bd	51.29	Bd2	47.69	SD	27.38	GL	189.55	DD	17.85	Dp	30.52	Dd	28.37
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 37OK	Bos	MC	R	All	F	Bp	55.90	Bd	55.52	Bd2	50.81	SD	27.95	GL	214.61	DD	21.15	Dp	34.40	Dd	31.33
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 37OK	Bos	MC	L	All	F	Bp	54.78	Bd	54.20	Bd2	51.07	SD	30.69	GL	198.96	DD	20.44	Dp	33.99	Dd	30.50
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 37OK	Bos	MC	L	All	F	Bp	54.04	Bd	53.60	Bd2	49.85	SD	27.97	GL	191.08	DD	21.02	Dp	32.29	Dd	29.40
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 085 U1 OK 38	Bos	MC	L	All	F	Bp	53.22	Bd	53.57	Bd2	52.03	SD	30.08	GL	197.40	DD	20.89	Dp	31.91	Dd	28.68
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 085 U1 OK 38	Bos	MC	R	All	F	Bp	55.51	Bd		Bd2		SD		GL		DD		Dp	31.43	Dd	29.86
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	KO 93 O79 U6 BOT /32	Bos	MC	L	PM	FP ?D	Bp	56.81	Bd		Bd2		SD	30.63	GL		DD	21.36	Dp	33.62	Dd	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 U gracht 33 OK	Bos	MC	R	All	F	Bp	47.22	Bd	48.15	Bd2	41.99	SD	23.28	GL	185.72	DD	17.30	Dp	28.92	Dd	27.09
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 U gracht 33 OK	Bos	MC	R	All	F	Bp	52.57	Bd	53.03	Bd2	48.93	SD	27.04	GL	201.07	DD	19.79	Dp	33.86	Dd	28.99
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.079. U6/BOT/42.	Bos	MC	R	PM	F	Bp	58.17	Bd		Bd2		SD		GL		DD		Dp	34.44	Dd	
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.079. U6/BOT/42.	Bos	MC	?	MD	F	Bp		Bd	57.12	Bd2	50.84	SD		GL		DD		Dp		Dd	30.26
Koekelare	38	24/32. Koekelare 1994. Various details see sheet	KO 94 U /48/4 BOT	Bos	MC	L	PM	FP	Bp	51.58	Bd		Bd2		SD		GL		DD		Dp	33.72	Dd	
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	MC	R	PM	FPUD	Bp	56.24	Bd		Bd2	53.17	SD	28.98	GL		DD	19.70	Dp	34.44	Dd	
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT /44	Bos	MC	L	All	FPUD	Bp	58.81	Bd	58.66	Bd2	58.07	SD	30.62	GL	219.65	DD	21.06	Dp	34.96	Dd	31.94
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT /44	Bos	MC	R	PM	FP ?D	Bp	50.70	Bd		Bd2		SD		GL		DD		Dp	30.42	Dd	
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT /44	Bos	MC	?	UDE	UDE	Bp		Bd	52.22	Bd2	50.60	SD		GL		DD		Dp		Dd	30.94
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94.G.3. B/49	Bos	MC	L	PM	FP	Bp	60.32	Bd		Bd2		SD	31.91	GL		DD	22.79	Dp	35.90	Dd	
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94.G.3. B/49	Bos	MC	L	PM	FP	Bp	47.98	Bd		Bd2		SD	31.18	GL		DD	19.86	Dp	33.40	Dd	
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A 007 Beenderen/14	Bos	MC	L	PM	FP	Bp	56.34	Bd		Bd2		SD	28.06	GL		DD	21.03	Dp	32.60	Dd	
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II OO8.	Bos	MC	L	PM	FP	Bp		Bd		Bd2		SD		GL		DD	19.55	Dp		Dd	
Koekelare	6	16/32 KO A 95 III ZAK 25/37	KO 95 A III INV 006 ZAK 25	Bos	MC	R	PM	FPUD	Bp	53.81	Bd		Bd2	51.35	SD	29.04	GL		DD	21.37	Dp	31.25	Dd	
Koekelare	6	16/32 KO A 95 III ZAK 25/38	KO 95 A III INV 006 ZAK 25	Bos	MC	L	PM	FPUD	Bp		Bd		Bd2	52.94	SD	30.31	GL		DD	20.56	Dp		Dd	
Koekelare	6	16/32 KO A 95 III ZAK 25/39	KO 95 A III INV 006 ZAK 25	Bos	MC	?	M	UD	Bp		Bd		Bd2	50.80	SD		GL		DD	21.77	Dp		Dd	
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	KO 95- A III.002.ZAK 8	Bos	MC	L	PM	F	Bp	50.35	Bd		Bd2		SD	26.59	GL		DD	20.49	Dp	31.07	Dd	
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	KO 95- A III.002.ZAK 8	Bos	MC	R	PM	F	Bp	50.74	Bd		Bd2		SD		GL		DD		Dp	29.83	Dd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ 007/ 7 OK	Bos	MC	L	All	F	Bp	55.31	Bd	54.46	Bd2	50.54	SD	30.82	GL	201.14	DD	21.13	Dp	30.79	Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ 007/ 7 OK	Bos	MC	L	All	F	Bp	54.14	Bd	54.23	Bd2	49.83	SD	28.33	GL	203.13	DD	19.43	Dp	31.86	Dd	30.76
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ 007/ 7 OK	Bos	MC	R	All	F	Bp	51.66	Bd	50.65	Bd2	46.83	SD	27.93	GL	202.35	DD	20.29	Dp	31.49	Dd	28.30
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.I.ZAK/9	Bos	MC	L	PM	F	Bp	63.87	Bd		Bd2		SD		GL		DD		Dp	36.84	Dd	
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.III.007 ZAK/9	Bos	MC	?	MD	F	Bp		Bd	52.33	Bd2	50.85	SD		GL		DD		Dp		Dd	29.13
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	MC	L	PM	FP	Bp	54.07	Bd		Bd2		SD	27.52	GL		DD	21.47	Dp	31.71	Dd	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	MC	L	PM	FP	Bp	51.92	Bd		Bd2		SD		GL		DD		Dp	29.84	Dd	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	MC	?	MD	FD	Bp		Bd	48.51	Bd2	47.19	SD	27.18	GL		DD	18.68	Dp		Dd	27.38
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	MC	?	M	UD ?P	Bp		Bd		Bd2	49.85	SD	27.12	GL		DD	20.08	Dp		Dd	
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.V 004 BOT	Bos	MC	L	All	F	Bp	56.75	Bd	57.00	Bd2	50.98	SD	30.55	GL	209.29	DD	20.14	Dp		Dd	31.78
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.V 004 BOT	Bos	MC	R	PM	FP	Bp	52.63	Bd		Bd2		SD		GL		DD		Dp	28.31	Dd	
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.V 004 BOT	Bos	MC	R	All	F	Bp		Bd	51.31	Bd2	49.92	SD	29.83	GL	189.93	DD	21.26	Dp	34.10	Dd	30.15
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	KO 95 A.V 006. onder van pakket. BOT/29	Bos	MC	?	MD	FD	Bp		Bd	40.74	Bd2	40.92	SD	21.36	GL		DD	19.93	Dp		Dd	26.44
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.VI. INV 002 ZAK/22	Bos	MC	R	PM	FP	Bp	52.25	Bd		Bd2		SD		GL		DD		Dp	31.63	Dd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/001/2 OK	Bos	MC	L	All	F	Bp	59.54	Bd	53.24	Bd2		SD	32.03	GL	213.12	DD	21.42	Dp	37.59	Dd	32.89
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/001/2 OK	Bos	MC	R	All	F	Bp	67.01	Bd	65.40	Bd2		SD	35.14	GL	215.97	DD	24.85	Dp	43.35	Dd	35.69
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/003/6 OK	Bos	MC	L	All	F	Bp	57.54	Bd	57.71	Bd2	57.34	SD	30.69	GL	211.64	DD	21.13	Dp	36.10	Dd	32.47
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/003/6 OK	Bos	MC	L	All	F	Bp	60.88	Bd	57.89	Bd2	54.61	SD	30.79	GL	210.77	DD	21.59	Dp	36.95	Dd	32.87
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/003/6 OK	Bos	MC	L	All	F	Bp	54.56	Bd	53.80	Bd2	47.03	SD	25.98	GL	189.02	DD	17.82	Dp	22.41	Dd	28.73
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/003/6 OK	Bos	MC	R	All	F	Bp	56.23	Bd	55.07	Bd2	50.03	SD	27.83	GL	203.27	DD	20.21	Dp	22.01	Dd	31.31
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/007/24 OK	Bos	MC	L	All	F	Bp	57.01	Bd	56.09	Bd2	49.91	SD	28.27	GL	204.05	DD	21.77	Dp	35.36	Dd	31.42
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/007/24 OK	Bos	MC	L	All	F	Bp	53.15	Bd		Bd2		SD	27.41	GL	196.99	DD	20.64	Dp	31.66	Dd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/007/24 OK	Bos	MC	L	All	F	Bp	55.99	Bd	54.69	Bd2	48.99	SD	26.89	GL	193.13	DD	18.10	Dp	35.05	Dd	29.61
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/1 OK	Bos	MC	R	All	F	Bp	54.12	Bd	54.11	Bd2	54.91	SD	28.81	GL	204.77	DD	20.32	Dp	34.47	Dd	30.78
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/1 OK	Bos	MC	R	All	F	Bp	51.77	Bd	53.57	Bd2	48.85	SD	28.33	GL	198.32	DD	19.00	Dp	32.28	Dd	28.69
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/1 OK	Bos	MC	R	All	F	Bp	50.96	Bd	51.01	Bd2	48.51	SD	27.96	GL	198.07	DD	19.49	Dp		Dd	28.38
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/5/OK	Bos	MC	L	All	F	Bp	56.27	Bd	57.27	Bd2	52.38	SD	30.88	GL	207.52	DD	22.60	Dp	35.13	Dd	31.06
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/5/OK	Bos	MC	L	All	F	Bp		Bd	53.24	Bd2	52.79	SD	30.66	GL	206.39	DD	22.51	Dp		Dd	30.04
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/5/OK	Bos	MC	R	All	F	Bp	53.33	Bd	54.05	Bd2	47.15	SD	26.09	GL	193.83	DD	19.17	Dp	31.71	Dd	30.89
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/5/OK	Bos	MC	R	All	F	Bp	53.44	Bd	52.35	Bd2	50.46	SD	28.48	GL	206.12	DD	21.29	Dp	31.90	Dd	30.02
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/5/OK	Bos	MC	R	All	F	Bp	53.92	Bd	54.96	Bd2	52.19	SD	29.95	GL	200.31	DD	22.15	Dp	36.91	Dd	30.69
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/V/002/12 OK	Bos	MC	R	All	F	Bp		Bd		Bd2		SD	30.98	GL	201.84	DD	19.72	Dp	31.65	Dd	31.34
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/V/002/12 OK	Bos	MC	R	All	F	Bp	47.90	Bd		Bd2		SD	27.01	GL	194.22	DD	20.37	Dp	31.44	Dd	
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Bos	MC	L	All	F	Bp	53.27	Bd	52.81	Bd2	48.14	SD	28.76	GL	195.56	DD	21.69	Dp	32.65	Dd	
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Bos	MC	L	PM	FP ?D	Bp	50.37	Bd		Bd2		SD	27.75	GL		DD	20.36	Dp	33.18	Dd	
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 V 002	Bos	MC	L	All	F	Bp	62.39	Bd	59.35	Bd2	55.08	SD	31.88	GL	216.21	DD	23.78	Dp	38.70	Dd	34.46
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1 o spaade BOT /30	Bos	MC	R	PM	FP	Bp	54.84	Bd		Bd2		SD	28.75	GL		DD	21.33	Dp	33.02	Dd	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO93 080 U6 40	Bos	MC	L	All	F	Bp	53.77	Bd	54.04	Bd2	50.14	SD	29.00	GL	201.06	DD	19.41	Dp	34.03	Dd	28.53
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MC	L	PM	FP ?D	Bp	53.76	Bd		Bd2		SD	24.21	GL		DD	18.73	Dp	31.57	Dd	
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MC	L	PM	FP ?D	Bp	51.20	Bd		Bd2		SD	26.90	GL		DD	20.79	Dp	30.37	Dd	
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MC	L	FPUD	FPUD	Bp	52.96	Bd		Bd2	50.28	SD	26.50	GL		DD	19.18	Dp	31.84	Dd	
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MC	L	FPUD	FPUD	Bp	49.86	Bd		Bd2	49.37	SD	26.51	GL		DD	20.73	Dp	30.97	Dd	
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MC	L	FPUD	FPUD	Bp	50.28	Bd		Bd2		SD	26.11	GL		DD	19.98	Dp	29.15	Dd	
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MC	L	PM	FP ?D	Bp		Bd		Bd2		SD		GL		DD		Dp		Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Koekelare	6	16/32 KO A 95 III ZAK 25/15	Loose in box	Bos	MC	R	PM	FPUD	Bp	48.18	Bd		Bd2	47.26	SD	26.41	GL		DD	19.56	Dp	31.34	Dd	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MC	L	PM	FPUD	Bp	59.63	Bd		Bd2	55.02	SD	30.06	GL		DD	22.61	Dp	36.36	Dd	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MC	R	PM	FPUD	Bp	45.47	Bd		Bd2	45.85	SD	26.95	GL		DD	19.47	Dp	27.52	Dd	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MC	L	PM	FPUD	Bp	52.38	Bd		Bd2		SD	29.84	GL		DD	22.80	Dp	33.82	Dd	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MC	?	MD	FD	Bp		Bd	55.74	Bd2	51.10	SD		GL		DD		Dp		Dd	30.46
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	MC	L	PM	FPUD	Bp	51.29	Bd		Bd2		SD		GL		DD	20.03	DP	32.02	DD	
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	MC	L	PM	FPUD	Bp	53.96	Bd		Bd2	48.62	SD	27.31	GL		DD	20.74	DP	32.60	DD	
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	MC	?	M	UD	Bp		Bd		Bd2	47.34	SD		GL		DD		DP		DD	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MC	L	PM	FPUD	Bp	50.49	Bd		Bd2	46.43	SD	26.77	GL		DD	19.47	DP	30.66	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MC	L	PM	FP ?D	Bp		Bd		Bd2		SD	26.91	GL		DD	20.76	DP	33.73	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MC	R	PM	FPUD	Bp	52.04	Bd		Bd2	48.73	SD	27.34	GL		DD	20.54	DP	29.20	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MC	R	PM	FPUD	Bp	52.03	Bd		Bd2	48.77	SD	25.91	GL		DD	19.74	DP	29.05	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MC	R	PM	FPUD	Bp	55.43	Bd		Bd2	51.91	SD	27.72	GL		DD	20.62	DP	32.74	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MC	R	PM	FPUD	Bp	58.89	Bd		Bd2	59.24	SD	28.72	GL		DD	21.27	DP	36.17	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MC	R	PM	FP ?D	Bp	49.71	Bd		Bd2		SD	26.36	GL		DD	19.47	DP	31.00	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MC	R	PM	FPUD	Bp		Bd		Bd2	45.87	SD	27.01	GL		DD	19.76	DP	30.43	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MC	?	MD	FD	Bp		Bd	54.26	Bd2	50.16	SD		GL		DD		DP		Dd	29.00
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	L	PM	FPUD	Bp	50.95	Bd		Bd2		SD	27.34	GL		DD	19.94	Dp	30.06	Dd	
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	L	PM	FPUD	Bp	53.54	Bd		Bd2		SD		GL		DD		Dp	32.52	Dd	
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	L	PM	FP	Bp	60.04	Bd		Bd2		SD		GL		DD		Dp	37.53	Dd	
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	L	PM	FPUD	Bp	51.17	Bd		Bd2	51.70	SD	30.26	GL		DD	21.50	Dp	31.58	Dd	
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	L	PM	FPUD	Bp	51.61	Bd		Bd2		SD	26.72	GL		DD	18.90	Dp	30.00	Dd	
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	R	PM	FPUD	Bp	49.67	Bd		Bd2	52.05	SD	27.30	GL		DD	18.41	Dp		Dd	
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	R	PM	FPUD	Bp		Bd		Bd2	52.70	SD	28.89	GL		DD	18.62	Dp		Dd	
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	R	PM	FP	Bp		Bd		Bd2		SD	28.96	GL		DD	19.87	Dp		Dd	
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	R	PM	FPUD	Bp		Bd		Bd2		SD	27.15	GL		DD	20.37	Dp	32.13	Dd	
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	?	M	M	Bp		Bd		Bd2		SD		GL		DD		Dp		Dd	
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	?	MD	MD	Bp		Bd	58.51	Bd2	54.26	SD		GL		DD		Dp		Dd	33.04
Koekelare	14	Koekelare gracht handverz	Loose in box	Bos	MC	?	M	M	Bp		Bd		Bd2		SD		GL		DD		Dp		Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MC	L	PM	FPUD	Bp		Bd		Bd2		SD	23.71	GL		DD	23.82	Dp		Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MC	L	PM	FPUD	Bp	43.37	Bd		Bd2	48.28	SD	22.92	GL		DD	23.72	Dp		Dd	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	MC	R	PM	FPUD	Bp	52.72	Bd		Bd2		SD	29.07	GL		DD	19.62	Dp	31.65	Dd	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	MC	R	PM	FPUD	Bp	55.13	Bd		Bd2		SD	24.37	GL		DD	19.19	Dp	31.47	Dd	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	MC	R	PM	FPUD	Bp	52.89	Bd		Bd2	52.36	SD	31.00	GL		DD	21.20	Dp	32.91	Dd	
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	MC	L	PM	FP	Bp	54.92	Bd		Bd2		SD		GL		DD		Dp	35.71	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MC	L	PM	FPUD	Bp	47.50	Bd		Bd2	48.67	SD	25.39	GL		DD	18.83	Dp	29.42	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MC	L	PM	FP	Bp	55.39	Bd		Bd2		SD		GL		DD	21.15	Dp	33.71	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MC	R	PM	FP	Bp	54.93	Bd		Bd2		SD		GL		DD		Dp	31.37	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MC	R	PM	FP	Bp	49.50	Bd		Bd2		SD		GL		DD		Dp	30.44	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MC	R	PM	FP	Bp	51.66	Bd		Bd2		SD	24.37	GL		DD	19.64	Dp	28.85	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MC	?	PM	FPUD	Bp		Bd		Bd2	47.89	SD	27.45	GL		DD	19.94	Dp	16.90	Dd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 13	Bos	MC	L	All	F	Bp	54.11	Bd	52.11	Bd2	48.41	SD	27.54	GL		DD	18.27	Dp	32.29	Dd	27.92
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 13	Bos	MC	L	All	F	Bp		Bd	52.33	Bd2	48.46	SD	27.92	GL		DD	19.74	Dp		Dd	29.79
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 13	Bos	MC	R	All	F	Bp	50.57	Bd	51.54	Bd2	47.82	SD		GL		DD	18.94	Dp	30.21	Dd	27.35
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 15	Bos	MC	R	All	F	Bp	52.53	Bd	51.14	Bd2	49.66	SD	28.36	GL		DD	19.45	Dp	33.45	Dd	29.27

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 25	Bos	MC	R	All	F	Bp		Bd	58.57	Bd2	53.45	SD	29.07	GL	201.19	DD	21.59	Dp		Dd	30.78
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 25	Bos	MC	R	All	F	Bp	51.21	Bd	51.11	Bd2	45.97	SD	26.29	GL		DD	19.83	Dp	32.27	Dd	28.24
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 30	Bos	MC	L	All	F	Bp	51.01	Bd	51.76	Bd2	48.11	SD	28.46	GL	189.16	DD	17.44	Dp	30.73	Dd	28.10
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 39	Bos	MC	L	All	F	Bp	50.30	Bd	50.50	Bd2	46.67	SD	27.82	GL	194.14	DD	20.01	Dp	31.91	Dd	26.73
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 39	Bos	MC	R	All	F	Bp	57.00	Bd		Bd2		SD	28.25	GL	200.21	DD	22.32	Dp		Dd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 4	Bos	MC	L	All	F	Bp	53.97	Bd	53.56	Bd2	48.99	SD	29.69	GL	194.70	DD	20.47	Dp	35.22	Dd	29.01
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 4	Bos	MC	R	All	F	Bp	54.72	Bd	52.58	Bd2	48.02	SD	26.38	GL		DD	19.79	Dp	34.28	Dd	28.03
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 46	Bos	MC	L	All	F	Bp	54.29	Bd	55.58	Bd2	52.92	SD	31.45	GL	208.12	DD	22.46	Dp	34.85	Dd	30.11
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 46	Bos	MC	R	All	F	Bp	53.69	Bd		Bd2		SD	27.08	GL		DD		Dp	32.73	Dd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 8	Bos	MC	R	All	F	Bp	56.07	Bd	55.23	Bd2	51.56	SD	30.37	GL		DD	21.10	Dp	35.23	Dd	29.78
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Lose in box Number on bone 23	Bos	MC	L	All	F	Bp	53.93	Bd		Bd2		SD		GL		DD	21.86	Dp	33.03	Dd	
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	Bos	MC	L	All	F	Bp		Bd	54.73	Bd2	48.14	SD		GL	197.47	DD		Dp		Dd	31.47
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	Bos	MC	R	PM	FPUD	Bp	47.91	Bd		Bd2	48.94	SD	26.07	GL		DD	18.57	Dp	29.77	Dd	
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	Bos	MC	R	PM	FPUD	Bp		Bd		Bd2		SD	23.64	GL		DD	18.38	Dp		Dd	
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	Bos	MC	L	PM	FPUD	Bp	59.68	Bd		Bd2	56.31	SD	31.55	GL		DD	21.59	Dp	35.63	Dd	
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	Bos	MC	L	PM	FPUD	Bp	54.14	Bd		Bd2		SD	24.94	GL		DD	20.48	Dp	31.88	Dd	
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	MC	R	PM	FPUD	Bp	55.86	Bd		Bd2	55.01	SD	30.76	GL		DD	21.27	Dp	33.18	Dd	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	Note in box- KO 95 A.I. 003.BOT/11 niets Pl	Bos	MC	L	PM	F	Bp	53.56	Bd		Bd2		SD		GL		DD		Dp		Dd	
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	MC	R	PM	FP	Bp	53.99	Bd		Bd2		SD	28.15	GL		DD	20.42	Dp	32.38	Dd	
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	MC	L	PM	FPUD	Bp	53.65	Bd		Bd2	52.70	SD	28.25	GL		DD	20.21	Dp	32.84	Dd	
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	MC	L	PM	F	Bp	50.83	Bd		Bd2		SD	26.73	GL		DD	17.63	Dp	31.71	Dd	
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	MC	R	PM	F	Bp	55.34	Bd		Bd2		SD		GL		DD		Dp	34.54	Dd	
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box-Ko.93.061.U1.BOT/41	Bos	MC	?	MD	FD	Bp		Bd	50.91	Bd2	47.16	SD		GL		DD		Dp		Dd	30.12
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	MC	R	PM	FPUD	Bp	49.84	Bd		Bd2		SD	26.78	GL		DD	19.79	Dp	29.41	Dd	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	MC	?	M	UD	Bp		Bd		Bd2	51.07	SD		GL		DD		Dp		Dd	
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	MC	L	PM	FP ?D	Bp	54.12	Bd		Bd2		SD	29.44	GL		DD		Dp	33.27	Dd	
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	MC	L	PM	FP ?D	Bp	47.82	Bd		Bd2		SD		GL		DD		Dp		Dd	
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	MC	R	PM	FP ?D	Bp	50.38	Bd		Bd2		SD	26.30	GL		DD	19.83	Dp	33.05	Dd	
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	MC	L	PM	FP ?D	Bp	53.22	Bd		Bd2		SD	26.58	GL		DD	19.82	Dp	31.39	Dd	
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	MC	L	PM	FP ?D	Bp	53.88	Bd		Bd2		SD	28.72	GL		DD	20.05	Dp	34.15	Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	MC	R	PM	FP ?D	Bp		Bd		Bd2		SD	25.08	GL		DD	8.68	Dp	15.95	Dd	14.63
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	MC	?	MD	FD	Bp		Bd	54.13	Bd2	51.58	SD		GL		DD		Dp		Dd	30.60
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	MC	?	MD	FD	Bp		Bd	55.55	Bd2	54.53	SD		GL		DD		Dp		Dd	31.88
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	MC	L	PM	F	Bp	71.85	Bd		Bd2		SD		GL		DD		Dp	45.20	Dd	
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	Note in box- KO.A.III 005.95. BOT/ 27	Bos	MC	R	PM	FP	Bp	54.98	Bd		Bd2		SD	31.38	GL		DD	22.94	Dp	33.62	Dd	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	L	All	F	Bp	57.10	Bd	56.17	Bd2	50.82	SD	31.06	GL	197.02	DD	21.73	Dp	35.72	Dd	31.31
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	L	All	F	Bp	50.51	Bd	51.53	Bd2	47.70	SD	25.66	GL	190.12	DD	18.78	Dp	31.67	Dd	28.08
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	L	All	F	Bp	55.63	Bd	54.24	Bd2	49.89	SD	29.58	GL	199.15	DD	20.79	Dp	32.01	Dd	31.92
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	L	All	F	Bp	54.26	Bd	54.69	Bd2	50.12	SD	28.72	GL	188.00	DD	19.73	Dp	35.02	Dd	29.95
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	L	All	F	Bp	58.52	Bd	56.21	Bd2	51.38	SD	30.04	GL	213.39	DD	23.76	Dp	35.67	Dd	32.82
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	L	All	F	Bp	67.67	Bd	68.76	Bd2	68.57	SD	37.06	GL	230.40	DD	25.32	Dp	42.83	Dd	36.37
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	L	All	F	Bp	55.58	Bd	56.80	Bd2	53.11	SD	30.92	GL	204.11	DD	23.69	Dp	35.33	Dd	31.78
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	L	All	F	Bp		Bd	52.84	Bd2	49.87	SD	28.42	GL		DD	20.37	Dp		Dd	29.80
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	R	All	F	Bp	52.01	Bd	52.67	Bd2	49.54	SD	27.41	GL	193.17	DD	20.68	Dp	31.24	Dd	30.52
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	R	All	F	Bp	50.91	Bd	52.67	Bd2	47.54	SD	27.05	GL	194.88	DD	19.57	Dp	30.56	Dd	29.20
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	R	All	F	Bp	57.29	Bd	60.20	Bd2	51.56	SD	28.95	GL	179.66	DD	20.00	Dp	33.33	Dd	30.37
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	R	All	F	Bp	56.77	Bd	53.19	Bd2	28.32	SD	19.81	GL	197.71	DD	19.90	Dp	36.57	Dd	53.08
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	R	All	F	Bp	59.51	Bd	58.19	Bd2	54.28	SD	33.80	GL	207.66	DD	22.98	Dp	37.43	Dd	32.42
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	R	All	F	Bp	51.68	Bd	53.41	Bd2	50.33	SD	28.44	GL	193.21	DD	21.00	Dp	31.44	Dd	30.45
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	R	All	F	Bp	54.96	Bd	54.53	Bd2	52.82	SD	28.88	GL	209.31	DD	21.10	Dp	35.21	Dd	31.01
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	R	All	F	Bp	48.74	Bd	48.85	Bd2	44.53	SD	25.04	GL	182.06	DD	19.09	Dp	30.73	Dd	29.26
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	R	All	F	Bp	52.11	Bd	50.92	Bd2	48.16	SD	28.02	GL	196.40	DD	22.06	Dp	33.03	Dd	30.21
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MC	R	All	F	Bp	52.49	Bd		Bd2		SD	28.20	GL		DD	20.51	Dp	33.54	Dd	
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	KO 94 U8 BOT/50	Bos	MC	?	MD	F	Bp		Bd	60.32	Bd2	56.43	SD		GL		DD	25.04	Dp		Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MC	?	M	?	Bp		Bd		Bd2		SD	22.40	GL		DD	23.29	Dp		Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	KO 95 Vlad D Loupe 7-17 Oufthant	Bos	MC	L	PM	U	Bp	44.57	Bd		Bd2		SD		GL		DD		Dp	26.49	Dd		
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	MC	L	PM	F	Bp	52.39	Bd		Bd2		SD		GL		DD		Dp	33.72	Dd		.
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MC/MT	?	D	UDE	Bp		Bd	55.51	Bd2		SD		GL		DD		Dp		Dd	31.33	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MC/MT	?	MD	FD	Bp		Bd	53.15	Bd2	49.82	SD	28.75	GL		DD		Dp		Dd	31.36	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MC/MT	?	MD	FD	Bp		Bd		Bd2	60.99	SD		GL		DD		Dp		Dd	35.36	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	MC/MT	?	UDE	UDE	Bp		Bd	51.81	Bd2	51.81	SD		GL		DD		Dp		Dd	29.95	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	MC/MT	?	UDE	UDE	Bp		Bd	54.88	Bd2	54.29	SD		GL		DD		Dp		Dd	30.25	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	MC/MT	?	UDE	UDE	Bp		Bd	48.38	Bd2	48.29	SD		GL		DD		Dp		Dd	30.35	
Koekelare	6	16/32 KO A 95 III ZAK 25/41	KO 95 A III INV 006 ZAK 25	Bos	MC/MT	?	UDE	UDE	Bp		Bd	62.47	Bd2		SD		GL		DD		Dp		Dd	35.65	
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Bos	MC/MT	?	MD	FD	Bp		Bd	50.40	Bd2	46.66	SD		GL		DD		Dp		Dd	28.12	
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	MC/MT	?	DE	U (D)		.		.		.		.		.		.		.		.	.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MC/MT	?	UDE	UD	Bp		Bd	49.72	Bd2		SD		GL		DD		Dp		Dd		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MC/MT	?	UDE	UD	Bp		Bd	49.32	Bd2		SD		GL		DD		Dp		Dd		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MC/MT	?	UDE	UD	Bp		Bd	60.80	Bd2		SD		GL		DD		Dp		Dd		.
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MC/MT	?	MD	FD	Bp		Bd	46.94	Bd2		SD		GL		DD		Dp		Dd	26.05	
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	MC/MT	?	UDE	UDE	Bp		Bd	51.88	Bd2	51.87	SD		GL		DD		Dp		Dd	29.88	
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	KO 95- A III.002.ZAK 8	Bos	MC/MT	?	MD	F	Bp		Bd	53.94	Bd2	48.74	SD		GL		DD		Dp		Dd	30.81	
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.VI. INV 002 ZAK/22	Bos	MC/MT	?	MD	FD	Bp		Bd	58.84	Bd2	57.28	SD		GL		DD		Dp		Dd	32.12	
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	MC/MT	?	UDE	UDE	Bp		Bd	58.12	Bd2	58.91	SD		GL		DD		Dp		Dd	32.45	
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	MC/MT	?	UDE	UDE	Bp		Bd	54.65	Bd2	53.82	SD		GL		DD		Dp		Dd	29.83	
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	MC/MT	?	MD	FD	Bp		Bd	50.82	Bd2	47.09	SD		GL		DD		Dp		Dd		
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	MC/MT	?	UDE	UDE	Bp		Bd	51.29	Bd2	48.12	SD		GL		DD		Dp		Dd	29.40	
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	MT	?	MD	F	Bp		Bd	41.88	Bd2	37.63	SD	20.61	GL		DD	18.94	Dp		Dd	24.58	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 125 A/ 001/3 OK	Bos	MT	L	All	F	Bp	42.20	Bd	49.63	Bd2	44.82	SD	22.88	GL	217.61	DD	21.65	Dp	45.00	Dd	29.62	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 125 A/ 001/3 OK	Bos	MT	L	All	F	Bp	42.72	Bd	50.44	Bd2	47.14	SD	25.24	GL	219.56	DD	26.38	Dp		Dd	28.97	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 125 A/ 001/3 OK	Bos	MT	L	All	F	Bp	50.75	Bd	49.87	Bd2	46.10	SD	26.37	GL	220.61	DD	23.67	Dp	45.82	Dd	29.26	
Koekelare	15	Koekelare gracht zeef +881 047	KO 88-1-047	Bos	MT	L	All	F	Bp	49.18	Bd	53.98	Bd2	50.38	SD	27.70	GL	240.41	DD	26.31	Dp	47.37	Dd	31.76	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 ?opkuls gracht rond motte OK 33	Bos	MT	R	All	F	Bp	47.51	Bd	50.24	Bd2	47.50	SD	24.26	GL	221.29	DD	23.85	Dp	46.47	Dd	30.40	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 ?opkuls gracht rond motte OK 34	Bos	MT	R	All	F	Bp	39.88	Bd	45.23	Bd2	40.95	SD	20.51	GL	203.50	DD	20.49	Dp	38.50	Dd	26.07	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 37OK	Bos	MT	L	All	F	Bp	41.88	Bd	47.16	Bd2	43.32	SD	23.07	GL	206.58	DD	20.93	Dp	37.42	Dd	26.83	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 085 U1 OK 38	Bos	MT	L	All	F	Bp	46.74	Bd	53.44	Bd2	50.24	SD	25.24	GL	224.65	DD	24.51	Dp	46.01	Dd	31.00	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 085 U1 OK 38	Bos	MT	L	All	F	Bp		Bd	50.27	Bd2	48.11	SD	24.79	GL		DD	23.19	Dp		Dd	29.51	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 U gracht 33 OK	Bos	MT	R	All	F	Bp	44.06	Bd		Bd2	46.36	SD	23.64	GL	221.83	DD	24.44	Dp	42.26	Dd	29.91	
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	MT	L	PM	FPUD	Bp	43.96	Bd		Bd2	43.82	SD	20.93	GL		DD	21.63	Dp	42.09	Dd		
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	MT	R	PM	FPUD	Bp	44.89	Bd		Bd2		SD	23.81	GL		DD	23.20	Dp	43.52	Dd		
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94.G.3. B/49	Bos	MT	L	PM	FP	Bp	47.87	Bd		Bd2		SD	23.00	GL		DD	24.95	Dp	47.33	Dd		
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94.G.3. B/49	Bos	MT	L	PM	FP	Bp	44.30	Bd		Bd2		SD	26.32	GL		DD		Dp	42.85	Dd		
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94.G.3. B/49	Bos	MT	?	MD	FD	Bp		Bd	51.34	Bd2	48.04	SD		GL		DD		Dp		Dd	29.29	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A 005 27 OK	Bos	MT	L	All	F	Bp	44.46	Bd	50.36	Bd2	47.05	SD	24.43	GL	225.32	DD	22.96	Dp	44.13	Dd	29.22	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A 005 27 OK	Bos	MT	L	All	F	Bp		Bd	49.61	Bd2	45.74	SD	24.21	GL	218.20	DD	23.59	Dp	38.30	Dd	29.65	
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II OO8.	Bos	MT	L	PM	F	Bp	51.98	Bd		Bd2		SD	31.61	GL		DD	29.35	Dp	54.01	Dd		
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ 007/ 7 OK	Bos	MT	R	All	F	Bp	43.47	Bd	47.20	Bd2	46.51	SD	23.42	GL	211.59	DD	21.98	Dp	39.82	Dd	27.72	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ 007/ 7 OK	Bos	MT	L	All	F	Bp		Bd	49.13	Bd2	45.26	SD	23.06	GL		DD		Dp		Dd		

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Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ 007/ 7 OK	Bos	MT	R	All	F	Bp		Bd	51.39	Bd2	47.54	SD	24.97	GL	219.63	DD	25.19	Dp	42.97	Dd	29.48
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	Ko 95 A.I. 009 Beenderen	Bos	MT	R	PM	FP	Bp	45.07	Bd		Bd2		SD	25.56	GL		DD	23.81	Dp	43.03	Dd	
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.II.010 BOT/18	Bos	MT	L	PM	FP	Bp	42.21	Bd		Bd2		SD	21.14	GL		DD	19.95	Dp		Dd	
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.III.007 ZAK/9	Bos	MT	R	PM	F	Bp	48.20	Bd		Bd2		SD		GL		DD		Dp	43.61	Dd	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	MT	L	PM	FP	Bp		Bd		Bd2		SD	23.40	GL		DD	22.99	Dp		Dd	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	MT	R	PM	FP	Bp	43.98	Bd		Bd2		SD	24.73	GL		DD	23.24	Dp	45.77	Dd	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	MT	L	PM	FP	Bp	45.74	Bd		Bd2		SD		GL		DD		Dp	39.80	Dd	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	MT	R	PM	FP	Bp		Bd		Bd2		SD		GL		DD		Dp		Dd	
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	KO 95 A.V 006. onder van pakket. BOT/29	Bos	MT	R	PM	FP	Bp	45.01	Bd		Bd2		SD	24.09	GL		DD	23.84	Dp	41.56	Dd	
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	Ko 95 A.V. 005 Beenderen/17	Bos	MT	L	PM	F	Bp	41.06	Bd		Bd2		SD	24.51	GL		DD	23.85	Dp	34.77	Dd	
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.VI. INV 002 ZAK/22	Bos	MT	L	PM	FP	Bp	44.41	Bd		Bd2		SD		GL		DD		Dp	40.18	Dd	
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.VI. INV 002 ZAK/22	Bos	MT	L	PM	FP	Bp	44.00	Bd		Bd2		SD		GL		DD		Dp	43.35	Dd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/001/2 OK	Bos	MT	R	All	F	Bp	47.07	Bd	50.47	Bd2		SD	27.48	GL	229.39	DD	25.73	Dp	45.35	Dd	29.65
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/001/2 OK	Bos	MT	R	All	F	Bp	47.75	Bd	51.69	Bd2		SD	24.60	GL	228.14	DD	23.60	Dp	44.41	Dd	27.78
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/003/6 OK	Bos	MT	R	All	F	Bp	47.07	Bd		Bd2		SD	22.99	GL		DD	21.87	Dp	44.65	Dd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/003/6 OK	Bos	MT	R	All	F	Bp	44.87	Bd	48.22	Bd2	45.45	SD	23.72	GL	204.17	DD	22.75	Dp	41.90	Dd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/003/6 OK	Bos	MT	R	All	F	Bp		Bd	49.73	Bd2	46.68	SD	24.30	GL	221.06	DD	23.83	Dp		Dd	29.45
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/007/24 OK	Bos	MT	R	All	F	Bp	46.65	Bd	51.54	Bd2	49.61	SD	23.46	GL	224.46	DD	23.96	Dp	44.05	Dd	29.66
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/007/24 OK	Bos	MT	R	All	F	Bp	48.67	Bd	49.15	Bd2	51.65	SD	25.18	GL	218.59	DD	25.08	Dp	45.81	Dd	29.27
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/1 OK	Bos	MT	R	All	F	Bp	46.90	Bd	52.05	Bd2	46.40	SD	25.54	GL	218.38	DD	23.64	Dp		Dd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/1 OK	Bos	MT	L	All	F	Bp	44.60	Bd	51.08	Bd2	47.46	SD	24.84	GL	217.48	DD	23.08	Dp	42.15	Dd	28.09
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/1 OK	Bos	MT	L	All	F	Bp		Bd	49.64	Bd2	44.95	SD	22.20	GL		DD	21.32	Dp		Dd	28.33
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/1 OK	Bos	MT	R	All	F	Bp	45.21	Bd	50.24	Bd2	46.66	SD	24.93	GL	221.09	DD	25.12	Dp	43.34	Dd	31.45
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/1 OK	Bos	MT	L	All	F	Bp		Bd	50.31	Bd2	49.95	GL	0.03			DD	24.19	Dp	38.86	Dd	30.55
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/5/OK	Bos	MT	R	All	F	Bp	39.66	Bd	47.89	Bd2	43.51	SD	21.01	GL	214.49	DD	21.56	Dp	38.23	Dd	26.95
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/5/OK	Bos	MT	L	All	F	Bp	40.04	Bd	41.98	Bd2	39.41	SD	21.66	GL	201.23	DD	18.98	Dp	36.90	Dd	25.28
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/III/008/5/OK	Bos	MT	L	All	F	Bp	46.61	Bd	53.31	Bd2	50.17	SD	25.63	GL	235.47	DD	26.11	Dp	43.78	Dd	32.34
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/V/002/12 OK	Bos	MT	L	All	F	Bp	45.30	Bd	45.96	Bd2	48.31	SD	23.82	GL	220.38	DD	24.05	Dp	43.10	Dd	28.98
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A/V/002/12 OK	Bos	MT	L	All	F	Bp		Bd		Bd2		SD	26.38	GL		DD	25.66	Dp		Dd	
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 V 002	Bos	MT	L	PM	FPUD	Bp	42.09	Bd		Bd2	47.04	SD	23.21	GL		DD	22.44	Dp	41.33	Dd	
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 V 002	Bos	MT	R	All	F	Bp	50.01	Bd		Bd2	51.47	SD	28.65	GL	235.81	DD	26.58	Dp	49.29	Dd	33.73
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1 o spaade BOT /30	Bos	MT	L	PM	FPUD	Bp	50.33	Bd		Bd2	58.99	SD	28.12	GL		DD	25.98	Dp	48.87	Dd	
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1 o spaade BOT /30	Bos	MT	R	PM	FPUD	Bp	45.80	Bd		Bd2	48.34	SD	25.47	GL		DD	23.35	Dp	45.28	Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MT	R	PM	FP	Bp	48.66	Bd		Bd2		SD	26.10	GL		DD	25.08	Dp	47.65	Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MT	L	PM	FP	Bp	47.84	Bd		Bd2		SD	25.08	GL		DD	25.77	Dp	47.32	Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MT	R	PM	FP	Bp	57.73	Bd		Bd2		SD		GL		DD		Dp	56.85	Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MT	R	PM	FPUD	Bp	45.62	Bd		Bd2	49.18	SD	24.20	GL		DD	24.52	Dp	45.07	Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MT	L	PM	FP	Bp	43.81	Bd		Bd2		SD		GL		DD		Dp	45.75	Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MT	R	PM	FPUD	Bp	41.30	Bd		Bd2	49.40	SD	22.06	GL		DD	23.99	Dp	42.69	Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MT	L	PM	FP	Bp	43.77	Bd		Bd2		SD	24.62	GL		DD	22.93	Dp	44.06	Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?																
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MT	L	PM	FP	Bp	47.46	Bd		Bd2		SD		GL		DD		Dp	52.08	Dd	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MT	L	PM	FP	Bp	43.06	Bd		Bd2		SD	23.45	GL		DD	23.24	Dp	41.89	Dd	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	MT	R	All	F	Bp	54.50	Bd		Bd2		SD	31.22	GL	257.25	DD	27.81	Dp	52.61	Dd	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	MT	R	PM	FPUD	Bp	44.02	Bd		Bd2	49.67	SD	22.77	GL		DD	22.50	Dp	44.64	Dd	
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	MT	R	PM	FPUD	Bp	45.20	Bd		Bd2	50.00	SD	24.71	GL		DD	23.78	Dp	45.46	Dd	
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	MT	R	PM	FPUD	Bp	43.69	Bd		Bd2	44.65	SD	24.68	GL		DD	22.34	Dp	41.23	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MT	L	PM	FP	Bp	52.03	Bd		Bd2		SD		GL		DD		Dp	46.09	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MT	R	PM	FPUD	Bp	44.79	Bd		Bd2	51.89	SD	25.68	GL		DD	24.85	Dp	45.10	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MT	R	PM	FP	Bp	46.18	Bd		Bd2		SD	23.49	GL		DD	23.50	Dp	43.97	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MT	?	PM	FPUD	Bp		Bd		Bd2	48.17	SD	24.97	GL		DD	24.32	Dp		Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MT	?	MD	FD	Bp		Bd	47.35	Bd2	46.87	SD	24.78	GL		DD		Dp		Dd	29.41
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MT	?	MD	FD	Bp		Bd	50.09	Bd2	47.31	SD		GL		DD		Dp		Dd	29.68
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	MT	?	MD	FD	Bp		Bd	55.76	Bd2	53.26	SD		GL		DD		Dp		Dd	29.75
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone ?	Bos	MT	L	All	F	Bp	42.21	Bd	48.80	Bd2	44.93	SD	22.06	GL	219.34	DD	21.39	Dp	40.62	Dd	28.11
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 13	Bos	MT	R	All	F	Bp	44.09	Bd	48.86	Bd2	45.57	SD	23.14	GL	219.02	DD	21.95	Dp	40.31	Dd	28.43
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 13	Bos	MT	L	All	F	Bp	40.12	Bd	49.02	Bd2	42.35	SD	21.21	GL	215.84	DD	21.37	Dp	40.00	Dd	27.27
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 26	Bos	MT	L	All	F	Bp	46.63	Bd	51.35	Bd2	48.66	SD	25.28	GL	219.22	DD	25.43	Dp	44.53	Dd	30.14
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 28	Bos	MT	R	All	F	Bp		Bd	48.18	Bd2	47.73	SD	25.91	GL	232.72	DD	24.07	Dp	38.61	Dd	29.05
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 30	Bos	MT	L	All	F	Bp	44.73	Bd	51.10	Bd2	47.82	SD	26.51	GL	220.76	DD	22.79	Dp	43.11	Dd	28.49
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 30	Bos	MT	L	All	F	Bp	40.83	Bd	45.68	Bd2	40.97	SD	20.64	GL	218.12	DD	22.01	Dp	39.63	Dd	26.71
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 30	Bos	MT	R	All	F	Bp	48.73	Bd	53.12	Bd2	47.82	SD	25.49	GL	230.15	DD	24.68	Dp	46.47	Dd	31.76
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 36	Bos	MT	L	All	F	Bp	45.46	Bd	51.66	Bd2	48.24	SD	24.03	GL	226.20	DD	22.13	Dp	43.66	Dd	31.33
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 36	Bos	MT	R?	All	F	Bp		Bd	51.44	Bd2	47.57	SD	24.20	GL	205.61	DD	23.64	Dp	43.38	Dd	28.24
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 4	Bos	MT	L	All	F	Bp	47.21	Bd	54.46	Bd2	51.39	SD	27.36	GL	238.50	DD	24.70	Dp	45.46	Dd	31.69
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 44	Bos	MT	L	All	F	Bp	48.61	Bd	51.11	Bd2	47.65	SD	26.35	GL	218.57	DD	23.44	Dp	46.17	Dd	29.49
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 44	Bos	MT	L	All	F	Bp	44.99	Bd	46.60	Bd2	41.95	SD	22.19	GL	204.56	DD	21.24	Dp	40.96	Dd	28.58
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 44	Bos	MT	R	All	F	Bp	47.66	Bd	54.13	Bd2	51.75	SD	29.44	GL	232.88	DD	27.48	Dp	46.35	Dd	30.51
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 47	Bos	MT	R	All	F	Bp	48.33	Bd	53.83	Bd2	50.33	SD	27.93	GL	230.01	DD	24.65	Dp	46.78	Dd	32.64
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	Bos	MT	R	PM	FPUD	Bp	46.83	Bd		Bd2	51.31	SD	26.09	GL		DD	24.52	Dp	47.09	Dd	
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	Bos	MT	R	PM	FPUD	Bp	42.86	Bd		Bd2	49.28	SD	22.88	GL		DD	23.24	Dp	41.58	Dd	
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	MT	L	PM	FPUD	Bp	43.02	Bd		Bd2		SD	24.80	GL		DD	23.93	Dp	44.64	Dd	
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	MT	L	PM	FPUD	Bp	44.79	Bd		Bd2	50.73	SD	24.70	GL		DD	23.90	Dp	43.32	Dd	
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	MT	R	PM	FP	Bp	55.71	Bd		Bd2		SD		GL		DD		Dp	49.98	Dd	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	Note in box- KO 95 A.I. 003.BOT/11 niets Pl	Bos	MT	L	PM	F	Bp	42.79	Bd		Bd2		SD	24.61	GL		DD	23.14	Dp	43.08	Dd	
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	MT	L	PM	FP	Bp	44.30	Bd		Bd2		SD	22.90	GL		DD	23.06	Dp	42.22	Dd	
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	MT	R	PM	FPUD	Bp	45.34	Bd		Bd2	49.85	SD	25.59	GL		DD	24.66	Dp	44.12	Dd	
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	MT	R	PM	FPUD	Bp	42.76	Bd		Bd2	48.28	SD	22.93	GL		DD	21.58	Dp	41.15	Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box-Ko.93.061.U1.BOT/41	Bos	MT	L	PM	FPUD	Bp	45.37	Bd		Bd2	51.03	SD	22.48	GL		DD	21.93	Dp	45.03	Dd	
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box-Ko.93.061.U1.BOT/41	Bos	MT	R	PM	FPUD	Bp	43.79	Bd		Bd2	51.81	SD	25.15	GL		DD	23.38	Dp	43.38	Dd	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	MT	R	PM	FPUD	Bp	48.16	Bd		Bd2		SD	24.12	GL		DD	24.49	Dp	44.00	Dd	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	MT	R	All	F	Bp	49.55	Bd	54.35	Bd2	51.57	SD	26.12	GL	235.95	DD	25.41	Dp	43.73	Dd	32.89
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	MT	R	PM	FP	Bp		Bd		Bd2	45.85	SD	23.32	GL		DD	22.08	Dp	39.76	Dd	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	MT	R	PM	FPUD	Bp	41.04	Bd		Bd2	45.86	SD	22.98	GL		DD	21.74	Dp	42.93	Dd	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	MT	?	MD	FD	Bp		Bd	52.65	Bd2	51.19	SD		GL		DD		Dp		Dd	31.24
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	MT	R	PM	FPUD	Bp	41.75	Bd		Bd2	42.89	SD	20.59	GL		DD	20.24	Dp		Dd	
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	MT	L	PM	FPUD	Bp	45.29	Bd		Bd2	43.66	SD	21.32	GL		DD	22.33	Dp	42.24	Dd	
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	MT	R	PM	FPUD	Bp		Bd		Bd2		SD	24.92	GL		DD	23.59	Dp	41.30	Dd	
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	MT	R	PM	FP ?D	Bp	38.68	Bd		Bd2		SD	22.66	GL		DD	22.69	Dp	35.81	Dd	
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	MT	R	PM	FP ?D	Bp	41.03	Bd		Bd2		SD	23.20	GL		DD	22.45	Dp	39.84	Dd	
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	MT	R	PM	FPUD	Bp	45.47	Bd		Bd2	54.00	SD	27.30	GL		DD		Dp	44.32	Dd	
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	MT	R	PM	FPUD	Bp	49.07	Bd		Bd2	55.53	SD	25.91	GL		DD	24.42	Dp	49.53	Dd	
Koekelare	18	Ream Koekelare gracht zeef	Note in box-RUND- 15e eeuw KO HAND?	Bos	MT	L	All	F	Bp	45.20	Bd	52.10	Bd2	49.26	SD	25.95	GL	235.64	DD	23.27	Dp	43.57	Dd	30.14
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box-Ko.94.U7.BOT	Bos	MT	R	PM	FPUD	Bp		Bd		Bd2		SD	25.19	GL		DD	23.11	Dp	43.49	Dd	
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box-Ko.94.U7.BOT	Bos	MT	L	PM	FPUD	Bp	41.61	Bd		Bd2	46.37	SD	23.57	GL		DD	23.03	Dp	41.42	Dd	
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	Note in box-KO.A.III 005.95. BOT/ 27	Bos	MT	L	PM	FP	Bp	47.27	Bd		Bd2		SD	25.76	GL		DD		Dp	44.65	Dd	
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	Note in box-KO.A.III 005.95. BOT/ 27	Bos	MT	R	PM	FPUD	Bp	42.88	Bd		Bd2	47.23	SD	22.44	GL		DD	22.17	Dp	41.83	Dd	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	R	All	F	Bp	53.75	Bd	55.90	Bd2	53.50	SD	29.56	GL	246.70	DD	26.83	Dp	47.66	Dd	34.15
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	R	All	F	Bp	46.05	Bd	52.66	Bd2	50.30	SD	26.73	GL	225.71	DD	23.57	Dp	47.37	Dd	29.11
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	R	All	F	Bp	47.33	Bd	52.73	Bd2	50.70	SD	24.61	GL	235.47	DD	24.56	Dp	45.97	Dd	30.91
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	R	All	F	Bp	47.20	Bd	51.72	Bd2	49.48	SD	25.83	GL	229.01	DD	25.96	Dp	44.71	Dd	30.58
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	R	All	F	Bp	46.16	Bd	51.38	Bd2	50.15	SD	26.58	GL	230.31	DD	24.71	Dp	44.31	Dd	30.58
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	R	All	F	Bp	46.33	Bd	50.60	Bd2	46.36	SD	24.28	GL	223.52	DD	22.08	Dp	43.60	Dd	30.92
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	R	All	F	Bp		Bd	48.58	Bd2	43.69	SD	22.10	GL		DD	21.33	Dp		Dd	29.85
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp	51.90	Bd	57.62	Bd2	54.24	SD	27.37	GL	249.87	DD	26.94	Dp	45.61	Dd	33.20
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp	45.95	Bd	52.36	Bd2	45.36	SD	24.46	GL	221.53	DD	24.16	Dp	45.53	Dd	31.53

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp	46.14	Bd	51.40	Bd2	47.31	SD	24.34	GL	214.58	DD	23.17	Dp	44.10	Dd	30.26	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp	44.01	Bd	47.64	Bd2	47.64	SD	22.33	GL	219.56	DD	23.95	Dp	42.51	Dd	29.75	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp	42.26	Bd		Bd2		SD	21.89	GL		DD	21.03	Dp	37.47	Dd		
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp		Bd	46.46	Bd2	46.46	SD	22.00	GL		DD	21.56	Dp		Dd	28.47	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp		Bd	51.29	Bd2	51.29	SD	25.01	GL		DD	25.57	Dp		Dd	31.76	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp	45.53	Bd	47.37	Bd2	47.37	SD	26.23	GL	235.36	DD	24.72	Dp	43.28	Dd	30.76	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp	46.68	Bd	49.77	Bd2	49.77	SD	23.88	GL	228.39	DD	23.33	Dp	43.83	Dd	30.00	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp	46.08	Bd	47.39	Bd2	47.39	SD	25.00	GL	236.76	DD	23.74	Dp	43.44	Dd	30.48	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp	43.80	Bd	44.11	Bd2	44.11	SD	23.85	GL	218.37	DD	21.44	Dp	41.30	Dd	28.86	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	OK Koekelare 88 Handverzameld	Bos	MT	L	All	F	Bp	46.61	Bd	47.16	Bd2	47.16	SD	25.23	GL	225.56	DD	23.11	Dp	39.74	Dd	28.20	
Koekelare	17	Koekelare gracht handverz	Loose in box	Bos	MT	?	M	?	Bp		Bd		Bd2		SD	20.62	GL		DD		Dp		Dd		
Koekelare	10	Koekelare Oosthof 1990	90 KO 3 & 2/23 038	Bos	MT	?	MD	F	Bp		Bd	47.60	Bd2	42.51	SD		GL		DD		Dp		Dd		
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	MT	L	PM	FPUD	Bp	42.23	Bd		Bd2	43.69	SD	25.39	GL		DD	23.57	Dp	42.33	Dd		.
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	MT	?	MD	FD ?P	Bp		Bd		Bd2		SD		GL		DD		Dp		Dd	30.45	.
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	MT	R	All	F	Bp	46.91	Bd	53.53	Bd2	50.36	SD	26.52	GL	209.55	DD	23.81	Dp		Dd	28.22	
Koekelare	10	Koekelare Oosthof 1990	KO 90 2/23 005	Bos	MT	L	PM	F	Bp	43.38	Bd		Bd2		SD		GL		DD		Dp	40.23	Dd		
Koekelare	10	Koekelare Oosthof 1990	KO 90 3 & 2/ 23. 035	Bos	MT	L	PM	FP	Bp	45.64	Bd		Bd2		SD	27.86	GL		DD		Dp		Dd		
Koekelare	6	16/32 KO A 95 III ZAK 25/40	KO 95 A III INV 006 ZAK 25	Bos	MT	L	PM	FPUD	Bp	45.21	Bd		Bd2		SD	25.74	GL		DD	23.88	Dp	43.28	Dd		
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Bos	MT	R	PM	FP ?D	Bp	43.84	Bd		Bd2		SD	23.12	GL		DD	23.00	Dp	40.36	Dd		
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Bos	MT	L	PM	FP ?D	Bp		Bd		Bd2		SD	24.67	GL		DD	26.67	Dp		Dd		
Koekelare	5	KO 95-93 A V	KO 95 VLAB B 7 BOT 17 GRONDPLAN 1 -1500 M BOT	Bos	MT	R	PM	FPUD	Bp	40.18	Bd		Bd2	42.19	SD	20.37	GL		DD	19.74	Dp	36.84	Dd		
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	MT	L	PM	F	Bp	45.93	Bd		Bd2		SD	23.94	GL		DD		Dp	45.80	Dd		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MT	R	FPUD	FPUD	Bp	43.76	Bd		Bd2	47.33	SD	24.52	GL		DD	22.66	Dp		Dd		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MT	L	FPUD	FPUD	Bp		Bd		Bd2	45.77	SD	23.13	GL		DD	20.95	Dp		Dd		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MT	L	PM	FP ?D	Bp		Bd		Bd2		SD	22.75	GL		DD	21.87	Dp		Dd		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MT	L	PM	FP ?D	Bp	43.01	Bd		Bd2		SD		GL		DD		Dp	42.07	Dd		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MT	L	PM	FPUD	Bp	45.42	Bd		Bd2	48.84	SD	25.47	GL		DD	22.04	Dp	43.41	Dd		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MT	?	MD	FD ?P	Bp		Bd	45.03	Bd2	43.38	SD		GL		DD		Dp		Dd	25.42	.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MT	?	MD	FD	Bp		Bd	52.24	Bd2	49.68	SD		GL		DD		Dp		Dd	29.93	.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	MT	?	MD	FD	Bp		Bd	46.34	Bd2	43.51	SD		GL		DD		Dp		Dd	24.80	.
Koekelare	6	16/32 KO A 95 III ZAK 25/16	Loose in box	Bos	MT	R	PM	FP ?D	Bp	45.50	Bd		Bd2		SD	25.06	GL		DD	22.28	Dp	40.83	Dd		
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MT	R	PM	F	Bp	44.05	Bd		Bd2		SD	24.06	GL		DD	24.37	Dp	42.07	Dd		
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MT	?	M	UD	Bp		Bd		Bd2	52.12	SD		GL		DD		Dp		Dd		
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MT	?	M	UD	Bp		Bd		Bd2	50.24	SD		GL		DD		Dp		Dd		
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MT	R	PM	FP	Bp	48.68	Bd		Bd2		SD		GL		DD		Dp	47.28	Dd		
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MT	R	PM	FP	Bp	41.22	Bd		Bd2		SD		GL		DD		Dp	38.50	Dd		
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MT	R	PM	FP	Bp		Bd		Bd2		SD		GL		DD		Dp		Dd		

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																		
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MT	L	PM	FP	Bp	44.03	Bd		Bd2		SD		GL		DD		Dp	44.48	Dd			
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	MT	L	PM	FPUD	Bp	43.46	Bd		Bd2	47.88	SD	27.17	GL		DD	22.98	Dp	44.23	Dd			
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	MT	L	PM	FPUD	Bp	45.41	Bd		Bd2	43.63	SD	22.10	GL		DD	21.13	DP	41.94	DD			
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MT	L	PM	FPUD	Bp	43.07	Bd		Bd2	48.56	SD		GL		DD		DP	44.18	Dd			
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MT	L	PM	FPUD	Bp	44.19	Bd		Bd2	50.87	SD	25.21	GL		DD	23.39	DP	45.07	Dd			
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MT	L	PM	FP ?D	Bp	45.68	Bd		Bd2		SD	21.84	GL		DD	21.43	DP	39.18	Dd			
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MT	R	PM	FP ?D	Bp	40.72	Bd		Bd2		SD		GL		DD		DP	36.20	Dd			
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	MT	R	PM	FPUD	Bp	42.49	Bd		Bd2	48.21	SD	22.33	GL		DD	22.25	DP	41.74	Dd			
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.062.U6.1o spade.BOT/37	Bos	MT/MC	?	UDE	UDE	Bp		Bd	48.36	Bd2	48.58	SD		GL		DD		Dp		Dd	28.86		
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	NC	R	All	F	GB	50.42																
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	NC	R	All	F	GB	53.78																
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.I. 010 Beenderen/20	Bos	NC	R	All		GB	48.11																
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	Ko 95 A.V. 005 Beenderen/17	Bos	NC	R	All	F	GB	52.08																
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	NC	L	All	F	GB	47.11																
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	NC	R	All	F	GB	55.00																
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	NC	R	All	F	GB	52.65																
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	NC	R	All	F	GB	51.58																
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	NC	L	All	F	GB	47.76																
Koekelare	6	16/32 KO A 95 III ZAK 25/47	KO 95 A III INV 006 ZAK 25	Bos	NC	R	All	F	GB	49.72																
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Bos	NC	L	All	F	GB	46.44																
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	NC	L	All	F	GB	48.86																
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	NC	R	All	F	GB	57.28																
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	NC	R	All	F	GB	55.15																
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	NC	R	All	F	GB	46.99																
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	NC	R	All	F	GB	50.98																
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	NC	L	All	F	GB	50.59		.		.		.		.		.		.		.		.
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	NC	L	All	F	GB	51.26		.		.		.		.		.		.		.		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	NC	L	All	F	GB	44.98		.		.		.		.		.		.		.		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	NC	L	All	F	GB	50.76		.		.		.		.		.		.		.		.
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	NC	L	All	F	GB	47.55																
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	NC	R	All	F	GB	46.63																
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	NC	R	All	F	GB																	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	NC	R	All	F	GB	58.21																
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	NC	L	All	F	GB	52.01																
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	NC	R	All	F	GB	50.40																
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	NC	R	All	F	GB	51.96																
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	NC	L	All	F	GB	49.57																
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	NC	L	All	F	GB	51.61																
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Patella	R	All	F	GL	60.33	GB	43.05														
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A III.009	Bos	Pelvis	L	All	F	GL		LA	62.58	LAR	52.70												
Koekelare	10	Koekelare Oosthof 1990	90 KO 3/23 036	Bos	Pelvis	R	All	F	GL		LA	61.75	LAR	46.82												
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Bos	Pelvis	R	Acet	F	GL		LA		LAR	55.50												

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Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	BOT KO 94 U /4.BOT /45	Bos	Pelvis	R	Acet	F	GL		LA	65.56	LAR	49.20		
Koekelare	38	24/32. Koekelare 1994. Various details see sheet	KO 94 U /48/4 BOT	Bos	Pelvis	L	Acet	F	GL		LA	65.88	LAR	55.22		
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.I.ZAK/9	Bos	Pelvis	R	Acet	F	GL		LA	58.08	LAR	48.26		
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	Bos	Pelvis	R	All	F	GL		LA		LAR	69.84		
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Pelvis	L	Acet	F	GL		LA	74.85	LAR	49.16		
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Pelvis	L	All	F	GL		LA	67.56	LAR	49.46		
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Pelvis	R	Acet	F?	GL		LA	65.71	LAR	51.27		
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Pelvis	R	All	F	GL		LA	68.81	LAR			
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Pelvis	L	Acet	F	GL		LA	74.10	LAR	58.47		
Koekelare	14	Koekelare gracht handverz	Unmarked bag	Bos	Pelvis	L	M	F	GL		LA	71.45	LAR	55.37		
Koekelare	14	Koekelare gracht handverz	Unmarked bag	Bos	Pelvis	L	M	F	GL		LA		LAR	44.18		
Koekelare	14	Koekelare gracht handverz	Unmarked bag	Bos	Pelvis	R	M	F	GL		LA	62.55	LAR	49.02		
Koekelare	14	Koekelare gracht handverz	Unmarked bag	Bos	Pelvis	R	M	F	GL		LA		LAR	47.03		
Koekelare	14	Koekelare gracht handverz	Unmarked bag	Bos	Pelvis	R	M	F	GL		LA	62.02	LAR	50.89		
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	BOT KO 93 U GRACHT /33	Bos	Ph 1	L	All	F	GLPe	63.69	Bp	28.01	SD	24.41	Bd	26.09
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	Ph 1	R	All	F	GLPe	54.51	Bp	29.66	SD	23.36	Bd	27.24
Koekelare	15	Koekelare gracht zeef +881 047	KO 88.1.047	Bos	Ph 1	R	All	F	GLPe	53.38	Bp	24.23	SD	20.44	Bd	22.70
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 1PL	Bos	Ph 1	L	All	F	GLpe	55.00	Bp		SD	21.87	Bd	
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 1PL	Bos	Ph 1	R	All	F	GLpe	69.57	Bp	31.57	SD	25.23	Bd	29.90
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 26PL	Bos	Ph 1	L	All	F	GLpe	56.51	Bp	26.49	SD	22.50	Bd	25.42
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 2PL	Bos	Ph 1	R	All	F	GLpe	58.99	Bp	26.56	SD	22.33	Bd	27.16
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 30PE	Bos	Ph 1	L	All	F	GLpe	56.28	Bp	27.04	SD	22.23	Bd	24.55
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 3PL	Bos	Ph 1	L	All	F	GLpe	57.02	Bp	27.78	SD	22.65	Bd	25.65
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 3PL	Bos	Ph 1	R	All	F	GLpe	58.23	Bp	27.79	SD	23.58	Bd	26.02
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 46PL	Bos	Ph 1	L	All	F	GLpe	55.61	Bp	25.08	SD	21.30	Bd	23.77
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 5PE	Bos	Ph 1	R	All	F	GLpe	61.43	Bp		SD	23.51	Bd	24.61
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 5PL	Bos	Ph 1	L	All	F	GLpe	59.15	Bp	25.77	SD	22.40	Bd	24.23
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 6P	Bos	Ph 1	R	All	F	GLpe	61.40	Bp	27.16	SD	21.25	Bd	28.48
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 05 U1 39 Number on bone 7PE	Bos	Ph 1	R	All	F	GLpe	67.54	Bp	34.35	SD	27.63	Bd	30.77
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 061 U1 28 Number on bone 26AE	Bos	Ph 1	R	All	F	GLpe	55.90	Bp	25.82	SD	21.98	Bd	24.08
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 061 U1 28 Number on bone 3AE	Bos	Ph 1	R	All	F	GLpe	55.10	Bp	25.59	SD	22.74	Bd	24.58
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 061 U1 28 Number on bone 3PE	Bos	Ph 1	R	All	F	GLpe	60.20	Bp	25.09	SD	20.52	Bd	24.31
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 061 U1 28 Number on bone 5AL	Bos	Ph 1	L	All	F	GLpe	54.83	Bp	25.53	SD	20.12	Bd	25.21
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 061 U1 28 Number on bone 88PL	Bos	Ph 1	L	All	F	GLpe	52.88	Bp	25.83	SD	20.36	Bd	23.69
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 12PE	Bos	Ph 1	L	All	F	GLpe	63.04	Bp	26.37	SD	23.06	Bd	24.24

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*								
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 14AE	Bos	Ph 1	R	All	F	GLpe	61.91	Bp	29.04	SD	24.66	Bd	26.46
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 1PL	Bos	Ph 1	R	All	F	GLpe	55.73	Bp	24.57	SD	20.84	Bd	24.19
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 23PE	Bos	Ph 1	L	All	F	GLpe	66.22	Bp	29.93	SD	25.12	Bd	29.88
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 24AE	Bos	Ph 1	R	All	F	GLpe	57.47	Bp	26.38	SD	21.44	Bd	23.74
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 24PL	Bos	Ph 1	L	All	F	GLpe	56.22	Bp	24.90	SD	21.55	Bd	26.19
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 24PL	Bos	Ph 1	R	All	F	GLpe	60.86	Bp	27.26	SD	24.06	Bd	24.28
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 26PE	Bos	Ph 1	L	All	F	GLpe	62.05	Bp	24.34	SD	21.40	Bd	24.62
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 28PE	Bos	Ph 1	L	All	F	GLpe	55.70	Bp	25.53	SD	21.49	Bd	24.16
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 28PE	Bos	Ph 1	R	All	F	GLpe	56.86	Bp	25.31	SD	20.33	Bd	22.44
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 2AE	Bos	Ph 1	R	All	F	GLpe	55.22	Bp	27.64	SD	22.55	Bd	25.58
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 2PE	Bos	Ph 1	L	All	F	GLpe	60.19	Bp	28.22	SD	22.29	Bd	23.98
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 30PE	Bos	Ph 1	R	All	F	GLpe	61.52	Bp	28.50	SD	23.85	Bd	25.20
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 31AL	Bos	Ph 1	R	All	F	GLpe	61.18	Bp	31.95	SD	27.40	Bd	27.80
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 31Pl	Bos	Ph 1	R	All	F	GLpe	55.88	Bp	24.74	SD	20.34	Bd	22.48
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 34AE	Bos	Ph 1	L	All	F	GLpe	53.99	Bp	26.00	SD	22.03	Bd	23.77
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 36AE	Bos	Ph 1	L	All	F	GLpe	56.19	Bp	29.24	SD	24.44	Bd	24.42
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 36PE	Bos	Ph 1	L	All	F	GLpe	59.67	Bp	25.67	SD	21.61	Bd	24.98
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 3PL	Bos	Ph 1	L	All	F	GLpe	60.53	Bp	27.67	SD	23.46	Bd	26.62
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 44AE	Bos	Ph 1	L	All	F	GLpe	57.20	Bp	28.55	SD	24.90	Bd	27.22
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 46AE	Bos	Ph 1	R	All	F	GLpe	59.55	Bp	30.30	SD	26.13	Bd	26.76
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 46PE	Bos	Ph 1	L	All	F	GLpe	58.85	Bp	25.97	SD	22.75	Bd	23.82
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 46PE	Bos	Ph 1	R	All	F	GLpe	59.00	Bp	28.43	SD	23.06	Bd	25.67
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 46PL	Bos	Ph 1	L	All	F	GLpe	59.40	Bp	28.88	SD	23.08	Bd	26.21

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Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 47AL	Bos	Ph 1	L	All	F	GLpe	57.76	Bp	28.49	SD	24.31	Bd	26.02
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 4AE	Bos	Ph 1	L	All	F	GLpe	56.67	Bp	26.66	SD	23.07	Bd	25.41
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 4AL	Bos	Ph 1	L	All	F	GLpe	56.38	Bp	26.99	SD	22.20	Bd	25.32
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 4PE	Bos	Ph 1	L	All	F	GLpe	61.02	Bp	29.18	SD	25.45	Bd	26.60
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 4PE	Bos	Ph 1	L	All	F	GLpe	62.41	Bp	27.06	SD	22.26	Bd	25.53
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 4PE	Bos	Ph 1	L	All	F	GLpe	58.01	Bp	26.40	SD	21.24	Bd	23.73
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 5AE	Bos	Ph 1	L	All	F	GLpe	56.36	Bp	28.36	SD	23.35	Bd	25.06
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 5AE	Bos	Ph 1	R	All	F	GLpe	62.35	Bp	32.75	SD	27.08	Bd	28.23
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 5PL	Bos	Ph 1	L	All	F	GLpe	54.24	Bp	27.13	SD	22.91	Bd	24.91
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 6AL	Bos	Ph 1	R	All	F	GLpe	55.05	Bp	25.62	SD	20.79	Bd	26.18
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 6PL	Bos	Ph 1	L	All	F	GLpe	56.64	Bp	25.89	SD	21.37	Bd	25.18
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 7PE	Bos	Ph 1	L	All	F	GLpe	55.24	Bp	23.92	SD	21.05	Bd	21.87
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 88AE	Bos	Ph 1	L	All	F	GLpe	68.46	Bp	34.44	SD	29.91	Bd	31.63
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 88AL	Bos	Ph 1	L	All	F	GLpe	54.68	Bp	26.83	SD	22.31	Bd	25.01
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 88AL	Bos	Ph 1	R	All	F	GLpe	53.75	Bp	25.74	SD	22.07	Bd	23.99
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 88AL	Bos	Ph 1	R	All	F	GLpe	57.61	Bp	28.69	SD	24.27	Bd	26.75
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 88PL	Bos	Ph 1	L	All	F	GLpe	61.29	Bp	27.23	SD	24.66	Bd	26.78
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone 88PL	Bos	Ph 1	R	All	F	GLpe	58.24	Bp	24.41	SD	21.07	Bd	23.76
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone AE24	Bos	Ph 1	R	All	F	GLpe	59.64	Bp	28.90	SD	23.98	Bd	27.58
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone AE28	Bos	Ph 1	L	All	F	GLpe	56.83	Bp	27.50	SD	23.32	Bd	25.86
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone AE28	Bos	Ph 1	L	All	F	GLpe	56.47	Bp	27.64	SD	23.58	Bd	26.17
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone AE3	Bos	Ph 1	R	All	F	GLpe	57.14	Bp	26.81	SD	22.92	Bd	25.53
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone AE3	Bos	Ph 1	R	All	F	GLpe	63.64	Bp	30.96	SD	25.02	Bd	27.17

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Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone AL2	Bos	Ph 1	R	All	F	GLpe	62.56	Bp	30.67	SD	24.59	Bd	27.75
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone AL3	Bos	Ph 1	R	All	F	GLpe	64.80	Bp	33.07	SD	27.56	Bd	31.43
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone AL34	Bos	Ph 1	R	All	F	GLpe	58.20	Bp	29.35	SD	23.50	Bd	25.28
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone AL7	Bos	Ph 1	R	All	F	GLpe	58.42	Bp	28.07	SD	23.73	Bd	25.39
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone PE2	Bos	Ph 1	L	All	F	GLpe	60.04	Bp	29.61	SD	24.11	Bd	27.33
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone PE2	Bos	Ph 1	R	All	F	GLpe	56.92	Bp	24.81	SD	19.65	Bd	23.67
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone PE3	Bos	Ph 1	L	All	F	GLpe	57.01	Bp	28.69	SD	22.88	Bd	24.62
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone PE4	Bos	Ph 1	R	All	F	GLpe	64.88	Bp	29.02	SD	24.37	Bd	27.46
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone PE5	Bos	Ph 1	L	All	F	GLpe	59.88	Bp		SD	23.30	Bd	25.93
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 062 U6 1o spade 30 Number on bone PE5	Bos	Ph 1	R	All	F	GLpe	58.01	Bp	23.61	SD	20.43	Bd	22.17
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 U gracht 36 Number on bone 30AL	Bos	Ph 1	L	All	F	GLpe	57.05	Bp	29.11	SD	24.64	Bd	28.21
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 U gracht 36 Number on bone 3AL	Bos	Ph 1	R	All	F	GLpe	58.96	Bp	30.53	SD	24.47	Bd	27.23
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 U gracht 36 Number on bone 5AE	Bos	Ph 1	R	All	F	GLpe	55.45	Bp	26.71	SD	22.72	Bd	25.72
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 U gracht 36 Number on bone 5AL	Bos	Ph 1	R	All	F	GLpe	52.72	Bp	26.32	SD	20.37	Bd	23.57
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 U gracht 36 Number on bone 88AL	Bos	Ph 1	R	All	F	GLpe	58.93	Bp	30.00	SD	24.00	Bd	27.12
Koekelare	2	19/32 KO 93 Speciale Beenderen uit contexten Gehaald	KO 93 U gracht 36 Number on bone AE6	Bos	Ph 1	R	All	F	GLpe	57.84	Bp	28.93	SD	23.96	Bd	25.61
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 10PL	Bos	Ph 1	L	All	F	Glpe	62.16	Bp	26.17	SD	21.94	Bd	25.47
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 1PE	Bos	Ph 1	L	All	F	Glpe	57.49	Bp	27.28	SD	22.49	Bd	26.70
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 23PL	Bos	Ph 1	R	All	F	Glpe	57.63	Bp	26.46	SD	23.29	Bd	25.04
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 24AL	Bos	Ph 1	R	All	F	Glpe	54.21	Bp	26.34	SD	21.22	Bd	22.83
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 26AE	Bos	Ph 1	R	All	F	Glpe	57.34	Bp	26.43	SD	23.51	Bd	24.52
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 28AE	Bos	Ph 1	R	All	F	Glpe	57.48	Bp	28.35	SD	22.60	Bd	24.31
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 2PE	Bos	Ph 1	R	All	F	Glpe	59.51	Bp	24.77	SD	20.65	Bd	23.43
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 2PL	Bos	Ph 1	L	All	F	Glpe	57.30	Bp	27.37	SD	23.14	Bd	26.36
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 34PE	Bos	Ph 1	L	All	F	Glpe	55.78	Bp	24.99	SD	21.26	Bd	23.95
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 34PL	Bos	Ph 1	L	All	F	Glpe	60.73	Bp	25.58	SD	22.66	Bd	25.79

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Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 34PL	Bos	Ph 1	R	All	F	Glpe	57.45	Bp	26.19	SD	21.62	Bd	24.98
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 3PL	Bos	Ph 1	L	All	F	Glpe	59.36	Bp	25.87	SD	20.66	Bd	25.68
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 3PL	Bos	Ph 1	L	All	F	Glpe	58.28	Bp	26.81	SD	22.82	Bd	25.11
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 42PE	Bos	Ph 1	L	All	F	Glpe	59.11	Bp	26.24	SD	21.84	Bd	24.57
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 45PL	Bos	Ph 1	R	All	F	Glpe	55.83	Bp	27.29	SD	22.17	Bd	24.44
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 47AL	Bos	Ph 1	R	All	F	Glpe	56.65	Bp	28.19	SD	22.88	Bd	25.04
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 4AL	Bos	Ph 1	L	All	F	Glpe	58.03	Bp	27.59	SD	23.41	Bd	26.39
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 50PE	Bos	Ph 1	L	All	F	Glpe	61.62	Bp	27.62	SD	24.10	Bd	27.43
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 7AE	Bos	Ph 1	R	All	F	Glpe	56.80	Bp	24.74	SD	21.58	Bd	23.84
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 7AL	Bos	Ph 1	L	All	F	Glpe	56.55	Bp	27.57	SD	22.39	Bd	25.45
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 7PE	Bos	Ph 1	R	All	F	Glpe	58.22	Bp	26.27	SD	21.30	Bd	24.24
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 7PL	Bos	Ph 1	L	All	F	Glpe	59.90	Bp	26.58	SD	22.56	Bd	26.04
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 7PL	Bos	Ph 1	R	All	F	Glpe	55.25	Bp	25.00	SD	21.23	Bd	23.08
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 88PE	Bos	Ph 1	R	All	F	Glpe	61.30	Bp	28.19	SD	23.78	Bd	26.04
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 88PL	Bos	Ph 1	L	All	F	Glpe	62.92	Bp	27.52	SD	24.62	Bd	26.18
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 88PL	Bos	Ph 1	L	All	F	Glpe	59.20	Bp	26.09	SD	23.30	Bd	25.26
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U 7./46 Number on bone 8PE	Bos	Ph 1	R	All	F	Glpe	55.29	Bp	24.72	SD	20.65	Bd	23.78
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U/4./ 45 Number on bone 1PL	Bos	Ph 1	L	All	F	Glpe	61.64	Bp	28.52	SD	23.54	Bd	27.47
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 1	Bos	Ph 1	L	All	F	Glpe	53.44	Bp	27.28	SD	24.02	Bd	25.13
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 1	Bos	Ph 1	L	All	F	Glpe	56.14	Bp	23.69	SD	21.43	Bd	24.24
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 10	Bos	Ph 1	L	All	F	Glpe	52.09	Bp	24.91	SD	22.54	Bd	25.66
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 15	Bos	Ph 1	L	All	F	Glpe	58.56	Bp	27.39	SD	24.84	Bd	29.54
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 23	Bos	Ph 1	R	All	F	Glpe		Bp		SD	23.19	Bd	25.39
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 23	Bos	Ph 1	R	All	F	Glpe	57.17	Bp		SD		Bd	
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 23	Bos	Ph 1	R	All	F	Glpe		Bp		SD	22.15	Bd	26.53
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 24	Bos	Ph 1	L	All	F	Glpe	56.77	Bp		SD	21.71	Bd	25.08
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 25	Bos	Ph 1	R	All	F	Glpe	52.73	Bp	25.29	SD	22.03	Bd	23.43
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 45	Bos	Ph 1	L	All	F	Glpe	49.11	Bp	24.62	SD	22.10	Bd	23.83

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Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 5	Bos	Ph 1	L	All	F	Glpe	57.08	Bp	25.76	SD	22.74	Bd	25.37
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 5	Bos	Ph 1	L	All	F	Glpe	58.43	Bp	26.69	SD	23.22	Bd	26.91
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 5	Bos	Ph 1	L	All	F	Glpe	58.44	Bp	27.22	SD	22.69	Bd	25.16
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 6	Bos	Ph 1	R	All	F	Glpe	57.17	Bp	25.60	SD	23.22	Bd	25.20
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 7	Bos	Ph 1	L	MD	FDUP	Glpe		Bp		SD	25.29	Bd	28.25
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 7	Bos	Ph 1	R	MD	FDUP	Glpe		Bp		SD	20.72	Bd	23.90
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 8	Bos	Ph 1	L	All	F	Glpe	49.76	Bp	25.04	SD	22.13	Bd	24.25
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 8	Bos	Ph 1	R	All	F	Glpe		Bp	25.62	SD	23.36	Bd	27.78
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 .A IIIII 005	Bos	Ph 1	R	All	F	Glpe	58.77	Bp		SD	22.15	Bd	24.51
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A 001 13 Number on bone 28AL	Bos	Ph 1	L	All	F	GLpe	58.51	Bp	30.01	SD	24.83	Bd	27.34
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A 001 13 Number on bone 5PL	Bos	Ph 1	L	All	F	GLpe	58.73	Bp	26.57	SD	21.93	Bd	25.99
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A 001 13 Number on bone 5PL	Bos	Ph 1	R	All	F	GLpe	56.90	Bp	24.93	SD	21.79	Bd	23.76
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A 001 13 Number on bone 88AL	Bos	Ph 1	R	All	F	GLpe	54.30	Bp	28.17	SD	23.36	Bd	24.78
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A 001 13 Number on bone 88PL	Bos	Ph 1	L	All	F	GLpe	57.52	Bp	24.77	SD	20.32	Bd	24.18
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A 001 26 Number on bone 1AL	Bos	Ph 1	R	All	F	GLpe		Bp	27.23	SD	22.74	Bd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A 001 26 Number on bone 1PE	Bos	Ph 1	R	All	F	GLpe	53.56	Bp	25.92	SD	20.65	Bd	22.75
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A 001 26 Number on bone 50PE	Bos	Ph 1	L	All	F	GLpe	49.91	Bp	24.22	SD	21.00	Bd	23.92
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A I 002 23 Number on bone 1AL	Bos	Ph 1	R	All	F	GLpe	55.57	Bp	26.71	SD	23.74	Bd	24.98
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A I 002 23 Number on bone 1PE	Bos	Ph 1	L	All	F	GLpe	57.93	Bp	26.02	SD	21.20	Bd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A I 002 23 Number on bone 42PE	Bos	Ph 1	L	All	F	GLpe	56.04	Bp	24.51	SD	20.69	Bd	23.27
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A I 002 23 Number on bone 4PL	Bos	Ph 1	L	All	F	GLpe	57.11	Bp	24.27	SD	20.88	Bd	23.17
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A I 002 23 Number on bone 4PL	Bos	Ph 1	L	All	F	GLpe	50.64	Bp	24.74	SD	21.51	Bd	22.37
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A I 002 23 Number on bone 88PL	Bos	Ph 1	R	All	F	GLpe	55.75	Bp	24.95	SD	21.66	Bd	23.26
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II 009 BOT	Bos	Ph 1	R	All	F	Glpe	55.73	Bp	27.60	SD	24.77	Bd	25.80
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 008 1 Number on bone 1PE	Bos	Ph 1	L	All	F	Glpe	56.79	Bp	24.57	SD	21.30	Bd	23.26
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 008 1 Number on bone 23P	Bos	Ph 1	L	All	F	Glpe	57.67	Bp	28.18	SD	24.20	Bd	
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 008 1 Number on bone 47PL	Bos	Ph 1	R	All	F	Glpe	61.90	Bp		SD	22.13	Bd	25.44
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 008 1 Number on bone 8PE	Bos	Ph 1	R	All	F	Glpe	51.99	Bp	23.67	SD	20.42	Bd	21.56
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A III 009	Bos	Ph 1	R	All	F	Glpe		Bp	29.01	SD	23.41	Bd	

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Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 1PE	Bos	Ph 1	R	All	F	GLpe	60.10	Bp	27.62	SD	22.54	Bd	24.18
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 24AL	Bos	Ph 1	L	All	F	GLpe	57.59	Bp	25.35	SD	21.09	Bd	24.14
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 2PL	Bos	Ph 1	L	All	F	GLpe	55.32	Bp	24.56	SD	20.16	Bd	24.42
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 34AL	Bos	Ph 1	R	All	F	GLpe	50.08	Bp	25.42	SD	22.20	Bd	25.19
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 34PL	Bos	Ph 1	L	All	F	GLpe	53.77	Bp	26.94	SD	21.83	Bd	23.79
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 3PE	Bos	Ph 1	R	All	F	GLpe	59.84	Bp		SD	21.53	Bd	23.83
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 48PE	Bos	Ph 1	R	All	F	GLpe	52.33	Bp		SD	21.19	Bd	22.41
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 5AL	Bos	Ph 1	L	All	F	GLpe	57.39	Bp	28.66	SD	22.89	Bd	24.19
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 5AL	Bos	Ph 1	R	All	F	GLpe	55.82	Bp	24.71	SD	21.38	Bd	24.63
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 5PL	Bos	Ph 1	R	All	F	GLpe	60.51	Bp	28.98	SD	24.37	Bd	24.63
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 6PE	Bos	Ph 1	L	All	F	GLpe	52.58	Bp	26.95	SD	21.82	Bd	23.76
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 88AL	Bos	Ph 1	L	All	F	GLpe	54.43	Bp	25.51	SD	20.35	Bd	23.18
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone 88PL	Bos	Ph 1	R	All	F	GLpe	55.04	Bp	22.02	SD	19.42	Bd	21.01
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone AE3	Bos	Ph 1	L	All	F	GLpe	55.92	Bp	26.42	SD	23.10	Bd	24.89
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone AE3	Bos	Ph 1	L	All	F	GLpe	55.66	Bp	24.43	SD	21.71	Bd	24.22
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone AE3	Bos	Ph 1	R	All	F	GLpe	60.61	Bp	20.11	SD	23.37	Bd	26.58
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone AE7	Bos	Ph 1	L	All	F	GLpe	56.92	Bp	26.47	SD	22.83	Bd	24.71
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone AE88	Bos	Ph 1	R	All	F	GLpe	56.14	Bp	25.68	SD	22.62	Bd	25.77
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone AL13	Bos	Ph 1	R	All	F	GLpe	52.50	Bp	25.05	SD	20.16	Bd	25.01
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone PE 88	Bos	Ph 1	L	All	F	GLpe	60.97	Bp	27.01	SD	23.70	Bd	26.69
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III 02 8 Number on bone PL3	Bos	Ph 1	R	All	F	GLpe	58.80	Bp	23.67	SD	21.17	Bd	23.99
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone 2PE	Bos	Ph 1	L	All	F	GLpe	59.94	Bp	28.60	SD	21.76	Bd	25.98
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone 39AE	Bos	Ph 1	L	All	F	GLpe	67.82	Bp	35.83	SD	29.37	Bd	31.32
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone 39PL	Bos	Ph 1	L	All	F	GLpe	54.53	Bp	27.66	SD	21.89	Bd	24.83
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone 6AE	Bos	Ph 1	L	All	F	GLpe	60.36	Bp	30.53	SD	26.16	Bd	28.75
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone 7AE	Bos	Ph 1	R	All	F	GLpe	55.79	Bp	27.19	SD	22.92	Bd	24.49
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone 7PE	Bos	Ph 1	R	All	F	GLpe	60.30	Bp	28.18	SD	22.81	Bd	26.72
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone 88AL	Bos	Ph 1	R	All	F	GLpe	57.83	Bp	29.84	SD	24.10	Bd	26.56

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Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone AE4	Bos	Ph 1	L	All	F	GLpe	57.67	Bp	29.63	SD	26.40	Bd	30.40
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone AL3	Bos	Ph 1	R	All	F	GLpe	61.44	Bp	34.08	SD	27.12	Bd	27.34
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone AL5	Bos	Ph 1	R	All	F	GLpe	57.16	Bp	31.08	SD	26.46	Bd	33.70
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	KO 95 A III/ OO4 Puinlaag 15 Number on bone PE3	Bos	Ph 1	R	All	F	GLpe	63.21	Bp	29.15	SD	24.46	Bd	29.33
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.V 004 BOT	Bos	Ph 1	L	All	F	Glpe	56.04	Bp	26.05	SD	21.92	Bd	23.53
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.V 004 BOT	Bos	Ph 1	R	All	F	Glpe	56.20	Bp	26.41	SD	23.24	Bd	26.38
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.VI. INV 002 ZAK/22	Bos	Ph 1	R	All	FDUP	Glpe		Bp		SD	23.79	Bd	27.19
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 1	L	MD	UP	GLpe		Bp		SD	17.98	Bd	21.40
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 1	L	MD	UP	GLpe		Bp		SD	22.69	Bd	24.30
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 1	R	MD	UP	GLpe		Bp		SD	23.67	Bd	
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 1	R	MD	UP	GLpe		Bp		SD		Bd	23.52
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 1	R	All	F	GLpe	57.24	Bp	26.78	SD	22.98	Bd	25.92
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Ph 1	R	All	F	GLPe		Bp		SD		Bd	27.13
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Ph 1	R	All	F	GLPe	58.01	Bp	27.65	SD	22.18	Bd	26.49
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Ph 1	L	All	UP	GLPe		Bp		SD	24.98	Bd	28.27
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 1	L	All	F	Glpe	56.91	Bp	23.70	SD	21.52	Bd	22.73
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 1	Bos	Ph 1	R	All	F	GLpe	57.96	Bp	25.89	SD	20.80	Bd	25.47
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 88 AE/PE?	Bos	Ph 1	L	All	F	GLpe	56.57	Bp	26.00	SD	21.05	Bd	25.64
Koekelare	1	20/32 KO 95 A Various contexts. All MT/mc	Loose in box Number on bone 88 PE	Bos	Ph 1	R	All	F	Glpe	58.62	Bp	24.25	SD	20.42	Bd	22.41
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Ph 1	L	All	F	Glpe		Bp		SD	21.26	Bd	24.03
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Ph 1	R	All	FDUP	Glpe		Bp		SD	20.73	Bd	24.49
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	Ph 1	R	All	F	GLPe	54.02	Bp	25.78	SD	23.41	Bd	28.03
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	Ph 1	R	All	F	GLpe	59.18	Bp	28.77	SD	23.50	Bd	28.00
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Ph 1	L	All	F								
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Ph 1	R	All	F								
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Ph 1	L	All	F								
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Ph 1	R	All	F								
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Ph 1	R	All	F								
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Ph 1	R	All	U (P)								
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 3.021	Bos	Ph 2	R	All	F	GLPe	32.93	Bp	24.62	SD	19.54	Bd	19.95
Koekelare	15	Koekelare gracht zeef +881 047	KO 88.1.047	Bos	Ph 2	R	All	F	GLPe	37.81	Bp	26.54	SD	20.66	Bd	21.12
Koekelare	15	Koekelare gracht zeef +881 047	KO 881/1/047	Bos	Ph 2	L	All	F	GLPe	39.02	Bp	27.58	SD	22.00	Bd	24.00
Koekelare	15	Koekelare gracht zeef +881 047	KO 881/1/047	Bos	Ph 2	R	All	F	GLPe	36.87	Bp	26.66	SD	22.63	Bd	22.68
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.079. U6/BOT/42.	Bos	Ph 2	L	All	F	Glpe	37.02	Bp	27.92	SD	21.81	Bd	21.69
Koekelare	38	24/32. Koekelare 1994. Various details see sheet	KO 94 U /48/4 BOT	Bos	Ph 2	R	All	F	Glpe	38.37	Bp	25.29	SD	19.09	Bd	20.03
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II 011 BOT	Bos	Ph 2	L	All	F	Glpe	37.73	Bp	26.45	SD	21.44	Bd	23.03
Koekelare	6	16/32 KO A 95 III ZAK 25/42	KO 95 A III INV 006 ZAK 25	Bos	Ph 2	L	All	F	GLpe	34.84	Bp	23.93	SD	20.22	Bd	18.53
Koekelare	6	16/32 KO A 95 III ZAK 25/43	KO 95 A III INV 006 ZAK 25	Bos	Ph 2	R	All	F	GLpe	38.04	Bp	26.41	SD	20.41	Bd	21.86
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	KO 95- A III.002.ZAK 8	Bos	Ph 2	R	All	F	Glpe	35.20	Bp	23.49	SD	17.81	Bd	18.98

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?								
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	KO 95- A III.002.ZAK 8	Bos	Ph 2	R	All	F	Glpe	36.86	Bp	27.23	SD	19.36	Bd	21.49
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.III.007 ZAK/9	Bos	Ph 2	R	All	F	Glpe	35.44	Bp	28.72	SD	20.91	Bd	22.97
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.VI. INV 002 ZAK/22	Bos	Ph 2	R	All	F	Glpe	39.16	Bp	30.37	SD	24.58	Bd	24.46
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	L	All	F	GLpe	35.34	Bp	24.38	SD	19.40	Bd	19.90
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	L	All	F	GLpe	36.87	Bp	26.74	SD	21.01	Bd	21.56
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	L	All	F	GLpe	40.87	Bp	27.61	SD	22.41	Bd	23.45
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	L	All	F	GLpe	38.28	Bp	25.80	SD	20.42	Bd	20.32
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	L	All	F	GLpe	39.64	Bp	26.11	SD	20.66	Bd	22.60
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	L	All	F	GLpe	38.23	Bp	27.81	SD	21.51	Bd	24.04
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	L	All	F	GLpe	37.88	Bp	25.67	SD	19.23	Bd	20.18
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	L	All	F	GLpe	38.16	Bp	26.75	SD	20.42	Bd	21.64
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	R	All	F	GLpe	38.89	Bp	26.96	SD	22.76	Bd	23.59
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	R	All	F	GLpe	39.74	Bp	24.79	SD	21.02	Bd	22.10
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	R	All	F	GLpe	41.01	Bp	27.28	SD	22.63	Bd	23.26
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 2	R	All	F	GLpe	37.12	Bp	25.27	SD	20.96	Bd	21.14
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Ph 2	L	All	F	GLpe	37.91	Bp	27.47	SD	21.72	Bd	23.02
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Ph 2	R	All	F	GLpe	33.64	Bp	24.38	SD	18.10	Bd	18.94
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Ph 2	R	All	F	GLpe	35.16	Bp	27.69	SD	18.72	Bd	21.66
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Ph 2	R	All	F	GLpe	38.11	Bp	23.48	SD	19.07	Bd	19.68
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 2	L	All	F	GLpe	40.23	Bp	29.05	SD	22.34	Bd	23.98
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 2	L	All	F	GLpe	41.17	Bp	29.08	SD	21.42	Bd	22.73
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 2	L	All	F	GLpe	39.00	Bp	28.94	SD	21.32	Bd	26.23
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 2	L	All	F	GLpe	36.29	Bp	27.51	SD	21.44	Bd	23.52
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 2	L	All	F	GLpe	37.20	Bp	27.74	SD	22.35	Bd	27.40
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 2	L	All	F	GLpe	39.52	Bp	28.22	SD	23.33	Bd	27.74
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 2	R	All	F	GLpe	38.24	Bp	29.22	SD	24.39	Bd	29.64
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 2	R	All	F	GLpe	37.32	Bp	25.11	SD	19.66	Bd	25.03
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Ph 2	L	All	F	GLPe	37.40	Bp	27.43	SD	21.43	Bd	22.59
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Ph 2	L	All	F	GLPe	40.83	Bp	27.73	SD	21.17	Bd	22.01
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Ph 2	L	All	F	GLPe	37.45	Bp	25.02	SD	18.72	Bd	17.95
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Ph 2	L	All	F	GLPe	39.93	Bp	25.75	SD	20.80	Bd	21.59
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Ph 2	R	All	F	GLPe	36.98	Bp	26.07	SD	20.35	Bd	20.96
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Ph 2	R	All	F	GLPe	38.09	Bp	24.47	SD	18.86	Bd	21.47
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 2	L	All	F	Glpe	37.28	Bp	25.49	SD	19.80	Bd	20.51
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 2	L	All	F	Glpe	38.45	Bp	28.22	SD	22.27	Bd	23.70
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 2	L	All	F	Glpe	43.92	Bp	27.60	SD	22.28	Bd	22.56
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 2	R	All	F	Glpe	36.93	Bp	25.65	SD	20.82	Bd	20.95
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 2	R	All	F	Glpe	35.24	Bp	27.75	SD	23.77	Bd	22.50
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 2	R	All	F	Glpe	39.64	Bp	28.18	SD	21.35	Bd	21.22
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Ph 2	L	All	F	Glpe	44.26	Bp	31.18	SD	24.19	Bd	26.15

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Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Ph 2	L	All	F	Glpe	39.88	Bp	26.69	SD	19.18	Bd	21.08
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Ph 2	R	All	F	Glpe	39.12	Bp	27.41	SD	20.48	Bd	22.94
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	Ph 2	R	All	F	GLpe	35.67	Bp	27.18	SD	20.90	Bd	22.88
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	Bos	Ph 2	L	All	F	GLpe	38.23	Bp	26.26	SD	19.86	Bd	21.02
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	Bos	Ph 2	L	All	F	GLpe	40.47	Bp	29.94	SD	23.07	Bd	23.20
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	Bos	Ph 2	R	All	F	GLpe	40.05	Bp	24.91	SD	20.41	Bd	20.74
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 2	L	All	F	Glpe	36.78	Bp	27.69	SD	21.57	Bd	24.04
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 2	L	All	F	Glpe	34.81	Bp	26.66	SD	20.57	Bd	22.67
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 2	L	All	F	Glpe	40.03	Bp	28.86	SD	22.43	Bd	23.45
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 2	R	All	F	Glpe	37.22	Bp	29.19	SD	22.38	Bd	25.43
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 2	R	All	F	Glpe	41.41	Bp	31.65	SD	25.16	Bd	26.99
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 2	R	All	F	Glpe	37.54	Bp	26.77	SD	20.75	Bd	22.13
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 2	R	All	F	Glpe	38.77	Bp	27.17	SD	20.35	Bd	22.82
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 2	R	All	F	Glpe	35.36	Bp	26.12	SD	19.48	Bd	21.83
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Ph 2	L	All	F	GLpe	37.18	Bp	25.84	SD	21.45	Bd	22.84
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Ph 2	L	All	F	Glpe	33.53	Bp	24.40	SD	19.81	Bd	20.97
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Ph 2	L	All	F	Glpe	36.92	Bp	27.42	SD	21.49	Bd	21.48
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Ph 2	L	All	F	Glpe	40.04	Bp	32.37	SD	23.33	Bd	24.53
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Ph 2	R	All	F	Glpe	36.67	Bp	28.36	SD	23.57	Bd	21.48
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	Ph 2	R	All	F	Glpe	39.31	Bp	26.13	SD	19.05	Bd	20.87
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Ph 2	L	All	F	Glpe	34.41	Bp	25.35	SD	20.27	Bd	21.93
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	Bos	Ph 2	R	All	F	Glpe	42.91	Bp	32.45	SD	25.99	Bd	28.51
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	Note in box- KO.A.III 005.95. BOT/ 27	Bos	Ph 2	L	All	F	Glpe	40.30	Bp	32.62	SD	25.80	Bd	27.50
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	Note in box- KO.A.III 005.95. BOT/ 27	Bos	Ph 2	R	All	F	Glpe	37.60	Bp	24.28	SD	19.87	Bd	19.95
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	Ph 2	R	All	F	Glpe	41.21	Bp	31.12	SD	22.61	Bd	24.11
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Bos	Ph 2	L	All	F	GLpe	35.17	Bp	28.60	SD	21.53	Bd	22.54
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Ph 2	L	All	F	Glpe	40.92	Bp	28.19	SD	23.04	Bd	25.30
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Ph 2	R	All	F	Glpe	39.61	Bp	26.07	SD	19.05	Bd	19.29
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Ph 2	R	All	F	Glpe	37.68	Bp	25.66	SD	20.54	Bd	20.18
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Ph 2	R	All	F	Glpe	35.67	Bp	25.80	SD	20.68	Bd	19.60
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Ph 2	L	All	F								
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	BOT KO 93 U GRACHT /33	Bos	Ph 3	R	All	F	LD	46.36	DLS	63.43	MBS	17.06		
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	BOT KO 93 U GRACHT /33	Bos	Ph 3	R	All	F	LD	53.54	DLS	70.05	MBS	19.62		
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Bos	Ph 3	L	All	F	LD	45.83	DLS	60.41	MBS	21.66		
Koekelare	15	Koekelare gracht zeef +881 047	KO 88.1.047	Bos	Ph 3	L	All	F	LD	41.11	DLS	51.48	MBS	17.39		
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT /44	Bos	Ph 3	R	All	F	LD	50.21	DLS	71.66	MBS	21.90		
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	KO 94 U8 BOT/50	Bos	Ph 3	R	All	F	LD	50.36	DLS	54.36	MBS			
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II 011 BOT	Bos	Ph 3	R	All	F	LD	45.23	DLS	61.94	MBS	22.15		
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.III.007 ZAK/9	Bos	Ph 3	R	All	F	LD	55.50	DLS	68.74	MBS	24.26		

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Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	Bos	Ph 3	R	All	F	LD		DLS		MBS	17.03
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 3	L	All	F	LD	44.28	DLS	53.35	MBS	16.49
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 3	R	All	F	LD	43.44	DLS	55.54	MBS	14.82
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 3	R	All	F	LD	43.27	DLS	54.29	MBS	17.30
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 3	R	All	F	LD	45.93	DLS	64.56	MBS	20.21
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 3	R	All	F	LD	49.42	DLS	61.55	MBS	19.66
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 3	L	All	F	LD	54.35	DLS	75.91	MBS	23.02
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 3	L	All	F	LD	46.34	DLS	57.23	MBS	21.03
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 3	L	All	F	LD		DLS		MBS	15.57
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 3	L	All	F	LD	49.45	DLS	61.27	MBS	17.25
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 3	R	All	F	LD		DLS		MBS	17.48
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 3	R	All	F	LD	41.90	DLS	53.12	MBS	16.67
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ph 3	R	All	F	LD	46.12	DLS	60.92	MBS	18.60
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Ph 3	L	All	F	LD		DLS		MBS	19.89
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	Bos	Ph 3	R	All	F	LD	50.24	DLS	70.66	MBS	21.33
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	Bos	Ph 3	L	All	F	LD	45.25	DLS	55.32	MBS	17.30
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	Ph 3	L	All	F	LD	45.90	DLS	58.98	MBS	18.96
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	Ph 3	R	All	F	LD	47.11	DLS	60.00	MBS	20.11
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	Bos	Ph 3	L	All	F	LD	50.54	DLS	70.66	MBS	21.61
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 3	L	All	F	LD	52.31	DLS	68.40	MBS	22.00
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 3	R	All	F	LD		DLS	62.06	MBS	18.64
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 3	R	All	F	LD	59.15	DLS	78.91	MBS	24.97
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 3	R	All	F	LD	47.07	DLS	58.34	MBS	18.39
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 3	R	All	F	LD	52.91	DLS	61.94	MBS	19.16
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 3	R	All	F	LD	51.24	DLS	62.72	MBS	18.56
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ph 3	R	All	F	LD	41.25	DLS		MBS	18.36
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box-Ko.93.061.U1.BOT/41	Bos	Ph 3	L	All	F	LD	55.43	DLS	71.97	MBS	22.29
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Ph 3	L	All	F	LD		DLS		MBS	16.89
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Ph 3	L	All	F	LD	49.23	DLS	66.36	MBS	20.58
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Ph 3	R	All	F	LD	53.83	DLS	66.19	MBS	21.15
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Ph 3	R	All	F	LD	44.36	DLS	52.28	MBS	17.41
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	Ph 3	R	All	F	LD	56.03	DLS	74.08	MBS	21.76
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box-Ko.94.U7.BOT	Bos	Ph 3	R	All	F	LD	48.02	DLS	61.09	MBS	18.10
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box-Ko.94.U7.BOT	Bos	Ph 3	R	All	F	LD	50.26	DLS	69.19	MBS	22.19
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box-Ko.94.U7.BOT	Bos	Ph 3	R	All	F	LD	54.22	DLS	74.16	MBS	23.22
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	Note in box-KO.A.III 005.95. BOT/ 27	Bos	Ph 3	R	All	F	LD	53.28	DLS	68.72	MBS	21.37
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	Ph 3	L	All	F	LD	49.95	DLS	63.33	MBS	20.63
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	Ph 3	L	All	F	LD	54.04	DLS	75.24	MBS	19.70

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*																		
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 3	L	All	F	LD		DLS		MBS	16.57												
Koekelare	13	Koekelare gracht handver 2	KOEKELARE 88 HAND VERZAMELD	Bos	Ph 3	L	All	F	LD		DLS	63.59	MBS	22.56												
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Ph 3	R	All	F	LD	37.76	DLS	51.81	MBS	18.71		.		.		.		.		.		.
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Ph 3	L	All	F	LD	40.72	DLS	56.33	MBS	18.06		.		.		.		.		.		.
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Ph 3	L	All	F	LD	47.94	DLS	60.52	MBS	19.57		.		.		.		.		.		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Ph 3	R	All	F												.		.		.		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Ph 3	R	All	F												.		.		.		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Ph 3	R	All	F												.		.		.		.
Koekelare	6	16/32 KO A 95 III ZAK 25/24	Loose in box	Bos	Ph 3	R	All	F	LD	51.53	DLS	76.52	MBS	23.14												
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Ph 3	L	All	F	LD	45.48	DLS	60.85	MBS	19.72												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 3	L	All	F	LD	46.45	DLS	56.68	MBS	20.93												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 3	L	All	F	LD	51.19	DLS	70.99	MBS	22.63												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 3	R	All	F	LD	49.78	DLS	58.06	MBS	18.11												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Ph 3	R	All	F	LD	55.00	DLS	73.22	MBS	24.64												
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Ph 3	R	All	F	LD	46.55	DLS	61.61	MBS	19.65												
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	BOT KO 93 U GRACHT /33	Bos	Radius	L	PM	FP	GL		Bp	73.19	BFP	67.30	SD	33.43	Bd		BFD							
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Bos	Radius	L	PM	F	GL		Bp	77.80	BFP	70.09	SD		Bd		BFD							
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Bos	Radius	R	PM	F	GL		Bp	72.72	BFP	66.84	SD		Bd		BFD							
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	BOT KO 93.U. gracht/36	Bos	Radius	L	MD	F	GL		Bp		BFP		SD		Bd	70.67	BFD	67.24						
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	L	PM	F	GL		Bp	84.55	BFP	76.07	SD	37.03	Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	L	PM	F	GL		Bp	65.57	BFP	60.50	SD	30.49	Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	L	PM	F	GL		Bp	76.81	BFP	69.21	SD		Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	L	PM	F	GL		Bp	71.88	BFP		SD	36.09	Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	L	PM	F	GL		Bp	66.75	BFP	62.64	SD	34.03	Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	L	PM	F	GL		Bp	75.90	BFP	71.12	SD		Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	L	PM	F	GL		Bp	72.55	BFP	66.92	SD	37.18	Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	L	PM	F	GL		Bp	72.60	BFP	68.97	SD	38.65	Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	R	PM	F	GL		Bp	71.97	BFP	66.61	SD	32.00	Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	R	PM	F	GL		Bp	77.71	BFP	72.27	SD	32.15	Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	R	PM	F	GL		Bp	72.90	BFP	66.83	SD	39.24	Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	R	PM	F	GL		Bp		BFP	61.84	SD		Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	R	PM	F	GL		Bp	72.49	BFP	67.31	SD		Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	R	PM + U	F	GL		Bp	82.14	BFP	73.44	SD		Bd		BFD							
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	R	PM + U	F	GL		Bp	77.29	BFP	70.41	SD		Bd		BFD		BpC	44.85				
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	R	UDE	U	GL		Bp		BFP		SD		Bd	65.23	BFD	58.27						
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	R	MD	F	GL		Bp		BFP		SD		Bd	64.61	BFD	59.40						
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Radius	R	MD	F	GL		Bp		BFP		SD	32.78	Bd	57.73	BFD	53.37						
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	Radius	R	PM	F	GL		Bp	57.30	BFP		SD		Bd		BFD							
Koekelare	10	Koekelare Oosthof 1990	KO 90 2 & 3 /23 043	Bos	Radius	L	PM	FP	GL		Bp	69.85	BFP	63.93	SD		Bd		BFD							
Koekelare	10	Koekelare Oosthof 1990	KO 90 2 & 3 23/025	Bos	Radius	L	PM	F	GL		Bp	69.85	BFP	66.93	SD		Bd		BFD							
Koekelare	10	Koekelare Oosthof 1990	KO 90 2 & 3/23 041	Bos	Radius	R	DE	UDE	GL		Bp		BFP		SD		Bd	64.75	BFD	57.55						
Koekelare	10	Koekelare Oosthof 1990	KO 90 2/23 005	Bos	Radius	R	PM	F	GL		Bp	76.27	BFP	70.85	SD		Bd		BFD							
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.079. U6/BOT/42.	Bos	Radius	L	PM	F	GL		Bp	93.49	BFP	83.02	SD	46.96	Bd		BFD							
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II 009 BOT	Bos	Radius	R	PM	F	GL		Bp		BFP	59.73	SD	38.81	Bd		BFD							
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II 011 BOT	Bos	Radius	L	PM	F	GL		Bp	75.61	BFP	69.68	SD		Bd		BFD							
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A III 007	Bos	Radius	L	PM	F	GL		Bp	72.45	BFP	66.84	SD		Bd		BFD							

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?												
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	KO 95- A III.002.ZAK 8	Bos	Radius	L	PM	F	GL		Bp	52.32	BFP	50.27	SD		Bd		BFD	
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	KO 95- A III.002.ZAK 8	Bos	Radius	R	PM	F	GL		Bp	58.20	BFP		SD		Bd		BFD	
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.II.013 BOT	Bos	Radius	L	PM	F	GL		Bp	82.85	BFP	75.44	SD	42.27	Bd		BFD	
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.II.013 BOT	Bos	Radius	R	PM	F	GL		Bp	76.24	BFP	69.40	SD	34.73	Bd		BFD	
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.III.007 ZAK/9	Bos	Radius	L	PM	F	GL		Bp	75.89	BFP	70.27	SD		Bd		BFD	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	Radius	L	PM	F	GL		Bp	80.15	BFP	72.34	SD		Bd		BFD	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	Radius	L	PM	F	GL		Bp	86.32	BFP		SD		Bd		BFD	
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.VI. INV 002 ZAK/22	Bos	Radius	L	MD	F	GL		Bp		BFP		SD		Bd	66.03	BFD	62.83
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1 o spaade BOT /30	Bos	Radius	L	PM	FP	GL		Bp	76.22	BFP	70.09	SD	38.94	Bd		BFD	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Radius	L	PM	F	GL		Bp	64.81	BFP	59.18	SD	18.43	Bd		BFD	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Radius	L	MD	F	GL		Bp		BFP		SD		Bd	51.36	BFD	45.81
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Radius	L	MD	F	GL		Bp		BFP		SD		Bd	66.96	BFD	56.17
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Radius	L	MD	F	GL		Bp		BFP		SD		Bd		BFD	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Radius	L	MD	F	GL		Bp		BFP		SD		Bd	70.42	BFD	64.54
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Radius	L	MD	F	GL		Bp		BFP		SD		Bd	66.93	BFD	
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Radius	R	PM	F	GL		Bp	74.48	BFP	68.41	SD		Bd		BFD	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Radius	R	PM	FP	GL		Bp	76.14	BFP	70.19	SD		Bd		BFD	
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	Bos	Radius	R	PM	F	GL		Bp	68.93	BFP	63.15	SD	31.68	Bd		BFD	
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	Bos	Radius	L	PM	F	GL		Bp	72.51	BFP	67.96	SD		Bd		BFD	
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	Bos	Radius	R	MD	F	GL		Bp		BFP		SD		Bd	62.61	BFD	52.43
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Radius	L	PM	F	GL		Bp	82.68	BFP	74.42	SD		Bd		BFD	
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Radius	R	PM	F	GL		Bp	67.81	BFP	62.66	SD		Bd		BFD	
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Radius	L	PM	FP	GL		Bp	76.55	BFP	71.66	SD		Bd		BFD	
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Radius	L	PM	FP	GL		Bp	72.53	BFP		SD	38.00	Bd		BFD	
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Radius	R	PM	FP	GL		Bp	76.13	BFP	69.64	SD	35.05	Bd		BFD	
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Radius	R	PM	FP	GL		Bp		BFP		SD	34.86	Bd		BFD	
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Radius	L	UDE	UDE	GL		Bp		BFP		SD		Bd	62.11	BFD	60.04
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box-Ko.93.061.U1.BOT/41	Bos	Radius	R	PM	F	GL		Bp	72.94	BFP	65.84	SD		Bd		BFD	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Radius	L	PM	F	GL		Bp	78.45	BFP	70.97	SD		Bd		BFD	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Radius	R	PM	F	GL		Bp	69.96	BFP	63.90	SD		Bd		BFD	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Radius	R	PM	F	GL		Bp	73.73	BFP	66.86	SD		Bd		BFD	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Radius	R	PM	F	GL		Bp	76.83	BFP	70.05	SD		Bd		BFD	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Radius	R	PM	F	GL		Bp	65.54	BFP		SD		Bd		BFD	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Radius	R	PM	F	GL		Bp	68.63	BFP	63.11	SD		Bd		BFD	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Radius	R	PM	F	GL		Bp	72.96	BFP	67.19	SD		Bd		BFD	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																										
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Radius	L	MD	F	GL		Bp		BFP		SD		Bd	70.53	BFD																
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Radius	L	MD	F	GL		Bp		BFP		SD		Bd	72.31	BFD	59.61															
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	Radius	R	PM	FP	GL		Bp	72.95	BFP	67.60	SD		Bd		BFD																
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	Radius	L	PM	FP	GL		Bp	71.81	BFP	66.90	SD		Bd		BFD																
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Radius	L	PM	FP	GL		Bp	73.51	BFP	69.10	SD	33.27	Bd		BFD																
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Radius	R	PM	FP	GL		Bp	71.14	BFP	65.90	SD		Bd		BFD																
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Radius	R	PM	FP	GL		Bp	76.24	BFP	69.50	SD		Bd		BFD																
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Radius	R	PM	FP	GL		Bp	76.73	BFP	67.75	SD		Bd		BFD																
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	Radius	R	MD	FD	GL		Bp		BFP		SD	34.75	Bd	71.35	BFD	57.64															
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	Radius	R	PM	FP	GL		Bp	91.92	BFP	83.14	SD		Bd		BFD																
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	Radius	R	PM	FP	GL		Bp	74.99	BFP	69.56	SD	35.49	Bd		BFD																
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	Note in box- KO.A.III 005.95. BOT/ 27	Bos	Radius	L	MD	F	GL		Bp		BFP		SD		Bd	65.66	BFD	54.93															
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	Radius	R	P	FP	GL		Bp	66.65	BFP	61.35	SD		Bd		BFD			.		.		.									
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	Radius	R	PM	FP	GL		Bp	83.14	BFP	74.65	SD		Bd		BFD			.		.		.									
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	Radius	L	PM	FP	GL		Bp	71.77	BFP	66.17	SD	35.62	Bd		BFD			.		.		.									
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	Radius	L	UDE	UD	GL		Bp		BFP		SD		Bd	75.53	BFD	63.08		.		.		.									
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Radius	L	PM	F	GL		Bp	71.50	BFP	65.92	SD		Bd		BFD			.		.		.									
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Radius	L	PM	F	GL		Bp		BFP		SD	34.58	Bd		BFD			.		.		.									
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Radius	R	PM	FP	GL		Bp		BFP		SD		Bd		BFD			.		.		.									
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Radius	R	PM	FP+U	GL		Bp	81.84	BFP	74.49	SD	36.49	Bd		BFD			.		.		.									
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Radius	L	PM	FP	GL		Bp	89.97	BFP	79.41	SD		Bd		BFD			.		.		.									
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Radius	R	PM	FP	GL		Bp	70.72	BFP		SD		Bd		BFD																
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Radius	R	PM	FP	GL		Bp	68.61	BFP	63.54	SD	31.62	Bd		BFD																
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Radius	R	PM	FP	GL		Bp	68.64	BFP	63.41	SD	33.23	Bd		BFD																
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Radius	L	PM	FP	GL		Bp	76.39	BFP	71.11	SD		Bd		BFD																
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Radius	L	PM	FP	GL		Bp	71.51	BFP	67.00	SD		Bd		BFD																
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Radius	R	PM	FP	GL		Bp	72.81	BFP	66.94	SD		Bd		BFD																
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Radius	R	PM	FP	GL		Bp	76.94	BFP	72.19	SD	34.64	Bd		BFD																
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Radius	L	MD	FD	GL		Bp		BFP		SD		Bd	66.73	BFD	60.77															
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Radius	L	PM	F	GL		Bp		BFP		SD		Bd		BFD																
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Radius	L	PM	F	GL		Bp	59.10	BFP	51.52	SD	23.77	Bd		BFD																
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Radius	L	PM	F	GL		Bp	54.31	BFP	49.20	SD	23.49	Bd		BFD																
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Radius + Ulna	R	PM	F	GL		Bp	57.51	BFP	50.48	SD	21.20	Bd		BFD		GL		LO		Dpa		SDO		BpC	28.28					
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Radius + Ulna	L	PM	F	GL		Bp		BFP		SD		Bd		BFD		GL		LO		Dpa		SDO		BpC	50.08					
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Radius + Ulna	L	PM	F	GL		Bp	72.85	BFP	67.79	SD		Bd		BFD		GL		LO		Dpa		SDO		BpC	45.82					
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Radius + Ulna	L	PM	F	GL		Bp	74.97	BFP	68.96	SD		Bd		BFD		GL		LO		Dpa		SDO		BpC	44.63					
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Radius + Ulna	R	PM	F	GL		Bp	80.16	BFP	72.35	SD		Bd		BFD		GL		LO		Dpa		SDO		BpC						
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Radius + Ulna	L	PM	FP + UL	GL		Bp		BFP		SD		Bd		BFD		GL		LO		Dpa		SDO		BpC	48.79					
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	Radius + Ulna	L	PM	FP	GL		Bp	76.34	BFP	69.36	SD	37.32	Bd		BFD		GL		GLO		Dpa		SDO		BpC	40.26					

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																						
Koekelare	18	Ream Koekelare gracht zeef	Note in box- RUND- 15e eeuw KO HAND?	Bos	Radius + Ulna	L	PM	FP	GL		Bp	81.56	BFP	53.65	SD		Bd		BFD		GL		GLO		Dpa		SDO		BpC	52.17
Koekelare	10	Koekelare Oosthof 1990	90 KO 3/23 036	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	51.07	GLP	59.15	LG	55.57	BG	45.05								
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP		LG		BG	47.12		.		.				
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP	62.96	LG	52.21	BG	46.77								
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 3.021	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	34.26	GLP		LG	39.80	BG	38.30								
Koekelare	15	Koekelare gracht zeef +881 047	KO 881/1/047	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	63.89	LG	53.68	BG	44.64								
Koekelare	10	Koekelare Oosthof 1990	KO 90 223/23 037	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	44.45	GLP	60.56	LG	52.67	BG	43.14								
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT /44	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	70.95	LG	57.58	BG	46.75								
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II OO8.	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	39.17	GLP	61.12	LG	51.64	BG	41.23								
Koekelare	6	16/32 KO A 95 III ZAK 25/50	KO 95 A III INV 006 ZAK 25	Bos	Scapula	L	MP	F	HS		DHA		Ld		SLC	52.99	GLP		LG	48.09	BG	52.04								
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	Ko 95 A.I. 009 Beenderen	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	55.12	LG	47.24	BG	40.55								
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	67.01	LG	55.05	BG	47.45								
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1 o spaade BOT /30	Bos	Scapula	L	PM	FP	HS		DHA		Ld		SLC	49.87	GLP	64.68	LG	53.49	BG	45.21								
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1 o spaade BOT /30	Bos	Scapula	L	PM	FP	HS		DHA		Ld		SLC	53.13	GLP	73.51	LG	60.30	BG	49.67								
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Scapula	R	P	F	HS		DHA		Ld		SLC		GLP		LG	55.53	BG	43.71		.		.				
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Scapula	R	PM	F	HS		DHA		LD		SLC	45.93	GLP	57.82	LG		BG	46.30		.		.				
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	38.49	GLP	55.64	LG	42.43	BG	41.91		.		.				
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	51.02	GLP	67.86	LG	54.11	BG	47.80		.		.				
Koekelare	6	16/32 KO A 95 III ZAK 25/23	Loose in box	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP	67.78	LG	55.67	BG	46.91								
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Scapula	L	PM	?	HS		DHA		Ld		SLC		GLP		LG		BG									
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	46.56	GLP	62.90	LG	52.14	BG	39.65								
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	44.95	GLP		LG	41.77	BG	34.24								
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Scapula	R	MD	?	HS		DHA		Ld	160.08	SLC		GLP		LG		BG									
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP	59.81	LG	49.54	BG	41.53								
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP		LG	37.71	BG	37.52								
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	50.48	GLP		LG	46.00	BG	41.66								
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Scapula	L	M	?	HS		DHA		Ld		SLC	45.09	GLP		LG		BG									
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	46.44	GLP	66.54	LG	54.86	BG	48.15								
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	45.59	GLP	61.34	LG	52.79	BG	44.37								
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	55.83	GLP		LG		BG									
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	70.75	LG	59.12	BG	45.02								
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	51.82	GLP	67.15	LG	55.63	BG	42.27								
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	46.92	GLP	59.14	LG	51.57	BG	45.45								
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	50.57	GLP	65.15	LG	56.81	BG	42.91								
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	43.00	GLP	70.55	LG	57.72	BG	44.97								
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	40.22	GLP	63.38	LG	53.96	BG	48.19								
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	Bos	Scapula	L	All	F	HS		DHA		Ld		SLC		GLP	61.04	LG	53.94	BG	48.03								
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	Bos	Scapula	L	All	F	HS		DHA		Ld		SLC		GLP	72.30	LG	59.48	BG									
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP	54.93	LG		BG									
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	46.19	GLP		LG	51.34	BG	42.22								
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	42.91	GLP	64.37	LG	55.44	BG	43.73								

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?														
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	48.72	GLP	62.64	LG	53.55	BG	44.31
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box-Ko.93.061.U1.BOT/41	Bos	Scapula	L	PM	PM	HS		DHA		Ld		SLC		GLP	68.15	LG	58.13	BG	52.12
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	56.80	LG	49.50	BG	42.46
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	53.51	GLP	75.49	LG	61.22	BG	50.03
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	Tarsal1	R	All	F	GB	38.59												
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	60.57	Dd					
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	BOT KO 93 U GRACHT /33	Bos	Tibia	L	All	F	GL		Bp		SD	35.56	Bd	62.13	Dd	49.98				
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Bos	Tibia	L	MD	FD	GL		Bp		SD	30.70	Bd	53.95	Dd	38.76				
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Bos	Tibia	R	MD	FD	GL		Bp		SD		Bd	54.42	Dd	40.33				
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	BOT KO 93.U. gracht/36	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd		Dd	41.75				
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	BOT KO 94 U /4.BOT /45	Bos	Tibia	L	MD	F	GL		Bp		SD	33.15	Bd	57.19	Dd	42.16				
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	Tibia	L	All	F	GL	319.00	Bp	89.20	SD	34.79	Bd		Dd					
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Bos	Tibia	L	MD	F	GL		Bp		SD	30.87	Bd	53.07	Dd	40.15				
Koekelare	16	Koekelare gracht handverz	KO 88 1007	Bos	Tibia	L	MD	F	GL		Bp		SD	35.63	Bd	59.53	Dd	45.38				
Koekelare	16	Koekelare gracht handverz	KO 88 1007	Bos	Tibia	L	MD	F	GL		Bp		SD	31.04	Bd		Dd					
Koekelare	16	Koekelare gracht handverz	KO 88 1007	Bos	Tibia	L	MD	F	GL		Bp		SD		Bd	59.90	Dd	46.27				
Koekelare	16	Koekelare gracht handverz	KO 88 1007	Bos	Tibia	L	MD	F	GL		Bp		SD	42.34	Bd	68.93	Dd	53.79				
Koekelare	16	Koekelare gracht handverz	KO 88 1007	Bos	Tibia	R	MD	F	GL		Bp		SD	35.61	Bd	59.21	Dd	43.40				
Koekelare	16	Koekelare gracht handverz	KO 88 1007	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	54.82	Dd	40.77				
Koekelare	16	Koekelare gracht handverz	KO 88 1007	Bos	Tibia	R	M	U	GL		Bp		SD	27.47	Bd		Dd					
Koekelare	16	Koekelare gracht handverz	KO 88 1007	Bos	Tibia	R	M	U	GL		Bp		SD		Bd		Dd					
Koekelare	15	Koekelare gracht zeef +881 047	KO 88.1.047	Bos	Tibia	L	MD	F	GL		Bp		SD	32.99	Bd	51.59	Dd	41.49				
Koekelare	15	Koekelare gracht zeef +881 047	KO 88.1.047	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	56.45	Dd	42.83				
Koekelare	10	Koekelare Oosthof 1990	KO 90 2 /4 GRONDPLAN 2 009/WERVEL RUND	Bos	Tibia	R	MD	F	GL		Bp		SD	33.48	Bd	54.85	Dd	40.67				
Koekelare	10	Koekelare Oosthof 1990	KO 90 223/23 037	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	59.08	Dd					
Koekelare	10	Koekelare Oosthof 1990	KO 90 3 & 2/ 23. 035	Bos	Tibia	R	PM	FP	GL		Bp	68.69	SD		Bd		Dd					
Koekelare	10	Koekelare Oosthof 1990	KO 90 3/23 034	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	77.28	Dd	60.13				
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	Tibia	L	MD	FD	GL		Bp		SD	37.75	Bd	62.78	Dd	50.87				
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	Tibia	L	MD	FD	GL		Bp		SD		Bd	55.16	Dd	42.01				
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	Tibia	R	MD	FD	GL		Bp		SD	33.84	Bd	57.03	Dd					
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7 BOT / 47	Bos	Tibia	R	UDE	UDE	GL		Bp		SD		Bd	49.07	Dd	42.49				
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II OO8.	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	66.74	Dd	51.67				
Koekelare	6	16/32 KO A 95 III ZAK 25/48	KO 95 A III INV 006 ZAK 25	Bos	Tibia	R	MD	F	GL		Bp		SD	33.87	Bd	55.54	Dd	42.23				
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	KO 95- A III.002.ZAK 8	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	47.28	Dd	37.92				
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.II.013 BOT	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	59.24	Dd	43.05				
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	Tibia	L	MD	F	GL		Bp		SD		Bd	51.99	Dd	40.12				
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	Tibia	L	MD	F	GL		Bp		SD		Bd	46.07	Dd	37.47				
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	KO 95 A.V 006. onder van pakket. BOT/29	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	55.88	Dd	44.14				

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?										
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	KO 95 A.VI. INV 002 ZAK/22	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	53.52	Dd	
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	62.36	Dd	47.50
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Tibia	R	MD	F	GL		Bp		SD	31.35	Bd	57.23	Dd	40.08
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Tibia	R	MD	F	GL		Bp		SD	34.41	Bd	56.97	Dd	38.46
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Tibia	L	MD	F	GL		Bp		SD		Bd	55.63	Dd	44.51
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Tibia	L	MD	F	GL		Bp		SD	30.85	Bd		Dd	
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Bos	Tibia	L	MD	U (D)	GL		Bp		SD	33.47	Bd	51.84	Dd	37.81
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Tibia	L	MD	FD	GL		Bp		SD	31.76	Bd	60.34	Dd	46.11
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD	34.94	Bd		Dd	
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Tibia	L	M	?	GL		Bp		SD	31.62	Bd		Dd	
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Tibia	L	M	?	GL		Bp		SD		Bd		Dd	
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Bos	Tibia	R	PM	FP	GL		Bp		SD	34.77	Bd		Dd	
Koekelare	6	16/32 KO A 95 III ZAK 25/25	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD	33.72	Bd	55.65	Dd	36.26
Koekelare	6	16/32 KO A 95 III ZAK 25/26	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD	34.45	Bd	57.10	Dd	43.39
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Tibia	L	PM	F	GL		Bp	76.31	SD		Bd		Dd	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Tibia	L	MD	F	GL		Bp		SD		Bd	58.99	Dd	46.40
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Bos	Tibia	L	MD	F	GL		Bp		SD	33.21	Bd	53.38	Dd	43.19
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Tibia	L	MD	F	GL		Bp		SD	36.29	Bd	58.81	Dd	43.57
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Tibia	L	MD	F	GL		Bp		SD	33.00	Bd	56.84	Dd	38.76
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Tibia	L	MD	F	GL		Bp		SD	33.03	Bd	59.09	Dd	46.26
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Tibia	L	MD	F	GL		Bp		SD	40.05	Bd	63.87	Dd	
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Tibia	R	MD	F	GL		Bp		SD	32.30	Bd	53.34	Dd	40.65
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	53.58	Dd	41.69
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Tibia	L	DE	UDE	GL		Bp		SD		Bd	54.31	Dd	42.76
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Tibia	L	MD	FD	GL		Bp		SD	30.26	Bd	55.62	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Tibia	L	MD	FING D	GL		Bp		SD		Bd	57.95	Dd	45.37
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Tibia	L	MD	FD	GL		Bp		SD	32.34	Bd	55.88	Dd	42.15
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD	33.94	Bd	59.28	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD	35.22	Bd	59.28	Dd	
Koekelare	16	Koekelare gracht handverz	Loose in box	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	42.09	Dd	34.13
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Tibia	R	MD	F	GL		Bp		SD	33.43	Bd	54.90	Dd	40.88
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Tibia	R	MD	F	GL		Bp		SD	30.81	Bd		Dd	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Tibia	R	MD	F	GL		Bp		SD	41.18	Bd	62.65	Dd	44.98
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Tibia	R	MD	F	GL		Bp		SD	38.03	Bd	59.93	Dd	47.93
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Tibia	L	UDE	UDE	GL		Bp		SD		Bd	55.56	Dd	42.24
Koekelare	23	6/32 KO-95-1 INV 001	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD	35.81	Bd	59.46	Dd	43.57
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Tibia	L	MD	FD	GL		Bp		SD		Bd	55.51	Dd	41.86
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Tibia	L	MD	FD	GL		Bp		SD	28.07	Bd	50.97	Dd	39.38
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Tibia	L	MD	FD	GL		Bp		SD		Bd	57.04	Dd	43.39
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD	33.15	Bd	55.47	Dd	39.29
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD		Bd	59.54	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD		Bd	57.19	Dd	40.42
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD		Bd	53.03	Dd	41.86
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Tibia	R	MD	FD	GL		Bp		SD	36.80	Bd	62.11	Dd	45.93
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	Tibia	R	MD	F	GL		Bp		SD	31.68	Bd	56.31	Dd	38.57
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	Note in box- KO 95 A.I. 003.BOT/11 niets PI	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	54.87	Dd	40.02
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Tibia	L	MD	FD	GL		Bp		SD		Bd	60.58	Dd	45.78
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Tibia	R	MD	FD	GL		Bp		SD	37.99	Bd	62.88	Dd	49.57

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?										
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Tibia	L	PM	F	GL		Bp	88.21	SD		Bd		Dd	
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Bos	Tibia	L	MD	F	GL		Bp		SD	31.06	Bd	53.78	Dd	38.62
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box- Ko.93.061.U1.B OT/41	Bos	Tibia	R	PM	F	GL		Bp	78.10	SD		Bd		Dd	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	57.42	Dd	40.50
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	57.55	Dd	41.76
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Tibia	R	MD	F	GL		Bp		SD		Bd	63.73	Dd	42.80
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Tibia	L	MD	F	GL		Bp		SD	35.48	Bd	56.96	Dd	47.82
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Bos	Tibia	L	MD	F	GL		Bp		SD		Bd	56.90	Dd	52.21
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	Tibia	L	MD	FD	GL		Bp		SD		Bd	62.34	Dd	46.70
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	Tibia	L	MD	FD	GL		Bp		SD	28.92	Bd	53.00	Dd	37.41
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	Tibia	R	MD	FD	GL		Bp		SD	35.71	Bd	58.89	Dd	45.76
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	Bos	Tibia	R	MD	FD	GL		Bp		SD	31.21	Bd	55.74	Dd	41.94
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Tibia	L	MD	FD	GL		Bp		SD		Bd		Dd	53.45
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Tibia	L	MD	FD	GL		Bp		SD		Bd	57.04	Dd	40.45
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Tibia	R	MD	FD	GL		Bp		SD		Bd	57.14	Dd	44.11
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	Bos	Tibia	R	PM	F	GL		Bp	92.45	SD		Bd		Dd	
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	Note in box- KO.A.III 005.95. BOT/ 27	Bos	Tibia	L	MD	F	GL		Bp		SD	31.13	Bd	54.77	Dd	41.27
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	Note in box- KO.A.III 005.95. BOT/ 27	Bos	Tibia	R	MD	Fing	GL		Bp		SD	35.98	Bd	60.56	Dd	43.64
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Ulna	R	M	?	GL		LO		Dpa	53.13	SDO	61.37	BpC	
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	45.63
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Bos	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	55.27
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.062.U6.1o spade.BOT/37	Bos	Ulna	L	M	F	GL		LO		Dpa		SDO		BpC	47.89
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	Bos	Ulna	L	M	F	GL		LO		Dpa		SDO	62.29	BpC	46.31
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	Ko 95 A.V. 005 Beenderen/17	Bos	Ulna	L	M	?	GL		LO		Dpa		SDO	51.87	BpC	35.99
Koekelare	6	16/32 KO A 95 III ZAK 25/34	Loose in box	Bos	Ulna	R	M	F	GL		LO		Dpa		SDO		BpC	44.20
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ulna	L	PM	F	GL		LO		Dpa		SDO		BpC	44.84
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ulna	R	PM	F	GL		LO		Dpa		SDO	55.47	BpC	41.53
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ulna	R	PM	F	GL		LO		Dpa		SDO	46.56	BpC	36.56
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Bos	Ulna	R	PM	F	GL		LO		Dpa		SDO		BpC	46.91
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Ulna	L	M	?	GL		LO		Dpa		SDO	57.07	BpC	43.06
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	38.93
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO	62.41	BpC	
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	Bos	Ulna	L	PM	F	GL		LO		Dpa		SDO		BpC	44.35

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	Bos	Ulna	L	M	F	GL		LO		Dpa		SDO		BpC	41.06						
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ulna	L	M	F	GL		LO		Dpa		SDO		BpC	48.37						
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	Bos	Ulna	L	M	F	GL		LO		Dpa		SDO		BpC	43.57						
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Cervus	MT	R	PMD	F	Bp	33.80	Bd	36.00	Bd2	34.69	SD	20.94	GL	265.46	DD	18.32	Dp	35.12	Dd	24.49
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Equs	MC	?	All	F	Bp	46.85	Bd	47.02	Bd2	49.00	SD	36.90	GL	230.91	DD	25.56	Dp	32.52	Dd	
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	KO 94 U7/44. 96 RAV 12. Number on bone 88	Equs	Phalange 1	R	All	F	Glpe	67.86	Bp		SD	30.05	Bd									
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.I.009 BOT	Equs	Phalange 1	R	All	F	Glpe	83.63	Bp	56.79	SD	35.94	Bd	48.55								
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.I.ZAK/9	Equs	Phalange 1	R	All	F	Glpe	78.29	Bp	49.49	SD	35.72	Bd	46.97								
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	BOT KO 94 U /4.BOT /45	O/C	Astragalus	L	All	F	GL	28.14	GLM	28.32	GB	19.05										
Koekelare	38	24/32. Koekelare 1994. Various details see sheet	KO 94 U /48/4 BOT	O/C	Astragalus	L	All	F	GL	31.29	GLM	29.60	GB	20.41										
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Astragalus	R	All	F	GL	24.75	GLM	23.24	GB	15.24										
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Astragalus	L	All	F	GL	26.54	GLM	27.69	GB	18.13										
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	Calcaneus	R	All	F	GL	53.86	GB	15.62												
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 9.044	O/C	Calcaneus	R	All	U	GL	54.18	GB	19.49												
Koekelare	6	16/32 KO A 95 III ZAK 25/44	KO 95 A III INV 006 ZAK 25	O/C	Calcaneus	R	All	U	GL		GB	19.99												
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	O/C	Calcaneus	L	All	U	GL	52.27	GB	16.26												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Calcaneus	R	All	F	GL	55.79	GB	17.68												
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	O/C	Calcaneus	R	All	U	GL		GB	24.45												
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	Femur	L	PM	F	GL	196.80	GLC	186.68	Bp	42.97	BTR	30.77	DC	21.61	SD	14.85	Bd	34.46		
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.062.U6.1o spade.BOT/37	O/C	Femur	L	All	F	GL	157.46	GLC	153.71	Bp	44.16	BTR	32.15	DC	20.03	SD	16.80	Bd	37.99		
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	O/C	Femur	R	PM + UDE	UDE REFITS U	GL	198.25	GLC		Bp		BTR		DC	20.79	SD	18.91	Bd	43.11		
Koekelare	6	16/32 KO A 95 III ZAK 25/36	Loose in box	O/C	Femur	R	M	UD ?P	GL		GLC		Bp		BTR		DC		SD	15.63	Bd			
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	O/C	Femur	R	PM	FP	GL		GLC		Bp	45.77	BTR	29.26	DC	17.70	SD	16.98	Bd			
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD	14.20	Bd	26.97	BT	26.03				
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD	13.86	Bd	28.76	BT	27.55				
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD	13.53	Bd	28.36	BT	26.97				
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Humerus	R	MD	F	GL		GLC		Bp		SD	14.02	Bd	30.53	BT	28.76				
Koekelare	11	Koekelare Oosthof 1989	KO 89 W4 9-12 155CM	O/C	Humerus	R	All	F	GL	154.38	GLC	53.13	Bp	33.64	SD	14.39	Bd	33.36	BT	23.38				
Koekelare	10	Koekelare Oosthof 1990	KO 90 3/23 022	O/C	Humerus	R	MD	F	GL		GLC		Bp		SD		Bd	30.33	BT	28.41				
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.I.ZAK/9	O/C	Humerus	R	M	?	GL		GLC		Bp		SD	17.80	Bd		BT					
Koekelare	42	KOEKELARE 1995. BOT + ZEEFST. BOT- DIER. MONSTERS.	KO 95 A.III 002 UIT 17L -0,5mm	O/C	Humerus	L	M	?	GL		GLC		Bp		SD	13.68	Bd		BT					
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD	15.57	Bd	27.48	BT	26.64				
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.V 004 BOT	O/C	Humerus	R	MD	F	GL		GLC		Bp		SD		Bd	29.60	BT	28.60				
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	Ko 95 A.V. 005 Beenderen/17	O/C	Humerus	R	MD	F	GL		GLC		Bp		SD	13.80	Bd	30.86	BFD	28.54				
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Humerus	L	M	UD	GL		GLC		Bp		SD	11.98	Bd		BT					
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	14.14	Bd	25.16	BT	25.74				
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	13.80	Bd	28.81	BT	26.90				
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD	12.33	Bd	24.42	BT	24.87				
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD	14.07	Bd		BT	21.02				
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD	15.08	Bd	28.74	BT	27.63				
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	13.31	Bd	25.69	BT	25.42				

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	O/C	Humerus	R	M	?	GL		GLC		Bp		SD	13.56	Bd		BT					
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD		Bd	32.18	BT	29.36				
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	13.71	Bd	29.17	BT	26.86				
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD	15.02	Bd	28.13	BT	27.37				
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD		Bd	30.80	BT	29.87				
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	O/C	Humerus	R	MD	F	GL		GLC		Bp		SD	11.89	Bd	26.98	BT	26.76				
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	O/C	Humerus	R	MD	F	GL		GLC		Bp		SD	16.85	Bd	31.21	BT	32.20				
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	14.27	Bd	27.28	BT	27.34				
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	O/C	Humerus	R	MD	FD	GL		GLC		Bp		SD	15.21	Bd	29.04	BT	27.38				
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	14.41	Bd	31.33	BT	29.36				
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	15.01	Bd	29.66	BT	29.42				
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	O/C	Jaw	L		M3E	M3L	21.00	M3AW	7.49												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Jaw	L	All	M2 1/2 M3 NE	M1L	18.87	M1PW	6.69												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Jaw	L		M3 NE	M1L	17.30	M1PW	6.95												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Jaw	R	All	M3 NE	M1L	16.16	M1PW	6.06												
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Jaw	R		M3 NE?	M1L	23.10	M1PW	6.48												
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Jaw	L		M2W	M1L	12.59	M1AW	7.41	M1PW	7.36	M2L	15.27	M2A	8.11	M2PW	7.84				
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	BOT KO 93 U GRACHT /33	O/C	MC	L	All	F	Bp	22.42	Bd	23.62	Bd2	23.63	SD	13.39	GL	136.69	DD	9.33	Dp	16.91	Dd	16.52
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	BOT KO 93 U GRACHT /33	O/C	MC	R	PM	FPUD	Bp	21.99	Bd		Bd2	24.92	SD	14.06	GL		DD	9.90	Dp	16.67	Dd	
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	BOT KO 93 U GRACHT /33	O/C	MC	R	All	F	Bp	26.07	Bd	27.61	Bd2	27.87	SD	15.80	GL	138.73	DD	10.64	Dp	18.49	Dd	17.72
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	MC	R	PM	FP	Bp	22.97	Bd		Bd2		SD	13.72	GL		DD	9.69	Dp	16.69	Dd	
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	MC	L	PM	FP	Bp	22.57	Bd		Bd2		SD		GL		DD		Dp	16.91	Dd	
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	MC	R	PM	FPUD	Bp	21.88	Bd		Bd2	25.05	SD	13.01	GL		DD	9.95	Dp	15.47	Dd	
Koekelare	16	Koekelare gracht handverz	KO 88 1007	O/C	MC	L	PM	FPUD	Bp	22.18	Bd		Bd2	23.96	SD	11.22	GL		DD	8.09	Dp	14.50	Dd	
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	MC	R	PM	FP ?D	Bp	23.06	Bd		Bd2		SD		GL		DD		Dp	16.82	Dd	
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	MC	R	All	F	Bp	19.27	Bd	22.86	Bd2	22.19	SD	11.53	GL	140.44	DD	7.90	Dp	14.60	Dd	14.07
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	MC	R	PM	FP ?D	Bp	20.89	Bd		Bd2		SD	12.25	GL		DD	9.24	Dp	15.93	Dd	
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	MC	?	MD	FD ?P	Bp		Bd	23.43	Bd2	22.87	SD	12.07	GL		DD	9.37	Dp		Dd	15.52
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 .A IIIII 005	O/C	MC	?	MD	Fing	Bp		Bd	26.26	Bd2	26.22	SD	14.40	GL		DD	9.42	Dp		Dd	15.10
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	KO 95 A.V 006. onder van pakket. BOT/29	O/C	MC	R	PM	FPUD	Bp	22.87	Bd		Bd2		SD	14.39	GL		DD	10.29	Dp	16.70	Dd	
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	O/C	MC	L	All	F	Bp	23.87	Bd	25.98	Bd2	25.83	SD	15.13	GL	144.72	DD	10.49	Dp	16.93	Dd	16.03
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	O/C	MC	?	M	UD	Bp		Bd		Bd2	28.84	SD	15.17	GL		DD	13.63	Dp		Dd	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	O/C	MC	R	PM	FP ?D	Bp	20.42	Bd		Bd2		SD	13.18	GL		DD	8.84	Dp		Dd	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	O/C	MC	R	M	FP ?D	Bp		Bd		Bd2		SD	12.68	GL		DD	8.82	Dp		Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	MC	L	PM	FPUD	Bp	22.64	Bd		Bd2	23.18	SD	13.34	GL		DD	9.78	DP	17.91	Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	MC	L	PM	FP ?D	Bp		Bd		Bd2		SD	10.42	GL		DD		DP		Dd	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	MC	R	PM	FP ?D	Bp	19.57	Bd		Bd2		SD	11.15	GL		DD	8.68	DP	14.83	Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	MC	L	PM	FP ?D	Bp	22.36	Bd		Bd2		SD	13.38	GL		DD	9.79	Dp	14.83	Dd	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	MC	R	PM	FPUD	Bp	21.02	Bd		Bd2	23.02	SD	13.07	GL		DD	9.01	Dp	15.25	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	MC	L	PM	FP	Bp	22.34	Bd		Bd2		SD	12.77	GL		DD	8.96	Dp	15.97	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	MC	R	PM	FP	Bp	22.75	Bd		Bd2		SD	15.23	GL		DD	9.54	Dp	16.60	Dd	
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	MC	?	MD	FD	Bp		Bd	23.29	Bd2	21.31	SD		GL		DD		Dp		Dd	13.07
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	MC	L	PM	FP	Bp	21.55	Bd		Bd2		SD	13.21	GL		DD		Dp		Dd	
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	O/C	MC	L	PM	FPUD	Bp	22.10	Bd		Bd2		SD	12.94	GL		DD	9.19	Dp	16.20	Dd	
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	O/C	MC	R	All	F	Bp	22.59	Bd	25.34	Bd2	25.35	SD	14.24	GL	127.32	DD	10.38	Dp		Dd	15.42
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	O/C	MC	L	PM	FP	Bp	23.32	Bd		Bd2		SD	14.94	GL		DD	12.27	Dp	16.51	Dd	
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	O/C	MC	L	PM	F	Bp	19.22	Bd	22.11	Bd2	21.32	SD	11.20	GL	108.60	DD	8.14	Dp	14.08	Dd	13.15
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box- Ko.93.061.U1.BOT/41	O/C	MC	R	PM	FP	Bp	20.17	Bd		Bd2		SD		GL		DD		Dp	14.70	Dd	
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box- Ko.93.061.U1.BOT/41	O/C	MC	R	PM	FP	Bp	22.92	Bd		Bd2		SD	13.55	GL		DD	9.50	Dp	16.77	Dd	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	O/C	MC	L	PM	FP	Bp	23.78	Bd		Bd2		SD	13.56	GL		DD	9.78	Dp	16.91	Dd	
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	O/C	MC	L	PM	FP ?D	Bp	23.12	Bd		Bd2		SD	13.00	GL		DD	9.01	Dp	17.61	Dd	
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	O/C	MC	L	PM	FPUD	Bp	20.10	Bd		Bd2		SD	11.67	GL		DD	8.93	Dp	14.79	Dd	
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	O/C	MC	R	All	F	Bp	22.17	Bd	24.86	Bd2	23.65	SD	13.26	GL	131.22	DD	19.94	Dp	30.66	Dd	
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	O/C	MC	L	All	All	Bp	23.89	Bd	26.36	Bd2	26.69	SD	15.47	GL	136.48	DD	10.10	Dp	17.02	Dd	15.84
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	O/C	MC	L	PM	FP ?D	Bp	22.56	Bd		Bd2		SD	13.18	GL		DD	9.12	Dp	18.19	Dd	
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	O/C	MC	R	PM	FP ?D	Bp	22.25	Bd		Bd2		SD	12.89	GL		DD	9.44	Dp	16.66	Dd	
Koekelare	15	Koekelare gracht zeef +881 047	SCH 1 GEN KO88 15e EEUWS	O/C	MC	L	All	F	Bp	19.16	Bd	22.10	Bd2	21.25	SD	11.97	GL	119.16	DD	8.71	Dp	14.86	Dd	14.70
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	O/C	MC/MT	?	MD	FD	Bp		Bd	23.07	Bd2	22.74	SD		GL		DD		Dp		Dd	15.13
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	MT	L	PM	FP	Bp	20.17	Bd		Bd2		SD	13.16	GL		DD	9.49	Dp	18.94	Dd	
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	MT	R	PM	FP	Bp	20.31	Bd		Bd2		SD	11.65	GL		DD	9.93	Dp	19.34	Dd	
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	MT	L	All	F	Bp	20.54	Bd	24.30	Bd2	23.05	SD	12.03	GL	135.24	DD	9.31	Dp		Dd	16.32
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	MT	R	PM	FP ?D	Bp	20.36	Bd		Bd2		SD	11.39	GL		DD		Dp	19.88	Dd	
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	MT	R	PM	FPUD	Bp	20.24	Bd		Bd2	23.78	SD	12.23	GL		DD	10.33	Dp	19.47	Dd	
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	MT	R	PM	FP ?D	Bp	20.91	Bd		Bd2		SD		GL		DD	11.02	Dp	20.86	Dd	
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	KO 94 U8 BOT/50	O/C	MT	L	All	F	Bp	19.51	Bd	23.71	Bd2	22.67	SD	11.66	GL	130.63	DD	9.70	Dp	18.97	Dd	15.28
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A II OO8.	O/C	MT	R	PM	FP	Bp	21.36	Bd		Bd2		SD	14.59	GL		DD		Dp	22.77	Dd	
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	Ko 95 A.III 003 Bovenpuinlaag Beenderen/21	O/C	MT	L	All	F	Bp	18.65	Bd	22.10	Bd2	21.66	SD	10.50	GL	128.76	DD	9.13	Dp	18.39	Dd	14.62
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	O/C	MT	R	PM	FP	Bp	20.79	Bd		Bd2		SD	13.40	GL		DD	11.53	Dp	21.07	Dd	
Koekelare	29	17/32. KO 95.A.V./12.KO 95 A I/11. INV 002 + INV 003.	KO 95 A.V 002/12	O/C	MT	R	PM	FP	Bp	20.80	Bd		Bd2		SD	13.51	GL		DD	10.76	Dp	20.17	Dd	
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1 o spaade BOT /30	O/C	MT	L	PM	FP	Bp	16.49	Bd		Bd2		SD	12.53	GL		DD	9.64	Dp	18.58	Dd	
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	O/C	MT	R	All	F	Bp	21.04	Bd	25.04	Bd2	24.47	SD	12.86	GL	155.97	DD	11.71	Dp	21.50	Dd	16.69
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	O/C	MT	L	All	F	Bp	21.25	Bd	24.73	Bd2	24.77	SD	13.36	GL	156.40	DD	11.70	Dp	20.76	Dd	16.58

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																									
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	MT	L	PM	FPUD	Bp	18.76	Bd		Bd2		SD	8.45	GL		DD	8.14	Dp	17.53	Dd										
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	MT	L	All	F	Bp	19.78	Bd	23.99	Bd2	23.86	SD	11.70	GL	133.25	DD	9.10	Dp	18.81	Dd	14.95									
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	MT	L	PM	FPUD	Bp	19.48	Bd		Bd2	20.89	SD	11.50	GL		DD	9.98	Dp	19.79	Dd										
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	MT	R	All	F	Bp	18.38	Bd	20.91	Bd2	20.16	SD	11.08	GL	136.19	DD	9.76	Dp	19.11	Dd	13.54									
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	MT	R	PM	FP ?D	Bp	16.51	Bd		Bd2		SD	11.32	GL		DD	9.82	Dp	16.72	Dd										
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	MT	R	All	F	Bp	20.46	Bd	23.21	Bd2	23.30	SD	11.72	GL	129.32	DD	9.78	Dp	19.01	Dd	15.37									
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	MT	L	PM	FP	Bp	20.14	Bd		Bd2		SD	13.11	GL		DD	11.68	Dp	18.86	Dd										
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	MT	L	PM	FP	Bp	22.56	Bd		Bd2		SD	12.28	GL		DD	9.99	Dp	16.13	Dd										
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	MT	L	PM	FP	Bp	19.07	Bd		Bd2		SD	13.08	GL		DD	9.81	Dp	17.26	Dd										
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	O/C	MT	L	All	F	Bp	18.99	Bd	22.16	Bd2	21.90	SD	11.01	GL	139.68	DD	9.52	Dp	19.08	Dd	15.22									
Koekelare	31	28/32 KO 93 U1 085/ 38.	Note in box- KO 93.O85. U.1. BOT /38	O/C	MT	R	PM	FP	Bp	20.37	Bd		Bd2		SD	11.55	GL		DD	10.40	Dp	19.91	Dd										
Koekelare	27	15/32.KO-95-A.III ZAK/8.KO 95 A.I ZAK/23.INV 002.	Note in box- KO 95 A I.002.BOT/23	O/C	MT	R	PM	FP	Bp	19.63	Bd		Bd2		SD		GL		DD		Dp	19.62	Dd										
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	O/C	MT	L	PM	FP	Bp	18.71	Bd		Bd2		SD	12.31	GL		DD	8.82	Dp	18.75	Dd										
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	O/C	MT	R	PM	FP	Bp	17.93	Bd		Bd2		SD	10.79	GL		DD	8.80	Dp	17.46	Dd										
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	O/C	MT	R	PM	FP	Bp	19.05	Bd		Bd2		SD	11.22	GL		DD	9.90	Dp	20.43	Dd										
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box- Ko.93.061.U1.BOT/41	O/C	MT	L	All	F	Bp	19.01	Bd	20.93	Bd2	20.30	SD	11.22	GL	139.18	DD	9.57	Dp	18.68	Dd	14.75									
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	O/C	MT	R	All	F	Bp	18.45	Bd	22.02	Bd2	20.89	SD	11.38	GL	122.02	DD	9.22	Dp	18.51	Dd	14.42									
Koekelare	15	Koekelare gracht zeef +881 047	SCH 1 GEN KO88 15e EEUWS	O/C	MT	L	All	F	Bp	19.00	Bd	21.89	Bd2	20.71	SD	10.66	GL	127.75	DD	9.43	Dp	18.28	Dd	14.45									
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	MT	R	All	F	Bp	23.92	Bd	25.27	Bd2	25.36	SD	15.23	GL	144.21	DD	10.33	DP	16.32	DD	15.94									
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	MT	L	All	F	Bp	20.25	Bd	24.39	Bd2	24.86	SD	14.02	GL	145.69	DD	10.93	DP	19.95	DD	16.31									
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	MT	R	PM	FP	Bp	19.91	Bd		Bd2		SD	12.67	GL		DD	10.23	DP	21.08	DD										
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	MT	L	PM	FP	Bp	17.79	Bd		Bd2		SD		GL		DD		DP	17.31	Dd										
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	MT	R	PM	FP	Bp	19.83	Bd		Bd2		SD		GL		DD		DP	19.48	Dd										
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	MT	R	All	F	Bp	17.47	Bd	23.76	Bd2	22.13	SD	11.22	GL	127.70	DD	8.22	DP	18.38	Dd	14.76									
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	MT	R	PM	FP	Bp	17.55	Bd		Bd2		SD	10.54	GL		DD		DP	18.63	Dd										
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	O/C	Pelvis	R	All	F	GL		LA	31.69	LAR	26.54	LS		SH		SB		SC		LFO		GBTC		GBA		GBTi		SBI		
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Pelvis	R	M	F	GL		LA	30.41	LAR	25.39	LS		SH		SB		SC		LFO		GBTC		GBA		GBTi		SBI		
Koekelare	38	24/32. Koekelare 1994. Various details see sheet	KO 94 U /48/4 BOT	O/C	Pelvis	L	Acet	F	GL		LA	33.87	LAR	25.72	LS		SH		SB		SC		SC		LFO		GBTC		GBA		GBTi		SBI
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	O/C	Ph 1	L	All	F	Glpe	38.89	Bp	12.70	SD	10.26	Bd	11.80																	
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	O/C	Ph 1	L	All	F	Glpe	39.94	Bp	11.75	SD	9.63	Bd	11.70																	
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	O/C	Ph 1	R	All	F	Glpe	39.56	Bp	13.02	SD	10.07	Bd	11.87																	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Ph 1	R	All	F	GLPe	35.34	Bp	11.92	SD	9.70	Bd	10.81																	
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 9.044	O/C	ph 3	L	All	F	LD	44.56	DLS	56.17	MBS	17.62																			
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	BOT KO 93.U. gracht/36	O/C	Radius	R	PM	F	GL		Bp	29.27	BFP	27.38	SD	14.15	Bd		BFD														
Koekelare	41	21/32. KO 94 U7 .4+ U + 6.3 E (?B)	BOT KO 94 U /4.BOT /45	O/C	Radius	L	PM	F	GL		Bp	31.14	BFP	28.82	SD	15.82	Bd		BFD														
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Radius	R	PM	F	GL		Bp	28.20	BFP	25.26	SD		Bd		BFD														
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Radius	L	PM	F	GL		Bp	31.01	BFP	28.73	SD		Bd		BFD														
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Radius	L	PM	F	GL		Bp	30.97	BFP	28.04	SD		Bd		BFD														
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 89 W4 9/TOT 12 TOT-1,32 M 027 W(3) 14 TOT 17	O/C	Radius	L	PM	FPUD	GL		Bp	28.48	BFP	25.93	SD	15.03	Bd		BFD														
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Radius	R	MD	F	GL		Bp		BFP		SD		Bd	29.19	BFD	26.14													

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																										
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	Radius	R	PM	FP	GL		Bp	30.18	BFP	27.59	SD	17.51	Bd		BFD															
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	O/C	Radius	R	PM	F	GL		Bp	28.49	BFP	25.82	SD	16.58	Bd		BFD															
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	O/C	Radius	L	PM	FP	GL		Bp	26.18	BFP	24.35	SD	15.01	Bd		BFD															
Koekelare	33	11/32 KO-95-A III. INV 007. ZAK/7.	Note in box- KO-95-1.INV 007	O/C	Radius	R	PM	FPUD	GL		Bp	31.01	BFP	29.08	SD	17.34	Bd		BFD															
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Radius	R	PM	FP	GL		Bp	30.77	BFP	25.36	SD	16.82	Bd		BFD															
Koekelare	6	16/32 KO A 95 III ZAK 25/33	Loose in box	O/C	Radius	L	PM	F	GL		Bp	31.12	BFP	28.14	SD	16.10	Bd		BFD															
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	16.91	GLP	22.98	LG	19.41	BG	19.07													
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.99	GLP		LG	21.29	BG	21.94													
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.78	GLP	32.81	LG	21.38	BG	20.99													
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 89 W4 13/14-15 TOT 030 155CM	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.12	GLP		LG		BG	23.50													
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	KO 93 O79 U6 BOT /32	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	19.54	GLP		LG		BG														
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	Ko 95 A.III 003 Bovenpuinlaag Beenderen/21	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.69	GLP		LG		BG	19.59													
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	16.98	GLP	27.97	LG	23.14	BG	18.70													
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	O/C	Scapula	L	PM	?	HS		DHA		Ld		SLC		GLP		LG		BG	25.43													
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Scapula	L	All	F	HS		DHA		Ld		SLC	21.15	GLP	32.20	LG	23.00	BG	22.76													
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Scapula	L	All	F	HS		DHA		Ld		SLC	16.79	GLP		LG		BG	19.91													
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Scapula	R	All	F	HS		DHA		Ld		SLC	16.34	GLP		LG	20.13	BG	18.97													
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Scapula	R	All	F	HS		DHA		Ld		SLC	19.25	GLP	29.88	LG	23.92	BG	22.04													
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Scapula	L	All	F	HS		DHA		Ld		SLC	15.64	GLP		LG		BG														
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Scapula	L	M	F	HS		DHA		Ld		SLC	17.10	GLP		LG		BG														
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Scapula	L	M	?	HS		DHA		Ld		SLC	15.87	GLP		LG		BG														
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.07	GLP	26.86	LG	22.63	BG	18.84													
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	15.53	GLP	26.89	LG	21.42	BG	17.94													
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	16.51	GLP	27.86	LG	21.77	BG	18.40													
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	19.98	GLP		LG		BG														
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.44	GLP	26.30	LG	18.06	BG														
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Scapula	L	M	F	HS		DHA		Ld		SLC	20.07	GLP		LG		BG														
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Scapula	L	M	?	HS		DHA		Ld		SLC	16.49	GLP		LG		BG														
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	21.10	GLP	30.71	LG	24.93	BG	21.15													
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.72	GLP	27.16	LG	19.11	BG	18.48													
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	14.79	GLP		LG		BG	17.77													
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	16.76	GLP		LG	22.13	BG	18.89													
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	15.01	GLP	26.10	LG	21.16	BG	19.34													
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box-Ko.93.061.U1.BOT/41	O/C	Scapula	R	PM	PM	HS		DHA		Ld		SLC	19.22	GLP		LG		BG	21.25													
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box-Ko.93.061.U1.BOT/41	O/C	Scapula	L	PM	PM	HS		DHA		Ld		SLC	21.21	GLP		LG	25.23	BG	21.73													
Koekelare	32	2/32 KO-95-1. Zak 3 INV 001	Note in box- KO-95-1.INV 001	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	17.43	GLP		LG	18.03	BG	16.93													
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	Tibia	L	All	F	GL	205.76	Bp	36.02	SD	13.67	Bd	24.98	Dd	18.91																	
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	Tibia	R	All	F	GL	199.71	Bp	36.85	SD	14.88	Bd	27.02	Dd	19.93																	
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 9.044	O/C	Tibia	R	MD	F	GL		Bp		SD	12.95	Bd	24.10	Dd	18.64																	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																		
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Tibia	L	MD	F	GL		Bp		SD	16.23	Bd	26.70	Dd	20.66								
Koekelare	10	Koekelare Oosthof 1990	KO 90 2 & 3 23/025	O/C	Tibia	R	MD	F	GL		Bp		SD	15.51	Bd	24.87	DD	19.97								
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.079. U6/BOT/42.	O/C	Tibia	R	PM	Fing	GL		Bp	39.34	SD		Bd		Dd									
Koekelare	6	16/32 KO A 95 III ZAK 25/49	KO 95 A III INV 006 ZAK 25	O/C	Tibia	L	MD	F	GL		Bp		SD	11.88	Bd	22.95	Dd	16.30								
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A III.009	O/C	Tibia	R	MD	F	GL		Bp		SD	12.84	Bd	24.50	Dd	19.04								
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	O/C	Tibia	L	MD	FD UP	GL		Bp		SD	16.19	Bd	27.41	Dd	21.55								
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	O/C	Tibia	R	MD	FD UP	GL		Bp		SD	18.40	Bd	29.15	Dd	27.26								
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Tibia	L	MD	FD	GL		Bp		SD	12.65	Bd	22.76	Dd	17.56								
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Tibia	L	MD	FD	GL		Bp		SD	12.67	Bd	22.57	Dd	16.79								
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	O/C	Tibia	R	DE	UDE	GL		Bp		SD		Bd	27.99	Dd	21.25								
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	O/C	Tibia	R	MD	F	GL		Bp		SD	12.58	Bd	21.72	Dd	17.68								
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	Note in box- KO 93.061. U 1. BOT/28	O/C	Tibia	L	MD	F	GL		Bp		SD	15.08	Bd	26.07	Dd	19.70								
Koekelare	44	3/32 KO 95 1. ZAK 2. INV 001.	Note in box- KO 95.A.001	O/C	Tibia	L	MD	FD	GL		Bp		SD		Bd	25.09	Dd	20.17								
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	O/C	Tibia	R	All	FDUP	GL		Bp	36.03	SD	16.62	Bd	26.82	Dd	13.13								
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note in box- Ko.94.U7.BOT	O/C	Tibia	R	MD	FD	GL		Bp		SD		Bd	25.56	Dd	10.43								
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	O/C	Ulna	R	M	F	GL		GLO		Dpa	35.53	SDO	22.68	BpC	17.82								
Koekelare	16	Koekelare gracht handverz	KO 881.007	O/C	Ulna	R	M	F	GL		LO	33.83	Dpa	21.97	SDO	24.45	BpC	15.57								
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	O/C	Ulna	R	All	?	GL		LO		Dpa		SDO		BpC	39.77								
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	O/C	Ulna	L	M	F	GL		LO		Dpa		SDO		BpC	41.15								
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	39.71								
Koekelare	4	KO 95 A III ZAK 6	Loose in box	O/C	Calcaneus	R	All	U	GL	74.49	GB	22.37								.		.		.		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	O/C	Humerus	R	MD	FD	GL		GLC		Bp		SD	13.35	Bd	28.41	BT	26.91		.		.		.
Koekelare	6	16/32 KO A 95 III ZAK 25/29	Loose in box	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	14.85	Bd	30.84	BT	28.00						
Koekelare	6	16/32 KO A 95 III ZAK 25/30	Loose in box	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	12.82	Bd	26.66	BT	26.31						
Koekelare	6	16/32 KO A 95 III ZAK 25/31	Loose in box	O/C	Humerus	R	MD	FD	GL		GLC		Bp		SD	15.05	Bd	27.31	BT	25.74						
Koekelare	6	16/32 KO A 95 III ZAK 25/32	Loose in box	O/C	Humerus	R	MD	FD	GL		GLC		Bp		SD	13.77	Bd	30.20	BT	27.97						
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	O/C	MC	L	PM	FP	Bp	18.92	Bd		Bd2		SD		GL		DD		Dp	15.09	Dd			.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	O/C	MC	L	PM	FP ?D	Bp	21.88	Bd		Bd2		SD	13.46	GL		DD	10.78	Dp	16.28	Dd			.
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	O/C	MC/MT	?	MD	FD	Bp		Bd	21.86	Bd2	20.69	SD	10.91	GL		DD	9.37	Dp		Dd	13.73		.
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	O/C	MT	L	All	F	Bp	17.91	Bd	21.52	Bd2	21.29	SD	11.63	GL	101.13	DD	9.82	Dp	17.44	Dd	15.71		.
Koekelare	3	KO 95 A III ZAK 5	Loose in box	O/C	MT	L	All	F	Bp	19.91	Bd	24.17	Bd2	24.66	SD	13.67	GL	145.84	DD	10.57	Dp	19.79	Dd	15.57		.
Koekelare	3	KO 95 A III ZAK 5	Loose in box	O/C	MT	L	P	F	Bp	19.22	Bd		Bd2		SD		GL		DD		Dp	18.36	Dd			.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	O/C	MT	L	PM	Fp	Bp	19.29	Bd		Bd2		SD	11.01	GL		DD	11.74	Dp		Dd			.
Koekelare	6	16/32 KO A 95 III ZAK 25/17	Loose in box	O/C	MT	L	PM	FP	Bp	20.04	Bd		Bd2		SD	11.70	GL		DD	10.09	Dp		Dd			
Koekelare	5	KO 95-93 A V	Bot KO 93 Opkuls gracht rond motte 31	O/C	Radius	L	PM	FP	GL		Bp	28.38	BFP	25.67	SD	15.75	Bd		BFD			.		.		.
Koekelare	3	KO 95 A III ZAK 5	Loose in box	O/C	Radius	R	PM	F	GL		Bp	31.41	BFP	29.25	SD	17.32	Bd		BFD			.		.		.
Koekelare	3	KO 95 A III ZAK 5	Loose in box	O/C	Scapula	R	PM	F	HS		DHA		LD		SLC	19.49	GLP		LG		BG	22.43		.		.
Koekelare	3	KO 95 A III ZAK 5	Loose in box	O/C	Scapula	L	PM	F	HS		DHA		LD		SLC	17.96	GLP		LG		BG			.		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	16.42	GLP		LG	20.46	BG	18.04		.		.
Koekelare	4	KO 95 A III ZAK 6	Loose in box	O/C	Tibia	L	MD	FD	GL		Bp		SD		Bd	25.81	Dd	19.97		.		.		.		.
Koekelare	6	16/32 KO A 95 III ZAK 25/27	Loose in box	O/C	Tibia	R	MD	FD	GL		Bp		SD	14.21	Bd	23.56	Dd	18.23								
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Sus	Astragalus	L	All	F	GL	39.93	GLM	37.83	GB	23.37												
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Sus	Astragalus	R	All	F	GL	48.61	GLM		GB	26.98												
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. onder van pakket.	KO 95 A.V 006. onder van pakket. BOT/29	Sus	Calcaneus	L	All	F	GL	107.89	GB	31.61														

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																											
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Sus	Calcaneus	R	All	?	GL		GB																								
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Sus	Carpal	?	All	F	GB	25.08																									
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Sus	Femur	R	UDE	UDE	GL		GLC		Bp		BTR		DC		SD		Bd	38.77													
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Sus	Femur	L	All	UPUD	GL		GLC		Bp		BTR		DC		SD	17.53	Bd														
Koekelare	30	18/32 KO 95 A. III ZAK/27.KO 95 A.V ZAK/29. INV 006. ONDER VAN PAKKET.	KO 95 A.V 006. onder van pakket. BOT/29	Sus	Humerus	R	MD	F	GL		GLC		Bp		SD	17.53	Bd		BT																
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Sus	Humerus	L	MD	F	GL		GLC		Bp		SD	15.35	Bd	35.10	BT	31.27															
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Sus	Humerus	L	M	?	GL		GLC		Bp		SD	16.85	Bd		BT																
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Sus	Humerus	R	MD	FD	GL		GLC		Bp		SD	16.45	Bd	30.63	BT	28.33															
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Sus	Humerus	R	M	?UD	GL		GLC		Bp		SD	12.89	Bd		BT																
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Sus	Humerus	L	MD	FD	GL		GLC		Bp		SD	17.46	Bd	45.58	BT	38.28															
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Sus	Humerus	L	MD	FD	GL		GLC		Bp		SD	27.35	Bd		BT																
Koekelare	39	8/32. KO 95 A. III. INV 008. ZAK/5.	Loose in box	Sus	Humerus	L	MD	F	GL		GLC		Bp		SD	17.38	Bd	45.52	BT	39.95															
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	Note in box- KO 93.085 U7 BOT/39	Sus	Humerus	R	MD	FD	GL		GLC		Bp		SD		Bd	47.04	BT	35.61															
Koekelare	25	5/32 KO-A-95. ZAK 13. INV 001	Note in box- KO 95-A.Inv 001.Zak 13.Opkuis Zuidkant	Sus	Humerus	R	MD	Fing D	GL		GLC		Bp		SD	15.83	Bd	39.12	BT	34.30															
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Sus	Jaw	L	All	M3C3 HALF	P4L	12.13	P4W	8.13	M1L	14.68	M1AW	9.49	M1PW		M2L	19.64	M2AW	11.88	M2PW	12.52	M3AW	14.37									
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Sus	Jaw	R	All	M3C2 HALF	P4L	13.09	P4W	7.77	M1L	14.31	M1AW	8.84	M1PW	9.64	M2L	18.11	M2AW	11.53	M2PW	11.50											
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 3.021	Sus	Jaw	L	All	M1 M2 M3? NE	P4L	14.32	P4W	9.34	M1L	15.06	M1AW		M1PW	11.65	M2L	20.53	M2AW	13.84	M2PW	13.97											
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 89 W4 16-19 5E STEEK TOT- 034	Sus	Jaw	R	All	M3C2E	P4L	13.24	M1L	15.50	M1AW	9.18	M1PW	9.62	M2L	18.52	M2AW	11.97	M2PW	12.33	M3AW	14.73											
Koekelare	10	Koekelare Oosthof 1990	KO 90 3 & 2/ 23. 035	Sus	Jaw	R		M2E	M2L	20.55	M2AW	13.03	M2PW	12.34																					
Koekelare	10	Koekelare Oosthof 1990	KO 90.2 009	Sus	Jaw	R		M3 NE	M1L	16.44	M1PW	10.80	M2L	18.40	M2AW	12.49	M2PW	13.04																	
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	KO 93 O79 U6 BOT /32	Sus	Jaw	L	All	P4 M1 M2 M3	P4L	11.79	P4W	7.02	M1L		M1AW	9.18	M1PW		M2L	18.17	M2AW		M2PW		M3L	29.05	M3AW	14.06	M3MW	13.65	M3PW	11.18			
Koekelare	43	25/32 Koekelare 1993.KO 93 U1 061/28. KO 93 U6 079/32. KO 93 U6 079/33.	KO 93 O79 U6 BOT /32	Sus	Jaw	L	All	M1 M2 M3	M1L		M1AW		M1PW		M2L	18.48	M2AW	11.39	M2PW	11.47	M3L	25.73	M3AW	14.14	M3MW	13.12	M3PW	10.20							
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Sus	Jaw	L	All		P4L	11.83	P4PW	7.04	M1L	15.72	M2L	19.01	M2AW	11.47	M2PW	11.45															
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1 o spaade BOT /30	Sus	Jaw	L	All	M2 M3	P4L		P4W		M1L		M1AW		M1PW		M2L	16.24	M2AW	12.06	M2PW	12.93	M3L	38.86	M3AW	13.84	M3MW	13.00	M3PW	10.46			
Koekelare	34	26/32 Koekelare 1993.various details see sheet	Ko.93.062.U6.1 o spaade BOT /30	Sus	Jaw	L	All	P4 M1 M2 M3	P4L	14.18	P4W	9.52	M1L	16.17	M1AW	10.41	M1PW	11.34	M2L	22.02	M2AW	13.92	M2PW	14.21	M3L		M3AW	14.81	M3MW		M3PW				
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Sus	Jaw	R		M3 C1 HALF	M1L	16.33	M1AW	9.66	M1PW	10.50	M2L	21.94	M2AW	13.73	M2PW	13.33															
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Sus	Jaw	L	All	M1 M2 M3 C1V	M2L	23.94																									
Koekelare	16	Koekelare gracht handverz	Unmarked bag	Sus	Jaw	R	All	DP4 M1 M2 NE	DP4L	17.82	DP4W	8.16	M1L	15.97	M1AW	9.18	M1PW	10.06																	
Koekelare	16	Koekelare gracht handverz	Unmarked bag	Sus	Jaw	L	All	P4 M1 M2 M3	P4L	13.22	P4W	7.68	M1L	14.50	M1AW	9.48	M1PW	9.85	M2L	18.42	M2AW	12.37	M2PW	12.39	M3L	26.31	M3AW	13.04	M3MW	12.51					
Koekelare	16	Koekelare gracht handverz	Unmarked bag	Sus	Jaw	L	All	M3 C3 HALF	P4L	14.18	P4W	9.61	M1L	15.29	M1AW	9.09	M1PW	10.85	M2L	19.31	M2AW	12.50	M2PW	12.73	M3L		M3AW	15.17							
Koekelare	16	Koekelare gracht handverz	Unmarked bag	Sus	Jaw	L	All	M3 C2 HALF	P4L	14.85	P4W	8.89	M1L	16.06	M1AW	9.85	M1PW	10.79	M2L	20.79	M2AW	13.47	M2PW	13.80											
Koekelare	38	24/32. Koekelare 1994. Various details see sheet	KO 94 U /48/4 BOT	Sus	MC	R	PM	FPUD	Bp	15.46	Bd		Bd2		SD	9.74	GL		DD	9.38	Dp	14.68	Dd												
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	Sus	MC	R	PM	FPUD	Bp	14.33	Bd		Bd2	16.18	SD	10.25	GL		DD	13.07	Dp	15.34	Dd												
Koekelare	16	Koekelare gracht handverz	Unmarked bag	Sus	MC	R	PM	F	Bp	17.43	Bd		Bd2		SD	10.67	GL		DD	14.05	Dp	17.21	Dd												
Koekelare	28	31/32 KO-95-A various details see sheet	KO 95 A.I.009 BOT	Sus	MT	R	PM	FPUD	Bp	18.50	Bd		Bd2	19.86	SD	16.13	GL		DD	12.77	Dp	27.88	Dd												
Koekelare	10	Koekelare Oosthof 1990	90 KO 3 & 2/23 038	Sus	MT	R	PM	FPUD	Bp	16.69	Bd		Bd2	16.07	SD	13.44	GL		DD	10.28	Dp	24.93	Dd												
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 89 W4 16-19 5E STEEK TOT- 034	Sus	Pelvis	L	All	F	GL		LA	64.10	LAR	52.59	LS		SH		SB				SC		LFO		GBTC		GBA		GBTi		SBI		
Koekelare	6	16/32 KO A 95 III ZAK 25/51	KO 95 A III INV 006 ZAK 25	Sus	Pelvis	L	Acet	F	GL		LA	56.33	LAR	54.55	LS		SH		SB		SC		LFO		GBTC		GBA		GBTI		SBI				

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																										
Koekelare	22	27/32 Koekelare 1993. KO 93 U1 39.085.KO 93 U6 089/40	KO.93.080.U6 Bot/40	Sus	Pelvis	R	All	F	GL		LA	52.96	LAR	39.69	LS		SH		SB		SC		SC		LFO		GBTC		GBA		GBTi		SBI		
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Sus	Pelvis	L	All	F	GL		LA	36.04	LAR	27.84	LS		SH		SB		SC		LFO		GBTC		GBA		GBTi		SBI				
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Sus	Radius	L	PM	F	GL		Bp	28.01	BFP	22.49	SD	15.40	Bd		BFD																
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Ko 93.062.U6.1o spade.BOT/37	Sus	Radius	L	PM	F	GL		Bp	28.32	BFP		SD	18.57	Bd		BFD																
Koekelare	36	22/32. KOEKELARE A 1995. BEENDEREN VAN VERSCHILEDE INV NR.	Ko 95 A.V. 005 Beenderen/17	Sus	Radius	R	PM	F	GL		Bp	31.32	BFP	28.41	SD	17.30	Bd		BFD																
Koekelare	6	16/32 KO A 95 III ZAK 25/22	Loose in box	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	27.66	GLP		LG	29.62	BG	29.87													
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	25.95	GLP		LG	30.07	BG														
Koekelare	26	29/32. KO-93-U1.061/41.KO 93 U.Gracht/36	Note in box-Ko.93.061.U1.BOT/41	Sus	Scapula	L	PM	PM	HS		DHA		Ld		SLC	25.79	GLP	37.24	LG		BG	28.45													
Koekelare	6	16/32 KO A 95 III ZAK 25/28	Loose in box	Sus	Tibia	R	PM	FP	GL		Bp		SD	14.22	Bd		Dd																		
Koekelare	5	KO 95-93 A V	KO 95 VLAB B 7 BOT 17 GRONDPLAN 1 -1500 M BOT	Sus	Tooth- Mandible M2	L	All	F	L	23.03	M2AW	14.38	M2PW	15.00																					
Koekelare	34	26/32 Koekelare 1993.various details see sheet	BOT KO 93. Opkus gracht rond motte/34	Sus	Ulna	L	M	?	GL		GLO		Dpa		SDO	43.15	BpC	25.75																	
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	38.89																	
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	37.37																	
Koekelare	14	Koekelare gracht handverz	Box: Hand 15 e	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	43.89																	
Koekelare	12	Koekelare '88- Kleinere contexten '89	KO 88 1.03	Sus	Ulna	L	M	F	GL		LO		Dpa	50.82	SDO		BpC	41.35																	
Koekelare	15	Koekelare gracht zeef +881 047	KO 88.1.047	Sus	Ulna	L	M	F	GL		LO		Dpa		SDO		BpC	36.02																	
Koekelare	10	Koekelare Oosthof 1990	KO 90 223/23 037	Sus	Ulna	R	M	U	GL		LO		Dpa	38.24	SDO	30.53	BpC	23.38																	
Koekelare	6	16/32 KO A 95 III ZAK 25/45	KO 95 A III INV 006 ZAK 25	Sus	Ulna	L	All	?	GL		LO		Dpa		SDO		BpC	46.00																	
Koekelare	37	14/32. KO 95 A.III./9/KO 95 A.I/10.INV 007	KO 95 A.I.ZAK/9	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	42.08																	
Koekelare	6	16/32 KO A 95 III ZAK 25/35	Loose in box	Sus	Ulna	L	M	F	GL		LO		Dpa	37.15	SDO	32.41	BpC	22.90																	
Koekelare	7	7/32 KO A 95 III INV 008 ZAK 1	Loose in box	Sus	Ulna	L	All	F	GL		LO		Dpa		SDO		BpC	36.41																	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Sus	Ulna	L	M	F	GL		LO		Dpa		SDO		BpC	28.57																	
Koekelare	9	1/32 KO A 95 ZAK 3 INV 001	Loose in box	Sus	Ulna	R	M	F	GL		LO		Dpa		SDO		BpC	24.25																	
Koekelare	20	10/32 Koekelare A III 199 INV 007 ZAK 7	Loose in box	Sus	Ulna	R	PM	F	GL		LO		Dpa		SDO	43.59	BpC	25.24																	
Koekelare	21	12/32 Koekelare A III INV 007 zak 24	Note in box Ko.95.A.III 007	Sus	Ulna	R	M	F	GL		LO		Dpa		SDO		BpC	37.92																	
Koekelare	18	Ream Koekelare gracht zeef	Note in box-RUND- 15e eeuw KO HAND?	Sus	Ulna	R	M	FP	GL		LO		Dpa		SDO		BpC	45.28																	
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Sus	Humerus	L	M	?	GL		GLC		Bp		SD	26.60	Bd		BT			.		.		.									
Koekelare	3	KO 95 A III ZAK 5	Loose in box	Sus	Humerus	L	MD	F	GL		GLC		Bp		SD	27.18	Bd		BT			.		.		.									
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Sus	Humerus	R	M	?	GL		GLC		Bp		SD	16.48	Bd		BT			.		.		.									
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Sus	Pelvis	L	Acet	F	GL		LA	72.85	LAR	55.04																					
Koekelare	8	4/38 KO A 95-1 ZAK 4 INV 001	Loose in box	Sus	Pelvis	R	Acet	F	GL		LA	67.92	LAR	50.10																					
Koekelare	4	KO 95 A III ZAK 6	Loose in box	Sus	Scapula	L	P	F	HS		DHA		Ld		SLC		GLP		LG	34.07	BG	31.72		.		.									
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Sus	Tibia	L	MD	F	GL		Bp		SD		Bd	38.70	Dd	33.05																	
Koekelare	5	KO 95-93 A V	KO 95 AV 005 15o E BOVEN VEERPABKET BOT	Sus	Tibia	L	MD	F	GL		Bp		SD		Bd	42.69	Dd	30.92																	
Koekelare	42	KOEKELARE 1995. BOT + ZEEFST. BOT- DIER. MONSTERS.	Few measurable bones-majority of box samples of soil only.																																
Koekelare	40	KO 89 ZEEFSTALEN. NIET GEWASSEN. 10-155. 9-12. Monsters.	No apparent measurable bones-samples of soil only.																																
Koekelare	19	Koekelare gracht handverz	No measurable bones in box																																
Koekelare	24	30/32 Koekelare 1993-1994 various details see sheet	Note-some bags in box not opened although a few remains present due to poor condition of bones making accurate measurements unlikely.																																

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?								
Koekelare	35	23/32. KO 94 U7 + K7 + U8. KO-94-A. Opperkakte Gracht	Note-some bags in box not opened although a few remains present due to poor condition of bones making accurate measurements unlikely.													
Koekelare	38	24/32. Koekelare 1994. Various details see sheet	Note-some bags in box not opened although a few remains present due to poor condition of bones making accurate measurements unlikely.													
Raversijde	74	RAV BOT 97-RAV-13 tot 80	97-RAV-48	Bos	Radius + Ulna	L	PM	F	GL		Bp	71.35	Bfp	64.94	UBpc	40.98
Raversijde	69	RAV 96 BOT 424	424	Bos	Astragalus	L	All	F	GL	55.32	GLm	52.52	GB	31.10		
Raversijde	69	RAV 96 BOT 424	424	Bos	Astragalus	L	All	F	GL		GLm	63.05	GB			
Raversijde	69	RAV 96 BOT 424	424	Bos	Astragalus	R	All	F	GL	64.20	GLm	58.50	GB	37.90		
Raversijde	69	RAV 96 BOT 424	424	Bos	Astragalus	R	All	F	GL		GLm		GB	40.13		
Raversijde	63	RAV BOT 477	477	Bos	Astragalus	?	All	F	GL		GLm		GB	35.94		
Raversijde	48	Doos 4	4559	Bos	Astragalus	R	All	F	GL		GLm		GB	37.24		
Raversijde	48	Doos 4	4569	Bos	Astragalus	L			GLM	56.92	GB	38.33				
Raversijde	52		95-RAV-120	Bos	Astragalus	L	All	F	GL	69.70	GLm	63.81	GB	45.89		
Raversijde	52		95-RAV-120	Bos	Astragalus	L	All	F	GL	63.40	GLm	59.00	GB	38.28		
Raversijde	55		95-RAV-279	Bos	Astragalus	L	All	F	GL		GLm		GB	45.19		
Raversijde	64	96 RAV 150-195	96 RAV 166	Bos	Astragalus	L	All	F	GL	69.80	GLm	66.20	GB	43.21		
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	Bos	Astragalus	L	All	F	GL	76.63	GLm	71.94	GB	46.97		
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Astragalus	R	All	F	GL		GLm	63.09	GB	37.06		
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Astragalus	R	All	F	GL		GLm		GB	39.94		
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Bos	Astragalus	L	All	F	GL	66.55	GLm	61.14	GB	39.49		
Raversijde	79	96 RAV 208-218	96 RAV 217 vis HU t zond HV 0,5 mm UIT	Bos	Astragalus	R	All	F	GL	63.50	GLm	58.45	GB	38.36		
Raversijde	79	96 RAV 208-218	96 RAV 217 vis HU t zond HV 0,5 mm UIT	Bos	Astragalus	R	All	F	GL		GLm		GB	42.42		
Raversijde	87	RAV BOT 235-263	96 RAV 250	Bos	Astragalus	R	All	F	GL	64.87	GLm	59.94	GB	39.76		
Raversijde	87	RAV BOT 235-263	96 RAV 263	Bos	Astragalus	?R	All	F	GL		GLm		GB	38.19		
Raversijde	77	96 RAV 288-314	96 RAV 302	Bos	Astragalus	L	All	F	GL	78.84	GLm	72.23	GB	47.12		
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	Bos	Astragalus	L	All	F	GL		GLm		GB	38.60		
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 54	Bos	Astragalus	?	BROKEN	F	GL			46.35	GB			
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	Astragalus	R	All	F	GL	62.18	GLm	58.96	GB	37.40		
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.10	Bos	Astragalus	L	All	F	GL	63.21	GLm	58.25	GB	39.21		
Raversijde	59		97 RAV 361	Bos	Astragalus	L	All	F	GL	73.77	GLm	67.63	GB	43.66		
Raversijde	61		97 RAV 477	Bos	Astragalus	L	All	F	GL	64.21	GLm	59.70	GB	40.87		
Raversijde	58		97-RAV-361	Bos	Astragalus	L	All	F	GL		GLm		GB	38.97		
Raversijde	69	RAV 96 BOT 424	424	Bos	Calcaneus	R	M	F	GL	124.99	GB	41.62				
Raversijde	62	97 RAV 650	650	Bos	Calcaneus	R	PM	F	GL		GB	37.79				
Raversijde	47	Bot 3 Raversijde 4492-4550	4550	Bos	Calcaneus	R	All	UDE	GL		GB	38.52				
Raversijde	48	Doos 4	4569	Bos	Calcaneus	L	M	?			GB	36.91				
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Calcaneus	L	M	?	GL		GB	38.92				
Raversijde	52		95-RAV-120	Bos	Calcaneus	R	M	U	GL		GB	36.38				
Raversijde	52		95-RAV-120	Bos	Calcaneus	R	M	U	GL		GB	42.87				
Raversijde	64	96 RAV 150-195	96 RAV 194	Bos	Calcaneus	R	M	U	GL		GB	39.08				
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Bos	Calcaneus	L	M	U	GL		GB	36.82				
Raversijde	84	RAV bot 221-226	96 RAV 221	Bos	Calcaneus	R	M	?	GL		GB	42.76				
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Bos	Calcaneus	L	M	U	GL		GB	40.63				
Raversijde	87	RAV BOT 235-263	96 RAV 254	Bos	Calcaneus	R	M	U	GL		GB	40.45				
Raversijde	77	96 RAV 288-314	96 RAV 302	Bos	Calcaneus	L	All	F	GL	149.38	GB	48.25				
Raversijde	70	RAV BOT 61-69	96 RAV 61	Bos	Calcaneus	R	PM	F	GL	124.51	GB	37.89				
Raversijde	53		96-RAV-146	Bos	Calcaneus	R	M	?	GL		GB	24.15				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Bos	Calcaneus	L	M	U	GL		GB	36.40				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Bos	Calcaneus	R	M	U	GL		GB	30.34				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Bos	Calcaneus	R	All	F	GL	136.06	GB	39.67				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	Bos	Calcaneus	L	A	F	GL	136.70	GB	43.09				
Raversijde	59		97 RAV 361	Bos	Calcaneus	L	All	F	GL	128.14	GB	37.13				
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Calcaneus	R	M	U	GL		GB	39.72				
Raversijde	90	RAV 686-781	97 RAV 708	Bos	Calcaneus	L	M	U	GL		GB	42.30				
Raversijde	90	RAV 686-781	97 RAV 781	Bos	Calcaneus	L	M	UP	GL		GB	37.58				
Raversijde	54		97-RAV-148	Bos	Calcaneus	L	All	F	GL		GB	36.62				
Raversijde	54		97-RAV-148	Bos	Calcaneus	R	M	?	GL		GB	33.62				
Raversijde	57		97-RAV-298	Bos	Calcaneus	R	M	U	GL		GB	39.48				
Raversijde	57		97-RAV-298	Bos	Calcaneus	R	M	?	GL		GB	41.72				
Raversijde	74	RAV BOT 97-RAV-13 tot 65	97-RAV-55	Bos	Calcaneus	R	All	F	GL		GB	36.78				
Raversijde	74	RAV BOT 97-RAV-13 tot 79	97-RAV-48	Bos	Carpal	?	All	F	GB	27.09						
Raversijde	63	RAV BOT 477	477	Bos	Carpal	?	All	F	GB	25.18						

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*														
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	Bos	Carpal	?	All	F	GB	33.41												
Raversijde	48	Doos 4	4551	Bos	Carpal	?	All	F	GB	32.19												
Raversijde	48	Doos 4	4554	Bos	Carpal	R	All		GB	26.39												
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Carpal	?	All	F	GB	34.55												
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Carpal	?	All	F	GB	28.24												
Raversijde	51		95-RAV-	Bos	Carpal	?	All	F	GB	33.66												
Raversijde	52		95-RAV-120	Bos	Carpal	?	All	F	GB	31.64												
Raversijde	55		95-RAV-279	Bos	Carpal	?	All	F	GB	29.45												
Raversijde	55		95-RAV-279	Bos	Carpal	?	All	F	GB	28.47												
Raversijde	55		95-RAV-279	Bos	Carpal	?	All	F	GB	37.41												
Raversijde	64	96 RAV 150-195	96 RAV 157	Bos	Carpal	R	All	F	GB	22.25												
Raversijde	64	96 RAV 150-195	96 RAV 157	Bos	Carpal	R	All	F	GB	26.33												
Raversijde	79	96 RAV 208-218	96 RAV 211	Bos	Carpal	?	All	F	GB	27.81												
Raversijde	84	RAV bot 221-226	96 RAV 223	Bos	Carpal	L	All	F	GB	23.64												
Raversijde	84	RAV bot 221-226	96 RAV 223	Bos	Carpal	L	All	F	GB	28.31												
Raversijde	84	RAV bot 221-226	96 RAV 223	Bos	Carpal	R	All	F	GB	22.27												
Raversijde	84	RAV bot 221-226	96 RAV 225 VIS HU + rond HU- UIT	Bos	Carpal	?	All	F	GB	22.30												
Raversijde	80	96 RAV 264-286	96 RAV 283	Bos	Carpal	?	All	F	GB	25.12												
Raversijde	77	96 RAV 288-314	96 RAV 300	Bos	Carpal	?	All	F	GB	23.11												
Raversijde	83	RAV bot 338-374	96 RAV 338	Bos	Carpal	R	All	F	GB	37.11												
Raversijde	83	RAV bot 338-374	96 RAV 339	Bos	Carpal	R	All	F	GB	29.84												
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 345	Bos	Carpal	R	All	F	GB	26.54												
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 54	Bos	Carpal	L	All	F	GB	34.59												
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-37	Bos	Carpal		?	?	GB	26.57												
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.9	Bos	Carpal		All	FULL	GB	26.33												
Raversijde	82	RAV bot 210-301	97 RAV 253	Bos	Carpal	L	All	F	GB	34.75												
Raversijde	82	RAV bot 210-301	97 RAV 280	Bos	Carpal	?	All	F	GB	27.77												
Raversijde	81	RAV 97 306-339	97 RAV 334	Bos	Carpal	L	All	F	GB	2164.00												
Raversijde	81	RAV 97 306-339	97 RAV 334	Bos	Carpal	L	All	F	GB	31.57												
Raversijde	81	RAV 97 306-339	97 RAV 334	Bos	Carpal	L	All	F	GB	31.16												
Raversijde	81	RAV 97 306-339	97 RAV 334	Bos	Carpal	L	All	F	GB	22.91												
Raversijde	88	RAV BOT 350-369	97 RAV 358	Bos	Carpal	R	All	F	GB	21.64												
Raversijde	59		97 RAV 361	Bos	Carpal	?	All	F	GB	20.41												
Raversijde	59		97 RAV 361	Bos	Carpal	?	All	F	GB	25.61												
Raversijde	59		97 RAV 361	Bos	Carpal	?	All	F	GB	31.94												
Raversijde	59		97 RAV 361	Bos	Carpal	?	All	F	GB	34.55												
Raversijde	60		97 RAV 361	Bos	Carpal	?	All	F	GB	23.46												
Raversijde	71	RAV BOT 61-98	97 RAV 97	Bos	Carpal				GB	32.06												
Raversijde	74	RAV BOT 97-RAV-13 tot 88	97-RAV-20	Bos	Carpal	?	F	F	GB	25.44												
Raversijde	74	RAV BOT 97-RAV-13 tot 89	97-RAV-20	Bos	Carpal	?	F	F	GB	30.50												
Raversijde	57		97-RAV-298	Bos	Carpal	?	All	F	GB	25.58												
Raversijde	57		97-RAV-298	Bos	Carpal	?	All	F	GB	23.23												
Raversijde	57		97-RAV-298	Bos	Carpal	?	All	F	GB	22.93												
Raversijde	57		97-RAV-298	Bos	Carpal	?	All	F	GB	33.21												
Raversijde	58		97-RAV-361	Bos	Carpal	?	All	F	GB	33.88												
Raversijde	62	97 RAV 650	650	Bos	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	54.94
Raversijde	62	97 RAV 650	650	Bos	Femur	L	PM	FP?D	GL		GLC		Bp		BTr		DC		SD	35.83	Bd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	Bos	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	98.65
Raversijde	47	Bot 3 Raversijde 4492-4550	4547	Bos	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	
Raversijde	79	96 RAV 208-218	96 RAV 210	Bos	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	52.62
Raversijde	79	96 RAV 208-218	96 RAV 211	Bos	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	51.93
Raversijde	84	RAV bot 221-226	96 RAV 225	Bos	Femur	L	MD	FingD?P	GL		GLC		Bp		BTr		DC		SD	30.05	Bd	88.74
Raversijde	87	RAV BOT 235-263	96 RAV 260	Bos	Femur	?	P	F	GL		GLC		Bp		SD	16.40	DC	29.03	SD	29.37		
Raversijde	80	96 RAV 264-286	96 RAV 281	Bos	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	53.23
Raversijde	80	96 RAV 264-286	96 RAV 282	Bos	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	52.55
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 345	Bos	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	56.46
Raversijde	70	RAV BOT 61-69	96 RAV 61	Bos	Femur	L	MD	FD?P	GL		GLC		Bp		BTR		DC		SD		Bd	106.20
Raversijde	70	RAV BOT 61-69	96 RAV 61	Bos	Femur	R	PM	FD?P	GL		GLC		Bp		BTR		DC	44.04	SD		Bd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	Femur	L	M	UP?D	GL		GLC		Bp		BTr		DC		SD	21.23	Bd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	Femur	R	M	UP?D	GL		GLC		Bp		BTr		DC		SD	21.30	Bd	
Raversijde	75	97 RAV 150-189	97 RAV 163	Bos	Femur	R	MD	M+UDErefit	GL		GLC		Bp		BTr		DC		SD	21.67	Bd	57.67
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	Bos	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	51.98
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	Bos	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	93.50
Raversijde	60		97 RAV 361	Bos	Femur	R	MD	FingD?P	GL		GLC		Bp		BTr		DC		SD		Bd	50.76
Raversijde	60		97 RAV 361	Bos	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	51.36
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	Bos	Femur	R	MD	FD?P	GL		GLC		Bp		BTR	31.36	DC		SD		Bd	89.44
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	Bos	Femur	R	MD	FD?P	GL		GLC		Bp		BTR	31.36	DC		SD		Bd	85.48
Raversijde	90	RAV 686-781	97 RAV 712 VIS HU + Zond HU 0, 5 mm UIT	Bos	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	55.44
Raversijde	69	RAV 96 BOT 424	424	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	64.73	BT			
Raversijde	69	RAV 96 BOT 424	424	Bos	Humerus	L	PM	FP?D	GL		GLC		Bp	88.36	SD		Bd		BT			
Raversijde	62	97 RAV 650	650	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	73.71	BT			
Raversijde	62	97 RAV 650	650	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	73.70	BT			
Raversijde	62	97 RAV 650	650	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	76.76	BT	70.50		

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																								
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4431	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	69.90	BT	69.94												
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	Bos	Humerus	R		FD?P	GL		GLC		Bp		SD		Bd	80.67	BT	71.97												
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	32.60	Bd	78.25	BT	72.46												
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	78.67	BT	74.81												
Raversijde	51		95-RAV-	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	76.57	BT	69.59												
Raversijde	51		95-RAV-115	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	73.23	BT	67.15												
Raversijde	52		95-RAV-120	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	19.41	Bd	71.72	BT	67.38												
Raversijde	52		95-RAV-120	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.60	Bd	82.17	BT													
Raversijde	64	96 RAV 150-195	96 RAV 166	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	68.49	BT													
Raversijde	64	96 RAV 150-195	96 RAV 177 vis HU. UIT	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	77.96	BT													
Raversijde	79	96 RAV 208-218	96 RAV 208	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	33.07	Bd	77.85	BT													
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	Bos	Humerus	?R	MD	FD?P	GL		GLC		Bp		SD		Bd		BT	66.47												
Raversijde	84	RAV bot 221-226	96 RAV 225 VIS HU + rond HU- UIT	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	67.86	BT													
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	32.47	Bd	74.97	BT	66.61												
Raversijde	87	RAV BOT 235-263	96 RAV 248	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	75.62	BT	69.49												
Raversijde	77	96 RAV 288-314	96 RAV 314	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	29.66	Bd	71.00	BT	68.98												
Raversijde	77	96 RAV 288-314	96 RAV 314	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	29.24	Bd	69.82	BT	66.98												
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 320	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd		BT	64.59												
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 347	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	37.50	Bd	80.38	BT	75.38												
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	31.93	Bd	79.18	BT	70.32												
Raversijde	83	RAV bot 338-374	96 RAV 354	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	80.01	BT													
Raversijde	70	RAV BOT 61-69	96 RAV 62	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	33.49	Bd	77.31	BT	76.93												
Raversijde	70	RAV BOT 61-69	96 RAV 62	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd		BT													
Raversijde	53		96-RAV-127	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	70.03	BT	67.06												
Raversijde	53		96-RAV-145	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	69.13	BT	64.65												
Raversijde	56		96-RAV-292	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	37.45	Bd	85.42	BT	79.59												
Raversijde	56		96-RAV-292	Bos	Humerus	L	PM	FingP?D	GL		GLC		Bp	92.11	SD		Bd		BT													
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	74.73	BT													
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	76.52	BT													
Raversijde	75	97 RAV 150-189	97 RAV 171	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	31.97	Bd	73.69	BT	68.76												
Raversijde	75	97 RAV 150-189	97 RAV 182	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	29.55	Bd	67.09	BT	67.40												
Raversijde	76	RAV 97 191-209	97 RAV 206	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	33.92	Bd	78.59	BT	74.02												
Raversijde	82	RAV bot 210-301	97 RAV 301	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	76.06	BT	68.65												
Raversijde	88	RAV BOT 350-369	97 RAV 355	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	69.81	BT													
Raversijde	88	RAV BOT 350-369	97 RAV 358	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	27.35	Bd	75.45	BT	64.89												
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	31.36	Bd	76.13	BT	67.94												
Raversijde	90	RAV 686-781	97 RAV 753	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	75.01	BT													
Raversijde	71	RAV BOT 61-98	97 RAV 96	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	27.71	Bd	74.91	BT													
Raversijde	57		97-RAV-298	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	79.92	BT	71.41												
Raversijde	58		97-RAV-361	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	28.67	Bd	65.62	BT	64.16												
Raversijde	58		97-RAV-361	Bos	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	72.86	BT	71.47												
Raversijde	74	RAV BOT 97-RAV-13 tot 73	97-RAV-48	Bos	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	75.38	BT	68.26												
Raversijde	74	RAV BOT 97-RAV-13 tot 75	97-RAV-59	Bos	Humerus	R	MD	FDUP	GL		GLC		Bp		SD	39.78	Bd	75.26	BT	71.20												
Raversijde	69	RAV 96 BOT 424	424	Bos	Jaw	L			P4L	20.13	P4W	11.31	M1L	19.72	M1AW	13.43	M1PW	13.07	M2L	22.00	M2AW	13.71	M2PW	12.75	M3L	32.03	M3AW	12.70	M3MW	12.16	M3PW	6.20
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	Bos	Jaw	R	All	dp4, M1#	dp4L	29.69	dp4W	12.72	M1L	26.54	M1aw	14.22	M1pw															
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	Bos	Jaw	L			M1L	22.21	M1Aw	13.75	M1Pw	13.81	M2L	24.69	M2AW	14.64	M2PW	14.31	M3L	31.07	M3AW	14.48	M3MW	13.42	M3PW	6.59	P4L	20.26	P4W	11.84
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Jaw	L	All	M1, M2, M3	M1L	21.07	M1AW	13.34	M1PW	14.71	M2L	21.81	M2AW	14.70	M2PW	14.82	M3L	32.46	M3AW	13.27	M3MW	12.18	M3PW	6.60				
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Bos	Jaw	R			P4L	20.80	P4W	12.98	M2L	23.87	M2AW	15.17	M2PW	14.82	M3L	33.10	M3AW	13.95	M3MW	13.15	M3PW	7.40						
Raversijde	70	RAV BOT 61-69	96 RAV 66	Bos	Jaw	L	All	P41/2-M3C31/	P4L	21.14	P4W	11.90	M1L	24.39	M1AW	14.73	M1PW	14.84	M2L	28.34	M2AW	15.15	M2PW	13.66	M3AW	13.82						
Raversijde	88	RAV BOT 350-369	97 RAV 344	Bos	Jaw	L			P4L	19.21	P4W	13.48	M1L	21.78	M1AW	13.85	M1PW	14.73														
Raversijde	88	RAV BOT 350-369	97 RAV 344	Bos	Jaw	R			P4L	20.35	P4W	12.79	M1L	21.46	M1AW	13.50	M1PW	14.47	M2L	23.22	M2AW	16.01	M2PW	16.31	M3L	36.80	M3AW	16.77	M3MW	13.81	M3PW	9.54
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	Bos	Jaw	L	?	(M2+M3)	M2L	24.86	M2AW	15.67	M2PW	16.48	M3L	37.45	M3AW	16.48	M3PW	10.42												
Raversijde	48	Doos 4	4558	Bos	Jaw	L		M2/M3	M2L	22.94	M2AW	15.75	MRPW	15.38	M3L	35.12	M3AW	15.68	M3MW	14.12	M3PW	10.32										
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	Bos	MC	R		FP?D	Bp	56.97	Bd		Bd2		SD		GL		DD		Dp		Dd									
Raversijde	48	Doos 4	4560	Bos	MC	?	?	UDE	Bp		Bd	50.90	Bd2	50.07	SD		GL		DD		DP		Dd	30.51								
Raversijde	62	97 RAV 650	650	Bos	MC	?	MD	FD?P	Bp		Bd	55.29	Bd2	52.93	SD	30.40	GL		DD	21.47	Dp		Dd									
Raversijde	87	RAV BOT 235-263	96 RAV 235 1 groot stuk vis UIT in bird bag	Bos	MC	?	MD	FD?P	Bp		Bd	53.21	Bd2	47.95	SD		GL		DD		Dp		Dd	29.51								
Raversijde	82	RAV bot 210-301	97 RAV 212	Bos	MC	?	MD	FD?	Bp		Bd	48.15	Bd2	43.81	SD		GL		DD		Dp		Dd	26.34								
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	Bos	MC	?	MD	UD?P	Bp		Bd		Bd2	55.13	SD		GL		DD		Dp		Dd									
Raversijde	69	RAV 96 BOT 424	424	Bos	MC	R	PM	FP?D	Bp	57.83	Bd		Bd2		SD		GL		DD		Dp	35.02	Dd									
Raversijde	69	RAV 96 BOT 424	424	Bos	MC	R	PM	FP?D	Bp	51.35	Bd		Bd2		SD		GL		DD		Dp	32.48	Dd									

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?																
Raversijde	63	RAV BOT 477	477	Bos	MC	R	All	F	Bp	56.19	Bd	55.24	Bd2	52.39	SD	31.55	GL	197.62	DD	23.12	Dp	33.52	Dd	30.36
Raversijde	62	97 RAV 650	650	Bos	MC	L	All	F	Bp	51.72	Bd	49.88	Bd2	46.73	SD	26.79	GL	196.52	DD	20.50	Dp	29.53	Dd	27.85
Raversijde	62	97 RAV 650	650	Bos	MC	L	All	F	Bp	54.25	Bd	54.55	Bd2	51.33	SD	29.77	GL	195.73	DD	20.96	Dp	34.26	Dd	31.04
Raversijde	62	97 RAV 650	650	Bos	MC	R	All	F	Bp	50.85	Bd	51.73	Bd2	47.29	SD	26.53	GL	187.94	DD	19.17	Dp	31.97	Dd	28.13
Raversijde	62	97 RAV 650	650	Bos	MC	R	All	F	Bp	52.89	Bd	52.56	Bd2	50.91	SD	28.91	GL	194.43	DD	20.35	Dp	33.26	Dd	29.01
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	Bos	MC	L	All	All	Bp	54.32	Bd	55.59	Bd2	53.06	SD	31.15	GL	192.64	DD	22.31	Dp	33.85	Dd	30.40
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	Bos	MC	L	All	F	Bp		Bd	50.06	Bd2	45.96	SD	28.37	GL		DD	18.41	Dp		Dd	28.08
Raversijde	46	Bot 2 Raversijde 4466-4492	4473	Bos	MC	L	PM	FPUD	Bp		Bd		Bd2	50.05	SD	24.36	GL		DD	19.06	Dp	30.26	Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4542	Bos	MC	L	PM	FP?D	Bp	53.42	Bd		Bd2		SD		GL		DD		DP	31.61	DD	
Raversijde	48	Doos 4	4554	Bos	MC	L		FPUD	Bp	54.14	Bd		Bd2	54.46	SD	27.06	GL		DD	22.80	DP	32.52	Dd	
Raversijde	48	Doos 4	4560	Bos	MC	L	All	F	Bp	55.88	Bd		Bd2		SD		GL		DD		DP	35.62	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	MC	L	PM	FP?D	Bp	61.18	Bd		Bd2		SD		GL		DD		Dp	35.64	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	MC	L	PM	FPUD	Bp	57.37	Bd		Bd2	55.02	SD	31.77	GL		DD	22.72	Dp	34.93	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	MC	R	All	F	Bp	55.70	Bd	56.08	Bd2	51.50	SD	28.67	GL	202.11	DD	21.73	Dp	32.21	Dd	29.95
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	MC	L	All	All	Bp	53.17	Bd	56.46	Bd2	53.33	SD	28.99	GL	202.12	DD	21.31	Dp	32.24	Dd	28.51
Raversijde	52		95-RAV-120	Bos	MC	L	PM	FPUD	Bp	51.25	Bd		Bd2	45.65	SD	25.79	GL		DD	18.29	Dp		Dd	
Raversijde	52		95-RAV-120	Bos	MC	L	PM	FP?D	Bp	52.92	Bd		Bd2		SD	30.64	GL		DD		Dp		Dd	
Raversijde	52		95-RAV-120	Bos	MC	R	All	F	Bp	52.70	Bd		Bd2		SD		GL		DD		Dp	31.74	Dd	
Raversijde	52		95-RAV-120	Bos	MC	R	PM	FPUD	Bp	56.66	Bd		Bd2		SD	23.97	GL		DD	18.10	Dp		Dd	
Raversijde	52		95-RAV-120	Bos	MC	R	PM	FPUD	Bp		Bd		Bd2		SD		GL		DD	24.12	Dp		Dd	
Raversijde	52		95-RAV-120	Bos	MC	?	MD	FD?P	Bp		Bd	51.14	Bd2	48.41	SD		GL		DD	22.55	Dp		Dd	31.44
Raversijde	64	96 RAV 150-195	96 RAV 194	Bos	MC	?	MD	FD?P	Bp		Bd	49.58	Bd2	46.98	SD	25.75	GL		DD	24.61	Dp		Dd	28.30
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Bos	MC	R	All	FP?D	Bp	51.27	Bd	55.06	Bd2	48.67	SD	29.93	GL	194.80	DD	19.94	Dp	34.55	Dd	28.96
Raversijde	79	96 RAV 208-218	96 RAV 208	Bos	MC	L	All	F	Bp	55.07	Bd	56.18	Bd2	51.71	SD	29.58	GL	193.66	DD	20.51	Dp	33.52	Dd	30.68
Raversijde	79	96 RAV 208-218	96 RAV 211	Bos	MC	L	All	F	Bp	49.00	Bd	49.97	Bd2	45.74	SD	28.04	GL	188.18	DD	20.71	Dp	29.72	Dd	29.86
Raversijde	79	96 RAV 208-218	96 RAV 217 vis HU t zond HV 0,5 mm UIT	Bos	MC	R	All	F	Bp	53.96	Bd	54.32	Bd2	52.67	SD	29.85	GL	202.55	DD	21.36	Dp	32.76	Dd	30.61
Raversijde	79	96 RAV 208-218	96 RAV 217 vis HU t zond HV 0,5 mm UIT	Bos	MC	R	All	F	Bp	56.36	Bd		Bd2		SD		GL		DD	21.74	Dp	34.90	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 22	Bos	MC	R	All	F	Bp	56.75	Bd		Bd2		SD	28.38	GL		DD	21.58	Dp	34.95	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	Bos	MC	?	UDE	UDE	Bp		Bd	60.48	Bd2	57.93	SD		GL		DD		Dp		Dd	32.81
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 24	Bos	MC	R	PM	FP?D	Bp	57.71	Bd		Bd2		SD		GL		DD		Dp	34.91	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 314	Bos	MC	L	PM	FP?D	Bp	59.88	Bd		Bd2		SD		GL		DD		Dp	36.73	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 338	Bos	MC	R	PM	FP?D	Bp	56.21	Bd		Bd2		SD		GL		DD		Dp	34.51	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 349	Bos	MC	R	All	F	Bp	57.05	Bd	55.94	Bd2	52.68	SD	30.59	GL	202.82	DD	22.15	Dp	36.13	Dd	31.53
Raversijde	70	RAV BOT 61-69	96 RAV 61	Bos	MC	R	All	F	Bp	53.10	Bd	53.31	Bd2	50.01	SD	29.16	GL	203.88	DD	19.65	Dp	31.56	Dd	28.92
Raversijde	70	RAV BOT 61-69	96 RAV 62	Bos	MC	R	All	FP?D	Bp	55.21	Bd	55.34	Bd2	52.71	SD	30.62	GL	198.89	DD	21.97	Dp	34.15	Dd	30.49
Raversijde	70	RAV BOT 61-69	96 RAV 62	Bos	MC	R	PM	FP?D	Bp		Bd		Bd2		SD	31.45	GL		DD	21.01	Dp	32.17	Dd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 735	Bos	MC	L	All	F	Bp	55.77	Bd	55.33	Bd2	51.49	SD	28.52	GL	198.42	DD	20.78	Dp	34.86	Dd	32.22
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	MC	L	PM	FPUD	Bp	48.15	Bd		Bd2	44.62	SD	19.85	GL		DD	15.23	Dp	28.64	Dd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	MC	R	PM	FP?D	Bp	48.33	Bd		Bd2		SD		GL		DD		Dp	28.27	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-11	Bos	MC	R	PM	FPUD	Bp	50.31	Bd		Bd2	44.72	SD	22.94	GL		DD	18.13	Dp	29.64	Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-11.1	Bos	MC	L	PM	FP?D	Bp	56.62	Bd		Bd2		SD		GL		DD		Dp	34.62	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Bos	MC	L	PM	FP?D	Bp	58.34	Bd		Bd2		SD		GL		DD		Dp	35.94	Dd	
Raversijde	56		96-RAV-292	Bos	MC	R	All	F	Bp	65.79	Bd	63.62	Bd2	60.00	SD	34.68	GL	212.16	DD	24.69	Dp	40.68	Dd	34.58
Raversijde	50		96-RAV-79	Bos	MC	?	MD	FD?P	Bp		Bd	59.41	Bd2	58.95	SD	32.74	GL		DD	24.28	Dp		Dd	34.87
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR-11.5ZWART	Bos	MC	R	PM	FP?D	Bp	52.43	Bd		Bd2		SD		GL		DD		Dp	32.25	Dd	
Raversijde	76	RAV 97 191-209	97 RAV 194	Bos	MC	L	PM	FPUD	Bp	57.18	Bd		Bd2	54.45	SD	30.94	GL		DD	22.56	Dp	34.74	Dd	
Raversijde	76	RAV 97 191-209	97 RAV 194	Bos	MC	R	A	F	Bp	50.33	Bd	51.33	Bd2	47.60	SD	27.80	GL	189.63	DD	21.42	Dp	31.48	Dd	31.06
Raversijde	76	RAV 97 191-209	97 RAV 194	Bos	MC	R	All	F	Bp	52.59	Bd	53.06	Bd2	46.66	SD	27.48	GL	200.69	DD	18.36	Dp	33.38	Dd	29.56
Raversijde	82	RAV bot 210-301	97 RAV 244	Bos	MC	L	All	F	Bp	55.98	Bd	56.08	Bd2	53.09	SD	31.69	GL	207.20	DD	22.91	Dp	34.35	Dd	30.63
Raversijde	82	RAV bot 210-301	97 RAV 273	Bos	MC	R	PM	FP?D	Bp	52.68	Bd		Bd2		SD		GL		DD		Dp	31.76	Dd	
Raversijde	82	RAV bot 210-301	97 RAV 301	Bos	MC	L	All	F	Bp	48.77	Bd	51.90	Bd2	47.56	SD	26.24	GL	194.94	DD	118.56	Dp	31.21	Dd	28.38
Raversijde	81	RAV 97 306-339	97 RAV 317	Bos	MC	L	PM	FPUD	Bp		Bd		Bd2	54.96	SD	25.16	GL		DD	18.61	Dp	30.56	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 317	Bos	MC	L	PM	FP?D	Bp	55.38	Bd		Bd2		SD		GL		DD		Dp	33.66	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 318	Bos	MC	R	All	F	Bp	53.42	Bd	53.21	Bd2	50.71	SD	30.42	GL	192.27	DD	21.47	Dp	32.97	Dd	29.71
Raversijde	59		97 RAV 361	Bos	MC	R	All	F	Bp	59.27	Bd	57.96	Bd2	53.55	SD	31.85	GL	198.15	DD	22.78	Dp	36.57	Dd	32.12
Raversijde	59		97 RAV 361	Bos	MC	R	All	F	Bp	51.69	Bd	51.94	Bd2	48.72	SD	28.48	GL	193.61	DD	20.74	Dp	32.59	Dd	28.66
Raversijde	61		97 RAV 477	Bos	MC	L	PM	FP?D	Bp	55.05	Bd		Bd2		SD		GL		DD		Dp	33.13	Dd	
Raversijde	54		97-RAV-117	Bos	MC	?	MD	FD?P	Bp		Bd	58.43	Bd2	57.38	SD		GL		DD	21.89	Dp		Dd	32.09
Raversijde	54		97-RAV-120	Bos	MC	?	MD	FD?P	Bp		Bd	50.06	Bd2	41.80	SD		GL		DD		Dp		Dd	28.18
Raversijde	54		97-RAV-149	Bos	MC	R	PM	FP?D	Bp	56.53	Bd		Bd2		SD		GL		DD		Dp	33.60	Dd	
Raversijde	58		97-RAV-361	Bos	MC	L	All	F	Bp	57.60	Bd	55.12	Bd2	53.46	SD	30.32	GL	201.59	DD	21.44	Dp	36.19	Dd	32.85
Raversijde	58		97-RAV-361	Bos	MC	L	All	F	Bp	58.35	Bd	57.17	Bd2	52.40	SD	31.87	GL	207.41	DD	23.01	Dp	35.50	Dd	31.41
Raversijde	74	RAV BOT 97-RAV-13 tot 67	97-RAV-54	Bos	MC	?	MD	FD?P	Bp		Bd	54.89	Bd2	51.46	SD		GL		DD		Dp		Dd	30.54
Raversijde	82	RAV bot 210-301	97 RAV 213	Bos	MC	L	PM	FP?D	Bp	52.76	Bd		Bd2		SD	26.50	FL		DD		Dp	31.89	Dd	
Raversijde	69	RAV 96 BOT 424	424	Bos	MC/MT	?	UDE	UDE	Bp		Bd	52.53	Bd2	52.80	SD		GL		DD		Dp		Dd	30.25
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	MC/MT	?	D	UDE	Bp		Bd	57.00	Bd2	58.13	SD		GL		DD		Dp		Dd	
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	Bos	MC/MT	?	MD	FD?P	Bp		Bd	53.02	Bd2		SD		GL		DD		Dp		Dd	30.69

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Bos	MC/MT	?	MD	FD?P	Bp		Bd	55.77	Bd2	49.11	SD	49.11	GL		DD		Dp		Dd	31.18
Raversijde	87	RAV BOT 235-263	96 RAV 248	Bos	MC/MT	?	MD	FD?P	Bp		Bd	56.90	Bd2	52.22	SD		GL		DD	22.15	Dp		Dd	31.15
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 325	Bos	MC/MT	?	MD	FD?P	Bp		Bd	54.08	Bd2	49.31	SD		GL		DD	21.38	Dp		Dd	31.82
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 348	Bos	MC/MT	?	MD	FD?P	Bp		Bd	54.63	Bd2	49.09	SD		GL		DD		Dp		Dd	30.92
Raversijde	76	RAV 97 191-209	97 RAV 194	Bos	MC/MT	?	UDE	UDE	Bp		Bd	52.98	Bd2	55.97	SD		GL		DD		Dp		Dd	30.32
Raversijde	88	RAV BOT 350-369	97 RAV 358	Bos	MC/MT	?	MD	FD?P	Bp		Bd	59.85	Bd2	57.12	SD	32.75	GL		DD	23.14	Dp		Dd	32.71
Raversijde	60		97 RAV 361	Bos	MC/MT	L	All	F	Bp	51.71	Bd		Bd2		SD		GL		DD		Dp	30.98	Dd	
Raversijde	60		97 RAV 361	Bos	MC/MT	R	PM	FPUD	Bp		Bd		Bd2	56.34	SD	29.60	GL		DD	22.61	Dp	34.10	Dd	
Raversijde	60		97 RAV 361	Bos	MC/MT	R	All	F	Bp		Bd	48.21	Bd2	43.42	SD	24.38	GL	187.89	DD	18.37	Dp		Dd	48.02
Raversijde	60		97 RAV 361	Bos	MC/MT	L	All	F	Bp	50.03	Bd	54.09	Bd2	50.32	SD	26.42	GL	237.52	DD	26.64	Dp	48.36	Dd	53.97
Raversijde	60		97 RAV 361	Bos	MC/MT	R	All	F	Bp	43.60	Bd	45.32	Bd2	40.65	SD	20.72	GL	211.10	DD	19.63	Dp	39.18	Dd	45.44
Raversijde	60		97 RAV 361	Bos	MC/MT	?	MD	FD?P	Bp		Bd	55.91	Bd2	53.66	SD		GL		DD		Dp		Dd	56.07
Raversijde	52		95-RAV-120	Bos	MC/MT	?	UDE	UDE	Bp		Bd	52.61	Bd2	54.30	SD		GL		DD		Dp		Dd	29.69
Raversijde	48	Doos 4	4554	Bos	MC/MT	?		UDE	Bp		Bd	51.28	Bd2	53.07	SD		GL		DD		DP		Dd	30.25
Raversijde	88	RAV BOT 350-369	97 RAV 356	Bos	MC/MT	?	MD	FD?P	Bp		Bd	52.95	Bd2	48.63	SD	23.79	GL		DD	24.36	Dp		Dd	30.38
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	MT	?	MD	FD?P	Bp		Bd	47.67	Bd2	44.65	SD		GL		DD		Dp		Dd	27.86
Raversijde	79	96 RAV 208-218	96 RAV 211	Bos	MT	?	MD	FD?P	Bp		Bd	52.82	Bd2	50.00	SD		GL		DD		Dp		Dd	30.31
Raversijde	84	RAV bot 221-226	96 RAV 221	Bos	MT	?	MD	FD?P	Bp		Bd	52.13	Bd2	47.59	SD		GL		DD		Dp		Dd	32.05
Raversijde	69	RAV 96 BOT 424	424	Bos	MT	L	PM	FP?D	Bp	49.13	Bd		Bd2		SD	27.97	GL		DD	27.54	Dp	47.23	Dd	
Raversijde	69	RAV 96 BOT 424	424	Bos	MT	L	PM	FP?D	Bp		Bd		Bd2		SD	24.69	GL		DD		Dp		Dd	
Raversijde	69	RAV 96 BOT 424	424	Bos	MT	R	All	F	Bp	46.93	Bd	52.07	Bd2	51.34	SD	23.97	GL	0.66	DD	25.60	Dp	43.34	Dd	29.34
Raversijde	69	RAV 96 BOT 424	424	Bos	MT	R	PM	FP?D	Bp	44.30	Bd		Bd2		SD		GL		DD		Dp	41.02	Dd	
Raversijde	63	RAV BOT 477	477	Bos	MT	L	PM	FP?D	Bp	44.87	Bd		Bd2		SD		GL		DD		Dp	41.16	Dd	
Raversijde	63	RAV BOT 477	477	Bos	MT	L	All	F	Bp		Bd		Bd2		SD		GL		DD		Dp		Dd	
Raversijde	62	97 RAV 650	650	Bos	MT	L	All	F	Bp	43.41	Bd	49.20	Bd2	48.40	SD	24.01	GL	221.08	DD	21.95	Dp	43.12	Dd	29.34
Raversijde	62	97 RAV 650	650	Bos	MT	L	All	F	Bp	47.85	Bd	52.74	Bd2	49.90	SD	26.80	GL	233.04	DD	26.02	Dp	47.16	Dd	32.35
Raversijde	62	97 RAV 650	650	Bos	MT	R	All	F	Bp	44.80	Bd	49.71	Bd2	47.60	SD	24.52	GL	220.43	DD	21.56	Dp	42.02	Dd	29.39
Raversijde	62	97 RAV 650	650	Bos	MT	R	All	F	Bp	47.62	Bd	53.75	Bd2	51.26	SD	25.74	GL	229.62	DD	24.19	Dp	45.90	Dd	32.53
Raversijde	62	97 RAV 650	650	Bos	MT	?	MD	FD?P	Bp		Bd	50.87	Bd2	46.74	SD	24.85	GL		DD	25.16	Dp		Dd	29.51
Raversijde	62	97 RAV 650	650	Bos	MT	?	MD	FD?P	Bp		Bd	48.92	Bd2	24.76	SD		GL		DD	20.53	Dp		Dd	28.76
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	Bos	MT	L	All	F	Bp	45.42	Bd	51.75	Bd2	50.30	SD	27.08	GL	230.54	DD	23.99	Dp	43.36	Dd	29.80
Raversijde	46	Bot 2 Raversijde 4466-4492	4473	Bos	MT	R	PM	FPUD	Bp	41.29	Bd		Bd2	44.21	SD	20.41	GL		DD	19.28	Dp	40.88	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	Bos	MT	R	PM	FP?D	Bp	47.19	Bd		Bd2		SD		GL		DD		Dp	43.51	Dd	
Raversijde	48	Doos 4	4554	Bos	MT	L		FPUD	Bp	45.27	Bd		Bd2	52.30	SD	24.41	GL		DD	25.93	DP	42.53	Dd	
Raversijde	48	Doos 4	4558	Bos	MT	L	PM	FP?D	Bp	45.16	Bd		Bd2		SD		GL		DD		DP	38.73	DD	
Raversijde	48	Doos 4	4558	Bos	MT	R	All	F	Bp	45.99	Bd	52.79	Bd2	50.48	SD	24.56	GL	227.53	DD	25.94	DP	45.63	DD	31.01
Raversijde	48	Doos 4	4558	Bos	MT	R	All	F	Bp	48.22	Bd	51.08	Bd2	48.55	SD	23.93	GL	216.89	DD	23.83	DP	45.63	DD	29.63
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	MT	L	All	All	Bp	47.25	Bd		Bd2	50.81	SD	24.87	GL	231.71	DD	26.12	Dp	46.03	Dd	31.46
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	MT	L	All	F	Bp		Bd	48.31	Bd2	44.69	SD	23.57	GL	218.67	DD	22.94	Dp	41.23	Dd	29.00
Raversijde	52		95-RAV-120	Bos	MT	L	All	F	Bp	45.11	Bd	49.82	Bd2	47.40	SD	25.87	GL	220.86	DD	24.32	Dp	43.13	Dd	30.33
Raversijde	52		95-RAV-120	Bos	MT	L	PM	FP?D	Bp	45.06	Bd		Bd2		SD	23.80	GL		DD		Dp		Dd	
Raversijde	52		95-RAV-120	Bos	MT	R	PM	FPUD	Bp	48.55	Bd		Bd2	46.84	SD	20.13	GL		DD	21.66	Dp	44.00	Dd	
Raversijde	64	96 RAV 150-195	96 RAV 194	Bos	MT	R	PM	FPUD	Bp	46.10	Bd		Bd2		SD	23.48	GL		DD	24.00	Dp	41.29	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	Bos	MT	L	All	F	Bp	45.22	Bd	44.69	Bd2	47.80	SD	23.43	GL	212.81	DD	21.90	Dp	42.12	Dd	28.92
Raversijde	79	96 RAV 208-218	96 RAV 208	Bos	MT	L	All	F	Bp	46.34	Bd	54.28	Bd2	52.33	SD	27.02	GL	236.95	DD	24.89	Dp	44.50	Dd	31.17
Raversijde	79	96 RAV 208-218	96 RAV 211	Bos	MT	R	All	FPFingD	Bp	48.76	Bd		Bd2		SD		GL		DD	25.96	Dp		Dd	
Raversijde	84	RAV bot 221-226	96 RAV 221	Bos	MT	R	All	F	Bp	44.96	Bd	46.90	Bd2	43.01	SD	22.80	GL	2200.54	DD	23.08	Dp	41.13	Dd	28.97
Raversijde	84	RAV bot 221-226	96 RAV	Bos	MT	R	PM	FP?D	Bp	45.12	Bd		Bd2		SD		GL		DD		Dp	39.64	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Bos	MT	L	All	F	Bp	48.89	Bd	53.61	Bd2	50.14	SD	50.14	GL	229.28	DD	25.43	Dp	43.23	Dd	32.17
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Bos	MT	L	All	F	Bp	48.55	Bd	53.66	Bd2	51.93	SD	51.93	GL	232.95	DD	24.93	Dp	44.63	Dd	32.21
Raversijde	87	RAV BOT 235-263	96 RAV 245	Bos	MT	L	All	F	Bp	47.55	Bd		Bd2	50.50	SD	24.18	GL	229.82	DD	25.08	Dp	45.23	Dd	
Raversijde	80	96 RAV 264-286	96 RAV 267	Bos	MT	R	All	F	Bp	48.48	Bd	54.66	Bd2	52.85	SD	27.50	GL	232.22	DD	26.26	Dp	47.13	Dd	33.27
Raversijde	77	96 RAV 288-314	96 RAV 314	Bos	MT	L	All	FPFingD	Bp	46.56	Bd	49.65	Bd2	49.99	SD	25.91	GL	219.56	DD	22.99	Dp	41.11	Dd	28.90
Raversijde	77	96 RAV 288-314	96 RAV 314	Bos	MT	L	PM	FP?D	Bp	46.90	Bd		Bd2		SD		GL		DD		Dp	46.17	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 314	Bos	MT	R	All	F	Bp	43.54	Bd	49.40	Bd2	44.63	SD	22.61	GL	218.85	DD	21.95	Dp	41.26	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 349	Bos	MT	R	All	F	Bp	47.54	Bd	52.37	Bd2	51.31	SD	23.40	GL	219.99	DD	24.09	Dp	44.86	Dd	29.86
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	MT	L	PM	FP?D	Bp	38.51	Bd		Bd2		SD	17.22	GL		DD		Dp	40.83	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Bos	MT	L	All	F	Bp	50.45	Bd		Bd2		SD	26.74	GL		DD		Dp		Dd	
Raversijde	76	RAV 97 191-209	97 RAV 297	Bos	MT	L	PM	FPUD	Bp	45.80	Bd		Bd2	52.64	SD	28.02	GL		DD	24.78	Dp	43.47	Dd	
Raversijde	82	RAV bot 210-301	97 RAV 301	Bos	MT	R	All	F	Bp	46.89	Bd	51.06	Bd2	49.53	SD	24.27	GL	215.90	DD	23.26	Dp	40.32	Dd	30.20
Raversijde	82	RAV bot 210-301	97 RAV 301	Bos	MT	R	PM	FP?D	Bp	45.13	Bd		Bd2		SD		GL		DD		Dp	44.41	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 306	Bos	MT	R	PM	FPUD	Bp	45.87	Bd		Bd2	47.15	SD	19.85	GL		DD	19.64	Dp	42.87	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 334	Bos	MT	R	All	F	Bp		Bd	57.02	Bd2	55.35	SD	28.40	GL		DD	26.06	Dp		Dd	32.52
Raversijde	88	RAV BOT 350-369	97 RAV 340	Bos	MT	R	PM	FP?D	Bp	50.19	Bd		Bd2		SD		GL		DD		Dp	51.69	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 351	Bos	MT	R	All	F	Bp	53.69	Bd	59.90	Bd2	56.80	SD	29.08	GL	244.25	DD	26.45	Dp	51.22	Dd	34.43
Raversijde	61		97 RAV 477	Bos	MT	L	PM	FP?D	Bp	43.70	Bd		Bd2		SD		GL		DD		Dp	41.37	Dd	
Raversijde	90	RAV 686-781	97 RAV 686 3 Zakjes	Bos	MT	L	PM	FP?D	Bp	42.79	Bd		Bd 2		SD		GL		DD		Dp	42.81	Dd	
Raversijde	90	RAV 686-781	97 RAV 686 3 Zakjes	Bos	MT	R	PM	FP?D	Bp	51.82	Bd		Bd 2		SD		GL		DD		Dp	46.49	Dd	
Raversijde	90	RAV 686-781	97 RAV 686 3 Zakjes	Bos	MT	R	PM	FPUD	Bp	44.55	Bd		Bd 2	49.79	SD	23.53	GL		DD	22.16	Dp	42.10	Dd	
Raversijde	54		97-RAV-117	Bos	MT	R	PM	FPUD	Bp	43.45	Bd		Bd2		SD	24.52	GL		DD		Dp	41.18	Dd	
Raversijde	57		97-RAV-298	Bos	MT	L	All	F	Bp	43.82	Bd	51.49	Bd2	49.27	SD	24.67	GL	225.21	DD	24.35	Dp	42.73	Dd	30.21

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Bos	MT	R	All	F	Bp	20.42	Bd	23.84	Bd2	25.48	SD	12.87	GL	150.61	DD	20.21	Dp	20.21	Dd	15.30
Raversijde	57		97-RAV-298	Bos	MT	L	All	F	Bp	45.23	Bd	49.05	Bd2	45.55	SD	23.04	GL	215.18	DD	23.88	Dp	44.44	Dd	30.32
Raversijde	69	RAV 96 BOT 424	424	Bos	NC	L	All	F	GB	49.34														
Raversijde	63	RAV BOT 477	477	Bos	NC	R	All	F	GB	52.07														
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	Bos	NC	R	All	F	GB	54.08														
Raversijde	47	Bot 3 Raversijde 4492-4550	4545	Bos	NC	L		F	GB	48.71														
Raversijde	47	Bot 3 Raversijde 4492-4550	4547	Bos	NC	R		F	GL	57.18														
Raversijde	64	96 RAV 150-195	96 RAV 157	Bos	NC	R	All	F	GB	53.78														
Raversijde	84	RAV bot 221-226	96 RAV 221 2 Zakjes	Bos	NC	R	All	F	GB	54.45														
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Bos	NC	?R	All	F	GB	55.05														
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Bos	NC	R	All	F	GB	54.27														
Raversijde	77	96 RAV 288-314	96 RAV 302	Bos	NC	L	All	F	GB	61.83														
Raversijde	83	RAV bot 338-374	96 RAV 362 x	Bos	NC	L	All	F	GB	55.63														
Raversijde	70	RAV BOT 61-69	96 RAV 61	Bos	NC	L	All	F	GB	58.64														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	NC	L	All	F	GB	46.39														
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.6	Bos	NC	R	All	F	GB	52.79														
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-136	Bos	NC	L	All	F	GB	50.78														
Raversijde	50		96-RAV-88	Bos	NC	R	All	F		51.79														
Raversijde	50		96-RAV-97	Bos	NC	L	All	F	GB	47.34														
Raversijde	76	RAV 97 191-209	97 RAV 206	Bos	NC	R	All	F	GB	58.72														
Raversijde	60		97 RAV 361	Bos	NC	L	All	F	GB	53.89														
Raversijde	90	RAV 686-781	97 RAV 708	Bos	NC	R	All	F	GB	5162.00														
Raversijde	90	RAV 686-781	97 RAV 753	Bos	NC	L	All	F	GB	49.11														
Raversijde	71	RAV BOT 61-98	97 RAV 90	Bos	NC	L	All	F	OB	52.72														
Raversijde	54		97-RAV-117	Bos	NC	L	All	F	GB	48.77														
Raversijde	57		97-RAV-298	Bos	NC	R	All	F	GB	54.71														
Raversijde	57		97-RAV-298	Bos	Patella	?	All	F	GL	62.30	GB	37.16												
Raversijde	57		97-RAV-298	Bos	Patella	?	All	F	GL		GB	38.06												
Raversijde	57		97-RAV-298	Bos	Patella	?	All	F	GL	56.40	GB	34.58												
Raversijde	63	RAV BOT 477	477	Bos	Pelvis	L	Acet	?	LA	71.71	LAR	55.40												
Raversijde	63	RAV BOT 477	477	Bos	Pelvis	R	Acet	F	LA	72.29	LAR	57.11												
Raversijde	51		95-RAV-137	Bos	Pelvis	L	Acet	F	LA	81.89	LAR	70.70												
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 345	Bos	Pelvis	L	Acet	F	LA	69.95	LAR	61.14												
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 8	Bos	Pelvis	R	Acet	F	LA	73.18	LAR	50.28												
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.8	Bos	Pelvis	R	All	Acet F	LA	73.62	LAR	57.39												
Raversijde	76	RAV 97 191-209	97 RAV 194	Bos	Pelvis	L	Acet	F	LA	65.82	LAR	48.76												
Raversijde	57		97-RAV-298	Bos	Pelvis	L	Acet	F	LA		LAR													
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	Ph 1	L	MD	FDUP	Glpe		Bp		SD	17.58	Bd	21.30								
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Bos	Ph 1	L	MD	FD?P	Glpe		Bp		SD		Bd	26.10								
Raversijde	75	97 RAV 150-189	97 RAV 189 ISHU uit	Bos	Ph 1	L	MD	FD?P	Glpe		Bp		SD		Bd	27.43								
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	Bos	Ph 1	R	PM	FP?D	Glpe		Bp	30.76	SD		Bd									
Raversijde	69	RAV 96 BOT 424	424	Bos	Ph 1	L	All	F	Glpe	59.46	Bp	29.89	SD	25.80	Bd	28.15								
Raversijde	69	RAV 96 BOT 424	424	Bos	Ph 1	R	All	F	Glpe	59.70	Bp	26.91	SD	21.67	Bd	26.02								
Raversijde	63	RAV BOT 477	477	Bos	Ph 1	R	MD	FDUP	Glpe		Bp		SD	16.42	Bd	19.87								
Raversijde	63	RAV BOT 477	477	Bos	Ph 1	R	All	F	Glpe	57.03	Bp	25.82	SD	21.48	Bd	23.82								
Raversijde	62	97 RAV 650	650	Bos	Ph 1	L	MD	FDUP	Glpe		Bp		SD	17.14	Bd	20.35								
Raversijde	62	97 RAV 650	650	Bos	Ph 1	L	All	F	Glpe	54.77	Bp	27.83	SD	23.13	Bd	24.82								
Raversijde	62	97 RAV 650	650	Bos	Ph 1	L	All	F	Glpe	56.82	Bp	26.48	SD	21.90	Bd	25.60								
Raversijde	62	97 RAV 650	650	Bos	Ph 1	L	All	F	Glpe	57.22	Bp	26.83	SD	21.41	Bd	23.59								
Raversijde	62	97 RAV 650	650	Bos	Ph 1	L	All	F	Glpe	61.03	Bp	26.61	SD	23.83	Bd	25.13								
Raversijde	62	97 RAV 650	650	Bos	Ph 1	R	All	F	Glpe	63.89	Bp	29.19	SD	23.52	Bd	26.00								
Raversijde	62	97 RAV 650	650	Bos	Ph 1	R	All	F	Glpe	57.69	Bp	27.49	SD	22.05	Bd	25.10								
Raversijde	62	97 RAV 650	650	Bos	Ph 1	R	All	F	Glpe	55.29	Bp	25.90	SD	22.75	Bd	24.33								
Raversijde	62	97 RAV 650	650	Bos	Ph 1	R	All	F	Glpe	57.10	Bp	26.32	SD	20.70	Bd	25.81								
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	Bos	Ph 1	L	All	F	Glpe	56.18	Bp	24.09	SD	21.45	Bd									
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	Bos	Ph 1	R	All	F	Glpe	56.01	Bp	25.58	SD	21.29	Bd									
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	Bos	Ph 1	L	All	F	Glpe	56.02	Bp	27.98	SD	25.36	Bd	26.42								
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	Bos	Ph 1	R	All	F	GLpe	47.39	Bp		SD	19.39	Bd	22.56								
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	Bos	Ph 1	R	All	F	Glpe	54.96	Bp	26.37	SD	22.42	Bd	24.97								
Raversijde	46	Bot 2 Raversijde 4466-4492	4489	Bos	Ph 1	R	All	F	Glpe	59.12	Bp	27.59	SD	23.17	Bd	25.37								
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	Bos	Ph 1	R	All	F	GLPE	51.93	Bp	26.31	SD	23.28	Bd	22.93								
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	Bos	Ph 1	L	MD	FD?P	GLPE		Bp		SD	23.70	Bd	25.38								
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	Bos	Ph 1	L	All	F	GLpe	58.10	Bp		SD	23.29	Bd	24.17								
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	Bos	Ph 1	R	All	F	GLpe	53.44	Bp	27.06	SD	22.93	Bd	26.40								
Raversijde	47	Bot 3 Raversijde 4492-4550	4526	Bos	Ph 1	R	MD	FDUP	GLPE		Bp		SD	22.16	Bd	23.06								

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?								
Raversijde	47	Bot 3 Raversijde 4492-4550	4547	Bos	Ph 1	R	All	F	Glpe	58.79	Bp	25.85	SD	21.95	Bd	24.57
Raversijde	47	Bot 3 Raversijde 4492-4550	4550	Bos	Ph 1	R	All	F	GLPE	61.36	Bp	27.93	SD	23.15	Bd	25.92
Raversijde	48	Doos 4	4554	Bos	Ph 1	L	All	FPUD	GLPE	63.81	Bp	28.51	SD	24.63	Bd	27.77
Raversijde	48	Doos 4	4566	Bos	Ph 1	L	All	F					GLPE		BpC	26.99
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Ph 1	L	MD	FDUP	GLpe		Bp		SD	21.65	Bd	24.89
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Ph 1	R	All	F	GLpe	56.70	Bp	24.91	SD	22.29	Bd	25.62
Raversijde	52		95-RAV-120	Bos	Ph 1	L	All	F	Glpe		Bp		SD		Bd	
Raversijde	52		95-RAV-120	Bos	Ph 1	L	MD	FDUP	Glpe		Bp		SD	20.75	Bd	23.11
Raversijde	52		95-RAV-120	Bos	Ph 1	L	All	F	Glpe	56.14	Bp	28.15	SD	23.15	Bd	25.56
Raversijde	52		95-RAV-120	Bos	Ph 1	L	All	F	Glpe	58.37	Bp	26.83	SD	23.27	Bd	25.07
Raversijde	55		95-RAV-279	Bos	Ph 1	L	All	F	Glpe	56.79	Bp	29.76	SD	25.12	Bd	26.69
Raversijde	55		95-RAV-279	Bos	Ph 1	L	All	F	Glpe	59.34	Bp	26.67	SD	23.03	Bd	26.55
Raversijde	55		95-RAV-279	Bos	Ph 1	R	All	F	Glpe	59.72	Bp		SD		Bd	30.62
Raversijde	55		95-RAV-279	Bos	Ph 1	R	All	F	Glpe	57.06	Bp	26.73	SD	23.17	Bd	22.25
Raversijde	64	96 RAV 150-195	96 RAV 165	Bos	Ph 1	L	All	F	Glpe	59.34	Bp	26.36	SD		Bd	
Raversijde	64	96 RAV 150-195	96 RAV 166	Bos	Ph 1	L	PM	FP?D	Glpe		Bp	30.76	SD		Bd	
Raversijde	64	96 RAV 150-195	96 RAV 172	Bos	Ph 1	L	All	F	GLpe	60.72	Bp	25.75	SD	22.66	Bd	24.87
Raversijde	64	96 RAV 150-195	96 RAV 188	Bos	Ph 1	R	All	F	Glpe	55.57	Bp	25.38	SD	21.79	Bd	25.29
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	Bos	Ph 1	L	All	F	GLpe	63.28	Bp	29.59	SD		Bd	
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Ph 1	R	All	F	Glpe	47.27	Bp		SD	22.46	Bd	24.88
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Bos	Ph 1	R	All	F	Glpe	66.52	Bp	30.77	SD	26.89	Bd	29.23
Raversijde	84	RAV bot 221-226	96 RAV 221	Bos	Ph 1	L	All	F	GLpe	60.14	Bp	28.86	SD	23.24	Bd	24.60
Raversijde	84	RAV bot 221-226	96 RAV 221	Bos	Ph 1	L	All	F	Glpe	52.64	Bp		SD		Bd	
Raversijde	84	RAV bot 221-226	96 RAV 221	Bos	Ph 1	L	All	F	Glpe	56.15	Bp	25.25	SD	20.83	Bd	24.71
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	Bos	Ph 1	L	All	F	GLpe	54.46	Bp	26.82	SD	23.11	Bd	24.99
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	Bos	Ph 1	R	All	F	Glpe	57.89	Bp	26.09	SD	22.28	Bd	25.82
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	Bos	Ph 1	R	All	F	GLpe	55.51	Bp	27.14	SD	22.40	Bd	25.59
Raversijde	84	RAV bot 221-226	96 RAV 223	Bos	Ph 1	L	PM	FP?D	Glpe		Bp	25.72	SD		Bd	
Raversijde	84	RAV bot 221-226	96 RAV 225	Bos	Ph 1	R	All	F	GLpe		Bp	31.90	SD		Bd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Bos	Ph 1	L	All	F	GLpe	56.60	Bp	25.35	SD	22.19	Bd	25.88
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Bos	Ph 1	L	All	F	Glpe	60.57	Bp	27.24	SD	23.29	Bd	25.18
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Bos	Ph 1	L	All	F	Glpe	55.84	Bp	28.41	SD	23.94	Bd	25.97
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Bos	Ph 1	L	All	F	Glpe		Bp		SD	24.81	Bd	25.94
Raversijde	87	RAV BOT 235-263	96 RAV 250	Bos	Ph 1	L	All	F	GLpe	64.43	Bp	28.80	SD	25.85	Bd	27.68
Raversijde	87	RAV BOT 235-263	96 RAV 254	Bos	Ph 1	L	All	F	Glpe	56.63	Bp	25.61	SD	21.59	Bd	23.56
Raversijde	80	96 RAV 264-286	96 RAV 266	Bos	Ph 1	L	All	F	Glpe	61.06	Bp	28.17	SD	23.53	Bd	26.47
Raversijde	80	96 RAV 264-286	96 RAV 266	Bos	Ph 1	L	All	F	Glpe		Bp	24.83	SD	22.92	Bd	24.79
Raversijde	77	96 RAV 288-314	96 RAV 288	Bos	Ph 1	R	All	F	GLpe	59.85	Bp	25.43	SD		Bd	
Raversijde	77	96 RAV 288-314	96 RAV 300	Bos	Ph 1	R	MD	F	GLpe		Bp		SD		Bd	28.51
Raversijde	77	96 RAV 288-314	96 RAV 309	Bos	Ph 1	R	All	F	Glpe	58.69	Bp	29.84	SD	24.76	Bd	26.31
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	Bos	Ph 1	R	PM	FD?P	GLpe		Bp		SD		Bd	22.62
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	Bos	Ph 1	L	MD	FP?D	GLpe		Bp	27.50	SD		Bd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	Bos	Ph 1	R	All	F	GLpe	60.38	Bp		SD		Bd	26.68
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	Bos	Ph 1	R	All	F	GLpe		Bp	29.90	SD		Bd	
Raversijde	83	RAV bot 338-374	96 RAV 338	Bos	Ph 1	R	All	F	GLpe	55.97	Bp	27.51	SD	21.84	Bd	26.02
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Bos	Ph 1	R	All	F	GLpe	57.54	Bp	26.68	SD	21.67	Bd	23.58
Raversijde	83	RAV bot 338-374	96 RAV 362 x	Bos	Ph 1	L	All	F	GLpe	59.11	Bp	27.42	SD		Bd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 37	Bos	Ph 1	L	All	F	Glpe	57.50	Bp		SD	22.34	Bd	24.34
Raversijde	70	RAV BOT 61-69	96 RAV 62	Bos	Ph 1	R	PM	FP?D	GLPE		Bp	24.78	SD		Bd	
Raversijde	70	RAV BOT 61-69	96 RAV 66	Bos	Ph 1	R	All	F	GLPE	57.34	Bp	30.42	SD		Bd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.2	Bos	Ph 1	L	All	?F	Glpe	57.20	Bp		SD	23.96	Bd	24.12
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.7	Bos	Ph 1	L	All	F	Glpe	63.11	Bp	27.48	SD	23.85	Bd	25.82
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.7	Bos	Ph 1	R	All	F	Glpe	57.09	Bp	27.07	SD	22.99	Bd	23.95
Raversijde	53		96-RAV-134	Bos	Ph 1	L	All	F	Glpe	58.84	Bp	23.59	SD	20.64	Bd	23.56
Raversijde	53		96-RAV-145	Bos	Ph 1	L	All	F	Glpe	58.82	Bp	26.92	SD	23.52	Bd	24.73
Raversijde	53		96-RAV-145	Bos	Ph 1	L	All	F	Glpe		Bp	27.47	SD		Bd	
Raversijde	53		96-RAV-146	Bos	Ph 1	R	All	F	Glpe	29.26	Bp	26.88	SD	21.85	Bd	22.78
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Bos	Ph 1	R	PM	FP?D	Glpe		Bp	27.41	SD		Bd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?								
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Bos	Ph 1	L	MD	FD?P	Glpe		Bp		SD		Bd	24.47
Raversijde	50		96-RAV-80	Bos	Ph 1	L	All	F	Glpe	60.93	Bp	26.84	SD	22.31	Bd	24.29
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.4	Bos	Ph 1	R	All	F	Glpe	61.13	Bp	26.44	SD	22.28	Bd	25.27
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.4	Bos	Ph 1	L	All		Glpe	53.85	Bp	25.99	SD	21.85	Bd	24.35
Raversijde	50		96-RAV-GRACHT-11.6	Bos	Ph 1	L	All	F	Glpe	56.85	Bp	29.19	SD	24.65	Bd	25.42
Raversijde	75	97 RAV 150-189	97 RAV 157	Bos	Ph 1	R	All	F	Glpe	59.45	Bp	26.43	SD	23.28	Bd	24.52
Raversijde	75	97 RAV 150-189	97 RAV 177	Bos	Ph 1	L	All	F	Glpe	65.87	Bp	31.21	SD	26.10	Bd	28.50
Raversijde	75	97 RAV 150-189	97 RAV 180 2 ZAK VIS HU + ZOND Hui 0,5 UIT	Bos	Ph 1	R	PM	FP?D	Glpe		Bp	29.98	SD		Bd	
Raversijde	76	RAV 97 191-209	97 RAV 191	Bos	Ph 1	R	All	F	GLpe	51.97	Bp	23.74	SD	20.55	Bd	22.62
Raversijde	76	RAV 97 191-209	97 RAV 205	Bos	Ph 1	R	All	F	Glpe	61.72	Bp	25.91	SD	22.44	Bd	24.69
Raversijde	82	RAV bot 210-301	97 RAV 254	Bos	Ph 1	R	All	F	GLpe	59.83	Bp	27.06	SD	22.99	Bd	24.16
Raversijde	82	RAV bot 210-301	97 RAV 254	Bos	Ph 1	L	All	F	GLpe	60.16	Bp	26.97	SD	23.28	Bd	25.46
Raversijde	82	RAV bot 210-301	97 RAV 280	Bos	Ph 1	L	All	F	Glpe	55.35	Bp	25.07	SD	21.45	Bd	23.60
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	Bos	Ph 1	R	All	F	Glpe	53.86	Bp	27.24	SD	20.50	Bd	24.81
Raversijde	82	RAV bot 210-301	97 RAV 301	Bos	Ph 1	L	All	F	GLpe	57.81	Bp	25.67	SD	21.18	Bd	24.20
Raversijde	81	RAV 97 306-339	97 RAV 306	Bos	Ph 1	L	All	F	Glpe	57.70	Bp	26.81	SD	21.67	Bd	25.16
Raversijde	88	RAV BOT 350-369	97 RAV 355	Bos	Ph 1	R	All	F	GLpe	61.04	Bp	24.96	SD	20.71	Bd	23.56
Raversijde	59		97 RAV 361	Bos	Ph 1	R	All	F	GLpe	57.93	Bp	29.56	SD	23.91	Bd	27.81
Raversijde	60		97 RAV 361	Bos	Ph 1	L	All	FDUP	Glpe	59.66	Bp	30.73	SD	24.63	Bd	29.48
Raversijde	60		97 RAV 361	Bos	Ph 1	L	All	F	Glpe	57.13	Bp	28.24	SD	23.00	Bd	26.87
Raversijde	60		97 RAV 361	Bos	Ph 1	R	All	F	Glpe	59.31	Bp	30.75	SD	24.29	Bd	28.46
Raversijde	60		97 RAV 361	Bos	Ph 1	R	All	F	Glpe	58.04	Bp	26.08	SD	22.56	Bd	23.99
Raversijde	60		97 RAV 361	Bos	Ph 1	R	All	F	Glpe	62.47	Bp	28.33	SD	24.93	Bd	26.09
Raversijde	61		97 RAV 477	Bos	Ph 1	L	All	F	GLpe	55.47	Bp	27.51	SD	23.29	Bd	25.13
Raversijde	61		97 RAV 477	Bos	Ph 1	R	All	F	GLpe	49.17	Bp	18.97	SD	14.88	Bd	18.28
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Ph 1	L	All	F	Glpe	58.42	Bp	27.25	SD	22.54	Bd	24.52
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Ph 1	L	All	F	Glpe	60.85	Bp	26.80	SD	23.18	Bd	25.13
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Ph 1	L	All	F	Glpe	51.61	Bp	25.20	SD	20.95	Bd	23.30
Raversijde	71	RAV BOT 61-98	97 RAV 65	Bos	Ph 1	R	All	F	GLPE	61.09	Bp	29.07	SD	23.77	Bd	27.98.
Raversijde	90	RAV 686-781	97 RAV 710 VIS HU + Zond HU 0,5 mm UIT	Bos	Ph 1	L	All	F	Glpe	56.99	Bp	25.72	SD	21.28	Bd	24.30
Raversijde	90	RAV 686-781	97 RAV 752	Bos	Ph 1	R	All	F	Glpe	56.39	Bp	27.71	SD	23.81	Bd	25.19
Raversijde	90	RAV 686-781	97 RAV 753	Bos	Ph 1	L	MD	UPFD	Glpe		Bp		SD	22.56	Bd	25.75
Raversijde	54		97-RAV-117	Bos	Ph 1	R	All	F	Glpe	56.09	Bp	20.03	SD	16.43	Bd	18.56
Raversijde	54		97-RAV-117	Bos	Ph 1	R	All	F	Glpe	56.95	Bp	25.47	SD	22.27	Bd	26.13
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-27	Bos	Ph 1	R	All	F	Glpe	59.61	Bp	27.72	SD	22.05	Bd	26.33
Raversijde	57		97-RAV-298	Bos	Ph 1	L	All	F	Glpe	58.27	Bp	24.10	SD	22.92	Bd	23.94
Raversijde	57		97-RAV-298	Bos	Ph 1	L	All	F	Glpe	58.52	Bp		SD	22.51	Bd	23.91
Raversijde	57		97-RAV-298	Bos	Ph 1	L	All	F	Glpe	55.17	Bp	27.46	SD	21.57	Bd	25.11
Raversijde	57		97-RAV-298	Bos	Ph 1	R	All	F	Glpe	54.74	Bp	27.12	SD	21.86	Bd	25.51
Raversijde	57		97-RAV-298	Bos	Ph 1	R	All	F	Glpe	53.98	Bp	26.60	SD	21.26	Bd	24.69
Raversijde	57		97-RAV-298	Bos	Ph 1	R	All	F	Glpe	59.64	Bp	29.44	SD	23.92	Bd	27.50
Raversijde	58		97-RAV-361	Bos	Ph 1	L	All	F	Glpe	62.35	Bp	28.67	SD	24.71	Bd	26.87
Raversijde	58		97-RAV-361	Bos	Ph 1	R	All	F	Glpe	58.72	Bp	28.96	SD	24.25	Bd	26.75
Raversijde	58		97-RAV-361	Bos	Ph 1	R	All	F	Glpe	57.36	Bp	24.63	SD	20.41	Bd	23.67
Raversijde	74	RAV BOT 97-RAV-13 tot 66	97-RAV-55	Bos	Ph 1	L	All	F	Glpe	59.57	Bp	25.88	SD	22.31	Bd	26.15
Raversijde	74	RAV BOT 97-RAV-13 tot 74	97-RAV-59	Bos	Ph 1	R	All	F	Glpe		Bp	23.87	SD	20.99	Bd	
Raversijde	81	RAV 97 306-339	97 RAV 331	Bos	Ph 1	L	All	F	Glpe	56.01	Bp	24.61	SD	20.02	Bd	23.29
Raversijde	84	RAV bot 221-226	96 RAV 223	Bos	Ph 1	L	MD	FD?P	Glpe		Bp		SD		Bd	26.28
Raversijde	81	RAV 97 306-339	97 RAV 316	Bos	Ph 1	R	MD	FD?P	Glpe		Bp		SD		Bd	26.76
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	Ph 2	R	MD	FDUP	Glpe		Bp		SD	17.45	Bd	21.13
Raversijde	69	RAV 96 BOT 424	424	Bos	Ph 2	R	All	F	Glpe	36.39	Bp	27.08	SD	21.08	Bd	23.18
Raversijde	69	RAV 96 BOT 424	424	Bos	Ph 2	R	All	F	Glpe	40.38	Bp	27.65	SD	22.35	Bd	25.10
Raversijde	63	RAV BOT 477	477	Bos	Ph 2	L	All	F	Glpe	40.68	Bp	27.25	SD	20.98	Bd	20.68
Raversijde	62	97 RAV 650	650	Bos	Ph 2	L	All	F	Glpe	37.81	Bp	25.32	SD	20.27	Bd	22.58
Raversijde	62	97 RAV 650	650	Bos	Ph 2	R	All	F	Glpe	40.69	Bp	27.41	SD	20.75	Bd	22.68
Raversijde	62	97 RAV 650	650	Bos	Ph 2	R	All	F	Glpe	37.28	Bp	26.80	SD	21.15	Bd	22.39
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	Bos	Ph 2	R	All	F	Glpe	36.92	Bp	28.16	SD	23.01	Bd	24.16
Raversijde	46	Bot 2 Raversijde 4466-4492	4473	Bos	Ph 2	R	All	F	Glpe	34.48	Bp	23.42	SD	19.20	Bd	19.76
Raversijde	48	Doos 4	4565	Bos	Ph 2	R	All	F	Glpe	41.35	Bp	29.23	SD	24.05	Bd	24.53
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Ph 2	R	All	FingPFD	GLpe	39.42	Bp	26.37	SD	21.93	Bd	22.64
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Ph 2	L	All	F	Glpe	35.23	Bp	24.92	SD	20.82	Bd	22.12
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Ph 2	L	All	F	GLpe	40.28	Bp	28.33	SD	21.70	Bd	23.69
Raversijde	52		95-RAV-120	Bos	Ph 2	R	All	F	Glpe	43.40	Bp	33.70	SD	25.68	Bd	
Raversijde	52		95-RAV-120	Bos	Ph 2	L	All	F	Glpe	44.46	Bp	33.55	SD	26.74	Bd	28.96
Raversijde	55		95-RAV-279	Bos	Ph 2	L	All	F	Glpe	40.39	Bp	28.62	SD	21.42	Bd	23.96
Raversijde	64	96 RAV 150-195	96 RAV 161	Bos	Ph 2	R	All	F	Glpe	38.59	Bp	27.23	SD	21.16	Bd	22.48
Raversijde	64	96 RAV 150-195	96 RAV 166	Bos	Ph 2	L	All	FDFingP	Glpe	37.10	Bp	28.39	SD	20.76	Bd	23.63
Raversijde	64	96 RAV 150-195	96 RAV 167	Bos	Ph 2	L	All	F	Glpe	36.47	Bp	26.39	SD	19.86	Bd	22.26
Raversijde	78	96 RAV 196-204	96 RAV 203	Bos	Ph 2	L	All	F	Glpe	39.91	Bp	28.13	SD	20.79	Bd	23.64
Raversijde	78	96 RAV 196-204	96 RAV 203	Bos	Ph 2	R	All	F	Glpe	38.51	Bp	27.84	SD	21.71	Bd	22.69
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Ph 2	L	All	F	GLpe	41.15	Bp	26.72	SD	22.25	Bd	22.83
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Ph 2	R	All	F	Glpe	37.22	Bp	27.61	SD	22.14	Bd	24.64
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Ph 2	R	All	F	GLpe	37.08	Bp	26.32	SD	21.02	Bd	21.26

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?								
Raversijde	79	96 RAV 208-218	96 RAV 208	Bos	Ph 2	L	All	F	Glpe	35.55	Bp	23.03	SD	18.28	Bd	18.83
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Bos	Ph 2	L	All	F	GLpe	41.96	Bp	29.74	SD	24.79	Bd	24.63
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Bos	Ph 2	L	All	F	GLpe	39.96	Bp	26.93	SD	21.56	Bd	22.67
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Bos	Ph 2	R	All	F	Glpe	38.94	Bp	26.37	SD	19.82	Bd	21.53
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Bos	Ph 2	L	All	F	Glpe	41.31	Bp	27.32	SD	20.90	Bd	23.03
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Bos	Ph 2	R	All	F	Glpe	35.94	Bp	24.97	SD	19.25	Bd	20.57
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 24	Bos	Ph 2	L	All	F	Glpe	39.83	Bp	29.04	SD	21.83	Bd	23.54
Raversijde	87	RAV BOT 235-263	96 RAV 245	Bos	Ph 2	R	All	F	Glpe	38.39	Bp	27.57	SD	22.12	Bd	24.53
Raversijde	87	RAV BOT 235-263	96 RAV 253	Bos	Ph 2	L	All	F	GLpe	39.83	Bp	26.67	SD	21.34	Bd	22.22
Raversijde	87	RAV BOT 235-263	96 RAV 260	Bos	Ph 2	R	All	F	GL		GB	26.68				
Raversijde	87	RAV BOT 235-263	96 RAV 263	Bos	Ph 2	L	All	F	Glpe	39.22	Bp	28.05	SD	21.72	Bd	21.85
Raversijde	87	RAV BOT 235-263	96 RAV 263	Bos	Ph 2	R	All	F	Glpe	42.15	Bp	25.35	SD	18.65	Bd	22.10
Raversijde	80	96 RAV 264-286	96 RAV 267	Bos	Ph 2	R	All	F	GLpe	39.52	Bp	30.07	SD	23.09	Bd	25.35
Raversijde	80	96 RAV 264-286	96 RAV 283	Bos	Ph 2	L	All	F	Glpe	39.73	Bp	26.27	SD	19.19	Bd	21.10
Raversijde	77	96 RAV 288-314	96 RAV 300	Bos	Ph 2	L	All	F	Glpe	38.28	Bp	24.88	SD	18.87	Bd	19.95
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	Bos	Ph 2	L	All	F	Glpe	39.57	Bp	26.33	SD	21.13	Bd	21.81
Raversijde	83	RAV bot 338-374	96 RAV 354	Bos	Ph 2	L	MD	FDUP	Glpe		Bp		SD	23.61	Bd	27.06
Raversijde	70	RAV BOT 61-69	96 RAV 66	Bos	Ph 2	R	All	F	GLPE	38.34	Bp	24.58	SD	20.63	Bd	21.17
Raversijde	89	RAV BOT 1996 772-780	96 RAV 747	Bos	Ph 2	L	All	F	Glpe	35.91	Bp	27.81	SD	19.78	Bd	22.72
Raversijde	53		96-RAV-123	Bos	Ph 2	L	All	F	Glpe	40.73	Bp	27.08	SD	20.08	Bd	20.91
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Bos	Ph 2	R	All	F	Glpe	38.27	Bp	26.60	SD	20.71	Bd	22.64
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-22	Bos	Ph 2	R	All	F	Glpe	39.66	Bp	30.60	SD	22.17	Bd	23.98
Raversijde	50		96-RAV-72	Bos	Ph 2	L	All	F	Glpe	41.00	Bp	29.14	SD	22.45	Bd	25.64
Raversijde	75	97 RAV 150-189	97 RAV 170	Bos	Ph 2	R	All	F	Glpe	41.05	Bp	29.91	SD	23.28	Bd	25.35
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	Bos	Ph 2	R	All	F	Glpe	36.06	Bp	26.99	SD	20.81	Bd	23.69
Raversijde	76	RAV 97 191-209	97 RAV 205	Bos	Ph 2	L	All	F	Glpe	39.47	Bp	26.18	SD	20.10	Bd	23.07
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	Bos	Ph 2	R	All	F	Glpe	38.47	Bp	24.68	SD	19.00	Bd	19.71
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	Bos	Ph 2	L	All	F	GLpe	39.58	Bp	25.43	SD	20.58	Bd	21.23
Raversijde	81	RAV 97 306-339	97 RAV 306	Bos	Ph 2	R	All	F	GLpe	40.29	Bp	26.51	SD	20.08	Bd	22.56
Raversijde	81	RAV 97 306-339	97 RAV 306	Bos	Ph 2	R	All	F	Glpe	40.61	Bp	26.44	SD	20.36	Bd	22.46
Raversijde	81	RAV 97 306-339	97 RAV 331	Bos	Ph 2	R	All	F	Glpe	39.91	Bp	27.35	SD	20.90	Bd	21.58
Raversijde	81	RAV 97 306-339	97 RAV 339	Bos	Ph 2	L	All	F	Glpe	39.47	Bp	27.27	SD	21.41	Bd	23.41
Raversijde	88	RAV BOT 350-369	97 RAV 358	Bos	Ph 2	L	All	F	Glpe	41.77	Bp	30.49	SD	22.18	Bd	24.26
Raversijde	59		97 RAV 361	Bos	Ph 2	L	All	F	Glpe	38.20	Bp	25.22	SD	20.80	Bd	20.80
Raversijde	60		97 RAV 361	Bos	Ph 2	R	All	F	Glpe	39.01	Bp	26.32	SD	21.46	Bd	23.54
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Ph 2	R	All	F	Glpe	37.40	Bp	25.95	SD	20.07	Bd	20.23
Raversijde	90	RAV 686-781	97 RAV 710 VIS HU + Zond HU 0,5 mm UIT	Bos	Ph 2	L	All	F	GLpe	41.98	Bp	28.31	SD	21.82	Bd	22.53
Raversijde	57		97-RAV-298	Bos	Ph 2	L	All	F	Glpe	37.14	Bp	26.45	SD	20.35	Bd	23.31
Raversijde	57		97-RAV-298	Bos	Ph 2	L	All	F	Glpe	40.39	Bp	27.74	SD	22.47	Bd	23.60
Raversijde	58		97-RAV-361	Bos	Ph 2	L	All	F	Glpe	38.64	Bp	28.61	SD	23.33	Bd	24.11
Raversijde	58		97-RAV-361	Bos	Ph 2	L	All	F	Glpe	38.83	Bp	23.92	SD	18.91	Bd	20.87
Raversijde	58		97-RAV-361	Bos	Ph 2	L	All	F	Glpe	38.75	Bp	27.82	SD	22.36	Bd	25.24
Raversijde	58		97-RAV-361	Bos	Ph 2	R	All	F	Glpe	37.36	Bp	25.62	SD	20.25	Bd	23.14
Raversijde	58		97-RAV-361	Bos	Ph 2	R	All	F	Glpe	35.45	Bp	28.02	SD	22.52	Bd	23.66
Raversijde	58		97-RAV-361	Bos	Ph 2	R	All	F	Glpe	38.27	Bp	26.99	SD	20.27	Bd	22.70
Raversijde	58		97-RAV-361	Bos	Ph 2	R	All	F	Glpe	35.12	Bp	28.63	SD	21.16	Bd	23.81
Raversijde	58		97-RAV-361	Bos	Ph 2	R	All	F	Glpe	38.56	Bp	27.53	SD	21.37	Bd	23.81
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Ph 3	L	MD	FD?P	GLpe		Bp		SD		Bd	27.60
Raversijde	69	RAV 96 BOT 424	424	Bos	Ph 3	L	All	F	LD	47.25	DLS	61.03	MBS	18.97		
Raversijde	63	RAV BOT 477	477	Bos	Ph 3	R	All	F	LD	52.48	DLS	66.63	MBS	21.38		
Raversijde	63	RAV BOT 477	477	Bos	Ph 3	R	All	F	LD	51.99	DLS	64.14	MBS	20.72		
Raversijde	62	97 RAV 650	650	Bos	Ph 3	L	All	F	LD	45.57	DLS	58.02	MBS	17.42		
Raversijde	62	97 RAV 650	650	Bos	Ph 3	L	All	F	LD	55.83	DLS	63.01	MBS	19.87		
Raversijde	62	97 RAV 650	650	Bos	Ph 3	L	All	F	LD	55.08	DLS	74.81	MBS	22.04		
Raversijde	62	97 RAV 650	650	Bos	Ph 3	L	All	F	LD	53.01	DLS	65.20	MBS	22.06		
Raversijde	62	97 RAV 650	650	Bos	Ph 3	R	All	F	LD	53.66	DLS	73.25	MBS	22.34		
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	Bos	Ph 3	R	All	F	LD	45.68	DLS	59.94	MBS	19.89		
Raversijde	46	Bot 2 Raversijde 4466-4492	4473	Bos	Ph 3	R	M	F	LD		DLS		MBS	20.86		
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	Bos	Ph 3	L		F	LO	52.70	DLS	74.19	MBS	23.03		
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	Bos	Ph 3	L	All	F	LD	47.03	DLS	58.56	MBS	18.92		
Raversijde	47	Bot 3 Raversijde 4492-4550	4516	Bos	Ph 3	R	All	F	LD		DLS	59.83	MBS	19.27		
Raversijde	47	Bot 3 Raversijde 4492-4550	4545	Bos	Ph 3	R		F	LD	52.64	DLS	67.61	MBS	23.22		
Raversijde	48	Doos 4	4554	Bos	Ph 3	L	All	FPUD	LD	46.88	DLS	58.16	MBS	18.40		
Raversijde	48	Doos 4	4554	Bos	Ph 3	R	All	FPUD	LD	45.94	DLS	55.41	MBS	18.23		
Raversijde	48	Doos 4	4558	Bos	Ph 3	L	All	F	LD	47.77	DLS	66.89	MBS	21.30		
Raversijde	48	Doos 4	4560	Bos	Ph 3	R	All	F	LD	41.65	DLS	56.38	MBS	18.24		

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?												
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Ph 3	L	All	F	LD	45.40	DLS	62.51	MBS	19.42						
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Ph 3	L	All	F	LD	43.09	DLS	56.30	MBS	19.18						
Raversijde	77	96 RAV 288-314	95 RAV 290	Bos	Ph 3	L	All	F	LD	55.94	DLS	74.64	MBS	23.13						
Raversijde	64	96 RAV 150-195	96 RAV 178	Bos	Ph 3	L	All	F	LD	53.51	DLS	67..5	MBS	22.67						
Raversijde	64	96 RAV 150-195	96 RAV 181	Bos	Ph 3	L	All	F	LD	51.91	DLS	64.02	MBS	20.60						
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Ph 3	L	All	F	LD	50.07	DLS	64.82	MBS	21.13						
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Ph 3	L	All	F	LD		DLS	64.44	MBS	19.85						
Raversijde	79	96 RAV 208-218	96 RAV 210	Bos	Ph 3	L	All	FP?D	LD	52.43	DLS	68.87	MBS	20.88						
Raversijde	87	RAV BOT 235-263	96 RAV 235 1 groot stuk vis UIT in bird bag	Bos	Ph 3	R	All	F	LD	48.01	DLS	59.24	MBS	18.58						
Raversijde	87	RAV BOT 235-263	96 RAV 239	Bos	Ph 3	R	All	F	LD	47.68	DLS	60.32	MBS	20.24						
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 345	Bos	Ph 3	R	All	F	LD	53.47	DLS	62.49	MBS	20.37						
Raversijde	70	RAV BOT 61-69	96 RAV 61	Bos	Ph 3	R	All	F	LD	48.74	DLS	70.27	MBS	21.29						
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.1	Bos	Ph 3	R	All	F	LD	45.07	DLS	54.38	MBS	19.42						
Raversijde	53		96-RAV-121	Bos	Ph 3	R	All	F	LD	51.18	DLS	65.14	MBS	21.48						
Raversijde	53		96-RAV-145	Bos	Ph 3	L	All	FP?D	LD	46.62	DLS	58.17	MBS	20.06						
Raversijde	56		96-RAV-292	Bos	Ph 3	L	All	F	LD	48.85	DLS	65.89	MBS	25.23						
Raversijde	56		96-RAV-292	Bos	Ph 3	R	All	F	LD	47.97	DLS	67.18	MBS	21.96						
Raversijde	50		96-RAV-79	Bos	Ph 3	L	All	F	LD	57.10	DLS	69.24	MBS	18.66						
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR-11.5ZWART	Bos	Ph 3	L	All	F	LD	49.50	DLS	65.51	MBS	20.82						
Raversijde	75	97 RAV 150-189	97 RAV 177	Bos	Ph 3	R	All	F	LD	49.39	DLS	62.98	MBS	23.38						
Raversijde	82	RAV bot 210-301	97 RAV 301	Bos	Ph 3	R	All	F	LD	44.31	DLS	54.32	MBS	18.45						
Raversijde	59		97 RAV 361	Bos	Ph 3	R	All	F	LD	55.02	DLS	77.12	MBS	22.75						
Raversijde	88	RAV BOT 350-369	97 RAV 361	Bos	Ph 3	L	All	F	LD	44.23	DLS	57.16	MBS	18.85						
Raversijde	61		97 RAV 477	Bos	Ph 3	L	All	F	LD	44.35	DLS	60.41	MBS	18.22						
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Ph 3	L	All	F	LD	44.49	DLS	61.03	MBS	19.68						
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Ph 3	L	All	F	LD	48.34	DLS	63.06	MBS	22.97						
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Ph 3	R	All	F	LD		DLS		MBS	17.80						
Raversijde	90	RAV 686-781	97 RAV 708	Bos	Ph 3	L	All	F	LD	45.07	DLS	58.62	MBS	17.64						
Raversijde	74	RAV BOT 97-RAV-13 tot 87	97-RAV-20	Bos	Ph 3	R	All	F	LD	46.84	DLS	57.89	MBS	19.52						
Raversijde	57		97-RAV-298	Bos	Ph 3	L	All	F	LD	46.26	DLS	60.45	MBS	18.94						
Raversijde	57		97-RAV-298	Bos	Ph 3	L	All	F	LD	49.92	DLS	60.71	MBS	18.12						
Raversijde	57		97-RAV-298	Bos	Ph 3	L	All	F	LD	51.29	DLS	73.22	MBS	21.74						
Raversijde	57		97-RAV-298	Bos	Ph 3	L	All	F	LD	57.12	DLS	71.33	MBS	22.68						
Raversijde	57		97-RAV-298	Bos	Ph 3	L	All	F	LD	47.10	DLS	64.09	MBS	18.27						
Raversijde	57		97-RAV-298	Bos	Ph 3	R	All	F	LD	46.44	DLS	55.99	MBS	20.05						
Raversijde	57		97-RAV-298	Bos	Ph 3	R	All	F	LD	49.20	DLS	60.86	MBS	19.72						
Raversijde	58		97-RAV-361	Bos	Ph 3	L	All	F	LD	45.05	DLS	54.55	MBS	18.73						
Raversijde	58		97-RAV-361	Bos	Ph 3	R	All	F	LD	47.41	DLS	65.88	MBS	21.57						
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	Bos	Ph 3	L	All	F	LD	45.53	DLS	58.83	MBS	18.55						
Raversijde	74	RAV BOT 97-RAV-13 tot 76	97-RAV-48	Bos	Ph 3	L	All	F	LD	42.37	DLS	54.72	MBS	18.06						
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	Bos	Ph 3	L	All	F	LD	45.07	DLS	55.26	MBS	18.36						
Raversijde	84	RAV bot 221-226	96 RAV 221	Bos	Ph 3	L	All	F	LD	44.97	DLS	50.92	MBS	17.43						
Raversijde	83	RAV bot 338-374	96 RAV 354	Bos	Ph 3	R	All	F	LD	44.88	DLS	60.11	MBS	18.93						
Raversijde	69	RAV 96 BOT 424	424	Bos	Radius	L	PM	FP?D	GL		Bp	7404.00	BFp		SD		Bd		BFd	
Raversijde	63	RAV BOT 477	477	Bos	Radius	L	PM	FP?D	GL		Bp	77.67	BFp	71.37	SD		Bd		BFd	
Raversijde	63	RAV BOT 477	477	Bos	Radius	R	PM	FP?D	GL		Bp	84.15	BFp	77.34	SD		Bd		BFd	
Raversijde	63	RAV BOT 477	477	Bos	Radius	R	PM	FP?D	GL		Bp	77.06	BFp	71.60	SD		Bd		BFd	
Raversijde	63	RAV BOT 477	477	Bos	Radius	R	UDE	UDE	GL		Bp		BFp		SD		Bd	70.28	BFd	63.22
Raversijde	63	RAV BOT 477	477	Bos	Radius	R	MD	FD?P	GL		Bp		BFp		SD	34.08	Bd	63.08	BFd	58.60
Raversijde	62	97 RAV 650	650	Bos	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	64.83	BFd	54.81
Raversijde	62	97 RAV 650	650	Bos	Radius	L	MD	FingD?P	GL		Bp		BFp		SD		Bd	65.15	BFd	57.24
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4431	Bos	Radius	R	MD	FD?P	GL		Bp		BFp		SD	34.52	Bd	59.85	BFd	55.05
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	Bos	Radius	L	PM	FP?D	GL		Bp	71.75	BFp	66.05	SD		Bd		BFD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	Bos	Radius	L	PM	FP?D	GL		Bp	73.85	BFP	68.93						
Raversijde	52		95-RAV-120	Bos	Radius	L	PM	FP?D	GL		Bp	80.68	Bfp	76.13	SD		Bd		Bfd	
Raversijde	52		95-RAV-120	Bos	Radius	L	PM	FP?D	GL		Bp		Bfp		SD		Bd		Bfd	
Raversijde	52		95-RAV-120	Bos	Radius	L	PM	FP?D	GL		Bp	82.60	Bfp	80.74	SD		Bd		Bfd	
Raversijde	52		95-RAV-120	Bos	Radius	R	PM	FP?D	GL		Bp	84.05	Bfp	76.41	SD		Bd		Bfd	
Raversijde	52		95-RAV-120	Bos	Radius	L	MD	FD?P	GL		Bp		Bfp		SD		Bd	63.46	Bfd	63.32
Raversijde	52		95-RAV-120	Bos	Radius	R	MD	FD?P	GL		Bp		Bfp		SD		Bd	58.70	Bfd	56.52
Raversijde	55		95-RAV-279	Bos	Radius	R	PM	FP?D	GL		Bp	78.81	Bfp	71.95	SD		Bd		Bfd	
Raversijde	64	96 RAV 150-195	96 RAV 191	Bos	Radius	R	PM	FP?D	GL		Bp	72.02	BFp	67.62	SD		Bd		BFd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	Bos	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	72.43	BFd	65.87
Raversijde	78	96 RAV 196-204	96 RAV 203	Bos	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	65.15	BFd	53.31
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Radius	L	PM	FP?D	GL		Bp	55.40	BFp	51.59	SD	26.85	Bd		BFd	
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Bos	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	61.19	BFd	55.27
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	Bos	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	66.47	BFd	61.37
Raversijde	84	RAV bot 221-226	96 RAV 223	Bos	Radius	R	MD	UD?P	GL		Bp		BFp		SD		Bd	68.40	BFd	68.09
Raversijde	84	RAV bot 221-226	96 RAV 223	Bos	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	66.80	BFd	66.41
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Bos	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	68.45	BFd	71.50
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 234	Bos	Radius	R	PM	FP?D	GL		Bp	72.68	BFp	66.73	SD	34.88	Bd		BFd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	Bos	Radius	L	PM	FP?D	GL		Bp	72.86	BFp	66.80	SD		Bd		BFd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?																										
Raversijde	83	RAV bot 338-374	96 RAV 338	Bos	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	62.54	BFd	56.75														
Raversijde	83	RAV bot 338-374	96 RAV 338	Bos	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	63.88	BFd	61.23														
Raversijde	83	RAV bot 338-374	96 RAV 338	Bos	Radius	R	PM	FP?D	GL		Bp	77.01	BFp	71.85	SD		Bd		BFd															
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Bos	Radius	R	PM	FP?D	GL		Bp	75.18	BFp	67.57	SD		Bd		BFd															
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Bos	Radius	R	PM	FP?D	GL		Bp	82.31	BFp	73.83	SD		Bd		BFd															
Raversijde	70	RAV BOT 61-69	96 RAV 61	Bos	Radius	L	PM	FP?D	GL		Bp	77.62	BFP	71.70	SD		Bd		BFD															
Raversijde	70	RAV BOT 61-69	96 RAV 61	Bos	Radius	R	PM	FP?D	GL		Bp	72.87	BFP	67.29	SD		Bd		BFD															
Raversijde	53		96-RAV-121	Bos	Radius	L	MD	FD?P	GL		Bp		Bfp		SD		Bd	60.94	Bfd	53.09														
Raversijde	53		96-RAV-128	Bos	Radius	R	MD	FD?P	GL		Bp		Bfp		SD		Bd	63.08	Bfd	54.22														
Raversijde	75	97 RAV 150-189	97 RAV 182	Bos	Radius	L	MD	FingD?P	GL		Bp		BFp		SD		Bd	72.09	BFd															
Raversijde	81	RAV 97 306-339	97 RAV 309	Bos	Radius	R	PM	FP?D	GL		Bp	76.32	BFp		SD		Bd		BFd															
Raversijde	81	RAV 97 306-339	97 RAV 331	Bos	Radius	R	UDE	UDE	GL		Bp		BFp		SD		Bd	63.01	BFd	62.56														
Raversijde	81	RAV 97 306-339	97 RAV 334	Bos	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	64.48	BFd	61.66														
Raversijde	59		97 RAV 361	Bos	Radius	L	PM	FP?D	GL		Bp	71.55	BFp		SD		Bd		BFd															
Raversijde	60		97 RAV 361	Bos	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	32.79	BFd	56.76														
Raversijde	61		97 RAV 477	Bos	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	65.02	BFd	55.34														
Raversijde	61		97 RAV 477	Bos	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	67.56	BFd	59.25														
Raversijde	71	RAV BOT 61-98	97 RAV 96	Bos	Radius	L	MD	FD?P	GL		Bp		BFP		SD		Bd	66.57	BFD	54.60														
Raversijde	54		97-RAV-108	Bos	Radius	R	MD	FD?P	GL		Bp		Bfp		SD		Bd	64.53	Bfd	54.19														
Raversijde	54		97-RAV-110	Bos	Radius	L	PM	FP?D	GL		Bp	72.53	Bfp	66.44	SD		Bd		Bfd															
Raversijde	54		97-RAV-117	Bos	Radius	R	MD	FD?P	GL		Bp		Bfp		SD		Bd	64.20	Bfd	53.53														
Raversijde	57		97-RAV-298	Bos	Radius	R	MD	FD?P	GL		Bp		Bfp		SD		Bd	51.44	Bfd	51.28														
Raversijde	58		97-RAV-361	Bos	Radius	R	PM	FP?D	GL		Bp	76.47	Bfp	72.41	SD		Bd		Bfd															
Raversijde	58		97-RAV-361	Bos	Radius	R	UDE	UDE	GL		Bp		Bfp		SD		Bd	75.00	Bfd	62.72														
Raversijde	47	Bot 3 Raversijde 4492-4550	4545	Bos	Radius + Ulna	R	(M)	FP	GL		Bp	74.89	BFP	69.40	SD		Bd		Bfd		GL		LO		Dpa		SDO		BpC	46.13					
Raversijde	48	Doos 4	4551	Bos	Radius + Ulna	L	PM	FP?D	GL		Bp	85.14	BFP	78.93	SD		Bd		Bfd		LO		Dpa		SDO		BpC								
Raversijde	52		95-RAV-120	Bos	Radius + Ulna	L	M	?	GL		Bp	78.65	Bfp	73.11	SD		Bd		Bfd		UGL		ULO		UDpa		SDO		UBpc	46.50					
Raversijde	52		95-RAV-120	Bos	Radius + Ulna	R	M	?	GL		Bp	65.97	Bfp	59.73	SD		Bd		Bfd		UGL		ULO		UDpa		SDO		UBpc	48.46					
Raversijde	64	96 RAV 150-195	96 RAV 160	Bos	Radius + Ulna	L	PM	F	GL		Bp	80.92	BFp	75.27	SD		Bd		BFd		GL		LO	92.71	Dpa	52.72	SDO	64.66	BpC	47.80					
Raversijde	64	96 RAV 150-195	96 RAV 172	Bos	Radius + Ulna	L	M	?	GL		Bp		BFp		SD		Bd		BFd		GL		LO		Dpa		SDO	54.70	BpC	41.12					
Raversijde	84	RAV bot 221-226	96 RAV 221	Bos	Radius + Ulna	L	M	?	BpC	45.01																									
Raversijde	83	RAV bot 338-374	96 RAV 338	Bos	Radius + Ulna	R	PM	R=FP, U?	GL		Bp	71.67	BFP	65.93	SD		Bd		BFd		GL		LO		Dpa		SDO	55.13	BpC	42.14					
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Bos	Radius + Ulna	R	PM	FP?D	GL		Bp	78.66	BFp	71.12	SD		Bd		BFd																
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Radius + Ulna	R	M	?	GL		Bp	75.07	BFP	69.48	SD		Bd		BFD		GL		LO		Dpa		SDO		BpC	45.60					
Raversijde	81	RAV 97 306-339	97 RAV 316	Bos	Radius + Ulna	R	PM	FP?D	GL		Bp	73.12	BFp	66.05	SD		Bd		BFd		GL		LO		Dpa		SDO		BpC	42.08					
Raversijde	46	Bot 2 Raversijde 4466-4492	4470	Bos	Radius+Ulna	R	PM	FP?D	GL		Bp	76.98	BFp	71.72	SD		Bd		BFd		GL		LO		Dpa		SDO	56.37	BpC	45.98					
Raversijde	46	Bot 2 Raversijde 4466-4492	4482	Bos	Scapula	?R	PM	?	HS		DHA		Ld		SLC		GLP		LG		BG	43.66													
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	Bos	Scapula	L	PM	FP	HS		DHA		Ld		SLC		Glp	64.95	LG		Bg	45.30													
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	Bos	Scapula	L	PM	?	HS		DHA		Ld		SLC	44.66	Glp		LG		Bg														
Raversijde	48	Doos 4	4566	Bos	Scapula	R	PM	F					HS		DHA		LD		SLC		GLP	65.86	LG		BG										
Raversijde	52		95-RAV-120	Bos	Scapula	R	PM	FP	HS		DHA		Ld		SLC	43.32	GLP	65.09	LG	54.73	BG	46.74													
Raversijde	52		95-RAV-120	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	46.77	GLP	69.43	LG	57.59	BG	50.37													
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	49.34	GLP	65.61	LG	53.95	BG	44.99													
Raversijde	87	RAV BOT 235-263	96 RAV 245	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP	66.33	LG	53.12	BG	4436.00													
Raversijde	87	RAV BOT 235-263	96 RAV 248	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	44.24	GLP	69.24	LG	58.17	BG	50.54													
Raversijde	80	96 RAV 264-286	96 RAV 283	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP		LG	56.53	BG	46.85													
Raversijde	77	96 RAV 288-314	96 RAV 314	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	47.23	GLP	66.89	LG	54.50	BG	47.04													
Raversijde	70	RAV BOT 61-69	96 RAV 64	Bos	Scapula	R	PM	F	HS		DHA		LD		SLC	49.28	GLP	67.33	LG	57.75	BG														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 735	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	65.36	LG	53.09	BG	43.38													
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	Scapula	R	PM	?	HS		DHA		Ld		SLC	27.48	GLP		LG		BG														
Raversijde	49		96-RAV-16	Bos	Scapula	L	M	U	HS		DHA		Ld		SLC	41.50	GLP		LG		BG														
Raversijde	56		96-RAV-292	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	54.49	GLP	76.80	LG	62.27	BG	52.73													
Raversijde	56		96-RAV-292	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	55.23	GLP	74.94	LG	62.48	BG	53.92													
Raversijde	75	97 RAV 150-189	97 RAV 179	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	48.12	GLP	67.48	LG	54.25	BG	44.30													
Raversijde	61		97 RAV 477	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP		LG		BG	51.25													
Raversijde	90	RAV 686-781	97 RAV 686 3 Zakjes	Bos	Scapula	L	PM	F	HS		DHA		Ld		SLC	48.44	GLP	65.19	LG	58.71	BG	45.75													
Raversijde	90	RAV 686-781	97 RAV 686 3 Zakjes	Bos	Scapula	L	PM	?F	HS		DHA		Ld		SLC	49.18	GLP	68.81	LG	58.96	BG	45.71													
Raversijde	90	RAV 686-781	97 RAV 710 VIS HU + Zond HU 0,5 mm UIT	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	64.08	LG		BG	43.60													
Raversijde	57		97-RAV-298	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	69.96	LG	59.50	BG	49.43													
Raversijde	57		97-RAV-298	Bos	Scapula	R	PM	F	HS		DHA		Ld		SLC	46.50	GLP	61.70	LG		BG														
Raversijde	69	RAV 96 BOT 424	424	Bos	Tibia	L	PM	FingP?D	GL		Bp	87.26	SD		Bd		Dd																		
Raversijde	69	RAV 96 BOT 424	424	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	57.05	Dd	41.62																	
Raversijde	63	RAV BOT 477	477	Bos	Tibia	?L	UPE	UPE	GL		Bp	81.22	SD		Bd		Dd																		
Raversijde	63	RAV BOT 477	477	Bos	Tibia	L	PM	UPE-refit	GL		Bp	82.79	SD		Bd		Dd																		
Raversijde	62	97 RAV 650	650	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	55.35	Dd																		
Raversijde	62	97 RAV 650	650	Bos	Tibia	R	MD	FingD?P	GL		Bp		SD		Bd	60.63	Dd	46.75																	
Raversijde	62	97 RAV 650	650	Bos	Tibia	R	PM	FP?D	GL		Bp	78.96	SD		Bd		Dd																		
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	54.53	Dd	42.06																	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4431	Bos	Tibia	L	MD	FD?P	GL		Bp		SD	35.95	Bd	58.75	Dd	44.57																	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?										
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4431	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	65.22	Dd	47.69
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	Bos	Tibia	L	PM	FP	GL		Bp		SD	40.70	Bd		Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4492	Bos	Tibia	R	P	UPE	GL		Bp	91.40	SD		Bd		Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	Bos	Tibia	L		FingD	GL		Bp		SD	36.74	Bd		Dd	43.42
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	Bos	Tibia	L		FD?P	GL		Bp		SD		Bd	60.34	Dd	44.96
Raversijde	47	Bot 3 Raversijde 4492-4550	4526	Bos	Tibia	L	PM	FP?D	GL		Bp	95.66	SD		Bd		DD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4545	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	57.96	DD	45.43
Raversijde	47	Bot 3 Raversijde 4492-4550	4550	Bos	Tibia	R	MD	FD	GL		Bp		SD	37.20	Bd	64.76	DD	48.02
Raversijde	48	Doos 4	4562	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	58.07	Dd	
Raversijde	48	Doos 4	4562	Bos	Tibia	R	MD	FingD?P	GL		Bp		SD		Bd	62.27	Dd	46.57
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Tibia	R	MD	FD?P	GL		Bp		SD	39.00	Bd	56.15	Dd	43.26
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Bos	Tibia	R	MD	FD?P	GL		Bp		SD	37.10	Bd		Dd	
Raversijde	52		95-RAV-120	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	61.63	Dd	44.71
Raversijde	55		95-RAV-279	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	61.68	Dd	
Raversijde	64	96 RAV 150-195	96 RAV 168	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	56.33	Dd	43.72
Raversijde	64	96 RAV 150-195	96 RAV 173	Bos	Tibia	L	UDE	UDE	GL		Bp		SD		Bd	61.73	Dd	39.62
Raversijde	64	96 RAV 150-195	96 RAV 191	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	55.14	Dd	41.94
Raversijde	78	96 RAV 196-204	96 RAV 194	Bos	Tibia	L	PM	FingP?D	GL		Bp	90.33	SD		Bd		Dd	
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Tibia	L	UDE	UDE	GL		Bp		SD		Bd	67.28	Dd	50.54
Raversijde	78	96 RAV 196-204	96 RAV 204	Bos	Tibia	R	PM	FingP?D	GL		Bp	88.69	SD		Bd		Dd	
Raversijde	79	96 RAV 208-218	96 RAV 208	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	56.66	Dd	42.30
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	Bos	Tibia	L	UDE	UDE	GL		Bp		SD		Bd		Dd	48.43
Raversijde	84	RAV bot 221-226	96 RAV 221	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	59.40	Dd	47.03
Raversijde	77	96 RAV 288-314	96 RAV 302	Bos	Tibia	L	All	FDFingP	GL	352.72	Bp	107.93	SD	41.05	Bd	69.24	Dd	56.46
Raversijde	77	96 RAV 288-314	96 RAV 314	Bos	Tibia	L	PMMD	FD?P	GL		Bp		SD		Bd	63.92	Dd	44.41
Raversijde	77	96 RAV 288-314	96 RAV 314	Bos	Tibia	R	MD	FD?P	GL		Bp		SD	34.09	Bd		Dd	47.74
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	56.46	Dd	43.73
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 320	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	57.76	Dd	43.67
Raversijde	83	RAV bot 338-374	96 RAV 339	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	61.51	Dd	47.09
Raversijde	70	RAV BOT 61-69	96 RAV 61	Bos	Tibia	R		UPE	GL		Bp	88.91	SD		Bd		Dd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	Tibia	L	M	UPUD	GL		Bp		SD	23.66	Bd		Dd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Bos	Tibia	R	M	UPUD	GL		Bp		SD	23.28	Bd		Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.6	Bos	Tibia	R	PM	FP?D	GL		Bp	87.83	SD		Bd		Dd	
Raversijde	53		96-RAV-133	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	58.24	Dd	43.43
Raversijde	76	RAV 97 191-209	97 RAV 206	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	63.11	Dd	46.45
Raversijde	76	RAV 97 191-209	97 RAV 206	Bos	Tibia	R	MD	FD?P	GL		Bp		SD	36.63	Bd	63.63	Dd	42.81
Raversijde	82	RAV bot 210-301	97 RAV 212	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	57.30	Dd	44.16
Raversijde	82	RAV bot 210-301	97 RAV 301	Bos	Tibia	L	MD	FD?P	GL		Bp		SD	34.40	Bd	61.28	Dd	46.52
Raversijde	82	RAV bot 210-301	97 RAV 301	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	59.71	Dd	46.73
Raversijde	81	RAV 97 306-339	97 RAV 306	Bos	Tibia	R	M	U	GL		Bp		SD	26.91	Bd		Dd	
Raversijde	81	RAV 97 306-339	97 RAV 318	Bos	Tibia	R	MD	FD?P	GL		Bp		SD	33.24	Bd	35.02	Dd	41.27
Raversijde	81	RAV 97 306-339	97 RAV 331	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	57.93	Dd	46.36
Raversijde	59		97 RAV 361	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd		Dd	47.52
Raversijde	88	RAV BOT 350-369	97 RAV 366	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	61.67	Dd	47.58
Raversijde	61		97 RAV 477	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	27.33	Dd	25.12
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	57.56	Dd	44.99
Raversijde	71	RAV BOT 61-98	97 RAV 64	Bos	Tibia	L	PM	FP?D	GL		Bp	93.96	SD		Bd		Dd	
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	Bos	Tibia	L	MD	FD?P	GL		Bp		SD	38.51	Bd	57.94	Dd	45.77
Raversijde	71	RAV BOT 61-98	97 RAV 90	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	53.74	Dd	43.32
Raversijde	54		97-RAV-117	Bos	Tibia	R	MD	FD?P	GL		Bp		SD	37.18	Bd	61.15	Dd	43.96
Raversijde	54		97-RAV-117	Bos	Tibia	L	PM	FP?D	GL		Bp	83.97	SD		Bd		Dd	
Raversijde	57		97-RAV-298	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	60.40	Dd	45.26
Raversijde	58		97-RAV-361	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	65.33	Dd	51.98
Raversijde	58		97-RAV-361	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	57.10	Dd	43.54
Raversijde	58		97-RAV-361	Bos	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	55.91	Dd	
Raversijde	74	RAV BOT 97-RAV-13 tot 64	97-RAV-55	Bos	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	54.74	Dd	41.37
Raversijde	63	RAV BOT 477	477	Bos	Ulna	?L	M	?	GL		LO		Dpa		SDO		BpC	50.24
Raversijde	48	Doos 4	4562	Bos	Ulna	L	PM	Fing	GL		Dpa	108.02	SDO	65.59	BpC	47.63		
Raversijde	52		95-RAV-120	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO	51.30	BpC	41.27
Raversijde	52		95-RAV-120	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	49.04
Raversijde	52		95-RAV-120	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	43.75
Raversijde	55		95-RAV-279	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	48.97
Raversijde	64	96 RAV 150-195	96 RAV 194	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	44.47
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	Bos	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	44.59
Raversijde	84	RAV bot 221-226	96 RAV 221	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	40.69
Raversijde	83	RAV bot 338-374	96 RAV 339	Bos	Ulna	R	PM	F	GL		LO	92.13	Dpa		SDO	55.94	BpC	48.23
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 347	Bos	Ulna	?	M	?	GL		LO		Dpa		SDO		BpC	44.00
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	51.12

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Bos	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	44.66						
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Bos	Ulna	L	M	?	GL		LO		Dpa	44.62	SDO	52.41	BpC							
Raversijde	70	RAV BOT 61-69	96 RAV 61	Bos	Ulna	R	M	?	GL		LO		Dpa	19.87	SDO	34.89	BpC	22.14						
Raversijde	71	RAV BOT 61-98	97 RAV 63	Bos	Ulna	R	PM	F	GL		LO		Dpa		SDO	89.21	BpC	53.67						
Raversijde	54		97-RAV-148	Bos	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	41.80						
Raversijde	57		97-RAV-298	Bos	Ulna	L	M	?	GL		LO		Dpa		SDO	53.85	Bpc	41.86						
Raversijde	81	RAV 97 306-339	97 RAV 334	Canis	Calcaneus	L	All	F	GL	47.58	GB	19.27												
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4431	Canis	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.19	Bd	39.10	BT	29.40				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 8	Canis	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	9.43	Bd	24.50	BT	19.47				
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 317	Equs	Carpal	?	All	F	GB	47.71														
Raversijde	52		95-RAV-120	Equs	MC	L	All	F	Bp	60.75	Bd	55.68	Bd2	58.91	SD	38.40	GL	296.10	DD	33.17	Dp	56.33	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Equs	MC	?L	All	FP?D	Bp		Bd	53.42	Bd2	54.45	SD	40.89	GL	256.71	DD	25.43	Dp		Dd	
Raversijde	77	96 RAV 288-314	96 RAV 288	Equs	MC	?L	All	F	Bp	57.06	Bd	54.21	Bd2		SD	38.82	GL	252.38	DD	27.78	Dp	37.11	Dd	41.56
Raversijde	76	RAV 97 191-209	97 RAV 206	Equs	MT	L	PM	FP?D	Bp	55.55	Bd		Bd2		SD	37.59	GL		DD		Dp	50.25	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 314	Equs	Ph 1	L	All	F	Glpe	85.35	Bp	58.84	SD	38.40	Bd	48.55								
Raversijde	69	RAV 96 BOT 424	424	Equs	Ph 1	?R	All	F	Glpe	100.19	Bp	67.91	SD	43.83	Bd	52.80								
Raversijde	63	RAV BOT 477	477	Equs	Ph 1	?R	All	F	Glpe	73.38	Bp	49.80	SD	33.01	Bd	41.80								
Raversijde	52		95-RAV-120	Equs	Ph 1	L	All	F	Glpe	85.66	Bp	56.61	SD	35.53	Bd	47.98								
Raversijde	60		97 RAV 361	Equs	Ph 1	R	All	F	Glpe	93.26	Bp	63.73	SD	41.14	Bd	54.60								
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Equs	Ph 3	L	All	F	Glpe	56.76	Bp	30.80	SD	25.66	Bd	28.54								
Raversijde	68			Equs	Tibia	L	All	F	GL	403.21	Bp	114.92	SD	45.97	Bd	86.85	Dd	56.22						
Raversijde	88	RAV BOT 350-369	97 RAV 365	No Measurable Bones																				
Raversijde	47	Bot 3 Raversijde 4492-4550	4493	No Measurable Bones																				
Raversijde	47	Bot 3 Raversijde 4492-4550	4494	No Measurable Bones																				
Raversijde	47	Bot 3 Raversijde 4492-4550	4534	No Measurable Bones																				
Raversijde	47	Bot 3 Raversijde 4492-4550	4535	No Measurable Bones																				
Raversijde	47	Bot 3 Raversijde 4492-4550	4543	No Measurable Bones																				
Raversijde	47	Bot 3 Raversijde 4492-4550	4548	No Measurable Bones																				
Raversijde	75	97 RAV 150-189	180 zond leder	No Measurable Bones																				
Raversijde	80	96 RAV 264-286	95 RAV 277	No Measurable Bones																				
Raversijde	77	96 RAV 288-314	95 RAV 301	No Measurable Bones																				
Raversijde	77	96 RAV 288-314	95 RAV 306	No Measurable Bones																				
Raversijde	77	96 RAV 288-314	95 RAV 312	No Measurable Bones																				
Raversijde	85	RAV 1996 96 RAV 317-349	95 RAV 344	No Measurable Bones																				
Raversijde	51		95-RAV-100	No Measurable Bones																				
Raversijde	51		95-RAV-101	No Measurable Bones																				
Raversijde	51		95-RAV-103	No Measurable Bones																				
Raversijde	51		95-RAV-108	No Measurable Bones																				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV (2)50	No Measurable Bones																				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 10	No Measurable Bones																				
Raversijde	64	96 RAV 150-195	96 RAV 150	No Measurable Bones																				

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?
Raversijde	64	96 RAV 150-195	96 RAV 151	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 153	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 154	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 160	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 163	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 168	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 169	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 171	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 173	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 180	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 183	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 184	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 184	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 186	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 190	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 194	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 194	No Measurable Bones				
Raversijde	64	96 RAV 150-195	96 RAV 195	No Measurable Bones				
Raversijde	78	96 RAV 196-204	96 RAV 196	No Measurable Bones				
Raversijde	78	96 RAV 196-204	96 RAV 197	No Measurable Bones				
Raversijde	78	96 RAV 196-204	96 RAV 198	No Measurable Bones				
Raversijde	78	96 RAV 196-204	96 RAV 203	No Measurable Bones				
Raversijde	78	96 RAV 196-204	96 RAV 204	No Measurable Bones				
Raversijde	79	96 RAV 208-218	96 RAV 208	No Measurable Bones				
Raversijde	79	96 RAV 208-218	96 RAV 208 2 Zakjes	No Measurable Bones				
Raversijde	79	96 RAV 208-218	96 RAV 212	No Measurable Bones				
Raversijde	79	96 RAV 208-218	96 RAV 214/ 217	No Measurable Bones				
Raversijde	79	96 RAV 208-218	96 RAV 217	No Measurable Bones				
Raversijde	84	RAV bot 221-226	96 RAV 225	No Measurable Bones				
Raversijde	84	RAV bot 221-226	96 RAV 225	No Measurable Bones				
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 228	No Measurable Bones				

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	No Measurable Bones				
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 232	No Measurable Bones				
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 234	No Measurable Bones				
Raversijde	87	RAV BOT 235-263	96 RAV 235	No Measurable Bones				
Raversijde	87	RAV BOT 235-263	96 RAV 236	No Measurable Bones				
Raversijde	87	RAV BOT 235-263	96 RAV 237	No Measurable Bones				
Raversijde	87	RAV BOT 235-263	96 RAV 242	No Measurable Bones				
Raversijde	87	RAV BOT 235-263	96 RAV 245 2 Zakjes	No Measurable Bones				
Raversijde	87	RAV BOT 235-263	96 RAV 246	No Measurable Bones				
Raversijde	87	RAV BOT 235-263	96 RAV 250	No Measurable Bones				
Raversijde	87	RAV BOT 235-263	96 RAV 253	No Measurable Bones				
Raversijde	80	96 RAV 264-286	96 RAV 265	No Measurable Bones				
Raversijde	80	96 RAV 264-286	96 RAV 268	No Measurable Bones				
Raversijde	80	96 RAV 264-286	96 RAV 278	No Measurable Bones				
Raversijde	80	96 RAV 264-286	96 RAV 282	No Measurable Bones				
Raversijde	80	96 RAV 264-286	96 RAV 284	No Measurable Bones				
Raversijde	80	96 RAV 264-286	96 RAV 286	No Measurable Bones				
Raversijde	77	96 RAV 288-314	96 RAV 289	No Measurable Bones				
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 299	No Measurable Bones				
Raversijde	77	96 RAV 288-314	96 RAV 309	No Measurable Bones				
Raversijde	77	96 RAV 288-314	96 RAV 309	No Measurable Bones				
Raversijde	77	96 RAV 288-314	96 RAV 314	No Measurable Bones				
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318	No Measurable Bones				
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321	No Measurable Bones				
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321	No Measurable Bones				
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 322	No Measurable Bones				
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 323	No Measurable Bones				
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 328	No Measurable Bones				
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 334	No Measurable Bones				
Raversijde	83	RAV bot 338-374	96 RAV 341	No Measurable Bones				
Raversijde	83	RAV bot 338-374	96 RAV 342	No Measurable Bones				

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*																										
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 348	No Measurable Bones																														
Raversijde	83	RAV bot 338-374	96 RAV 352	No Measurable Bones																														
Raversijde	70	RAV BOT 61-69	96 RAV 61	No Measurable Bones																														
Raversijde	70	RAV BOT 61-69	96 RAV 62	No Measurable Bones																														
Raversijde	70	RAV BOT 61-69	96 RAV 64	No Measurable Bones																														
Raversijde	70	RAV BOT 61-69	96 RAV 66	No Measurable Bones																														
Raversijde	70	RAV BOT 61-69	96 RAV 68	No Measurable Bones																														
Raversijde	70	RAV BOT 61-69	96 RAV 68	No Measurable Bones																														
Raversijde	70	RAV BOT 61-69	96 RAV 69	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 726	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 730	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 731	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 733	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 736	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 736	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 740	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 740	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 742	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 746	No Measurable Bones																														
Raversijde	89	RAV BOT 1996 772-780	96 RAV 780	No Measurable Bones																														
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.8	No Measurable Bones																														
Raversijde	50		96-RAV-101	No Measurable Bones																														
Raversijde	50		96-RAV-106	No Measurable Bones																														
Raversijde	50		96-RAV-107	No Measurable Bones																														
Raversijde	50		96-RAV-119	No Measurable Bones																														
Raversijde	53		96-RAV-120	No Measurable Bones																														
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-120	No Measurable Bones																														
Raversijde	53		96-RAV-125	No Measurable Bones																														
Raversijde	53		96-RAV-126	No Measurable Bones																														
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-13	No Measurable Bones																														
Raversijde	53		96-RAV-130	No Measurable Bones																														

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*
Raversijde	53		96-RAV-131	No Measurable Bones				
Raversijde	53		96-RAV-133	No Measurable Bones				
Raversijde	53		96-RAV-136	No Measurable Bones				
Raversijde	53		96-RAV-138	No Measurable Bones				
Raversijde	49		96-RAV-14	No Measurable Bones				
Raversijde	53		96-RAV-141	No Measurable Bones				
Raversijde	53		96-RAV-148	No Measurable Bones				
Raversijde	53		96-RAV-148	No Measurable Bones				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-160	No Measurable Bones				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-160	No Measurable Bones				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-18	No Measurable Bones				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-31	No Measurable Bones				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-39	No Measurable Bones				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-4	No Measurable Bones				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-40	No Measurable Bones				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-41	No Measurable Bones				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-42	No Measurable Bones				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-50	No Measurable Bones				
Raversijde	50		96-RAV-74	No Measurable Bones				
Raversijde	50		96-RAV-79	No Measurable Bones				
Raversijde	50		96-RAV-80	No Measurable Bones				
Raversijde	50		96-RAV-82	No Measurable Bones				
Raversijde	50		96-RAV-86	No Measurable Bones				
Raversijde	50		96-RAV-90	No Measurable Bones				
Raversijde	50		96-RAV-92	No Measurable Bones				
Raversijde	50		96-RAV-94	No Measurable Bones				
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.10	No Measurable Bones				
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.5	No Measurable Bones				
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.6KLE1	No Measurable Bones				
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.2	No Measurable Bones				
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.4	No Measurable Bones				

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*
Raversijde	75	97 RAV 150-189	97 RAV 150	No Measurable Bones				
Raversijde	75	97 RAV 150-189	97 RAV 152	No Measurable Bones				
Raversijde	75	97 RAV 150-189	97 RAV 161	No Measurable Bones				
Raversijde	75	97 RAV 150-189	97 RAV 162	No Measurable Bones				
Raversijde	75	97 RAV 150-189	97 RAV 169	No Measurable Bones				
Raversijde	75	97 RAV 150-189	97 RAV 175	No Measurable Bones				
Raversijde	75	97 RAV 150-189	97 RAV 176	No Measurable Bones				
Raversijde	75	97 RAV 150-189	97 RAV 183 stefe Bovenst Laog	No Measurable Bones				
Raversijde	75	97 RAV 150-189	97 RAV 185 Stefe Bovenste Laog	No Measurable Bones				
Raversijde	75	97 RAV 150-189	97 RAV 188	No Measurable Bones				
Raversijde	76	RAV 97 191-209	97 RAV 195	No Measurable Bones				
Raversijde	76	RAV 97 191-209	97 RAV 197	No Measurable Bones				
Raversijde	76	RAV 97 191-209	97 RAV 198	No Measurable Bones				
Raversijde	81	RAV 97 306-339	97 RAV 2 Zakjes= 1 geworden	No Measurable Bones				
Raversijde	76	RAV 97 191-209	97 RAV 208	No Measurable Bones				
Raversijde	76	RAV 97 191-209	97 RAV 208	No Measurable Bones				
Raversijde	76	RAV 97 191-209	97 RAV 209 VIS UIT	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 210	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 211	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 215	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 218	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 219	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 221	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 230	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 231	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 237	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 255	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 262	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 270	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 273	No Measurable Bones				
Raversijde	82	RAV bot 210-301	97 RAV 286	No Measurable Bones				

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*																										
Raversijde	82	RAV bot 210-301	97 RAV 288	No Measurable Bones																														
Raversijde	82	RAV bot 210-301	97 RAV 290	No Measurable Bones																														
Raversijde	82	RAV bot 210-301	97 RAV 291	No Measurable Bones																														
Raversijde	82	RAV bot 210-301	97 RAV 292	No Measurable Bones																														
Raversijde	82	RAV bot 210-301	97 RAV 301	No Measurable Bones																														
Raversijde	81	RAV 97 306-339	97 RAV 310	No Measurable Bones																														
Raversijde	81	RAV 97 306-339	97 RAV 320	No Measurable Bones																														
Raversijde	81	RAV 97 306-339	97 RAV 325	No Measurable Bones																														
Raversijde	81	RAV 97 306-339	97 RAV	No Measurable Bones																														
Raversijde	88	RAV BOT 350-369	97 RAV 343	No Measurable Bones																														
Raversijde	88	RAV BOT 350-369	97 RAV 345	No Measurable Bones																														
Raversijde	88	RAV BOT 350-369	97 RAV 348	No Measurable Bones																														
Raversijde	88	RAV BOT 350-369	97 RAV 349	No Measurable Bones																														
Raversijde	88	RAV BOT 350-369	97 RAV 354	No Measurable Bones																														
Raversijde	71	RAV BOT 61-98	97 RAV 61	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 686	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 690	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 691	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 692	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 697	No Measurable Bones																														
Raversijde	71	RAV BOT 61-98	97 RAV 70	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 703	No Measurable Bones																														
Raversijde	71	RAV BOT 61-98	97 RAV 71	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 713	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 722	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 723	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 728	No Measurable Bones																														
Raversijde	71	RAV BOT 61-98	97 RAV 74	No Measurable Bones																														
Raversijde	90	RAV 686-781	97 RAV 747	No Measurable Bones																														
Raversijde	71	RAV BOT 61-98	97 RAV 75	No Measurable Bones																														
Raversijde	71	RAV BOT 61-98	97 RAV 79	No Measurable Bones																														

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?
Raversijde	71	RAV BOT 61-98	97 RAV 81	No Measurable Bones				
Raversijde	71	RAV BOT 61-98	97 RAV 82	No Measurable Bones				
Raversijde	71	RAV BOT 61-98	97 RAV 89	No Measurable Bones				
Raversijde	71	RAV BOT 61-98	97 RAV 94	No Measurable Bones				
Raversijde	71	RAV BOT 61-98	97 RAV 96	No Measurable Bones				
Raversijde	71	RAV BOT 61-98	97 RAV98	No Measurable Bones				
Raversijde	54		97-RAV-100	No Measurable Bones				
Raversijde	54		97-RAV-102	No Measurable Bones				
Raversijde	54		97-RAV-103	No Measurable Bones				
Raversijde	54		97-RAV-104	No Measurable Bones				
Raversijde	54		97-RAV-109	No Measurable Bones				
Raversijde	54		97-RAV-114	No Measurable Bones				
Raversijde	54		97-RAV-116	No Measurable Bones				
Raversijde	54		97-RAV-118	No Measurable Bones				
Raversijde	54		97-RAV-127	No Measurable Bones				
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-13	No Measurable Bones				
Raversijde	54		97-RAV-130	No Measurable Bones				
Raversijde	54		97-RAV-131	No Measurable Bones				
Raversijde	54		97-RAV-136	No Measurable Bones				
Raversijde	54		97-RAV-137	No Measurable Bones				
Raversijde	54		97-RAV-138	No Measurable Bones				
Raversijde	54		97-RAV-140	No Measurable Bones				
Raversijde	54		97-RAV-142	No Measurable Bones				
Raversijde	54		97-RAV-144	No Measurable Bones				
Raversijde	54		97-RAV-145	No Measurable Bones				
Raversijde	54		97-RAV-148	No Measurable Bones				
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-17	No Measurable Bones				
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-18	No Measurable Bones				
Raversijde	74	RAV BOT 97-RAV-13 tot 64	97-RAV-19	No Measurable Bones				
Raversijde	74	RAV BOT 97-RAV-13 tot 65	97-RAV-21	No Measurable Bones				
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-24	No Measurable Bones				

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*						
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-26	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-30	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-31	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-32	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-36	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-39	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-40	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-43	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 66	97-RAV-44	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 84	97-RAV-50	No Measurable Bones										
Raversijde	74	RAV BOT 97-RAV-13 tot 83	97-RAV-60	No Measurable Bones										
Raversijde	65			No Measurable Bones										
Raversijde	66			No Measurable Bones										
Raversijde	67			No Measurable Bones										
Raversijde	69	RAV 96 BOT 424	424	O/C	Astragalus	R	All	F	GL	27.21	GLm	25.35	GB	17.43
Raversijde	62	97 RAV 650	650	O/C	Astragalus	L	All	F	GL	27.53	GLm	25.97	GB	17.15
Raversijde	46	Bot 2 Raversjide 4466-4492	4482	O/C	Astragalus	R	All	F	GL	27.50	GLm	25.90	GB	18.24
Raversijde	47	Bot 3 Raversjide 4492-4550	4492	O/C	Astragalus	R		F	GL	29.98	GLM	30.75	GB	20.08
Raversijde	47	Bot 3 Raversjide 4492-4550	4547	O/C	Astragalus	R	All	F	GL	28.72	GLM	27.04	GB	17.48
Raversijde	48	Doos 4	4560	O/C	Astragalus	L	All	F	GL	28.12	GLM	26.62	GB	18.23
Raversijde	52		95-RAV-120	O/C	Astragalus	R	All	F	GL	29.67	GLM	28.16	GB	17.79
Raversijde	55		95-RAV-279	O/C	Astragalus	R	All	F	GL	28.85	GLM	27.20	GB	18.23
Raversijde	64	96 RAV 150-195	96 RAV 166	O/C	Astragalus	L	All	F	GL	28.67	GLm	27.13	GB	18.77
Raversijde	64	96 RAV 150-195	96 RAV 186	O/C	Astragalus	R	All	F	GL		GLm		GB	
Raversijde	64	96 RAV 150-195	96 RAV 192	O/C	Astragalus	L	All	F	GL	27.61	GLm	26.04	GB	17.18
Raversijde	78	96 RAV 196-204	96 RAV 194	O/C	Astragalus	R	All	F	GL	29.03	GLm	27.81	GB	17.83
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Astragalus	R	All	F	GL	29.05	GLm	27.38	GB	19.22
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Astragalus	R	All	F	GL	29.03	GLm	26.39	GB	18.20
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	Astragalus	L	All	F	GL	27.28	GLm	25.58	GB	17.19
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	Astragalus	L	All	F	GL	26.46	GLm	25.61	GB	17.60
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Astragalus	R	All	F	GL	28.64	GLm	26.55	GB	17.45
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Astragalus	R	All	F	GL	28.60	GLm	26.71	GB	17.85
Raversijde	87	RAV BOT 235-263	96 RAV 237	O/C	Astragalus	R	All	F	GL	29.26	GLm	26.52	GB	18.69
Raversijde	87	RAV BOT 235-263	96 RAV 250	O/C	Astragalus	L	All	F	GL	29.40	GLm	28.62	GB	17.79
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	Astragalus	R	All	F	GL	27.36	GLm	25.92	GB	17.07
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Astragalus	R	All	F	GL	26.07	GLm	24.47	GB	15.78
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	Astragalus	L	All	F	GL	27.14	GLm	25.99	GB	17.87
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	Astragalus	L	All	F	GL	27.86	GLm	25.48	GB	17.75
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	Astragalus	L	All	F	GL	29.52	GLm	27.97	GB	19.43
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.7	O/C	Astragalus	L	All	F	GL	29.09	GLM	26.81	GB	18.07
Raversijde	50		96-RAV-101	O/C	Astragalus	R	All	F	GL	29.39	GLM	27.47	GB	18.63
Raversijde	53		96-RAV-145	O/C	Astragalus	L	All	F	GL	24.57	GLM	22.91	GB	16.29
Raversijde	75	97 RAV 150-189	97 RAV 163	O/C	Astragalus	R	All	F	GL	28.05	GLm	25.98	GB	17.83
Raversijde	82	RAV bot 210-301	97 RAV 264	O/C	Astragalus	L	All	F	GL	28.13	GLm	26.17	GB	16.96
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	O/C	Astragalus	L	All	F	GL	27.41	GLm	25.22	GB	18.12
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	O/C	Astragalus	R	All	F	GL	27.87	GLm	26.49	GB	17.55
Raversijde	57		97-RAV-298	O/C	Astragalus	L	All	F	GL	29.65	GLM	27.36	GB	19.16
Raversijde	57		97-RAV-298	O/C	Astragalus	R	All	F	GL	27.76	GLM	26.26	GB	18.31
Raversijde	58		97-RAV-361	O/C	Astragalus	L	All	F	GL	30.27	GLM	28.01	GB	19.24
Raversijde	46	Bot 2 Raversjide 4466-4492	4492	O/C	Calcaneus	L	All	UP	GL		GB	24.92		
Raversijde	89	RAV BOT 1996 772-780	96 RAV 724	O/C	Calcaneus	R	M	U	GL		GB	20.06		

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*				
Raversijde	69	RAV 96 BOT 424	424	O/C	Calcaneus	L	M	U	GL		GB	17.12
Raversijde	69	RAV 96 BOT 424	424	O/C	Calcaneus	L	M	U	GL		GB	18.50
Raversijde	69	RAV 96 BOT 424	424	O/C	Calcaneus	R	M	F	GL	51.91	GB	16.33
Raversijde	69	RAV 96 BOT 424	424	O/C	Calcaneus	R	M	F	GL	52.22	GB	16.69
Raversijde	63	RAV BOT 477	477	O/C	Calcaneus	L	All	F	GL	55.02	GB	18.47
Raversijde	63	RAV BOT 477	477	O/C	Calcaneus	L	All	F	GL	60.78	GB	18.31
Raversijde	63	RAV BOT 477	477	O/C	Calcaneus	L	All	U	GL		GB	18.17
Raversijde	63	RAV BOT 477	477	O/C	Calcaneus	L	All	F	GL	53.71	GB	17.67
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	O/C	Calcaneus	L	MD	F	GL	59.94	GB	18.68
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Calcaneus	R		F	GL	63.40	GB	20.49
Raversijde	47	Bot 3 Raversijde 4492-4550	4550	O/C	Calcaneus	R	All	F	GL	58.57	GB	18.50
Raversijde	48	Doos 4	4562	O/C	Calcaneus	L	All	F	GL	55.25	GB	18.08
Raversijde	48	Doos 4	4562	O/C	Calcaneus	R	All	F	GL	54.18	GB	17.29
Raversijde	52		95-RAV-120	O/C	Calcaneus	R	All	F	GL	55.56	GB	16.67
Raversijde	55		95-RAV-279	O/C	Calcaneus	L	All	F	GL	56.83	GB	16.90
Raversijde	55		95-RAV-279	O/C	Calcaneus	L	All	F	GL	53.18	GB	16.67
Raversijde	55		95-RAV-279	O/C	Calcaneus	L	All	F	GL	53.35	GB	16.91
Raversijde	55		95-RAV-279	O/C	Calcaneus	L	All	F	GL	52.29	GB	15.47
Raversijde	55		95-RAV-279	O/C	Calcaneus	R	All	F	GL	58.48	GB	17.03
Raversijde	64	96 RAV 150-195	96 RAV 173	O/C	Calcaneus	R	All	U	GL		GB	19.69
Raversijde	64	96 RAV 150-195	96 RAV 177 vis HU. UIT	O/C	Calcaneus	L	All	F	GL	54.67	GB	17.32
Raversijde	64	96 RAV 150-195	96 RAV 181	O/C	Calcaneus	R	All	U	GL		GB	18.62
Raversijde	64	96 RAV 150-195	96 RAV 192	O/C	Calcaneus	L	All	F	GL	54.20	GB	17.21
Raversijde	64	96 RAV 150-195	96 RAV 195	O/C	Calcaneus	L	All	F	GL	53.90	GB	17.25
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	Calcaneus	L	All	F	GL	47.96	GB	15.85
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	Calcaneus	R	All	F	GL	52.15	GB	15.64
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Calcaneus	L	All	F	GL	50.07	GB	18.33
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 233	O/C	Calcaneus	R	All	F	GL	53.65	GB	18.12
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 24	O/C	Calcaneus	L	M	U	GL		GB	15.88
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Calcaneus	L	PM	F	GL	57.25	GB	19.26
Raversijde	80	96 RAV 264-286	96 RAV 266	O/C	Calcaneus	R	All	F	GL	54.31	GB	16.82
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Calcaneus	L	All	F	GL	55.55	GB	17.79
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Calcaneus	R	M	UDE	GL		GB	18.16
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	Calcaneus	R	M	U	GL		GB	20.10
Raversijde	77	96 RAV 288-314	96 RAV 288	O/C	Calcaneus	L	M	U	GL		GB	18.87
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Calcaneus	L	All	F	GL	52.85	GB	17.72
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318	O/C	Calcaneus	L	All	F	GL	60.65	GB	19.39
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318	O/C	Calcaneus	R	All	F	GL	51.40	GB	16.88
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	Calcaneus	R	M	U	GL		GB	18.23
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	Calcaneus	L	M	U	GL		GB	16.58
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Calcaneus	R	All	UP	GL		GB	17.33
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Calcaneus	R	All	FP	GL	55.88	GB	16.77
Raversijde	53		96-RAV-120	O/C	Calcaneus	L	M	U	GL		GB	17.52
Raversijde	53		96-RAV-123	O/C	Calcaneus	R	All	F	GL	55.83	GB	16.00
Raversijde	53		96-RAV-134	O/C	Calcaneus	R	All	F	GL	54.30	GB	17.01
Raversijde	53		96-RAV-134	O/C	Calcaneus	R	All	F	GL	55.86	GB	17.66
Raversijde	53		96-RAV-145	O/C	Calcaneus	R	M	F	GL	50.96	GB	16.50
Raversijde	53		96-RAV-145	O/C	Calcaneus	R	M	U	GL		GB	18.65
Raversijde	53		96-RAV-146	O/C	Calcaneus	L	All	F	GL	55.86	GB	16.14
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Calcaneus	L	Q	F	GL	56.09	GB	15.93
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	Calcaneus	L	M	U	GL		GB	16.07
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	Calcaneus	R	A	F	GL	58.94	GB	19.43
Raversijde	75	97 RAV 150-189	97 RAV 184 1 ZAK	O/C	Calcaneus	R	M	U	GL		GB	16.22
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	O/C	Calcaneus	R	M	UDE	GL		GB	15.80
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	O/C	Calcaneus	L	All	F	GL	54.39	GB	18.02
Raversijde	81	RAV 97 306-339	97 RAV 318	O/C	Calcaneus	R	PM	Fing	GL	58.49	GB	20.86
Raversijde	81	RAV 97 306-339	97 RAV 318	O/C	Calcaneus	R	M	U	GL		GB	20.35
Raversijde	81	RAV 97 306-339	97 RAV 334	O/C	Calcaneus	R	All	F	GL	58.23	GB	19.87
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	Calcaneus	L	All	F	GL	52.89	GB	16.91
Raversijde	59		97 RAV 361	O/C	Calcaneus	L	All	F	GL	53.03	GB	17.46
Raversijde	59		97 RAV 361	O/C	Calcaneus	R	M	U	GL		GB	19.13
Raversijde	59		97 RAV 361	O/C	Calcaneus	R	M	?	GL		GB	16.05
Raversijde	60		97 RAV 361	O/C	Calcaneus	L	All	F	GL	53.02	GB	16.96
Raversijde	60		97 RAV 361	O/C	Calcaneus	R	All	F	GL	54.71	GB	17.53
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Calcaneus	R	M	U	GL		GB	17.85
Raversijde	90	RAV 686-781	97 RAV 726 1 medpkoot UIT	O/C	Calcaneus	R	All	F	GL	53.28	GB	18.84
Raversijde	71	RAV BOT 61-98	97 RAV 90	O/C	Calcaneus	L	M	UP	GL		GB	
Raversijde	71	RAV BOT 61-98	97 RAV 90	O/C	Calcaneus	R	M	UP	GL		GB	21.87
Raversijde	57		97-RAV-298	O/C	Calcaneus	L	All	F	GL	60.37	GB	17.59
Raversijde	57		97-RAV-298	O/C	Calcaneus	L	All	F	GL	51.08	GB	15.04
Raversijde	57		97-RAV-298	O/C	Calcaneus	R	M	U	GL		GB	15.33
Raversijde	57		97-RAV-298	O/C	Calcaneus	R	M	U	GL		GB	14.63
Raversijde	57		97-RAV-298	O/C	Calcaneus	R	All	F	GL	54.60	GB	16.33
Raversijde	57		97-RAV-298	O/C	Calcaneus	R	All	F	GL	54.56	GB	14.62

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	58		97-RAV-361	O/C	Calcaneus	R	All	F	GL	54.69	GB	17.19												
Raversijde	58		97-RAV-361	O/C	Calcaneus	R	All	F	GL	57.47	GB	18.12												
Raversijde	74	RAV BOT 97-RAV-13 tot 77	97-RAV-48	O/C	Calcaneus	R	M	U	GL		GB	16.49												
Raversijde	81	RAV 97 306-339	94 RAV 330	O/C	Cranium																			
Raversijde	81	RAV 97 306-339	94 RAV 330 Schedel sheep 2	O/C	Cranium																			
Raversijde	62	97 RAV 650	650	O/C	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	36.14		
Raversijde	69	RAV 96 BOT 424	424	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD	14.28	Bd	35.30		
Raversijde	69	RAV 96 BOT 424	424	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD	15.01	Bd	33.58		
Raversijde	69	RAV 96 BOT 424	424	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	35.73		
Raversijde	69	RAV 96 BOT 424	424	O/C	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		BB	36.26		
Raversijde	69	RAV 96 BOT 424	424	O/C	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	38.09		
Raversijde	69	RAV 96 BOT 424	424	O/C	Femur	R	All	F	GL		GLC		Bp		BTr		DC		SD	15.85	Bd	36.02		
Raversijde	63	RAV BOT 477	477	O/C	Femur	L	PM	FingP?D	GL		GLC		Bp	41.45	BTr	29.90	DC	18.06	SD	15.80	Bd			
Raversijde	63	RAV BOT 477	477	O/C	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	37.33		
Raversijde	63	RAV BOT 477	477	O/C	Femur	R	MD	FingD?P	GL		GLC		Bp		BTr		DC		SD	16.60	Bd	36.39		
Raversijde	62	97 RAV 650	650	O/C	Femur	L	M	?	GL		GLC		Bp		BTr		DC		SD	15.77	Bd			
Raversijde	62	97 RAV 650	650	O/C	Femur	R	PM	PM	GL		GLC		Bp		BTr	31.53	DC		SD		Bd			
Raversijde	46	Bot 2 Raversjide 4466-4492	4488	O/C	Femur	L	MD	FingD ?P	GL		GLC		Bp		BTr		DC		SD	20.14	Bd	39.84		
Raversijde	47	Bot 3 Raversjide 4492-4550	4492	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	31.60		
Raversijde	47	Bot 3 Raversjide 4492-4550	4526	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTR		DC		SD	16.13	Bd	35.83		
Raversijde	64	96 RAV 150-195	96 RAV 161	O/C	Femur	L	MD	FingD?P	GL		GLC		Bp		BTr		DC		SD	17.13	Bd	37.96		
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Femur	R	PM	FP?D	GL		GLC		Bp		BTr		DC	19.31	SD	16.28	Bd			
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	40.79		
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 21	O/C	Femur	R	PM	FingP?D	GL		GLC		Bp	40.68	BTr	29.76	DC	18.81	SD		Bd			
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	Femur	R	MD	Fing D?P	GL		GLC		Bp		BTr		DC		SD		Bd	36.51		
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	Femur	R	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	33.31		
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	33.95		
Raversijde	84	RAV bot 221-226	96 RAV 225 VIS HU + rond HU- UIT	O/C	Femur	R	M	UD?P	GL		GLC		Bp		BTr		DC		SD	14.83	Bd			
Raversijde	84	RAV bot 221-226	96 RAV 225 VIS HU + rond HU- UIT	O/C	Femur	L	M	UD?P	GL		GLC		Bp		BTr		DC		SD	16.65	Bd			
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	Femur	L	PM	FP?D	GL		GLC		Bp		BTr		DC	20.47	SD		Bd			
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Femur	L	MD	FingD?P	GL		GLC		Bp		BTr		DC		SD	14.39	Bd			
Raversijde	87	RAV BOT 235-263	96 RAV 252	O/C	Femur	R	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	34.28		
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Femur	R	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	34.75		
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	33.96		
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Femur	L	All	FD?P	GL		GLC		Bp		BTr		DC		SD	13.98	Bd	35.05		
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	Femur	R	MD	FD?P	GL		GLC		Bp		BTr		DC		SD	17.22	Bd	36.43		
Raversijde	77	96 RAV 288-314	96 RAV 300	O/C	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	39.22		
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Femur	L	MD	FingD?P	GL		GLC		Bp		BTr		DC		SD	15.67	Bd	36.28		
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Femur	R	PM	FP?D	GL		GLC		Bp		BTr		DC		SD	15.22	Bd			
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	37.69		
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Femur	R	MD	FD?P	GL		GLC		Bp		BTR		DC		SD	18.57	Bd	36.68		
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Femur	L	PM	FP?D	GL		GLC		Bp		BTR		DC	19.64	SD		Bd			
Raversijde	50		96-RAV-72	O/C	Femur	R	PM	FP?D	GL		GLC		Bp	42.05	BTr	27.98	DC	20.23	SD		Bd			
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	36.99	BTR	
Raversijde	75	97 RAV 150-189	97 RAV 151	O/C	Femur	L	All	F	GL	161.56	GLC		Bp	26.61	BTr		DC		SD	14.52	Bd	33.48		
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	Femur	R	PM	FP?D	GL		GLC		Bp	41.02	BTr	25.61	DC	19.02	SD	14.10	Bd			
Raversijde	76	RAV 97 191-209	97 RAV 194	O/C	Femur	R	MD	FD?P	GL		GLC		Bp		BTr		DC		SD	17.11	Bd	37.32		
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	O/C	Femur	R	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	32.13		
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	O/C	Femur	L	PM	FP?D	GL		GLC		Bp	31.33	BTr	45.72	DC	21.27	SD	18.87	Bd			
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD	14.64	Bd	36.28		
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	38.81		
Raversijde	81	RAV 97 306-339	97 RAV 331	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	37.57		
Raversijde	88	RAV BOT 350-369	97 RAV 340	O/C	Femur	L	PM	FP?D	GL		GLC		Bp	39.56	BTr	27.38	DC	16.94	SD		Bd			
Raversijde	59		97 RAV 361	O/C	Femur	R	MD	FD?P	GL		GLC		Bp	99.00	BTr		DC		SD	16.27	Bd			
Raversijde	59		97 RAV 361	O/C	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	35.28		
Raversijde	59		97 RAV 361	O/C	Femur	L	PM	FP?D	GL		GLC		Bp	28.57	BTr	41.87	DC	18.19	SD		Bd			
Raversijde	60		97 RAV 361	O/C	Femur	L	PM	FP?D	GL		GLC		Bp	28.96	BTr	41.68	DC	19.38	SD		Bd			
Raversijde	88	RAV BOT 350-369	97 RAV 369	O/C	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	37.21		
Raversijde	61		97 RAV 477	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	38.07		
Raversijde	61		97 RAV 477	O/C	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	40.05		
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Femur	L	All	F	GL	161.66	GLC		Bp	40.63	BTR		DC	18.25	SD	14.69	Bd	36.23		
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	Femur	L		UDE	GL		GLC		Bp		BTR	31.36	DC		SD		Bd	36.35		
Raversijde	90	RAV 686-781	97 RAV 713	O/C	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	37.07		
Raversijde	71	RAV BOT 61-98	97 RAV 73	O/C	Femur	L	MD	FD?P			GL		GLC		Bp		BT		DC		SD	14.68	Bd	34.94
Raversijde	54		97-RAV-110	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	35.77		
Raversijde	54		97-RAV-117	O/C	Femur	R	PM	FP?D	GL		GLC		Bp	32.73	BTr	44.97	DC	21.98	SD		Bd			
Raversijde	58		97-RAV-361	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD	15.01	Bd			
Raversijde	58		97-RAV-361	O/C	Femur	L	M	U	GL		GLC		Bp		BTr		DC		SD	13.19	Bd			
Raversijde	58		97-RAV-361	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD	14.23	Bd	36.40		
Raversijde	58		97-RAV-361	O/C	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	40.21		

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?																
Raversijde	58		97-RAV-361	O/C	Femur	R	MD	FiNGD?P	GL		GLC		Bp		BTr		DC		SD		Bd	34.57		
Raversijde	79	96 RAV 208-218	96 RAV 210	O/C	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD	15.02	Bd			
Raversijde	83	RAV bot 338-374	96 RAV 339	O/C	Humerus	L	M	?	GL		GLC		Bp		SD	16.37	Bd		BT					
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.33	BT	29.75				
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.09	BT	27.08				
Raversijde	69	RAV 96 BOT 424	424	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	26.79	BT	26.53				
Raversijde	69	RAV 96 BOT 424	424	O/C	Humerus	L	PM	FingP?D	GL		GLC		Bp	38.12	SD		Bd		BT					
Raversijde	69	RAV 96 BOT 424	424	O/C	Humerus	L	PM	FP?D	GL		GLC		Bp	36.88	SD		Bd		BT					
Raversijde	69	RAV 96 BOT 424	424	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.37	Bd	31.77	BT					
Raversijde	69	RAV 96 BOT 424	424	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.50	Bd	30.15	BT	28.02				
Raversijde	69	RAV 96 BOT 424	424	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.75	BT	28.76				
Raversijde	69	RAV 96 BOT 424	424	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.06	BT	27.29				
Raversijde	69	RAV 96 BOT 424	424	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	27.18	BT					
Raversijde	63	RAV BOT 477	477	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	26.19	BT	25.82				
Raversijde	63	RAV BOT 477	477	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	25.79	BT	24.11				
Raversijde	62	97 RAV 650	650	O/C	Humerus	L	MD	F	GL		GLC		Bp		SD		Bd	27.59	BT	27.00				
Raversijde	62	97 RAV 650	650	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	32.50	BT	29.56				
Raversijde	62	97 RAV 650	650	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	27.14	BT	25.40				
Raversijde	62	97 RAV 650	650	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.77	BT	26.64				
Raversijde	62	97 RAV 650	650	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	31.35	BT	29.12				
Raversijde	62	97 RAV 650	650	O/C	Humerus	R	UPE	UPE	GL		GLC		Bp	41.75	SD		Bd		BT					
Raversijde	46	Bot 2 Raversijde 4466-4492	4482	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	30.05	BT	29.04				
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Humerus	L		FD?P	GL		GLC		Bp		SD	17.04	Bd	32.48	BT	31.36				
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	29.01	BTR	28.45				
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	28.51	BTR	26.26				
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.77	Bd	31.02	BT	28.70				
Raversijde	47	Bot 3 Raversijde 4492-4550	4547	O/C	Humerus	R	All	AllFingPFD	GL	129.64	GLC	144.70	Bp	38.85	SD	14.82	Bd	28.20	BTR	26.93				
Raversijde	47	Bot 3 Raversijde 4492-4550	4550	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	32.33	BT	27.78				
Raversijde	48	Doos 4	4551	O/C	Humerus	L	All	F	GL	130.28	GLC		Bp		SD	14.58	Bd	28.08	BT	26.79				
Raversijde	48	Doos 4	4554	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	26.29	BT	26.88				
Raversijde	48	Doos 4	4554	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.51	Bd	28.53	BT	27.37				
Raversijde	48	Doos 4	4558	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	14.51	Bd	26.50	BT	25.67				
Raversijde	48	Doos 4	4559	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	27.25	BT	26.20				
Raversijde	48	Doos 4	4560	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.37	Bd	32.24	BT	30.38				
Raversijde	48	Doos 4	4562	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		BTr		DC		SD		Bd	26.82	BT	25.63
Raversijde	48	Doos 4	4566	O/C	Humerus	L	MD	FD?P					GL		GCC		BpC		SD		Bd	27.84	BTr	26.11
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	31.60	BT	31.04				
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.59	Bd	28.60	BR	28.77				
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	32.94	BT	29.19				
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.74	BT	27.34				
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.12	Bd	28.01	BT	27.47				
Raversijde	85	RAV 1996 96 RAV 317-349	95 328	O/C	Humerus	L	M	UD?P	GL		GLC		Bp		SD	14.24	Bd		BT					
Raversijde	52		95-RAV-120	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.74	Bd	29.82	BT	26.39				
Raversijde	52		95-RAV-120	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.92	Bd		BT	28.25				
Raversijde	52		95-RAV-120	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.94	Bd	29.12	BT	27.31				
Raversijde	52		95-RAV-120	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.14	Bd		BT					
Raversijde	52		95-RAV-120	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd		BT					
Raversijde	52		95-RAV-120	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	13.69	Bd	29.44	BT	28.53				
Raversijde	52		95-RAV-120	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.79	Bd	27.66	BT	26.96				
Raversijde	52		95-RAV-120	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	31.75	BT	30.95				
Raversijde	52		95-RAV-120	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.40	BT	28.10				
Raversijde	55		95-RAV-279	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.99	BT	29.64				
Raversijde	55		95-RAV-279	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	12.90	Bd	26.91	BT					
Raversijde	64	96 RAV 150-195	96 RAV 166	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.81	Bd	30.75	BT	28.99				
Raversijde	64	96 RAV 150-195	96 RAV 173	O/C	Humerus	?R	FD?P	FD?P	GL		GLC		Bp		SD		Bd	29.29	BT	28.24				
Raversijde	64	96 RAV 150-195	96 RAV 181	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.63	Bd	29.25	BT	28.14				
Raversijde	78	96 RAV 196-204	96 RAV 194	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.09	Bd	28.85	BT	27.53				
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	16.21	Bd	30.58	BT	29.41				
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	29.86	BT	29.70				
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	31.61	BT	31.61				
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Humerus	R	M	?	GL		GLC		Bp		SD	16.64	Bd		BT					
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Humerus	L	M	?	GL		GLC		Bp		SD	14.11	Bd		BT					
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	13.74	Bd	28.75	BT	28.79				
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.98	BT	29.76				
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.59	Bd	29.50	BT	28.83				
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.74	Bd	29.55	BT	28.47				
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	31.05	BT	30.01				
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	26.51	BT	24.90				
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.56	Bd		BT					

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?												
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	13.18	Bd	27.96	BT	26.76
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.78	Bd	31.99	BT	30.94
Raversijde	79	96 RAV 208-218	96 RAV 217 vis HU t zond HV 0,5 mm UIT	O/C	Humerus	R	MD	FD?P	GL		GLC	31.21	Bp	27.93	SD	16.19	Bd		BT	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 22	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	30.49	BT	27.50
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.95	Bd	26.54	BT	25.96
Raversijde	84	RAV bot 221-226	96 RAV	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	29.21	BT	28.66
Raversijde	84	RAV bot 221-226	96 RAV	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.78	BT	
Raversijde	84	RAV bot 221-226	96 RAV 223	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.77	BT	26.92
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	12.87	Bd	27.15	Bt	26.97
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	28.61	BT	28.09
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	13.11	Bd	27.33	BT	26.25
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	24.68	BT	24.25
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.31	Bd	28.33	BT	28.04
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.97	BT	29.86
Raversijde	87	RAV BOT 235-263	96 RAV 235 1 groot stuk vis UIT in bird bag	O/C	Humerus	R	PM	FP?D	GL		GLC		Bp	38.52	SD		Bd		BT	
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	13.25	Bd	26.81	BT	26.33
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.45	Bd		BT	
Raversijde	87	RAV BOT 235-263	96 RAV 247	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	13.64	Bd	25.84	BT	26.06
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.89	Bd	28.53	BT	28.80
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	13.92	Bd	30.29	BT	27.20
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	31.29	BT	30.40
Raversijde	87	RAV BOT 235-263	96 RAV 262	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	27.29	BT	26.86
Raversijde	87	RAV BOT 235-263	96 RAV 263	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.40	Bd	29.03	BT	29.37
Raversijde	80	96 RAV 264-286	96 RAV 266	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	12.40	Bd	27.51	BT	26.30
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.81	Bd	30.50	BT	29.05
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	13.55	Bd	26.54	BT	26.31
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.43	Bd	29.66	BT	27.45
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	28.45	BT	27.43
Raversijde	77	96 RAV 288-314	96 RAV 288	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.53	Bd	27.86	BT	27.04
Raversijde	77	96 RAV 288-314	96 RAV 300	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.65	Bd	31.24	BT	30.93
Raversijde	77	96 RAV 288-314	96 RAV 300	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.43	BT	26.44
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.85	BT	27.07
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.79	Bd	29.13	BT	29.57
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	17.62	Bd	30.84	BT	30.14
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.52	BT	26.70
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.61	Bd	31.06	BT	29.51
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.06	BT	28.80
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 347	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.20	Bd	30.36	BT	28.85
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 349	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.30	Bd	28.99	BT	28.37
Raversijde	83	RAV bot 338-374	96 RAV 354	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.34	BT	26.39
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	30.81	BT	29.57
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	29.36	BT	29.52
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD	13.78	Bd	29.54	BT	28.56
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	Humerus	L	MD	FD	GL		GLC		Bp		SD		Bd	27.61	BT	24.93
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	Humerus	R	MD	FD	GL		GLC		Bp		SD		Bd	28.13	BT	27.24
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.39	Bd	29.94	BT	30.08
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.06	Bd	30.22	BT	28.88
Raversijde	70	RAV BOT 61-69	96 RAV 66	O/C	Humerus	L	All	F	GL	128.25	GLC		Bp	40.00	SD	15.02	Bd	29.11	BT	28.03
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.3	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	25.64	BT	25.47
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.3	O/C	Humerus	R	,D	FD?P	GL		GLC		Bp		SD		Bd	27.81	BT	27.35
Raversijde	50		96-RAV-108	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.78	BT	29.91
Raversijde	53		96-RAV-127	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	12.57	Bd	27.26	BT	25.61
Raversijde	53		96-RAV-127	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.43	Bd	29.85	BT	25.68
Raversijde	53		96-RAV-128	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	31.70	BT	30.07
Raversijde	53		96-RAV-145	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	27.39	BT	26.48
Raversijde	53		96-RAV-146	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	30.06	BT	27.80
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.85	Bd	30.38	BT	29.76
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	18.40	Bd	30.95	BT	30.60
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.53	Bd	28.62	BT	28.00
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	12.70	Bd	25.15	BT	25.08
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	13.98	Bd	30.64	BT	28.73
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	17.11	Bd	32.14	BT	30.72
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-37	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.38	Bd	27.61	BT	27.30
Raversijde	50		96-RAV-72	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.58	Bd	29.96	BT	28.67
Raversijde	50		96-RAV-72	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.69	Bd	27.40	BT	27.42
Raversijde	75	97 RAV 150-189	97 RAV 165	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	31.82	BT	30.11

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	75	97 RAV 150-189	97 RAV 168 ZAK DES 2 ZAK	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.62	BT	26.77				
Raversijde	75	97 RAV 150-189	97 RAV 178	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.15	Bd	31.13	BT	29.95				
Raversijde	75	97 RAV 150-189	97 RAV 189 ISHU uit	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.21	BT	29.34				
Raversijde	76	RAV 97 191-209	97 RAV 194	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.88	Bd	30.88	BT					
Raversijde	76	RAV 97 191-209	97 RAV 206	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.08	BT	26.67				
Raversijde	82	RAV bot 210-301	97 RAV 245	O/C	Humerus	L	All	F	GL	0.14	GLC	122.09	Bp	32.71	SD	13.16	Bd	28.91	BT	26.67				
Raversijde	82	RAV bot 210-301	97 RAV 245	O/C	Humerus	R	MD	FDUP	GL		GLC		Bp		SD	14.25	Bd	28.97	BT	26.55				
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	26.80	BT	25.03				
Raversijde	81	RAV 97 306-339	97 RAV 331	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	30.56	BT	29.71				
Raversijde	88	RAV BOT 350-369	97 RAV 346	O/C	Humerus	L	MD	FDUP	GL		GLC		Bp		SD	13.62	Bd	29.89	BT	30.46				
Raversijde	88	RAV BOT 350-369	97 RAV 355	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	26.74	BT	26.15				
Raversijde	59		97 RAV 361	O/C	Humerus	L	M	?	GL		GLC		Bp		SD	14.59	Bd		BT					
Raversijde	59		97 RAV 361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	31.81	BT	30.24				
Raversijde	59		97 RAV 361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.97	Bd	29.24	BT	27.45				
Raversijde	59		97 RAV 361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.02	BT	29.23				
Raversijde	59		97 RAV 361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	26.88	BT	25.27				
Raversijde	59		97 RAV 361	O/C	Humerus	L	PM	FP?D	GL		GLC		Bp	39.66	SD		Bd		BT					
Raversijde	60		97 RAV 361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.62	BT	27.84				
Raversijde	61		97 RAV 477	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	27.53	BT	26.81				
Raversijde	61		97 RAV 477	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	27.28	BT	26.74				
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	23.23	BT	28.06				
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.14	BT	26.18				
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	26.96	BT	26.46				
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.05	BT	25.75				
Raversijde	71	RAV BOT 61-98	97 RAV 66	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	28.22	BT	26.67				
Raversijde	90	RAV 686-781	97 RAV 708	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	99.00	Bd	27.47	BT	26.68				
Raversijde	90	RAV 686-781	97 RAV 729	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	29.04	BT	27.55				
Raversijde	90	RAV 686-781	97 RAV 752	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.32	BT	28.92				
Raversijde	54		97-RAV-105	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.65	Bd	29.78	BT	29.02				
Raversijde	54		97-RAV-117	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	29.30	BT	26.21				
Raversijde	54		97-RAV-149	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.16	BT	25.74				
Raversijde	57		97-RAV-298	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	30.04	BT	29.82				
Raversijde	57		97-RAV-298	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	16.69	Bd	31.29	BT	30.56				
Raversijde	57		97-RAV-298	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	26.33	BT	26.37				
Raversijde	57		97-RAV-298	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	25.72	BT	26.98				
Raversijde	57		97-RAV-298	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.84	Bd	28.52	BT	29.86				
Raversijde	57		97-RAV-298	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.98	BT	27.94				
Raversijde	57		97-RAV-298	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	26.57	BT	24.92				
Raversijde	57		97-RAV-298	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	26.21	BT	26.18				
Raversijde	57		97-RAV-298	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	28.77	BT	27.30				
Raversijde	57		97-RAV-298	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	30.37	BT	29.72				
Raversijde	57		97-RAV-298	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.34	Bd	31.97	BT	31.58				
Raversijde	57		97-RAV-298	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	29.50	BT	29.09				
Raversijde	57		97-RAV-298	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.46	BT	27.44				
Raversijde	57		97-RAV-298	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.11	BT	27.73				
Raversijde	57		97-RAV-298	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	27.37	BT					
Raversijde	57		97-RAV-298	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	27.16	BT	26.68				
Raversijde	58		97-RAV-361	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	28.66	BT	27.83				
Raversijde	58		97-RAV-361	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.45	Bd	27.18	BT	24.70				
Raversijde	58		97-RAV-361	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	28.76	BT	27.13				
Raversijde	58		97-RAV-361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	26.47	BT	24.33				
Raversijde	58		97-RAV-361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	26.28	BT	26.36				
Raversijde	58		97-RAV-361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	26.14	BT	26.08				
Raversijde	58		97-RAV-361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.31	Bd	29.22	BT	27.92				
Raversijde	58		97-RAV-361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	26.66	BT	26.37				
Raversijde	58		97-RAV-361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	29.05	BT	27.62				
Raversijde	58		97-RAV-361	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	27.60	BT	26.65				
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	27.35	BT	26.76				
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	Humerus	L	PM	FP?D	GL		GLC		Bp	42.20	SD		Bd		BT					
Raversijde	74	RAV BOT 97-RAV-13 tot 75	97-RAV-48	O/C	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	28.71	BT	26.51				
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	Jaw	R	All		dp4l	17.04	dp4w	7.71	M1L	16.54	M1AW	9.29	M1PW	10.30						
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MC	?	MD	FD?P	Bp		Bd	27.06	Bd2	25.49	SD		GL		DD	9.33	Dp		Dd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	MC	?	MD	FD?P	Bp		Bd	24.79	Bd2	24.16	SD		GL		DD		Dp		Dd	15.30
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	MC	?	MD	FD?P	Bp		Bd	24.10	Bd2	23.38	SD		GL		DD		Dp		Dd	13.19
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	O/C	MC	?	MD	FD?P	Bp		Bd	21.98	Bd2	21.70	SD		GL		DD		Dp		Dd	
Raversijde	77	96 RAV 288-314	96 RAV 309	O/C	MC	?	MD	FD?P	Bp		Bd	23.12	Bd2	22.08	SD	11.70	GL		DD	9.40	Dp		Dd	15.77
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 347	O/C	MC	?	MD	FD?P	Bp		Bd	26.24	Bd2	25.38	SD	13.50	GL		DD	9.74	Dp		Dd	16.64
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	O/C	MC	?	MD	F	Bp		Bd	25.89	Bd2	24.79	SD	15.26	GL		DD	10.11	Dp		Dd	16.85
Raversijde	81	RAV 97 306-339	97 RAV 318	O/C	MC	?	MD	FD?P	Bp		Bd	23.76	Bd2	23.55	SD		GL		DD		Dp		Dd	16.09
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	L	PM	FP?D	Bp	22.26	Bd		Bd2	24.00	SD	12.74	GL		DD		Dp	16.72	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	L	PM	FPUD	Bp	23.02	Bd		Bd2	26.27	SD	13.57	GL		DD	9.50	Dp	17.62	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	L	PM	FPUD	Bp	23.83	Bd		Bd2		SD		GL		DD		Dp	17.24	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	L	PM	FP?D	Bp	22.51	Bd		Bd2		SD		GL		DD		Dp	16.84	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	L	PM	FP?D	Bp	24.82	Bd		Bd2		SD		GL		DD		Dp	18.39	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	L	All	F	Bp	22.47	Bd	25.08	Bd2	24.85	SD	14.38	GL	130.35	DD	8.86	Dp	16.18	Dd	16.12
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	L	All	F	Bp	22.24	Bd	24.20	Bd2	24.12	SD	13.95	GL	124.56	DD	8.65	Dp	16.19	Dd	15.32
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	L	All	F	Bp	20.68	Bd	23.89	Bd2	24.74	SD	13.23	GL	115.52	DD	8.90	Dp	15.24	Dd	14.59
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	L	All	F	Bp	22.22	Bd	25.77	Bd2	23.95	SD	13.61	GL	115.01	DD	9.65	Dp	16.86	Dd	15.34
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	R	All	F	Bp	21.62	Bd	23.92	Bd2	23.01	SD	13.53	GL	121.21	DD	9.48	Dp	15.78	Dd	14.93
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	R	All	F	Bp	21.40	Bd	23.64	Bd2	23.60	SD	12.31	GL	123.04	DD	8.71	Dp	15.79	Dd	15.29

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	R	PM	FPUD	Bp	23.02	Bd		Bd2		SD		GL		DD		Dp	17.09	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	R	All	F	Bp	22.19	Bd	24.51	Bd2	25.33	SD	11.77	GL	123.20	DD	8.94	Dp	15.81	Dd	15.31
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	R	PM	FPUD	Bp	24.43	Bd		Bd2	26.41	SD	14.05	GL		DD	9.49	Dp	17.26	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	L	All	F	Bp	20.48	Bd	23.76	Bd2	24.71	SD	13.56	GL	115.47	DD	9.12	Dp	15.28	Dd	14.59
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	R	All	F	Bp	20.39	Bd	23.51	Bd2	22.37	SD	12.01	GL	109.66	DD	8.44	Dp	15.33	Dd	13.96
Raversijde	69	RAV 96 BOT 424	424	O/C	MC	R	PM	FP?D	Bp	24.55	Bd		Bd2		SD	15.31	GL		DD		Dp	18.62	Dd	
Raversijde	63	RAV BOT 477	477	O/C	MC	L	PM	FPUD	Bp	23.43	Bd		Bd2	26.97	SD	14.54	GL		DD	9.71	Dp	17.97	Dd	
Raversijde	63	RAV BOT 477	477	O/C	MC	R	PM	FP?D	Bp	23.70	Bd		Bd2		SD		GL		DD		Dp	17.62	Dd	
Raversijde	63	RAV BOT 477	477	O/C	MC	R	PM	FP?D	Bp	22.24	Bd		Bd2		SD	12.30	GL		DD		Dp	16.21	Dd	
Raversijde	63	RAV BOT 477	477	O/C	MC	R	All	F	Bp	20.48	Bd	22.03	Bd2	22.34	SD	11.06	GL	118.06	DD	8.43	Dp	14.66	Dd	14.74
Raversijde	63	RAV BOT 477	477	O/C	MC	R	All	F	Bp	21.87	Bd	23.26	Bd2	23.00	SD	12.71	GL	127.88	DD	9.93	Dp	16.50	Dd	16.22
Raversijde	63	RAV BOT 477	477	O/C	MC	R	All	F	Bp	21.53	Bd		Bd2		SD		GL	125.80	DD		Dp	15.27	Dd	
Raversijde	62	97 RAV 650	650	O/C	MC	L	All	F	Bp	23.89	Bd	25.87	Bd2	27.34	SD	15.16	GL	139.15	DD	10.87	Dp	17.68	Dd	17.20
Raversijde	62	97 RAV 650	650	O/C	MC	L	All	F	Bp	23.90	Bd	25.19	Bd2	25.54	SD	15.38	GL	142.57	DD	10.19	Dp	17.84	Dd	16.62
Raversijde	62	97 RAV 650	650	O/C	MC	L	All	FingDFP	Bp	21.38	Bd	23.91	Bd2	24.24	SD	13.29	GL	124.66	DD	9.44	Dp	15.71	Dd	15.38
Raversijde	62	97 RAV 650	650	O/C	MC	L	PM	FPUD	Bp	22.20	Bd		Bd2	26.42	SD	12.39	GL		DD	9.59	Dp	16.38	Dd	
Raversijde	62	97 RAV 650	650	O/C	MC	L	PM	FP?D	Bp	22.87	Bd		Bd2		SD	13.95	GL		DD		Dp	16.49	Dd	
Raversijde	62	97 RAV 650	650	O/C	MC	L	PM	FPUD	Bp	22.34	Bd		Bd2		SD		GL		DD		Dp	17.37	Dd	
Raversijde	62	97 RAV 650	650	O/C	MC	R	All	FPUD	Bp	20.25	Bd		Bd2		SD		GL	120.15	DD		Dp	15.12	Dd	
Raversijde	62	97 RAV 650	650	O/C	MC	R	All	FP?D	Bp	20.71	Bd	23.96	Bd2	24.30	SD	13.19	GL	116.75	DD	9.60	Dp	15.63	Dd	13.67
Raversijde	62	97 RAV 650	650	O/C	MC	R	PM	F	Bp	24.77	Bd		Bd2		SD		GL		DD	9.74	Dp	17.22	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	O/C	MC	L	PM	FPUD	Bp	24.36	Bd		Bd2	25.02	SD	14.39	GL		DD	9.96	Dp	16.05	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	O/C	MC	L	PM	FP?D	Bp	23.16	Bd		Bd2		SD		GL		DD		Dp	17.15	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	O/C	MC	L	PM	FP?D	Bp	22.32	Bd		Bd2		SD	13.37	GL		DD	9.49	Dp	16.91	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4431	O/C	MC	R	PM	FP?D	Bp	23.07	Bd		Bd2		SD	14.48	GL		DD	9.92	Dp	17.33	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	MC	L	PM	FP?D	Bp	23.44	Bd		Bd2		SD		GL		DD		Dp	16.74	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	MC	L	All	F	Bp	22.98	Bd	25.63	Bd2	26.03	SD	15.36	GL	130.69	DD	9.26	Dp	15.12	Dd	15.48
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	MC	R	All	F	Bp	22.77	Bd	24.92	Bd2	24.47	SD	13.13	GL	119.92	DD	8.90	Dp	16.92	Dd	16.09
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	MC	L	All	F	Bp	19.62	Bd	23.53	Bd2	22.63	SD	12.36	GL	116.83	DD	7.98	Dp	15.53	Dd	14.28
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	MC	R	All	F	Bp	23.82	Bd	26.87	Bd2	25.37	SD	14.07	GL	122.47	DD	9.97	Dp	17.08	Dd	15.83
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	MC	R	PM	PFUD	Bp	22.10	Bd		Bd2	25.21	SD	13.31	GL		DD	9.34	Dp	16.44	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	MC	L	PM	PF?D	Bp	18.72	Bd		Bd2		SD	12.30	GL		DD		Dp	14.13	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	MC	L	All	F	Bp	22.76	Bd	25.05	Bd2	24.77	SD	13.12	GL	123.04	DD	9.13	Dp	17.19	Dd	14.74
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	MC	R	All	F	Bp	23.09	Bd	25.77	Bd2	26.00	SD	14.49	GL	129.72	DD	9.93	Dp	17.38	Dd	15.37
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	O/C	MC	L	PM	FPUD	Bp	21.71	Bd		Bd2	27.15	SD	13.74	GL		DD	9.61	Dp	17.15	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	O/C	MC	R	PM	FP?D	Bp	22.07	Bd		Bd2		SD	13.01	GL		DD	9.31	Dp		Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	O/C	MC	L	PM	FP?D	Bp	23.26	Bd		Bd2		SD		GL		DD		Dp	15.68	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4482	O/C	MC	L	All	FD?P	Bp	22.07	Bd	24.60	Bd2	25.81	SD	15.38	GL	127.26	DD	10.18	Dp	15.78	Dd	15.70
Raversijde	47	Bot 3 Raversijde 4492-4550	4497	O/C	MC	R	All	F	Bp	21.37	Bd	23.20	Bd2	22.59	SD	13.48	GL	135.04	DD	8.56	DP	16.22	DD	15.08
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	MC	R	PM	FP?D	Bp	21.92	Bd		Bd2		SD	13.29	GL		DD		DP	15.51	DD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4516	O/C	MC	R	PM	FP?D	Bp	20.40	Bd		Bd2		SD		GL		DD		DP	15.17	DD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	O/C	MC	L	PM	FP?D	Bp	20.73	Bd		Bd2		SD	11.58	GL		DD	8.46	Dp	15.01	Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	O/C	MC	R	All	All F	Bp	20.27	Bd	23.62	Bd2	24.32	SD	13.42	GL	122.60	DD	9.80	Dp	14.53	Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	O/C	MC	R	PM	FP?D	Bp	19.71	Bd		Bd2	22.18	SD	11.73	GL		DD	8.36	Dp	14.77	Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4547	O/C	MC	L	PM	FP?D	Bp	22.79	Bd		Bd2		SD	13.29	GL		DD		Dp	15.61	Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4547	O/C	MC	L	All	F	Bp	22.32	Bd	25.19	Bd3	25.56	SD	14.44	GL	113.39	DD	9.71	Dp	16.84	Dd	15.42
Raversijde	48	Doos 4	4558	O/C	MC	L	PM	FP?D	Bp	21.33	Bd		Bd2		SD	11.78	GL		DD	9.45	DP	15.89	DD	
Raversijde	48	Doos 4	4559	O/C	MC	R	All	F	Bp	21.54	Bd	23.53	Bd2	23.81	SD	12.37	GL	124.72	DD	9.13	DP	15.74	Dd	15.03
Raversijde	48	Doos 4	4560	O/C	MC	R	PM	FP?D	Bp	24.03	Bd		Bd2		SD		GL		DD		DP	17.44	Dd	
Raversijde	48	Doos 4	4560	O/C	MC	L	PM	FPUD	Bp	21.77	Bd		Bd2	26.04	SD	13.07	GL		DD	8.82	DP	15.91	Dd	
Raversijde	48	Doos 4	4560	O/C	MC	L	PM	FP?D	Bp		Bd		Bd2		SD	14.58	GL		DD	11.05	DP	16.72	Dd	
Raversijde	48	Doos 4	4566	O/C	MC	L	PM	PF?D	Bp	19.55	Bd		Bd2		SD		GL		DD		DP	15.07	Dd	
Raversijde	48	Doos 4	4566	O/C	MC	R	PM	FPUD	Bp	22.67	Bd		Bd2	25.96	SD	13.17	GL		DD	9.50	DP	16.49	Dd	
Raversijde	48	Doos 4	4568	O/C	MC	R	PM	FP?D	Bp	24.40	Bd		Bd2		SD		GL		DD		DP	18.13	Dd	
Raversijde	48	Doos 4	4569	O/C	MC	R	All	F	Bp	18.51	Bd	22.33	Bd2	22.42	SD	12.30	GL	116.00	DD	8.84	DP		Dd	13.98
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MC	L	PM	FP?D	Bp	20.38	Bd		Bd2		SD	12.14	GL		DD		Dp	14.68	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MC	R	All	F	Bp	22.65	Bd	23.30	Bd2	23.63	SD	12.74	GL	129.44	DD	8.49	Dp	16.27	Dd	15.13
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MC	R	All	F	Bp	22.10	Bd	24.40	Bd2	24.62	SD	12.69	GL	125.11	DD	9.03	Dp	16.22	Dd	15.17
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MC	R	PM	FP?D	Bp	23.58	Bd		Bd2		SD		GL		DD		Dp	17.34	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MC	L	PM	FP?D	Bp	21.55	Bd		Bd2		SD	12.94	GL		DD		Dp	15.66	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MC	R	All	F	Bp	23.17	Bd	25.96	Bd2	25.76	SD	13.92	GL	124.98	DD	8.43	Dp	16.72	Dd	15.84
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MC	?	MD	FD?P	Bp		Bd	25.11	Bd2	24.69	SD		GL		DD		Dp		Dd	15.03

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	84	RAV bot 221-226	69 RAV 221	O/C	MC	L	PM	FP?D	Bp	20.09	Bd		Bd2		SD	12.47	GL		DD		Dp	15.05	Dd	
Raversijde	52		95-RAV-120	O/C	MC	L	PM	FP?D	Bp	21.29	Bd		Bd2		SD	12.30	GL		DD		Dp	15.28	Dd	
Raversijde	52		95-RAV-120	O/C	MC	L	PM	FP?D	Bp	23.15	Bd		Bd2		SD	14.64	GL		DD		Dp	17.00	Dd	
Raversijde	52		95-RAV-120	O/C	MC	L	PM	FP?D	Bp	23.69	Bd		Bd2		SD		GL		DD		Dp	17.04	Dd	
Raversijde	52		95-RAV-120	O/C	MC	L	PM	FP?D	Bp	20.00	Bd		Bd2		SD	12.81	GL		DD		Dp	14.68	Dd	
Raversijde	52		95-RAV-120	O/C	MC	L	PM	FPUD	Bp	24.41	Bd		Bd2	27.86	SD	15.30	GL		DD	11.28	Dp	18.08	Dd	
Raversijde	52		95-RAV-120	O/C	MC	R	All	F	Bp	20.88	Bd	23.71	Bd2	23.14	SD	11.77	GL	113.61	DD	9.18	Dp	14.55	Dd	14.59
Raversijde	52		95-RAV-120	O/C	MC	R	PM	FP?D	Bp	22.04	Bd		Bd2		SD		GL		DD		Dp	16.55	Dd	
Raversijde	52		95-RAV-120	O/C	MC	R	All	F	Bp	21.79	Bd		Bd2	23.42	SD	13.05	GL		DD	10.17	Dp	16.26	Dd	
Raversijde	52		95-RAV-120	O/C	MC	R	All	F	Bp	24.54	Bd	26.27	Bd2	25.86	SD	14.41	GL		DD	10.17	Dp	17.36	Dd	
Raversijde	52		95-RAV-120	O/C	MC	R	PM	FP?D	Bp	19.94	Bd		Bd2		SD	13.36	GL		DD	9.36	Dp		Dd	
Raversijde	55		95-RAV-279	O/C	MC	L	All	F	Bp	24.06	Bd	25.81	Bd2	25.57	SD	13.87	GL	130.24	DD	10.03	Dp	17.36	Dd	16.54
Raversijde	55		95-RAV-279	O/C	MC	L	All	F	Bp	23.15	Bd	22.98	Bd2	23.94	SD	13.58	GL	129.74	DD	9.47	Dp	16.99	Dd	15.68
Raversijde	55		95-RAV-279	O/C	MC	L	All	F	Bp	23.09	Bd	24.05	Bd2	23.54	SD	13.49	GL	119.30	DD	8.34	Dp	15.96	Dd	15.18
Raversijde	55		95-RAV-279	O/C	MC	L	PM	FPUD	Bp	22.09	Bd		Bd2	23.91	SD	12.91	GL		DD	9.81	Dp	15.66	Dd	
Raversijde	55		95-RAV-279	O/C	MC	L	All	F	Bp	21.53	Bd	22.65	Bd2	22.40	SD	12.28	GL	121.98	DD	7.78	Dp	15.57	Dd	15.28
Raversijde	55		95-RAV-279	O/C	MC	L	All	F	Bp	24.92	Bd		Bd2	25.51	SD	14.40	GL	129.86	DD	10.02	Dp	18.13	Dd	
Raversijde	55		95-RAV-279	O/C	MC	L	All	F	Bp	22.69	Bd		Bd2		SD		GL	133.93	DD		Dp	16.70	Dd	
Raversijde	55		95-RAV-279	O/C	MC	L	All	F	Bp	22.88	Bd	25.02	Bd2	24.68	SD	13.57	GL	129.26	DD	9.68	Dp	17.65	Dd	15.88
Raversijde	55		95-RAV-279	O/C	MC	L	PM	FPUD	Bp	23.63	Bd		Bd2		SD	15.10	GL		DD		Dp	16.90	Dd	
Raversijde	55		95-RAV-279	O/C	MC	R	PM	FPUD	Bp		Bd		Bd2		SD		GL		DD		Dp	16.30	Dd	
Raversijde	55		95-RAV-279	O/C	MC	R	PM	FP?D	Bp	23.50	Bd		Bd2		SD		GL		DD		Dp	17.82	Dd	
Raversijde	55		95-RAV-279	O/C	MC	R	PM	FP?D	Bp	20.86	Bd		Bd2		SD	12.83	GL		DD		Dp		Dd	
Raversijde	55		95-RAV-279	O/C	MC	R	All	F	Bp	19.88	Bd	22.33	Bd2	21.89	SD	12.28	GL	112.82	DD	8.91	Dp	15.02	Dd	14.53
Raversijde	55		95-RAV-279	O/C	MC	R	PM	FP?D	Bp	20.79	Bd		Bd2		SD	13.68	GL		DD		Dp	15.67	Dd	
Raversijde	55		95-RAV-279	O/C	MC	R	PM	FPUD	Bp	22.13	Bd		Bd2	22.94	SD	10.87	GL		DD	8.69	Dp	15.27	Dd	
Raversijde	64	96 RAV 150-195	96 RAV 160	O/C	MC	L	All	F	Bp	23.05	Bd	23.67	Bd2	24.68	SD	14.80	GL	126.43	DD	9.17	Dp	16.77	Dd	15.27
Raversijde	64	96 RAV 150-195	96 RAV 188	O/C	MC	L	All	F	Bp	22.48	Bd	24.81	Bd2	24.21	SD	13.10	GL	122.37	DD	8.94	Dp	15.65	Dd	15.62
Raversijde	78	96 RAV 196-204	96 RAV 196 1 heft uit	O/C	MC	R	PM	FP?D	Bp	21.21	Bd		Bd2		SD	12.20	GL		DD	7.70	Dp	15.67	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1 heft uit	O/C	MC	R	All	F	Bp	22.64	Bd		Bd2		SD	13.08	GL	130.57	DD	9.97	Dp	16.18	Dd	14.97
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	MC	L	All	FP?D	Bp	22.77	Bd	24.31	Bd2	23.62	SD	13.12	GL	126.75	DD	9.67	Dp	15.66	Dd	15.75
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	MC	L	All	FP?D	Bp	22.80	Bd	23.00	Bd2	24.60	SD	13.34	GL	130.52	DD	9.34	Dp	16.26	Dd	15.41
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	MC	R	All	FPUD	Bp	24.52	Bd		Bd2		SD	15.58	GL		DD		Dp	18.31	Dd	
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	MC	L	All	F	Bp	23.64	Bd		Bd2		SD	14.19	GL	136.63	DD	10.21	Dp	17.83	Dd	
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	MC	L	PM	FP?D	Bp	22.53	Bd		Bd2		SD	14.87	GL		DD		Dp	15.75	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 21	O/C	MC	R	PM	FPUD	Bp	24.09	Bd		Bd2	25.43	SD	13.84	GL		DD	9.80	Dp	16.95	Dd	
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	MC	R	All	F	Bp	22.68	Bd	24.35	Bd2	24.26	SD	13.14	GL	130.18	DD	8.88	Dp	16.40	Dd	16.13
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	MC	R	All	F	Bp	22.64	Bd	24.46	Bd2	24.74	SD	13.41	GL	132.22	DD	9.62	Dp	15.93	Dd	16.32
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	O/C	MC	R	PM	FP?D	Bp	21.42	Bd		Bd2		SD		GL		DD		Dp	15.86	Dd	
Raversijde	79	96 RAV 208-218	96 RAV 214	O/C	MC	L	All	FD?P	Bp	23.41	Bd	26.28	Bd2	26.82	SD	14.34	GL	137.94	DD	9.77	Dp	17.13	Dd	16.52
Raversijde	79	96 RAV 208-218	96 RAV 217 vis HU t zond HV 0,5 mm UIT	O/C	MC	R	PM	FP?D	Bp	22.88	Bd		Bd2		SD	13.65	GL		DD		Dp	16.91	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	MC	L	PM	FP?D	Bp	21.29	Bd		Bd2		SD	12.46	GL		DD		Dp	15.33	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	MC	R	PM	FP?D	Bp	22.02	Bd		Bd2		SD		GL		DD	99.00	Dp	15.53	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	MC	R	All	F	Bp	21.28	Bd	22.64	Bd2	22.44	SD	13.15	GL	124.06	DD	8.27	Dp	15.31	Dd	15.10
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	MC	L	PM	FP?D	Bp	24.75	Bd		Bd2		SD		GL	129.00	DD		Dp	18.39	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	MC	L	PM	FPUD	Bp	24.18	Bd		Bd2		SD		GL		DD		Dp	17.60	Dd	
Raversijde	84	RAV bot 221-226	96 RAV	O/C	MC	L	PM	FPUD	Bp	22.85	Bd		Bd2	27.89	SD	14.60	GL		DD	9.20	Dp	9.00	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	MC	L	PM	FP?D	Bp	21.90	Bd		Bd2		SD	13.27	GL		DD		Dp	16.08	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	MC	L	PM	FP?D	Bp	20.50	Bd		Bd2		SD	11.17	GL		DD	7.73	Dp	14.98	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	MC	R	PM	FP?D	Bp	20.49	Bd		Bd2		SD		GL		DD		Dp	15.44	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	MC	R	All	F	Bp	22.42	Bd	24.46	Bd2		SD	12.64	GL	113.14	DD	8.28	Dp	15.93	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	O/C	MC	R	PM	FPUD	Bp	25.10	Bd		Bd2	26.28	SD	15.24	GL		DD	10.08	Dp	17.48	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	O/C	MC	R	PM	FPUD	Bp	24.03	Bd		Bd2	27.77	SD	15.43	GL		DD		Dp	17.65	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	O/C	MC	R	PM	FP?D	Bp	23.62	Bd		Bd2		SD	13.61	GL		DD		Dp	15.08	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	MC	L	PM	FPUD	Bp	23.89	Bd		Bd2	26.21	SD	14.68	GL		DD	10.27	Dp	17.36	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	MC	R	All	F	Bp	23.48	Bd	26.23	Bd2	26.45	SD	14.10	GL	138.43	DD	9.94	Dp	17.37	Dd	16.41
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	MC	L	PM	FPUD	Bp	24.01	Bd		Bd2	24.30	SD	13.75	GL		DD	9.51	Dp	17.27	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	MC	L	All	F	Bp	21.18	Bd	22.88	Bd2	22.06	SD	10.59	GL	118.12	DD	7.68	Dp	15.16	Dd	14.43
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	MC	L	PM	FPUD	Bp	22.62	Bd		Bd2	25.83	SD	1357.00	GL		DD	10.07	Dp	17.28	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	MC	L	All	F	Bp	22.31	Bd	24.05	Bd2	23.49	SD	12.17	GL	126.62	DD	8.69	Dp	16.92	Dd	16.64
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	MC	L	PM	FPUD	Bp	23.67	Bd		Bd2	24.32	SD	13.67	GL		DD	9.46	Dp	16.39	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	MC	L	All	F	Bp	22.71	Bd	23.39	Bd2	23.91	SD	13.51	GL	121.05	DD	9.88	Dp	16.02	Dd	15.36

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	MC	L	All	F	Bp	21.95	Bd	24.58	Bd2	25.65	SD	25.65	GL	128.17	DD	9.20	Dp	16.91	Dd	15.16
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	MC	R	All	F	Bp	20.29	Bd		Bd2	23.29	SD	23.29	GL	131.91	DD	9.02	Dp	15.01	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	MC	R	PM	FPUD	Bp	22.16	Bd		Bd2		SD		GL		DD	8.99	Dp	15.84	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	MC	L	PM	FP?D	Bp	22.51	Bd		Bd2		SD	13.65	GL		DD	9.59	Dp	17.27	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 237	O/C	MC	R	All	F	Bp	21.86	Bd	24.47	Bd 2	22.74	SD	12.96	GL	127.86	DD	8.91	Dp	16.07	Dd	16.21
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	MC	L	PM	FPUD	Bp	24.02	Bd		Bd2		SD	14.22	GL		DD	9.62	Dp	17.48	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	MC	R	PM	FP?D	Bp	24.51	Bd		Bd2		SD		GL		DD		Dp	17.70	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 247	O/C	MC	R	All	F	Bp	23.08	Bd	24.42	Bd2	24.56	SD	12.63	GL	128.04	DD	8.42	Dp	16.15	Dd	15.78
Raversijde	87	RAV BOT 235-263	96 RAV 252	O/C	MC	R	All	F	Bp	23.33	Bd	26.12	Bd2	25.37	SD	13.90	GL	131.29	DD	9.51	Dp	16.34	Dd	16.49
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	MC	R	All	F	Bp	21.68	Bd		Bd2		SD		GL	124.69	DD		Dp	15.76	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 256	O/C	MC	R	PM	FP?D	Bp	22.97	Bd		Bd 2	99.00	SD	14.26	GL		DD	10.27	Dp	17.58	Dd	
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	MC	L	PM	FP?D	Bp	24.26	Bd		Bd2		SD		GL		DD		Dp	17.45	Dd	
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	MC	R	All	F	Bp	25.10	Bd	27.00	Bd2	25.81	SD	14.63	GL	129.43	DD	9.23	Dp	17.86	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 306	O/C	MC	R	PM	FPUD	Bp	20.74	Bd		Bd2	26.61	SD	13.94	GL		DD	10.50	Dp	16.34	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	MC	L	PM	FP?D	Bp	25.44	Bd		Bd2		SD	14.97	GL		DD	10.43	Dp	17.70	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	MC	R	PM	FP?D	Bp	22.48	Bd		Bd2		SD	12.92	GL		DD		Dp	16.01	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	MC	L	PM	FPUD	Bp	22.02	Bd		Bd2		SD	12.90	GL		DD	9.86	Dp	16.07	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	MC	R	All	F	Bp	21.11	Bd	25.11	Bd2	25.05	SD	12.70	GL	114.41	DD	9.31	Dp	14.97	Dd	14.70
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	MC	L	PM	FPUD	Bp	23.17	Bd		Bd2	25.57	SD	13.34	GL		DD	10.30	Dp	16.76	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318	O/C	MC	L	PM	FPUD	Bp	23.36	Bd		Bd2	27.95	SD	15.54	GL		DD	10.29	Dp	17.68	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318	O/C	MC	R	PM	FPUD	Bp	19.94	Bd		Bd2	21.72	SD	12.35	GL		DD	9.14	Dp	15.57	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318	O/C	MC	R	All	F	Bp	20.65	Bd	22.90	Bd2	22.65	SD	12.04	GL	119.67	DD	8.11	Dp	16.12	Dd	15.05
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	O/C	MC	R	PM	FPUD	Bp	24.67	Bd		Bd2		SD		GL		DD		Dp	17.19	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	MC	L	PM	FP?D	Bp	23.54	Bd		Bd2		SD	13.54	GL		DD	10.07	Dp	16.82	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 324	O/C	MC	L	PM	FD?P	Bp	23.89	Bd		Bd2		SD	12.70	GL		DD		Dp	17.31	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	MC	L	All	FPFingD	Bp	22.53	Bd	25.21	Bd2	25.31	SD	13.38	GL	120.62	DD	9.41	Dp	16.81	Dd	15.46
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	MC	L	PM	FP?D	Bp	22.08	Bd		Bd2		SD	12.48	GL		DD	7.97	Dp	15.42	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	MC	L	All	FPFingD	Bp	22.89	Bd	25.12	Bd2	27.44	SD	13.94	GL	129.44	DD	10.05	Dp	16.17	Dd	15.55
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	MC	L	All	F	Bp	22.31	Bd	23.72	Bd2	23.70	SD	13.24	GL	124.98	DD	8.42	Dp	16.30	Dd	15.08
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	MC	R	PM	FP?D	Bp	20.32	Bd		Bd2		SD		GL		DD		Dp	15.21	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 339	O/C	MC	R	PM	FPUD	Bp	25.23	Bd		Bd2	27.99	SD	14.64	GL		DD	10.32	Dp	17.90	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 339	O/C	MC	L	PM	FPUD	Bp	18.86	Bd		Bd2	22.87	SD	12.62	GL		DD	9.37	Dp	14.16	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	MC	L	All	F	Bp		Bd	23.59	Bd2	23.35	SD	13.04	GL		DD	8.54	Dp	15.68	Dd	15.79
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	MC	L	All	F	Bp	22.97	Bd	23.79	Bd2	24.35	SD	13.21	GL	132.68	DD	8.92	Dp	16.30	Dd	15.49
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	MC	L	PM	FPUD	Bp	22.64	Bd		Bd2		SD	14.30	GL		DD	10.01	Dp	16.68	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 354	O/C	MC	R	All	F	Bp	22.42	Bd	24.17	Bd2	24.86	SD	13.00	GL	132.21	DD	8.65	Dp	16.41	Dd	15.72
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	MC	R	All	F	Bp	21.35	Bd	22.42	Bd2	22.74	SD	12.71	GL	118.93	DD	8.33	Dp	14.95	Dd	15.26
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 54	O/C	MC	R	All	F	Bp	20.74	Bd	23.11	Bd2	22.04	SD	13.37	GL	123.42	DD	8.82	Dp	14.83	Dd	14.63
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	MC	L	PM	FPUD	Bp	20.81	Bd		Bd2		SD	13.98	GL		DD	9.05	Dp	15.41	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	MC	L	PM	FP?D	Bp	20.83	Bd		Bd2		SD	12.27	GL		DD		Dp	16.22	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	MC	L	PM	FP?D	Bp	21.33	Bd		Bd2		SD	12.58	GL		DD	9.44	Dp	15.77	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	MC	L	PM	FP?D	Bp	21.70	Bd		Bd2		SD	13.95	GL		DD		Dp	15.61	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	MC	L	All	FP?D	Bp	21.51	Bd	22.92	Bd2	22.81	SD	12.48	GL	112.45	DD	8.96	Dp	15.60	Dd	14.34
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	MC	R	PM	FP?D	Bp	23.31	Bd		Bd2		SD	13.22	GL		DD		Dp	16.97	Dd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 724	O/C	MC	L	PM	FP?D	Bp	22.16	Bd		Bd2		SD	13.20	GL		DD		Dp	16.60	Dd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 724	O/C	MC	L	All	F	Bp	21.12	Bd	22.63	Bd2	22.51	SD	11.87	GL	114.22	DD	8.36	Dp	15.03	Dd	15.29
Raversijde	89	RAV BOT 1996 772-780	96 RAV 738	O/C	MC	R	All	F	Bp	23.82	Bd	25.99	Bd2	26.13	SD	14.15	GL	131.30	DD	10.30	Dp	17.77	Dd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 740	O/C	MC	R	All	F	Bp	24.41	Bd	26.54	Bd2	26.72	SD	14.82	GL	137.73	DD	9.21	Dp	17.36	Dd	16.51
Raversijde	89	RAV BOT 1996 772-780	96 RAV 747	O/C	MC	L	All	F	Bp	21.55	Bd	24.61	Bd2	26.60	SD	13.86	GL	128.58	DD	9.84	Dp	15.97	Dd	15.72
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.3	O/C	MC	R	PM	FP?D	Bp	19.31	Bd		Bd2		SD		GL		DD		Dp	14.59	Dd	
Raversijde	50		96-RAV-101	O/C	MC	?	MD	FD?P	Bp		Bd	23.01	Bd2	22.36	SD	11.50	GL		DD	9.59	Dp		Dd	13.83
Raversijde	50		96-RAV-101	O/C	MC	L	All	FD?P	Bp	21.97	Bd	24.50	Bd2	25.32	SD	13.75	GL	126.62	DD	9.78	Dp	15.92	Dd	15.61
Raversijde	50		96-RAV-108	O/C	MC	R	PM	FP?D	Bp	23.73	Bd		Bd2		SD	15.41	GL		DD		Dp	17.59	Dd	
Raversijde	53		96-RAV-120	O/C	MC	L	PM	FP?D	Bp	25.00	Bd		Bd2		SD	15.73	GL		DD		Dp	16.31	Dd	
Raversijde	53		96-RAV-121	O/C	MC	R	PM	FPUD	Bp	23.85	Bd		Bd2	25.48	SD	13.44	GL		DD	10.24	Dp	16.39	Dd	
Raversijde	53		96-RAV-121	O/C	MC	R	All	F	Bp	22.21	Bd	23.65	Bd2	23.87	SD	12.51	GL	125.93	DD	8.14	Dp	16.33	Dd	15.72
Raversijde	53		96-RAV-123	O/C	MC	L	PM	FP?D	Bp	23.37	Bd		Bd2		SD		GL		DD		Dp	16.87	Dd	
Raversijde	53		96-RAV-123	O/C	MC	?	All	F	Bp		Bd	24.03	Bd2	24.23	SD	12.98	GL	127.50	DD	9.95	Dp		Dd	15.86
Raversijde	53		96-RAV-127	O/C	MC	L	All	F	Bp	21.76	Bd	23.38	Bd2	23.64	SD	13.05	GL	17.02	DD	9.09	Dp	16.03	Dd	14.76
Raversijde	53		96-RAV-131	O/C	MC	L	PM	FP?D	Bp	22.98	Bd		Bd2		SD	13.63	GL		DD		Dp	17.17	Dd	
Raversijde	53		96-RAV-135	O/C	MC	R	All	F	Bp	22.95	Bd	26.39	Bd2	28.17	SD	15.22	GL	144.10	DD	10.09	Dp	17.35	Dd	
Raversijde	53		96-RAV-145	O/C	MC	L	All	F	Bp	20.69	Bd	23.21	Bd2	22.27	SD	12.01	GL	130.88	DD	8.94	Dp	15.41	Dd	15.21

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	53		96-RAV-146	O/C	MC	R	All	F	Bp	23.88	Bd		Bd2		SD		GL	137.88	DD		Dp	17.53	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	MC	L	PM	FP?D	Bp	23.73	Bd		Bd2		SD	14.98	GL		DD	10.66	Dp	15.54	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-22	O/C	MC	L	PM	FPUD	Bp	22.68	Bd		Bd2	26.49	SD	13.55	GL		DD	9.85	Dp	16.49	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-22	O/C	MC	R	PM	FP?D	Bp	23.37	Bd		Bd2		SD	14.28	GL		DD	9.21	Dp	16.30	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-37	O/C	MC	L	PM	FP,FingD	Bp	24.73	Bd	26.25	Bd2	27.00	SD	14.79	GL	141.47	DD	10.37	Dp	17.90	Dd	17.88
Raversijde	50		96-RAV-72	O/C	MC	R	PM	FP?D	Bp	21.10	Bd		Bd2		SD	13.22	GL		DD		Dp	16.51	Dd	
Raversijde	50		96-RAV-72	O/C	MC	R	All	FP?D	Bp	23.34	Bd	23.98	Bd2	24.27	SD	13.28	GL	128.42	DD	9.37	Dp	16.43	Dd	15.93
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	MC	R	PM	FPUD	Bp	25.02	Bd		Bd2	27.46	SD	13.58	GL		DD	11.02	Dp	18.74	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	MC	R	All	F	Bp	23.41	Bd		Bd2		SD	15.33	GL	134.50	DD	9.64	Dp	17.15	Dd	
Raversijde	50		96-RAV-95	O/C	MC	R	PM	FP?D	Bp	22.05	Bd		Bd2		SD		GL		DD		Dp	15.75	Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR-11.5ZWART	O/C	MC	R	PM	FPUD	Bp	24.07	Bd		Bd2	27.53	SD	14.59	GL		DD	10.63	Dp	17.02	Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-I Datictish material. (11.7?)	O/C	MC	L	All	F	Bp	22.53	Bd	24.34	Bd2	23.52	SD	12.69	GL	115.79	DD	8.01	Dp	17.05	Dd	16.02
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-I Datictish material. (11.7?)	O/C	MC	?	MD	FD?P	Bp		Bd	24.63	Bd2	26.35	SD	14.29	GL		DD	9.64	Dp		Dd	16.12
Raversijde	75	97 RAV 150-189	97 RAV 168 ZAK DES 2 ZAK	O/C	MC	L	PM	FPUD	Bp	22.36	Bd		Bd2		SD		GL		DD		Dp	16.23	Dd	
Raversijde	75	97 RAV 150-189	97 RAV 178	O/C	MC	R	All	F	Bp	19.56	Bd	23.08	Bd2	22.47	SD	11.65	GL	130.58	DD	9.65	Dp	19.17	Dd	15.90
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	MC	L	All	F	Bp	23.84	Bd	25.59	Bd2	25.10	SD	13.11	GL	130.37	DD	9.54	Dp	15.90	Dd	16.09
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	MC	R	PM	FPUD	Bp	23.88	Bd		Bd2	24.31	SD	13.87	GL		DD	10.13	Dp	15.92	Dd	
Raversijde	76	RAV 97 191-209	97 RAV 194	O/C	MC	R	PM	FP?D	Bp	22.53	Bd		Bd2		SD	12.27	GL		DD		Dp	16.70	Dd	
Raversijde	76	RAV 97 191-209	97 RAV 203	O/C	MC	R	PM	FP?D	Bp	22.64	Bd		Bd2		SD		GL		DD		Dp	17.28	Dd	
Raversijde	76	RAV 97 191-209	97 RAV 207	O/C	MC	R	PM	FPUD	Bp	21.78	Bd		Bd2	25.92	SD	13.85	GL		DD	10.30	Dp	16.21	Dd	
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken Uit, 1x Bot Rund UIT 10-1-02 ISOT	O/C	MC	R	All	F	Bp	19.89	Bd	22.39	Bd2	22.37	SD	12.17	GL	122.29	DD	8.62	Dp	14.67	Dd	14.23
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	MC	L	All	F	Bp	20.86	Bd	22.38	Bd2	23.14	SD	12.42	GL	125.17	DD	8.74	Dp	15.76	Dd	14.99
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	MC	L	PM	FPUD	Bp	23.23	Bd		Bd2	26.35	SD	14.11	GL		DD	9.59	Dp	16.80	Dd	
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	MC	L	All	F	Bp	21.17	Bd	23.39	Bd2	21.57	SD	11.06	GL	114.74	DD	8.81	Dp	15.46	Dd	14.82
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	MC	R	All	F	Bp	23.39	Bd	25.84	Bd2	26.28	SD	14.44	GL	133.91	DD	10.12	Dp	17.52	Dd	16.70
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	MC	R	PM	FP?D	Bp	21.40	Bd		Bd2		SD	12.91	GL		DD	8.97	Dp	15.41	Dd	
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	O/C	MC	R	All	F	Bp	21.44	Bd		Bd2		SD		GL	114.10	DD		Dp	15.96	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 331	O/C	MC	R	All	F	Bp	21.58	Bd	24.95	Bd2	24.33	SD	12.79	GL	129.58	DD	9.13	Dp	16.08	Dd	16.17
Raversijde	81	RAV 97 306-339	97 RAV 332	O/C	MC	R	PM	FP?D	Bp	21.85	Bd		Bd2		SD		GL		DD		Dp	17.21	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 340	O/C	MC	L	PM	FP?D	Bp	21.93	Bd		Bd2		SD		GL		DD		Dp	16.03	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 353	O/C	MC	L	All	F	Bp	20.28	Bd	21.66	Bd2	21.33	SD	11.45	GL	124.13	DD	9.00	Dp	16.19	Dd	15.51
Raversijde	88	RAV BOT 350-369	97 RAV 355	O/C	MC	L	PM	FP?D	Bp	22.00	Bd		Bd 2		SD	12.98	GL		DD	8.12	Dp	16.60	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 356	O/C	MC	L	MD	FP?D	Bp	20.03	Bd		Bd2		SD	12.24	GL		DD		Dp	14.96	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	MC	L	All	F	Bp	20.44	Bd		Bd2		SD	11.69	GL	119.87	DD	7.51	Dp	15.56	Dd	15.14
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	MC	L	All	F	Bp	20.68	Bd	22.90	Bd2	22.36	SD	12.82	GL	118.65	DD	8.89	Dp	15.45	Dd	14.89
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	MC	R	All	F	Bp	22.20	Bd		Bd2		SD		GL	113.80	DD		Dp	15.62	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	MC	R	PM	FP?D	Bp	22.96	Bd		Bd2		SD	14.36	GL		DD		Dp	16.06	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	MC	R	PM	FPUD	Bp	20.72	Bd		Bd2		SD		GL		DD		Dp	15.12	Dd	
Raversijde	59		97 RAV 361	O/C	MC	L	PM	FP?D	Bp	22.47	Bd		Bd2		SD	13.49	GL		DD		Dp	16.48	Dd	
Raversijde	59		97 RAV 361	O/C	MC	L	All	F	Bp	21.95	Bd	25.00	Bd2	24.39	SD	13.84	GL	131.47	DD	9.82	Dp	16.33	Dd	15.51
Raversijde	59		97 RAV 361	O/C	MC	L	PM	FP?D	Bp	24.31	Bd		Bd2		SD		GL		DD		Dp	17.43	Dd	
Raversijde	59		97 RAV 361	O/C	MC	L	All	F	Bp	22.35	Bd	23.27	Bd2	24.30	SD	12.93	GL	129.07	DD	9.57	Dp	16.30	Dd	15.83
Raversijde	59		97 RAV 361	O/C	MC	L	PM	FPUD	Bp	21.91	Bd		Bd2	25.32	SD	13.91	GL		DD	9.89	Dp	15.84	Dd	
Raversijde	59		97 RAV 361	O/C	MC	L	PM	FP?D	Bp	21.83	Bd		Bd2		SD		GL		DD		Dp	17.02	Dd	
Raversijde	59		97 RAV 361	O/C	MC	R	PM	FPUD	Bp	23.10	Bd		Bd2	25.93	SD	14.23	GL		DD	9.93	Dp	17.78	Dd	
Raversijde	59		97 RAV 361	O/C	MC	R	All	F	Bp	21.68	Bd	22.61	Bd2	22.49	SD	11.98	GL	124.64	DD	7.98	Dp	15.94	Dd	15.27
Raversijde	60		97 RAV 361	O/C	MC	L	PM	FP?D	Bp	22.84	Bd		Bd2		SD		GL		DD		Dp	16.90	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 361	O/C	MC	R	PM	FP?D	Bp	21.95	Bd		Bd2		SD	11.75	GL		DD		Dp	15.60	Dd	
Raversijde	60		97 RAV 361-Separate Bag inside	O/C	MC	L	All	F	Bp	22.76	Bd	24.62	Bd2	24.62	SD	14.50	GL	122.05	DD	7.96	Dp	17.51	Dd	15.86
Raversijde	60		97 RAV 361-Separate Bag inside	O/C	MC	R	All	FPFingD	Bp	21.86	Bd	23.94	Bd2	23.94	SD	14.35	GL	129.57	DD	9.37	Dp	17.22	Dd	15.37
Raversijde	60		97 RAV 361-Separate Bag inside	O/C	MC	R	PM	FPUD	Bp	22.24	Bd		Bd2		SD	14.32	GL		DD	9.96	Dp	16.82	Dd	
Raversijde	60		97 RAV 361-Separate Bag inside	O/C	MC	R	All	F	Bp	20.53	Bd	23.65	Bd2	23.65	SD	13.09	GL	121.72	DD	10.18	Dp	14.86	Dd	16.01
Raversijde	88	RAV BOT 350-369	97 RAV 367	O/C	MC	R	All	F	Bp	20.05	Bd	22.75	Bd2	22.83	SD	12.11	GL	119.39	DD	7.94	Dp	14.36	Dd	15.04
Raversijde	88	RAV BOT 350-369	97 RAV 368	O/C	MC	L	All	F	Bp	21.12	Bd	23.20	Bd2	22.26	SD	11.32	GL	122.13	DD	8.42	Dp	14.87	Dd	14.79
Raversijde	61		97 RAV 477	O/C	MC	L	PM	FPUD	Bp	22.03	Bd		Bd2		SD		GL		DD		Dp	17.16	Dd	
Raversijde	61		97 RAV 477	O/C	MC	L	PM	FP?D	Bp	26.03	Bd		Bd2		SD		GL		DD		Dp	18.37	Dd	
Raversijde	61		97 RAV 477	O/C	MC	L	PM	FP?D	Bp	20.65	Bd		Bd2		SD	12.22	GL		DD	9.04	Dp	15.08	Dd	
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	MC	L	PM	FP?D	Bp	20.89	Bd		Bd2		SD		GL		DD		DP	15.71	Dd	
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	MC	L	All	F	Bp	21.83	Bd		Bd2		SD	12.90	GL	121.24	DD	10.24	DP	16.44	Dd	
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	MC	R	PM	FPUD	Bp	22.68	Bd		Bd2	25.02	SD	13.68	GL		DD	9.97	DP	16.24	Dd	
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	MC	R	All	F	Bp	22.85	Bd	25.49	Bd2	25.42	SD	13.80	GL	139.22	DD	9.32	DP	17.14	Dd	16.47
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	MC	L	PM	FP?D	Bp	23.05	Bd		Bd2		SD		GL		DD		DP	16.77	Dd	
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	MC	R	MD	FD?P	Bp		Bd	23.67	Bd2	23.38	SD		GL		DD		DP		Dd	16.09
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	MC	R	All	F	Bp	21.69	Bd	23.86	Bd2	23.67	SD	12.83	GL	128.91	DD	8.87	DP	15.07	Dd	15.48
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	MC	R	All	F	Bp	21.11	Bd	23.15	Bd2	22.60	SD	12.63	GL	120.93	DD	8.46	DP	15.60	Dd	15.91
Raversijde	90	RAV 686-781	97 RAV 709	O/C	MC	R	All	F	Bp	22.54	Bd	23.31	Bd2	23.07	SD	11.76	GL	117.88	DD	8.11	Dp	16.52	Dd	15.59

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																	
Raversijde	90	RAV 686-781	97 RAV 712 VIS HU + Zond HU 0,5 mm UIT	O/C	MC	L	PM	FPUD	Bp	24.55	Bd		Bd		Bd2		SD		GL		DD		Dp	17.69	Dd
Raversijde	90	RAV 686-781	97 RAV 725	O/C	MC	L	PM	FPUD	Bp	23.94	Bd		Bd2	25.83	SD	13.21	GL		DD	9.35	Dp	18.20	Dd		
Raversijde	90	RAV 686-781	97 RAV 752	O/C	MC	R	All	F	Bp	20.04	Bd	22.85	Bd2	22.99	SD	12.85	GL	122.34	DD	8.52	Dp	15.05	Dd	13.88	
Raversijde	90	RAV 686-781	97 RAV 753	O/C	MC	R	All	F	Bp	23.98	Bd	26.04	Bd2	24.69	SD	12.92	GL	121.85	DD	8.40	Dp	16.99	Dd	15.88	
Raversijde	71	RAV BOT 61-98	97 RAV 85	O/C	MC	R	All	F	Bp	23.55	Bd	25.22	Bd2	25.10	SD	12.58	GL	130.67	DD	9.11	DP	16.70	Dd	16.12	
Raversijde	71	RAV BOT 61-98	97 RAV 97	O/C	MC	R	All	F	Bp	23.10	Bd	24.93	Bd2	24.12	SD	14.48	GL	129.11	DD	10.45	DP	16.16	Dd	15.52	
Raversijde	54		97-RAV-105	O/C	MC	L	PM	FPUD	Bp	23.91	Bd		Bd2	26.57	SD	13.78	GL		DD	10.41	Dp	18.03	Dd		
Raversijde	54		97-RAV-106	O/C	MC	R	PM	FPUD	Bp	23.60	Bd		Bd2	25.23	SD	12.85	GL		DD	9.90	Dp	16.39	Dd		
Raversijde	54		97-RAV-117	O/C	MC	L	PM	FPUD	Bp	23.22	Bd		Bd2	24.75	SD	13.98	GL		DD	9.03	Dp	17.26	Dd		
Raversijde	54		97-RAV-117	O/C	MC	R	All	F	Bp	24.48	Bd	25.18	Bd2	25.34	SD	13.90	GL	138.49	DD	9.88	Dp	17.41	Dd	17.08	
Raversijde	54		97-RAV-117	O/C	MC	R	PM	FP?D	Bp	24.18	Bd		Bd2		SD	13.78	GL		DD		Dp	17.34	Dd		
Raversijde	54		97-RAV-117	O/C	MC	R	All	F	Bp	22.55	Bd	24.82	Bd2	25.14	SD	13.63	GL	122.94	DD	9.44	Dp	16.38	Dd	16.61	
Raversijde	54		97-RAV-132	O/C	MC	L	PM	FPUD	Bp	22.00	Bd	22.94	Bd2	22.67	SD	12.15	GL	126.11	DD	8.94	Dp	15.57	Dd	15.02	
Raversijde	54		97-RAV-135	O/C	MC	R	All	F	Bp	21.88	Bd	23.60	Bd2	24.26	SD	12.85	GL	126.91	DD	8.62	Dp	16.42	Dd	15.54	
Raversijde	54		97-RAV-148	O/C	MC	R	All	F	Bp	22.59	Bd	24.76	Bd2	24.36	SD	12.92	GL	121.53	DD	8.88	Dp	15.48	Dd	15.16	
Raversijde	54		97-RAV-148	O/C	MC	R	All	F	Bp	22.30	Bd	24.23	Bd2	24.56	SD	13.89	GL	129.09	DD	9.47	Dp	16.86	Dd	15.05	
Raversijde	57		97-RAV-298	O/C	MC	L	All	FP?D	Bp	21.22	Bd		Bd2		SD	11.18	GL		DD		Dp	15.15	Dd		
Raversijde	57		97-RAV-298	O/C	MC	L	PM	F	Bp	21.26	Bd		Bd2		SD		GL	128.74	DD	9.02	Dp	15.93	Dd		
Raversijde	57		97-RAV-298	O/C	MC	L	PM	FP?D	Bp	20.58	Bd		Bd2		SD	12.95	GL		DD		Dp	15.74	Dd		
Raversijde	57		97-RAV-298	O/C	MC	L	PM	FPUD	Bp	22.02	Bd		Bd2		SD		GL		DD		Dp	16.54	Dd		
Raversijde	57		97-RAV-298	O/C	MC	L	PM	FP?D	Bp	19.03	Bd		Bd2		SD		GL		DD		Dp	14.54	Dd		
Raversijde	57		97-RAV-298	O/C	MC	L	All	F	Bp	21.64	Bd	23.07	Bd2	22.89	SD	12.86	GL	126.83	DD	8.39	Dp	15.92	Dd	15.86	
Raversijde	57		97-RAV-298	O/C	MC	R	All	F	Bp	21.57	Bd	23.41	Bd2	24.06	SD	12.66	GL	119.79	DD	9.30	Dp	16.00	Dd	15.12	
Raversijde	57		97-RAV-298	O/C	MC	R	All	F	Bp	22.47	Bd	25.09	Bd2	24.39	SD	15.44	GL	121.32	DD	9.51	Dp	16.07	Dd	15.99	
Raversijde	57		97-RAV-298	O/C	MC	R	All	F	Bp	22.84	Bd	24.12	Bd2	23.90	SD	12.73	GL	125.29	DD	9.78	Dp	16.83	Dd	16.42	
Raversijde	57		97-RAV-298	O/C	MC	R	All	F	Bp	21.28	Bd	22.24	Bd2	22.14	SD	11.84	GL	122.36	DD	8.60	Dp	15.73	Dd	14.74	
Raversijde	57		97-RAV-298	O/C	MC	R	PM	FPUD	Bp	24.28	Bd		Bd2	27.86	SD	14.53	GL		DD	10.00	Dp	18.30	Dd		
Raversijde	57		97-RAV-298	O/C	MC	R	All	F	Bp	23.64	Bd	25.85	Bd2	25.20	SD	13.38	GL	133.40	DD	9.48	Dp	17.06	Dd	16.31	
Raversijde	57		97-RAV-298	O/C	MC	R	All	F	Bp	20.70	Bd	23.11	Bd2	24.16	SD	12.97	GL	126.26	DD	9.44	Dp	16.02	Dd	15.30	
Raversijde	58		97-RAV-361	O/C	MC	L	PM	FPUD	Bp	22.76	Bd		Bd2	25.47	SD	14.03	GL		DD	9.76	Dp	16.81	Dd		
Raversijde	58		97-RAV-361	O/C	MC	R	PM	FP?D	Bp	19.94	Bd		Bd2		SD	11.93	GL		DD		Dp	14.58	Dd		
Raversijde	58		97-RAV-361	O/C	MC	R	All	F	Bp	20.33	Bd	23.26	Bd2	23.66	SD	12.46	GL	117.31	DD	9.24	Dp	15.20	Dd	14.74	
Raversijde	58		97-RAV-361	O/C	MC	R	PM	FPUD	Bp	23.40	Bd		Bd2	25.78	SD	13.94	GL		DD	10.45	Dp	16.55	Dd		
Raversijde	58		97-RAV-361	O/C	MC	R	PM	FP?D	Bp	22.93	Bd		Bd2		SD		GL		DD		Dp	17.17	Dd		
Raversijde	58		97-RAV-361	O/C	MC	R	All	F	Bp	20.38	Bd		Bd2		SD		GL	114.48	DD		Dp	15.03	Dd		
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	MC	L	All	F	Bp	19.80	Bd	21.41	Bd2	21.95	SD	11.29	GL	108.72	DD	8.11	Dp	15.12	Dd	14.52	
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	MC	R	All	F	Bp	20.70	Bd	22.92	Bd2	22.19	SD	11.81	GL	122.10	DD	9.29	Dp	15.79	Dd	15.15	
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	MC	?		FP?P	Bp		Bd	24.07	Bd2	22.96	SD		GL		DD	9.74	Dp		Dd	16.43	
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	MC	L		All	Bp	22.80	Bd	25.67	Bd2	26.70	SD	14.51	GL	128.08	DD	10.22	Dp	16.99	Dd	15.23	
Raversijde	81	RAV 97 306-339	97 RAV 306	O/C	MC	L	All	F	Bp	22.11	Bd	23.19	Bd2	24.05	SD	11.69	GL	127.93	DD	9.02	Dp	16.95	Dd	15.90	
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	MC/MT	?	MD	FD?P	Bp		Bd	24.62	Bd2	23.84	SD	12.27	GL		DD	10.70	Dp	16.25	Dd		
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	MC/MT	?	MD	FD?P	Bp		Bd	24.68	Bd2	22.79	SD		GL		DD		Dp		Dd	15.21	
Raversijde	69	RAV 96 BOT 424	424	O/C	MC/MT	?	UDE	UDE	Bp		Bd	24.68	Bd2	24.65	SD		GL		DD		Dp		Dd	18.01	
Raversijde	63	RAV BOT 477	477	O/C	MC/MT	?	MD	F	Bp		Bd	24.42	Bd2	25.85	SD	14.83	GL		DD	10.48	Dp		Dd	15.38	
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	MC/MT	?	UDE	UDE	Bp		Bd	25.07	Bd2	26.27	SD		GL		DD		Dp		Dd	16.75	
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	O/C	MC/MT	?	UDE	UDE	Bp		Bd	26.29	Bd2	28.26	SD		GL		DD		Dp		Dd	15.93	
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	MC/MT	?	MD	FD?P	Bp		Bd	24.21	Bd2	23.94	SD		GL		DD		Dp		Dd	16.13	
Raversijde	87	RAV BOT 235-263	96 RAV 256	O/C	MC/MT	?	MD	FD?P	Bp		Bd	24.85	Bd 2	24.38	SD	13.02	GL		DD	8.86	Dp		Dd	15.41	
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	MC/MT	?	UDE	UDE	Bp		Bd	24.69	Bd2	27.10	SD		GL		DD		Dp		Dd	15.53	
Raversijde	82	RAV bot 210-301	97 RAV 217	O/C	MC/MT	?	UDE	UDE	Bp		Bd	23.77	Bd2	23.98	SD		GL		DD		Dp		Dd	16.01	
Raversijde	60		97 RAV 361	O/C	MC/MT	L	All	F	Bp	21.68	Bd	23.44	Bd2	23.72	SD	13.12	GL	123.95	DD	9.57	Dp	16.10	Dd	23.72	
Raversijde	60		97 RAV 361	O/C	MC/MT	R	All	F	Bp	24.03	Bd	26.48	Bd2	26.09	SD	14.68	GL	140.77	DD	10.49	Dp	17.78	Dd	26.43	
Raversijde	60		97 RAV 361	O/C	MC/MT	?	MD	FD?P	Bp		Bd	22.31	Bd2	22.47	SD	10.91	GL		DD	8.81	Dp		Dd	22.46	
Raversijde	60		97 RAV 361	O/C	MC/MT	L	All	F	Bp	18.70	Bd		Bd2		SD		GL	142.70	DD		Dp	19.47	Dd		
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 24	O/C	MC/MT	?	MD	FD?P	Bp		Bd	20.08	Bd2	19.09	SD	10.69	GL		DD	8.36	Dp		Dd	13.61	
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	MC/MT	L	PM	FPUD	Bp	20.66	Bd		Bd2	23.69	SD	12.07	GL		DD	11.37	Dp	19.72	Dd		
Raversijde	75	97 RAV 150-189	97 RAV 184 1 ZAK	O/C	MC/MT	?	MD	FD?P	Bp		Bd	22.95	Bd 2	21.24	SD	10.39	GL		DD	9.19	Dp		Dd	15.24	
Raversijde	47	Bot 3 Raversijde 4492-4550	4513	O/C	MT	L	All	F	Bp	23.57	Bd	25.91	Bd2	25.87	SD	14.41	GL	129.39	DD	9.75	DP	16.68	DD	16.36	
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	MT	R		FP?D	Bp	18.11	Bd		Bd2	21.54	SD	11.37	GL		DD	10.01	Dp	18.47	Dd		
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	O/C	MT	?	MD	FD?P	Bp		Bd	24.68	Bd2	23.59	SD		GL		DD		Dp		Dd	16.30	
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	O/C	MT	?	MD	FD?P	Bp		Bd	25.11	Bd2	25.37	SD	12.11	GL		DD	11.89	Dp		Dd	16.73	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MT	?	MD	FD?P	Bp		Bd	22.13	Bd2	21.98	SD	11.37	GL		DD	9.02	Dp		Dd	15.02	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 328	O/C	MT	?	MD	FD?P	Bp		Bd	24.27	Bd2	23.54	SD		GL		DD		Dp		Dd	16.22	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	All	F	Bp	19.04	Bd	21.78	Bd2	21.59	SD	10.85	GL	133.30	DD	8.94	Dp	18.23	Dd	15.07	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	PM	FP?D	Bp	18.95	Bd		Bd2		SD		GL		DD		Dp	18.95	Dd		
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	PM	FPUD	Bp	21.30	Bd		Bd2	23.97	SD	12.19	GL		DD	10.66	Dp	20.72	Dd		
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	All	F	Bp	19.04	Bd	22.17	Bd2	21.63	SD	10.73	GL	126.48	DD	9.61	Dp	19.19	Dd	14.18	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	All	F	Bp	19.49	Bd	22.48	Bd2	21.78	SD	10.75	GL	132.32	DD	9.03	Dp	18.71	Dd	15.19	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	PM	FPUD	Bp	20.23	Bd		Bd2	22.26	SD	11.37	GL		DD	10.38	Dp	20.36	Dd		
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	PM	FPUD	Bp	19.71	Bd		Bd2		SD		GL		DD		Dp	19.69	Dd		
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	All	F	Bp	18.70	Bd		Bd2		SD	10.62	GL	131.88	DD	8.68	Dp	18.37	Dd	14.88	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	PM	FPUD	Bp	21.63	Bd		Bd2		SD		GL		DD		Dp	21.00	Dd		
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	All	F	Bp	18.18	Bd	22.18	Bd2	21.22	SD	10.40	GL	112.20	DD	8.76	Dp	18.22	Dd	13.57	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	All	F	Bp	19.45	Bd	24.35	Bd2	23.16	SD	11.18	GL	133.98	DD	9.96	Dp	19.11	Dd	15.36	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	All	F	Bp	21.24	Bd	25.38	Bd2	23.45	SD	11.38	GL		DD	9.99	Dp	19.89	Dd	16.18	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	PM	FP?D	Bp	19.12	Bd		Bd2		SD		GL		DD		Dp	19.53	Dd		
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	All	F	Bp	21.44	Bd	27.10	Bd2	27.58	SD	12.78	GL	144.45	DD	12.13	Dp	21.14	Dd	16.81	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	L	All	F	Bp	20.40	Bd		Bd2		SD		GL	133.51	DD		Dp	20.44	Dd		
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	R	All	F	Bp	19.98	Bd		Bd2		SD		GL	133.73	DD	10.32	Dp	20.05	Dd		

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?														
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	R	PM	FPUD	Bp	19.89	Bd		Bd2	20.08	SD	11.43	GL		DD	10.41	Dp	20.85	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	R	All	F	Bp	20.47	Bd	25.15	Bd2	23.82	SD	11.45	GL	136.43	DD	9.73	Dp	20.24	Dd	16.12
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	R	All	F	Bp	19.15	Bd	23.56	Bd2	22.94	SD	11.76	GL	130.01	DD	9.66	Dp	18.76	Dd	14.57
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	R	PM	FPUD	Bp	18.89	Bd		Bd2		SD		GL		DD		Dp	19.10	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	R	All	F	Bp	18.71	Bd	23.05	Bd2	22.79	SD	12.05	GL	137.10	DD	9.42	Dp	18.46	Dd	15.20
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	R	PM	FPUD	Bp	21.17	Bd		Bd2	24.25	SD	12.78	GL		DD	11.29	Dp	21.70	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	R	All	F	Bp	21.37	Bd		Bd2		SD		GL	130.15	DD		Dp	21.31	Dd	
Raversijde	69	RAV 96 BOT 424	424	O/C	MT	R	All	F	Bp	18.33	Bd	23.07	Bd2	20.96	SD	10.53	GL	112.68	DD	8.76	Dp	17.78	Dd	13.65
Raversijde	63	RAV BOT 477	477	O/C	MT	L	PM	FP?D	Bp	19.85	Bd		Bd2		SD		GL		DD		Dp	19.13	Dd	
Raversijde	63	RAV BOT 477	477	O/C	MT	L	PM	FPUD	Bp	18.30	Bd		Bd2	20.86	SD	10.43	GL		DD	9.11	Dp	17.92	Dd	
Raversijde	63	RAV BOT 477	477	O/C	MT	L	PM	FPUD	Bp	21.04	Bd		Bd2		SD	12.80	GL		DD	10.88	Dp	19.78	Dd	
Raversijde	63	RAV BOT 477	477	O/C	MT	R	All	F	Bp	18.52	Bd	21.35	Bd2	20.93	SD	9.92	GL	121.04	DD	8.62	Dp	17.25	Dd	14.96
Raversijde	62	97 RAV 650	650	O/C	MT	L	All	FP?D	Bp	18.99	Bd		Bd2		SD		GL	138.05	DD	9.14	Dp	18.35	Dd	
Raversijde	62	97 RAV 650	650	O/C	MT	L	All	F	Bp	21.32	Bd	25.94	Bd2	25.26	SD	13.51	GL	149.62	DD	11.31	Dp	21.47	Dd	18.21
Raversijde	62	97 RAV 650	650	O/C	MT	L	PM	F	Bp	19.84	Bd		Bd2		SD		GL		DD		Dp	19.65	Dd	
Raversijde	62	97 RAV 650	650	O/C	MT	L	PM	FP?D	Bp	20.42	Bd		Bd2		SD		GL		DD		Dp	20.11	Dd	
Raversijde	62	97 RAV 650	650	O/C	MT	R	PM	FP?D	Bp	19.24	Bd		Bd2		SD	10.70	GL		DD		Dp	19.09	Dd	
Raversijde	62	97 RAV 650	650	O/C	MT	R	PM	FPUD	Bp	19.97	Bd		Bd2	24.77	SD	12.25	GL		DD	10.87	Dp	20.17	Dd	
Raversijde	62	97 RAV 650	650	O/C	MT	R	PM	FPUD	Bp	18.68	Bd		Bd2	21.91	SD	11.23	GL		DD	9.65	Dp	18.96	Dd	
Raversijde	62	97 RAV 650	650	O/C	MT	R	All	F	Bp	17.17	Bd		Bd2		SD		GL	127.16	DD		Dp	17.93	Dd	
Raversijde	62	97 RAV 650	650	O/C	MT	?	MD	FD?P	Bp		Bd	24.19	Bd2	25.61	SD		GL		DD		Dp		Dd	16.07
Raversijde	62	97 RAV 650	650	O/C	MT	L	PM	FPUD	Bp	19.79	Bd		Bd2		SD		GL		DD		Dp	19.80	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	O/C	MT	L	All	F	Bp	19.10	Bd	23.75	Bd2	22.31	SD	11.35	GL	130.82	DD	8.72	Dp		Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	O/C	MT	L	PM	FPUD	Bp	17.81	Bd		Bd2		SD	11.66	GL		DD	9.72	Dp	16.87	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	MT	L	All	F	Bp	19.54	Bd		Bd2		SD	10.98	GL		DD		Dp	18.40	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	MT	R	All	F	Bp	18.21	Bd	21.74	Bd2	21.19	SD	9.78	GL	129.43	DD	8.46	Dp	19.15	Dd	15.04
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	MT	R	PM	FPUD	Bp	15.92	Bd		Bd2		SD	13.70	GL		DD	13.25	Dp	24.97	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	MT	R	PM	PFUD	Bp	19.56	Bd		Bd2	23.84	SD	11.69	GL		DD	10.90	Dp	20.78	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	MT	R	All	F	Bp	18.50	Bd		Bd2		SD	9.82	GL		DD	8.50	Dp	18.79	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	MT	L	PM	PFUD	Bp	20.11	Bd		Bd2	22.49	SD	11.31	GL		DD	10.43	Dp	20.27	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	MT	R	All	F	Bp	20.86	Bd	23.50	Bd2	23.20	SD	12.23	GL	148.31	DD	10.77	Dp	20.02	Dd	16.04
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	MT	L	PM	PFUD	Bp	19.32	Bd		Bd2		SD	11.76	GL		DD	9.57	Dp		Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	MT	L	All	F	Bp	19.01	Bd	22.17	Bd2	21.63	SD	10.99	GL	130.75	DD	9.24	Dp	18.33	Dd	15.27
Raversijde	46	Bot 2 Raversijde 4466-4492	4470	O/C	MT	L	PM	FP?D	Bp	20.51	Bd		Bd2		SD		GL		DD		Dp	19.70	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	O/C	MT	R	All	F	Bp	18.61	Bd	21.25	Bd2	21.03	SD	10.50	GL	137.98	DD	8.76	Dp	18.48	Dd	15.54
Raversijde	46	Bot 2 Raversijde 4466-4492	4482	O/C	MT	R	PM	FP?D	Bp	20.59	Bd		Bd2		SD	13.04	GL		DD	11.25	Dp	20.10	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4482	O/C	MT	L	PM	FP?D	Bp	18.93	Bd		Bd2		SD	11.70	GL		DD	9.73	Dp	19.64	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4488	O/C	MT	L	PM	FPUD	Bp	19.33	Bd		Bd2		SD	11.80	GL		DD	10.19	Dp	19.93	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4488	O/C	MT	R	PM	FP?D	Bp	19.31	Bd		Bd2		SD		GL		DD		Dp	19.72	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4488	O/C	MT	R	PM	FP?D	Bp	21.32	Bd		Bd2		SD		GL		DD		Dp	20.21	Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	MT	R		FPUD	Bp	21.92	Bd		Bd2		SD	12.61	GL		DD	10.86	Dp	21.75	Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	MT	R		All	Bp	20.79	Bd	23.92	Bd2	23.94	SD	12.15	GL	133.44	DD	10.29	Dp	20.52	Dd	16.33
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	MT	L		All	Bp	19.55	Bd	22.77	Bd2	21.68	SD	12.02	GL	137.89	DD	8.78	Dp	19.07	Dd	14.92
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	MT	L		FP?D	Bp	19.52	Bd		Bd2		SD		GL		DD		Dp	19.27	Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	MT	L	PM	FP?D	Bp	18.46	Bd		Bd2		SD	12.27	GL		DD	9.75	DP	19.94	DD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	MT	L	PM	FP?D	Bp	19.92	Bd		Bd2		SD	11.77	GL		DD	9.68	DP	20.44	DD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	O/C	MT	R	All	F4	Bp	20.06	Bd	22.40	Bd2	21.67	SD	11.67	GL	137.70	DD	10.62	Dp	19.72	Dd	15.51
Raversijde	47	Bot 3 Raversijde 4492-4550	4526	O/C	MT	L	PM	FP?D	Bp	19.93	Bd		Bd2		SD		GL		DD		DP	20.35	DD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4526	O/C	MT	R	PM	FP?F	Bp	21.48	Bd		Bd3		SD	12.82	GL		DD		DP	21.53	DD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4526	O/C	MT	L	All	FPFD	Bp	20.55	Bd	22.66	Bd4	22.01	SD	11.31	GL	134.11	DD	9.74	DP	19.62	DD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4542	O/C	MT	L	PM	FP?D	Bp	21.03	Bd		Bd3		SD	12.26	GL		DD		DP	20.46	DD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4544	O/C	MT	L	All	F	Bp	19.23	Bd	23.06	Bd2	22.01	SD	11.28	GL	130.30	DD	9.60	DP	18.27	DD	13.24
Raversijde	48	Doos 4	4560	O/C	MT	R	All	F	Bp	19.95	Bd		Bd2		SD	11.91	GL	134.20	DD	9.08	DP	19.61	Dd	
Raversijde	48	Doos 4	4560	O/C	MT	R	PM	FP?D	Bp	21.32	Bd		Bd2		SD	13.03	GL		DD		DP	21.44	Dd	
Raversijde	48	Doos 4	4560	O/C	MT	R	All	FP	Bp	18.40	Bd		Bd2		SD		GL		DD		DP	18.17	Dd	
Raversijde	48	Doos 4	4560	O/C	MT	R	PM	FP?D	Bp	19.87	Bd		Bd2		SD	13.72	GL		DD	9.66	DP		Dd	
Raversijde	48	Doos 4	4565	O/C	MT	L	PM	FPUD	Bp	21.08	Bd		Bd2	25.24	SD	12.91	GL		DD	11.20	DP	21.90	Dd	
Raversijde	48	Doos 4	4566	O/C	MT	L	PM	FPUD	Bp	19.10	Bd		Bd2	20.03	SD	11.66	GL		DD	10.04	DP	19.33	Dd	
Raversijde	48	Doos 4	4566	O/C	MT	R	All	F	Bp	18.35	Bd	22.47	Bd2	22.25	SD	10.35	GL	124.54	DD	8.28	DP	19.07	Dd	14.62
Raversijde	48	Doos 4	4566	O/C	MT	R	PM	FP?D	Bp	21.38	Bd		Bd2		SD	11.44	GL		DD	10.05	DP	22.14	Dd	
Raversijde	48	Doos 4	4569	O/C	MT	L	All	F	Bp	20.27	Bd	23.36	Bd2	22.59	SD	11.25	GL	140.53	DD	9.79	DP	20.47	Dd	15.42
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MT	R	PM	FP?D	Bp	19.62	Bd		Bd2		SD	11.81	GL		DD		Dp	19.71	Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MT	L	PM	FP?D	Bp	18.89	Bd		Bd2		SD	11.11	GL		DD	9.62	Dp	18.85	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MT	R	All	F	Bp	19.14	Bd	22.96	Bd2	22.18	SD	12.29	GL	140.57	DD	10.26	Dp	19.05	Dd	14.46
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	MT	R	PM	FP?D	Bp	20.87	Bd		Bd2		SD		GL		DD		Dp	20.11	Dd	
Raversijde	51		95-RAV-	O/C	MT	L	PM	FP?D	Bp	18.94	Bd		Bd2		SD	11.49	GL		DD	9.41	Dp	19.23	Dd	
Raversijde	51		95-RAV-115	O/C	MT	L	All	F	Bp	17.39	Bd	20.66	Bd2	21.72	SD	10.86	GL	123.62	DD	9.33	Dp	17.96	Dd	13.83
Raversijde	52		95-RAV-120	O/C	MT	L	All	F	Bp	18.67	Bd	21.40	Bd2	21.63	SD	11.74	GL	129.16	DD	10.45	Dp	17.85	Dd	15.31
Raversijde	52		95-RAV-120	O/C	MT	L	All	F	Bp	18.89	Bd	23.10	Bd2	22.24	SD	12.25	GL	131.75	DD	10.49	Dp	18.36	Dd	16.22
Raversijde	52		95-RAV-120	O/C	MT	L	All	F	Bp	17.99	Bd	21.18	Bd2	20.49	SD	10.78	GL	127.17	DD	9.20	Dp	18.21	Dd	15.00
Raversijde	52		95-RAV-120	O/C	MT	L	PM	FP?D	Bp	20.87	Bd		Bd2		SD	13.13	GL		DD		Dp	19.81	Dd	
Raversijde	52		95-RAV-120	O/C	MT	L	PM	FP?D	Bp	19.31	Bd		Bd2		SD	13.16	GL		DD		Dp	19.88	Dd	
Raversijde	52		95-RAV-120	O/C	MT	L	PM	FP?D	Bp	19.59	Bd		Bd2		SD		GL		DD		Dp	18.89	Dd	
Raversijde	52		95-RAV-120	O/C	MT	R	PM	FPUD	Bp	19.99	Bd		Bd2	25.06	SD	13.19	GL		DD	11.45	Dp	20.77	Dd	
Raversijde	52		95-RAV-120	O/C	MT	R	All	F	Bp	20.21	Bd	22.96	Bd2	21.82	SD	12.24	GL	134.16	DD	10.55	Dp	19.62	Dd	15.93
Raversijde	52		95-RAV-120	O/C	MT	R	All	F	Bp	20.68	Bd	23.50	Bd2	23.44	SD	12.36	GL	139.56	DD	10.75	Dp	19.58	Dd	16.32
Raversijde	52		95-RAV-120	O/C	MT	R	PM	FPUD	Bp	20.62	Bd		Bd2	21.81	SD	12.43	GL		DD	10.41	Dp	20.29	Dd	
Raversijde	52		95-RAV-120	O/C	MT	R	PM	FP?D	Bp	20.91	Bd		Bd2		SD	10.94	GL		DD		Dp		Dd	
Raversijde	55		95-RAV-279	O/C	MT	L	PM	FP?D	Bp	20.05	Bd		Bd2		SD		GL		DD		Dp	18.80	Dd	
Raversijde	55		95-RAV-279	O/C	MT	L	All	F	Bp	20.36	Bd	23.58	Bd2	23.63	SD	11.57	GL	139.77	DD	9.20	Dp	20.49	Dd	16.54
Raversijde	55		95-RAV-279	O/C	MT	L	All	F	Bp	20.01	Bd	23.97	Bd2	25.31	SD	11.78	GL	135.64	DD	10.53	Dp	20.47	Dd	15.79
Raversijde	55		95-RAV-279	O/C	MT	R	PM	FP?D	Bp	20.93	Bd		Bd2		SD	13.19	GL		DD		Dp	20.62	Dd	
Raversijde	55		95-RAV-279	O/C	MT	R	All	F	Bp	19.70	Bd	22.77	Bd2	22.44	SD	11.60	GL	136.18	DD	9.60	Dp	20.55	Dd	16.30
Raversijde	55		95-RAV-279	O/C	MT	R	PM	FP?D	Bp	18.60	Bd		Bd2		SD	10.15	GL		DD		Dp	18.15	Dd	
Raversijde	55		95-RAV-279	O/C	MT	R	All	F	Bp	19.47	Bd	21.74	Bd2	21.70	SD	11.04	GL	134.22	DD	9.24	Dp	18.84	Dd	
Raversijde	55		95-RAV-279	O/C	MT	?	UDE	UDE	Bp		Bd	22.83	Bd2	24.41	SD		GL		DD		Dp		Dd	14.86
Raversijde	51		95-RAV-95	O/C	MT	L	PM	FPUD	Bp	20.93	Bd		Bd2	25.98	SD	11.96	GL		DD	11.06	Dp	20.97	Dd	
Raversijde	64	96 RAV 150-195	96 RAV 160	O/C	MT	R	All	F	Bp	21.57	Bd	26.30	Bd2	25.41	SD	13.16	GL	149.33	DD	10.81	Dp	20.82	Dd	
Raversijde	64	96 RAV 150-195	96 RAV 166	O/C	MT	R	PM	FPUD	Bp	20.49	Bd		Bd2	23.24	SD	12.81	GL		DD	11.33	Dp	19.58	Dd	
Raversijde	64	96 RAV 150-195	96 RAV 172	O/C	MT	R	PM	FP?D	Bp	19.91	Bd		Bd2		SD		GL		DD		Dp	20.17	Dd	
Raversijde	64	96 RAV 150-195	96 RAV 172	O/C	MT	L	PM	FP?D	Bp	17.82	Bd		Bd2		SD	10.77	GL		DD	10.07	Dp	17.67	Dd	
Raversijde	64	96 RAV 150-195	96 RAV 186	O/C	MT	L	All	F	Bp		Bd		Bd2		SD		GL		DD		Dp		Dd	
Raversijde	64	96 RAV 150-195	96 RAV 189	O/C	MT	R	PM	FP?D	Bp	18.25	Bd		Bd2		SD	10.43	GL		DD		Dp	17.43	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 194	O/C	MT	L	PM	FP?D	Bp	21.50	Bd		Bd2		SD	12.95	GL		DD	11.74	Dp	20.47	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 194	O/C	MT	R	All	F	Bp	18.56	Bd	21.88	Bd2	21.91	SD	10.13	GL	119.91	DD	8.79	Dp	18.06	Dd	14.30
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	MT	L	PM	FPUD	Bp	20.91	Bd		Bd2	24.08	SD	13.44	GL		DD	11.37	Dp	19.65	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	MT	L	All	F	Bp	19.41	Bd	23.37	Bd2	22.00	SD	10.30	GL	125.58	DD	8.65	Dp	18.96	Dd	14.95
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	MT	R	PM	FP?D	Bp	21.92	Bd		Bd2		SD	12.33	GL		DD		Dp	21.32	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	MT	L	PM	FP?D	Bp	20.84	Bd		Bd2		SD		GL		DD		Dp	21.04	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	MT	R	PM	FP?D	Bp	20.99	Bd		Bd2		SD	12.20	GL		DD		Dp	20.28	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	MT	L	PM	FP?D	Bp	19.06	Bd		Bd2		SD		GL		DD		Dp	18.09	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	MT	R	PM	FP?D	Bp	20.71	Bd		Bd2		SD		GL		DD		Dp	19.82	Dd	
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	MT	L	All	F	Bp	19.92	Bd	24.29	Bd2	24.92	SD	12.99	GL	154.76	DD	11.10	Dp	20.07	Dd	16.67
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 21	O/C	MT	L	PM	FP?D	Bp	20.43	Bd		Bd2		SD	12.70	GL		DD		Dp	22.51	Dd	
Raversijde	79	96 RAV 208-218	96 RAV 210	O/C	MT	L	PM	FP?D	Bp	19.61	Bd		Bd2		SD		GL		DD		Dp	19.51	Dd	
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	MT	L	PM	FP?D	Bp	20.04	Bd		Bd2		SD		GL		DD		Dp	20.12	Dd	
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	MT	L	All	F	Bp	19.98	Bd		Bd2		SD	11.35	GL	134.69	DD	9.69	Dp	19.82	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 22	O/C	MT	R	PM	FP?D	Bp	19.41	Bd		Bd2		SD	10.74	GL		DD	9.51	Dp	19.73	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	MT	L	PM	FP?D	Bp	20.85	Bd		Bd2		SD	12.65	GL		DD		Dp	20.46	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	MT	R	PM	FP?D	Bp	18.25	Bd		Bd2		SD		GL		DD		Dp	18.40	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	MT	L	PM	FP?D	Bp	18.36	Bd		Bd2		SD	10.36	GL		DD	9.29	Dp	17.36	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	MT	L	PM	FP?D	Bp	21.18	Bd		Bd2		SD		GL		DD		Dp	21.86	Dd	
Raversijde	84	RAV bot 221-226	96 RAV	O/C	MT	L	PM	FP?D	Bp	21.09	Bd		Bd2		SD	11.75	GL		DD		Dp	21.20	Dd	
Raversijde	84	RAV bot 221-226	96 RAV	O/C	MT	R	PM	FP?D	Bp	20.82	Bd		Bd2		SD		GL		DD		Dp	20.12	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	MT	L	PM	FPUD	Bp	18.37	Bd		Bd2		SD	11.55	GL		DD	9.85	Dp	17.63	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	MT	L	PM	FPUD	Bp	17.78	Bd		Bd2		SD	9.58	GL		DD	8.59	Dp	17.04	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	MT	R	PM	FP?D	Bp	18.93	Bd		Bd2		SD	10.67	GL		DD		Dp	17.48	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	MT	R	PM	FPUD	Bp	18.90	Bd		Bd2		SD	12.00	GL		DD	10.07	Dp	18.40	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 223	O/C	MT	R	All	F	Bp	19.85	Bd	25.25	Bd2	24.14	SD	12.15	GL	146.07	DD	10.10	Dp	19.43	Dd	15.97
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	MT	R	PM	FP?D	Bp	21.15	Bd		Bd2		SD		GL		DD		Dp	20.43	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	MT	R	PM	FPUD	Bp	20.20	Bd		Bd2	23.62	SD	13.34	GL		DD	10.86	Dp	20.11	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	MT	R	All	F	Bp	18.95	Bd	21.58	Bd2	21.07	SD	10.20	GL	126.01	DD	9.05	Dp	17.72	Dd	14.57
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	MT	L	PM	FP?D	Bp	19.56	Bd		Bd2		SD		GL		DD		Dp	20.06	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	MT	L	PM	FP?D	Bp	21.68	Bd		Bd2		SD	13.07	GL		DD		Dp		Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	MT	L	All	F	Bp	17.81	Bd	22.19	Bd2	21.60	SD	9.55	GL	122.77	DD	18.04	Dp	18.04	Dd	13.92
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	MT	R	PM	FP?D	Bp	20.22	Bd		Bd2		SD	12.41	GL		DD	21.31	Dp	21.31	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	MT	R	All	F	Bp	17.33	Bd	21.38	Bd2	21.44	SD	9.71	GL	119.37	DD	18.11	Dp	18.11	Dd	14.17
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	MT	L	PM	FPUD	Bp	21.20	Bd		Bd2	26.77	SD	12.53	GL		DD	10.44	Dp	19.47	Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	MT	R	All	F	Bp	20.35	Bd	25.37	Bd2	25.26	SD	13.26	GL	148.50	DD	10.98	Dp	21.13	Dd	15.89
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	MT	R	All	F	Bp	18.37	Bd	21.89	Bd2	21.55	SD	11.55	GL	129.35	DD	9.17	Dp	17.96	Dd	14.23
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	MT	?	MD	FD?P	Bp		Bd	21.86	Bd2	22.06	SD	10.62	GL		DD	9.86	Dp		Dd	14.23
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	MT	R	PM	FPUD	Bp	17.47	Bd		Bd2	17.87	SD	9.12	GL		DD	7.99	Dp		Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	MT	R	PM	FPUD	Bp	20.69	Bd		Bd2	23.19	SD	12.00	GL		DD	10.08	Dp	20.50	Dd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	MT	R	PM	FPUD	Bp	20.76	Bd		Bd2	22.52	SD	11.58	GL		DD	10.21	Dp	20.47	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 239	O/C	MT	L	PM	FP?D	Bp	20.11	Bd		Bd2		SD	12.46	GL		DD		Dp	20.34	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	MT	R	All	F	Bp	18.48	Bd		Bd2		SD	11.16	GL	132.27	DD	9.17	Dp	18.97	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 247	O/C	MT	R	PM	FP?D	Bp	20.89	Bd		Bd2		SD	12.21	GL		DD	11.17	Dp	21.34	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 248	O/C	MT	L	PM	FP?D	Bp	19.78	Bd		Bd2		SD	11.34	GL		DD		Dp	19.86	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 248	O/C	MT	R	PM	FP?D	Bp	19.84	Bd		Bd2		SD		GL		DD		Dp	20.55	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 250	O/C	MT	L	PM	FP?D	Bp	20.89	Bd		Bd 2		SD	12.38	GL		DD		Dp	20.15	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 250	O/C	MT	L	PM	FP?D	Bp	19.22	Bd		Bd 2		SD		GL		DD		Dp	19.44	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 252	O/C	MT	R	PM	FP?D	Bp	18.82	Bd		Bd2		SD	10.39	GL		DD	8.73	Dp	19.35	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 262	O/C	MT	R	All	F	Bp	19.28	Bd	22.65	Bd 2	21.64	SD	10.53	GL	116.62	DD	8.53	Dp	17.17	Dd	14.75
Raversijde	80	96 RAV 264-286	96 RAV 264	O/C	MT	L	All	F	Bp	20.67	Bd	24.02	Bd2	23.43	SD	12.59	GL	139.93	DD	9.92	Dp	20.01	Dd	15.97
Raversijde	80	96 RAV 264-286	96 RAV 264	O/C	MT	R	All	F	Bp	19.66	Bd	22.90	Bd2	21.61	SD	11.07	GL	138.43	DD	9.11	Dp	19.35	Dd	16.03
Raversijde	80	96 RAV 264-286	96 RAV 266	O/C	MT	R	PM	FPUD	Bp	20.58	Bd		Bd2	22.09	SD	12.17	GL		DD	10.09	Dp	19.22	Dd	
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	MT	R	All	F	Bp	17.30	Bd	20.81	Bd2	21.31	SD	10.50	GL	124.64	DD	9.03	Dp	17.41	Dd	14.46
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	MT	R	PM	FP?D	Bp	18.63	Bd		Bd2		SD	11.01	GL		DD		Dp	18.67	Dd	
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	MT	L	All	F	Bp	21.22	Bd	25.44	Bd2	24.81	SD	12.62	GL	157.46	DD	10.81	Dp	21.76	Dd	16.48
Raversijde	77	96 RAV 288-314	96 RAV 288	O/C	MT	L	PM	FPUD	Bp	18.88	Bd		Bd2	23.19	SD	11.75	GL		DD	10.26	Dp	19.57	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 306	O/C	MT	L	PM	FPUD	Bp	20.30	Bd		Bd2		SD	12.87	GL		DD	10.89	Dp	20.63	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 306	O/C	MT	R	All	F	Bp	19.31	Bd	23.48	Bd2	23.25	SD	12.69	GL	142.88	DD	9.87	Dp	20.00	Dd	16.17
Raversijde	77	96 RAV 288-314	96 RAV 309	O/C	MT	R	All	F	Bp	19.40	Bd		Bd2		SD	11.18	GL	135.89	DD	9.55	Dp	20.66	Dd	15.59
Raversijde	77	96 RAV 288-314	96 RAV 309	O/C	MT	L	PM	FP?D	Bp	19.28	Bd		Bd2		SD	10.40	GL		DD		Dp	19.63	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	MT	R	All	FPFingD	Bp	20.47	Bd	25.18	Bd2	24.50	SD	12.83	GL	143.91	DD	10.30	Dp	21.30	Dd	16.17
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	MT	R	All	F	Bp	19.26	Bd	23.24	Bd2	21.84	SD	10.78	GL	141.62	DD	9.43	Dp	18.82	Dd	15.32
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 325	O/C	MT	L	PM	FPUD	Bp	21.00	Bd		Bd2	22.39	SD	12.34	GL		DD	10.90	Dp	21.45	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 325	O/C	MT	?	MD	FD?P	Bp		Bd	23.88	Bd2	22.44	SD	11.90	GL		DD	9.45	Dp		Dd	16.50
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 328	O/C	MT	R	PM	FPUD	Bp	21.66	Bd		Bd2	23.48	SD	12.71	GL		DD	11.26	Dp	20.78	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	MT	L	PM	FP?D	Bp	21.46	Bd		Bd2		SD	11.92	GL		DD		Dp	21.36	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	MT	L	All	F	Bp	18.70	Bd	22.76	Bd2	20.83	SD	10.69	GL	121.07	DD	9.34	Dp	18.25	Dd	14.38
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	MT	L	All	FPFingD	Bp	19.01	Bd		Bd2		SD	11.38	GL	135.22	DD	9.14	Dp	18.92	Dd	14.93
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 344	O/C	MT	L	PM	FP?D	Bp	18.41	Bd		Bd2		SD	9.98	GL		DD		Dp	18.08	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 348	O/C	MT	L	PM	FP?D	Bp	21.21	Bd		Bd2		SD	99.00	GL		DD		Dp		Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 348	O/C	MT	R	PM	FPUD	Bp	20.75	Bd		Bd2	22.76	SD	12.20	GL		DD	11.35	Dp	20.88	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 348	O/C	MT	R	All	FPFingD	Bp	20.75	Bd	24.57	Bd2	25.46	SD	13.25	GL	150.31	DD	9.82	Dp	20.67	Dd	16.61
Raversijde	83	RAV bot 338-374	96 RAV 354	O/C	MT	R	All	F	Bp	19.49	Bd	23.00	Bd2	23.47	SD	12.24	GL	138.37	DD	10.34	Dp	19.37	Dd	15.58
Raversijde	83	RAV bot 338-374	96 RAV 354	O/C	MT	R	PM	FPUD	Bp		Bd		Bd2	22.84	SD	10.96	GL		DD	9.50	Dp		Dd	
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	MT	R	PM	FPUD	Bp	22.74	Bd		Bd2	24.72	SD	12.58	GL		DD	10.86	Dp	22.99	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	MT	L	PM	FPUD	Bp	20.78	Bd		Bd2	23.70	SD	13.15	GL		DD	10.65	Dp	20.02	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	MT	L	PM	FP?D	Bp	19.64	Bd		Bd2		SD		GL		DD		Dp	21.33	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 374	O/C	MT	L	PM	FP?D	Bp	18.94	Bd		Bd2		SD	10.30	GL		DD		Dp	18.92	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 54	O/C	MT	R	All	F	Bp	22.52	Bd	26.46	Bd2	25.96	SD	14.00	GL	152.02	DD	11.42	Dp	21.99	Dd	18.00
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 54	O/C	MT	L	All	F	Bp	21.87	Bd	24.91	Bd2	24.58	SD	13.01	GL	144.38	DD	10.25	Dp	21.46	Dd	17.08
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 54	O/C	MT	L	PM	FP?D	Bp	22.80	Bd		Bd2		SD	12.43	GL		DD		Dp	22.17	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	MT	L	PM	FP?D	Bp	19.58	Bd		Bd2		SD	11.22	GL		DD		Dp	19.48	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	MT	R	PM	FP?D	Bp	18.11	Bd		Bd2		SD	11.73	GL		DD		Dp	18.31	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	MT	R	PM	FP?D	Bp	21.55	Bd		Bd2		SD		GL		DD		Dp	20.99	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	MT	L	All	F	Bp	19.63	Bd	22.14	Bd2	22.22	SD	11.45	GL	142.23	DD	8.29	Dp	21.13	Dd	15.06
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	MT	L	PM	FP?D	Bp	18.54	Bd		Bd2		SD	11.32	GL		DD	8.77	Dp	17.35	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	MT	R	PM	FP?D	Bp	19.94	Bd	99.00	Bd2		SD	10.76	GL		DD	10.14	Dp	20.61	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	MT	R	PM	FP?D	Bp	19.58	Bd		Bd2		SD	12.65	GL		DD		Dp	19.51	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 64	O/C	MT	L	All	F	Bp	20.72	Bd	24.02	Bd2	23.56	SD	12.03	GL	141.62	DD	10.52	DP	20.78	Dd	15.52
Raversijde	70	RAV BOT 61-69	96 RAV 66	O/C	MT	L	All	F	Bp	18.35	Bd	20.95	Bd2	20.70	SD	11.17	GL	136.93	DD	8.38	DP	17.98	Dd	14.17
Raversijde	89	RAV BOT 1996 772-780	96 RAV 722	O/C	MT	R	PM	FP?D	Bp	19.61	Bd		Bd2		SD	11.99	GL		DD		Dp	19.43	Dd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 739	O/C	MT	R	PM	FP?D	Bp	17.57	Bd		Bd2		SD	11.11	GL		DD		Dp	18.36	Dd	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 751	O/C	MT	L	All	F	Bp	20.75	Bd	23.68	Bd2	23.27	SD	11.80	GL	142.44	DD	10.23	Dp	20.44	Dd	15.98
Raversijde	89	RAV BOT 1996 772-780	96 RAV 751	O/C	MT	R	All	F	Bp	21.33	Bd	24.01	Bd2	23.05	SD	11.93	GL	135.75	DD	10.06	Dp	20.31	Dd	16.55
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 8	O/C	MT	R	PM	FP?D	Bp	20.16	Bd		Bd2		SD	12.64	GL		DD		Dp	20.96	Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.2	O/C	MT	R	PM	FP?D	Bp	21.14	Bd		Bd2		SD		GL		DD		Dp	21.09	Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.7	O/C	MT	R	PM	FPUD	Bp	18.84	Bd		Bd2	20.67	SD	10.61	GL		DD	9.30	Dp	18.27	Dd	
Raversijde	53		96-RAV-127	O/C	MT	L	PM	FP?D	Bp	19.64	Bd		Bd2		SD	11.57	GL		DD		Dp	19.86	Dd	
Raversijde	53		96-RAV-127	O/C	MT	R	PM	FP?D	Bp	18.45	Bd		Bd2		SD	10.64	GL		DD		Dp	18.71	Dd	
Raversijde	53		96-RAV-128	O/C	MT	L	PM	FP?D	Bp	19.94	Bd		Bd2		SD	12.06	GL		DD	10.14	Dp	18.65	Dd	
Raversijde	53		96-RAV-128	O/C	MT	R	PM	FP?D	Bp	21.14	Bd		Bd2		SD	12.40	GL		DD		Dp		Dd	
Raversijde	53		96-RAV-128	O/C	MT	R	All	F	Bp	18.10	Bd	21.98	Bd2	21.48	SD	11.40	GL	122.77	DD	8.86	Dp	18.34	Dd	14.15
Raversijde	53		96-RAV-128	O/C	MT	R	PM	FP?D	Bp	19.19	Bd		Bd2		SD	11.50	GL		DD		Dp	20.00	Dd	
Raversijde	53		96-RAV-141	O/C	MT	L	All	F	Bp	19.47	Bd	22.79	Bd2	23.47	SD	11.70	GL	133.66	DD	9.54	Dp	19.98	Dd	15.74

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?																
Raversijde	53		96-RAV-141	O/C	MT	R	PM	FP?D	Bp	19.63	Bd		Bd2		SD	11.92	GL		DD		Dp	20.13	Dd	
Raversijde	53		96-RAV-146	O/C	MT	L	All	F	Bp	19.94	Bd	22.44	Bd2	22.29	SD	10.88	GL	135.79	DD	9.28	Dp	19.63	Dd	15.68
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	MT	L	PM	FP?D	Bp	20.30	Bd		Bd2		SD	12.28	GL		DD		Dp	21.08	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	MT	L	All	F	Bp	20.51	Bd	23.03	Bd2	23.54	SD	12.11	GL	140.02	DD	9.57	Dp	19.80	Dd	15.94
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	MT	L	PM	FPUD	Bp	18.69	Bd		Bd2	21.00	SD	10.97	GL		DD	10.12	Dp	18.75	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	MT	L	PM	FP?D	Bp	18.50	Bd		Bd2		SD	11.39	GL		DD	9.12	Dp	18.94	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	MT	R	PM	FP?D	Bp	18.47	Bd		Bd2		SD		GL		DD		Dp	18.65	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-37	O/C	MT	L	PM	FPUD	Bp	20.41	Bd		Bd2		SD	12.80	GL		DD	11.27	Dp	20.27	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-37	O/C	MT	R	PM	FPUD	Bp	19.80	Bd		Bd2	22.58	SD	11.02	GL		DD	10.34	Dp	20.17	Dd	
Raversijde	50		96-RAV-72	O/C	MT	L	PM	FPUD	Bp	20.22	Bd		Bd2	22.48	SD	11.55	GL		DD	10.22	Dp	20.40	Dd	
Raversijde	50		96-RAV-78	O/C	MT	L	PM	FP?D	Bp	19.06	Bd		Bd2		SD	11.65	GL		DD	10.68	Dp	19.54	Dd	
Raversijde	50		96-RAV-88	O/C	MT	R	PM	FP?D	Bp	20.86	Bd		Bd2		SD	12.23	GL		DD		Dp	20.64	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	MT	L	A	F	Bp	19.26	Bd	23.69	Bd2	23.78	SD	12.87	GL	144.47	DD	11.16	Dp	19.37	Dd	15.65
Raversijde	50		96-RAV-92	O/C	MT	R	PM	FPUD	Bp	21.43	Bd		Bd2	24.07	SD	12.56	GL		DD	10.44	Dp	20.07	Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.9	O/C	MT	L	PM	FP?D	Bp	20.92	Bd		Bd2		SD		GL		DD		Dp	20.74	Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.3	O/C	MT	L	All	F	Bp	19.15	Bd	22.66	Bd2	21.52	SD	11.11	GL	141.12	DD	10.03	Dp	18.10	Dd	15.31
Raversijde	75	97 RAV 150-189	97 RAV 151	O/C	MT	R	All	F	Bp	17.93	Bd	21.81	Bd2	20.54	SDO	9.84	GL	130.32	DD	8.86	Dp	18.40	Dd	14.91
Raversijde	75	97 RAV 150-189	97 RAV 170	O/C	MT	L	All	FPFingD	Bp	20.45	Bd	24.75	Bd2	22.91	SD	11.62	GL	140.86	DD	10.37	Dp	20.26	Dd	17.06
Raversijde	75	97 RAV 150-189	97 RAV 176	O/C	MT	L	PM	FP?D	Bp	19.26	Bd		Bd2		SD	12.13	GL		DD	10.06	Dp	19.47	Dd	
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	MT	L	PM	FP?D	Bp	18.34	Bd		Bd2		SD		GL		DD		Dp	18.98	Dd	
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	MT	R	PM	FP?D	Bp	18.97	Bd		Bd2		SD		GL		DD		Dp	18.59	Dd	
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	MT	R	PM	FPUD	Bp	20.61	Bd		Bd2	23.41	SD	12.14	GL		DD	10.30	Dp	20.98	Dd	
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	MT	R	PM	FP?D	Bp	19.74	Bd		Bd2		SD		GL		DD		Dp		Dd	
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	MT	R	PM	FP?D	Bp	19.65	Bd		Bd2		SD		GL		DD		Dp		Dd	
Raversijde	76	RAV 97 191-209	97 RAV 194	O/C	MT	R	PM	FP?D	Bp	22.09	Bd		Bd2		SD	12.81	GL		DD		Dp	22.30	Dd	
Raversijde	76	RAV 97 191-209	97 RAV 202 3 Zakjes	O/C	MT	L	PM	FP?D	Bp	19.58	Bd		Bd2		SD	11.60	GL		DD		Dp	19.04	Dd	
Raversijde	76	RAV 97 191-209	97 RAV 206	O/C	MT	R	PM	FP?D	Bp	19.22	Bd		Bd2		SD	10.41	GL		DD	18.72	Dp	17.75	Dd	
Raversijde	76	RAV 97 191-209	97 RAV 206	O/C	MT	L	All	F	Bp	19.27	Bd	22.52	Bd2	21.44	SD		GL	135.59	DD	9.22	Dp	18.23	Dd	15.58
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	O/C	MT	L	PM	FPUD	Bp	19.95	Bd		Bd2	21.92	SD	11.48	GL		DD	9.82	Dp	19.71	Dd	
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	O/C	MT	L	All	F	Bp	21.84	Bd	25.61	Bd2	23.51	SD	12.29	GL	144.98	DD	10.22	Dp	21.98	Dd	17.15
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	MT	R	All	F	Bp	18.79	Bd	22.28	Bd2	20.80	SD	10.28	GL	139.19	DD	8.64	Dp	18.10	Dd	15.25
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	MT	L	PM	FP?D	Bp	20.36	Bd		Bd2		SD	11.40	GL		DD		Dp	19.74	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 316	O/C	MT	L	PM	FP?D	Bp	19.01	Bd		Bd2		SD		GL		DD		Dp	18.78	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 318	O/C	MT	R	PM	FPUD	Bp	20.42	Bd		Bd2		SD	12.06	GL		DD	11.18	Dp	21.20	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 318	O/C	MT	L	All	F	Bp	19.01	Bd	23.01	Bd2	22.42	SD	11.79	GL	141.16	DD	9.69	Dp	19.00	Dd	14.96
Raversijde	81	RAV 97 306-339	97 RAV 318	O/C	MT	R	PM	FPUD	Bp	18.23	Bd		Bd2		SD	9.49	GL		DD	8.72	Dp	18.23	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 319	O/C	MT	L	All	F	Bp	20.32	Bd	24.01	Bd2	22.31	SD	11.44	GL		DD	10.53	Dp	19.75	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 328	O/C	MT	L	All	F	Bp	18.44	Bd	22.81	Bd2	22.04	SD	10.76	GL	116.98	DD	9.03	Dp	18.33	Dd	14.47
Raversijde	81	RAV 97 306-339	97 RAV 331	O/C	MT	L	PM	FPUD	Bp	20.01	Bd		Bd2	22.02	SD	12.46	GL		DD	10.29	Dp	20.77	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 332	O/C	MT	R	PM	FP?D	Bp	20.55	Bd		Bd2		SD		GL		DD		Dp	20.04	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 332	O/C	MT	L	PM	FPUD	Bp	20.60	Bd		Bd2	23.51	SD	11.96	GL		DD	10.01	Dp	20.76	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 334	O/C	MT	L	PM	FP?D	Bp	205.00	Bd		Bd2		SD	12.43	GL		DD		Dp	20.92	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 355	O/C	MT	L	PM	FP?D	Bp	19.85	Bd		Bd 2		SD	11.51	GL		DD	9.83	Dp	18.84	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	MT	R	All	F	Bp	17.92	Bd	21.73	Bd2	20.48	SD	9.71	GL	131.69	DD	8.59	Dp	18.70	Dd	14.51
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	MT	R	All	F	Bp	19.01	Bd	22.81	Bd2	22.18	SD	10.15	GL	119.77	DD	9.28	Dp	19.37	Dd	14.51
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	MT	R	All	F	Bp	19.79	Bd		Bd2		SD	11.49	GL	136.06	DD		Dp	20.45	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 359	O/C	MT	R	PM	FPUD	Bp	19.60	Bd		Bd2	22.12	SD	10.47	GL		DD	10.13	Dp	21.08	Dd	
Raversijde	59		97 RAV 361	O/C	MT	L	PM	FP?D	Bp	20.29	Bd		Bd2		SD		GL		DD		Dp	19.17	Dd	
Raversijde	59		97 RAV 361	O/C	MT	L	All	FPFingD	Bp	19.75	Bd		Bd2	23.10	SD	11.50	GL	124.54	DD	9.84	Dp	20.00	Dd	14.77
Raversijde	59		97 RAV 361	O/C	MT	L	PM	FPUD	Bp	19.96	Bd		Bd2	22.46	SD	11.78	GL		DD	9.95	Dp	20.39	Dd	9.00
Raversijde	59		97 RAV 361	O/C	MT	L	All	F	Bp	20.85	Bd	25.58	Bd2	23.72	SD	11.40	GL	140.13	DD	10.79	Dp	19.92	Dd	16.87
Raversijde	59		97 RAV 361	O/C	MT	L	All	F	Bp	18.47	Bd	22.57	Bd2	21.74	SD	11.20	GL	130.39	DD	9.66	Dp	18.44	Dd	14.61
Raversijde	59		97 RAV 361	O/C	MT	L	PM	FP?D	Bp	19.16	Bd		Bd2		SD	10.92	GL		DD	9.61	Dp	18.75	Dd	
Raversijde	59		97 RAV 361	O/C	MT	L	All	F	Bp	19.59	Bd	23.50	Bd2	23.35	SD	12.46	GL	137.46	DD	9.69	Dp	19.96	Dd	16.06
Raversijde	59		97 RAV 361	O/C	MT	L	All	F	Bp	19.03	Bd	23.20	Bd2	23.24	SD	12.21	GL	135.05	DD	10.23	Dp	19.14	Dd	15.77
Raversijde	59		97 RAV 361	O/C	MT	R	PM	FP?D	Bp	19.80	Bd		Bd2		SD		GL		DD		Dp	18.52	Dd	
Raversijde	59		97 RAV 361	O/C	MT	R	PM	FP?D	Bp	20.47	Bd		Bd2		SD	11.28	GL		DD		Dp	19.74	Dd	
Raversijde	59		97 RAV 361	O/C	MT	R	All	F	Bp	19.05	Bd	22.86	Bd2	22.83	SD	11.62	GL	134.91	DD	10.04	Dp	18.99	Dd	14.88
Raversijde	59		97 RAV 361	O/C	MT	R	PM	FPUD	Bp	19.64	Bd		Bd2		SD		GL		DD		Dp	19.10	Dd	
Raversijde	59		97 RAV 361	O/C	MT	R	All	F	Bp	20.80	Bd	24.63	Bd2	23.28	SD	11.66	GL	139.03	DD	10.20	Dp	19.38	Dd	16.86
Raversijde	59		97 RAV 361	O/C	MT	R	PM	FPUD	Bp	21.28	Bd		Bd2		SD	13.16	GL		DD	10.63	Dp	21.17	Dd	
Raversijde	59		97 RAV 361	O/C	MT	R	All	F	Bp	18.45	Bd	23.06	Bd2	23.19	SD	11.37	GL	121.72	DD	9.57	Dp	17.96	Dd	13.88
Raversijde	59		97 RAV 361	O/C	MT	R	All	F	Bp	19.75	Bd	22.67	Bd2	22.77	SD	11.49	GL	133.46	DD	8.66	Dp	18.96	Dd	16.36
Raversijde	59		97 RAV 361	O/C	MT	R	All	F	Bp	19.36	Bd	22.23	Bd2	21.90	SD	11.05	GL	128.31	DD	9.57	Dp	17.94	Dd	15.92
Raversijde	59		97 RAV 361	O/C	MT	R	All	F	Bp	17.21	Bd	20.64	Bd2	19.62	SD	10.62	GL	127.97	DD	8.24	Dp	17.46	Dd	14.45
Raversijde	60		97 RAV 361-Separate Bag inside	O/C	MT	L	All	F	Bp	18.51	Bd	22.64	Bd2	22.64	SD	23.65	GL	119.53	DD	8.93	Dp	17.35	Dd	13.94
Raversijde	60		97 RAV 361-Separate Bag inside	O/C	MT	R	All	F	Bp	18.75	Bd	22.68	Bd2	22.68	SD	21.37	GL	139.17	DD	9.71	Dp	18.85	Dd	15.62
Raversijde	88	RAV BOT 350-369	97 RAV 369	O/C	MT	L	All	F	Bp	18.67	Bd	22.66	Bd2	22.41	SD	10.71	GL	126.30	DD	8.82	Dp	18.20	Dd	14.82
Raversijde	88	RAV BOT 350-369	97 RAV 369	O/C	MT	R	PM	FP?D	Bp	19.91	Bd		Bd2		SD	10.06	GL		DD		Dp	19.65	Dd	
Raversijde	61		97 RAV 477	O/C	MT	L	All	F	Bp	19.85	Bd		Bd2		SD	11.70	GL		DD	10.50	Dp	22.32	Dd	
Raversijde	61		97 RAV 477	O/C	MT	L	PM	FP?D	Bp	17.86	Bd		Bd2		SD		GL		DD		Dp	17.36	Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?																		
Raversijde	61		97 RAV 477	O/C	MT	L	PM	FP?D	Bp	20.91	Bd		Bd2		SD	11.51	GL		DD	10.12	Dp	20.54	Dd			
Raversijde	61		97 RAV 477	O/C	MT	R	All	F	Bp	20.93	Bd	25.83	Bd2	25.40	SD	12.66	GL	150.02	DD	10.33	Dp	20.78	Dd	17.64		
Raversijde	61		97 RAV 477	O/C	MT	R	All	F	Bp	21.63	Bd	26.15	Bd2	24.97	SD	13.15	GL	151.59	DD	10.09	Dp	20.34	Dd	16.66		
Raversijde	61		97 RAV 477	O/C	MT	R	All	F	Bp	17.95	Bd	21.95	Bd2	20.77	SD	10.84	GL	126.26	DD	9.61	Dp	17.99	Dd	14.28		
Raversijde	61		97 RAV 477	O/C	MT	R	PM	FP?D	Bp	17.29	Bd		Bd2		SD	9.09	GL		DD		Dp	17.73	Dd			
Raversijde	61		97 RAV 477	O/C	MT	R	PM	FP?D	Bp	19.48	Bd		Bd2		SD		GL		DD		Dp	18.68	Dd			
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	MT	L	All	F	Bp	20.33	Bd	23.69	Bd2	23.57	SD	11.73	GL	139.77	DD	10.27	DP	19.41	Dd	16.30		
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	MT	L	All	F	Bp	18.06	Bd	21.42	Bd2	20.56	SD	10.56	GL	121.91	DD	8.45	DP	17.81	Dd	13.66		
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	MT	R	PM	FP?D	Bp	20.83	Bd		Bd2		SD	11.71	GL		DD		DP	20.05	Dd			
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	MT	R	PM	FP?D	Bp	19.83	Bd		Bd2	22.91	SD	11.46	GL		DD	10.10	DP		Dd			
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	MT	L	All	F	Bp	19.81	Bd	22.27	Bd2	22.20	SD	10.92	GL	136.98	DD	9.04	DP	19.37	Dd	16.64		
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	MT	R	All	F	Bp	18.21	Bd	21.83.	Bd2	20.32	SD	10.47	GL	129.91	DD	9.25	DP	17.82	Dd	14.97		
Raversijde	71	RAV BOT 61-98	97 RAV 65	O/C	MT	R	All	F	Bp	18.54	Bd	22.29	Bd2	21.02	SD	10.51	GL	127.71	DD	9.48	DP	18.69	Dd	14.52		
Raversijde	90	RAV 686-781	97 RAV 708	O/C	MT	L	All	F	Bp	19.93	Bd	23.97	Bd2	22.88	SD	10.91	GL	141.26	DD	10.07	Dp	20.11	Dd	16.07		
Raversijde	90	RAV 686-781	97 RAV 712 VIS HU + Zond HU 0, 5 mm UIT	O/C	MT	L	All	F	Bp	18.39	Bd	21.56	Bd	21.61	Bd2	21.61	SD	11.38	GL	135.32	DD	9.38	Dp	18.43	Dd	15.51
Raversijde	90	RAV 686-781	97 RAV 712 VIS HU + Zond HU 0, 5 mm UIT	O/C	MT	L	PM	FPUD	Bp	20.64	Bd		Bd		Bd2		SD		GL		DD		Dp	21.68	Dd	
Raversijde	90	RAV 686-781	97 RAV 725	O/C	MT	L	PM	FPUD	Bp	20.64	Bd		Bd2	24.54	SD	11.52	GL		DD	10.39	Dp	20.80	Dd			
Raversijde	90	RAV 686-781	97 RAV 752	O/C	MT	R	All	F	Bp	20.60	Bd		Bd2		SD		GL	145.42	DD		Dp	20.57	Dd			
Raversijde	71	RAV BOT 61-98	97 RAV 97	O/C	MT	L	PM	PFUD	Bp	21.16	Bd		Bd2		SD		GL		DD		DP	21.00	Dd			
Raversijde	90	RAV 686-781	97 RAV712 VIS HU + Zond HU 0, 5 mm UIT	O/C	MT	L	All	F	Bp	19.89	Bd	23.18	Bd	22.28	Bd2	22.28	SD	10.40	GL	124.84	DD	9.36	Dp	19.76	Dd	15.65
Raversijde	54		97-RAV-117	O/C	MT	L	PM	FP?D	Bp	19.47	Bd		Bd2		SD		GL		DD		Dp	20.16	Dd			
Raversijde	54		97-RAV-117	O/C	MT	R	All	F	Bp	17.70	Bd		Bd2		SD	11.46	GL		DD		Dp	19.02	Dd			
Raversijde	54		97-RAV-119	O/C	MT	L	PM	FPUD	Bp	21.63	Bd		Bd2	23.30	SD	12.62	GL		DD	10.96	Dp	21.65	Dd			
Raversijde	54		97-RAV-132	O/C	MT	L	PM	FPUD	Bp	18.74	Bd		Bd2	20.11	SD	11.07	GL		DD	9.03	Dp	19.01	Dd			
Raversijde	54		97-RAV-148	O/C	MT	L	All	F	Bp	20.09	Bd	23.80	Bd2	23.09	SD	11.16	GL	127.58	DD	9.27	Dp	19.20	Dd	15.89		
Raversijde	57		97-RAV-298	O/C	MT	L	PM	F	Bp	19.58	Bd	23.73	Bd2	23.64	SD	11.29	GL	116.13	DD	10.01	Dp	19.60	Dd	13.65		
Raversijde	57		97-RAV-298	O/C	MT	L	All	FPUD	Bp	19.82	Bd		Bd2		SD	10.57	GL		DD		Dp	20.61	Dd			
Raversijde	57		97-RAV-298	O/C	MT	L	PM	FPUD	Bp	19.95	Bd		Bd2	22.48	SD	11.25	GL		DD	10.30	Dp	20.29	Dd			
Raversijde	57		97-RAV-298	O/C	MT	L	PM	FPUD	Bp	21.18	Bd		Bd2	22.14	SD	12.54	GL		DD	10.49	Dp	20.09	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	All	F	Bp	19.63	Bd	22.41	Bd2	21.74	SD	11.74	GL	137.71	DD	10.26	Dp	19.06	Dd	15.50		
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FP?D	Bp	19.71	Bd		Bd2		SD	11.03	GL		DD		Dp	20.26	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	All	F	Bp	18.35	Bd		Bd2		SD		GL		DD	9.57	Dp	19.53	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	All	F	Bp	18.75	Bd	21.58	Bd2	22.58	SD	11.86	GL	133.43	DD	10.16	Dp	18.48	Dd	15.22		
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FPUD	Bp	19.68	Bd		Bd2	23.16	SD	12.01	GL		DD	11.27	Dp	20.05	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FPUD	Bp	20.07	Bd		Bd2		SD		GL		DD		Dp	20.59	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FP?D	Bp	18.66	Bd		Bd2		SD	11.56	GL		DD		Dp	18.76	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	All	FPFingD	Bp	19.30	Bd	23.28	Bd2	23.66	SD	11.65	GL	133.02	DD	10.35	Dp	19.73	Dd	13.97		
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FP?D	Bp	19.06	Bd		Bd2		SD	11.34	GL		DD		Dp	18.61	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FP?D	Bp	18.12	Bd		Bd2		SD	10.93	GL		DD		Dp	17.98	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FP?D	Bp	20.10	Bd		Bd2		SD		GL		DD		Dp	20.38	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FPUD	Bp	18.46	Bd		Bd2	19.85	SD	8.95	GL		DD	8.47	Dp	17.82	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FPUD	Bp	20.95	Bd		Bd2	21.59	SD	12.64	GL		DD	10.83	Dp	21.91	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FPUD	Bp	20.16	Bd		Bd2	22.58	SD	11.83	GL		DD	10.01	Dp	20.43	Dd			
Raversijde	57		97-RAV-298	O/C	MT	R	All	F	Bp	17.14	Bd	19.56	Bd2	19.52	SD	10.57	GL	123.30	DD	8.50	Dp	17.55	Dd	13.44		
Raversijde	57		97-RAV-298	O/C	MT	R	PM	FPUD	Bp	19.90	Bd		Bd2		SD		GL		DD		Dp	21.39	Dd			
Raversijde	58		97-RAV-361	O/C	MT	L	PM	FP?D	Bp	22.31	Bd		Bd2		SD		GL		DD		Dp	20.94	Dd			
Raversijde	58		97-RAV-361	O/C	MT	L	All	F	Bp	19.25	Bd	22.25	Bd2	22.82	SD	11.55	GL	133.83	DD	8.83	Dp	18.99	Dd	16.12		
Raversijde	58		97-RAV-361	O/C	MT	L	All	F	Bp	17.23	Bd	21.10	Bd2	19.40	SD	11.00	GL	122.61	DD	8.52	Dp	17.44	Dd	14.43		
Raversijde	58		97-RAV-361	O/C	MT	L	PM	FPUD	Bp	19.32	Bd		Bd2		SD		GL		DD		Dp	19.47	Dd			
Raversijde	58		97-RAV-361	O/C	MT	L	All	F	Bp	20.16	Bd		Bd2	21.75	SD	11.41	GL	141.81	DD	10.27	Dp	19.76	Dd			
Raversijde	58		97-RAV-361	O/C	MT	L	PM	FPUD	Bp	19.63	Bd		Bd2	21.60	SD	10.33	GL		DD	10.09	Dp	18.34	Dd			
Raversijde	58		97-RAV-361	O/C	MT	L	All	F	Bp	18.72	Bd		Bd2		SD		GL	132.87	DD		Dp	18.76	Dd			
Raversijde	58		97-RAV-361	O/C	MT	L	All	F	Bp	19.24	Bd		Bd2	22.34	SD	10.76	GL	134.59	DD	9.29	Dp	19.21	Dd	14.29		
Raversijde	58		97-RAV-361	O/C	MT	R	PM	FPUD	Bp	20.05	Bd		Bd2	22.85	SD	10.47	GL		DD	10.05	Dp	20.06	Dd			
Raversijde	58		97-RAV-361	O/C	MT	R	PM	FPUD	Bp	19.78	Bd		Bd2	22.02	SD	11.96	GL		DD	11.26	Dp	18.57	Dd			
Raversijde	58		97-RAV-361	O/C	MT	R	PM	FP?D	Bp	21.26	Bd		Bd2		SD		GL		DD		Dp	19.96	Dd			
Raversijde	58		97-RAV-361	O/C	MT	R	PM	FPUD	Bp	18.16	Bd		Bd2		SD		GL		DD		Dp	18.22	Dd			
Raversijde	58		97-RAV-361	O/C	MT	R	PM	FP?D	Bp	19.09	Bd		Bd2		SD	10.58	GL		DD		Dp	18.86	Dd			
Raversijde	58		97-RAV-361	O/C	MT	R	All	F	Bp	18.96	Bd		Bd2		SD		GL	133.61	DD	11.16	Dp	20.05	Dd	15.62		
Raversijde	58		97-RAV-361	O/C	MT	R	PM	FP?D	Bp	20.44	Bd		Bd2		SD		GL		DD		Dp	19.95	Dd			
Raversijde	58		97-RAV-361	O/C	MT	R	PM	FP?D	Bp	19.48	Bd		Bd2		SD	11.95	GL		DD		Dp	19.82	Dd			
Raversijde	58		97-RAV-361	O/C	MT	R	PM	FP?D	Bp	18.47	Bd		Bd2		SD		GL		DD		Dp	18.20	Dd			
Raversijde	58		97-RAV-361	O/C	MT	R	All	F	Bp	18.77	Bd	21.15	Bd2	21.30	SD	11.17	GL	131.35	DD	9.96	Dp	18.33	Dd	15.24		
Raversijde	74	RAV BOT 97-RAV-13 tot 67	97-RAV-47	O/C	MT	L	PM	FPUD	Bp	18.94	Bd		Bd2	22.98	SD	11.54	GL		DD	10.01	Dp	18.37	Dd			
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	MT	L	PM	FPUD	Bp	19.80	Bd		Bd2	22.06	SD	11.01	GL		DD	10.20	Dp	19.27	Dd			
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	MT	L	PM	FPUD	Bp	22.76	Bd		Bd2	23.71	SD	12.52	GL		DD	11.19	Dp	22.06	Dd			
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	MT	R	All	F	Bp	20.24	Bd	22.67	Bd2	22.53	SD	11.11	GL	146.26	DD	9.53	Dp	19.31	Dd	15.73		
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	MT	R	PM	FPUD	Bp	20.23	Bd		Bd2	22.92	SD	12.14	GL		DD	9.72	Dp	19.99	Dd			
Raversijde	74	RAV BOT 97-RAV-13 tot 71	97-RAV-48	O/C	MT	R	All	F	Bp	18.55	Bd	21.25	Bd2	21.57	SD	11.48	GL	136.69	DD	9.72	Dp	18.02		12.90		
Raversijde	74	RAV BOT 97-RAV-13 tot 72	97-RAV-48	O/C	MT	R	All	F	Bp	20.11	Bd		Bd2		SD	12.18	GL	143.70	DD	10.76	Dp	20.52				
Raversijde	74	RAV BOT 97-RAV-13 tot 61	97-RAV-55	O/C	MT	R	PM	FD?P	Bp	20.67	Bd		Bd2		SD		GL		DD		Dp	20.70	Dd			
Raversijde	74	RAV BOT 97-RAV-13 tot 72	97-RAV-59	O/C	MT	R	PM	FPUD	Bp	19.10	Bd		Bd2	20.15	SD	11.58	GL		DD	9.62	Dp	18.62	Dd			
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	NC	R		F	GB	25.62																
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 15	O/C	NC	L	All	F	GB	24.69																
Raversijde	77	96 RAV 288-314	96 RAV 300	O/C	NC	R	All	F	GB	24.52																
Raversijde	53		96-RAV-120	O/C	NC	?	All	F	GB	25.22																
Raversijde	53		96-RAV-145	O/C	NC	R	All	F	GB	24.21																

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*								
Raversijde	57		97-RAV-298	O/C	NC	R	All	F	GB	24.35						
Raversijde	58		97-RAV-361	O/C	NC	L	All	F	GB	23.16						
Raversijde	90	RAV 686-781	97 RAV 748	O/C	No Measurable Bones											
Raversijde	69	RAV 96 BOT 424	424	O/C	Pelvis	L	Acet	F	LA	28.62	LAR	22.68				
Raversijde	46	Bot 2 Raversjide 4466-4492	4473	O/C	Pelvis	R	M	F	LA	42.84	LAR	32.36				
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Pelvis	R	Acet	F	LA	28.50	LAR	24.01				
Raversijde	87	RAV BOT 235-263	96 RAV 260	O/C	Pelvis	R	Astrag	F	GL		GLm		GB	38.19		
Raversijde	77	96 RAV 288-314	96 RAV 288	O/C	Pelvis	L	Acet	F	LA	39.11	LAR	33.84				
Raversijde	77	96 RAV 288-314	96 RAV 307	O/C	Pelvis	R	Acet	F	LA	33.65	LAR	32.40				
Raversijde	63	RAV BOT 477	477	O/C	Pelvis	L	Acet	F	LA	41.18	LAR	33.99				
Raversijde	46	Bot 2 Raversjide 4466-4492	4466	O/C	Pelvis	R	M	F	LA	41.92	LAR	32.57				
Raversijde	46	Bot 2 Raversjide 4466-4492	4466	O/C	Pelvis	R	M	F	LA	36.02	LAR					
Raversijde	46	Bot 2 Raversjide 4466-4492	4466	O/C	Pelvis	L	M	F	LA	35.20	LAR					
Raversijde	47	Bot 3 Raversjide 4492-4550	4517	O/C	Pelvis	L		FAcet	LA	38.55	LAR	28.63				
Raversijde	47	Bot 3 Raversjide 4492-4550	4526	O/C	Pelvis	L	M	FAcet	LA	41.88	LAR	35.00				
Raversijde	48	Doos 4	4568	O/C	Pelvis	L	F Acet	F Acet	LA	41.62	LAR	30.80				
Raversijde	45	Bot 1 Raversjide Doos 1 4414-4462	4430 N&S	O/C	Pelvis	R	M	F	LA	36.52	LAR	29.59				
Raversijde	52		95-RAV-120	O/C	Pelvis	L	Acet	F	LA	30.12	LAR	23.82				
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Pelvis	L	Acet	F?	LA	30.63	LAR	24.68				
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Pelvis	L	Acet	F	LA	29.23	LAR	23.02				
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Pelvis	L	Acet	F	LA	30.90	LAR	24.44				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 37	O/C	Pelvis	R	Acet	U	LA	38.89	LAR	33.89				
Raversijde	50		96-RAV-108	O/C	Pelvis	R	M	F	LA	28.89	LAR	23.37				
Raversijde	53		96-RAV-127	O/C	Pelvis	R	Acet	F	LA	28.93	LAR	22.80				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Pelvis	L	Acet	F	LA	30.22	LAR	24.67				
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.4	O/C	Pelvis	R	Acet	F	LA	38.18	LAR	33.41				
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	Pelvis	R	Acet	F	LA	44.48	LAR	30.26				
Raversijde	76	RAV 97 191-209	97 RAV 206	O/C	Pelvis	L	Acet	?Pubis	LA	29.85	LAR	24.39				
Raversijde	90	RAV 686-781	97 RAV 752	O/C	Pelvis	R	Acet	F	LA	48.62	LAR	34.55				
Raversijde	71	RAV BOT 61-98	97 RAV 90	O/C	Pelvis	L	Acet	F	LA	34.61	LAR	27.97				
Raversijde	57		97-RAV-298	O/C	Pelvis	R	Acet	F	LA	29.90	LAR	25.12				
Raversijde	74	RAV BOT 97-RAV-13 tot 82	97-RAV-48	O/C	Pelvis	R	Acet	F	LA	26.66	LAR	22.75				
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Ph 1	L	All	F	Glpe	32.94	Bp	11.72	SD	9.90	Bd	10.91
Raversijde	63	RAV BOT 477	477	O/C	Ph 1	L	All	F	Glpe	34.55	Bp	11.51	SD	9.72	Bd	12.10
Raversijde	63	RAV BOT 477	477	O/C	Ph 1	R	All	F	Glpe	32.08	Bp	11.32	SD	8.84	Bd	10.96
Raversijde	62	97 RAV 650	650	O/C	Ph 1	L	All	F	Glpe	32.55	Bp	11.96	SD	9.77	Bd	10.45
Raversijde	62	97 RAV 650	650	O/C	Ph 1	R	All	F	GLpe	30.58	Bp	11.15	SD	9.12	Bd	10.78
Raversijde	79	96 RAV 208-218	96 RAV 210	O/C	Ph 1	L	All	F	Glpe	32.87	Bp	11.53	SD	9.54	Bd	10.88
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	Ph 1	L	All	F	Glpe	35.46	Bp	12.27	SD	9.08	Bd	11.09
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	Ph 1	L	All	F	Glpe	33.60	Bp	11.57	SD	10.21	Bd	10.85
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	Ph 1	R	All	F	Glpe	29.40	Bp	11.35	SD	8.47	Bd	9.91
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Ph 1	L	All	F	Glpe	33.52	Bp	11.97	SD	9.56	Bd	11.03
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Ph 1	R	All	F	Glpe	32.63	Bp	12.02	SD	10.19	Bd	10.90
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	Ph 1	R	All	F	GLpe	32.56	Bp	12.14	SD	10.47	Bd	11.33
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	Ph 1	R	All	F	Glpe	32.73	Bp		SD	9.57	Bd	10.59
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	Ph 1	L	All	F	Glpe	32.27	Bp	11.37	SD	9.43	Bd	10.28
Raversijde	90	RAV 686-781	97 RAV 752	O/C	Ph 1	L	All	F	Glpe	36.18	Bp	12.54	SD	9.43	Bd	11.37
Raversijde	90	RAV 686-781	97 RAV 752	O/C	Ph 1	R	All	F	Glpe	35.19	Bp	11.47	SD	8.79	Bd	10.61
Raversijde	77	96 RAV 288-314	96 RAV 306	O/C	Ph 1	L	All	F	GLpe	37.29	Bp	13.42	SD	10.48	Bd	12.29
Raversijde	69	RAV 96 BOT 424	424	O/C	Ph 1	L	All	F	Glpe	36.93	Bp	12.73	SD	10.47	Bd	11.58
Raversijde	69	RAV 96 BOT 424	424	O/C	Ph 1	L	All	F	Glpe	37.27	Bp	11.20	SD	9.14	Bd	10.56
Raversijde	69	RAV 96 BOT 424	424	O/C	Ph 1	L	All	F	Glpe	38.78	Bp	11.93	SD	9.51	Bd	10.27
Raversijde	69	RAV 96 BOT 424	424	O/C	Ph 1	R	All	F	Glpe	36.05	Bp	12.27	SD	10.24	Bd	11.90
Raversijde	69	RAV 96 BOT 424	424	O/C	Ph 1	R	All	F	Glpe	30.25	Bp	11.38	SD	9.03	Bd	10.97
Raversijde	69	RAV 96 BOT 424	424	O/C	Ph 1	R	All	F	Glpe	33.90	Bp	12.57	SD	9.72	Bd	10.71
Raversijde	69	RAV 96 BOT 424	424	O/C	Ph 1	R	All	F	Glpe	34.81	Bp	11.31	SD	8.93	Bd	10.27
Raversijde	69	RAV 96 BOT 424	424	O/C	Ph 1	R	All	F	Glpe	33.92	Bp	13.15	SD	11.02	Bd	12.32
Raversijde	69	RAV 96 BOT 424	424	O/C	Ph 1	L	All	F	Glpe	34.85	Bp	12.25	SD	10.06	Bd	11.03
Raversijde	69	RAV 96 BOT 424	424	O/C	Ph 1	R	All	F	Glpe	34.38	Bp	11.86	SD	9.56	Bd	10.14
Raversijde	48	Doos 4	4553	O/C	Ph 1	L	All	F	GLPE	32.62	Bp	11.90	SD	9.58	Bd	11.10
Raversijde	64	96 RAV 150-195	96 RAV 172	O/C	Ph 1	R	All	F	Glpe	35.29	Bp	11.84	SD	9.18	Bd	10.75
Raversijde	64	96 RAV 150-195	96 RAV 192	O/C	Ph 1	R	All	F	Glpe	38.53	Bp	14.30	SD		Bd	13.18
Raversijde	78	96 RAV 196-204	96 RAV 203	O/C	Ph 1	R	All	F	Glpe	30.84	Bp	12.14	SD	8.55	Bd	8.61
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Ph 1	L	All	F	Glpe	33.42	Bp	11.48	SD	9.81	Bd	10.82
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Ph 1	R	All	F	Glpe	36.62	Bp	11.97	SD	9.08	Bd	10.51
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Ph 1	R	All	F	GLpe	35.23	Bp	13.03	SD	10.36	Bd	12.28
Raversijde	84	RAV bot 221-226	96 RAV	O/C	Ph 1	L	All	F	GLpe	35.15	Bp	10.42	SD	8.13	Bd	9.53
Raversijde	84	RAV bot 221-226	96 RAV	O/C	Ph 1	L	All	F	Glpe	32.65	Bp	11.21	SD	9.10	Bd	11.00
Raversijde	84	RAV bot 221-226	96 RAV	O/C	Ph 1	R	All	F	Glpe	32.49	Bp	12.02	SD	9.93	Bd	12.36

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?												
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Ph 1	L	All	F	Glpe	35.76	Bp	13.90	SD	10.74	Bd	12.23				
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Ph 1	L	All	F	Glpe	33.48	Bp	11.99	SD	10.20	Bd	11.67				
Raversijde	77	96 RAV 288-314	96 RAV 309	O/C	Ph 1	L	All	F	Glpe	34.63	Bp	12.25	SD	10.07	Bd	12.13				
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Ph 1	L	All	FDFingP	Glpe	37.93	Bp	12.44	SD	10.13	Bd	11.97				
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	Ph 1	R	All	F	Glpe	35.41	Bp	11.90	SD	9.84	Bd	11.55				
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	Ph 1	R	All	F	GlPE		Bp		SD	10.20	Bd	12.37				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 54	O/C	Ph 1	R	All	F	Glpe	31.14	Bp	11.14	SD	8.50	Bd	9.84				
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Ph 1	L	All	F	GLPE	35.08	Bp	11.55	SD	9.85	Bd	11.03				
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Ph 1	R	All	F	GLPE	34.27	Bp	11.30	SD	9.22	Bd	9.51				
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Ph 1	R	All	F	GLPE	30.63	Bp	11.04	SD	8.81	Bd	9.72				
Raversijde	89	RAV BOT 1996 772-780	96 RAV 724	O/C	Ph 1	L	All	F	Glpe	31.12	Bp	11.01	SD	8.56	Bd	9.56				
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.3	O/C	Ph 1	?	All	F	Glpe	32.02	Bp	11.07	SD	8.65	Bd	9.90				
Raversijde	53		96-RAV-145	O/C	Ph 1	L	All	F	Glpe	32.17	Bp	11.46	SD	9.65	Bd	10.10				
Raversijde	53		96-RAV-145	O/C	Ph 1	R	All	F	Glpe	35.45	Bp	11.63	SD	10.00	Bd	10.48				
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	O/C	Ph 1	L	All	F	Glpe	34.54	Bp	11.90	SD	9.33	Bd	10.62				
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	O/C	Ph 1	L	All	F	Glpe	37.49	Bp	12.64	SD	10.17	Bd	11.98				
Raversijde	76	RAV 97 191-209	97 RAV 203	O/C	Ph 1	L	All	F	GLpe	37.57	Bp	12.52	SD	9.36	Bd	11.32				
Raversijde	81	RAV 97 306-339	97 RAV 332	O/C	Ph 1	R	All	F	Glpe	35.68	Bp	12.51	SD	10.19	Bd	11.86				
Raversijde	59		97 RAV 361	O/C	Ph 1	L	All	F	Glpe	36.65	Bp	11.81	SD	9.20	Bd	10.11				
Raversijde	59		97 RAV 361	O/C	Ph 1	L	All	F	Glpe	34.51	Bp	11.06	SD	8.75	Bd	9.55				
Raversijde	59		97 RAV 361	O/C	Ph 1	L	All	F	Glpe	32.84	Bp	11.47	SD		Bd	10.36				
Raversijde	59		97 RAV 361	O/C	Ph 1	L	All	F	Glpe	32.44	Bp	11.70	SD	9.33	Bd	11.04				
Raversijde	59		97 RAV 361	O/C	Ph 1	R	All	F	Glpe	39.25	Bp	11.68	SD	9.00	Bd	9.90				
Raversijde	59		97 RAV 361	O/C	Ph 1	L	All	F	Glpe	31.68	Bp	11.48	SD	9.34	Bd	9.81				
Raversijde	59		97 RAV 361	O/C	Ph 1	R	All	F	Glpe	32.98	Bp	11.60	SD	8.71	Bd	10.08				
Raversijde	60		97 RAV 361	O/C	Ph 1	R	All	F	Glpe	36.43	Bp	11.71	SD	9.15	Bd	10.32				
Raversijde	60		97 RAV 361	O/C	Ph 1	R	All	F	Glpe	32.44	Bp	12.13	SD	9.87	Bd	11.19				
Raversijde	61		97 RAV 477	O/C	Ph 1	R	All	F	GLpe	36.68	Bp	13.02	SD	11.18	Bd	12.59				
Raversijde	61		97 RAV 477	O/C	Ph 1	R	All	F	GLpe	32.90	Bp	11.79	SD	8.74	Bd	10.68				
Raversijde	61		97 RAV 477	O/C	Ph 1	R	All	F	GLpe	37.35	Bp	11.87	SD	9.15	Bd	10.62				
Raversijde	61		97 RAV 477	O/C	Ph 1	R	All	F	GLpe	35.04	Bp	12.08	SD	9.72	Bd	10.97				
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	Ph 1	L	All	F	Glpe	31.85	Bp	11.30	SD	9.80	Bd	11.04				
Raversijde	54		97-RAV-117	O/C	Ph 1	R	All	F	Glpe	35.41	Bp	12.81	SD	10.61	Bd	11.64				
Raversijde	54		97-RAV-117	O/C	Ph 1	R	All	F	Glpe	36.90	Bp	12.64	SD	10.53	Bd	12.02				
Raversijde	57		97-RAV-298	O/C	Ph 1	L	MD	UP	Glpe		Bp		SD	13.38	Bd	16.83				
Raversijde	57		97-RAV-298	O/C	Ph 1	L	All	F	Glpe	32.15	Bp	13.80	SD	9.26	Bd	9.70				
Raversijde	57		97-RAV-298	O/C	Ph 1	L	All	F	Glpe	34.95	Bp	11.22	SD	9.33	Bd	10.48				
Raversijde	57		97-RAV-298	O/C	Ph 1	L	All	F	Glpe	31.76	Bp	10.48	SD	8.17	Bd	8.97				
Raversijde	57		97-RAV-298	O/C	Ph 1	R	All	F	Glpe	36.01	Bp	11.95	SD	9.74	Bd	11.47				
Raversijde	57		97-RAV-298	O/C	Ph 1	R	All	F	Glpe	30.62	Bp		SD		Bd	9.94				
Raversijde	57		97-RAV-298	O/C	Ph 1	R	All	F	Glpe	34.38	Bp	11.68	SD	9.47	Bd	10.51				
Raversijde	57		97-RAV-298	O/C	Ph 1	R	All	F	Glpe	33.29	Bp	12.22	SD	10.45	Bd	11.29				
Raversijde	57		97-RAV-298	O/C	Ph 1	R	All	F	Glpe	36.11	Bp	12.45	SD	9.23	Bd	10.42				
Raversijde	58		97-RAV-361	O/C	Ph 1	L	All	F	Glpe	34.68	Bp	11.43	SD	9.18	Bd	10.19				
Raversijde	58		97-RAV-361	O/C	Ph 1	L	All	F	Glpe	35.16	Bp	11.94	SD	9.83	Bd	10.96				
Raversijde	58		97-RAV-361	O/C	Ph 1	L	All	F	Glpe	37.75	Bp	12.41	SD	9.66	Bd	10.40				
Raversijde	58		97-RAV-361	O/C	Ph 1	L	All	F	Glpe	33.41	Bp	11.76	SD	9.33	Bd	11.07				
Raversijde	58		97-RAV-361	O/C	Ph 1	R	All	F	Glpe	32.21	Bp	11.42	SD	9.56	Bd	10.99				
Raversijde	58		97-RAV-361	O/C	Ph 1	R	All	F	Glpe	32.55	Bp	10.63	SD	8.34	Bd	9.50				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 54	O/C	Ph 2	L	All	F	Glpe	21.53	Bp	10.57	SD	7.83	Bd	8.61				
Raversijde	53		96-RAV-145	O/C	Ph 2	L	All	F	Glpe	21.22	Bp	12.20	SD	8.94	Bd	9.85				
Raversijde	75	97 RAV 150-189	97 RAV 189 ISHU uit	O/C	Ph 2	R	All	FD?P	Glpe	21.79	Bp	11.88	SD	9.14	Bd	10.42				
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.4	O/C	Radius	L	PM		GL		Bp	28.97	Bfp	26.41	SD		Bd		Bfd	
Raversijde	69	RAV 96 BOT 424	424	O/C	Radius	L	PM	FP?D	GL		Bp	28.85	BFp	27.48	SD		Bd		BFd	
Raversijde	69	RAV 96 BOT 424	424	O/C	Radius	L	PM	FP	GL		Bp	32.55	BFp	30.62	SD		Bd		BFd	
Raversijde	69	RAV 96 BOT 424	424	O/C	Radius	L	PM	FP?D	GL		Bp	31.89	BFp	31.09	SD		Bd		BFd	
Raversijde	69	RAV 96 BOT 424	424	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	28.11	BFd	26.24
Raversijde	69	RAV 96 BOT 424	424	O/C	Radius	R	PM	FP?D	GL		Bp	28.40	BFp	25.75	SD		Bd		BFd	
Raversijde	69	RAV 96 BOT 424	424	O/C	Radius	R	PM	FP?D	GL		Bp	29.75	BFp	27.40	SD	16.47	Bd		BFd	
Raversijde	69	RAV 96 BOT 424	424	O/C	Radius	R	PM	FP?D	GL		Bp	28.42	BFp	26.08	SD		Bd		BFd	
Raversijde	63	RAV BOT 477	477	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD	16.16	Bd	27.70	BFd	23.60
Raversijde	63	RAV BOT 477	477	O/C	Radius	L	PM	FP?D	GL		Bp	30.34	BFp	28.06	SD		Bd		BFd	
Raversijde	63	RAV BOT 477	477	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD	14.32	Bd	25.78	BFd	20.58
Raversijde	62	97 RAV 650	650	O/C	Radius	R	All	F	GL	155.39	Bp	31.91	BFp	28.81	SD	16.06	Bd	28.18	BFd	24.68
Raversijde	62	97 RAV 650	650	O/C	Radius	R	PM	FP?D	GL		Bp	30.74	BFp	27.80	SD		Bd		BFd	
Raversijde	46	Bot 2 Raversjide 4466-4492	4466	O/C	Radius	L	PM	FPUD	GL		Bp	28.43	BFp	26.23	SD	15.30	Bd		BFd	
Raversijde	46	Bot 2 Raversjide 4466-4492	4466	O/C	Radius	R	All	F	GL	149.05	Bp	29.36	BFp	26.68	SD	14.54	Bd	25.33	BFd	23.39
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	O/C	Radius	L	All	F	GL	146.02	Bp	29.36	BFp	27.05	SD	15.16	Bd	26.40	BFd	23.26
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	O/C	Radius	L	PM	FP?D	GL		Bp	28.33	BFp	25.77	SD	15.02	Bd		BFd	
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	O/C	Radius	R	PM	FP?D	GL		Bp	29.91	BFp	27.76	SD	17.65	Bd		BFd	
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	O/C	Radius	L	PM	FP?D	GL		Bp	34.01	BFp	31.51	SD	18.46	Bd		BFd	
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	O/C	Radius	L	All	F	GL	146.02	Bp	29.36	BFp	27.05	SD	15.16	Bd		BFd	23.26
Raversijde	46	Bot 2 Raversjide 4466-4492	4473	O/C	Radius	R	PM	FP?D	GL		Bp	31.75	BFp	28.75	SD		Bd		BFd	
Raversijde	46	Bot 2 Raversjide 4466-4492	4488	O/C	Radius	R	M	?	GL		LO		Dpa		SDO		BpC	17.50		
Raversijde	47	Bot 3 Raversjide 4492-4550	4492	O/C	Radius	L	PM	FP?D	GL		Bp	29.58	BFp	27.79	SD		Bd		BFd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?												
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	Radius	R		FD?P	GL		Bp		SD		Bd	17.13	BFD	25.77		
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	Radius	L		FD?P	GL		Bp		SD		Bd		BFD	24.81		
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	Radius	R		FP?D	GL		Bp	27.40	SD	25.47	Bd	14.06	BFD			
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	Radius	L		FP?D	GL		Bp	31.92	SD	30.28	Bd		BFD			
Raversijde	48	Doos 4	4558	O/C	Radius	L	PM	FP	GL		Bp	29.63	BFP	27.73	SD	17.08	Bd		BFD	
Raversijde	48	Doos 4	4559	O/C	Radius	R	MD	FD?P	GL		Bp		BFP		SD	13.84	Bd	26.42	BFD	23.03
Raversijde	48	Doos 4	4562	O/C	Radius	L	PM	FP?D	GL		Bp	32.53	BFP	30.87	SD					
Raversijde	48	Doos 4	4564	O/C	Radius	L	PM	FP?D	GL		Bp	32.32	BFP	31.61	SD	16.97	Bd		BFD	
Raversijde	48	Doos 4	4565	O/C	Radius	L	PM	FP?D	GL		Bp	30.02	BFP	28.16	SD	16.29	Bd		BFD	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Radius	L	PM	FP?D	GL		Bp	27.57	BFp	25.88	SD	16.03	Bd		BFd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Radius	R	PM	FP?D	GL		Bp	31.43	BFp	30.11	SD	18.31	Bd		BFd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Radius	R	PM	FP?D	GL		Bp	32.03	BFp	28.75	SD	16.59	Bd		BFd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Radius	R	PM	FP?D	GL		Bp	28.51	BFp	26.11	SD	16.24	Bd		BFd	
Raversijde	52		95-RAV-120	O/C	Radius	L	PM	FPUD	GL		Bp	30.83	Bfp	27.88	SD	17.28	Bd		Bfd	
Raversijde	52		95-RAV-120	O/C	Radius	L	PM	FP?D	GL		Bp	31.18	Bfp	29.60	SD	16.85	Bd		Bfd	
Raversijde	52		95-RAV-120	O/C	Radius	L	All	F	GL	167.66	Bp	32.32	Bfp	30.82	SD	17.28	Bd	30.25	Bfd	27.24
Raversijde	52		95-RAV-120	O/C	Radius	L	PM	FP?D	GL		Bp	31.88	Bfp	30.28	SD	19.12	Bd		Bfd	
Raversijde	52		95-RAV-120	O/C	Radius	R	PM	FP?D	GL		Bp	34.03	Bfp	31.80	SD	18.54	Bd		Bfd	
Raversijde	52		95-RAV-120	O/C	Radius	R	All	F	GL	148.09	Bp	29.72	Bfp	35.58	SD	15.32	Bd	26.99	Bfd	27.10
Raversijde	52		95-RAV-120	O/C	Radius	R	PM	FPUD	GL		Bp	31.77	Bfp	29.30	SD	18.95	Bd		Bfd	
Raversijde	52		95-RAV-120	O/C	Radius	R	PM	FP?D	GL		Bp	32.01	Bfp	29.52	SD	17.55	Bd		Bfd	
Raversijde	52		95-RAV-120	O/C	Radius	R	PM	FP?D	GL		Bp	32.09	Bfp	29.67	SD	18.38	Bd		Bfd	
Raversijde	55		95-RAV-279	O/C	Radius	L	MD	FD?P	GL		Bp		Bfp		SD	16.01	Bd	28.04	Bfd	24.68
Raversijde	55		95-RAV-279	O/C	Radius	L	PM	FPUD	GL		Bp		Bfp		SD	15.76	Bd		Bfd	
Raversijde	55		95-RAV-279	O/C	Radius	L	PM	FP?D	GL		Bp	26.87	Bfp	24.87	SD	14.63	Bd		Bfd	
Raversijde	84	RAV bot 221-226	96 RAC 221	O/C	Radius	R	PM	FP?D	GL		Bp	31.64	BFp	29.42	SD	16.86	Bd		BFd	
Raversijde	64	96 RAV 150-195	96 RAV 166	O/C	Radius	L	PM	FP?D	GL		Bp	30.74	BFp	29.06	SD	16.93	Bd		BFd	
Raversijde	64	96 RAV 150-195	96 RAV 168	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	27.43	BFd	23.86
Raversijde	64	96 RAV 150-195	96 RAV 177 vis HU. UIT	O/C	Radius	L	PM	FP?D	GL		Bp	28.51	BFp	26.15	SD		Bd		BFd	
Raversijde	64	96 RAV 150-195	96 RAV 192	O/C	Radius	R	PM	FPUD	GL		Bp	32.81	BFp	30.48	SD	16.44	Bd		BFd	
Raversijde	64	96 RAV 150-195	96 RAV 192	O/C	Radius	R	PM	FP?D	GL		Bp	31.06	BFp	28.62	SD		Bd		BFd	
Raversijde	78	96 RAV 196-204	96 RAV 194	O/C	Radius	R	PM	FPUD	GL		Bp	28.49	BFp	27.31	SD	15.51	Bd		BFd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Radius	L	PM	FPUD	GL		Bp	30.70	BFp	29.00	SD	17.04	Bd		BFd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Radius	L	PM	FP?D	GL		Bp	29.01	BFp	26.91	SD	14.95	Bd		BFd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Radius	R	All	F	GL	148.00	Bp	29.41	BFp	27.17	SD	15.72	Bd	26.25	BFd	22.67
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Radius	R	PM	FPUD	GL		Bp	29.89	BFp	26.51	SD	15.64	Bd		BFd	
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Radius	L	PM	FP?D	GL		Bp	29.44	BFp	25.89	SD	15.45	Bd		BFd	
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Radius	R	PM	FP?D	GL		Bp	30.77	BFp	26.99	SD		Bd		BFd	
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Radius	L	All	F	GL	153.65	Bp	26.98	BFp	25.33	SD	15.02	Bd	24.85	BFd	21.02
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 21	O/C	Radius	L	PM	FP?D	GL		Bp	29.10	Bfp	26.35	SD	15.84	Bd		Bfd	
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	Radius	L	PM	FP?D	GL		Bp	28.24	BFp	26.92	SD		Bd		BFd	
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	Radius	R	PM	FP?D	GL		Bp	29.31	BFp	27.02	SD		Bd		BFd	
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	25.35	BFd	21.70
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD	13.54	Bd	27.48	BFd	21.29
Raversijde	79	96 RAV 208-218	96 RAV 217 vis HU t zond HV 0,5 mm UIT	O/C	Radius	R	PM	FP?D	GL		Bp	31.21	BfP	27.93	SD	16.19	Bd		BFd	
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	Radius	L	PM	FP?D	GL		Bp	31.82	BFp	29.30	SD	15.90	Bd		BFd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	O/C	Radius	L	PM	FP?D	GL		Bp	30.94	BFp	29.15	SD		Bd		BFd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	O/C	Radius	R	PM	FP?D	GL		Bp	33.54	BFp	30.72	SD		Bd		BFd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	27.30	BFd	26.86
Raversijde	84	RAV bot 221-226	96 RAV 223	O/C	Radius	R	PM	FP?D	GL		Bp	28.30	BFp	25.66	SD		Bd		BFd	
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	25.77	BFd	22.69
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	Radius	R	PM	FPUD	GL		Bp	30.51	BFp	28.97	SD	16.92	Bd		BFd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	25.36	BFd	22.10
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	30.05	BFd	28.65
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Radius	L	PM	FP?D	GL		Bp	29.12	BFp	27.52	SD		Bd		BFd	
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Radius	L	PM	FP?D	GL		Bp	32.49	BFp	30.72	SD	17.22	Bd		BFd	
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	Radius	L	PM	FP?D	GL		Bp	30.42	BFp	27.38	SD		Bd		BFd	
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	Radius	L	PM	FP?D	GL		Bp	26.72	BFp	25.08	SD		Bd		BFd	
Raversijde	87	RAV BOT 235-263	96 RAV 261	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	26.95	BFd	25.13
Raversijde	80	96 RAV 264-286	96 RAV 266	O/C	Radius	L	PM	FP?D	GL		Bp	30.01	BFp	28.33	SD	16.28	Bd		BFd	
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Radius	R	PM	FPUD	GL		Bp	31.34	BFp	29.53	SD	15.89	Bd		BFd	
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD	15.13	Bd	27.66	BFd	23.72
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	Radius	L	PM	FP?D	GL		Bp	30.28	BFp	27.87	SD	15.40	Bd		BFd	
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	27.93	BFd	23.24
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	Radius	L	PM	FP?D	GL		Bp	28.07	BFp	25.62	SD		Bd		BFd	
Raversijde	77	96 RAV 288-314	96 RAV 288	O/C	Radius	R	PM	FP?D	GL		Bp	26.72	BFp	25.11	SD	15.66	Bd		BFd	
Raversijde	77	96 RAV 288-314	96 RAV 300	O/C	Radius	R	PM	FP?D	GL		Bp	29.59	BFp	27.62	SD	16.83	Bd		BFd	
Raversijde	77	96 RAV 288-314	96 RAV 300	O/C	Radius	R	All	F	GL	154.03	Bp	30.44	BFp	28.42	SD	14.32	Bd	26.09	BFd	21.44
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Radius	R	All	F	GL	134.97	Bp	25.81	BFp	24.76	SD	13.83	Bd	25.67	BFd	20.91

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?													
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD	15.21	Bd	26.95	BFd	23.33	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	28.15	BFd	23.61	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 328	O/C	Radius	R	PM	FP?D	GL		Bp	31.19	BFp	28.17	SD	17.48	Bd		BFd		
Raversijde	83	RAV bot 338-374	96 RAV 339	O/C	Radius	R	PM	FPUD	GL		Bp	27.05	BFp	24.92	SD	15.14	Bd		BFd		
Raversijde	83	RAV bot 338-374	96 RAV 339	O/C	Radius	R	PM	FPUD	GL		Bp	31.39	BFp	29.48	SD	15.72	Bd		BFd		
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 347	O/C	Radius	L	PM	FP?D	GL		Bp	30.84	BFp	28.01	SD		Bd		BFd		
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 349	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD	16.41	Bd	28.68	BFd	24.88	
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	Radius	L	PM	FP?D	GL		Bp	30.62	BFp	29.17	SD		Bd		BFd		
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	Radius	L	PM	FP?D	GL		Bp	29.25	BFp	27.68	SD		Bd		BFd		
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	30.47	BFd	29.37	
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	25.39	BFd	25.24	
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	Radius	R	All	F	GL	160.77	Bp	30.71	BFp	28.27	SD	15.49	Bd	27.23	BFd	23.40	
Raversijde	83	RAV bot 338-374	96 RAV 354	O/C	Radius	L	PM	FP?D	GL		Bp	31.83	BFp	29.51	SD		Bd		BFd		
Raversijde	83	RAV bot 338-374	96 RAV 354	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	26.56	BFd	25.37	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 37	O/C	Radius	L	MD	FD?P	GL		Bp		Bfp		SD	15.18	Bd	27.62	Bfd	23.95	
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	Radius	L	PM	FPUD	GL		Bp	32.17	BFP	29.85	SD	17.15	Bd		BFD		
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	Radius	L	PM	FP?D	GL		Bp	29.60	BFP	28.63	SD		Bd		BFD		
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	Radius	R	PM	FP?D	GL		Bp	30.01	BFP	26.66	SD	18.46	Bd		BFD		
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	Radius	R	PM	FP?D	GL		Bp	26.21	BFP		SD		Bd		BFD		
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	Radius	R	PM	FP?D	GL		Bp	29.54	BFP	27.09	SD	16.10	Bd		BFD		
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Radius	L	MD	FD?P	GL		Bp		BFP		SD		Bd	27.67	BFD	24.28	
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Radius	L	PM	FP?D	GL		Bp	30.94	BFP	27.52	SD		Bd		BFD		
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Radius	L	PM	FP?D	GL		Bp	30.16	BFP	27.33	SD	16.39	Bd		BFD		
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Radius	R	PM	FP?D	GL		Bp	29.63	BFP	27.13	SD	16.68	Bd		BFD		
Raversijde	89	RAV BOT 1996 772-780	96 RAV 748	O/C	Radius	L	PM	FP?D	GL		Bp	30.07	BFp	28.26	SD	17.44	Bd		BT		
Raversijde	53		96-RAV-127	O/C	Radius	R	PM	FP?D	GL		Bp	29.42	Bfp	27.82	SD	15.38	Bd		Bfd		
Raversijde	53		96-RAV-127	O/C	Radius	R	PM	FPUD	GL		Bp	32.52	Bfp	28.64	SD	16.96	Bd		Bfd		
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Radius	L	PM	FP?D	GL		Bp	33.58	Bfp	31.35	SD	19.41	Bd		Bfd		
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Radius	R	All	F	GL	150.08	Bp	30.27	Bfp	28.47	SD	14.47	Bd	27.63	Bfd	24.10	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Radius	R	MD	FD?P	GL		Bp		Bfp		SD	13.81	Bd	27.27	Bfd	24.23	
Raversijde	50		96-RAV-72	O/C	Radius	R	PM	FP?D	GL		Bp	31.62	Bfp	29.29	SD	17.18	Bd		Bfd		
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	Radius	L	PM	FP?D	GL		Bp	29.47	Bfp		SD		Bd		Bfd		
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	Radius	R	MD	FD?P	GL		Bp		Bfp		SD		Bd	29.37	Bfd	26.23	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.9	O/C	Radius	L	MD	FD?P	GL		Bp		Bfp		SD		Bd	25.30	Bfd		21.84
Raversijde	50		96-RAV-GRACHT-11.6	O/C	Radius	L	PM	FPUD	GL		Bp	31.02	Bfp	28.48	SD	17.52	Bd		Bfd		
Raversijde	75	97 RAV 150-189	97 RAV 168 ZAK DES 2 ZAK	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD	14.06	Bd	29.47	BFd	21.00	
Raversijde	75	97 RAV 150-189	97 RAV 178	O/C	Radius	R	PM	FP?D	GL		Bp	33.22	BFp	30.79	SD		Bd		BFd		
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	Radius	L	PM	FP?D	GL		Bp	32.01	BFp	29.71	SD		Bd		BFd		
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	Radius	R	PM	FP?D	GL		Bp	30.45	BFp	27.92	SD	16.44	Bd		BFd		
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	27.91	BFd	24.07	
Raversijde	75	97 RAV 150-189	97 RAV 184 1 ZAK	O/C	Radius	L	PM	FP?D	GL		Bp	29.63	BFp	27.37	SD	15.75	Bd		BFd		
Raversijde	76	RAV 97 191-209	97 RAV 191	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	27.86	BFd	23.00	
Raversijde	76	RAV 97 191-209	97 RAV 194	O/C	Radius	L	PM	FP?D	GL		Bp	28.93	BFp	26.74	SD		Bd		BFd		
Raversijde	82	RAV bot 210-301	97 RAV 212	O/C	Radius	L	PM	FP?D	GL		Bp	29.15	BFp	27.56	SD		Bd		BFd		
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	O/C	Radius	L	PM	FP?D	GL		Bp	30.18	BFp	28.32	SD		Bd		BFd		
Raversijde	81	RAV 97 306-339	97 RAV 316	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	27.12	BFd	24.71	
Raversijde	81	RAV 97 306-339	97 RAV 331	O/C	Radius	L	UDE	UDE	GL		Bp		BFp		SD		Bd	29.63	BFd	25.40	
Raversijde	81	RAV 97 306-339	97 RAV 334	O/C	Radius	L	PM	FPUD	GL		Bp	32.52	BFp	29.17	SD	16.95	Bd		BFd		
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	Radius	L	PM	FP?D	GL		Bp	31.09	BFp	28.91	SD		Bd		BFd		
Raversijde	59		97 RAV 361	O/C	Radius	L	PM	FP?D	GL		Bp	28.98	BFp	26.65	SD	16.08	Bd		BFd		
Raversijde	59		97 RAV 361	O/C	Radius	L	PM	FP?D	GL		Bp	30.74	BFp	28.12	SD		Bd		BFd		
Raversijde	59		97 RAV 361	O/C	Radius	L	PM	FP?D	GL		Bp	33.61	BFp	30.64	SD	18.44	Bd		BFd		

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?																						
Raversijde	59		97 RAV 361	O/C	Radius	L	All	FPFingD	GL	153.73	Bp	30.50	BFp	28.65	SD	15.69	Bd	29.43	BFd	26.36										
Raversijde	59		97 RAV 361	O/C	Radius	R	PM	FP?D	GL		Bp		BFp		SD	15.86	Bd		BFd											
Raversijde	59		97 RAV 361	O/C	Radius	R	PM	FP?D	GL		Bp	28.21	BFp	26.46	SD		Bd		BFd											
Raversijde	59		97 RAV 361	O/C	Radius	R	PM	FP?D	GL		Bp	26.87	BFp	25.03	SD		Bd		BFd											
Raversijde	60		97 RAV 361	O/C	Radius	L	PM	FP?D	GL		Bp	31.12	BFp	28.86	SD		Bd		BFd											
Raversijde	60		97 RAV 361	O/C	Radius	L	PM	FP?D	GL		Bp	30.59	BFp	28.49	SD		Bd		BFd											
Raversijde	60		97 RAV 361	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	26.08	BFd	24.05										
Raversijde	60		97 RAV 361	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	27.39	BFd	24.33										
Raversijde	60		97 RAV 361	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD		Bd	25.67	BFd	23.02										
Raversijde	60		97 RAV 361	O/C	Radius	R	PM	FP?D	GL		Bp	29.58	BFp	27.29	SD		Bd		BFd											
Raversijde	88	RAV BOT 350-369	97 RAV 361	O/C	Radius	R	UDE	UDE	GL		Bp		BFp		SD		Bd	30.17	BFd	29.41										
Raversijde	88	RAV BOT 350-369	97 RAV 361	O/C	Radius	R	MD	FD?P	GL		Bp		BFp		SD	15.08	Bd	27.93	BFd	26.28										
Raversijde	61		97 RAV 477	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	26.21	BFd	23.37										
Raversijde	61		97 RAV 477	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD	14.27	Bd	28.54	BFd	25.19										
Raversijde	61		97 RAV 477	O/C	Radius	L	MD	FD?P	GL		Bp		BFp		SD		Bd	28.55	BFd	25.83										
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Radius	R	PM	FP?D	GL		Bp	27.86	BFP	25.77	SD		Bd		BFD											
Raversijde	71	RAV BOT 61-98	97 RAV 65	O/C	Radius	R	PM	FP?D	GL		Bp	28.75	BFP	26.36	SD	16.57	Bd		BFD											
Raversijde	90	RAV 686-781	97 RAV 710 VIS HU + Zond HU 0,5 mm UIT	O/C	Radius	R	PM	FP?D	GL		Bp	31.73	BFp	28.61	SD		Bd		BFd											
Raversijde	71	RAV BOT 61-98	97 RAV 96	O/C	Radius	L	PM	FP?D	GL		Bp	31.77	BFP	29.18	SD		Bd		BFD											
Raversijde	54		97-RAV-106	O/C	Radius	R	PM	FPUD	GL		Bp	28.95	Bfp	27.44	SD	15.51	Bd		Bfd											
Raversijde	54		97-RAV-117	O/C	Radius	L	PM	FP?D	GL		Bp	29.52	Bfp	26.88	SD	15.78	Bd		Bfd											
Raversijde	54		97-RAV-117	O/C	Radius	R	MD	FD?P	GL		Bp		Bfp		SD		Bd	29.87	Bfd	27.00										
Raversijde	54		97-RAV-123	O/C	Radius	R	MD	FD?P	GL		Bp		Bfp		SD	14.47	Bd	27.20	Bfd	23.36										
Raversijde	54		97-RAV-148	O/C	Radius	L	PM	FP?D	GL		Bp	28.77	Bfp	24.82	SD		Bd		Bfd											
Raversijde	54		97-RAV-148	O/C	Radius	L	PM	FP?D	GL		Bp	29.79	Bfp	27.65	SD	16.89	Bd		Bfd											
Raversijde	57		97-RAV-298	O/C	Radius	L	MD	FD?P	GL		Bp		Bfp		SD		Bd	26.37	Bfd	24.78										
Raversijde	57		97-RAV-298	O/C	Radius	L	MD	FD?P	GL		Bp		Bfp		SD	16.20	Bd	28.96	Bfd	25.92										
Raversijde	57		97-RAV-298	O/C	Radius	L	PM	FP?D	GL		Bp		Bfp		SD		Bd		Bfd											
Raversijde	57		97-RAV-298	O/C	Radius	L	PM	FP?D	GL		Bp	28.89	Bfp	96.79	SD		Bd		Bfd											
Raversijde	57		97-RAV-298	O/C	Radius	R	PM	FP?D	GL		Bp	28.85	Bfp	27.51	SD		Bd		Bfd											
Raversijde	57		97-RAV-298	O/C	Radius	R	PM	FP?D	GL		Bp		Bfp		SD		Bd		Bfd											
Raversijde	57		97-RAV-298	O/C	Radius	R	PM	FP?D	GL		Bp	28.17	Bfp	26.07	SD		Bd		Bfd											
Raversijde	57		97-RAV-298	O/C	Radius	R	PM	FP?D	GL		Bp	32.07	Bfp	30.35	SD	16.43	Bd		Bfd											
Raversijde	57		97-RAV-298	O/C	Radius	R	MD	FD?P	GL		Bp		Bfp		SD		Bd	26.77	Bfd	27.11										
Raversijde	57		97-RAV-298	O/C	Radius	L	MD	FD?P	GL		Bp		Bfp		SD		Bd	28.25	Bfd	24.89										
Raversijde	57		97-RAV-298	O/C	Radius	R	MD	FD?P	GL		Bp		Bfp		SD		Bd	27.29	Bfd	24.34										
Raversijde	74	RAV BOT 97-RAV-13 tot 70	97-RAV-34	O/C	Radius	L	MD	FD?P	GL		Bp		Bfp		SD		Bd	27.98	Bfd	24.50										
Raversijde	58		97-RAV-361	O/C	Radius	L	PM	FP?D	GL		Bp	34.40	Bfp	31.35	SD		Bd		Bfd											
Raversijde	58		97-RAV-361	O/C	Radius	R	PM	FP?D	GL		Bp	31.00	Bfp	29.13	SD		Bd		Bfd											
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	Radius	L	PM	FP?D	GL		Bp	31.58	Bfp	29.92	SD		Bd		Bfd											
Raversijde	48	Doos 4	4551	O/C	Radius + Ulna	L	PM	FRadius + Uln	GL		Bp	84.97	BFP	79.21	SD		Bd		BFD		GL		LO		Dpa		SDO		BpC	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 328	O/C	Radius + Ulna	R	PM	FP?D	GL		Bp	30.31	BFp	28.63	SD	19.09	Bd		BFd		GL		LO	42.86	Dpa	24.28	SDO	26.10	BpC	22.16
Raversijde	59		97 RAV 361	O/C	Radius + Ulna	R	PM	FP?D	GL		Bp	31.81	BFp	27.46	SD		Bd		BFd		GL		LO		Dpa		SDO		BpC	21.43
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	19.21	GLP		LG		BG	20.01								
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.55	GLP	27.39	LG	21.71	BG	17.96								
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.07	GLP		LG		BG									
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.12	GLP		LG		BG									
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.63	GLP		LG	23.17	BG	20.95								
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	L	PM	U	HS		DHA		Ld		SLC	13.59	GLP		LG	17.75	BG	15.93								
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	L	M	?	HS		DHA		Ld		SLC	18.14	GLP		LG		BG									
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	L	PM	?	HS		DHA		Ld		SLC	20.01	GLP		LG		BG	21.37								
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.35	GLP	34.29	LG	23.56	BG	23.19								
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.15	GLP	31.21	LG	24.85	BG	21.05								
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.06	GLP	31.71	LG	24.71	BG	20.86								
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.00	GLP		LG	26.04	BG	20.72								
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.89	GLP	29.69	LG		BG									
Raversijde	69	RAV 96 BOT 424	424	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.61	GLP	32.48	LG	25.53	BG	20.67								
Raversijde	63	RAV BOT 477	477	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.56	GLP	32.25	LG	24.02	BG	22.58								
Raversijde	63	RAV BOT 477	477	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	15.59	GLP	27.26	LG	18.10	BG	17.74								
Raversijde	62	97 RAV 650	650	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.78	GLP	33.16	LG	24.07	BG	23.37								
Raversijde	62	97 RAV 650	650	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.56	GLP	30.83	LG	23.64	BG	20.48								
Raversijde	62	97 RAV 650	650	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	16.83	GLP	29.52	LG	22.59	BG	19.78								
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.65	GLP	32.72	LG	24.88	BG	22.35								
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.57	GLP		LG		BG									
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.49	GLP	32.45	LG	24.88	BG	19.82								
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Scapula	R		FP	HS		DHA		Cd		SLC	20.65	GLP	35.08	LG	29.91	BG	21.65								
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Scapula	R		FP	HS		DHA		Cd		SLC	18.36	GLP	32.26	LG	23.09	BG	22.41								
Raversijde	47	Bot 3 Raversijde 4492-4550	4497	O/C	Scapula	L	PM	U	SLC	11.13	GLP		LG	17.30	GB	15.68														
Raversijde	47	Bot 3 Raversijde 4492-4550	4497	O/C	Scapula	R	PM	F?	SLC	19.18	GLP		LG	23.48	GB	21.82														
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	Scapula	R	PM	F	SLC	18.04	GLP	30.63	LG	25.08	BG	19.43														
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	O/C	Scapula	R	PM	FP	HS		DHA		Ld		SLC	18.97	Glp	30.73	LG	25.14	Bg	20.95								
Raversijde	47	Bot 3 Raversijde 4492-4550	4526	O/C	Scapula	R	PM	F	HS		DHA		LD		SLC	15.88	GLP	28.74	CG	23.23	BG	18.59								
Raversijde	48	Doos 4	4551	O/C	Scapula	L	PM	F	HS		DHA		LD		SLC	19.57	GLP	28.56	LG	21.93	BG	17.84								
Raversijde	48	Doos 4	4551	O/C	Scapula	R	PM	F	HS		DHA		LD		SLC	16.12	GLP	28.47	LG	22.78	BG	18.90								
Raversijde	48	Doos 4	4551	O/C	Scapula	R	PM	F	HS		DHA		LD		SLC	19.43	GLP		LG		BG	20.57								
Raversijde	48	Doos 4	4558	O/C	Scapula	R	PM	F	HS		DHA		LD		SLC	17.85	GLP	31.67	LG	25.25	BG	20.05								
Raversijde	48	Doos 5	4564	O/C	Scapula	L	PM	F	HS		DHA		LD		SLC	20.01	GLP	34.03	LG	26.83	BG	22.09								
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.11	GLp	30.59	LG	23.88	BG	20.36								

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?														
Raversijde	64	96 RAV 150-195	86 RAV 178	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.83	GLp	32.86	LG	25.31	BG	20.83
Raversijde	52		95-RAV-120	O/C	Scapula	L	PM	FP	HS		DHA		Ld		SLC	22.71	GLP	37.74	LG	27.55	BG	24.00
Raversijde	52		95-RAV-120	O/C	Scapula	L	PM	FP	HS		DHA		Ld		SLC	17.76	GLP	30.62	LG	25.42	BG	18.17
Raversijde	52		95-RAV-120	O/C	Scapula	R	PM	FP	HS		DHA		Ld		SLC	18.26	GLP	31.51	LG	23.51	BG	21.88
Raversijde	52		95-RAV-120	O/C	Scapula	R	PM	F?	HS		DHA		Ld		SLC	18.51	GLP		LG	23.19	BG	22.58
Raversijde	52		95-RAV-120	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.77	GLP		LG	23.64	BG	20.54
Raversijde	55		95-RAV-279	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.42	GLP		LG		BG	
Raversijde	55		95-RAV-279	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	16.85	GLP	30.18	LG	24.63	BG	19.67
Raversijde	55		95-RAV-279	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	15.83	GLP	29.89	LG	23.05	BG	19.17
Raversijde	64	96 RAV 150-195	96 RAV 184	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.42	GLp		LG	23.92	BG	19.07
Raversijde	64	96 RAV 150-195	96 RAV 184	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.94	GLp	33.07	LG	24.71	BG	22.86
Raversijde	64	96 RAV 150-195	96 RAV 188	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLp	33.68	LG	26.41	BG	21.86
Raversijde	78	96 RAV 196-204	96 RAV 203	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	18.01	GLP		LG		BG	20.65
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.77	GLP	31.70	LG	24.76	BG	20.37
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Scapula	L	PM	?	HS		DHA		Ld		SLC	19.91	GLP		LG	24.52	BG	22.84
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Scapula	L	PM	?	HS		DHA		Ld		SLC	18.85	GLP		LG		BG	
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.90	GLP	30.96	LG	24.29	BG	20.87
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	19.37	GLP		LG		BG	19.80
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.09	GLP	33.80	LG		BG	
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	19.13	GLP	30.43	LG	23.25	BG	19.78
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	16.99	GLP	29.05	LG	23.74	BG	19.70
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	19.18	GLP		LG		BG	
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	15.75	GLP	28.62	LG	24.08	BG	
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	O/C	Scapula	L	PM	FP	HS		DHA		Ld		SLC	16.36	GLP		LG	25.90	BG	19.71
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.33	GLP	32.15	LG	21.80	BG	20.68
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	O/C	Scapula	L	PM	?F	HS		DHA		Ld		SLC	17.66	GLP		LG		BG	18.80
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	O/C	Scapula	R	PM	?F	HS		DHA		Ld		SLC	19.88	GLP		LG		BG	21.95
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	16.89	GLP	31.09	LG	25.23	BG	19.20
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.05	GLP	30.03	LG	24.14	BG	
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.71	GLP	32.51	LG	25.85	BG	20.94
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	Scapula	R	PM	FP	HS		DHA		Ld		SLC		GLP	30.92	LG	25.20	BG	21.15
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	Scapula	L	M	?	HS		DHA		Ld		SLC	19.12	GLP		LG		BG	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.27	GLP	31.41	LG	24.72	BG	19.89
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	Scapula	R	PM	?F	HS		DHA		Ld		SLC	17.88	GLP		LG		BG	19.41
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.97	GLP	28.52	LG	23.40	BG	17.17
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 24	O/C	Scapula	L	MP	F	HS		DHA		Ld		SLC	19.98	GLP	32.68	LG	25.64	BG	21.57
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.88	GLP	29.34	LG		BG	
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Scapula	R	M	?	HS		DHA		Ld		SLC	19.63	GLP		LG		BG	
Raversijde	87	RAV BOT 235-263	96 RAV 250	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.11	GLP	31.68	LG	23.82	BG	21.33
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	20.71	GLP	35.12	LG	27.63	BG	22.62
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.66	GLP	31.42	LG	20.28	BG	19.38
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Scapula	R	PM	?F	HS		DHA		Ld	140.15	SLC	11.86	GLP		LG		BG	
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Scapula	L	PM	F	HS	140.56	DHA		Ld		SLC	19.59	GLP	33.10	LG	26.25	BG	22.35
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.96	GLP	30.60	LG	23.98	BG	20.26
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	20.55	GLP		LG	22.58	BG	20.92
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	Scapula	R	M	?	HS		DHA		Ld		SLC	17.99	GLP		LG		BG	
Raversijde	77	96 RAV 288-314	96 RAV 288	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	21.74	GLP	35.97	LG	24.00	BG	22.03
Raversijde	77	96 RAV 288-314	96 RAV 300	O/C	Scapula	R	PM	?F	HS		DHA		Ld		SLC	19.11	GLP		LG	24.44	BG	21.28
Raversijde	77	96 RAV 288-314	96 RAV 309	O/C	Scapula	R	M	?	HS		DHA		Ld		SLC	13.32	GLP		LG		BG	
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	19.78	GLP		LG		BG	22.70
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.66	GLP		LG		BG	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.68	GLP	31.39	LG	24.09	BG	20.95
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	Scapula	R	M	?	HS		DHA		Ld		SLC	16.39	GLP		LG		BG	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	17.46	GLP		LG	22.62	BG	20.04
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.64	GLP		LG		BG	19.75
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 323	O/C	Scapula	L	PM	FP?D	HS		DHA		Ld		SLC	18.37	GLP	34.23	LG	26.96	BG	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 325	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.08	GLP	30.32	LG	24.45	BG	21.86
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 328	O/C	Scapula	L	PM	?	HS		DHA		Ld		SLC	19.49	GLP		LG		BG	21.63
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	Scapula	R	M	?	HS		DHA		Ld		SLC	18.23	GLP		LG		BG	
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.63	GLP		LG		BG	20.66
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	19.20	GLP	32.86	LG	26.22	BG	20.81
Raversijde	83	RAV bot 338-374	96 RAV 339	O/C	Scapula	L	PM	?F	HS		DHA		Ld		SLC	15.43	GLP		LG	21.37	BG	20.12
Raversijde	83	RAV bot 338-374	96 RAV 339	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.18	GLP	31.58	LG	23.45	BG	20.92
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 349	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.62	GLP	31.93	LG	24.03	BG	22.21

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?														
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	Scapula	L	PM	?	HS		DHA		Ld		SLC	17.74	GLP		LG		BG	
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	18.62	GLP		LG		BG	20.90
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.20	GLP	33.17	LG	25.59	BG	21.24
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	Scapula	R	PM	F	HS		DHA		LD		SLC	17.58	GLP	29.83	LG	23.21	BG	18.06
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Scapula	R	PM	F	HS		DHA		LD		SLC	25.04	GLP	43.06	LG	36.00	BG	30.93
Raversijde	70	RAV BOT 61-69	96 RAV 64	O/C	Scapula	L	PM	F	HS		DHA		LD		SLC	16.00	GLP	27.99	LG	20.95	BG	17.55
Raversijde	70	RAV BOT 61-69	96 RAV 66	O/C	Scapula	L	PM	F	HS		DHA		LD		SLC	18.80	GLP	29.60	LG	22.21	BG	19.09
Raversijde	89	RAV BOT 1996 772-780	96 RAV 742	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	19.02	GLP		LG	23.38	BG	21.34
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.7	O/C	Scapula	R	All	U	HS		DHA		Ld		SLC	10.89	GLP		LG	17.48	BG	14.21
Raversijde	53		96-RAV-123	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	21.15	GLP	34.54	LG	24.67	BG	23.25
Raversijde	53		96-RAV-127	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	31.59	LG	24.52	BG	20.94
Raversijde	53		96-RAV-128	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.35	GLP	29.13	LG	22.83	BG	19.36
Raversijde	53		96-RAV-128	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	19.39	GLP	31.82	LG		BG	
Raversijde	53		96-RAV-128	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.40	GLP	33.22	LG	24.68	BG	20.71
Raversijde	53		96-RAV-145	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	16.54	GLP	26.94	LG	21.05	BG	18.86
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	Scapula	R	M	?	HS		DHA		Ld		SLC	20.70	GLP		LG		BG	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.4	O/C	Scapula	R	PM		HS		DHA		Ld		SLC	19.08	GLP	30.28	LG	25.61	BG	20.46
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR-11.5ZWART	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	16.94	GLP	26.74	LG		BG	18.10
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR-11.5ZWART	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP	33.10	LG	24.59	BG	20.63
Raversijde	50		96-RAV-GRACHT-11.6	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	17.67	GLP		LG		BG	
Raversijde	75	97 RAV 150-189	97 RAV 168 ZAK DES 2 ZAK	O/C	Scapula	L	M	?	HS		DHA		Ld		SLC	18.96	GLP		LG		BG	
Raversijde	75	97 RAV 150-189	97 RAV 168 ZAK DES 2 ZAK	O/C	Scapula	R	PM	?F	HS		DHA		Ld		SLC	19.86	GLP	32.01	LG	23.15	BG	21.68
Raversijde	75	97 RAV 150-189	97 RAV 176	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	19.13	GLP	30.29	LG	22.96	BG	21.32
Raversijde	75	97 RAV 150-189	97 RAV 176	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.08	GLP	29.89	LG	23.54	BG	18.67
Raversijde	75	97 RAV 150-189	97 RAV 181	O/C	Scapula	L	PM	?	HS		DHA		Ld		SLC	17.40	GLP		LG		BG	
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	Scapula	L	PM	U	HS		DHA		Ld		SLC	22.04	GLp		LG		BG	
Raversijde	76	RAV 97 191-209	97 RAV 191	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	19.16	GLP	33.35	LG	25.43	BG	21.26
Raversijde	76	RAV 97 191-209	97 RAV 194	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.85	GLP	32.24	LG	26.10	BG	20.77
Raversijde	76	RAV 97 191-209	97 RAV 205	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.94	GLP	33.20	LG	25.47	BG	
Raversijde	82	RAV bot 210-301	97 RAV 281	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	16.75	GLP		LG		BG	19.84
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	16.38	GLP		LG	24.05	BG	19.58
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	Scapula	L	PM	?F	HS		DHA		Ld		SLC	18.83	GLP		LG		BG	20.68
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.01	GLP	31.33	LG	24.09	BG	19.15
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.40	GLP	31.79	LG	24.23	BG	
Raversijde	81	RAV 97 306-339	97 RAV 318	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.58	GLP	28.97	LG	21.80	BG	17.46
Raversijde	81	RAV 97 306-339	97 RAV 332	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	16.83	GLP		LG		BG	
Raversijde	81	RAV 97 306-339	97 RAV 332	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC		GLP	36.52	LG	27.54	BG	25.03
Raversijde	81	RAV 97 306-339	97 RAV 337	O/C	Scapula	L	PM	?F	HS		DHA		Ld		SLC	17.56	GLP		LG		BG	18.11
Raversijde	88	RAV BOT 350-369	97 RAV 355	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.30	GLP	33.35	LG	27.20	BG	22.01
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	Scapula	L	PM	?F	HS		DHA		Ld		SLC	18.72	GLP		LG	21.61	BG	19.19
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	18.54	GLP		LG		BG	18.89
Raversijde	59		97 RAV 361	O/C	Scapula	L	PM	?	HS		DHA		Ld		SLC	17.50	GLP		LG	20.54	BG	18.68
Raversijde	59		97 RAV 361	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	16.83	GLP		LG	23.04	BG	20.96
Raversijde	59		97 RAV 361	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	16.50	GLP	30.59	LG	22.22	BG	19.07
Raversijde	59		97 RAV 361	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.64	GLP	30.57	LG	23.02	BG	19.42
Raversijde	59		97 RAV 361	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	17.73	GLP		LG		BG	19.26
Raversijde	59		97 RAV 361	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	19.64	GLP		LG		BG	20.74
Raversijde	88	RAV BOT 350-369	97 RAV 369	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.22	GLP	30.39	LG	24.86	BG	19.90
Raversijde	61		97 RAV 477	O/C	Scapula	L	PM	U	HS		DHA		Ld		SLC	15.61	GLP		LG	20.42	BG	
Raversijde	61		97 RAV 477	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	19.14	GLP	32.17	LG	25.34	BG	22.63
Raversijde	61		97 RAV 477	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	17.54	GLP	30.11	LG	23.36	BG	20.31
Raversijde	61		97 RAV 477	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.10	GLP	32.15	LG	25.12	BG	20.73
Raversijde	61		97 RAV 477	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.20	GLP	31.84	LG	25.19	BG	21.21
Raversijde	61		97 RAV 477	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	15.99	GLP	29.24	LG	22.83	BG	19.24
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Scapula	R	PM	?	HS		DHA		LD		SLC	19.47	GLP		LG		BG	
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	Scapula	R	PM	F	HS		DHA		LD		SLC	18.51	GLP	30.56	LG	23.78	BG	18.53
Raversijde	90	RAV 686-781	97 RAV 686 3 Zakjes	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.31	GLP	31.03	LG	24.76	BG	19.62
Raversijde	90	RAV 686-781	97 RAV 686 3 Zakjes	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.15	GLP	31.01	LG	24.40	BG	19.60
Raversijde	90	RAV 686-781	97 RAV 708	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.49	GLP		LG		BG	
Raversijde	90	RAV 686-781	97 RAV 708	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.06	GLP	31.82	LG	26.53	BG	21.57
Raversijde	90	RAV 686-781	97 RAV 710 VIS HU + Zond HU 0,5 mm UIT	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	20.54	GLP	32.74	LG	25.50	BG	20.86
Raversijde	90	RAV 686-781	97 RAV 710 VIS HU + Zond HU 0,5 mm UIT	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	20.16	GLP	33.41	LG	26.50	BG	23.12
Raversijde	71	RAV BOT 61-98	97 RAV 96	O/C	Scapula	R	PM	FD?P	HS		DHA		LD		SLC	16.84	GLP		LG		BG	18.79
Raversijde	54		97-RAV-108	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.13	GLP	33.32	LG	25.08	BG	20.27
Raversijde	54		97-RAV-117	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.19	GLP	29.18	LG	22.49	BG	18.82
Raversijde	54		97-RAV-117	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.06	GLP	29.63	LG	22.76	BG	19.24
Raversijde	54		97-RAV-117	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.83	GLP	34.75	LG	25.19	BG	22.03
Raversijde	54		97-RAV-148	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.79	GLP	31.97	LG	26.18	BG	21.24
Raversijde	57		97-RAV-298	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	15.48	GLP	29.43	LG	22.81	BG	19.76
Raversijde	57		97-RAV-298	O/C	Scapula	R	M	?	HS		DHA		Ld		SLC		GLP		LG		BG	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	57		97-RAV-298	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.19	GLP		LG		BG			
Raversijde	57		97-RAV-298	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	17.65	GLP	30.99	LG	24.33	BG	17.95		
Raversijde	57		97-RAV-298	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	21.51	GLP	34.53	LG		BG	20.59		
Raversijde	58		97-RAV-361	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP	32.15	LG	24.31	BG			
Raversijde	58		97-RAV-361	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	18.89	GLP		LG	25.34	BG	21.21		
Raversijde	58		97-RAV-361	O/C	Scapula	L	PM	F	HS		DHA		Ld		SLC	20.18	GLP	33.75	LG	27.13	BG	20.42		
Raversijde	58		97-RAV-361	O/C	Scapula	R	PM	?	HS		DHA		Ld		SLC	18.68	GLP		LG	23.09	BG	19.02		
Raversijde	58		97-RAV-361	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.63	GLP	31.53	LG	25.07	BG	21.04		
Raversijde	58		97-RAV-361	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	18.17	GLP	31.20	LG	24.57	BG	20.05		
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	O/C	Scapula	R	PM	F	HS		DHA		Ld		SLC	19.84	GLP		LG	26.57	BG	20.51		
Raversijde	68			O/C	Scapula	L	PM	F	SLC	18.63	GLP	29.27	LG	23.28	BG	18.98								
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4431	O/C	Tibia	R	PM	FingP?D	GL		Bp	42.33	SD		Bd		Dd							
Raversijde	88	RAV BOT 350-369	97 RAV 351	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	15.12	Bd	24.15	Dd	19.94						
Raversijde	69	RAV 96 BOT 424	424	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	23.63	Dd	18.24						
Raversijde	69	RAV 96 BOT 424	424	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.08	Dd	20.34						
Raversijde	69	RAV 96 BOT 424	424	O/C	Tibia	L	MD	FingD?P	GL		Bp		SD		Bd	26.19	Dd	20.97						
Raversijde	69	RAV 96 BOT 424	424	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.33	Bd	25.20	Dd	19.45						
Raversijde	69	RAV 96 BOT 424	424	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	15.54	Bd	28.94	Dd	22.36						
Raversijde	69	RAV 96 BOT 424	424	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	15.99	Bd	27.32	Dd	21.08						
Raversijde	69	RAV 96 BOT 424	424	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	23.62	Dd	19.28						
Raversijde	69	RAV 96 BOT 424	424	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.98	Dd	19.88						
Raversijde	69	RAV 96 BOT 424	424	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.27	Bd	23.26	Dd	19.50						
Raversijde	63	RAV BOT 477	477	O/C	Tibia	R	PM	FingP?D	GL		Bp	35.10	SD		Bd		Dd							
Raversijde	63	RAV BOT 477	477	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	24.38	Dd	20.14						
Raversijde	63	RAV BOT 477	477	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.00	Dd	18.98						
Raversijde	62	97 RAV 650	650	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.97	Bd	25.34	Dd	20.69						
Raversijde	62	97 RAV 650	650	O/C	Tibia	L	MD	FD?P	GL		B		SD	13.19	Bd	23.86	Dd	18.77						
Raversijde	62	97 RAV 650	650	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.80	Bd	26.51	Dd	20.10						
Raversijde	62	97 RAV 650	650	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.78	Bd	24.66	Dd	19.26						
Raversijde	62	97 RAV 650	650	O/C	Tibia	L	PM	FP?D	GL		Bp	37.23	SD		Bd		Dd							
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.55	Dd	19.97						
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	24.30	Dd	19.07						
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.78	Bd	23.93	Dd	20.89						
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	27.11	Dd	21.03						
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	Tibia	L	MD	FD	GL		Bp		SD		Bd	24.66	Dd	19.57						
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	O/C	Tibia	R	MD	FD	GL		Bp		SD		Bd	23.37	Dd	19.30						
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.66	Dd	19.99						
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.31	Bd	25.95	Dd	18.98						
Raversijde	46	Bot 2 Raversijde 4466-4492	4482	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	24.61	Dd	20.90						
Raversijde	46	Bot 2 Raversijde 4466-4492	4487	O/C	Tibia	L	PM	FingP ?D	GL		Bp	33.67	SD		Bd		Dd							
Raversijde	46	Bot 2 Raversijde 4466-4492	4492	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	14.14	Bd	26.46	Dd	19.49						
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Tibia	L		FD?P	GL		Bp		SD	15.18	Bd	25.69	Dd	20.77						
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Tibia	L		FD?P	GL		Bp		SD		Bd	23.64	Dd	18.48						
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Tibia	L		FD?P	GL		Bp		SD		Bd	24.44	Dd	20.22						
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Tibia	R		FD?P	GL		Bp		SD	14.10	Bd	22.33	Dd	19.89						
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Tibia	R		FD?P	GL		Bp		SD		Bd	27.01	Dd	22.41						
Raversijde	47	Bot 3 Raversijde 4492-4550	4497	O/C	Tibia	L	MD	FD?P	Bd	25.97	DD	20.38	SD	14.45										
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	15.40	Bd	26.39	PD	20.67						
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	5.55	Bd	24.68	Dd	19.76						
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	14.92	Bd	26.82	Dd	19.27						
Raversijde	47	Bot 3 Raversijde 4492-4550	4526	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	14.03	Bd	24.85	DD	18.72						
Raversijde	47	Bot 3 Raversijde 4492-4550	4545	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	14.62	Bd	24.67	DD	21.10						
Raversijde	47	Bot 3 Raversijde 4492-4550	4547	O/C	Tibia	L		FD?P	GL		Bp		SD		Bd	24.96	Dd	18.76						
Raversijde	47	Bot 3 Raversijde 4492-4550	4547	O/C	Tibia	L		FD?P	GL		Bp		SD	13.01	Bd	23.74	Dd	19.54						
Raversijde	47	Bot 3 Raversijde 4492-4550	4550	O/C	Tibia	L	MD	FD	GL		Bp		SD		Bd	25.73	DD	20.17						
Raversijde	47	Bot 3 Raversijde 4492-4550	4550	O/C	Tibia	R	MD	FD	GL		Bp		SD	13.72	Bd	26.48	DD	20.52						
Raversijde	48	Doos 4	4551	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.93	Bd	24.77	DD	20.93						
Raversijde	48	Doos 4	4554	O/C	Tibia	R	PM		GL		Bp	37.61	Dd		SD		Bd							
Raversijde	48	Doos 4	4558	O/C	Tibia	L	MD	FingD?P	GL		Bp		SD	15.40	Bd	26.04	DD	19.63						
Raversijde	48	Doos 4	4558	O/C	Tibia	L	MD	FingD?P	GL		Bp		SD	13.28	Bd	23.79	DD	17.99						
Raversijde	48	Doos 4	4559	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	12.86	Bd	25.28	Dd	20.22						
Raversijde	48	Doos 4	4562	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.20	Dd	21.08						
Raversijde	48	Doos 4	4566	O/C	Tibia	L	MD	FD?P					GL		BpC		SD		Bd	25.19	BFD	20.22		
Raversijde	48	Doos 4	4566	O/C	Tibia	R	MD	FD?P					GL		BpC		SD		Bd	24.24	BFD	18.47		
Raversijde	48	Doos 4	4568	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.70	Bd	25.04	Dd	19.86						
Raversijde	48	Doos 4	4569	O/C	Tibia	L	MD	FingP	Bp		Bd	23.51			SD	12.86	GL						Dd	19.36

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?										
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Tibia	R	MD	FD?P	GLP		Bp		SD		Bd	26.87	Dd	19.68
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.92	Bd	22.85	Dd	18.17
Raversijde	52		95-RAV-120	O/C	Tibia	L	PM	FP?D	GL		Bp	40.42	SD		Bd		Dd	
Raversijde	52		95-RAV-120	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.88	Dd	21.89
Raversijde	52		95-RAV-120	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	27.21	Dd	21.11
Raversijde	52		95-RAV-120	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	12.50	Bd	23.54	Dd	18.83
Raversijde	55		95-RAV-279	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.93	Dd	21.38
Raversijde	55		95-RAV-279	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.60	Dd	20.87
Raversijde	55		95-RAV-279	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.01	Bd	25.48	Dd	19.16
Raversijde	55		95-RAV-279	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.37	Dd	18.14
Raversijde	55		95-RAV-279	O/C	Tibia	R	PM	FP?D	GL		Bp	40.39	SD	14.70	Bd		Dd	
Raversijde	51		95-RAV-94	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.79	Bd	25.61	Dd	20.27
Raversijde	64	96 RAV 150-195	96 RAV 172	O/C	Tibia	L	MS	FD?P	GL		Bp		SD		Bd	25.05	Dd	22.51
Raversijde	64	96 RAV 150-195	96 RAV 173	O/C	Tibia	R	FD?P	FD?P	GL		Bp		SD		Bd	26.64	Dd	20.98
Raversijde	64	96 RAV 150-195	96 RAV 177 vis HU. UIT	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.90	Bd	25.17	Dd	20.04
Raversijde	64	96 RAV 150-195	96 RAV 177 vis HU. UIT	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.74	Bd	24.30	Dd	19.37
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Tibia	L	M	?	GL		Bp		SD	17.79	Bd		Dd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	24.97	Dd	17.50
Raversijde	78	96 RAV 196-204	96 RAV 197	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.79	Dd	19.60
Raversijde	78	96 RAV 196-204	96 RAV 203	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.83	Bd	25.91	Dd	19.22
Raversijde	78	96 RAV 196-204	96 RAV 203	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	23.59	Dd	18.78
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	15.85	Bd	27.57	Dd	21.07
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Tibia	L	UPE	UPE	GL		Bp	40.36	SD		Bd		Dd	
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Tibia	R	PM	FingP?D	GL		Bp	39.14	SD		Bd		Dd	
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Tibia	R	MD	FingD?P	GL		Bp		SD		Bd	25.80	Dd	20.66
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.23	Bd	25.25	Dd	19.65
Raversijde	79	96 RAV 208-218	96 RAV 208	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.72	Dd	19.86
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 21	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.58	Bd	25.82	Dd	20.42
Raversijde	79	96 RAV 208-218	96 RAV 210	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	26.87	Dd	20.05
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	24.37	Dd	19.45
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	24.97	Dd	19.48
Raversijde	79	96 RAV 208-218	96 RAV 214	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	23.87	Dd	19.50
Raversijde	79	96 RAV 208-218	96 RAV 217 vis HU t zond HV 0,5 mm UIT	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	24.15	Dd	17.72
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 22	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	26.61	Dd	20.14
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	27.14	Dd	20.28
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.00	Bd	23.19	Dd	18.08
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.56	Dd	20.89
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.99	Dd	20.49
Raversijde	84	RAV bot 221-226	96 RAV 225	O/C	Tibia	L	MD	FingD?P	GL		Bp		SD		Bd	28.25	Dd	22.86
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.00	Bd	24.92	Dd	20.39
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.02	Dd	19.51
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	23.96	Dd	19.72
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.77	Dd	19.71
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.90	Bd	24.78	Dd	19.25
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	22.99	Dd	18.14
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.80	Dd	21.06
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	23.95	Dd	18.63
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 233	O/C	Tibia	?R	PM	FP?D	GL		Bp	41.93	SD		Bd		Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	12.73	Bd	23.48	Dd	19.03
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.71	Dd	17.98
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	26.19	Dd	20.92
Raversijde	87	RAV BOT 235-263	96 RAV 253	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.80	Bd	25.67	Dd	18.90
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	15.77	Bd	27.74	Dd	22.11
Raversijde	87	RAV BOT 235-263	96 RAV 263	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.76	Bd	24.77	Dd	19.63
Raversijde	80	96 RAV 264-286	96 RAV 266	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	24.69	Dd	19.09
Raversijde	80	96 RAV 264-286	96 RAV 266	O/C	Tibia	R	PM	FingP?D	GL		Bp	42.32	SD		Bd		Dd	
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	26.36	Dd	21.42
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Tibia	L	MD	FingD?P	GL		Bp		SD		Bd	26.12	Dd	21.15
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Tibia	L	PM	FP?D	GL		Bp	38.13	SD		Bd		Dd	
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Tibia	L	PM	FP?D	GL	9.00	Bp	37.90	SD		Bd		Dd	
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.32	Dd	22.16
Raversijde	80	96 RAV 264-286	96 RAV 283	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.05	Bd	26.07	Dd	21.08
Raversijde	77	96 RAV 288-314	96 RAV 300	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.05	Bd	26.70	Dd	20.43
Raversijde	77	96 RAV 288-314	96 RAV 300	O/C	Tibia	L	PM	FP?D	GL		Bp	39.53	SD		Bd		Dd	
Raversijde	77	96 RAV 288-314	96 RAV 306	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.68	Dd	20.09
Raversijde	77	96 RAV 288-314	96 RAV 309	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.49	Bd	24.84	Dd	18.79
Raversijde	77	96 RAV 288-314	96 RAV 309	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.57	Bd	24.57	Dd	19.00
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.25	Bd	23.17	Dd	17.31
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.64	Bd	24.72	Dd	19.28
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.06	Dd	19.26
Raversijde	77	96 RAV 288-314	96 RAV 314	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.78	Dd	20.24

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?										
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	Tibia	R	PM	FP?D	GL		Bp	37.71	SD		Bd		Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 325	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	24.53	Dd	19.73
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 328	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	12.38	Bd	24.51	Dd	18.78
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	Tibia	R	PM	FP?D	GL		Bp	39.94	SD		Bd		Dd	
Raversijde	83	RAV bot 338-374	96 RAV 338	O/C	Tibia	L	All	F	GL	202.47	Bp	38.47	SD	13.64	Bd		Dd	18.09
Raversijde	83	RAV bot 338-374	96 RAV 339	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	26.79	Dd	20.90
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 345	O/C	Tibia	R	MD	Udrefit	GL		Bp		SD		Bd	25.52	Dd	21.27
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.28	Dd	20.37
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.93	Bd	26.52	Dd	20.23
Raversijde	83	RAV bot 338-374	96 RAV 354	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	12.76	Bd	23.56	Dd	17.91
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	14.73	Bd	24.99	Dd	19.32
Raversijde	83	RAV bot 338-374	96 RAV 362 x	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	24.80	Dd	18.94
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 37	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	22.12	Dd	17.14
Raversijde	70	RAV BOT 61-69	96 RAV 61	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.76	Dd	19.24
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	12.83	Bd	24.14	Dd	17.24
Raversijde	70	RAV BOT 61-69	96 RAV 62	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	14.44	Bd	24.96	Dd	19.53
Raversijde	89	RAV BOT 1996 772-780	96 RAV 738	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	14.36	Bd	26.76	Dd	20.47
Raversijde	89	RAV BOT 1996 772-780	96 RAV 747	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	23.55	Dd	19.31
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.1	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	23.81	Dd	18.61
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.10	O/C	Tibia	R	PM	FP?D	GL		Bp	18.28	SD		Bd		Dd	
Raversijde	53		96-RAV-120	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	15.19	Bd	25.29	Dd	18.87
Raversijde	53		96-RAV-121	O/C	Tibia	L	PM	FP?D	GL		Bp	35.46	SD		Bd		Dd	
Raversijde	53		96-RAV-123	O/C	Tibia	R	MD	FingD	GL		Bp		SD		Bd	27.84	Dd	22.51
Raversijde	53		96-RAV-127	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.40	Bd	24.72	Dd	19.73
Raversijde	53		96-RAV-145	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	12.51	Bd	22.23	Dd	18.41
Raversijde	53		96-RAV-145	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.71	Bd	26.25	Dd	20.72
Raversijde	53		96-RAV-145	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.90	Dd	21.43
Raversijde	53		96-RAV-145	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.13	Bd	25.23	Dd	19.52
Raversijde	53		96-RAV-145	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	14.22	Bd	24.72	Dd	18.74
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.07	Dd	19.98
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.12	Dd	
Raversijde	50		96-RAV-72	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	24.76	Dd	18.87
Raversijde	50		96-RAV-89	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	24.38	Dd	22.31
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	27.10	Dd	23.04
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.50	Dd	19.24
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	27.60	Dd	22.03
Raversijde	50		96-RAV-91	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.68	Dd	19.65
Raversijde	50		96-RAV-92	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.93	Dd	20.05
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.9	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	23.71	Dd	19.23
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.9	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	26.13	Dd	21.53
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.4	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.84	Dd	20.57
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.8	O/C	Tibia	?	?	?	GL		Bp		SD	13.82	Bd	24.79	Dd	19.25
Raversijde	50		96-RAV-GRACHT-11.6	O/C	Tibia	L	PM	FP?D	GL		Bp	39.71	SD		Bd		Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-I Datictish material. (11.7?)	O/C	Tibia	R	?	?	GL		Bp		SD	13.82	Bd	27.16	Dd	21.47
Raversijde	75	97 RAV 150-189	97 RAV 168 ZAK DES 2 ZAK	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.93	Bd		Dd	20.36
Raversijde	75	97 RAV 150-189	97 RAV 174	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.67	Bd	26.33	Dd	19.42
Raversijde	75	97 RAV 150-189	97 RAV 174	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.20	Dd	19.11
Raversijde	75	97 RAV 150-189	97 RAV 176	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	23.70	Dd	19.55
Raversijde	75	97 RAV 150-189	97 RAV 176	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.91	Bd	25.32	Dd	19.61
Raversijde	75	97 RAV 150-189	97 RAV 178	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	15.52	Bd	25.54	Dd	21.82
Raversijde	76	RAV 97 191-209	97 RAV 192	O/C	Tibia	R	MD	FingD?P	GL		Bp		SD		Bd	26.74	Dd	20.84
Raversijde	76	RAV 97 191-209	97 RAV 194	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	21.93	Dd	17.38
Raversijde	76	RAV 97 191-209	97 RAV 194	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.97	Bd	26.92	Dd	22.07
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	12.80	Bd		Dd	20.01
Raversijde	76	RAV 97 191-209	97 RAV 202 3 Zakjes	O/C	Tibia	L	PM	FP?D	GL		Bp	25.32	SD	19.48	Bd		Dd	
Raversijde	76	RAV 97 191-209	97 RAV 206	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	24.68	Dd	19.19
Raversijde	82	RAV bot 210-301	97 RAV 253	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.38	Dd	20.21
Raversijde	82	RAV bot 210-301	97 RAV 253	O/C	Tibia	L	MD	FingD?P	GL		Bp		SD		Bd	25.74	Dd	20.12
Raversijde	82	RAV bot 210-301	97 RAV 301	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.72	Dd	20.03
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	23.98	Dd	18.44

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?										
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	24.76	Dd	20.26
Raversijde	81	RAV 97 306-339	97 RAV 316	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.77	Bd	24.61	Dd	18.29
Raversijde	81	RAV 97 306-339	97 RAV 318	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	23.70	Dd	19.81
Raversijde	81	RAV 97 306-339	97 RAV 318	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.51	Dd	19.32
Raversijde	81	RAV 97 306-339	97 RAV 332	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	24.63	Dd	18.91
Raversijde	81	RAV 97 306-339	97 RAV 334	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	23.35	Dd	18.93
Raversijde	81	RAV 97 306-339	97 RAV 334	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	12.17	Bd	22.90	Dd	18.18
Raversijde	81	RAV 97 306-339	97 RAV 334	O/C	Tibia	L	UPE	UPE	GL		Bp	37.37	SD		Bd		Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	15.04	Bd	26.18	Dd	20.43
Raversijde	59		97 RAV 361	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.56	Dd	19.38
Raversijde	59		97 RAV 361	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.05	Bd	24.89	Dd	19.05
Raversijde	59		97 RAV 361	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	24.85	Dd	19.21
Raversijde	59		97 RAV 361	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.05	Bd		Dd	
Raversijde	59		97 RAV 361	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.13	Bd	26.84	Dd	21.98
Raversijde	59		97 RAV 361	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.38	Bd	24.46	Dd	19.39
Raversijde	59		97 RAV 361	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.53	Bd	25.65	Dd	20.00
Raversijde	59		97 RAV 361	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	12.92	Bd	24.31	Dd	18.39
Raversijde	59		97 RAV 361	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	24.59	Dd	19.26
Raversijde	59		97 RAV 361	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	14.37	Bd	25.52	Dd	19.72
Raversijde	60		97 RAV 361	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.15	Dd	19.09
Raversijde	61		97 RAV 477	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.48	Dd	20.39
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	23.06	Dd	17.52
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	24.64	Dd	17.37
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	Tibia	L	MD	FingD?P	GL		Bp		SD	13.44	Bd	24.27	Dd	18.22
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.85	Bd	24.80	Dd	18.90
Raversijde	90	RAV 686-781	97 RAV 708	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	27.37	Dd	21.84
Raversijde	90	RAV 686-781	97 RAV 712 VIS HU + Zond HU 0, 5 mm UIT	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	27.64	Dd	20.65
Raversijde	90	RAV 686-781	97 RAV 743	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	27.78	Dd	22.12
Raversijde	54		97-RAV-117	O/C	Tibia	L	PM	FP?D	GL		Bp	34.87	SD	13.75	Bd		Dd	
Raversijde	54		97-RAV-148	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.22	Bd	27.49	Dd	21.30
Raversijde	57		97-RAV-298	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.40	Dd	19.25
Raversijde	57		97-RAV-298	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.46	Dd	20.54
Raversijde	57		97-RAV-298	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	26.53	Dd	21.66
Raversijde	57		97-RAV-298	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.06	Bd	25.26	Dd	19.88
Raversijde	57		97-RAV-298	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.64	Dd	19.89
Raversijde	57		97-RAV-298	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	23.41	Dd	18.56
Raversijde	57		97-RAV-298	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.80	Dd	19.46
Raversijde	57		97-RAV-298	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.36	Bd	24.21	Dd	18.93
Raversijde	57		97-RAV-298	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	26.12	Dd	20.37
Raversijde	57		97-RAV-298	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	26.92	Dd	20.52
Raversijde	57		97-RAV-298	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	26.62	Dd	20.47
Raversijde	57		97-RAV-298	O/C	Tibia	R	MD	FiNGD?P	GL		Bp		SD		Bd	26.85	Dd	22.14
Raversijde	57		97-RAV-298	O/C	Tibia	R	UDE	UDE	GL		Bp		SD		Bd	26.87	Dd	19.40
Raversijde	58		97-RAV-361	O/C	Tibia	L	MD	FD?P	GL		Bp		SD		Bd	25.34	Dd	18.82
Raversijde	58		97-RAV-361	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	13.00	Bd	23.71	Dd	20.28
Raversijde	58		97-RAV-361	O/C	Tibia	R	MD	FD?P	GL		Bp		SD		Bd	25.95	Dd	20.26
Raversijde	58		97-RAV-361	O/C	Tibia	R	MD	FD?P	GL		Bp		SD	13.28	Bd	22.21	Dd	17.85
Raversijde	58		97-RAV-361	O/C	Tibia	R	PM	FP?D	GL		Bp	39.67	SD		Bd		Dd	
Raversijde	74	RAV BOT 97-RAV-13 tot 63	97-RAV-55	O/C	Tibia	L	MD	FD?P	GL		Bp		SD	14.57	Bd	25.83	Dd	20.44
Raversijde	69	RAV 96 BOT 424	424	O/C	Ulna	L	PM	F	GL		LO	40.48	Dpa	17.89	SDO	24.56	BpC	16.25
Raversijde	69	RAV 96 BOT 424	424	O/C	Ulna	L	M	U	GL		LO		Dpa		SDO	24.72	BpC	
Raversijde	69	RAV 96 BOT 424	424	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	26.93	BpC	16.40
Raversijde	69	RAV 96 BOT 424	424	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	25.19	BpC	18.95
Raversijde	69	RAV 96 BOT 424	424	O/C	Ulna	R	PM	F	GL		LO	35.28	Dpa	20.13	SDO	23.80	BpC	17.26
Raversijde	63	RAV BOT 477	477	O/C	Ulna	L	M	U	GL		LO		Dpa		SDO	27.11	BpC	17.50
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Ulna	L		F	GL		LO		Dpa		SDO	23.97	BpC	19.27
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	O/C	Ulna	L		?	GL		LO		Dpa		SDO	27.76	BpC	16.85
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	O/C	Ulna	L	M	F	GL		LO		Dpa	38.78	SDO	24.81	BpC	19.41
Raversijde	47	Bot 3 Raversijde 4492-4550	4513	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	27.44	BpC	17.10
Raversijde	47	Bot 3 Raversijde 4492-4550	4526	O/C	Ulna	L	M	U	GL		LO		Dpa		SDO	28.28	BpC	18.45
Raversijde	47	Bot 3 Raversijde 4492-4550	4547	O/C	Ulna	L	M	?	GG		LO		Dpa		SDO	27.79	BpC	17.56
Raversijde	48	Doos 4	4551	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	26.63	BpC	16.58
Raversijde	48	Doos 4	4559	O/C	Ulna	R	PM	U	GL		CO		Dpa		SDO		BpC	17.13
Raversijde	48	Doos 4	4562	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	23.55	BpC	16.99
Raversijde	48	Doos 4	4562	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	18.43
Raversijde	48	Doos 4	4565	O/C	Ulna	R	PM	F	GL		LO	37.14	Dpa		SDO	25.91	BpC	17.05
Raversijde	51		95-RAV-115	O/C	Ulna	L	PM	F	GL		LO	35.58	Dpa	20.01	SDO	23.19	BpC	16.11
Raversijde	52		95-RAV-120	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	25.23	BpC	15.72
Raversijde	52		95-RAV-120	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	27.58	BpC	16.58
Raversijde	64	96 RAV 150-195	96 RAV 166	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	27.91	BpC	18.79
Raversijde	64	96 RAV 150-195	96 RAV 173	O/C	Ulna	R	PM	F	GL		LO	37.34	Dpa	20.09	SDO		BpC	17.01
Raversijde	64	96 RAV 150-195	96 RAV 173	O/C	Ulna	R	M	F	GL		LO		Dpa		SDO	22.19	BpC	17.68
Raversijde	64	96 RAV 150-195	96 RAV 194	O/C	Ulna	L	PM	F	GL		LO		Dpa		SDO	28.17	BpC	17.92
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	27.22	BpC	19.23
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	25.70	BpC	17.98
Raversijde	78	96 RAV 196-204	96 RAV 204	O/C	Ulna	R	M	U	GL		LO		Dpa	24.65	SDO	28.73	BpC	20.22
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	O/C	Ulna	R	M	?	GL		LO		Dpa	21.29	SDO	25.94	BpC	17.78
Raversijde	79	96 RAV 208-218	96 RAV 211	O/C	Ulna	L	PM	F	GL		LO	37.55	Dpa	20.87	SDO	25.26	BpC	16.67
Raversijde	79	96 RAV 208-218	96 RAV 217 vis HU t zond HV 0,5 mm UIT	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	25.08	BpC	17.80

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?										
Raversijde	79	96 RAV 208-218	96 RAV 217 vis HU t zond HV 0,5 mm UIT	O/C	Ulna	L	M	UP?D	GL		LO		Dpa		SDO		BpC	17.35
Raversijde	79	96 RAV 208-218	96 RAV 218	O/C	Ulna	L	M	F?	GL		LO		Dpa	20.78	SDO	25.49	BpC	16.14
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	Ulna	R	PM	F	GL		LO	38.98	Dpa	21.21	SDO	25.70	BpC	
Raversijde	84	RAV bot 221-226	96 RAV 221	O/C	Ulna	L	PM	U	GL		LO		Dpa	20.81	SDO	24.34	BpC	17.78
Raversijde	84	RAV bot 221-226	96 RAV	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	18.04
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	O/C	Ulna	L	PM	FP	GL		LO	34.36	Dpa	20.84	SDO	23.11	BpC	17.45
Raversijde	84	RAV bot 221-226	96 RAV 226	O/C	Ulna	L	M	U	GL		LO		Dpa	23.26	SDO	28.10	BpC	19.00
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	O/C	Ulna	R	M	?	GL		LO		Dpa	22.54	SDO	28.77	BpC	17.09
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	27.52	BpC	18.22
Raversijde	87	RAV BOT 235-263	96 RAV 245	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	27.12	BpC	16.84
Raversijde	87	RAV BOT 235-263	96 RAV 247	O/C	Ulna	L	PM	F	GL		LO		Dpa		SDO		BpC	17.20
Raversijde	87	RAV BOT 235-263	96 RAV 248	O/C	Ulna	R	PM	F	GL		LO	43.25	Dpa	22.39	SDO	27.95	BpC	18.33
Raversijde	87	RAV BOT 235-263	96 RAV 254	O/C	Ulna	R	M	U	GL		LO		Dpa	20.02	SDO	23.64	BpC	15.78
Raversijde	87	RAV BOT 235-263	96 RAV 256	O/C	Ulna	L	PM	U	GL		LO		Dpa	21.82	SDO	26.75	BpC	18.27
Raversijde	87	RAV BOT 235-263	96 RAV 256	O/C	Ulna	L	PM	F	GL		LO	40.24	Dpa	20.31	SDO	24.51	BpC	17.00
Raversijde	87	RAV BOT 235-263	96 RAV 260	O/C	Ulna	R	M	?	GL		Bp		SD	14.76	Bd	24.77	Dd	19.63
Raversijde	80	96 RAV 264-286	96 RAV 266	O/C	Ulna	R	M	?	GL		LO		Dpa	22.03	SDO	24.57	BpC	17.91
Raversijde	80	96 RAV 264-286	96 RAV 267	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	27.19	BpC	18.53
Raversijde	80	96 RAV 264-286	96 RAV 282	O/C	Ulna	L	PM	F	GL		LO	40.64	Dpa	20.95	SDO	24.98	BpC	19.39
Raversijde	77	96 RAV 288-314	96 RAV 288	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	28.88	BpC	18.23
Raversijde	77	96 RAV 288-314	96 RAV 300	O/C	Ulna	L	PM	F	GL		LO	43.39	Dpa	23.99	SDO	28.61	BpC	17.28
Raversijde	77	96 RAV 288-314	96 RAV 309	O/C	Ulna	L	M	?	GL		LO		Dpa	24.41	SDO	28.25	BpC	18.96
Raversijde	77	96 RAV 288-314	96 RAV 309	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	30.10	BpC	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318	O/C	Ulna	L	PM	F	GL		LO	39.91	Dpa	20.70	SDO	25.26	BpC	18.56
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	O/C	Ulna	L	PM	F	GL		LO	39.24	Dpa	20.86	SDO	24.57	BpC	17.54
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	O/C	Ulna	R	M	?	GL		LO		Dpa	18.97	SDO	21.37	BpC	14.89
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	Ulna	L	M	U	GL		LO		Dpa		SDO		BpC	18.69
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	O/C	Ulna	L	M	?	GL		LO		Dpa	20.57	SDO	25.30	BpC	17.65
Raversijde	83	RAV bot 338-374	96 RAV 339	O/C	Ulna	R	M	?	GL		LO		Dpa	21.98	SDO	25.59	BpC	19.54
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 347	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	25.96	BpC	16.86
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 54	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	21.15
Raversijde	71	RAV BOT 61-98	96 RAV 62	O/C	Ulna	L	PM	F	GL		LO		Dpa	35.56	SDO	23.53	BpC	18.45
Raversijde	53		96-RAV-127	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	26.88	BpC	17.86
Raversijde	75	97 RAV 150-189	97 RAV 166	O/C	Ulna	R	M	U	GL		LO		Dpa	21.97	SDO	26.94	BpC	19.75
Raversijde	75	97 RAV 150-189	97 RAV 182	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	27.42	BpC	17.92
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	O/C	Ulna	R	PM	F	GL		LO	37.57	Dpa	21.11	SDO	25.37	BpC	17.76
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	21.99	BpC	17.51
Raversijde	81	RAV 97 306-339	97 RAV 316	O/C	Ulna	R	M	U	GL		LO		Dpa	21.77	SDO	25.96	BpC	17.43
Raversijde	81	RAV 97 306-339	97 RAV 318	O/C	Ulna	R	M	U	GL		LO		Dpa		SDO		BpC	19.66
Raversijde	81	RAV 97 306-339	97 RAV 339	O/C	Ulna	R	PM	F	GL		LO		Dpa		SDO		BpC	17.47
Raversijde	88	RAV BOT 350-369	97 RAV 358	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	24.69	BpC	16.07
Raversijde	59		97 RAV 361	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	2348.00	BpC	17.82
Raversijde	59		97 RAV 361	O/C	Ulna	R	M	F	GL		LO		Dpa		SDO		BpC	17.24
Raversijde	61		97 RAV 477	O/C	Ulna	R	M	F	GL		LO		Dpa		SDO	24.70	BpC	16.07
Raversijde	61		97 RAV 477	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	20.19
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	23.98	BpC	19.64
Raversijde	71	RAV BOT 61-98	97 RAV 64	O/C	Ulna	L	PM	F	GL		LO		Dpa	38.95	SDO	23.34	BpC	16.60
Raversijde	71	RAV BOT 61-98	97 RAV 96	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	23.22	BpC	17.94
Raversijde	54		97-RAV-117	O/C	Ulna	R	MD	?	GL		LO		Dpa		SDO	27.96	BpC	19.37
Raversijde	54		97-RAV-117	O/C	Ulna	L	MD	?	GL		LO		Dpa		SDO	40.68	BpC	26.82
Raversijde	57		97-RAV-298	O/C	Ulna	L	PM	F	GL		LO		Dpa		SDO	25.90	Bpc	19.01
Raversijde	57		97-RAV-298	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	26.19	Bpc	16.27
Raversijde	57		97-RAV-298	O/C	Ulna	L	M	?	GL		LO		Dpa		SDO	23.83	Bpc	19.47
Raversijde	57		97-RAV-298	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	23.88	Bpc	16.83
Raversijde	57		97-RAV-298	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	24.11	Bpc	15.94
Raversijde	58		97-RAV-361	O/C	Ulna	L	M	U	GL		LO		Dpa		SDO	29.02	BpC	18.88
Raversijde	58		97-RAV-361	O/C	Ulna	R	M	F	GL		LO		Dpa		SDO	27.24	BpC	20.24
Raversijde	58		97-RAV-361	O/C	Ulna	R	M	F	GL		LO		Dpa		SDO	24.47	BpC	15.37
Raversijde	58		97-RAV-361	O/C	Ulna	R	M	U	GL		LO		Dpa		SDO	26.34	BpC	14.99
Raversijde	74	RAV BOT 97-RAV-13 tot 78	97-RAV-48	O/C	Ulna	L	M	U	GL		LO		Dpa		SDO	27.66	BpC	18.05
Raversijde	79	96 RAV 208-218	96 RAV 210	O/C	Ulna	R	M	?	GL		LO		Dpa		SDO	26.97	BpC	17.32
Raversijde	62	97 RAV 650	650	Sus	Astragalus	L	All	F	GL	46.17	GLm	43.42	GB	27.04				
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	Sus	Astragalus	L	All	F	GL		GLm	46.44	GB					
Raversijde	46	Bot 2 Raversjide 4466-4492	4492	Sus	Astragalus	L	All	FD?P	GL	50.42	GLm	46.41	GB	28.88				
Raversijde	52		95-RAV-120	Sus	Astragalus	R	All	F	GL	48.54	GLM	43.88	GB	26.31				
Raversijde	64	96 RAV 150-195	96 RAV 192	Sus	Astragalus	R	All	F	GL	49.88	GLm	47.88	GB					
Raversijde	78	96 RAV 196-204	96 RAV 203	Sus	Astragalus	R	All	F	GL	50.59	GLm		GB	28.83				
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 22	Sus	Astragalus	R	All	F	GL	47.39	GLM	43.52	GB	28.23				
Raversijde	84	RAV bot 221-226	96 RAV 226	Sus	Astragalus	R	All	F	GL	51.89	GLm	48.30	GB	30.06				
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	Astragalus	L	All	F	GL	49.41	GLm	45.92	GB	29.28				
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	Astragalus	R	All	F	GL	49.70	GLm	45.77	GB	27.78				

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?														
Raversijde	87	RAV BOT 235-263	96 RAV 254	Sus	Astragalus	L	All	F	GL	51.13	GLm	53.10	GB	31.22								
Raversijde	80	96 RAV 264-286	96 RAV 266	Sus	Astragalus	L	All	F	GL	48.54	GLm	44.42	GB	31.83								
Raversijde	80	96 RAV 264-286	96 RAV 267	Sus	Astragalus	R	All	F	GL	53.95	GLm	51.34	GB	28.65								
Raversijde	80	96 RAV 264-286	96 RAV 267	Sus	Astragalus	R	All	F	GL	45.54	GLm	44.36	GB	28.06								
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	Astragalus	R	All	F	GL	46.73	GLM	42.73	GB	26.42								
Raversijde	71	RAV BOT 61-98	96 RAV 62	Sus	Astragalus	R	All	F	GL	47.26	GLM		GB									
Raversijde	53		96-RAV-121	Sus	Astragalus	L	All	F	GL	46.38	GLM	44.42	GB	26.51								
Raversijde	53		96-RAV-127	Sus	Astragalus	L	All	F	GL	42.33	GLM	40.17	GB	25.55								
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-136	Sus	Astragalus	L	All	F	GL	48.66	GLM	46.85	GB									
Raversijde	53		96-RAV-145	Sus	Astragalus	L	All	F	GL	49.29	GLM	46.31	GB	29.75								
Raversijde	53		96-RAV-146	Sus	Astragalus	R	All	F	GL	50.18	GLM	45.82	GB	27.84								
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV- GR11.4	Sus	Astragalus	R	All		GL	47.88	GLM	44.30	GB	25.67								
Raversijde	75	97 RAV 150-189	97 RAV 168 ZAK DES 2 ZAK	Sus	Astragalus	R	All	F	GL	42.87	GLm	40.82	GB	26.75								
Raversijde	82	RAV bot 210-301	97 RAV 212	Sus	Astragalus	L	All	F	GL		GLm	45.91	GB	29.65								
Raversijde	82	RAV bot 210-301	97 RAV 301	Sus	Astragalus	L	All	F	GL	46.49	GLm	42.30	GB	28.32								
Raversijde	81	RAV 97 306-339	97 RAV 339	Sus	Astragalus	L	All	F	GL	44.15	GLm	42.95	GB	28.32								
Raversijde	88	RAV BOT 350-369	97 RAV 355	Sus	Astragalus	R	All	F	GL	48.80	GLm	46.34	GB	26.74								
Raversijde	59		97 RAV 361	Sus	Astragalus	L	All	F	GL	50.03	GLm	46.36	GB	28.27								
Raversijde	90	RAV 686-781	97 RAV 708	Sus	Astragalus	R	All	F	GL	50.30	GLm	47.62	GB	28.19								
Raversijde	57		97-RAV-298	Sus	Astragalus	L	All	F	GL	44.46	GLM	41.21	GB	26.87								
Raversijde	57		97-RAV-298	Sus	Astragalus	R	All	F	GL	44.95	GLM	41.53	GB	24.95								
Raversijde	57		97-RAV-298	Sus	Astragalus	R	All	F	GL	51.68	GLM	47.79	GB	29.91								
Raversijde	57		97-RAV-298	Sus	Astragalus	R	All	F	GL	50.33	GLM	47.30	GB	29.14								
Raversijde	58		97-RAV-361	Sus	Astragalus	R	All	F	GL	47.73	GLM	45.51	GB									
Raversijde	74	RAV BOT 97-RAV-13 tot 76	97-RAV-51	Sus	Astragalus	R	All	F	GL	51.30	GLM	48.03	GB	29.22								
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Calcaneus	L	All	UP	GL		GB	22.45										
Raversijde	69	RAV 96 BOT 424	424	Sus	Calcaneus	L	M	?	GL		GB	24.59										
Raversijde	69	RAV 96 BOT 424	424	Sus	Calcaneus	R	M	U	GL		GB	24.91										
Raversijde	69	RAV 96 BOT 424	424	Sus	Calcaneus	R	M	U	GL		GB	26.19										
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	Sus	Calcaneus	L	M	U	GL		GB	24.32										
Raversijde	78	96 RAV 196-204	96 RAV 196 2 Zakjes	Sus	Calcaneus	R	M	U	GL		GB	25.03										
Raversijde	79	96 RAV 208-218	96 RAV 211	Sus	Calcaneus	L	All	?	GL		GB	23.99										
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 22	Sus	Calcaneus	L	All	U	GL		GB											
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Sus	Calcaneus	R	M	U	GL		GB	24.59										
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Sus	Calcaneus	L	M	U	GL		GB	22.82										
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Sus	Calcaneus	R	M	U	GL		GB	22.51										
Raversijde	87	RAV BOT 235-263	96 RAV 250	Sus	Calcaneus	L	M	U	GL		GB	23.16										
Raversijde	87	RAV BOT 235-263	96 RAV 263	Sus	Calcaneus	L	M	?U	GL		GB	22.68										
Raversijde	80	96 RAV 264-286	96 RAV 282	Sus	Calcaneus	R	M	UDE	GL		GB	24.39										
Raversijde	83	RAV bot 338-374	96 RAV 338	Sus	Calcaneus	L	M	?	GL		GB	22.32										
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 345	Sus	Calcaneus	R	M	U	GL		GB	24.52										
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV- 350 2 Zaken x	Sus	Calcaneus	L	M	U	GL		GB	23.61										
Raversijde	83	RAV bot 338-374	96 RAV 354	Sus	Calcaneus	L	M	U	GL		GB	25.44										
Raversijde	83	RAV bot 338-374	96 RAV 362 x	Sus	Calcaneus	R	M	U	GL		GB	25.72										
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.7	Sus	Calcaneus	R	All	U	GL		GB	24.36										
Raversijde	53		96-RAV-145	Sus	Calcaneus	L	M	U	GL		GB	22.86										
Raversijde	75	97 RAV 150-189	97 RAV 180 2 ZAK VIS HU + ZOND Hui 0,5 UIT	Sus	Calcaneus	L	M	?	GL		GB	20.78										
Raversijde	81	RAV 97 306-339	97 RAV 318	Sus	Calcaneus	L	M	?	GL		GB	23.58										
Raversijde	59		97 RAV 361	Sus	Calcaneus	R	M	U	GL		GB	21.91										
Raversijde	59		97 RAV 361	Sus	Calcaneus	R	M	?	GL		GB	25.76										
Raversijde	60		97 RAV 361	Sus	Calcaneus	R	M	?	GL		GB	26.68										
Raversijde	60		97 RAV 361	Sus	Calcaneus	R	M	U	GL		GB	23.52										
Raversijde	54		97-RAV-105	Sus	Calcaneus	L	MD	U	GL		GB	23.84										
Raversijde	54		97-RAV-106	Sus	Calcaneus	R	M	U	GL		GB	26.65										
Raversijde	57		97-RAV-298	Sus	Calcaneus	L	M	U	GL		GB	20.66										
Raversijde	57		97-RAV-298	Sus	Calcaneus	L	M	U	GL		GB	25.33										
Raversijde	57		97-RAV-298	Sus	Calcaneus	R	M	U	GL		GB	26.29										
Raversijde	58		97-RAV-361	Sus	Calcaneus	R	MD	U	GL		GB	21.82										
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	Sus	Calcaneus	L	M	U	GL		GB	24.02										
Raversijde	47	Bot 3 Raversijde 4492- 4550	4545	Sus	Calcaneus	L		UP	GL		GB	22.52										
Raversijde	47	Bot 3 Raversijde 4492- 4550	4545	Sus	Calcaneus	L		UP	GL		GB	23.66										
Raversijde	75	97 RAV 150-189	97 RAV 180 2 ZAK VIS HU + ZOND Hui 0,5 UIT	Sus	Calcaneus	R	M	U	GL		GB	16.67										
Raversijde	59		97 RAV 361	Sus	Carpal	?	All	F	GB	22.74												
Raversijde	81	RAV 97 306-339	97 RAV 331	Sus	Femur	L	MD	UD(refit)M ?P	GL		GLC		Bp		BTr		DC		SD	17.52	Bd	46.72
Raversijde	47	Bot 3 Raversijde 4492- 4550	4516	Sus	Femur	L	UDE	UDE	Bd	50.28												

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?														
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	Sus	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	49.89
Raversijde	84	RAV bot 221-226	96 RAV 224	Sus	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	46.71
Raversijde	84	RAV bot 221-226	96 RAV 225	Sus	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	45.35
Raversijde	64	96 RAV 150-195	96 RAV 186	Sus	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	52.78
Raversijde	69	RAV 96 BOT 424	424	Sus	Femur	R	M	UD?P	GL		GLC		Bp		BTr		DC		SD	19.49	Bd	
Raversijde	46	Bot 2 Raversjide 4466-4492	4474	Sus	Femur	R	D	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	37.22
Raversijde	51		95-RAV-110	Sus	Femur	R	MD	FD?P	GL		GLC		Bp		BTr		DC		SD	17.56	Bd	38.63
Raversijde	53		96-RAV-127	Sus	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	40.57
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR-11.5ZWART	Sus	Femur	L	MD	FD?P	GL		GLC		Bp		BTr		DC		SD	16.53	Bd	37.50
Raversijde	75	97 RAV 150-189	97 RAV 184 1 ZAK	Sus	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	47.51
Raversijde	82	RAV bot 210-301	97 RAV 224	Sus	Femur	R	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	52.71
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	Sus	Femur	R	M	UD?P	GL		GLC		Bp		BTr		DC		SD	20.51	Bd	
Raversijde	57		97-RAV-298	Sus	Femur	L	UDE	UDE	GL		GLC		Bp		BTr		DC		SD		Bd	35.79
Raversijde	57		97-RAV-298	Sus	Femur	L	M	UD?P	GL		GLC		Bp		BTr		DC		SD		Bd	
Raversijde	57		97-RAV-298	Sus	Femur	L	M+UDE	UD	GL		GLC		Bp		BTr		DC		SD	18.28	Bd	39.08
Raversijde	74	RAV BOT 97-RAV-13 tot 90	97-RAV-37	Sus	Femur	R	MD	UD?P(UDE ref	GL		GLC		Bp		BTr		DC		SD		Bd	37.39
Raversijde	84	RAV bot 221-226	96 RAV 225	Sus	Humerus	L	M	?	GL		GLC		Bp		SD	16.25	Bd		BT			
Raversijde	69	RAV 96 BOT 424	424	Sus	Humerus	L	MD	FingD?P	GL		GLC		Bp		SD	16.66	Bd	42.93	BT	34.59		
Raversijde	69	RAV 96 BOT 424	424	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.27	Bd	43.22	BT	36.17		
Raversijde	69	RAV 96 BOT 424	424	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.95	Bd	42.32	BT			
Raversijde	63	RAV BOT 477	477	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.21	Bd	42.10	BT	31.96		
Raversijde	62	97 RAV 650	650	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	19.88	Bd	44.73	BT	36.28		
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	Sus	Humerus	L	MD	FD	GL		GLC		Bp		SD	19.00	Bd	46.53	BT	33.33		
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	Sus	Humerus	R	MD	FD	GL		GLC		Bp		SD	15.70	Bd	39.07	BT	31.13		
Raversijde	46	Bot 2 Raversjide 4466-4492	4474	Sus	Humerus	R	MD	FDUP	GL		GLC		Bp		SD	17.17	Bd	43.85	BT	33.86		
Raversijde	47	Bot 3 Raversjide 4492-4550	4492	Sus	Humerus	L		FD?P	GL		GLC		Bp		SD	19.35	Bd	45.44	BT	37.85		
Raversijde	47	Bot 3 Raversjide 4492-4550	4492	Sus	Humerus	R		FD?P	GL		GLC		Bp		SD	17.88	Bd	45.72	BT	36.17		
Raversijde	47	Bot 3 Raversjide 4492-4550	4492	Sus	Humerus	R		FD?P	GL		GLC		Bp		SD	17.22	Bd	43.33	BT	33.77		
Raversijde	47	Bot 3 Raversjide 4492-4550	4517	Sus	Humerus	R	All	FingD&P	GL	159.42	GLC		Bp	62.53	SD	13.71	Bd	40.88	BT	30.54		
Raversijde	47	Bot 3 Raversjide 4492-4550	4547	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	40.92	BTR	34.26		
Raversijde	47	Bot 3 Raversjide 4492-4550	4550	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.78	Bd	39.91	BT	35.16		
Raversijde	48	Doos 4	4560	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	37.25	BT	31.74		
Raversijde	45	Bot 1 Raversjide Doos 1 4414-4462	4430 N&S	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	18.06	Bd	43.75	BT	37.00		
Raversijde	52		95-RAV-120	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.93	Bd	44.44	BT			
Raversijde	52		95-RAV-120	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.81	Bd		BT	29.66		
Raversijde	52		95-RAV-120	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.29	Bd		BT			
Raversijde	55		95-RAV-279	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	16.16	Bd		BT	33.40		
Raversijde	55		95-RAV-279	Sus	Humerus	L	All	FDFingP	GL		GLC		Bp		SD	17.58	Bd	49.50	BT	37.32		
Raversijde	55		95-RAV-279	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.82	Bd		BT			
Raversijde	55		95-RAV-279	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	45.51	BT	35.44		
Raversijde	64	96 RAV 150-195	96 RAV 162	Sus	Humerus	L	MD	FD?P	GL		GLC	31.38	Bp		SD	17.74	Bd		BT			
Raversijde	64	96 RAV 150-195	96 RAV 190	Sus	Humerus	L	M	?PUD	GL		GLC		Bp		SD	15.85	Bd		BT			
Raversijde	79	96 RAV 208-218	96 RAV 208	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	50.48	BT	38.77		
Raversijde	79	96 RAV 208-218	96 RAV 210	Sus	Humerus	R	MD	FingD?P	GL		GLC		Bp		SD	17.89	Bd	50.13	BT	43.50		
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	Sus	Humerus	R	M	?P?D	GL		GLC		Bp		SD	16.77	Bd		BT			
Raversijde	84	RAV bot 221-226	96 RAV 225 VIS HU + rond HU- UIT	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	41.68	BT	35.59		
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	45.42	BT	36.07		
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	Humerus	R	MD	FingD?P	GL		GLC		Bp		SD	14.94	Bd	40.65	BT	31.82		
Raversijde	77	96 RAV 288-314	96 RAV 306	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	46.14	BT	36.76		
Raversijde	77	96 RAV 288-314	96 RAV 308	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.97	Bd	37.83	BT	31.69		
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.26	Bd	42.70	BT	36.48		
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	17.33	Bd	43.03	BT	35.01		
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	17.32	Bd	45.00	BT	37.87		
Raversijde	83	RAV bot 338-374	96 RAV 339	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	41.51	BT	36.95		
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	14.65	Bd		BT			
Raversijde	70	RAV BOT 61-69	96 RAV 62	sus	Humerus	L	MD	UD?P	GL		GLC		Bp		SD	15.05	Bd		BT			
Raversijde	89	RAV BOT 1996 772-780	96 RAV 739	Sus	Humerus	R	M	?	GL		GLC		Bp		SD	20.21	Bd		BT			
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-11	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	17.06	Bd	44.53	BT	35.11		
Raversijde	53		96-RAV-147	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	19.18	Bd	47.29	BT	36.77		
Raversijde	53		96-RAV-147	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	48.29	BT			
Raversijde	53		96-RAV-148	Sus	Humerus	R	PM	FingP?D	GL		GLC		Bp	61.80	SD		Bd		BT			
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	18.63	Bd		BT			

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																											
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	14.92	Bd	38.35	BT	32.25															
Raversijde	50		96-RAV-72	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	13.47	Bd	37.38	BT	30.72															
Raversijde	50		96-RAV-90	Sus	Humerus	R	MD	FingD?P	GL		GLC		Bp		SD	15.01	Bd	37.47	BT	31.17															
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.4	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	43.91	BT	34.48															
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR-11.5ZWART	Sus	Humerus	L	MD	FingD	GL		GLC		Bp		SD	18.81	Bd	45.09	BT	35.61															
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR-11.5ZWART	Sus	Humerus	R	MD	FingD?P	GL		GLC		Bp		SD	14.66	Bd		BT	33.96															
Raversijde	75	97 RAV 150-189	97 RAV 176	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	19.42	Bd	46.22	BT	35.80															
Raversijde	76	RAV 97 191-209	97 RAV 206	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	15.74	Bd		BT																
Raversijde	82	RAV bot 210-301	97 RAV 301	Sus	Humerus	L	MD	FingD?P	GL		GLC		Bp		SD		Bd	40.89	BT	33.03															
Raversijde	82	RAV bot 210-301	97 RAV 301	Sus	Humerus	R	MD	FingD?P	GL		GLC		Bp		SD		Bd	44.25	BT	34.89															
Raversijde	81	RAV 97 306-339	97 RAV 306	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	17.66	Bd	42.65	BT	35.78															
Raversijde	81	RAV 97 306-339	97 RAV 321	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.36	Bd	37.57																	
Raversijde	88	RAV BOT 350-369	97 RAV 340	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	17.37	Bd	39.35	BT	31.93															
Raversijde	88	RAV BOT 350-369	97 RAV 350	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	16.52	Bd	39.30	BT	34.31															
Raversijde	59		97 RAV 361	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd		BT	42.53															
Raversijde	59		97 RAV 361	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	18.84	Bd	44.55	BT	35.43															
Raversijde	60		97 RAV 361	Sus	Humerus	L	MD	FDUP	GL		GLC		Bp		SD	18.06	Bd	39.81	BT	32.59															
Raversijde	61		97 RAV 477	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	39.26	BT																
Raversijde	61		97 RAV 477	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	16.68	Bd	39.31	BT	31.47															
Raversijde	54		97-RAV-106	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	17.03	Bd	44.29	BT	34.16															
Raversijde	74	RAV BOT 97-RAV-13 tot 85	97-RAV-29	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD		Bd	44.91	BT	35.29															
Raversijde	57		97-RAV-298	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	17.44	Bd	42.06	BT	25.68															
Raversijde	74	RAV BOT 97-RAV-13 tot 68	97-RAV-47	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	15.12	Bd	38.03	BT	31.07															
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-48	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD	17.04	Bd	41.97	BT	32.71															
Raversijde	74	RAV BOT 97-RAV-13 tot 74	97-RAV-48	Sus	Humerus	R	MD	FD?P	GL		GLC		Bp		SD	17.62	Bd	43.40	BT	33.07															
Raversijde	74	RAV BOT 97-RAV-13 tot 60	97-RAV-49	Sus	Humerus	L	MD	FD?P	GL		GLC		Bp		SD		Bd	44.82	BT	37.01															
Raversijde	69	RAV 96 BOT 424	424	Sus	Jaw	L			M1L	19.23	M1AW	11.43	M1PW	11.71	M2L	23.34	M2AW	14.94	M2PW	14.37															
Raversijde	69	RAV 96 BOT 424	424	Sus	Jaw	L			P4L	14.26	P4AW	8.80	M1L	16.33	M1AW	9.73	M1PW	10.76	M2L	20.71	M2AW	12.65	M2PW	13.58											
Raversijde	69	RAV 96 BOT 424	424	Sus	Jaw	L			P4L	13.96	P4W	9.33	M1L	17.24	M1AW	11.04	M1PW	11.67																	
Raversijde	69	RAV 96 BOT 424	424	Sus	Jaw	L			P4L		P4W	8.93	M1L	16.40	M1AW	11.26	M1PW	11.28																	
Raversijde	69	RAV 96 BOT 424	424	Sus	Jaw	R			M2L	17.22	M2AW	10.74	M2PW	10.82	M3c1w	13.83																			
Raversijde	63	RAV BOT 477	477	Sus	Jaw	L	All	P3/P4/M1#	P4L	14.73	P4W	9.38	M1L	16.87	M1AW	10.29	M1PW	10.63																	
Raversijde	62	97 RAV 650	650	Sus	Jaw	L			P4L	13.94	M1L	17.63	M1AW	10.26	M1PW	11.40	M2L	22.13	M2AW	13.88	M2PW	13.92													
Raversijde	62	97 RAV 650	650	Sus	Jaw	L			P4L	14.59	P4W	8.73																							
Raversijde	62	97 RAV 650	650	Sus	Jaw	R			P4L	13.76	P4W	8.31	M1L	16.91	M1AW	9.81	M1PW	10.11																	
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	Sus	Jaw	L	All	P2vne P3e P4e	P4L	14.44	P4W	9.41																							
Raversijde	48	Doos 4	4559	Sus	Jaw	R			P4L	14.13	P4W	8.97	M1L	15.91	MIAW	11.14	M1PW	11.53																	
Raversijde	48	Doos 4	4562	Sus	Jaw	R			dp4L	18.85	dp4W	9.18	M1L	17.38	M1aw	10.60	M1pw	11.76																	
Raversijde	48	Doos 4	4564	Sus	Jaw	L		DP3/P4NE	M1L	16.61	M1AW	9.91	M1PW	10.57																					
Raversijde	48	Doos 4	4569	sus	Jaw	R			M1L	18.53	M1AW	11.09	M1PW	11.45	M2L	22.74	M2AW	14.74	M2PW	14.55															
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Jaw	R	All	M2 C1E, C21/2	M2L	21.21	M2AW	13.33	M2PW	13.57																					
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Jaw	L	All	M1, M2, M3C1	M1L	16.73	M1AW	10.38	M1PW	10.97	M2L	22.15	M2AW	13.67	M2PW	14.14	M3AW	16.91													
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Jaw	R	All	P3, P4, M1, M2	depth p4m	40.34	depth M1M2	40.46	P4L	13.98	P4W	8.50	M1L	18.10	M1AW	9.95	M1PW	10.85	M2L	21.95	M2AW	12.86	M2PW	13.88							
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Jaw	R	All	M1e, M2C1V	dp4w	8.04	M1L	17.94	M1AW	9.99	M1PW	10.77																			
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Jaw	L	All	M1/M2 p&w	M1L	17.93	M1AW	9.88	M1PW	10.25	M2L	21.28	M2AW	13.12	M2PW	13.28															
Raversijde	52		95-RAV-120	Sus	Jaw	L			P4L	13.32	P4W	8.61	M1L	14.39	M1AW	10.37	M1PW	10.54	M2L	18.99	M2AW	14.06	M2PW	13.65	M3L	31.36	M3AW	16.60	M3MW	14.93	M3PW	11.85			
Raversijde	52		95-RAV-120	Sus	Jaw	R			P4L	14.18	P4W	9.67	M1L	17.39	M1AW	10.70		10.99																	
Raversijde	52		95-RAV-120	Sus	Jaw	R			P4L	13.14	P4W	9.78	M1L	18.36	M1AW	11.42		11.82																	
Raversijde	64	96 RAV 150-195	96 RAV 192	Sus	Jaw	R			dp4L	18.15	dp4W	8.72	M1L		M1AW	10.44	M1PW																		
Raversijde	78	96 RAV 196-204	96 RAV 204	Sus	Jaw	L			P4L	13.76	P4W	9.27																							
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Sus	Jaw	R			M2L	21.52	M2AW	13.11	M2PW	13.04	M3AW	15.55																			
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Sus	Jaw	L			P4L	14.85	P4W	9.89	M1L	17.38	M1AW	11.17	M1MW	11.31	M2L	23.69	M2AW	14.75	M2PW	14.66											
Raversijde	79	96 RAV 208-218	96 RAV 208	Sus	Jaw	R			M1L	20.07	M1AW	11.56	M1PW	12.33																					
Raversijde	79	96 RAV 208-218	96 RAV 208	Sus	Jaw	R			P4L	15.65	P4W	9.57	M1L	18.79	M1AW	11.02	M1PW	11.46	M2L	22.92	M2AW	14.16	M2PW	14.87											
Raversijde	79	96 RAV 208-218	96 RAV 210	Sus	Jaw	L			dp4L	18.53	dp4W	8.30	M1L	17.89	M1AW		M1PW	11.05																	
Raversijde	79	96 RAV 208-218	96 RAV 210	Sus	Jaw	R			M1L	18.00	M1AW	10.59	M1PW	11.17	M2L	22.33	M2AW	13.36	M2PW	13.70															
Raversijde	79	96 RAV 208-218	96 RAV 211	Sus	Jaw	R		M1 only	M1L	17.81	M1AW	10.24	M1PW	11.83																					
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	Sus	Jaw	L			M1L	18.35	M1AW	11.27	M1PW	11.65	M2L	22.21	M2AW	14.47	M2PW	14.05															
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	Sus	Jaw	L			dp4L	18.65	dp4W	8.36	M1L	18.78	M1AW	10.63	M1PW	10.70																	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	Sus	Jaw	L			P4L	13.30	P4W	8.40	M1L	16.84	M1AW	10.22	M1PW	10.87	M2L		M2AW	13.04	M2PW												
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Sus	Jaw	L			M1L	18.28	M1AW	10.33	M1PW	11.03	M2L	21.69	M2AW	14.46	M2PW	13.77															
Raversijde	80	96 RAV 264-286	96 RAV 266	Sus	Jaw	L			M1L	17.18	M1AW	10.24	M1PW	10.33	M2L	20.52	M2AW	12.79	M2PW	12.92															
Raversijde	80	96 RAV 264-286	96 RAV 283	Sus	Jaw	R			P4L	14.49	P4W	9.76	M1L	17.44	M1AW	9.79	M1PW	11.19	M2L		M2AW	13.59	M2PW												
Raversijde	77	96 RAV 288-314	96 RAV 288	Sus	Jaw	L			P4L	13.00	P4W	9.52	M1L	15.67	M1AW	10.31	M1PW																		
Raversijde	77	96 RAV 288-314	96 RAV 300	Sus	Jaw	L			P4L	14.53	P4W	8.78	M1L	18.95	M1AW	10.98	M1PW	11.53																	
Raversijde	77	96 RAV 288-314	96 RAV 311	Sus	Jaw	L			P4L	14.28	P4W	9.91	M1L	18.00	M1AW	10.81	M1PW	11.89	M2L	22.82	M2AW	14.60	M2PW	15.08											
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Jaw	L			P4L	15.14	P4W	10.40	M1L	19.25	M1AW	11.32	M1PW	12.29	M2L	23.72	M2AW	14.97	M2PW	15.38											
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Jaw	L			M1L	17.49	M1AW	10.56	M1PW	11.79																					
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Jaw	L			M2L	22.21	M2AW	13.22	M2PW	13.15																					

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																							
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Jaw	R		Cavity M3c2	P4L	13.94	P4W	8.07	M1L	15.03	M1AW		M1PW	10.70	M2L	21.74	M2AW	13.17	M2PW	13.05	M3L		M3AW	14.71	M3MW	13.56	M3PW	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	Sus	Jaw	R			M2L	22.52	M2AW	13.85	M2PW	14.27																	
Raversijde	83	RAV bot 338-374	96 RAV 338	Sus	Jaw	L	M2		M2L	21.93	M2AW	13.83	M2PW	13.74																	
Raversijde	83	RAV bot 338-374	96 RAV 339	Sus	Jaw	L			P4L	14.11	P4W	9.58	M1L	19.56	M1AW	11.28	M1PW	12.10													
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Sus	Jaw	L			M1L	18.85	M1AW	11.18	M1PW	11.38	M2L	22.10	M2AW	14.35	M2PW	14.58											
Raversijde	83	RAV bot 338-374	96 RAV 354	Sus	Jaw	L			M1L	18.78	M1AW	11.32	M1PW	11.54																	
Raversijde	83	RAV bot 338-374	96 RAV 354	Sus	Jaw	R	M2		M2L	22.43	M2AW	14.35	M2PW	14.22																	
Raversijde	70	RAV BOT 61-69	96 RAV 61	Sus	Jaw	L		M1NPM2	M2L	23.67	M2QZ	13.79	M2PZ	14.59																	
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	Jaw	L			P4L		P4W	8.09	M1L	17.49	M1AW	10.26	M1PW	10.94													
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	Jaw	R			P4L	15.44	P4W	9.73	M1L		M1AW		M1PW														
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	Jaw	R			P4L		P4W		M1L	18.20	M1AW	10.65	M1PW	11.36													
Raversijde	89	RAV BOT 1996 772-780	96 RAV 738	Sus	Jaw	L			P4L	14.67	P4W	10.07	M1L	17.72	M1AW	10.74	M1PW	11.27													
Raversijde	53		96-RAV-128	Sus	Jaw	L		M1NPM2M3C1	M2L	22.34	M2AW	14.32	M2PW	13.65																	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Sus	Jaw	R		m1/m2/m3c1v	M1L	16.81	M1AW	9.94	M1PW	10.20	M2L	22.25	M2AW	13.35	M2PW	13.45											
Raversijde	50		96-RAV-72	Sus	Jaw	L	dp4/M1	DP4/M1	DP4L	17.62	DP4W	8.47	M1L	17.66	MIAW	10.12	M1PW	10.80													
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	Sus	Jaw	R		DP3/DP4/M1	dp4l	18.87	dp4w	8.05	m1l	18.00	m1aw	10.31	m1pw	10.56													
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR11.4	Sus	Jaw	L			dp4l	18.26	dp4w	8.44	M1L	16.99	M1AW	10.54	M1PW	10.95													
Raversijde	75	97 RAV 150-189	97 RAV 166	Sus	Jaw	L		M1/M2/M3	M1L	15.54	M1AW		M1PW	11.41	M2L	21.36	M2AW	13.43	M2PW	13.47	M3L		M3AW	NE	M3MW	NE	M3PW	NE			
Raversijde	75	97 RAV 150-189	97 RAV 174	Sus	Jaw	L			P4L	14.36	P4W	8.85																			
Raversijde	75	97 RAV 150-189	97 RAV 180 2 ZAK VIS HU + ZOND Hui 0,5 UIT	Sus	Jaw	R			M2L	22.96	M2AW	14.53	M2PW	14.59																	
Raversijde	75	97 RAV 150-189	97 RAV 182	Sus	Jaw	R			dp4L	17.94	dp4W	8.12	M1L	17.48	M1AW	10.33	M1PW	11.03	M2L	21.65	M2AW	13.53	M2PW	13.73							
Raversijde	75	97 RAV 150-189	97 RAV 189 ISHU uit	Sus	Jaw	L			M1L	16.77	M1AW	10.08	M1PW	10.68	M2L	20.75	M2AW	12.86	M2PW	13.08											
Raversijde	81	RAV 97 306-339	97 RAV 318	Sus	Jaw	R			M2L		M2AW		M2PW	13.08																	
Raversijde	81	RAV 97 306-339	97 RAV 318	Sus	Jaw	L			M1L	19.36	M1AW	11.45	M1PW	12.22	M2L	22.94	M2AW	15.24	M2PW	15.01											
Raversijde	88	RAV BOT 350-369	97 RAV 358	Sus	Jaw	R			M1L		M1AW		M1PW	11.20	M2L		M2AW		M2PW	13.97											
Raversijde	59		97 RAV 361	Sus	Jaw	L			P4L	15.39	P4W	9.58	M1L	16.75	M1AW	10.25	M1PW	11.65													
Raversijde	90	RAV 686-781	97 RAV 729	Sus	Jaw	R			dp4L	18.31	dp4W	8.74	M1L	17.47	M1AW	10.77	M1PW	11.27													
Raversijde	54		97-RAV-148	Sus	Jaw	L		P41M2	M1L	17.09	M1AW	10.41	M1PW	11.49																	
Raversijde	57		97-RAV-298	Sus	Jaw	L		PHOTO	M1L	15.95	M1AW	9.49	M1PW	9.72																	
Raversijde	57		97-RAV-298	Sus	Jaw	R		PHOTO	P4L	14.18	P4W	8.81																			
Raversijde	58		97-RAV-361	Sus	Jaw	L		PHOTO	M1L	18.40	M1AW	10.42	M1PW	10.99	M2PW	13.95	M2L	22.60	M2AW	14.26											
Raversijde	58		97-RAV-361	Sus	Jaw	R		PHOTO	P4L	13.42	P4W	9.14	M1L	17.43	M1AW	10.62	M1PW	10.86	M2L	21.92	M2AW	13.82	M2PW	13.70							
Raversijde	47	Bot 3 Raversijde 4492-4550	4516	Sus	Jaw	L			DPL	17.93	dp4W	8.14	M1L	18.51	M1AW	10.50	M1PW	11.32													
Raversijde	69	RAV 96 BOT 424	424	Sus	MC	L	PM	FPUD	Bp	21.11	Bd		Bd2		SD	15.60	GL		DD	11.97	Dp	20.18	Dd								
Raversijde	63	RAV BOT 477	477	Sus	MC	R	PM	FPUD	Bp	20.28	Bd		Bd2	20.54	SD	15.41	GL		DD	9.74	Dp	20.10	Dd								
Raversijde	62	97 RAV 650	650	Sus	MC	R	PM	FPUD	Bp	20.84	Bd		Bd2	22.74	SD	15.72	GL		DD	13.73	Dp	20.65	Dd								
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	Sus	MC	R	PM	FPUD	Bp		Bd		Bd2		SD	10.92	GL		DD	12.50	Dp	25.83	Dd								
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	Sus	MC	R	PM	FPUD	Bp	20.12	Bd		Bd2		SD	10.24	GL		DD	11.21	Dp	20.31	Dd								
Raversijde	46	Bot 2 Raversijde 4466-4492	4467	Sus	MC	L	PM	PFUD	Bp		Bd		Bd2		SD		GL		DD		Dp	17.80	Dd								
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	MC	L	PM	FP?D	Bp	21.17	Bd		Bd2		SD		GL		DD		Dp	18.28	Dd								
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	MC	R	PM	FP?D	Bp	19.40	Bd		Bd2		SD		GL		DD		Dp	18.92	Dd								
Raversijde	52		95-RAV-120	Sus	MC	L	All	F	Bp	19.01	Bd	18.04	Bd2	19.16	SD	14.97	GL	92.36	DD	13.25	Dp	19.89	Dd	20.39								
Raversijde	55		95-RAV-279	Sus	MC	L	All	F	Bp	26.76	Bd	22.28	Bd2	27.42	SD	22.36	GL	94.61	DD	14.20	Dp	26.17	Dd	21.80								
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 15	Sus	MC	R	PM	FPUD	Bp	18.09	Bd		Bd2		SD	16.10	GL		DD	9.85	Dp	19.91	Dd								
Raversijde	64	96 RAV 150-195	96 RAV 189	Sus	MC	L	All	FPUDrefit	Bp	18.51	Bd	18.33	Bd2	20.07	SD	13.99	GL	92.52	DD	12.30	Dp	18.68	Dd	19.80								
Raversijde	64	96 RAV 150-195	96 RAV 189	Sus	MC	R	All	FPUDrefit	Bp	24.66	Bd	18.19	Bd2	19.31	SD	15.68	GL	90.80	DD	11.40	Dp	21.52	Dd	19.00								
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Sus	MC	L	PM	FP?D	Bp	17.73	Bd		Bd2		SD		GL		DD		Dp	18.68	Dd								
Raversijde	79	96 RAV 208-218	96 RAV 211	Sus	MC	R	PM	FPUD	Bp	17.07	Bd		Bd2		SD	12.01	GL		DD	9.99	Dp	16.87	Dd								
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	MC	R	PM	FP?D	Bp	19.42	Bd		Bd2		SD		GL		DD		Dp	17.72	Dd								
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	MC	R	PM	FPUD	Bp	18.96	Bd		Bd2	19.55	SD	15.57	GL		DD	10.20	Dp	19.01	Dd								
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	MC	L	PM	FP?D	Bp	19.18	Bd		Bd2		SD		GL		DD		Dp	19.24	Dd								
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	MC	L	PM	FPUD	Bp	18.60	Bd		Bd2	20.00	SD	14.34	GL		DD	11.38	Dp	18.39	Dd								
Raversijde	84	RAV bot 221-226	96 RAV	Sus	MC	L	PM	FP?D	Bp	19.50	Bd		Bd2		SD		GL		DD		Dp	19.78	Dd								
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	Sus	MC	L	PM	FPUD	Bp	16.27	Bd		Bd2	17.33	SD	12.77	GL		DD	10.74	Dp	16.11	Dd								
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	MC	L	PM	FPUD	Bp	19.94	Bd		Bd2	19.58	SD	15.63	GL		DD	10.58	Dp	19.66	Dd								
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	MC	L	PM	FP?D	Bp	20.36	Bd		Bd2		SD	13.90	GL		DD	10.29	Dp	19.96	Dd								
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	MC	R	PM	FP?D	Bp	19.68	Bd		Bd2		SD		GL		DD		Dp	20.03	Dd								
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	MC	R	PM	FPUD	Bp	20.96	Bd		Bd2	20.36	SD	15.14	GL		DD	10.12	Dp	20.03	Dd								
Raversijde	87	RAV BOT 235-263	96 RAV 247	Sus	MC	L	PM	FPUD	Bp	20.32	Bd		Bd2	22.63	SD	16.42	GL		DD	13.62	Dp	19.70	Dd								
Raversijde	87	RAV BOT 235-263	96 RAV 250	Sus	MC	R	PM	FP?D	Bp	18.38	Bd		Bd 2		SD		GL		DD		Dp	17.70	Dd								
Raversijde	87	RAV BOT 235-263	96 RAV 254	Sus	MC	R	PM	FPUD	Bp	18.59	Bd		Bd2	19.93	SD	14.92	GL		DD	11.81	Dp	18.79	Dd								
Raversijde	87	RAV BOT 235-263	96 RAV 256	Sus	MC	R	PM	FPUD	Bp	16.79	Bd		Bd 2	18.32	SD	13.75	GL		DD	10.44	Dp	17.29	Dd								
Raversijde	87	RAV BOT 235-263	96 RAV 261	Sus	MC	L	PM	FPUD	Bp	17.01	Bd		Bd 2		SD	13.13	GL		DD		Dp	17.89	Dd								
Raversijde	87	RAV BOT 235-263	96 RAV 263	Sus	MC	L	PM	FP?D	Bp	16.76	Bd		Bd 2		SD		GL		DD		Dp	18.10	Dd								
Raversijde	80	96 RAV 264-286	96 RAV 282	Sus	MC	R	PM	FPUD	Bp	20.54	Bd		Bd2	19.40	SD	16.17	GL		DD	10.92	Dp	20.70	Dd								
Raversijde	80	96 RAV 264-286	96 RAV 282	Sus	MC	L	PM	FPUD	Bp		Bd		Bd2	23.19	SD	15.06	GL		DD	13.88	Dp		Dd								
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318	Sus	MC	L	All	F	Bp	22.96	Bd		Bd2		SD	19.60	GL		DD	10.67	Dp	21.77	Dd								
Raversijde	70	RAV BOT 61-69	96 RAV 61	Sus	MC	R	PM	FP?D	Bp	18.23	Bd		Bd2		SD		GL		DD		Dp	19.13	Dd								
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	MC	R	PM	FPUD	Bp	19.71	Bd		Bd2	22.08	SD	12.95	GL		DD	15.50	Dp	19.78	Dd								
Raversijde	50		96-RAV-101	Sus	MC	L	PM	FP?D	Bp	19.24	Bd		Bd2		SD	16.14	GL		DD		Dp	19.00	Dd								

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																				
Raversijde	53		96-RAV-123	Sus	MC	L	All	F	Bp	22.28	Bd	20.22	Bd2	20.44	SD	16.45	GL	89.72	DD	11.28	Dp	21.92	Dd	19.90
Raversijde	53		96-RAV-123	Sus	MC	L	PM	FPUD	Bp	21.76	Bd		Bd2		SD		GL		DD	11.52	Dp	20.80	Dd	
Raversijde	53		96-RAV-134	Sus	MC	L	PM	FPUD	Bp	17.42	Bd		Bd2	19.86	SD	14.76	GL		DD	12.13	Dp	17.74	Dd	
Raversijde	53		96-RAV-146	Sus	MC	L	PM	FPUD	Bp	17.13	Bd		Bd2	19.70	SD	10.29	GL		DD		Dp	17.45	Dd	
Raversijde	50		96-RAV-72	Sus	MC	R	PM	FP?D	Bp	21.53	Bd		Bd2		SD	16.17	GL		DD	12.20	Dp	21.11	Dd	
Raversijde	50		96-RAV-GRACHT-11.6	Sus	MC	R	PM	FPUD	Bp	18.48	Bd		Bd2		SD	15.52	GL		DD		Dp	17.25	Dd	
Raversijde	50		96-RAV-GRACHT-11.6	Sus	MC	R	All	FPFingD	Bp	22.62	Bd	22.37	Bd2	22.31	SD	16.70	GL	84.22	DD	13.50	Dp	21.58	Dd	19.39
Raversijde	75	97 RAV 150-189	97 RAV 171	Sus	MC	L	PM	FP?D	Bp	21.30	Bd		Bd2	19.84	SD	17.37	GL		DD	11.93	Dp	21.91	Dd	
Raversijde	75	97 RAV 150-189	97 RAV 176	Sus	MC	L	PM	FP?D	Bp	17.96	Bd		Bd2		SD	14.21	GL		DD		Dp	19.31	Dd	
Raversijde	75	97 RAV 150-189	97 RAV 178	Sus	MC	L	PM	FP?D	Bp	18.06	Bd		Bd2		SD		GL		DD		Dp	19.38	Dd	
Raversijde	75	97 RAV 150-189	97 RAV 184 1 ZAK	Sus	MC	R	PM	FP?D	Bp	21.27	Bd		Bd2		SD		GL		DD		Dp	20.26	Dd	
Raversijde	76	RAV 97 191-209	97 RAV 194	Sus	MC	L	PM	FPUD	Bp	18.38	Bd		Bd2		SD	13.03	GL		DD	10.69	Dp	17.33	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 355	Sus	MC	R	PM	FPUD	Bp	23.51	Bd		Bd 2	24.44	SD	18.69	GL		DD	11.72	Dp	22.56	Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 358	Sus	MC	R	PM	FP?D	Bp	20.92	Bd		Bd2		SD		GL		DD		Dp	18.54	Dd	
Raversijde	59		97 RAV 361	Sus	MC	L	PM	FPUD	Bp	16.17	Bd		Bd2	17.77	SD	12.57	GL		DD	10.22	Dp	15.98	Dd	
Raversijde	59		97 RAV 361	Sus	MC	R	PM	FP?D	Bp	22.11	Bd		Bd2		SD		GL		DD		Dp	20.51	Dd	
Raversijde	61		97 RAV 477	Sus	MC	R	PM	FP?D	Bp	18.10	Bd		Bd2		SD		GL		DD		Dp	20.46	Dd	
Raversijde	90	RAV 686-781	97 RAV 686 3 Zakjes	Sus	MC	R	PM	FP?D	Bp	19.56	Bd		Bd 2		SD		GL		DD		Dp	20.38	Dd	
Raversijde	71	RAV BOT 61-98	97 RAV 80	Sus	MC	L	All	FingDFP	Bp	23.50	Bd	22.27	Bd2	23.17	SD	18.00	GL	89.40	DD	11.06	DP	22.45	Dd	21.51
Raversijde	54		97-RAV-105	Sus	MC	L	All	F	Bp	25.85	Bd	19.85	Bd2	23.85	SD	19.26	GL	97.54	DD	12.12	Dp	23.43	Dd	21.88
Raversijde	54		97-RAV-105	Sus	MC	R	All	F	Bp	22.70	Bd	18.21	Bd2	22.11	SD	16.54	GL	85.95	DD	10.85	Dp	21.87	Dd	19.51
Raversijde	54		97-RAV-106	Sus	MC	L	PM	FPUD	Bp	20.12	Bd		Bd2	19.56	SD	13.67	GL		DD	9.72	Dp	20.59	Dd	
Raversijde	54		97-RAV-117	Sus	MC	L	PM	FPUD	Bp	19.68	Bd		Bd2	19.85	SD	13.45	GL		DD	10.73	Dp	19.15	Dd	
Raversijde	54		97-RAV-123	Sus	MC	L	PM	FPUD	Bp	20.66	Bd		Bd2	22.03	SD	16.16	GL		DD	11.77	Dp	20.23	Dd	23.73
Raversijde	57		97-RAV-298	Sus	MC	L	PM	FPUD	Bp	23.03	Bd		Bd2	22.68	SD	17.50	GL		DD	10.43	Dp	20.45	Dd	
Raversijde	57		97-RAV-298	Sus	MC	R	PM	FPUD	Bp	20.06	Bd		Bd2		SD	13.12	GL		DD		Dp	19.86	Dd	
Raversijde	57		97-RAV-298	Sus	MC	R	PM	FPUD	Bp	19.78	Bd		Bd2	21.58	SD	14.97	GL		DD	10.56	Dp	22.80	Dd	
Raversijde	57		97-RAV-298	Sus	MC	R	PM	FPUD	Bp	18.48	Bd		Bd2		SD	14.66	GL		DD		Dp	18.95	Dd	
Raversijde	57		97-RAV-298	Sus	MC	R	PM	FPUD	Bp	18.22	Bd		Bd2	18.79	SD	14.46	GL		DD		Dp	17.12	Dd	
Raversijde	74	RAV BOT 97-RAV-13 tot 68	97-RAV-48	Sus	MC	R	All	F	Bp	20.98	Bd	19.82	Bd2	21.25	SD	15.92	GL	98.72	DD	13.92	Dp	20.03		22.10
Raversijde	60		97 RAV 361	Sus	MC/MT	L	All	F	Bp	17.75	Bd	15.50	Bd2	19.71	SD	13.09	GL	99.59	DD	10.40	Dp	26.54	Dd	15.85
Raversijde	62	97 RAV 650	650	Sus	MT	L	PM	F	Bp	17.62	Bd		Bd2	18.82	SD	12.80	GL		DD	10.75	Dp	29.41	Dd	
Raversijde	62	97 RAV 650	650	Sus	MT	L	PM	FPUD	Bp	21.55	Bd		Bd2		SD	16.54	GL		DD		Dp	33.21	Dd	
Raversijde	62	97 RAV 650	650	Sus	MT	R	PM	FPUD	Bp	20.73	Bd		Bd2	23.08	SD	16.79	GL		DD	12.38	Dp	31.02	Dd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	Sus	MT	R	PM	FP?D	Bp	18.06	Bd		Bd2		SD		GL		DD		Dp	23.34	Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4466	Sus	MT	R	PM	FPUD	Bp	19.26	Bd		Bd2		SD	14.89	GL		DD	10.57	Dp		Dd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4474	Sus	MT	L	PM	FPUD	Bp	17.38	Bd		Bd2		SD	14.70	GL		DD	12.75	Dp	25.77	Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4505	SUS	MT	L	PM	FPUD	Bp	17.61	Bd		Bd2		SD	13.08	GL		DD	12.50	DP	24.41	DD	
Raversijde	47	Bot 3 Raversijde 4492-4550	4517	Sus	MT	L	PM	FPUD	Bp	21.03	Bd		Bd2	21.98	SD	14.69	GL		DD	10.74	Dp	29.05	Dd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4545	Sus	MT	R	PM	FPUD	Bp	16.39	Bd		Bd2		SD	13.81	GL		DD	12.38	DP	25.95	DD	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	MT	L	All	FPUD	Bp	16.33	Bd		Bd2		SD	12.90	GL		DD	10.92	Dp	23.82	Dd	
Raversijde	55		95-RAV-279	Sus	MT	L	PM	FPUD	Bp	18.32	Bd		Bd2	18.82	SD	14.07	GL		DD	11.59	Dp	26.67	Dd	
Raversijde	55		95-RAV-279	Sus	MT	R	All	F	Bp	17.84	Bd	15.39	Bd2	17.45	SD	14.20	GL	93.07	DD	11.05	Dp	25.63	Dd	19.73
Raversijde	55		95-RAV-279	Sus	MT	R	PM	FPUD	Bp	20.32	Bd		Bd2	20.42	SD	15.45	GL		DD	13.06	Dp	28.77	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	Sus	MT	R	PM	FP?D	Bp	16.57	Bd		Bd2		SD		GL		DD		Dp	29.12	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	Sus	MT	R	PM	FP?D	Bp	20.74	Bd		Bd2		SD		GL		DD		Dp		Dd	
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Sus	MT	L	PM	FP?D	Bp	19.90	Bd		Bd2		SD		GL		DD		Dp	27.77	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Sus	MT	L	PM	FPUD	Bp	17.75	Bd		Bd2		SD	14.63	GL		DD	11.27	Dp	22.45	Dd	
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Sus	MT	R	PM	FPUD	Bp		Bd		Bd2		SD	12.04	GL		DD	14.32	Dp		Dd	
Raversijde	79	96 RAV 208-218	96 RAV 211	Sus	MT	L	PM	FP?D	Bp	14.88	Bd		Bd2		SD		GL		DD		Dp	28.11	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 22	Sus	MT	R	PM	FPUD	Bp	25.49	Bd		Bd2		SD	12.99	GL		DD	11.57	Dp	25.66	Dd	
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	MT	L	PM	FPUD	Bp	16.22	Bd		Bd2	18.29	SD	14.81	GL		DD	14.40	Dp	27.57	Dd	
Raversijde	87	RAV BOT 235-263	96 RAV 248	Sus	MT	L	All	FPFingD	Bp		Bd	19.00	Bd2	20.84	SD	14.62	GL	102.71	DD	12.13	Dp		Dd	21.07
Raversijde	87	RAV BOT 235-263	96 RAV 250	Sus	MT	R	PM	FP?D	Bp	20.04	Bd		Bd 2		SD		GL		DD		Dp		Dd	
Raversijde	80	96 RAV 264-286	96 RAV 282	Sus	MT	R	PM	FPUD	Bp	18.65	Bd		Bd2	20.31	SD	14.21	GL		DD	11.05	Dp	26.59	Dd	
Raversijde	80	96 RAV 264-286	96 RAV 282	Sus	MT	L	PM	FPUD	Bp	17.50	Bd		Bd2	17.79	SD	14.34	GL		DD	9.92	Dp	23.02	Dd	
Raversijde	80	96 RAV 264-286	96 RAV 282	Sus	MT	R	PM	FP?D	Bp	17.07	Bd		Bd2		SD	16.25	GL		DD	12.12	Dp	25.83	Dd	
Raversijde	77	96 RAV 288-314	96 RAV 288	Sus	MT	L	PM	FP?D	Bp	15.28	Bd		Bd2		SD		GL		DD		Dp	27.56	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	Sus	MT	L	PM	FP?D	Bp	19.21	Bd		Bd2		SD		GL		DD		Dp	25.97	Dd	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 348	Sus	MT	R	PM	FPUD	Bp	16.95	Bd		Bd2	17.70	SD	17.70	GL		DD	11.45	Dp	24.61	Dd	
Raversijde	83	RAV bot 338-374	96 RAV 354	Sus	MT	L	PM	FPUD	Bp	17.58	Bd		Bd2	17.09	SD	13.60	GL		DD	10.97	Dp	25.05	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	MT	R	PM	FP?D	Bp	20.78	Bd		Bd2		SD	16.73	GL		DD	12.43	Dp	26.81	Dd	
Raversijde	70	RAV BOT 61-69	96 RAV 66	Sus	MT	R	PM	FPUD	Bp	16.87	Bd		Bd2	18.71	SD	13.47	GL		DD	10.94	DP	28.09	Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.7	Sus	MT	R	PM	FPUD	Bp	20.14	Bd		Bd2		SD	14.93	GL		DD	12.72	Dp	28.28	Dd	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.7	Sus	MT	R	PM	FPUD	Bp	18.45	Bd		Bd2		SD	14.43	GL		DD	11.55	Dp	24.67	Dd	
Raversijde	53		96-RAV-145	Sus	MT	L	PM	FP?D	Bp	20.21	Bd		Bd2		SD		GL		DD		Dp	24.57	Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Sus	MT	R	PM	FPUD	Bp	18.35	Bd		Bd2		SD	14.16	GL		DD	11.86	Dp	24.73	Dd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																
Raversijde	75	97 RAV 150-189	97 RAV 168 ZAK DES 2 ZAK	Sus	MT	L	PM	FP?	Bp	22.55	Bd		Bd2		SD	15.73	GL		DD		Dp	26.32	Dd	
Raversijde	75	97 RAV 150-189	97 RAV 182	Sus	MT	L	PM	FPUD	Bp	17.82	Bd		Bd2		SD	13.75	GL		DD	10.49	Dp	26.06	Dd	
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	Sus	MT	R	PM	FP?D	Bp	18.05	Bd		Bd2		SD		GL		DD		Dp	25.89	Dd	
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	Sus	MT	L	PM	FPUD	Bp	19.13	Bd		Bd2	20.16	SD	15.24	GL		DD	12.44	Dp	27.12	Dd	
Raversijde	81	RAV 97 306-339	97 RAV 318	Sus	MT	L	PM	FPUD	Bp	18.95	Bd		Bd2	18.70	SD	13.95	GL		DD	11.08	Dp	26.59	Dd	
Raversijde	59		97 RAV 361	Sus	MT	L	PM	FP?D	Bp	17.02	Bd		Bd2		SD		GL		DD		Dp	28.17	Dd	
Raversijde	59		97 RAV 361	Sus	MT	L	All	F	Bp	19.94	Bd	18.29	Bd2	22.89	SD	16.59	GL	104.08	DD	11.85	Dp	29.09	Dd	21.90
Raversijde	90	RAV 686-781	97 RAV 686 3 Zakjes	Sus	MT	R	PM	FP?D	Bp	17.27	Bd		Bd 2		SD		GL		DD		Dp	24.70	Dd	
Raversijde	90	RAV 686-781	97 RAV 753	Sus	MT	R	All	F	Bp	19.90	Bd	19.39	Bd2	22.59	SD	15.33	GL	97.57	DD	12.25	Dp	26.69	Dd	22.24
Raversijde	57		97-RAV-298	Sus	MT	L	PM	FP?D	Bp	17.74	Bd		Bd2		SD		GL		DD		Dp	24.89	Dd	
Raversijde	57		97-RAV-298	Sus	MT	L	PM	FPUD	Bp	15.53	Bd		Bd2		SD	10.37	GL		DD	10.35	Dp	21.52	Dd	
Raversijde	57		97-RAV-298	Sus	MT	L	PM	FP?D	Bp	16.17	Bd		Bd2		SD		GL		DD		Dp	23.80	Dd	
Raversijde	57		97-RAV-298	Sus	MT	L	PM	FPUD	Bp	18.03	Bd		Bd2		SD	16.35	GL		DD	12.83	Dp	26.96	Dd	
Raversijde	57		97-RAV-298	Sus	MT	R	PM	FPUD	Bp	19.13	Bd		Bd2		SD	15.33	GL		DD	13.88	Dp	29.48	Dd	
Raversijde	57		97-RAV-298	Sus	MT	R	PM	FP?D	Bp	15.01	Bd		Bd2		SD		GL		DD		Dp	24.88	Dd	
Raversijde	58		97-RAV-361	Sus	MT	L	PM	FPUD	Bp	17.59	Bd		Bd2	19.01	SD	15.02	GL		DD	11.27	Dp	25.35	Dd	
Raversijde	58		97-RAV-361	Sus	MT	R	PM	FP?D	Bp	19.89	Bd		Bd2		SD		GL		DD		Dp	25.51	Dd	
Raversijde	74	RAV BOT 97-RAV-13 tot 69	97-RAV-48	Sus	MT	L	PM	FPUD	Bp	15.26	Bd		Bd2	18.31	SD	13.22	GL		DD	9.17	Dp	15.10		
Raversijde	74	RAV BOT 97-RAV-13 tot 70	97-RAV-48	Sus	MT	R	PM	FPUD	Bp	17.95	Bd		Bd2	20.51	SD	14.06	GL		DD	12.44	Dp	13.80		
Raversijde	74	RAV BOT 97-RAV-13 tot 73	97-RAV-59	Sus	MT	R	PM	FPUD	Bp	16.47	Bd		Bd2	17.78	SD	13.55	GL		DD	11.17	Dp	24.47	Dd	
Raversijde	75	97 RAV 150-189	97 RAV 180 2 ZAK VIS HU + ZOND Hui 0,5 UIT	Sus	MT	L	PM	FP?D	Bp	19.69	Bd		Bd2		SD	11.42	GL		DD	10.24	Dp	19.95	Dd	
Raversijde	62	97 RAV 650	650	Sus	NC	?	All	All	GB	20.53														
Raversijde	46	Bot 2 Raversjide 4466-4492	4466	Sus	NC	R	All	F	GB	21.71	GL	28.54												
Raversijde	80	96 RAV 264-286	96 RAV 283	Sus	NC	L	All	F	GB	20.66														
Raversijde	46	Bot 2 Raversjide 4466-4492	4473	Sus	Patella	?	All	F	GL	38.25	GB	19.95												
Raversijde	88	RAV BOT 350-369	97 RAV 358	Sus	Pelvis	R	Acet	F	LA	42.27	LAR	34.09												
Raversijde	46	Bot 2 Raversjide 4466-4492	4466	Sus	Pelvis	L	M	F	LA		LAR	51.87												
Raversijde	52		95-RAV-120	Sus	Pelvis	R	Acet	F	LA	43.59	LAR	36.19												
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Sus	Pelvis	R	Acet	?F?	LA	30.32	LAR	24.27												
Raversijde	76	RAV 97 191-209	97 RAV 194	Sus	Pelvis	R	Acet	F	LA	42.63	LAR	33.03												
Raversijde	59		97 RAV 361	Sus	Pelvis	R	Acet	F	LA	48.67	LAR	35.11												
Raversijde	60		97 RAV 361	Sus	Pelvis	L	Acet	F	LA	46.98	LAR	39.71												
Raversijde	57		97-RAV-298	Sus	Pelvis	L	Acet	F	LA	40.48	LAR	31.28												
Raversijde	57		97-RAV-298	Sus	Pelvis	L	Acet	F	LA	46.91	LAR	37.07												
Raversijde	57		97-RAV-298	Sus	Pelvis	L	Acet	F	LA	40.66	LAR	32.04												
Raversijde	58		97-RAV-361	Sus	Pelvis	L	Acet	F	LA	42.42	LAR	35.54												
Raversijde	74	RAV BOT 97-RAV-13 tot 81	97-RAV-48	Sus	Pelvis	L	Acet	F	LA	53.52	LAR	37.93												
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 15	Sus	Ph 1	R	All	F	Glpe	38.43	Bp	12.48	SD	8.69	Bd	10.31								
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Sus	Ph 1	L	All	F	Glpe	36.29	Bp	12.43	SD	10.43	Bd	11.55								
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	Ph 1	L	All	F	Glpe	35.77	Bp	13.87	SD	11.18	Bd	12.20								
Raversijde	87	RAV BOT 235-263	96 RAV 253	Sus	Ph 1	R	All	F	GLpe	34.03	Bp	12.97	SD	10.85	Bd	11.83								
Raversijde	87	RAV BOT 235-263	96 RAV 261	Sus	Ph 1	L	All	FD?P	Glpe	34.67	Bp	12.15	SD	10.10	Bd	10.89								
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318	Sus	Ph 1	R	All	F	Glpe	33.74	Bp	11.87	SD	9.55	Bd	11.05								
Raversijde	83	RAV bot 338-374	96 RAV 362 x	Sus	Ph 1	L	MD	FDUP	Glpe		Bp		SD	10.90	Bd	13.22								
Raversijde	79	96 RAV 208-218	96 RAV 210	Sus	Ph 1	R	All	F	Glpe	33.60	Bp	11.86	SD	9.40	Bd	10.66								
Raversijde	46	Bot 2 Raversjide 4466-4492	4470	Sus	Ph 1	R	All	F	GLpe	33.70	Bp	11.15	SD	8.73	Bd	9.92								
Raversijde	46	Bot 2 Raversjide 4466-4492	4474	Sus	Ph 1	R	All	F	GLpe	17.38	Bp	12.14	SD	9.83	Bd	11.82								
Raversijde	46	Bot 2 Raversjide 4466-4492	4474	Sus	Ph 1	L	All	F	GLpe	36.14	Bp	11.75	SD	10.36	Bd	10.81								
Raversijde	45	Bot 1 Raversjide Doos 1 4414-4462	4430 N&S	Sus	Ph 1	R	All	F	GLpe	35.07	Bp	13.06	SD	9.87	Bd	10.49								
Raversijde	77	96 RAV 288-314	96 RAV 309	Sus	Ph 1	L	MD	FDUP	Glpe		Bp		SD	18.11	Bd	21.02								
Raversijde	83	RAV bot 338-374	96 RAV 362 x	Sus	Ph 1	L	All	F	Glpe	33.18	Bp	12.29	SD	9.64	Bd	11.55								
Raversijde	69	RAV 96 BOT 424	424	Sus	Ph 1	L	All	FingPFD	Glpe	44.45	Bp	19.69	SD	16.05	Bd	18.50								
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	Sus	Ph 1	L	All	F	Glpe	39.43	Bp	19.05	SD	14.11	Bd	16.54								
Raversijde	46	Bot 2 Raversjide 4466-4492	4474	Sus	Ph 1	R	All	F (P- Fing)	GLpe	33.10	Bp	18.39	SD	15.34	Bd	17.89								
Raversijde	46	Bot 2 Raversjide 4466-4492	4477	Sus	Ph 1	L	MD	FDUP	Glpe		Bp		SD	14.53	Bd	16.28								
Raversijde	47	Bot 3 Raversjide 4492-4550	4505	SUS	Ph 1	R	All	F	GLPE	35.60	Bp	12.78	SD	10.30	Bd	11.56								
Raversijde	48	Doos 4	4565	Sus	Ph 1	R	All	F	GLPE	32.18	Bp	17.90	SD	14.82	Bd	15.25								
Raversijde	45	Bot 1 Raversjide Doos 1 4414-4462	4430 N&S	Sus	Ph 1	L	All	F	GLpe	34.20	Bp	13.00	SD	11.50	Bd	11.84								
Raversijde	45	Bot 1 Raversjide Doos 1 4414-4462	4430 N&S	Sus	Ph 1	R	All	F	GLpe	48.34	Bp	18.07	SD	15.25	Bd	16.91								
Raversijde	45	Bot 1 Raversjide Doos 1 4414-4462	4430 N&S	Sus	Ph 1	L	All	F	GLpe	38.00	Bp	13.30	SD	10.88	Bd	11.80								

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?								
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Ph 1	R	All	F	GLpe	36.57	Bp	12.20	SD	9.82	Bd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Ph 1	R	All	FDUP	GLpe		Bp		SD	14.40	Bd	17.44
Raversijde	52		95-RAV-120	Sus	Ph 1	L	All	F	Glpe	44.91	Bp		SD	14.78	Bd	18.81
Raversijde	55		95-RAV-279	Sus	Ph 1	R	All	F	Glpe	34.96	Bp	12.48	SD	10.34	Bd	12.06
Raversijde	55		95-RAV-279	Sus	Ph 1	R	All	F	Glpe	35.80	Bp	12.29	SD	10.20	Bd	11.49
Raversijde	64	96 RAV 150-195	96 RAV 157	Sus	Ph 1	L	All	F	Glpe	34.35	Bp	19.99	SD	16.40	Bd	17.49
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Sus	Ph 1	L	MD	FDUP	Glpe		Bp		SD	14.61	Bd	17.72
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	Sus	Ph 1	L	MD	FDUP	Glpe		Bp		SD	14.48	Bd	18.16
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	Ph 1	R	All	F	Glpe	47.89	Bp	20.99	SD	16.15	Bd	19.57
Raversijde	84	RAV bot 221-226	96 RAV 1 OK zee zoog dier? UIT (see memo)	Sus	Ph 1	R	All	F	Glpe	36.58	Bp	13.23	SD	11.30	Bd	12.46
Raversijde	84	RAV bot 221-226	96 RAV 225	Sus	Ph 1	R	MD	FDUP	GLpe		Bp		SD	14.25	Bd	16.23
Raversijde	84	RAV bot 221-226	96 RAV 226	Sus	Ph 1	L	MD	FDUP	Glpe		Bp		SD	14.30	Bd	15.41
Raversijde	80	96 RAV 264-286	96 RAV 267	Sus	Ph 1	L	All	FDUP	GLpe	48.91	Bp	18.85	SD	15.18	Bd	17.30
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Ph 1	L	All	F	Glpe	48.27	Bp	18.55	SD	15.76	Bd	17.02
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 317	Sus	Ph 1	L	All	F	Glpe	45.91	Bp	19.47	SD	16.24	Bd	19.11
Raversijde	53		96-RAV-141	Sus	Ph 1	L	All	F	Glpe	44.54	Bp	18.48	SD	15.71	Bd	18.73
Raversijde	53		96-RAV-146	Sus	Ph 1	L	All	F	Glpe	35.56	Bp	12.69	SD	10.80	Bd	12.00
Raversijde	53		96-RAV-146	Sus	Ph 1	R	All	F	Glpe	33.04	Bp	11.67	SD	9.62	Bd	11.23
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR10.5	Sus	Ph 1	L	All		Glpe	32.62	Bp	10.62	SD	8.25	Bd	9.35
Raversijde	76	RAV 97 191-209	97 RAV 206	Sus	Ph 1	R	MD	FDUP	Glpe		Bp		SD	13.65	Bd	15.73
Raversijde	82	RAV bot 210-301	97 RAV 245	Sus	Ph 1	L	MD	FDUP	Glpe		Bp		SD	14.40	Bd	17.78
Raversijde	82	RAV bot 210-301	97 RAV 253	Sus	Ph 1	R	All	F	GLpe	47.00	Bp	18.34	SD	14.52	Bd	16.19
Raversijde	82	RAV bot 210-301	97 RAV 264	Sus	Ph 1	R	All	F	GLpe	49.94	Bp	18.92	SD	13.95	Bd	18.01
Raversijde	82	RAV bot 210-301	97 RAV 301 VIS UIT	Sus	Ph 1	R	All	F	Glpe	35.85	Bp	13.78	SD	11.44	Bd	12.83
Raversijde	88	RAV BOT 350-369	97 RAV 344	Sus	Ph 1	L	MD	FDUP	GLpe		Bp		SD		Bd	
Raversijde	88	RAV BOT 350-369	97 RAV 346	Sus	Ph 1	R	MD	FDUP	GLpe		Bp		SD	13.19	Bd	17.91
Raversijde	59		97 RAV 361	Sus	Ph 1	L	All	F	Glpe	31.95	Bp	14.32	SD	9.68	Bd	10.24
Raversijde	59		97 RAV 361	Sus	Ph 1	L	All	FdFingP	Glpe	37.83	Bp	17.05	SD	14.70	Bd	16.38
Raversijde	59		97 RAV 361	Sus	Ph 1	L	MD	F	Glpe		Bp		SD	13.27	Bd	16.28
Raversijde	59		97 RAV 361	Sus	Ph 1	R	MD	F	Glpe		Bp		SD	14.70	Bd	17.88
Raversijde	60		97 RAV 361	Sus	Ph 1	R	MD	F	Glpe		Bp		SD	12.71	Bd	14.69
Raversijde	61		97 RAV 477	Sus	Ph 1	L	MD	FDUP	GLpe		Bp		SD	12.96	Bd	15.85
Raversijde	71	RAV BOT 61-98	97 RAV 64	Sus	Ph 1	L	MD	FPUD	Glpe		Bp		SD	13.43	Bd	15.88
Raversijde	90	RAV 686-781	97 RAV 686 3 Zakjes	Sus	Ph 1	R	MD	FD?P	GLpe		Bp		SD		Bd	17.78
Raversijde	54		97-RAV-105	Sus	Ph 1	L	MD	FDUP	Glpe		Bp		SD	16.05	Bd	17.56
Raversijde	54		97-RAV-110	Sus	Ph 1	R	MD	FDUP	Glpe		Bp		SD	16.55	Bd	19.13
Raversijde	54		97-RAV-122	Sus	Ph 1	R	All	FDFingP	Glpe	43.60	Bp	18.93	SD	14.12	Bd	17.68
Raversijde	57		97-RAV-298	Sus	Ph 1	L	All	F	Glpe	46.97	Bp		SD		Bd	17.49
Raversijde	57		97-RAV-298	Sus	Ph 1	L	MD	FDUP	Glpe		Bp		SD	14.59	Bd	17.38
Raversijde	57		97-RAV-298	Sus	Ph 1	R	MD	FDUP	Glpe		Bp		SD	13.39	Bd	16.75
Raversijde	57		97-RAV-298	Sus	Ph 1	R	All	F	Glpe	38.59	Bp	17.43	SD	14.25	Bd	16.82
Raversijde	57		97-RAV-298	Sus	Ph 1	R	MD	FDUP	Glpe		Bp		SD	15.17	Bd	19.31
Raversijde	58		97-RAV-361	Sus	Ph 1	L	MD	FDUP	Glpe		Bp		SD	13.82	Bd	17.46
Raversijde	58		97-RAV-361	Sus	Ph 1	R	MD	FDUP	Glpe		Bp		SD	14.93	Bd	17.75
Raversijde	81	RAV 97 306-339	97 RAV 331	Sus	Ph 1	R	UPE	UPE	GLpe		Bp	18.43	SD		Bd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4497	Sus	Ph 1	R	All	F	GLPE	33.32	Bp	10.61	SD	8.95	Bd	9.67
Raversijde	47	Bot 3 Raversijde 4492-4550	4547	Sus	Ph 1	L	All	F	Glpe	28.67	Bp	17.90	SD	15.37	Bd	16.54
Raversijde	75	97 RAV 150-189	97 RAV 180 2 ZAK VIS HU + ZOND Hui 0,5 UIT	Sus	Ph 1	L	MD	FD?P	Glpe		Bp		SD		Bd	21.65
Raversijde	75	97 RAV 150-189	97 RAV 180 2 ZAK VIS HU + ZOND Hui 0,5 UIT	Sus	Ph 1	L	All	F	Glpe	41.97	Bp	19.04	SD	14.66	Bd	17.31
Raversijde	79	96 RAV 208-218	96 RAV 208	Sus	Ph 2	L	All	F	Glpe	28.15	Bp	16.87	SD	15.06	Bd	14.68
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	Sus	Ph 2	R	All	F	Glpe	27.85	Bp	18.01	SD	13.97	Bd	15.57
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 321 Bot	Sus	Ph 2	L	All	F	Glpe	23.89	Bp	17.60	SD	14.19	Bd	15.62
Raversijde	76	RAV 97 191-209	97 RAV 206	Sus	Ph 2	L	All	F	Glpe	30.33	Bp	18.99	SD	15.87	Bd	18.26
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	Sus	Ph 2	L		F	Glpe	30.08	Bp	17.28	SD	14.15	Bd	15.01
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Ph 2	L	All	F	GLpe	26.45	Bp	17.51	SD		Bd	
Raversijde	51		95-RAV-	Sus	Ph 2	L	All	F	Glpe	26.26	Bp	19.15	SD	15.63	Bd	17.32
Raversijde	52		95-RAV-120	Sus	Ph 2	L	MD	FDUP	Glpe		Bp		SD	18.54	Bd	19.18
Raversijde	52		95-RAV-120	Sus	Ph 2	L	MD	FDUP	Glpe		Bp		SD	18.09	Bd	19.50
Raversijde	64	96 RAV 150-195	96 RAV 176	Sus	Ph 2	R	All	F	Glpe	26.29	Bp	17.58	SD	14.31	Bd	16.96
Raversijde	78	96 RAV 196-204	96 RAV 203	Sus	Ph 2	L	All	FDFingP	Glpe	30.40	Bp	18.28	SD	16.38	Bd	16.30
Raversijde	78	96 RAV 196-204	96 RAV 204	Sus	Ph 2	L	All	F	Glpe	29.06	Bp	18.98	SD	14.94	Bd	15.60
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	Ph 2	L	All	F	Glpe	28.43	Bp	17.70	SD	14.35	Bd	16.75
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Sus	Ph 2	L	All	F	Glpe	22.83	Bp	17.24	SD	14.39	Bd	15.06
Raversijde	83	RAV bot 338-374	96 RAV 362 x	Sus	Ph 2	R	MD	FD?P	Glpe		Bp		SD		Bd	17.01
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	Ph 2	L	All	F	GLPE	32.95	Bp	18.46	SD	15.81	Bd	16.80
Raversijde	53		96-RAV-121	Sus	Ph 2	R	All	F	Glpe	27.44	Bp	17.89	SD	14.22	Bd	14.79
Raversijde	53		96-RAV-145	Sus	Ph 2	R	All	F	Glpe	26.20	Bp	18.15	SD	14.70	Bd	16.06
Raversijde	53		96-RAV-145	Sus	Ph 2	R	All	FP?D	Glpe	25.96	Bp	19.80	SD	15.70	Bd	17.48

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/Dist	Fused?												
Raversijde	82	RAV bot 210-301	97 RAV 278	Sus	Ph 2	L	All	F	Glpe	33.89	Bp	18.35	SD	14.69	Bd	16.42				
Raversijde	81	RAV 97 306-339	97 RAV 318	Sus	Ph 2	R	All	F	GLpe	30.60	Bp	21.41	SD	18.35	Bd	21.87				
Raversijde	88	RAV BOT 350-369	97 RAV 358	Sus	Ph 2	R	All	F	GLpe		Bp	18.61	SD	15.58	Bd					
Raversijde	60		97 RAV 361	Sus	Ph 2	L	All	F	Glpe	27.41	Bp	17.34	SD	13.39	Bd	14.03				
Raversijde	61		97 RAV 477	Sus	Ph 2	R	All	F	GLpe	31.57	Bp	19.70	SD	16.27	Bd	16.67				
Raversijde	54		97-RAV-117	Sus	Ph 2	R	All	F	Glpe	23.91	Bp	16.88	SD	14.41	Bd	15.02				
Raversijde	57		97-RAV-298	Sus	Ph 2	R	All	F	Glpe	26.39	Bp	18.90	SD	15.38	Bd	17.49				
Raversijde	57		97-RAV-298	Sus	Ph 2	R	All	F	Glpe	27.04	Bp	18.74	SD	15.05	Bd	16.09				
Raversijde	57		97-RAV-298	Sus	Ph 2	R	All	F	Glpe	32.43	Bp	18.88	SD	14.61	Bd	16.31				
Raversijde	87	RAV BOT 235-263	96 RAV 254	Sus	Ph 3	L	All	F	LD	30.59	DLS	33.05	MBS	12.68						
Raversijde	47	Bot 3 Raversijde 4492-4550	4497	Sus	Ph 3	R	All	F	LD	32.28	PLS	35.64	MBS	14.43						
Raversijde	52		95-RAV-120	Sus	Ph 3	R	All	F	LD		DLS	42.69	MBS	13.23						
Raversijde	52		95-RAV-120	Sus	Ph 3	L	All	F	LD	34.21	DLS	44.74	MBS	13.97						
Raversijde	52		95-RAV-120	Sus	Ph 3	L	All	F	LD		DLS	46.13	MBS	14.65						
Raversijde	52		95-RAV-120	Sus	Ph 3	R	All	F	LD		DLS		MBS	15.32						
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Sus	Ph 3	R	All	F	LD	34.46	DLS	45.61	MBS	14.09						
Raversijde	57		97-RAV-298	Sus	Ph 3	L	All	F	LD	26.51	DLS	29.72	MBS	9.45						
Raversijde	69	RAV 96 BOT 424	424	Sus	Radius	L	PM	FP?D	GL		Bp	31.44	BFp		SD		Bd		BFd	
Raversijde	69	RAV 96 BOT 424	424	Sus	Radius	L	PM	FP?D	GL		Bp	32.06	BFp		SD	19.99	Bd		BFd	
Raversijde	69	RAV 96 BOT 424	424	Sus	Radius	L	PM	FP?D	GL		Bp	30.88	BFp		SD	17.30	Bd		BFd	
Raversijde	69	RAV 96 BOT 424	424	Sus	Radius	L	UDE	UDE	GL		Bp		BFp		SD		Bd	38.72	BFd	33.59
Raversijde	69	RAV 96 BOT 424	424	Sus	Radius	R	PM	FPUD	GL		Bp	34.39	BFp		SD	21.89	Bd		BFd	
Raversijde	69	RAV 96 BOT 424	424	Sus	Radius	R	PM	FPUD	GL		Bp	30.13	BFp		SD	17.75	Bd		BFd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430	Sus	Radius	R	MD	FD?P	GL		Bp		SD		SD	17.02	Bd	29.75	BFd	
Raversijde	46	Bot 2 Raversijde 4466-4492	4482	Sus	Radius	L	PM	FP?D	GL		Bp	32.16	BFp		SD		Bd		BFd	
Raversijde	47	Bot 3 Raversijde 4492-4550	4492	Sus	Radius	R	PM	FP?D	GL		Bp	39.45	BFp		SD	21.36	Bd		BFd	
Raversijde	48	Doos 4	4560	Sus	Radius	L	PM	FPUD	GL		Bp	32.83	BFP		SD	19.98	Bd		BFD	
Raversijde	48	Doos 4	4560	Sus	Radius	L	PM	FP?D	GL		Bp	33.04	BFP		SD	19.34	Bd		BFD	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Radius	L	PM	FP?D	GL		Bp	29.68	BFp		SD	18.25	Bd		BFd	
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Radius	L	PM	FP?D	GL		Bp	30.29	BFp		SD	18.49	Bd		BFd	
Raversijde	51		95-RAV-115	Sus	Radius	L	PM	FP?D	GL		Bp	27.48	Bfp		SD	15.43	Bd		Bfd	
Raversijde	52		95-RAV-120	Sus	Radius	L	PM	FP?D	GL		Bp	34.60	Bfp		SD	20.27	Bd		Bfd	
Raversijde	52		95-RAV-120	Sus	Radius	L	PM	FP?D	GL		Bp	35.40	Bfp		SD		Bd		Bfd	
Raversijde	52		95-RAV-120	Sus	Radius	R	PM	FP?D	GL		Bp	32.20	Bfp		SD	18.52	Bd		Bfd	
Raversijde	55		95-RAV-279	Sus	Radius	L	PM	FPUD	GL		Bp	31.74	Bfp		SD	19.67	Bd		Bfd	
Raversijde	55		95-RAV-279	Sus	Radius	L	PM	FPUD	GL		Bp	28.45	Bfp		SD	18.28	Bd		Bfd	
Raversijde	51		95-RAV-96	Sus	Radius	L	PM	FPUD	GL		Bp	30.24	Bfp		SD	15.82	Bd		Bfd	
Raversijde	64	96 RAV 150-195	96 RAV 166	Sus	Radius	L	PM	FP?D	GL		Bp	31.37	BFp		SD		Bd		BFd	
Raversijde	64	96 RAV 150-195	96 RAV 195	Sus	Radius	L	All	FP?D	GL		Bp	31.38	BFp		SD	17.74	Bd		BFd	
Raversijde	78	96 RAV 196-204	96 RAV 203	Sus	Radius	R	PM	FPUD	GL		Bp	31.05	BFp		SD	18.15	Bd		BFd	
Raversijde	78	96 RAV 196-204	96 RAV 204	Sus	Radius	L	PM	FP?D	GL		Bp	31.51	BFp		SD	18.12	Bd		BFd	
Raversijde	79	96 RAV 208-218	96 RAV 211	Sus	Radius	R	PM	FP?D	GL		Bp	27.73	BFp		SD	17.06	Bd		BFd	
Raversijde	79	96 RAV 208-218	96 RAV 211	Sus	Radius	R	PM	FPUD	GL		Bp		BFp		SD	19.01	Bd		BFd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	Sus	Radius	L	PM	FPUD	GL		Bp	29.66	BFp		SD	17.39	Bd		BFd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Sus	Radius	R	PM	FPUD	GL		Bp	28.94	BFp		SD	18.68	Bd		BFd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227 2 fing s/b ledle + 1 uedpkoolr UIT	Sus	Radius	L	PM	FP?D	GL		Bp	29.32	BFp		SD		Bd		BFd	
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Sus	Radius	L	PM	FPUD	GL		Bp	30.09	BFp		SD	18.74	Bd		BFd	
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	Radius	R	PM	FPUD	GL		Bp	31.83	BFp		SD	18.36	Bd		BFd	
Raversijde	80	96 RAV 264-286	96 RAV 266	Sus	Radius	L	PM	FP?D	GL		Bp	32.91	BFp		SD	18.92	Bd		BFd	
Raversijde	80	96 RAV 264-286	96 RAV 283	Sus	Radius	R	PM	FP?D	GL		Bp	34.52	BFp		SD		Bd		BFd	
Raversijde	77	96 RAV 288-314	96 RAV 307	Sus	Radius	L	PM	FP?D	GL		Bp	33.14	BFp		SD	19.24	Bd		BFd	
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Radius	R	PM	FPUD	GL		Bp	30.56	BFp		SD	18.09	Bd		BFd	
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	Radius	R	All	FPUD	GL		Bp	29.44	BFP		SD	18.12	Bd		BFD	
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	Radius	L	All	FPUD	GL		Bp	30.75	BFP		SD	19.20	Bd		BFD	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.7	Sus	Radius	L	MD	FD?P	GL		Bp		Bfp		SD		Bd	32.69	Bfd	
Raversijde	53		96-RAV-127	Sus	Radius	R	PM	FPUD	GL		Bp	29.72	Bfp		SD	15.87	Bd		Bfd	
Raversijde	53		96-RAV-127	Sus	Radius	R	PM	FPUD	GL		Bp	33.16	Bfp		SD	17.35	Bd		Bfd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Sus	Radius	L	PM	FP?D	GL		Bp	33.07	Bfp		SD	20.61	Bd		Bfd	
Raversijde	50		96-RAV-72	Sus	Radius	L	PM	FP?D	GL		Bp	30.83	Bfp		SD	18.33	Bd		Bfd	
Raversijde	50		96-RAV-72	Sus	Radius	R	PM	FP?D	GL		Bp	32.71	Bfp		SD	20.82	Bd		Bfd	
Raversijde	75	97 RAV 150-189	97 RAV 166	Sus	Radius	R	PM	FP?D	GL		Bp	30.84	BFp		SDO	17.41	Bd		BFd	
Raversijde	75	97 RAV 150-189	97 RAV 182	Sus	Radius	L	PM	FP?D	G		Bp	34.62	BFp		SD		Bd		BFd	
Raversijde	76	RAV 97 191-209	97 RAV 194	Sus	Radius	L	PM	FPUD	GL		Bp	30.98	BFp		SD	20.31	Bd		BFd	
Raversijde	76	RAV 97 191-209	97 RAV 194	Sus	Radius	R	PM	FPUD	GL		Bp	31.39	BFp		SD	18.29	Bd		BFd	
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	Sus	Radius	L	PM	FP?D	GL		Bp	30.51	BFp		SD	17.10	Bd		BFd	
Raversijde	81	RAV 97 306-339	97 RAV 306	Sus	Radius	L	PM	FP?D	GL		Bp	29.65	BFp		SD	16.83	Bd		BFd	
Raversijde	88	RAV BOT 350-369	97 RAV 347 2 Zakjes- 1 Zakje gewonden	Sus	Radius	L	PM	FP?D	GL		Bp	31.77	BFp		SD	18.55	Bd		BFd	
Raversijde	88	RAV BOT 350-369	97 RAV 351	Sus	Radius	R	PM	FP?D	GL		Bp	30.52	BFp		SD	19.12	Bd		BFd	
Raversijde	88	RAV BOT 350-369	97 RAV 355	Sus	Radius	L	PM	FP?D	GL		Bp	30.19	BFp		SD	17.77	Bd		BFd	
Raversijde	88	RAV BOT 350-369	97 RAV 358	Sus	Radius	R	PM	FPUD	GL		Bp	30.92	BFp		SD	16.81	Bd		BFd	
Raversijde	59		97 RAV 361	Sus	Radius	L	PM	FPUD	GL		Bp	27.82	BFp		SD	17.09	Bd		BFd	
Raversijde	59		97 RAV 361	Sus	Radius	R	PM	FP?D	GL		Bp	31.06	BFp		SD	18.66	Bd		BFd	
Raversijde	60		97 RAV 361	Sus	Radius	L	PM	FP?D	GL		Bp	32.60	BFp		SD		Bd		BFd	

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?																										
Raversijde	71	RAV BOT 61-98	97 RAV 64	Sus	Radius	R	PM	FP?D	GL		Bp	29.78	BFP		SD	18.30	Bd		BFD															
Raversijde	90	RAV 686-781	97 RAV 713	Sus	Radius	L	PM	FP?D	GL		Bp	34.73	BFp		SD		Bd		BFd															
Raversijde	90	RAV 686-781	97 RAV 726 1 medpkoot UIT	Sus	Radius	R	PM	FPUD	GL		Bp	32.02	BFp		SD	17.06	Bd		BFd															
Raversijde	71	RAV BOT 61-98	97 RAV 86	Sus	Radius	R	PM	FPUD	GL		Bp	28.42	BFP		SD	17.51	Bd		BFD															
Raversijde	54		97-RAV-117	Sus	Radius	R	PM	FP?D	GL		Bp	34.31	Bfp		SD	19.33	Bd		Bfd															
Raversijde	54		97-RAV-132	Sus	Radius	R	PM	FPUD	GL		Bp	35.63	Bfp		SD	19.78	Bd		Bfd															
Raversijde	74	RAV BOT 97-RAV-13 tot 86	97-RAV-29	Sus	Radius	L	PM	FP?D	GL		Bp	31.43	Bfp		SD		Bd		Bfd															
Raversijde	57		97-RAV-298	Sus	Radius	R	PM	FP?D	GL		Bp		Bfp		SD	21.85	Bd		Bfd															
Raversijde	57		97-RAV-298	Sus	Radius	R	PM	FP?D	GL		Bp	27.50	Bfp		SD	15.59	Bd		Bfd															
Raversijde	57		97-RAV-298	Sus	Radius	R	PM	FPUD	GL		Bp	32.72	Bfp		SD	20.23	Bd		Bfd															
Raversijde	57		97-RAV-298	Sus	Radius	R	PM	FP?D	GL		Bp	33.30	Bfp		SD	19.01	Bd		Bfd															
Raversijde	57		97-RAV-298	Sus	Radius	R	PM	FP?D	GL		Bp	32.98	Bfp		SD	21.10	Bd		Bfd															
Raversijde	57		97-RAV-298	Sus	Radius	L	PM	FPUD	GL		Bp	30.19	Bfp		SD	20.02	Bd		Bfd															
Raversijde	58		97-RAV-361	Sus	Radius	L	PM	FP?D	GL		Bp	32.85	Bfp		SD	18.86	Bd		Bfd															
Raversijde	58		97-RAV-361	Sus	Radius	R	PM	FP?D	GL		Bp	31.56	Bfp		SD		Bd		Bfd															
Raversijde	75	97 RAV 150-189	97 RAV 180 2 ZAK VIS HU + ZOND Hui 0,5 UIT	Sus	Radius	R	PM	FP?D	GL		Bp	29.59	BFp	26.49	SD	16.58	Bd		BFd															
Raversijde	48	Doos 4	4554	Sus	Radius + Ulna	L	M	FPUD	GL	143.67	Bp		BFp		SD	15.38	Bd	38.63	BFd	32.51	GL		LO		Dpa		SDO	33.19	BpC						
Raversijde	54		97-RAV-105	Sus	Radius + Ulna	L	PM	FP?D	GL		Bp	31.92	Bfp	30.09	SD	16.53	Bd		Bfd		UGL		ULO		UDpa		SDO	25.72	UBpc	19.69					
Raversijde	54		97-RAV-105	Sus	Radius + Ulna	R	All	FPFingD	GL		Bp	30.56	Bfp	28.39	SD	15.78	Bd	29.43	Bfd	25.76	UGL		ULO		UDpa		SDO		UBpc	18.74					
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	24.35	GLP	40.01	LG	37.11	BG	25.31												
Raversijde	75	97 RAV 150-189	97 RAV 180 2 ZAK VIS HU + ZOND Hui 0,5 UIT	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC		GLP	38.81	LG	34.88	BG	30.43												
Raversijde	82	RAV bot 210-301	97 RAV 301	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	24.21	GLP	40.03	LG	35.62	BG	29.01												
Raversijde	69	RAV 96 BOT 424	424	Sus	Scapula	L	M	?	HS		DHA		Ld		SLC	23.39	GLP		LG		BG													
Raversijde	69	RAV 96 BOT 424	424	Sus	Scapula	L	PM	?	HS		DHA		Ld		SLC	25.51	GLP		LG		BG													
Raversijde	69	RAV 96 BOT 424	424	Sus	Scapula	R	PM	?	HS		DHA		Ld		SLC	29.28	GLP		LG		BG													
Raversijde	63	RAV BOT 477	477	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	23.62	GLP	37.24	LG	29.88	BG	28.77												
Raversijde	63	RAV BOT 477	477	Sus	Scapula	R	PM	F	HS		DHA	171.01	Ld		SLC	21.00	GLP	36.94	LG	31.98	BG	28.30												
Raversijde	63	RAV BOT 477	477	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	27.13	GLP	41.85	LG	33.65	BG	33.30												
Raversijde	62	97 RAV 650	650	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	21.18	GLP		LG		BG													
Raversijde	62	97 RAV 650	650	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	30.57	GLP	42.80	LG	39.72	BG	32.00												
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4431	Sus	Scapula	L	PM	UP	HS		DHA		Ld		SLC	25.35	GLP		LG		BG	29.89												
Raversijde	46	Bot 2 Raversijde 4466- 4492	4467	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	25.41	GLP	39.45	LG	33.29	BG	27.21												
Raversijde	46	Bot 2 Raversijde 4466- 4492	4482	Sus	Scapula	L	PM	UP plate	HS		DHA		Ld		SLC	26.73	GLP	39.37	LG	34.03	BG	29.34												
Raversijde	46	Bot 2 Raversijde 4466- 4492	4482	Sus	Scapula	L	PM	?	HS		DHA		Ld		SLC	23.30	GLP		LG		BG													
Raversijde	47	Bot 3 Raversijde 4492- 4550	4492	Sus	Scapula	R			HS		DHA		Cd		SLC	22.44	GLP		LG		BG													
Raversijde	47	Bot 3 Raversijde 4492- 4550	4497	Sus	Scapula	L	PM	F							SLC	23.76	GLP	36.24	LG	32.15	GB	26.02												
Raversijde	47	Bot 3 Raversijde 4492- 4550	4526	Sus	Scapula	R	PM	?	HS		DHA		LD		SLC	25.68	GLP		CG		BG													
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Scapula	R	M	?	HS		DHA		Ld		SLC	24.60	GLp		LG		BG													
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Scapula	R	PM	?	HS		DHA		Ld		SLC	26.58	GLP		LG		BG	23.73												
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Scapula	L	PM	?	HS		DHA		Ld		SLC	25.29	GLP		LG		BG													
Raversijde	52		95-RAV-120	Sus	Scapula	R	PM	F?	HS		DHA		Ld		SLC	24.20	GLP		LG		BG													
Raversijde	52		95-RAV-120	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	31.80	GLP	43.70	LG	36.37	BG	30.78												
Raversijde	55		95-RAV-279	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	24.24	GLP		LG		BG													
Raversijde	55		95-RAV-279	Sus	Scapula	L	PM	?	HS		DHA		Ld		SLC	26.39	GLP		LG		BG													
Raversijde	55		95-RAV-279	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	25.16	GLP	40.68	LG		BG	29.54												
Raversijde	55		95-RAV-279	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	24.94	GLP	26.62	LG	31.94	BG													
Raversijde	64	96 RAV 150-195	96 RAV 166	Sus	Scapula	L	M	?	HS		DHA		Ld		SLC	24.36	GLP		LG		BG													
Raversijde	64	96 RAV 150-195	96 RAV 186	Sus	Scapula	L	PM	UP?D	HS		DHA		Ld		SLC	23.59	GLp		LG		BG	26.90												
Raversijde	78	96 RAV 196-204	96 RAV 197	Sus	Scapula	R	PM	?	HS		DHA		Ld		SLC	23.40	GLP		LG		BG													
Raversijde	79	96 RAV 208-218	96 RAV 211	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	26.67	GLP	38.45	LG	33.57	BG	31.69												
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	24.63	GLP	39.22	LG	32.95	BG	26.92												
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	24.18	GLP	36.62	LG	27.34	BG	26.92												
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	24.72	GLP	37.15	LG	30.29	BG	25.56												
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	24.95	GLP	38.88	LG	32.09	BG	26.22												
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Sus	Scapula	R	M	?	HS		DHA		Ld		SLC	26.42	GLP		LG		BG													
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Sus	Scapula	R	M	?	HS		DHA		Ld		SLC	22.69	GLP		LG		BG													
Raversijde	87	RAV BOT 235-263	96 RAV 237	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	24.03	GLP	37.02	LG	32.56	BG	27.18												
Raversijde	87	RAV BOT 235-263	96 RAV 237	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	26.06	GLP		LG		BG	31.37												
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	Scapula	R	PM	?F	HS		DHA		Ld		SLC	25.84	GLP		LG		BG	28.23												
Raversijde	87	RAV BOT 235-263	96 RAV 254	Sus	Scapula	L	M	?	HS		DHA		Ld		SLC	25.40	GLP		LG		BG													
Raversijde	87	RAV BOT 235-263	96 RAV 254	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	21.30	GLP	35.41	LG		BG													
Raversijde	87	RAV BOT 235-263	96 RAV 260	Sus	Scapula	R	M	?	HS		DHA		Ld		SLC	27.72	GLP		LG		BG													
Raversijde	87	RAV BOT 235-263	96 RAV 263	Sus	Scapula	R	M	?	HS		DHA		Ld		SLC	24.48	GLP		LG		BG													
Raversijde	80	96 RAV 264-286	96 RAV 266	Sus	Scapula	R	M	F	HS		DHA		Ld		SLC	20.19	GLP		LG		BG													
Raversijde	80	96 RAV 264-286	96 RAV 266	Sus	Scapula	R	M	U	HS		DHA		Ld		SLC	23.21	GLP		LG		BG													
Raversijde	80	96 RAV 264-286	96 RAV 281	Sus	Scapula	L	M	?	HS		DHA		Ld		SLC	28.67	GLP		LG		BG													
Raversijde	80	96 RAV 264-286	96 RAV 283	Sus	Scapula	L	PM	F?	HS		DHA		Ld		SLC	26.16	GLP	41.10	LG	34.01	BG	29.16												
Raversijde	77	96 RAV 288-314	96 RAV 309	Sus	Scapula	L	M	?	HS		DHA		Ld		SLC	21.85	GLP		LG		BG													
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Scapula	L	PM	?	HS		DHA		Ld		SLC	26.79	GLP		LG		BG	26.90												
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	25.01	GLP	40.76	LG	31.65	BG	26.77												
Raversijde	77	96 RAV 288-314	96 RAV 314	Sus	Scapula	L	M	?	HS		DHA		Ld		SLC	20.72	GLP		LG		BG													

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*														
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	Sus	Scapula	R	PM	?F	HS		DHA		Ld		SLC	24.25	GLP		LG		BG	25.18
Raversijde	83	RAV bot 338-374	96 RAV 338	Sus	Scapula	L	PM	?U	HS		DHA		Ld		SLC		GLP		LG		BG	29.84
Raversijde	83	RAV bot 338-374	96 RAV 338	Sus	Scapula	R	PM	?F	HS		DHA		Ld		SLC	27.20	GLP	41.50	LG		BG	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 338	Sus	Scapula	R	PM	?	HS		DHA		Ld		SLC	26.93	GLP		LG		BG	30.92
Raversijde	83	RAV bot 338-374	96 RAV 339	Sus	Scapula	R	M	?	HS		DHA		Ld		SLC	24.55	GLP		LG		BG	
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 349	Sus	Scapula	R	PM	?	HS		DHA		Ld		SLC	23.16	GLP		LG		BG	30.07
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 37	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	26.53	GLP	38.95	LG	35.34	BG	30.81
Raversijde	70	RAV BOT 61-69	96 RAV 61	Sus	Scapula	L	PM	F	HS		DHA		LD		SLC	27.31	GLP	41.93	LG	35.89	BG	29.87
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	Scapula	R	PM	F	HS		DHA		LD		SLC	18.28	GLP	31.92	LG	24.54	BG	21.36
Raversijde	70	RAV BOT 61-69	96 RAV 69	Sus	Scapula	R	PM	U	HS	166.70	DHA		Ld		SLC	24.35	GLP		LG	32.54	BG	25.65
Raversijde	89	RAV BOT 1996 772-780	96 RAV 737	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	22.53	GLP	37.70	LG		BG	26.75
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.10	Sus	Scapula	L	PM	FP	HS		DHA	204.16	Ld		SLC	27.72	GLP	42.54	LG	37.90	BG	30.53
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.7	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	25.75	GLP	39.00	LG		BG	31.63
Raversijde	50		96-RAV-113	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	23.25	GLP	34.13	LG		BG	
Raversijde	53		96-RAV-127	Sus	Scapula	R	M	?	HS		DHA		Ld		SLC	22.61	GLP		LG		BG	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-9	Sus	Scapula	L	M	?	HS		DHA		Ld		SLC	25.03	GLP		LG		BG	
Raversijde	50		96-RAV-92	Sus	Scapula	R	PM	?	HS		DHA		Ld		SLC	24.20	GLP		LG		BG	
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR-11.5ZWART	Sus	Scapula	L	PM	F?	HS		DHA		Ld		SLC	23.62	GLP		LG		BG	
Raversijde	50		96-RAV-GRACHT-11.6	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	28.94	GLP	41.73	LG	34.51	BG	28.98
Raversijde	75	97 RAV 150-189	97 RAV 171	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	24.34	GLp	37.67	LG	32.07	BG	26.66
Raversijde	75	97 RAV 150-189	97 RAV 182	Sus	Scapula	L	PM	U	HS		DHA		Ld		SLC	23.00	GLp		LG	29.00	BG	29.94
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	Sus	Scapula	R	M	?	HS		DHA		Ld		SLC	25.83	GLP		LG		BG	
Raversijde	82	RAV bot 210-301	97 RAV 301	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	31.81	GLP	43.25	LG	36.88	BG	29.34
Raversijde	82	RAV bot 210-301	97 RAV 301	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	24.71	GLP	39.71	LG		BG	26.32
Raversijde	81	RAV 97 306-339	97 RAV 318	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	24.15	GLP	38.86	LG		BG	28.13
Raversijde	88	RAV BOT 350-369	97 RAV 340	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	25.59	GLP	37.53	LG	31.55	BG	
Raversijde	88	RAV BOT 350-369	97 RAV 358	Sus	Scapula	L	PM	?F	HS		DHA		Ld		SLC	29.30	GLP		LG		BG	29.30
Raversijde	88	RAV BOT 350-369	97 RAV 358	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	25.38	GLP	41.15	LG	35.62	BG	31.36
Raversijde	59		97 RAV 361	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	22.98	GLP		LG	35.48	BG	29.83
Raversijde	59		97 RAV 361	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	24.70	GLP		LG		BG	
Raversijde	59		97 RAV 361	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	24.66	GLP	39.88	LG	32.97	BG	29.20
Raversijde	60		97 RAV 361	Sus	Scapula	R	PM	?	HS		DHA		Ld		SLC	23.42	GLP		LG		BG	30.89
Raversijde	88	RAV BOT 350-369	97 RAV 367	Sus	Scapula	L	PM	?U	HS		DHA		Ld		SLC	23.58	GLP		LG		BG	
Raversijde	71	RAV BOT 61-98	97 RAV 64	Sus	Scapula	R	M	?	HS		DHA		LD		SLC	26.89	GLP		LG		BG	
Raversijde	90	RAV 686-781	97 RAV 708	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	23.00	GLP	38.20	LG	30.12	BG	26.24
Raversijde	71	RAV BOT 61-98	97 RAV 72	Sus	Scapula	R	PM	UP	HS		DHA		LD		SLC	25.10	GLP		LG		BG	
Raversijde	89	RAV BOT 1996 772-780	97 RAV 727	Sus	Scapula	R	M	?	HS		DHA		Ld		SLC	23.97	GLP		LG		BG	
Raversijde	71	RAV BOT 61-98	97 RAV 74	Sus	Scapula	R	PM	?	HS		DHA		Ld		SLC	26.19	GLP		LG		BG	
Raversijde	54		97-RAV-105	Sus	Scapula	R	MD	?	HS		DHA		Ld		SLC	23.11	GLP		LG		BG	
Raversijde	54		97-RAV-117	Sus	Scapula	R	PM	F	HS		DHA		Ld		SLC	29.26	GLP		LG		BG	32.93
Raversijde	54		97-RAV-119	Sus	Scapula	L	PM	U	HS		DHA	154.70	Ld		SLC	21.59	GLP		LG	32.92	BG	27.21
Raversijde	54		97-RAV-143	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	27.11	GLP	42.93	LG	36.72	BG	
Raversijde	54		97-RAV-148	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	23.11	GLP	38.65	LG	33.16	BG	28.48
Raversijde	57		97-RAV-298	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	24.08	GLP	39.61	LG	33.95	BG	29.92
Raversijde	57		97-RAV-298	Sus	Scapula	R	PM	U	HS		DHA		Ld		SLC	22.95	GLP	37.36	LG		BG	25.73
Raversijde	57		97-RAV-298	Sus	Scapula	R	M	?	HS		DHA		Ld		SLC	23.03	GLP		LG		BG	
Raversijde	74	RAV BOT 97-RAV-13 tot 69	97-RAV-34	Sus	Scapula	L	PM	F	HS		DHA		Ld		SLC	24.98	GLP	36.68	LG	32.84	BG	26.82
Raversijde	58		97-RAV-361	Sus	Scapula	L	PM	?	HS		DHA		Ld		SLC	23.32	GLP		LG		BG	
Raversijde	58		97-RAV-361	Sus	Scapula	R	PM	F?	HS		DHA		Ld	199.65	SLC	25.31	GLP	40.92	LG	37.39	BG	32.45
Raversijde	47	Bot 3 Raversijde 4492-4550	4545	Sus	Scapula	L		F	HS		DHA		LD		SLC	25.07	GLP	37.64	LG	32.32	BG	27.77
Raversijde	69	RAV 96 BOT 424	424	Sus	Tibia	L	M	FingDUP	GL		Bp		SD	19.80	Bd		Dd					
Raversijde	69	RAV 96 BOT 424	424	Sus	Tibia	R	M	?	GL		Bp		SD	24.23	Bd		Dd					
Raversijde	69	RAV 96 BOT 424	424	Sus	Tibia	R	M	?PUD	GL		Bp		SD	21.53	Bd		Dd					
Raversijde	63	RAV BOT 477	477	Sus	Tibia	L	M	UPUD	GL		Bp		SD	19.78	Bd		Dd					
Raversijde	62	97 RAV 650	650	Sus	Tibia	R	MD	FDUP	GL		Bp		SD	23.32	Bd	34.27	Dd	30.15				
Raversijde	62	97 RAV 650	650	Sus	Tibia	R	MD	FingD?P	GL		Bp		SD	21.41	Bd	32.61	Dd	30.56				
Raversijde	62	97 RAV 650	650	Sus	Tibia	L	UPE	UPE	GL		Bp	50.44	SD		Bd		Dd					
Raversijde	48	Doos 4	4558	Sus	Tibia	R	All	UPFD	GL		Bp		SD	20.82	Bd	34.98	DD	31.46				
Raversijde	48	Doos 4	4569	sus	Tibia	R	All	U both ends	GL		Bp		SD	21.30	Bd		Dd					
Raversijde	45	Bot 1 Raversijde Doos 1 4414-4462	4430 N&S	Sus	Tibia	R	MD	FDUP	GL		Bp		SD	22.66	Bd	34.22	Dd	31.47				
Raversijde	52		95-RAV-120	Sus	Tibia	R	MD	FDUP	GL		Bp		SD	22.39	Bd	37.76	Dd	34.07				
Raversijde	64	96 RAV 150-195	96 RAV 173	Sus	Tibia	R	UPUD	UPUD	GL		Bp		SD	17.98	Bd		Dd					
Raversijde	64	96 RAV 150-195	96 RAV 192	Sus	Tibia	R	All	U	GL		Bp		SD	21.00	Bd		Dd					
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Sus	Tibia	L	MD	UD(refit)	GL		Bp		SD	22.17	Bd	35.65	Dd	30.32				
Raversijde	84	RAV bot 221-226	96 RAV 221	Sus	Tibia	R	M	U	GL		Bp		SD	19.91	Bd		Dd					
Raversijde	84	RAV bot 221-226	96 RAV 226	Sus	Tibia	L	UPE	UPE	GL		Bp	51.52	SD		Bd		Dd					
Raversijde	84	RAV bot 221-226	96 RAV 226	Sus	Tibia	L	M	U	GL		Bp		SD	19.11	Bd		Dd					
Raversijde	84	RAV bot 221-226	96 RAV 226	Sus	Tibia	L	M	U	GL		Bp		SD	18.84	Bd		Dd					
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Sus	Tibia	L	M	UD?P	GL		Bp		SD	18.41	Bd		Dd					
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 231	Sus	Tibia	R	MD	UD?P	GL		Bp		SD	20.48	Bd	35.89	Dd	32.21				
Raversijde	80	96 RAV 264-286	96 RAV 282	Sus	Tibia	R	M	UD?P	GL		Bp		SD	20.33	Bd		Dd					
Raversijde	77	96 RAV 288-314	96 RAV 300	Sus	Tibia	L	MD	FingD?P	GL		Bp		SD	19.43	Bd	30.33	Dd	29.08				
Raversijde	83	RAV bot 338-374	96 RAV 338	Sus	Tibia	L	All	F	GL	224.42	Bp	50.57	SD	22.44	Bd	33.71	Dd	28.57				
Raversijde	83	RAV bot 338-374	96 RAV 339	Sus	Tibia	R	M	U	GL		Bp		SD	17.85	Bd		Dd					
Raversijde	83	RAV bot 338-374	96 RAV 339	Sus	Tibia	L	M	U	GL		Bp		SD	20.87	Bd		Dd					

Site	Box	Box details (if any)	Bag details (if any)	Species	Element	Side	Prox/Mid/ Dist	Fused?										
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 349	Sus	Tibia	R	M	UD?P	GL		Bp		SD	19.61	Bd		Dd	
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Sus	Tibia	R	M	?PUD	GL		Bp		SD	21.94	Bd		Dd	
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Sus	Tibia	L	MD	FingD?P	GL		Bp		SD		Bd	32.05	Dd	28.46
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Sus	Tibia	R	MD	FD?P	GL		Bp		SD	21.29	Bd	34.54	Dd	30.77
Raversijde	76	RAV 97 191-209	97 RAV 197 2 ZAKEN	Sus	Tibia	L	M	UDE	GL		Bp		SD	17.28	Bd		Dd	
Raversijde	82	RAV bot 210-301	97 RAV 253	Sus	Tibia	R	M	U	GL		Bp		SD	20.85	Bd		Dd	
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	Sus	Tibia	R	PM	UPUD	GL		Bp	54.05	SD	19.36	Bd		Dd	
Raversijde	81	RAV 97 306-339	97 RAV 314 VIS HU. UIT	Sus	Tibia	R	M	U	GL		Bp		SD	19.65	Bd		Dd	
Raversijde	88	RAV BOT 350-369	97 RAV 340	Sus	Tibia	R	MD	FD?P	GL		Bp		SD	20.26	Bd	31.58	Dd	28.44
Raversijde	88	RAV BOT 350-369	97 RAV 358	Sus	Tibia	R	M	?	GL		Bp		SD		Bd		Dd	21.10
Raversijde	57		97-RAV-298	Sus	Tibia	L	UDE	UDE	GL		Bp		SD		Bd	35.21	Dd	32.02
Raversijde	71	RAV BOT 61-99	98 RAV 74	Sus	Tibia	L	M	U	SD	17.34								
Raversijde	75	97 RAV 150-189	97 RAV 180 2 ZAK VIS HU + ZOND Hui 0,5 UIT	Sus	Tibia	R	MD	FD?P	GL		Bp		SD	15.49	Bd	26.82	Dd	21.85
Raversijde	69	RAV 96 BOT 424	424	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	46.50	BpC	29.08
Raversijde	46	Bot 2 Raversjide 4466-4492	4466	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	37.18	BpC	23.69
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	27.88	BpC	18.58
Raversijde	46	Bot 2 Raversjide 4466-4492	4467	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	23.01
Raversijde	46	Bot 2 Raversjide 4466-4492	4473	Sus	Ulna	R	PM	?	GL		LO		Dpa		SDO	38.81	BpC	24.03
Raversijde	46	Bot 2 Raversjide 4466-4492	4474	Sus	Ulna	L	All	?	GL		LO		Dpa		SDO	45.78	BpC	27.68
Raversijde	46	Bot 2 Raversjide 4466-4492	4474	Sus	Ulna	R	All	?	GL		LO		Dpa		SDO	37.31	BpC	24.02
Raversijde	46	Bot 2 Raversjide 4466-4492	4482	Sus	Ulna	L	MD	?	GL		LO		Dpa		SDO	44.38	BpC	26.14
Raversijde	47	Bot 3 Raversjide 4492-4550	4492	Sus	Ulna	R		?	GL		LO		Dpa		SDO	39.08	BpC	21.06
Raversijde	47	Bot 3 Raversjide 4492-4550	4526	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	37.77	BpC	27.04
Raversijde	47	Bot 3 Raversjide 4492-4550	4526	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	36.53	BpC	21.38
Raversijde	47	Bot 3 Raversjide 4492-4550	4550	Sus	Ulna	L	M	?	GL		LO		PPA		SDO	38.79	BpC	22.36
Raversijde	48	Doos 4	4560	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	39.65	BpC	25.07
Raversijde	48	Doos 4	4560	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	35.87	BpC	23.63
Raversijde	48	Doos 4	4560	Sus	Ulna	L	MD	UD?	GL		LO		Dpa		SDO	35.84	BpC	23.29
Raversijde	48	Doos 4	4560	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	25.91
Raversijde	48	Doos 4	4564	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	34.92	BpC	22.49
Raversijde	48	Doos 4	4569	sus	Ulna	L	M	?	GL		LO		Dpa		SDO	47.33	BpC	27.85
Raversijde	45	Bot 1 Raversjide Doos 1 4414-4462	4430 N&S	Sus	Ulna	R	PM	UP	GL		LO		Dpa		SDO		BpC	25.39
Raversijde	52		95-RAV-120	Sus	Ulna	L	M	?	GL		LO		Dpa	30.07	SDO	37.70	BpC	25.91
Raversijde	55		95-RAV-279	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	45.97	BpC	29.01
Raversijde	55		95-RAV-279	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	42.02	BpC	25.77
Raversijde	55		95-RAV-279	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	41.31	BpC	24.86
Raversijde	51		95-RAV-96	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	40.01	BpC	25.31
Raversijde	78	96 RAV 196-204	96 RAV 196 1heft uit	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	42.41	BpC	27.43
Raversijde	78	96 RAV 196-204	96 RAV 204	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	39.73	BpC	26.23
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Sus	Ulna	L	M	?	GL		LO		Dpa	31.13	SDO	38.80	BpC	25.90
Raversijde	78	96 RAV 196-204	96 RAV 204 1 beluerkt bot uit	Sus	Ulna	R	M	?	GL		LO		Dpa	28.30	SDO	34.21	BpC	21.88
Raversijde	79	96 RAV 208-218	96 RAV 208	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	28.08
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 21	Sus	Ulna	R	PM	U	GL		LO		Dpa		SDO	29.43	BpC	17.95
Raversijde	79	96 RAV 208-218	96 RAV 210	Sus	Ulna	L	PM	UDE	GL		LO		Dpa	24.05	SDO	32.12	BpC	19.64
Raversijde	79	96 RAV 208-218	96 RAV 210	Sus	Ulna	R	PM	?	GL		LO		Dpa		SDO	41.74	BpC	26.44
Raversijde	79	96 RAV 208-218	96 RAV 211	Sus	Ulna	R	M	UP?D	GL		LO		Dpa	27.25	SDO	34.64	BpC	22.08
Raversijde	79	96 RAV 208-218	96 RAV 212 1 mishaft uit	Sus	Ulna	L	M	?	GL		LO		Dpa	30.36	SDO	38.79	BpC	23.36
Raversijde	84	RAV bot 221-226	96 RAV	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	36.86	BpC	23.71
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV ? 227?	Sus	Ulna	L	M	U	GL		LO		Dpa	27.67	SDO	35.56	BpC	21.55
Raversijde	86	RAV 1996 96 RAV 227-234	96 RAV 227	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	40.47	BpC	24.34
Raversijde	87	RAV BOT 235-263	96 RAV 235 1 groot stuk vis UIT in bird bag	Sus	Ulna	R	M	U	GL		LO		Dpa	36.99	SDO	43.79	BpC	26.61
Raversijde	87	RAV BOT 235-263	96 RAV 245	Sus	Ulna	R	M	?PUD	GL		LO		Dpa	32.25	SDO	41.83	BpC	27.24
Raversijde	77	96 RAV 288-314	96 RAV 300	Sus	Ulna	R	M	?	GL		LO		Dpa	30.38	SDO	37.83	BpC	22.69
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 318 VIS + ROND HU -> 0, 5 MMM UIT	Sus	Ulna	L	M	U	GL		LO		Dpa		SDO	42.54	BpC	24.36

Site	*Box*	*Box details (if any)*	*Bag details (if any)*	*Species*	*Element*	*Side*	*Prox/Mid/ Dist*	*Fused?*										
Raversijde	83	RAV bot 338-374	96 RAV 338	Sus	Ulna	L	M	U	GL		LO		Dpa	28.83	SDO	38.66	BpC	23.99
Raversijde	85	RAV 1996 96 RAV 317-349	96 RAV 348	Sus	Ulna	L	M	UPUD	GL		LO		Dpa	29.46	SD	37.51	BpC	24.30
Raversijde	83	RAV bot 338-374	96 RAV 350 1 groote stuk VIS UIT/ 96-RAV-350 2 Zaken x	Sus	Ulna	R	M	?	GL		LO		Dpa	30.03	SDO	38.68	BpC	24.95
Raversijde	83	RAV bot 338-374	96 RAV 362 x	Sus	Ulna	R	M	U	GL		LO		Dpa	30.21	SDO	39.91	BpC	24.97
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 37	Sus	Ulna	R	All	U	GL		LO		Dpa		SDO	17.90	BpC	11.88
Raversijde	70	RAV BOT 61-69	96 RAV 61	Sus	Ulna	R	M	UP	GL		LO		Dpa		SDO		BpC	47.90
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	26.88
Raversijde	70	RAV BOT 61-69	96 RAV 62	Sus	Ulna	L	PM	FP?D	GL		LO		Dpa	50.89	SDO		BpC	23.19
Raversijde	70	RAV BOT 61-69	96 RAV 66	Sus	Ulna	R	PM	F?	GL		LO		Dpa		SDO	41.50	BpC	
Raversijde	89	RAV BOT 1996 772-780	96 RAV 738	Sus	Ulna	R	M	?	GL		LO		Dpa	30.32	SDO	37.47	BpC	24.34
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 8	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	25.21
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96 RAV 8	Sus	Ulna	L	M	U	GL		LO		Dpa		SDO		BpC	22.88
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.1	Sus	Ulna	?	All	U	GL		LO		Dpa		SDO	38.78	BpC	22.58
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-10.10	Sus	Ulna	L	M	U	GL		LO		Dpa		SDO	34.76	BpC	21.41
Raversijde	50		96-RAV-108	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	35.94	BpC	24.42
Raversijde	72	RAV BOT 96-RAV-4 TOT 60	96-RAV-20	Sus	Ulna	L	?	?	GL		LO		Dpa		SDO	40.14	BpC	24.86
Raversijde	50		96-RAV-72	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	39.94	BpC	26.28
Raversijde	50		96-RAV-72	Sus	Ulna	R	M	U	GL		LO		Dpa		SDO	42.78	BpC	23.20
Raversijde	50		96-RAV-72	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	39.40	BpC	23.01
Raversijde	50		96-RAV-72	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO		BpC	21.60
Raversijde	73	RAV BOT 96-RAV-10.1 tot 11.8	96-RAV-GR-11.5ZWART	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	39.41	BpC	23.66
Raversijde	75	97 RAV 150-189	97 RAV 176	Sus	Ulna	L	M	UPUD	GL		LO		Dpa	28.94	SDO	38.16	BpC	22.50
Raversijde	75	97 RAV 150-189	97 RAV 182	Sus	Ulna	L	M	?	GL		LO		Dpa	32.18	SDO	42.63	BpC	27.10
Raversijde	76	RAV 97 191-209	97 RAV 194	Sus	Ulna	L	M	?	GL		LO		Dpa	33.93	SDO	41.19	BpC	27.41
Raversijde	82	RAV bot 210-301	97 RAV 254	Sus	Ulna	L	M	?	GL		LO		Dpa	32.76	SDO	43.24	BpC	22.94
Raversijde	82	RAV bot 210-301	97 RAV 286	Sus	Ulna	R	M	U	GL		LO		Dpa	32.24	SDO	39.13	BpC	27.32
Raversijde	82	RAV bot 210-301	97 RAV 298 2 BOT Varken UIT, 1XBot Rund UIT 10-1-02 ISOT	Sus	Ulna	L	M	?U	GL		LO		Dpa	30.39	SDO	37.21	BpC	24.87
Raversijde	81	RAV 97 306-339	97 RAV 318	Sus	Ulna	L	M	?U	GL		LO		Dpa	30.82	SDO	35.74	BpC	23.72
Raversijde	88	RAV BOT 350-369	97 RAV 347 2 Zakjes- 1 Zakje gewonden	Sus	Ulna	L	M	?	GL		LO		Dpa	32.80	SDO	43.31	BpC	26.36
Raversijde	88	RAV BOT 350-369	97 RAV 351	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	32.13	BpC	20.95
Raversijde	88	RAV BOT 350-369	97 RAV 351	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO		BpC	21.86
Raversijde	88	RAV BOT 350-369	97 RAV 351	Sus	Ulna	R	M	UDE	GL		LO		Dpa	31.34	SDO	40.47	BpC	24.52
Raversijde	88	RAV BOT 350-369	97 RAV 355	Sus	Ulna	L	PM	UP	GL		LO		Dpa	29.99	SDO	39.61	BpC	23.89
Raversijde	60		97 RAV 361	Sus	Ulna	R	M	U	GL		LO		Dpa		SDO	38.51	BpC	22.19
Raversijde	71	RAV BOT 61-98	97 RAV 64	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	39.30	BpC	22.06
Raversijde	71	RAV BOT 61-98	97 RAV 64/2	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	31.36	BpC	24.76
Raversijde	90	RAV 686-781	97 RAV 726 1 medpkoot UIT	Sus	Ulna	R	U	U	GL		LO		Dpa	29.34	SDO	37.49	BpC	25.07
Raversijde	54		97-RAV-106	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	41.98	BpC	25.99
Raversijde	54		97-RAV-132	Sus	Ulna	R	MD	U	GL		LO		Dpa		SDO	39.09	BpC	26.76
Raversijde	57		97-RAV-298	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	39.87	Bpc	24.56
Raversijde	57		97-RAV-298	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	41.35	Bpc	26.02
Raversijde	57		97-RAV-298	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	41.59	Bpc	25.94
Raversijde	74	RAV BOT 97-RAV-13 tot 71	97-RAV-35	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	43.78	BpC	26.39
Raversijde	58		97-RAV-361	Sus	Ulna	R	M	?	GL		LO		Dpa		SDO	40.83	BpC	23.73
Raversijde	74	RAV BOT 97-RAV-13 tot 62	97-RAV-55	Sus	Ulna	L	M	?	GL		LO		Dpa		SDO	37.28	BpC	22.90
Raversijde	90	RAV 686-781	97 RAV 704		No Measurable Bones													
Site	**Box**	**Box details (if any)**	**Bag Details (if any)**	**Species**	**Element**	**Side**	**Prox/Mid/D ist**	**Fused?**										

Appendix 3.2. Tables relating to the calculation of Epiphysial fusion ages

Table summarising the fusion data gathered from the Raversijde and Koekelare assemblages (cattle, pig, sheep/goat)

Species	*Element*	*Fusion status*	*AGE (in months)*	*Koekelare Total*	*Raversijde Total*
Bos	Metacarpal	F	> 24-30	105	0
Bos	Metacarpal	FPUD	<24-30	47	3
Bos	Metacarpal	FP?D	?	38	0
Bos	Femur	F	>42-48	9	8
Bos	Femur	U	<42-48	2	13
Bos	Femur	FingP	c. 42	1	2
Bos	Femur	Unknown	?	0	0
Bos	Ulna	F	>42-48	3	11
Bos	Ulna	U	<42-48	0	0
Bos	Ulna	Fing	c.42-48	1	0
Bos	Ulna	?	?	15	8
Bos	Radius	F	>42-48	23	12
Bos	Radius	FPFingD	c.42-48	2	0
Bos	Radius	Fp?D	>12-18	31	87
Bos	Radius	UD	<42-48	4	5
Bos	Radius	Unknown	?	5	1
Bos	Metatarsal	F	>24-30	82	31
Bos	Metatarsal	FP?D	>Birth	45	15
Bos	Metatarsal	FPUD	<24-30	43	8
Bos	Metatarsal	Unknown	?	1	0
Bos	Metatarsal	FPFingD	c. 24-30	0	2
Bos	Scapula	F	> 7-10	20	41
Bos	Scapula	U	< 7-10	1	0
Bos	Scapula	Unknown	?	4	3
Bos	Tibia	F	>42-48	58	6
Bos	Tibia	UP?D	<42-48	4	4
Bos	Tibia	U	<24-30	1	6
Bos	Tibia	FD?P	>24-30	31	42
Bos	Tibia	FingD	c.24-30	1	3
Bos	Tibia	FingP	c.42-48	0	4
Bos	Tibia	Unknown	?	2	0
Bos	Calcaneum	F	>36	14	9
Bos	Calcaneum	U	<36	15	13

Bos	Calcaneum	Unknown	?	9	6
Bos	Humerus	F	>42-48	11	1
Bos	Humerus	FD?P	>12-18	32	45
Bos	Humerus	UP?D	<42-48	1	0
Bos	Humerus	Unknown	?	8	0
Bos	Humerus	Fing P	c. 42-48	0	1
Bos	Humerus	FDUP	(12-18)-(42-48)	0	1
Bos	Phalange 1	F	>18-24	197	120
Bos	Phalange 1	U	<18-24	10	7
Bos	Phalange 1	Unknown	> Birth	0	7
Bos	Phalange 2	F	>18-24	81	68
Bos	Phalange 2	U	<18-24	0	3
Bos	Phalange 2	Fing	c. 18-24	0	2
O/C	Metacarpal	F	> 18-24	138	142
O/C	Metacarpal	FPUD	<18-24	9	64
O/C	Metacarpal	Fusing D	c. 18-24	1	5
O/C	Metacarpal	Unknown or FP?D	?	120	99
O/C	Femur	F	>36-42	3	37
O/C	Femur	U	<36-42	2	20
O/C	Femur	FingP	c.36-42	0	9
O/C	Femur	Unknown	?	0	0
O/C	Ulna	F	>(30)36-42	3	29
O/C	Ulna	U	<(30)36-42	0	17
O/C	Ulna	Unknown	?	2	45
O/C	Radius	FP?D	>3/10	12	107
O/C	Radius	FPUD	(3/10)-(36-42)	2	18
O/C	Radius	FD	>36-42	11	59
O/C	Radius	FingD	c.36-42	0	1
O/C	Radius	Unknown	?	0	1
O/C	Radius	?PUD	<36-42	0	2
O/C	Metatarsal	F	>20-24	18	145
O/C	Metatarsal	FP?D	>Birth	23	127
O/C	Metatarsal	FPUD	<20-24	3	84
O/C	Metatarsal	FPFingD	c.20-24	0	15
O/C	Scapula	F	> 6-8	26	137
O/C	Scapula	U	< 6-8	0	5
O/C	Scapula	Unknown	?	7	39
O/C	Tibia	F	>36-42	10	18
O/C	Tibia	FD?P	>15-24	8	195
O/C	Tibia	FingD	c.15-24	2	11
O/C	Tibia	U	<15-24	1	0
O/C	Tibia	Unknown	?	0	2
O/C	Tibia	FingP	c.36-42	0	6
O/C	Tibia	UP?D	<36-42	0	4

O/C	Calcaneum	F	>30-36	2	50
O/C	Calcaneum	U	<30-36	7	27
O/C	Calcaneum	Unknown	?	0	1
O/C	Calcaneum	Fing	c. 30-36	0	1
O/C	Humerus	F	>36-42	17	8
O/C	Humerus	FD?P	>3-10	13	175
O/C	Humerus	U	<3-10	1	1
O/C	Humerus	Unknown	?	3	4
O/C	Humerus	UP?D	<36-42	0	1
O/C	Humerus	FingP	c. 36-42	0	2
O/C	Humerus	FDUP	(3-10)-(36-42)	0	2
O/C	Phalange 1	F	>6-9	4	84
O/C	Phalange 1	U	<6-9	0	1
O/C	Phalange 1	Fing	c. 6-9	0	1
O/C	Phalange 2	F	>6-9	0	3
O/C	Phalange 2	U	<6-9	0	0
Sus	Scapula	F	>12	**41**	**20**
Sus	Scapula	Unknown	?	**3**	**3**
Sus	Scapula	U	<12	0	1
Sus	Humerus	F	>42	**4**	**28**
Sus	Humerus	FD?P	>12-18	**4**	**26**
Sus	Humerus	FingD	c.12-18	**1**	**9**
Sus	Humerus	U	<12-18	**1**	**2**
Sus	Humerus	Unknown	?	**3**	**0**
Sus	Humerus	FingP	c. 42	**0**	**2**
Sus	Humerus	FDUP	(12-18)-42	**0**	**1**
Sus	Metatarsal	F	>24-27	**0**	**4**
Sus	Metatarsal	FPUD	<24-27	**2**	30
Sus	Metatarsal	Unknown	?	**0**	**21**
Sus	Metatarsal	FPFingD	c.24-27	**0**	**1**
Sus	Radius	Fp?D	>12	**3**	**28**
Sus	Radius	F	>42	**0**	**1**
Sus	Radius	FPUD	12-42	**0**	**10**
Sus	Radius	?PUD	<42	**0**	**1**
Sus	Ulna	Unknown	?	**6**	**34**
Sus	Ulna	F	>36-42	**9**	**1**
Sus	Ulna	U	<36-42	**1**	**11**
Sus	Calcaneum	F	>24-30	**1**	**0**
Sus	Calcaneum	U	<24-30	**0**	**30**
Sus	Calcaneum	Unknown	?	**1**	**7**
Sus	Metacarpal	F	>24	**1**	**7**
Sus	Metacarpal	FPUD	<24	**2**	**37**
Sus	Metacarpal	FPFingD	c. 24	**0**	**2**
Sus	Metacarpal	Unknown	?	**0**	**24**

Sus	Femur	F	>42	**0**	**2**
Sus	Femur	U	<42	**2**	**15**
Sus	Tibia	F	>42	**3**	**3**
Sus	Tibia	FDFingP	c.42	**0**	**8**
Sus	Tibia	UP?D	<42	**0**	**24**
Sus	Phalange 1	F	>12-24	**0**	**33**
Sus	Phalange 1	U	<12-24	**0**	**20**
Sus	Phalange 1	Fing	c.12-24	**0**	**3**
Sus	Phalange 1	Unknown	?	**0**	**2**
Sus	Phalange 2	F	>12-24	**0**	**24**
Sus	Phalange 2	U	<12-24	**0**	**2**
Sus	Phalange 2	Fing	c. 12-24	**0**	**1**
Sus	Phalange 2	Unknown	?	**0**	**1**

Using ageing data from Schmid (1972) and Silver (1969). F= Fused, U=Unfused, Fing=Fusing; P=Proximal Epiphysis, D= Distal Epiphysis. >= Older than, <= Younger than, c. = Around, ? =

Table summarising the categories of fusion data used in this study (modified from Dobney et al., 2007 and after O'Connor 1989)

Cattle			**Sheep**			**Pig**		
O'Connor Stage	*Element*	*Aspect*	*O'Connor Stage*	*Element*	*Aspect*	*O'Connor Stage*	*Element*	*Aspect*
Early	Humerus	Distal	***Early***	Humerus	Distal	***Early***	Humerus	Distal
	Radius	Proximal		Radius	Proximal		Radius	Proximal
	Phalanges 1+2							
Intermediate	Metapodials	Distal	***Intermediate 1***	Phalanges 1+2		***Intermediate 1***	Metacarpal	Distal
	Tibia	Distal		Metacarpal	Distal		Tibia	Distal
	Calcaneum	Proximal						
			Intermediate 2	Tibia	Distal	***Intermediate 2***	Metatarsal	Distal
				Metatarsal	Distal		Calcaneum	Proximal
				Calcaneum	Proximal			
Late	Radius	Distal	***Late***	Radius	Distal	***Late***	Radius	Distal
	Femur	Distal		Femur	Distal		Femur	Distal
	Tibia	Proximal		Tibia	Proximal		Tibia	Proximal

Tables summarising the calculation of each O'Connor age category for the Raversijde and Koekelare assemblages (cattle, pig, sheep/goat), using raw counts.

Cow		
	Koekelare	**Raversijde**
hum dist fused	43	48
rad prox fused	56	99
Phal1+2 fused	278	188
Total Fused	**377**	**335**
hum dist unfused	0	0
rad prox unfused	0	0
Phal1+2 unfused	10	12
Total Unfused	**10**	**12**
TOTAL	**387**	**347**
% Early fused	97.4	96.5
mcarp dist fused	105	0
mtars dist fused	82	31
tib dist fused	89	48
calc prox fused	14	9
Total fused	**290**	**88**
mcarp dist unfused	47	3
mtars dist unfused	43	10
tib dist unfused	2	9
calc prox unfused	15	13
Total unfused	**107**	**35**
TOTAL	**397**	**123**
% Intermediate fused	**73.0**	**71.5**
rad dist fused	23	12
tib prox fused	58	6
fem fused	9	8
Total Fused	**90**	**26**
rad dist unfused	4	5
tib prox unfused	5	17
fem unfused	3	15
Total unfused	**12**	**37**
TOTAL	**102**	**63**
% Late fused	**88.2**	**41.3**

Sheep/Goat		
	Koekelare	**Raversijde**
hum dist fused	30	187
rad prox fused	25	185
Total fused	**55**	**372**
hum dist unfused	0	1
rad prox unfused	0	0
Total unfused	**0**	**1**
TOTAL	**55**	**373**
% Early fused	**100.0**	**99.7**
phal1 prox fused	4	84
phal2 prox fused	0	3
mcarp dist fused	138	142
Total Fused	**142**	**229**
phal1 prox unfused	0	1
phal2 prox unfused	0	0
mcarp dist unfused	10	69
Total unfused	**10**	**70**
TOTAL	**152**	**299**
% Intermediate 1 fused	**93.4**	**76.6**
tib dist fused	18	219
mtars dist fused	18	145
calc prox fused	2	50
Total fused	**38**	**414**
tib dist unfused	3	11
mtars dist unfused	3	99
calc prox unfused	7	28
Total unfused	**13**	**138**
TOTAL	**51**	**552**
% Intermediate 2 fused	**74.5**	**75.0**
rad dist fused	11	59
tib prox fused	10	18
fem dist fused	3	37
Total fused	**24**	**114**
rad dist unfused	2	21
tib prox unfused	3	21
fem dist unfused	2	29
Total unfused	**7**	**71**
TOTAL	**31**	**185**
% Late fused	**77.4**	**61.6**

	Pig	
	Koekelare	**Raversijde**
hum dist fused	8	57
rad prox fused	3	39
Total fused	**11**	**96**
hum dist unfused	2	11
rad prox unfused	0	0
Total unfused	**2**	**11**
TOTAL	**13**	**107**
% Early fused	**84.6**	**89.7**
mcarp dist fused	1	9
tib dist fused	3	11
Total fused	**4**	**20**
mcarp dist unfused	2	37
tib dist unfused	0	0
Total unfused	**2**	**37**
TOTAL	**6**	**57**
% Intermediate1 fused	**66.7**	**35.1**
mtars dist fused	0	4
calc prox fused	1	0
Total fused	**1**	**4**
mtars dist unfused	2	31
calc prox unfused	0	30
Total unfused	**2**	**61**
TOTAL	**3**	**65**
% Intermediate 2 fused	**33.3**	**6.2**
rad dist fused	0	1
tib prox fused	3	3
fem dist fused	0	2
Total fused	**3**	**6**
rad dist unfused	0	11
tib prox unfused	0	32
fem dist unfused	2	15
Total unfused	**2**	**58**
TOTAL	**5**	**64**
% Late fused	**60.0**	**9.4**

Appendix 7.1

T-Test statistics (Parametric test) for Length

Sites compared		Levene's Test for Equality of Variances: F	Levene's Test for Equality of Variances: Sig.	t-test for Equality of Means: t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference: Lower	95% Confidence Interval of the Difference: Upper
Ename/Londerzeel	Equal variances assumed	7.142	.008	.388	1480	.698	.22838	.58836	-.92573	1.38248
	Equal variances not assumed			.444	1130.463	.657	.22838	.51490	-.78189	1.23865
Ename/Oudenberg	Equal variances assumed	22.644	.000	3.498	2105	.000	1.45097	.41485	.63741	2.26452
	Equal variances not assumed			3.486	1827.702	.001	1.45097	.41625	.63460	2.26734
Ename/Raversijde	Equal variances assumed	46.819	.000	6.869	3238	.000	2.29898	.33469	1.64274	2.95521
	Equal variances not assumed			6.020	1516.067	.000	2.29898	.38187	1.54994	3.04802
Ename/Veurne	Equal variances assumed	4.143	.042	-.607	1736	.544	-.34487	.56855	-1.45999	.77024
	Equal variances not assumed			-.596	1390.601	.552	-.34487	.57900	-1.48068	.79093
Londerzeel/Oudenbeg	Equal variances assumed	.877	.349	2.803	1499	.005	1.22259	.43614	.36709	2.07809
	Equal variances not assumed			2.739	775.360	.006	1.22259	.44632	.34645	2.09873
Londerzeel/Raversijde	Equal variances assumed	3.290	.070	5.168	2632	.000	2.07060	.40067	1.28494	2.85627
	Equal variances not assumed			4.996	604.818	.000	2.07060	.41444	1.25668	2.88453
Londerzeel/Veurne	Equal variances assumed	18.054	.000	-.871	1130	.384	-.57325	.65848	-1.86524	.71874
	Equal variances not assumed			-.954	1128.749	.340	-.57325	.60098	-1.75242	.60592

Oudenberg/Raversijde	Equal variances assumed	1.410	.235	2.995	3257	.003	.84801	.28314	.29286	1.40317
	Equal variances not assumed			3.000	2109.933	.003	.84801	.28267	.29367	1.40235
Oudenberg/Veurne	Equal variances assumed	46.578	.000	-3.803	1755	.000	-1.79584	.47220	-2.72197	-.86971
	Equal variances not assumed			-3.460	1038.882	.001	-1.79584	.51896	-2.81416	-.77751
Raversijde/Veurne	Equal variances assumed	82.023	.000	-6.801	2888	.000	-2.64385	.38874	-3.40610	-1.88161
	Equal variances not assumed			-5.376	867.792	.000	-2.64385	.49181	-3.60913	-1.67857

T-Test statistics (Parametric test) for Breadth

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Sites compared									Lower	Upper
Ename/Londerzeel	Equal variances assumed	5.188	.023	2.977	1480	.003	.13970	.04692	.04766	.23174
	Equal variances not assumed			3.099	899.047	.002	.13970	.04508	.05123	.22817
Ename/Oudenberg	Equal variances assumed	9.017	.003	4.294	2105	.000	.15019	.03497	.08160	.21878
	Equal variances not assumed			4.290	2070.023	.000	.15019	.03501	.08153	.21885
Ename/Raversijde	Equal variances assumed	4.397	.036	.522	3238	.602	.01611	.03089	-.04445	.07667
	Equal variances not assumed			.513	1969.097	.608	.01611	.03139	-.04545	.07767

Ename/Veurne	Equal variances assumed	14.766	.000	-3.272	1736	.001	-.18086	.05528	-.28928	-.07244
	Equal variances not assumed			-2.962	1007.128	.003	-.18086	.06107	-.30070	-.06102
Londerzeel/Oudenbeg	Equal variances assumed	.005	.946	.243	1499	.808	.01049	.04315	-.07414	.09512
	Equal variances not assumed			.242	804.022	.809	.01049	.04340	-.07471	.09569
Londerzeel/Raversijde	Equal variances assumed	.913	.339	-2.943	2632	.003	-.12359	.04200	-.20594	-.04123
	Equal variances not assumed			-3.049	645.982	.002	-.12359	.04054	-.20319	-.04398
Londerzeel/Veurne	Equal variances assumed	14.475	.000	-4.257	1130	.000	-.32056	.07531	-.46832	-.17280
	Equal variances not assumed			-4.839	1100.195	.000	-.32056	.06624	-.45053	-.19059
Oudenberg/Raversijde	Equal variances assumed	1.620	.203	-4.527	3257	.000	-.13408	.02961	-.19214	-.07601
	Equal variances not assumed			-4.634	2232.611	.000	-.13408	.02893	-.19081	-.07734
Oudenberg/Veurne	Equal variances assumed	31.014	.000	-6.244	1755	.000	-.33105	.05302	-.43504	-.22706
	Equal variances not assumed			-5.532	940.861	.000	-.33105	.05984	-.44849	-.21361
Raversijde/Veurne	Equal variances assumed	39.597	.000	-4.513	2888	.000	-.19697	.04365	-.28255	-.11139
	Equal variances not assumed			-3.408	833.017	.001	-.19697	.05780	-.31042	-.08352

Appendix 7.2

Mann Whitney Test(non Parametric) for Length (μm) results

Ename in comparison to Londerzeel

Mann-Whitney U	214126.500
Wilcoxon W	759616.500
Z	-1.930
Asymp. Sig. (2-tailed)	.054

	Site	N	Mean Rank	Sum of Ranks
Length	Ename	1044	727.60	759616.50
	Londerzeel	438	774.63	339286.50
	Total	1482		

Ename in comparison to Oudenberg

Mann-Whitney U	524889.500
Wilcoxon W	1090405.50 0
Z	-2.148
Asymp. Sig. (2-tailed)	.032

	Site	N	Mean Rank	Sum of Ranks
Length	Ename	1044	1082.73	1130372.50
	Oudenberg	1063	1025.78	1090405.50
	Total	2107		

Ename in comparison to Raversijde

Mann-Whitney U	972265.000
Wilcoxon W	3384571.000
Z	-6.994
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Length	Ename	1044	1787.21	1865849.00
	Raversijde	2196	1541.24	3384571.00
	Total	3240		

Ename in comparison to Veurne

Mann-Whitney U	349799.000
Wilcoxon W	590964.000
Z	-1.217
Asymp. Sig. (2-tailed)	.224

	Site	N	Mean Rank	Sum of Ranks
Length	Ename	1044	881.44	920227.00
	Veurne	694	851.53	590964.00
	Total	1738		

Londerzeel in comparison to Oudenberg

Mann-Whitney U	205012.500
Wilcoxon W	770528.500
Z	-3.640
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Length	Londerzeel	438	814.43	356722.50
	Oudenberg	1063	724.86	770528.50
	Total	1501		

Londerzeel in comparison to Raversijde

Mann-Whitney U	375142.500
Wilcoxon W	2787448.500
Z	-7.279
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Length	Londerzeel	438	1559.01	682846.50
	Raversijde	2196	1269.33	2787448.50
	Total	2634		

Londerzeel in comparison to Veurne

Mann-Whitney U	138791.500
Wilcoxon W	379956.500
Z	-2.463
Asymp. Sig. (2-tailed)	.014

	Site	N	Mean Rank	Sum of Ranks
Length	Londerzeel	438	596.62	261321.50
	Veurne	694	547.49	379956.50
	Total	1132		

Oudenberg in comparison to Raversijde

Mann-Whitney U	1049723.000
Wilcoxon W	3462029.000
Z	-4.664
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Length	Oudenberg	1063	1740.49	1850141.00
	Raversijde	2196	1576.52	3462029.00
	Total	3259		

Oudenberg in comparison to Veurne

Mann-Whitney U	363629.000
Wilcoxon W	929145.000
Z	-.503
Asymp. Sig. (2-tailed)	.615

	Site	N	Mean Rank	Sum of Ranks
Length	Oudenberg	1063	874.08	929145.00
	Veurne	694	886.54	615258.00
	Total	1757		

Raversijde in comparison to Veurne

Mann-Whitney U	685641.000
Wilcoxon W	3097947.000
Z	-3.986
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Length	Raversijde	2196	1410.72	3097947.00
	Veurne	694	1555.54	1079548.00
	Total	2890		

Mann Whitney Test (non Parametric) for Breadth (μm) results

Ename in comparison to Londerzeel

Mann-Whitney U	208903.000
Wilcoxon W	305044.000
Z	-2.627
Asymp. Sig. (2-tailed)	.009

	Site	N	Mean Rank	Sum of Ranks
Breadth	Ename	1044	760.40	793859.00
	Londerzeel	438	696.45	305044.00
	Total	1482		

Ename in comparison to Oudenberg

Mann-Whitney U	499333.500
Wilcoxon W	1064849.500
Z	-3.982
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Breadth	Ename	1044	1107.21	1155928.50
	Oudenberg	1063	1001.74	1064849.50
	Total	2107		

Ename in comparison to Raversijde

Mann-Whitney U	1133498.000
Wilcoxon W	3545804.000
Z	-.515
Asymp. Sig. (2-tailed)	.606

	Site	N	Mean Rank	Sum of Ranks
Breadth	Ename	1044	1632.77	1704616.00
	Raversijde	2196	1614.66	3545804.00
	Total	3240		

Ename in comparison to Veurne

Mann-Whitney U	351751.000
Wilcoxon W	897241.000
Z	-1.027
Asymp. Sig. (2-tailed)	.304

	Site	N	Mean Rank	Sum of Ranks
Breadth	Ename	1044	859.43	897241.00
	Veurne	694	884.65	613950.00
	Total	1738		

Londerzeel in comparison to Oudenberg

Mann-Whitney U	229053.500
Wilcoxon W	794569.500
Z	-.491
Asymp. Sig. (2-tailed)	.624

	Site	N	Mean Rank	Sum of Ranks
Breadth	Londerzeel	438	759.55	332681.50
	Oudenberg	1063	747.48	794569.50
	Total	1501		

Londerzeel in comparison to Raversijde

Mann-Whitney U	443785.000
Wilcoxon W	539926.000
Z	-2.557
Asymp. Sig. (2-tailed)	.011

	Site	N	Mean Rank	Sum of Ranks
Breadth	Londerzeel	438	1232.71	539926.00
	Raversijde	2196	1334.41	2930369.00
	Total	2634		

Londerzeel in comparison to Veurne

Mann-Whitney U	134638.500
Wilcoxon W	230779.500
Z	-3.241
Asymp. Sig. (2-tailed)	.001

	Site	N	Mean Rank	Sum of Ranks
Breadth	Londerzeel	438	526.89	230779.50
	Veurne	694	591.50	410498.50
	Total	1132		

Oudenberg in comparison to Raversijde

Mann-Whitney U	1058444.500
Wilcoxon W	1623960.500
Z	-4.321
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Breadth	Oudenberg	1063	1527.71	1623960.50
	Raversijde	2196	1679.51	3688209.50
	Total	3259		

Oudenberg in comparison to Veurne

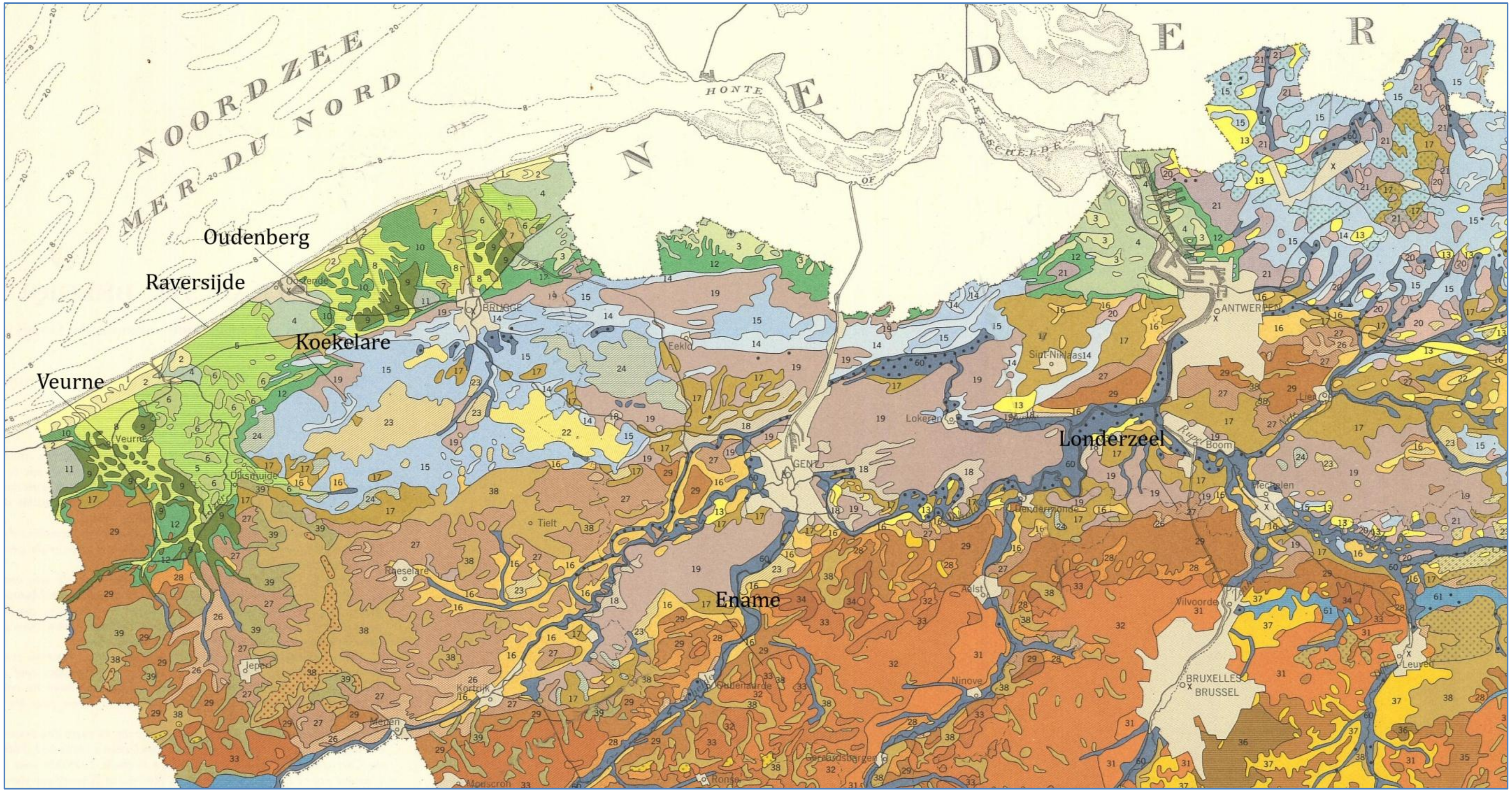
Mann-Whitney U	321063.000
Wilcoxon W	886579.000
Z	-4.601
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Breadth	Oudenberg	1063	834.03	886579.00
	Veurne	694	947.87	657824.00
	Total	1757		

Raversijde in comparison to Veurne

Mann-Whitney U	732784.500
Wilcoxon W	3145090.50 0
Z	-1.526
Asymp. Sig. (2-tailed)	.127

	Site	N	Mean Rank	Sum of Ranks
Breadth	Raversijde	2196	1432.19	3145090.50
	Veurne	694	1487.61	1032404.50
	Total	2890		


NOORDZEE
MER DU NORD
Oudenberg
Raversijde
Koekelare
Veurne
Londerzeel
Ename
HONTE
WESTERSCHELDE
BRUGGE
GENT
ANTWERPEN
Lokeren
Tielt
Roeselare
Kortrijk
Aalst
Ninove
Vilvoorde
BRUXELLES
BRUSSEL
Leuven
Mechelen
Lier
Boom
Diksmuide
Ieper
Menen
Mouscron
Ronse
Geraardsbergen
Oudenaarde
Dendermonde
Sint-Niklaas
Eeklo

Appendix 7.3: Geological map of the soils of Belgium, sourced from the European Digital Archive on soil maps of the world (EuDASM, accessed May 2010: http://eusoils.jrc.ec.europa.eu/esdb_archive/eudasm/indexes/Europe.htm)

PLAINE MARITIME – KUSTVLAKTE

DUNES DUINEN	Dunes élevées, fixées ou mouvantes Hoge duinen, al dan niet gefixeerd		1
	Sols dunaux et sols de transition Duingronden en overgangsgronden		2
POLDERS RÉCENTS ET HISTORIQUES NIEUWLAND EN HISTORISCHE POLDERS	Sols sableux à sablo-limoneux Zand- tot zandleemgronden		3
	Sols argileux Kleigronden		4
POLDERS MOYENS MIDDELLAND	Sols argileux de couverture Dekkleigronden		5
	Sols de couverture des cuvettes Overdekte poelgronden		6
	Sols battants Blekgronden		7
POLDERS ANCIENS OUDLAND	Sols des chenaux à relief inversé Kreekruggronden		8
	Sols des cuvettes Poelgronden		9
	Sols des hauts-fonds argileux anciens Oude kleiplaatgronden		10
MOËRES MOEREN			11
SOLS À PLÉISTOCÈNE RECOUVERT OVERDEKT PLEISTOCENE GRONDEN			12

BASSE BELGIQUE – LAAG-BELGIË

Sols sableux sans développement de profil Zandgronden zonder profielontwikkeling			13
Sols sableux et limono-sableux à horizon B humique ou/et ferrique Zand- en lemig-zandgronden met humus of/en ijzer B horizont		secs droge	14
		humides natte	15
Sols sableux à sablo-limoneux légers à horizon B de couleur ou à horizon B textural Zand- tot licht-zandleemgronden met kleur B horizont of met textuur B horizont		secs droge	16
		humides natte	17
Complexe des associations Complex van de associaties		14 + 16	18
		15 + 17	19
Sols sableux et limono-sableux à horizon A anthropogène épais Zand- en lemig-zandgronden met diepe antropogene humus A horizont		secs droge	20
		humides natte	21
Sols sableux à substrat non différenciés Niet gedifferentieerde zandige substraatgronden	sur sable op zand		22
	sur complexe argilo-sableux op klei-zandcomplex		23
	sur argile op klei		24
	sur craie ou marne op krijt of mergel		25

MOYENNE BELGIQUE – MIDDEN-BELGIË

Sols sablo-limoneux légers et sablo-limoneux à horizon B textural morcelé Licht-zandleem- en zandleemgronden met verbrokkelde textuur B horizont		secs droge	26
		humides natte	27
Sols sablo-limoneux à horizon B textural ou à horizon B textural morcelé Zandleemgronden met textuur B horizont of met verbrokkelde textuur B horizont		secs droge	28
		humides natte	29
Sols limoneux Leemgronden	à horizon B textural met textuur B horizont	Association sèche Droge associatie	30
		Association normale Normale associatie	31
		Association modérément sèche Matig droge associatie	32
		Association modérément humide Matig natte associatie	33
		Association humide Natte associatie	34
	à horizon B textural tacheté met gevlekte textuur B horizont		35
	à horizon B textural morcelé met verbrokkelde textuur B horizont		36
Sols sablo-limoneux ou limoneux à substrat non différenciés Niet gedifferentieerde zandlemige of lemige substraatgronden	sur sable op zand		37
	sur complexe argilo-sableux op klei-zandcomplex		38
	sur argile op klei		39

Key for Geological map of the soils of Belgium

HAUTE BELGIQUE – HOOG-BELGIË

Sols limono-caillouteux à horizon B textural ou à horizon B structural, à charge de : Stenig-leemgronden met textuur B horizont of met struktuur B horizont, met bijmenging van :	gravier grint		40
	craie ou silexite krijt of silexiet		41
	schiste et grès schiefer en zandsteen		42
	psammite psammiet		43
	calcaire kalksteen		44
	conglomérat conglomeraat		45
	schiste schiefer		46
	schiste et calcaire schiefer en kalksteen		47
	schiste et psammite schiefer en psammiet		48
Sols argileux et limono-caillouteux à charge schisteuse Klei- en stenig-leemgronden met schieferbijmenging			49
Sols limono-caillouteux à horizon B structural, à charge de : Stenig-leemgronden met struktuur B horizont, met bijmenging van :	schiste et phyllade schiefer en leisteen		50
	schiste et grès schiefer en zandsteen		51
Sols limoneux peu caillouteux à horizon B structural Weinig-stenig-leemgronden met struktuur B horizont		secs droge	52
		humides natte	53
Sols tourbeux Veengronden			54
Sols sableux à sablo-limoneux à horizon B textural Zand- tot zandleemgronden met textuur B horizont			55
Sols argileux et limono-caillouteux à horizon B textural Klei- en stenig-leemgronden met textuur B horizont			56
Sols argileux Kleigronden	à horizon B structural met struktuur B horizont		57
	à horizon B textural met textuur B horizont		58
Sols alluviaux Alluviale gronden	sans développement de profil zonder profielontwikkeling	secs droge	59
		humides natte	60
	à développement de profil met profielontwikkeling		61
Zones à fortes pentes Zones met steile hellingen			62
Zones non cartographiées Niet gekarteerde zones			x
Phases Fasen	Charge de gravier Grintbijmenging		
	Charge de grès limonitique Bijmenging van limonietzandsteen		
	Substrat argilo-sableux discontinu Discontinu klei-zandsubstraat		
Inclusions de sols tourbeux Inclusies van veengronden			• • • • • •

Appendix 7.3: Geological map of the soils of Belgium, sourced from the European Digital Archive on soil maps of the world (EuDASM, accessed May 2010: http://eusoils.jrc.ec.europa.eu/esdb_archive/eudasm/indexes/Europe.htm)

Appendix 7.4: Summary statistics for the Microwear measurements from the Belgian sites

Summary statistics for the Length measurements (µm) from the five sites

Site			Statistic	Std. Error
Ename	Mean		10.8941	.34582
	95% Confidence Interval for Mean	Lower Bound	10.2155	
		Upper Bound	11.5726	
	5% Trimmed Mean		9.3917	
	Median		7.4900	
	Variance		124.853	
	Std. Deviation		11.17377	
	Minimum		1.05	
	Maximum		167.72	
	Range		166.67	
	Interquartile Range		8.80	
	Skewness		4.775	.076
	Kurtosis		44.213	.151
Londerzeel	Mean		10.6657	.38149
	95% Confidence Interval for Mean	Lower Bound	9.9159	
		Upper Bound	11.4155	
	5% Trimmed Mean		9.7704	
	Median		8.7500	
	Variance		63.743	
	Std. Deviation		7.98393	
	Minimum		1.80	
	Maximum		60.23	
	Range		58.43	
	Interquartile Range		8.24	
	Skewness		2.171	.117
	Kurtosis		7.000	.233
Oudenberg	Mean		9.4431	.23167
	95% Confidence Interval for Mean	Lower Bound	8.9885	
		Upper Bound	9.8977	
	5% Trimmed Mean		8.5462	
	Median		7.1600	
	Variance		57.051	
	Std. Deviation		7.55324	
	Minimum		1.00	
	Maximum		72.43	
	Range		71.43	
	Interquartile Range		7.70	
	Skewness		2.448	.075
	Kurtosis		9.750	.150

Raversijde	Mean		8.5951	.16196
	95% Confidence Interval for Mean	Lower Bound	8.2775	
		Upper Bound	8.9127	
	5% Trimmed Mean		7.5871	
	Median		6.0800	
	Variance		57.604	
	Std. Deviation		7.58972	
	Minimum		.75	
	Maximum		69.54	
	Range		68.79	
	Interquartile Range		6.48	
	Skewness		2.889	.052
	Kurtosis		12.319	.104
Veurne	Mean		11.2389	.46438
	95% Confidence Interval for Mean	Lower Bound	10.3272	
		Upper Bound	12.1507	
	5% Trimmed Mean		9.5817	
	Median		7.5300	
	Variance		149.659	
	Std. Deviation		12.23353	
	Minimum		1.33	
	Maximum		130.77	
	Range		129.44	
	Interquartile Range		9.87	
	Skewness		3.883	.093
	Kurtosis		24.561	.185

Summary statistics for the Breadth measurements (μm) from the five sites

Site			Statistic	Std. Error
Ename	Mean		2.0985	.02621
	95% Confidence Interval for Mean	Lower Bound	2.0471	
		Upper Bound	2.1500	
	5% Trimmed Mean		2.0512	
	Median		2.0000	
	Variance		.717	
	Std. Deviation		.84685	
	Minimum		.33	
	Maximum		6.70	
	Range		6.37	
	Interquartile Range		1.11	
	Skewness		.926	.076
	Kurtosis		1.633	.151
Londerzeel	Mean		1.9588	.03668
	95% Confidence Interval for Mean	Lower Bound	1.8868	
		Upper Bound	2.0309	
	5% Trimmed Mean		1.9255	
	Median		1.8000	
	Variance		.589	
	Std. Deviation		.76758	
	Minimum		.33	
	Maximum		6.44	
	Range		6.11	
	Interquartile Range		.99	
	Skewness		.934	.117
	Kurtosis		2.604	.233
Oudenberg	Mean		1.9483	.02321
	95% Confidence Interval for Mean	Lower Bound	1.9028	
		Upper Bound	1.9939	
	5% Trimmed Mean		1.9123	
	Median		1.8000	
	Variance		.573	
	Std. Deviation		.75671	
	Minimum		.47	
	Maximum		5.01	
	Range		4.54	
	Interquartile Range		.99	
	Skewness		.782	.075
	Kurtosis		.785	.150

Raversijde	Mean		2.0824	.01727
	95% Confidence Interval for Mean	Lower Bound	2.0486	
		Upper Bound	2.1163	
	5% Trimmed Mean		2.0326	
	Median		1.9400	
	Variance		.655	
	Std. Deviation		.80936	
	Minimum		.33	
	Maximum		6.75	
	Range		6.42	
	Interquartile Range		.94	
	Skewness		1.070	.052
	Kurtosis		2.125	.104
Veurne	Mean		2.2794	.05516
	95% Confidence Interval for Mean	Lower Bound	2.1711	
		Upper Bound	2.3877	
	5% Trimmed Mean		2.1061	
	Median		2.0000	
	Variance		2.112	
	Std. Deviation		1.45313	
	Minimum		.47	
	Maximum		17.41	
	Range		16.94	
	Interquartile Range		1.20	
	Skewness		4.921	.093
	Kurtosis		36.884	.185

Appendix 7.5 Summary of T-Test results considering feature types separately

Statistical analysis (t-test)	Pit breadth		Pit length		Striation breadth		Striation length	
	Veurne	Raversijde	Veurne	Raversijde	Veurne	Raversijde	Veurne	Raversijde
Mean	2.570	2.284	5.251	4.901	1.917	1.747	18.479	14.733
Variance	3.208	0.652	13.158	5.135	0.648	0.480	220.718	84.483
Observations	368.000	1371.000	368.000	1371.000	313.000	825.000	313.000	825.000
df	408.000		447.000		497.000		406.000	
t Stat	2.981		1.759		3.288		4.168	
Sig. (2-tailed)	0.003		0.079		0.001		0.000	
t Critical two-tail	1.966		1.965		1.965		1.966	
	Veurne	Oudenberg	Veurne	Oudenberg	Veurne	Oudenberg	Veurne	Oudenberg
Mean	2.570	2.243	5.251	4.934	1.917	1.662	18.479	13.827
Variance	3.208	0.552	13.158	5.465	0.648	0.427	220.718	68.255
Observations	368.000	524.000	368.000	524.000	313.000	539.000	313.000	539.000
df	456.000		578.000		550.000		426.000	
t Stat	3.310		1.474		4.756		5.101	
Sig. (2-tailed)	0.001		0.141		0.000		0.000	
t Critical two-tail	1.965		1.964		1.964		1.966	
	Raversijde	Londerzeel	Raversijde	Londerzeel	Raversijde	Londerzeel	Raversijde	Londerzeel
Mean	2.284	2.282	4.901	5.125	1.747	1.744	14.733	14.352
Variance	0.652	0.611	5.135	5.271	0.480	0.461	84.483	68.674
Observations	1371.000	175.000	1371.000	175.000	825.000	263.000	825.000	263.000
df	224.000		220.000		449.000		484.000	
t Stat	0.030		-1.217		0.074		0.632	
Sig. (2-tailed)	0.976		0.225		0.941		0.528	
t Critical two-tail	1.971		1.971		1.965		1.965	
	Oudenberg	Ename	Oudenberg	Ename	Oudenberg	Ename	Oudenberg	Ename
Mean	2.243	2.393	4.934	5.123	1.662	1.817	13.827	16.406
Variance	0.552	0.679	5.465	5.747	0.427	0.593	68.255	176.516
Observations	524.000	510.000	524.000	510.000	539.000	534.000	539.000	534.000
df	1015.000		1029.000		1040.000		890.000	
t Stat	-3.081		-1.279		-3.553		-3.815	
Sig. (2-tailed)	0.002		0.201		0.000		0.000	
t Critical two-tail	1.962		1.962		1.962		1.963	
	Oudenberg	Raversijde	Oudenberg	Raversijde	Oudenberg	Raversijde	Oudenberg	Raversijde
Mean	2.284	2.243	4.901	4.934	1.747	1.662	14.733	13.827
Variance	0.652	0.552	5.135	5.465	0.480	0.427	84.483	68.255
Observations	1371.000	524.000	1371.000	524.000	825.000	539.000	825.000	539.000
df	1022.000		921.000		1197.000		1233.000	
t Stat	1.058		-0.276		2.296		1.895	
Sig. (2-tailed)	0.290		0.783		0.022		0.058	
t Critical two-tail	1.962		1.963		1.962		1.962	

	Veurne	Londerzeel	Veurne	Londerzeel	Veurne	Londerzeel	Veurne	Londerzeel
Mean	2.570	2.282	5.251	5.125	1.917	1.744	18.479	14.352
Variance	3.208	0.611	13.158	5.271	0.648	0.461	220.718	68.674
Observations	368.000	175.000	368.000	175.000	313.000	263.000	313.000	263.000
df	538.000		499.000		574.000		504.000	
t Stat	2.604		0.490		2.797		4.198	
Sig. (2-tailed)	0.009		0.624		0.005		0.000	
t Critical two-tail	1.964		1.965		1.964		1.965	
	Oudenberg	Londerzeel	Oudenberg	Londerzeel	Oudenberg	Londerzeel	Oudenberg	Londerzeel
Mean	2.243	2.282	4.934	5.125	1.662	1.744	13.827	14.352
Variance	0.552	0.611	5.465	5.271	0.427	0.461	68.255	68.674
Observations	524.000	175.000	524.000	175.000	539.000	263.000	539.000	263.000
df	286.000		303.000		503.000		518.000	
t Stat	-0.586		-0.949		-1.616		-0.844	
Sig. (2-tailed)	0.559		0.343		0.107		0.399	
t Critical two-tail	1.968		1.968		1.965		1.965	
	Londerzeel	Ename	Londerzeel	Ename	Londerzeel	Ename	Londerzeel	Ename
Mean	2.282	2.393	5.125	5.123	1.744	1.817	14.352	16.406
Variance	0.611	0.679	5.271	5.747	0.461	0.593	68.674	176.516
Observations	175.000	510.000	175.000	510.000	263.000	534.000	263.000	534.000
df	316.000		314.000		584.000		752.000	
t Stat	-1.598		0.014		-1.373		-2.670	
Sig. (2-tailed)	0.111		0.989		0.170		0.008	
t Critical two-tail	1.967		1.968		1.964		1.963	
	Veurne	Ename	Veurne	Ename	Veurne	Ename	Veurne	Ename
Mean	2.570	2.393	5.251	5.123	1.917	1.817	18.479	16.406
Variance	3.208	0.679	13.158	5.747	0.648	0.593	220.718	176.516
Observations	368.000	510.000	368.000	510.000	313.000	534.000	313.000	534.000
df	480.000		592.000		630.000		596.000	
t Stat	1.763		0.593		1.764		2.036	
Sig. (2-tailed)	0.079		0.554		0.078		0.042	
t Critical two-tail	1.965		1.964		1.964		1.964	
	Raversijde	Ename	Raversijde	Ename	Raversijde	Ename	Raversijde	Ename
Mean	2.284	2.393	4.901	5.123	1.747	1.817	14.733	16.406
Variance	0.652	0.679	5.135	5.747	0.480	0.593	84.483	176.516
Observations	1371.000	510.000	1371.000	510.000	825.000	534.000	825.000	534.000
df	895.000		868.000		1052.000		861.000	
t Stat	-2.567		-1.805		-1.698		-2.542	
Sig. (2-tailed)	0.010		0.071		0.090		0.011	
t Critical two-tail	1.963		1.963		1.962		1.963	

Appendix 7.6. Mann-Whitney test considering feature types separately

Mann Whitney Test (non Parametric) for Pit Length (μm) results

Veurne in comparison to Ename

	Pit Length
Mann-Whitney U	6610.500
Wilcoxon W	7691.500
Z	-2.723
Asymp. Sig. (2-tailed)	.006

	Site	N	Mean Rank	Sum of Ranks
Pit Length	Veurne	381	219.65	83686.50
	Ename	46	167.21	7691.50
	Total	427		

Veurne in comparison to Raversijde

	Pit Length
Mann-Whitney U	237467.50 0
Wilcoxon W	310238.50 0
Z	-.455
Asymp. Sig. (2-tailed)	.649

	Site	N	Mean Rank	Sum of Ranks
Pit Length	Veurne	381	814.27	310238.50
	Raversijde	1266	826.93	1046889.50
	Total	1647		

Veurne in comparison to Londerzeel

	Pit Length
Mann-Whitney U	7873.500
Wilcoxon W	8908.500
Z	-.895
Asymp. Sig. (2-tailed)	.371

	Site	N	Mean Rank	Sum of Ranks
Pit Length	Veurne	381	215.33	82042.50
	Londerzeel	45	197.97	8908.50
	Total	426		

Veurne in comparison to Oudenberg

	Pit Length
Mann-Whitney U	95663.500
Wilcoxon W	168434.500
Z	-1.071
Asymp. Sig. (2-tailed)	.284

	Site	N	Mean Rank	Sum of Ranks
Pit Length	Veurne	381	442.09	168434.50
	Oudenberg	524	460.94	241530.50
	Total	905		

Ename in comparison to Raversijde

	Pit Length
Mann-Whitney U	20903.000
Wilcoxon W	21984.000
Z	-3.255
Asymp. Sig. (2-tailed)	.001

	Site	N	Mean Rank	Sum of Ranks
Pit Length	Ename	46	477.91	21984.00
	Raversijde	1266	662.99	839344.00
	Total	1312		

Ename in comparison to Londerzeel

	Pit Length
Mann-Whitney U	858.000
Wilcoxon W	1939.000
Z	-1.405
Asymp. Sig. (2-tailed)	.160

	Site	N	Mean Rank	Sum of Ranks
Pit Length	Ename	46	42.15	1939.00
	Londerzeel	45	49.93	2247.00
	Total	91		

Ename in comparison to Oudenberg

	Pit Length
Mann-Whitney U	8414.000
Wilcoxon W	9495.000
Z	-3.397
Asymp. Sig. (2-tailed)	.001

	Site	N	Mean Rank	Sum of Ranks
Pit Length	Ename	46	206.41	9495.00
	Oudenberg	524	292.44	153240.00
	Total	570		

Raversijde in comparison to Londerzeel

	Pit Length
Mann-Whitney U	25317.500
Wilcoxon W	26352.500
Z	-1.269
Asymp. Sig. (2-tailed)	.204

	Site	N	Mean Rank	Sum of Ranks
Pit Length	Raversijde	1266	658.50	833663.50
	Londerzeel	45	585.61	26352.50
	Total	1311		

Raversijde in comparison to Oudenberg

	Pit Length
Mann-Whitney U	322460.000
Wilcoxon W	1124471.000
Z	-.928
Asymp. Sig. (2-tailed)	.353

	Site	N	Mean Rank	Sum of Ranks
Pit Length	Raversijde	1266	888.21	1124471.00
	Oudenberg	524	913.12	478474.00
	Total	1790		

Londerzeel in comparison to Oudenberg

	PitLength
Mann-Whitney U	10162.500
Wilcoxon W	11197.500
Z	-1.538
Asymp. Sig. (2-tailed)	.124

	Site	N	Mean Rank	Sum of Ranks
Pit Length	Londerzeel	45	248.83	11197.50
	Oudenberg	524	288.11	150967.50
	Total	569		

Mann Whitney Test (non Parametric) for Pit Breadth (µm) results

Veurne in comparison to Ename

	PitBreadth
Mann-Whitney U	6695.500
Wilcoxon W	7776.500
Z	-2.617
Asymp. Sig. (2-tailed)	.009

	Site	N	Mean Rank	Sum of Ranks
Pit Breadth	Veurne	381	219.43	83601.50
	Ename	46	169.05	7776.50
	Total	427		

Veurne in comparison to Raversijde

	Pit Breadth
Mann-Whitney U	237382.000
Wilcoxon W	1039393.000
Z	-.466
Asymp. Sig. (2-tailed)	.641

	Site	N	Mean Rank	Sum of Ranks
Pit Breadth	Veurne	381	833.95	317735.00
	Raversijde	1266	821.01	1039393.00
	Total	1647		

Veurne in comparison to Londerzeel

	PitBreadth
Mann-Whitney U	7298.500
Wilcoxon W	8333.500
Z	-1.632
Asymp. Sig. (2-tailed)	.103

	Site	N	Mean Rank	Sum of Ranks
Pit Breadth	Veurne	381	216.84	82617.50
	Londerzeel	45	185.19	8333.50
	Total	426		

Veurne in comparison to Oudenberg

	Pit Breadth
Mann-Whitney U	96068.000
Wilcoxon W	233618.00 0
Z	-.968
Asymp. Sig. (2-tailed)	.333

	Site	N	Mean Rank	Sum of Ranks
Pit Breadth	Veurne	381	462.85	176347.00
	Oudenberg	524	445.84	233618.00
	Total	905		

Ename in comparison to Raversijde

	Pit Breadth
Mann-Whitney U	22537.500
Wilcoxon W	23618.500
Z	-2.609
Asymp. Sig. (2-tailed)	.009

	Site	N	Mean Rank	Sum of Ranks
Pit Breadth	Ename	46	513.45	23618.50
	Raversijde	1266	661.70	837709.50
	Total	1312		

Ename in comparison to Londerzeel

	Pit Breadth
Mann-Whitney U	931.500
Wilcoxon W	2012.500
Z	-.823
Asymp. Sig. (2-tailed)	.411

	Site	N	Mean Rank	Sum of Ranks
Pit Breadth	Ename	46	43.75	2012.50
	Londerzeel	45	48.30	2173.50
	Total	91		

Ename in comparison to Oudenberg

	Pit Breadth
Mann-Whitney U	9558.500
Wilcoxon W	10639.500
Z	-2.330
Asymp. Sig. (2-tailed)	.020

	Site	N	Mean Rank	Sum of Ranks
Pit Breadth	Ename	46	231.29	10639.50
	Oudenberg	524	290.26	152095.50
	Total	570		

Raversijde in comparison to Londerzeel

	Pit Breadth
Mann-Whitney U	24800.500
Wilcoxon W	25835.500
Z	-1.477
Asymp. Sig. (2-tailed)	.140

	Site	N	Mean Rank	Sum of Ranks
Pit Breadth	Raversijde	1266	658.91	834180.50
	Londerzeel	45	574.12	25835.50
	Total	1311		

Raversijde in comparison to Oudenberg

	Pit Breadth
Mann-Whitney U	324569.500
Wilcoxon W	462119.500
Z	-.716
Asymp. Sig. (2-tailed)	.474

	Site	N	Mean Rank	Sum of Ranks
Pit Breadth	Raversijde	1266	901.13	1140825.50
	Oudenberg	524	881.91	462119.50
	Total	1790		

Londerzeel in comparison to Oudenberg

	Pit Breadth
Mann-Whitney U	10478.500
Wilcoxon W	11513.500
Z	-1.240
Asymp. Sig. (2-tailed)	.215

	Site	N	Mean Rank	Sum of Ranks
Pit Breadth	Londerzeel	45	255.86	11513.50
	Oudenberg	524	287.50	150651.50
	Total	569		

Mann Whitney Test (non Parametric) for Striation Length (µm) results

Veurne in comparison to Ename

	Striation Length
Mann-Whitney U	8737.000
Wilcoxon W	10628.000
Z	-1.048
Asymp. Sig. (2-tailed)	.295

	Site	N	Mean Rank	Sum of Ranks
Striation Length	Veurne	313	190.09	59497.00
	Ename	61	174.23	10628.00
	Total	374		

Veurne in comparison to Raversijde

	Striation Length
Mann-Whitney U	111045.000
Wilcoxon W	543960.000
Z	-6.280
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Striation Length	Veurne	313	732.22	229186.00
	Raversijde	930	584.90	543960.00
	Total	1243		

Veurne in comparison to Londerzeel

	Striation Length
Mann-Whitney U	8064.000
Wilcoxon W	10275.000
Z	-2.800
Asymp. Sig. (2-tailed)	.005

	Site	N	Mean Rank	Sum of Ranks
Striation Length	Veurne	313	197.24	61735.00
	Londerzeel	66	155.68	10275.00
	Total	379		

Veurne in comparison to Oudenberg

	Striation Length
Mann-Whitney U	66945.500
Wilcoxon W	212475.500
Z	-5.027
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Striation Length	Veurne	313	482.12	150902.50
	Oudenberg	539	394.20	212475.50
	Total	852		

Ename in comparison to Raversijde

	Striation Length
Mann-Whitney U	24278.000
Wilcoxon W	457193.000
Z	-1.887
Asymp. Sig. (2-tailed)	.059

	Site	N	Mean Rank	Sum of Ranks
Striation Length	Ename	61	563.00	34343.00
	Raversijde	930	491.61	457193.00
	Total	991		

Ename in comparison to Londerzeel

	Striation Length
Mann-Whitney U	1774.500
Wilcoxon W	3985.500
Z	-1.151
Asymp. Sig. (2-tailed)	.250

	Site	N	Mean Rank	Sum of Ranks
Striation Length	Ename	61	67.91	4142.50
	Londerzeel	66	60.39	3985.50
	Total	127		

Ename in comparison to Oudenberg

	Striation Length
Mann-Whitney U	14620.000
Wilcoxon W	160150.000
Z	-1.418
Asymp. Sig. (2-tailed)	.156

	Site	N	Mean Rank	Sum of Ranks
Striation Length	Ename	61	330.33	20150.00
	Oudenberg	539	297.12	160150.00
	Total	600		

Raversijde in comparison to Londerzeel

	Striation Length
Mann-Whitney U	29699.000
Wilcoxon W	462614.000
Z	-.439
Asymp. Sig. (2-tailed)	.661

	Site	N	Mean Rank	Sum of Ranks
Striation Length	Raversijde	930	497.43	462614.00
	Londerzeel	66	513.52	33892.00
	Total	996		

Raversijde in comparison to Oudenberg

	StriationLength
Mann-Whitney U	239969.000
Wilcoxon W	672884.000
Z	-1.361
Asymp. Sig. (2-tailed)	.173

	Site	N	Mean Rank	Sum of Ranks
Striation Length	Raversijde	930	723.53	672884.00
	Oudenberg	539	754.79	406831.00
	Total	1469		

Londerzeel in comparison to Oudenberg

	Striation Length
Mann-Whitney U	17563.000
Wilcoxon W	19774.000
Z	-.167
Asymp. Sig. (2-tailed)	.867

	Site	N	Mean Rank	Sum of Ranks
Striation Length	Londerzeel	66	299.61	19774.00
	Oudenberg	539	303.42	163541.00
	Total	605		

Mann Whitney Test (non Parametric) for Striation Breadth (µm) results

Veurne in comparison to Ename

	Striation Breadth
Mann-Whitney U	5529.000
Wilcoxon W	7420.000
Z	-5.206
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
StriationBreadth	1	313	200.34	62705.00
	2	61	121.64	7420.00
	Total	374		

Veurne in comparison to Raversijde

	Striation Breadth
Mann-Whitney U	131972.000
Wilcoxon W	564887.000
Z	-2.474
Asymp. Sig. (2-tailed)	.013

	Site	N	Mean Rank	Sum of Ranks
Striation Breadth	Veurne	313	665.36	208259.00
	Raversijde	930	607.41	564887.00
	Total	1243		

Veurne in comparison to Londerzeel

	Striation Breadth
Mann-Whitney U	7279.500
Wilcoxon W	9490.500
Z	-3.774
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Striation Breadth	Veurne	313	199.74	62519.50
	Londerzeel	66	143.80	9490.50
	Total	379		

Veurne in comparison to Oudenberg

	Striation Breadth
Mann-Whitney U	68120.000
Wilcoxon W	213650.000
Z	-4.694
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Striation Breadth	Veurne	313	478.36	149728.00
	Oudenberg	539	396.38	213650.00
	Total	852		

Ename in comparison to Raversijde

	Striation Breadth
Mann-Whitney U	18335.000
Wilcoxon W	20226.000
Z	-4.638
Asymp. Sig. (2-tailed)	.000

	Site	N	Mean Rank	Sum of Ranks
Striation Breadth	Ename	61	331.57	20226.00
	Raversijde	930	506.78	471310.00
	Total	991		

Ename in comparison to Londerzeel

	Striation Breadth
Mann-Whitney U	1675.000
Wilcoxon W	3566.000
Z	-1.635
Asymp. Sig. (2-tailed)	.102

	Site	N	Mean Rank	Sum of Ranks
Striation Breadth	Ename	61	58.46	3566.00
	Londerzeel	66	69.12	4562.00
	Total	127		

Ename in comparison to Oudenberg

	Striation Breadth
Mann-Whitney U	12056.500
Wilcoxon W	13947.500
Z	-3.422
Asymp. Sig. (2-tailed)	.001

	Site	N	Mean Rank	Sum of Ranks
Striation Breadth	Ename	61	228.65	13947.50
	Oudenberg	539	308.63	166352.50
	Total	600		

Raversijde in comparison to Londerzeel

	Striation Breadth
Mann-Whitney U	24375.000
Wilcoxon W	26586.000
Z	-2.800
Asymp. Sig. (2-tailed)	.005

	Site	N	Mean Rank	Sum of Ranks
Striation Breadth	Raversijde	930	505.29	469920.00
	Londerzeel	66	402.82	26586.00
	Total	996		

Raversijde in comparison to Oudenberg

	Striation Breadth
Mann-Whitney U	224970.000
Wilcoxon W	370500.000
Z	-3.280
Asymp. Sig. (2-tailed)	.001

	Site	N	Mean Rank	Sum of Ranks
Striation Breadth	Raversijde	930	762.60	709215.00
	Oudenberg	539	687.38	370500.00
	Total	1469		

Londerzeel in comparison to Oudenberg

	Striation Breadth
Mann-Whitney U	15939.500
Wilcoxon W	18150.500
Z	-1.381
Asymp. Sig. (2-tailed)	.167

	Site	N	Mean Rank	Sum of Ranks
Striation Breadth	Londerzeel	66	275.01	18150.50
	Oudenberg	539	306.43	165164.50
	Total	605		

Appendix 7.7: Raw Microwear data for the five Belgian Sites.

Site	Jaw	Length	Breadth	Site	Jaw	Length	Breadth
Raversijde	2b	22.1	1.33	Veurne	23b	2	2
Raversijde	2b	37.74	2.69	Veurne	23b	1.67	1.67
Raversijde	2b	12.98	0.94	Veurne	32a	111.91	1.49
Raversijde	2b	28.31	2.11	Veurne	32a	130.77	2.36
Raversijde	2b	18.95	1.8	Veurne	32a	40.02	1.2
Raversijde	2b	28.77	2.75	Veurne	32a	46.87	1.7
Raversijde	2b	21.67	2.13	Veurne	32a	47.99	1.8
Raversijde	2b	18.52	1.89	Veurne	32a	62.73	2.69
Raversijde	2b	9.99	1.05	Veurne	32a	31.62	1.41
Raversijde	2b	14.98	1.67	Veurne	32a	16.55	0.75
Raversijde	2b	18.6	2.11	Veurne	32a	21.77	1
Raversijde	2b	18.45	2.11	Veurne	32a	14.52	0.67
Raversijde	2b	13.78	1.67	Veurne	32a	31.57	1.49
Raversijde	2b	30.25	3.89	Veurne	32a	23.11	1.2
Raversijde	2b	15.61	2.03	Veurne	32a	32.2	1.7
Raversijde	2b	8.96	1.2	Veurne	32a	38.33	2.11
Raversijde	2b	17.45	2.4	Veurne	32a	31.84	1.8
Raversijde	2b	12.08	1.67	Veurne	32a	37.04	2.13
Raversijde	2b	26.8	3.73	Veurne	32a	37.11	2.24
Raversijde	2b	10.59	1.49	Veurne	32a	29.94	1.89
Raversijde	2b	9.69	1.37	Veurne	32a	23.36	1.67
Raversijde	2b	13.32	1.89	Veurne	32a	37.26	2.69
Raversijde	2b	15.55	2.24	Veurne	32a	18.67	1.37
Raversijde	2b	20.4	3.02	Veurne	32a	15.85	1.37
Raversijde	2b	6.74	1	Veurne	32a	18.87	1.67
Raversijde	2b	6.64	1	Veurne	32a	15.09	1.37
Raversijde	2b	17.85	2.69	Veurne	32a	15.09	1.37
Raversijde	2b	9.53	1.49	Veurne	32a	17.32	1.67
Raversijde	2b	7.56	1.2	Veurne	32a	17.04	1.67
Raversijde	2b	14.66	2.36	Veurne	32a	24.47	2.43
Raversijde	2b	6.41	1.05	Veurne	32a	7.52	0.75
Raversijde	2b	4.07	0.75	Veurne	32a	14.87	1.49
Raversijde	2b	8.06	1.49	Veurne	32a	13.6	1.37
Raversijde	2b	14.64	2.75	Veurne	32a	29.41	2.98
Raversijde	2b	19.41	3.68	Veurne	32a	14.62	1.49
Raversijde	2b	14.24	2.83	Veurne	32a	25.22	2.85
Raversijde	2b	7.4	1.49	Veurne	32a	10.75	1.33
Raversijde	2b	7.56	1.67	Veurne	32a	13.45	1.67
Raversijde	2b	8.01	1.8	Veurne	32a	13.33	1.67
Raversijde	2b	5.27	1.2	Veurne	32a	26.72	3.35
Raversijde	2b	7.32	1.67	Veurne	32a	20.12	2.54
Raversijde	2b	7.87	1.89	Veurne	32a	12.73	1.67
Raversijde	2b	9.61	2.36	Veurne	32a	7.6	1
Raversijde	2b	6.01	1.49	Veurne	32a	11.94	1.67
Raversijde	2b	5.82	1.49	Veurne	32a	17.2	2.43
Raversijde	2b	8.75	2.36	Veurne	32a	21.65	3.07
Raversijde	2b	7.75	2.11	Veurne	32a	11.2	1.67
Raversijde	2b	6.44	1.8	Veurne	32a	12.05	1.8
Raversijde	2b	8.41	2.4	Veurne	32a	12.02	1.8
Raversijde	2b	5.83	1.67	Veurne	32a	12.76	1.94
Raversijde	2b	7.21	2.13	Veurne	32a	9.29	1.49

Raversijde	2b	10.08	2.98	Veurne	32a	21.04	3.4
Raversijde	2b	10.2	3.07	Veurne	32a	8.06	1.41
Raversijde	2b	6.64	2	Veurne	32a	9.34	1.7
Raversijde	2b	5.59	1.7	Veurne	32a	17.01	3.16
Raversijde	2b	5.37	1.67	Veurne	32a	10.42	1.94
Raversijde	2b	4.63	1.49	Veurne	32a	13.68	2.69
Raversijde	2b	11.35	3.8	Veurne	32a	8.6	1.8
Raversijde	2b	5.27	1.8	Veurne	32a	6.33	1.33
Raversijde	2b	12.82	4.47	Veurne	32a	12.69	2.67
Raversijde	2b	3.89	1.37	Veurne	32a	7.28	1.67
Raversijde	2b	3.73	1.33	Veurne	32a	10.82	2.54
Raversijde	2b	8.54	3.16	Veurne	32a	4.35	1.05
Raversijde	2b	4.48	1.67	Veurne	32a	7.01	1.7
Raversijde	2b	6.2	2.36	Veurne	32a	6	1.67
Raversijde	2b	4.38	1.67	Veurne	32a	7.87	2.24
Raversijde	2b	5.82	2.24	Veurne	32a	7.45	2.13
Raversijde	2b	3.07	1.2	Veurne	32a	5.82	1.67
Raversijde	2b	3.07	1.2	Veurne	32a	4.33	1.37
Raversijde	2b	4.18	1.67	Veurne	32a	5.04	1.7
Raversijde	2b	5.9	2.36	Veurne	32a	4.74	1.67
Raversijde	2b	3.3	1.33	Veurne	32a	5.73	2.13
Raversijde	2b	4.81	1.94	Veurne	32a	3.67	1.37
Raversijde	2b	2.6	1.05	Veurne	32a	7.07	2.69
Raversijde	2b	8.11	3.28	Veurne	32a	3.59	1.41
Raversijde	2b	6.2	2.54	Veurne	32a	5.34	2.11
Raversijde	2b	6.87	2.83	Veurne	32a	6.4	2.54
Raversijde	2b	6.87	2.85	Veurne	32a	5.83	2.4
Raversijde	2b	3.59	1.49	Veurne	32a	4.33	1.94
Raversijde	2b	5.68	2.36	Veurne	32a	5.01	2.33
Raversijde	2b	7.31	3.07	Veurne	32a	7.34	3.43
Raversijde	2b	8.88	3.73	Veurne	32a	3.8	2.11
Raversijde	2b	5.67	2.4	Veurne	32a	7.56	4.27
Raversijde	2b	7.13	3.07	Veurne	32a	2.83	1.8
Raversijde	2b	9.26	4.01	Veurne	32a	4.67	3.02
Raversijde	2b	6.2	2.69	Veurne	32a	6.87	4.53
Raversijde	2b	2.13	0.94	Veurne	32a	2.03	1.37
Raversijde	2b	4.07	1.8	Veurne	32a	2.43	1.7
Raversijde	2b	4.77	2.11	Veurne	32a	4.92	3.61
Raversijde	2b	4.06	1.8	Veurne	32a	3.28	2.6
Raversijde	2b	6.67	2.98	Veurne	32a	2.43	1.94
Raversijde	2b	5	2.24	Veurne	32a	4.07	3.28
Raversijde	2b	3.28	1.49	Veurne	32a	4.01	3.54
Raversijde	2b	6.75	3.07	Veurne	32a	2.13	2.03
Raversijde	2b	3.67	1.67	Veurne	32a	2.69	2.6
Raversijde	2b	8.8	4.03	Veurne	32a	3.33	3.33
Raversijde	2b	4.74	2.24	Veurne	13c	35.9	2.85
Raversijde	2b	4.96	2.4	Veurne	13c	52.97	5.22
Raversijde	2b	3.07	1.49	Veurne	13c	22.4	3.77
Raversijde	2b	4.27	2.13	Veurne	13c	20.06	4.47
Raversijde	2b	3.28	1.67	Veurne	13c	7.7	1.89
Raversijde	2b	3.73	1.94	Veurne	13c	10.15	2.98
Raversijde	2b	3.59	1.89	Veurne	13c	10.85	3.54
Raversijde	2b	3.14	1.67	Veurne	13c	19.88	7.03
Raversijde	2b	4.77	2.6	Veurne	13c	8.34	3.16

Raversijde	2b	3.43	1.89	Veurne	13c	12.55	5
Raversijde	2b	4.27	2.36	Veurne	13c	10.88	4.35
Raversijde	2b	2.98	1.67	Veurne	13c	6.74	2.83
Raversijde	2b	3.8	2.13	Veurne	13c	4.35	1.89
Raversijde	2b	3.33	1.89	Veurne	13c	6.87	3.07
Raversijde	2b	2.4	1.37	Veurne	13c	11.49	5.21
Raversijde	2b	3.73	2.13	Veurne	13c	10.12	5
Raversijde	2b	3.28	1.89	Veurne	13c	1.94	1
Raversijde	2b	3.33	1.94	Veurne	13c	9.22	4.77
Raversijde	2b	3.8	2.24	Veurne	13c	12.87	7.21
Raversijde	2b	4.03	2.4	Veurne	13c	10.67	6.04
Raversijde	2b	4.35	2.6	Veurne	13c	2.69	1.67
Raversijde	2b	5.47	3.28	Veurne	13c	9.69	6.23
Raversijde	2b	4.38	2.67	Veurne	13c	17.31	11.34
Raversijde	2b	5.04	3.16	Veurne	13c	4.38	2.87
Raversijde	2b	4	2.54	Veurne	13c	7.34	4.81
Raversijde	2b	3.73	2.43	Veurne	13c	1.8	1.2
Raversijde	2b	2.24	1.49	Veurne	13c	13.67	9.29
Raversijde	2b	3.28	2.24	Veurne	13c	21.43	15.18
Raversijde	2b	2.43	1.67	Veurne	13c	17.67	12.57
Raversijde	2b	4.45	3.07	Veurne	13c	2.33	1.67
Raversijde	2b	3.07	2.13	Veurne	13c	2.03	1.49
Raversijde	2b	2.43	1.7	Veurne	13c	2.85	2.13
Raversijde	2b	4.48	3.14	Veurne	13c	2.13	1.67
Raversijde	2b	6.74	4.77	Veurne	13c	2.13	1.7
Raversijde	2b	7.7	5.59	Veurne	13c	2.43	1.94
Raversijde	2b	4.35	3.16	Veurne	13c	4.92	4
Raversijde	2b	4.53	3.33	Veurne	13c	7.13	5.83
Raversijde	2b	2.87	2.13	Veurne	13c	2	1.7
Raversijde	2b	3.73	2.85	Veurne	13c	2.6	2.24
Raversijde	2b	2.75	2.11	Veurne	13c	2.69	2.4
Raversijde	2b	3.02	2.33	Veurne	13c	3.54	3.3
Raversijde	2b	3	2.33	Veurne	13c	2.6	2.43
Raversijde	2b	5.7	4.47	Veurne	13c	13.2	13.02
Raversijde	2b	2.85	2.24	Veurne	13c	1.94	1.94
Raversijde	2b	4.77	3.8	Veurne	13c	3.33	3.33
Raversijde	2b	4.35	3.48	Veurne	13c	3.07	3.07
Raversijde	2b	3.33	2.69	Veurne	13c	2.4	2.36
Raversijde	2b	3.33	2.69	Veurne	13c	2.4	2.36
Raversijde	2b	3.54	2.87	Veurne	13c	2.11	2.03
Raversijde	2b	2.6	2.13	Veurne	13c	2.11	2
Raversijde	2b	3.67	3.07	Veurne	13c	2.4	2.24
Raversijde	2b	4.27	3.59	Veurne	13c	3.35	3.07
Raversijde	2b	3.07	2.6	Veurne	13c	2.33	2.13
Raversijde	2b	3.07	2.6	Veurne	13c	2.33	2.11
Raversijde	2b	3.16	2.69	Veurne	13c	19.49	17.41
Raversijde	2b	3.54	3.02	Veurne	13c	4.07	3.48
Raversijde	2b	1.94	1.7	Veurne	13c	2.43	2
Raversijde	2b	3.02	2.69	Veurne	13c	2.03	1.67
Raversijde	2b	3.8	3.43	Veurne	13c	2.13	1.67
Raversijde	2b	2.6	2.36	Veurne	13c	2.4	1.8
Raversijde	2b	2.43	2.24	Veurne	13c	2.36	1.7
Raversijde	2b	3.33	3.07	Veurne	13c	1.94	1.33
Raversijde	2b	2.6	2.4	Veurne	13c	3	2

Raversijde	2b	4.71	4.35	Veurne	13c	2.54	1.67
Raversijde	2b	3.4	3.16	Veurne	13c	15.71	9.85
Raversijde	2b	3.3	3.07	Veurne	13c	3.43	2
Raversijde	2b	3.33	3.16	Veurne	13c	15.07	8.65
Raversijde	2b	3.3	3.14	Veurne	13c	2.13	1.05
Raversijde	2b	2.75	2.75	Veurne	13c	3.54	1.7
Raversijde	2b	4.77	4.77	Veurne	13c	9.43	4.38
Raversijde	10c	28.18	1.33	Veurne	13c	3.61	1.49
Raversijde	10c	28.18	1.67	Veurne	13c	12.48	5.1
Raversijde	10c	22.39	1.41	Veurne	13c	11.49	3.54
Raversijde	10c	27.91	2.03	Veurne	13c	11.47	3.48
Raversijde	10c	29.07	2.13	Veurne	13c	2.6	0.75
Raversijde	10c	8.75	0.67	Veurne	13c	31.5	3.4
Raversijde	10c	16	1.33	Oudenberg	306c	52.5	1
Raversijde	10c	15.37	1.37	Oudenberg	306c	27.11	1
Raversijde	10c	18.34	1.8	Oudenberg	306c	14.47	0.75
Raversijde	10c	15.76	1.67	Oudenberg	306c	23.09	1.2
Raversijde	10c	15.85	1.7	Oudenberg	306c	18.44	1
Raversijde	10c	9.22	1.05	Oudenberg	306c	15.26	0.94
Raversijde	10c	11.46	1.37	Oudenberg	306c	30.17	2
Raversijde	10c	25.55	3.14	Oudenberg	306c	55.66	3.9
Raversijde	10c	17.59	2.36	Oudenberg	306c	23.04	1.67
Raversijde	10c	22.34	3.07	Oudenberg	306c	26.42	2.13
Raversijde	10c	16.7	2.4	Oudenberg	306c	18.08	1.67
Raversijde	10c	7.87	1.2	Oudenberg	306c	16.78	1.67
Raversijde	10c	21.26	3.4	Oudenberg	306c	9.39	0.94
Raversijde	10c	15.95	2.6	Oudenberg	306c	14.72	1.49
Raversijde	10c	19.65	3.35	Oudenberg	306c	21.05	2.36
Raversijde	10c	15.38	2.98	Oudenberg	306c	8.89	1
Raversijde	10c	13.33	3.07	Oudenberg	306c	11.79	1.33
Raversijde	10c	8.2	1.89	Oudenberg	306c	9.24	1.05
Raversijde	10c	11.48	2.83	Oudenberg	306c	21.5	2.6
Raversijde	10c	8.03	2	Oudenberg	306c	6.01	0.75
Raversijde	10c	8.23	2.11	Oudenberg	306c	18.63	2.33
Raversijde	10c	8.86	2.43	Oudenberg	306c	10.54	1.33
Raversijde	10c	6.08	1.7	Oudenberg	306c	10.71	1.37
Raversijde	10c	6.47	1.94	Oudenberg	306c	9.34	1.2
Raversijde	10c	10.35	3.16	Oudenberg	306c	15.01	2
Raversijde	10c	7.32	2.24	Oudenberg	306c	12.37	1.7
Raversijde	10c	3.9	1.2	Oudenberg	306c	15.07	2.24
Raversijde	10c	8.5	2.75	Oudenberg	306c	11.21	1.67
Raversijde	10c	7.28	2.36	Oudenberg	306c	12.34	1.89
Raversijde	10c	6.04	2	Oudenberg	306c	19.62	3.02
Raversijde	10c	9.06	3	Oudenberg	306c	10.67	1.67
Raversijde	10c	9.22	3.07	Oudenberg	306c	6.32	1
Raversijde	10c	9.01	3.07	Oudenberg	306c	9.29	1.49
Raversijde	10c	5.27	1.8	Oudenberg	306c	12.69	2.11
Raversijde	10c	7.8	2.69	Oudenberg	306c	8.89	1.49
Raversijde	10c	5.22	1.89	Oudenberg	306c	7.8	1.33
Raversijde	10c	4.48	1.67	Oudenberg	306c	9.67	1.67
Raversijde	10c	5.59	2.11	Oudenberg	306c	7.67	1.33
Raversijde	10c	5.27	2.03	Oudenberg	306c	15.7	2.75
Raversijde	10c	4.35	1.7	Oudenberg	306c	7.77	1.37
Raversijde	10c	3.35	1.37	Oudenberg	306c	5.21	0.94

Raversijde	10c	3.48	1.49	Oudenberg	306c	12.98	2.36
Raversijde	10c	4.96	2.13	Oudenberg	306c	13.73	2.54
Raversijde	10c	4.45	1.94	Oudenberg	306c	11.94	2.24
Raversijde	10c	8.23	3.61	Oudenberg	306c	5.59	1.05
Raversijde	10c	4.77	2.11	Oudenberg	306c	7	1.33
Raversijde	10c	4.81	2.13	Oudenberg	306c	8.65	1.67
Raversijde	10c	4.74	2.11	Oudenberg	306c	15.26	2.98
Raversijde	10c	4.74	2.13	Oudenberg	306c	10.73	2.11
Raversijde	10c	2.6	1.2	Oudenberg	306c	6.74	1.33
Raversijde	10c	6.2	2.87	Oudenberg	306c	8.34	1.67
Raversijde	10c	5.43	2.54	Oudenberg	306c	7.03	1.41
Raversijde	10c	5.7	2.69	Oudenberg	306c	8.17	1.67
Raversijde	10c	2.54	1.2	Oudenberg	306c	17.63	3.73
Raversijde	10c	5.47	2.6	Oudenberg	306c	6.41	1.37
Raversijde	10c	6.57	3.16	Oudenberg	306c	6.94	1.49
Raversijde	10c	6.57	3.28	Oudenberg	306c	5.55	1.2
Raversijde	10c	6.4	3.28	Oudenberg	306c	6.26	1.37
Raversijde	10c	6.87	3.54	Oudenberg	306c	4.77	1.05
Raversijde	10c	3.68	2	Oudenberg	306c	4.18	0.94
Raversijde	10c	3.67	2	Oudenberg	306c	7.4	1.67
Raversijde	10c	2.43	1.33	Oudenberg	306c	13.49	3.07
Raversijde	10c	4.01	2.24	Oudenberg	306c	5.96	1.37
Raversijde	10c	3.8	2.13	Oudenberg	306c	6.44	1.49
Raversijde	10c	2.4	1.37	Oudenberg	306c	5.09	1.2
Raversijde	10c	2.87	1.67	Oudenberg	306c	6.23	1.49
Raversijde	10c	2.85	1.7	Oudenberg	306c	3.9	0.94
Raversijde	10c	2.13	1.33	Oudenberg	306c	6.15	1.49
Raversijde	10c	2.69	1.7	Oudenberg	306c	4.92	1.2
Raversijde	10c	2.67	1.7	Oudenberg	306c	3.07	0.75
Raversijde	10c	3.9	2.54	Oudenberg	306c	8.03	2.03
Raversijde	10c	10.34	6.75	Oudenberg	306c	10.14	2.6
Raversijde	10c	2.75	1.8	Oudenberg	306c	8.72	2.24
Raversijde	10c	5.37	3.54	Oudenberg	306c	5.43	1.41
Raversijde	10c	2.87	1.94	Oudenberg	306c	13.73	3.73
Raversijde	10c	3.54	2.4	Oudenberg	306c	3.77	1.05
Raversijde	10c	2.98	2.03	Oudenberg	306c	9.34	2.67
Raversijde	10c	5.27	3.61	Oudenberg	306c	4.92	1.49
Raversijde	10c	2.43	1.7	Oudenberg	306c	5.39	1.67
Raversijde	10c	5.7	4.01	Oudenberg	306c	8.5	2.69
Raversijde	10c	2.75	1.94	Oudenberg	306c	7.34	2.33
Raversijde	10c	2.98	2.11	Oudenberg	306c	7.4	2.36
Raversijde	10c	2.54	1.8	Oudenberg	306c	3.28	1.05
Raversijde	10c	3.14	2.24	Oudenberg	306c	3.73	1.2
Raversijde	10c	4.77	3.73	Oudenberg	306c	4.53	1.49
Raversijde	10c	1.33	1.05	Oudenberg	306c	4.01	1.33
Raversijde	10c	3.35	2.67	Oudenberg	306c	4.48	1.49
Raversijde	10c	2.98	2.4	Oudenberg	306c	9.22	3.07
Raversijde	10c	4.22	3.4	Oudenberg	306c	4.47	1.49
Raversijde	10c	3.68	3	Oudenberg	306c	8.33	2.87
Raversijde	10c	2.85	2.36	Oudenberg	306c	4.07	1.41
Raversijde	10c	4.27	3.59	Oudenberg	306c	4.27	1.49
Raversijde	10c	2.36	2	Oudenberg	306c	2.13	0.75
Raversijde	10c	3.33	2.83	Oudenberg	306c	6.33	2.33
Raversijde	10c	2.75	2.36	Oudenberg	306c	6.47	2.4

Raversijde	10c	2.67	2.36	Oudenberg	306c	3.9	1.49
Raversijde	10c	2.36	2.13	Oudenberg	306c	6.96	2.69
Raversijde	10c	3	2.75	Oudenberg	306c	12.02	4.71
Raversijde	10c	3.73	3.43	Oudenberg	306c	5.68	2.24
Raversijde	10c	4.01	3.73	Oudenberg	306c	5.39	2.24
Raversijde	16b	22.36	1.37	Oudenberg	306c	4.96	2.11
Raversijde	16b	11.18	0.75	Oudenberg	306c	7.8	3.35
Raversijde	16b	26.19	1.94	Oudenberg	306c	4.03	1.8
Raversijde	16b	38.42	2.87	Oudenberg	306c	6.01	2.69
Raversijde	16b	37.05	3	Oudenberg	306c	6.01	2.69
Raversijde	16b	14.67	1.33	Oudenberg	306c	3.3	1.49
Raversijde	16b	22.53	2.11	Oudenberg	306c	4.38	2
Raversijde	16b	24.3	2.36	Oudenberg	306c	7.81	3.61
Raversijde	16b	15.77	1.67	Oudenberg	306c	4.03	1.94
Raversijde	16b	9.39	1	Oudenberg	306c	3.73	1.8
Raversijde	16b	17.16	1.94	Oudenberg	306c	8.11	4
Raversijde	16b	11.41	1.33	Oudenberg	306c	3.61	1.8
Raversijde	16b	11.46	1.37	Oudenberg	306c	4.27	2.13
Raversijde	16b	5.43	0.67	Oudenberg	306c	3.33	1.7
Raversijde	16b	8.41	1.05	Oudenberg	306c	4.92	2.54
Raversijde	16b	10.75	1.37	Oudenberg	306c	6.41	3.43
Raversijde	16b	7.75	1	Oudenberg	306c	4.63	2.69
Raversijde	16b	12.55	1.67	Oudenberg	306c	4.01	2.43
Raversijde	16b	12.45	1.7	Oudenberg	306c	3.33	2.13
Raversijde	16b	19.82	2.75	Oudenberg	306c	3.16	2.03
Raversijde	16b	10.2	1.49	Oudenberg	306c	4.68	3.02
Raversijde	16b	11.18	1.67	Oudenberg	306c	3.02	2
Raversijde	16b	9.1	1.37	Oudenberg	306c	2.83	1.89
Raversijde	16b	12.87	1.94	Oudenberg	306c	4.18	2.87
Raversijde	16b	9.02	1.37	Oudenberg	306c	4.92	3.4
Raversijde	16b	8.98	1.37	Oudenberg	306c	2.43	1.7
Raversijde	16b	14.38	2.24	Oudenberg	306c	1.67	1.2
Raversijde	16b	11.66	1.89	Oudenberg	306c	3.73	2.69
Raversijde	16b	8.34	1.37	Oudenberg	306c	2.87	2.13
Raversijde	16b	6.08	1	Oudenberg	306c	3.54	2.69
Raversijde	16b	18.48	3.07	Oudenberg	306c	4.53	3.48
Raversijde	16b	11.91	2.03	Oudenberg	306c	2.43	2
Raversijde	16b	6.94	1.2	Oudenberg	306c	2.54	2.11
Raversijde	16b	9.43	1.7	Oudenberg	306c	1.41	1.2
Raversijde	16b	7.36	1.33	Oudenberg	306c	2.24	1.94
Raversijde	16b	7.34	1.33	Oudenberg	306c	2.75	2.43
Raversijde	16b	12.29	2.24	Oudenberg	306c	1.67	1.49
Raversijde	16b	10.14	1.89	Oudenberg	306c	2.33	2.11
Raversijde	16b	8.6	1.67	Oudenberg	306c	3.61	3.28
Raversijde	16b	7.03	1.37	Oudenberg	306c	2.24	2.13
Raversijde	16b	5.34	1.05	Oudenberg	306c	3.3	3.16
Raversijde	16b	10.2	2.03	Oudenberg	306c	3.14	3.14
Raversijde	16b	6.87	1.37	Oudenberg	124b	24.15	1.2
Raversijde	16b	16.47	3.3	Oudenberg	124b	12.39	0.67
Raversijde	16b	5.96	1.2	Oudenberg	124b	22.57	1.49
Raversijde	16b	18.77	3.8	Oudenberg	124b	18	1.33
Raversijde	16b	7.13	1.49	Oudenberg	124b	27.52	2.11
Raversijde	16b	13.68	2.87	Oudenberg	124b	45.4	3.54
Raversijde	16b	6.26	1.33	Oudenberg	124b	15.36	1.2

Raversijde	16b	8.41	1.8	Oudenberg	124b	36.63	2.87
Raversijde	16b	10.46	2.24	Oudenberg	124b	12.37	1
Raversijde	16b	7.7	1.67	Oudenberg	124b	15.92	1.33
Raversijde	16b	6.08	1.37	Oudenberg	124b	37.76	3.16
Raversijde	16b	5.82	1.33	Oudenberg	124b	13.42	1.2
Raversijde	16b	11.74	2.69	Oudenberg	124b	21.59	2.03
Raversijde	16b	5.91	1.37	Oudenberg	124b	9.43	0.94
Raversijde	16b	10.3	2.4	Oudenberg	124b	16.42	1.7
Raversijde	16b	5.75	1.37	Oudenberg	124b	15.85	1.67
Raversijde	16b	12.78	3.07	Oudenberg	124b	13.13	1.49
Raversijde	16b	8.54	2.11	Oudenberg	124b	17.77	2.03
Raversijde	16b	11.13	2.75	Oudenberg	124b	13.7	1.67
Raversijde	16b	5.34	1.33	Oudenberg	124b	17.92	2.24
Raversijde	16b	4.01	1	Oudenberg	124b	12.04	1.67
Raversijde	16b	4.81	1.2	Oudenberg	124b	9.67	1.37
Raversijde	16b	4.81	1.2	Oudenberg	124b	9.06	1.37
Raversijde	16b	3	0.75	Oudenberg	124b	10.34	1.8
Raversijde	16b	12	3	Oudenberg	124b	13.92	2.43
Raversijde	16b	6.67	1.67	Oudenberg	124b	13.32	2.36
Raversijde	16b	2.67	0.67	Oudenberg	124b	9.34	1.7
Raversijde	16b	6.75	1.7	Oudenberg	124b	13.6	2.54
Raversijde	16b	6.75	1.7	Oudenberg	124b	17.69	3.35
Raversijde	16b	7.31	1.89	Oudenberg	124b	8.36	1.7
Raversijde	16b	21.23	5.55	Oudenberg	124b	11.64	2.43
Raversijde	16b	9.85	2.6	Oudenberg	124b	6.13	1.33
Raversijde	16b	3.73	1	Oudenberg	124b	10.69	2.33
Raversijde	16b	6.34	1.7	Oudenberg	124b	12.17	2.67
Raversijde	16b	8.8	2.36	Oudenberg	124b	10.63	2.4
Raversijde	16b	4.85	1.33	Oudenberg	124b	12.33	3.02
Raversijde	16b	7.06	1.94	Oudenberg	124b	10.92	2.75
Raversijde	16b	8.81	2.43	Oudenberg	124b	9.3	2.43
Raversijde	16b	5.39	1.49	Oudenberg	124b	8.01	2.13
Raversijde	16b	13.44	3.73	Oudenberg	124b	7.81	2.4
Raversijde	16b	8.5	2.36	Oudenberg	124b	6.33	2
Raversijde	16b	4.27	1.2	Oudenberg	124b	7.07	2.33
Raversijde	16b	7.95	2.24	Oudenberg	124b	7.03	2.33
Raversijde	16b	4.81	1.41	Oudenberg	124b	4.77	1.7
Raversijde	16b	5.67	1.67	Oudenberg	124b	9.67	3.54
Raversijde	16b	6.84	2.13	Oudenberg	124b	7.49	2.87
Raversijde	16b	4.38	1.37	Oudenberg	124b	6.15	2.36
Raversijde	16b	3.28	1.05	Oudenberg	124b	8.23	3.28
Raversijde	16b	4.64	1.49	Oudenberg	124b	4.63	1.89
Raversijde	16b	5.93	1.94	Oudenberg	124b	4.01	1.7
Raversijde	16b	2.87	0.94	Oudenberg	124b	4.01	1.89
Raversijde	16b	6.47	2.13	Oudenberg	124b	4.47	2.13
Raversijde	16b	4.01	1.33	Oudenberg	124b	4.12	2
Raversijde	16b	5.1	1.7	Oudenberg	124b	4.77	2.36
Raversijde	16b	3.9	1.33	Oudenberg	124b	3.77	1.89
Raversijde	16b	4.96	1.7	Oudenberg	124b	4.22	2.13
Raversijde	16b	6.87	2.36	Oudenberg	124b	4.07	2.13
Raversijde	16b	6.08	2.11	Oudenberg	124b	4.77	2.69
Raversijde	16b	4.27	1.49	Oudenberg	124b	4.18	2.4
Raversijde	16b	3.9	1.37	Oudenberg	124b	5.93	3.43
Raversijde	16b	6	2.11	Oudenberg	124b	4.77	2.98

Raversijde	16b	8.44	3	Oudenberg	124b	4.67	3.02
Raversijde	16b	7.7	2.75	Oudenberg	124b	2.11	1.37
Raversijde	16b	7.07	2.54	Oudenberg	124b	2	1.33
Raversijde	16b	7.45	2.69	Oudenberg	124b	4.96	3.43
Raversijde	16b	9.39	3.48	Oudenberg	124b	3.14	2.36
Raversijde	16b	4.01	1.49	Oudenberg	124b	2.98	2.24
Raversijde	16b	5.67	2.11	Oudenberg	124b	3.59	2.98
Raversijde	16b	3.68	1.37	Oudenberg	124b	2.75	2.36
Raversijde	16b	7.67	2.87	Oudenberg	124b	2	1.8
Raversijde	16b	4.53	1.7	Oudenberg	124b	2.24	2.13
Raversijde	16b	5.08	1.94	Oudenberg	24	32.34	0.67
Raversijde	16b	4.35	1.67	Oudenberg	24	29.8	1.2
Raversijde	16b	3.73	1.49	Oudenberg	24	29.11	1.2
Raversijde	16b	5.83	2.4	Oudenberg	24	24.37	1.33
Raversijde	16b	1.8	0.75	Oudenberg	24	23.65	1.41
Raversijde	16b	4.85	2.03	Oudenberg	24	18.57	1.2
Raversijde	16b	6.37	2.67	Oudenberg	24	14.15	0.94
Raversijde	16b	7.31	3.07	Oudenberg	24	14.47	1
Raversijde	16b	3.54	1.49	Oudenberg	24	9.39	0.67
Raversijde	16b	6.71	2.83	Oudenberg	24	9.36	0.67
Raversijde	16b	5.27	2.24	Oudenberg	24	18.27	1.41
Raversijde	16b	7.34	3.14	Oudenberg	24	24.04	1.94
Raversijde	16b	4.53	1.94	Oudenberg	24	31.9	2.69
Raversijde	16b	2.75	1.2	Oudenberg	24	11.1	0.94
Raversijde	16b	4.12	1.8	Oudenberg	24	13.8	1.2
Raversijde	16b	2.33	1.05	Oudenberg	24	26.68	2.33
Raversijde	16b	5.93	2.69	Oudenberg	24	18.55	1.67
Raversijde	16b	3.67	1.67	Oudenberg	24	6.75	0.67
Raversijde	16b	3.67	1.67	Oudenberg	24	17.75	1.8
Raversijde	16b	9.24	4.22	Oudenberg	24	7.34	0.75
Raversijde	16b	6.01	2.75	Oudenberg	24	14.56	1.49
Raversijde	16b	4.35	2	Oudenberg	24	6.47	0.67
Raversijde	16b	3.61	1.67	Oudenberg	24	14.27	1.67
Raversijde	16b	5.75	2.67	Oudenberg	24	11.33	1.33
Raversijde	16b	4.03	1.89	Oudenberg	24	9.29	1.2
Raversijde	16b	6.94	3.28	Oudenberg	24	15.18	2
Raversijde	16b	6.84	3.3	Oudenberg	24	11.63	1.67
Raversijde	16b	1.94	0.94	Oudenberg	24	10.3	1.49
Raversijde	16b	5.01	2.43	Oudenberg	24	11.49	1.8
Raversijde	16b	2.69	1.33	Oudenberg	24	10.64	1.67
Raversijde	16b	3	1.49	Oudenberg	24	9.17	1.49
Raversijde	16b	3.8	1.89	Oudenberg	24	6.08	1
Raversijde	16b	2.11	1.05	Oudenberg	24	14.16	2.4
Raversijde	16b	3.35	1.67	Oudenberg	24	11.4	1.94
Raversijde	16b	4.48	2.24	Oudenberg	24	11.66	2.13
Raversijde	16b	5.73	2.87	Oudenberg	24	12.08	2.24
Raversijde	16b	4.68	2.36	Oudenberg	24	10.71	2.03
Raversijde	16b	3.35	1.7	Oudenberg	24	5.37	1.05
Raversijde	16b	3.8	1.94	Oudenberg	24	8.54	1.67
Raversijde	16b	7.01	3.59	Oudenberg	24	3.8	0.75
Raversijde	16b	5.83	3.07	Oudenberg	24	4.53	0.94
Raversijde	16b	5.67	3	Oudenberg	24	14.73	3.16
Raversijde	16b	5.04	2.67	Oudenberg	24	5.52	1.2
Raversijde	16b	5.27	2.83	Oudenberg	24	12.97	2.87

Raversijde	16b	2.54	1.37	Oudenberg	24	7.38	1.67
Raversijde	16b	2.75	1.49	Oudenberg	24	13.31	3.07
Raversijde	16b	2.69	1.49	Oudenberg	24	11.57	2.69
Raversijde	16b	2.69	1.49	Oudenberg	24	7.07	1.67
Raversijde	16b	1.8	1	Oudenberg	24	7.06	1.67
Raversijde	16b	1.8	1	Oudenberg	24	7.01	1.7
Raversijde	16b	1.8	1	Oudenberg	24	6.62	1.67
Raversijde	16b	3	1.67	Oudenberg	24	8.5	2.24
Raversijde	16b	2.98	1.67	Oudenberg	24	7.67	2.03
Raversijde	16b	3.8	2.13	Oudenberg	24	4.92	1.41
Raversijde	16b	3.59	2.03	Oudenberg	24	9.55	2.85
Raversijde	16b	4.24	2.4	Oudenberg	24	10.92	3.28
Raversijde	16b	3.16	1.8	Oudenberg	24	8.06	2.54
Raversijde	16b	4.68	2.69	Oudenberg	24	8	2.67
Raversijde	16b	4.03	2.33	Oudenberg	24	9.43	3.3
Raversijde	16b	4.01	2.33	Oudenberg	24	9.43	3.3
Raversijde	16b	4.01	2.33	Oudenberg	24	6.64	2.4
Raversijde	16b	3.07	1.8	Oudenberg	24	6.75	2.54
Raversijde	16b	2.33	1.37	Oudenberg	24	4.38	1.67
Raversijde	16b	3.35	2	Oudenberg	24	4.45	1.7
Raversijde	16b	5.9	3.54	Oudenberg	24	2.6	1.05
Raversijde	16b	5.08	3.07	Oudenberg	24	3.59	1.49
Raversijde	16b	1.7	1.05	Oudenberg	24	6.41	3.07
Raversijde	16b	4.45	2.75	Oudenberg	24	3.43	1.67
Raversijde	16b	3.07	1.94	Oudenberg	24	4.81	2.36
Raversijde	16b	2.67	1.7	Oudenberg	24	3.73	1.94
Raversijde	16b	2.67	1.7	Oudenberg	24	4.53	2.4
Raversijde	16b	2.67	1.7	Oudenberg	24	4.06	2.36
Raversijde	16b	3.67	2.36	Oudenberg	24	6.57	4.01
Raversijde	16b	3.28	2.13	Oudenberg	24	2.4	1.67
Raversijde	16b	3.07	2.03	Oudenberg	24	3.48	2.6
Raversijde	16b	2	1.33	Oudenberg	24	3.14	2.4
Raversijde	16b	9.07	6.04	Oudenberg	24	3.16	2.69
Raversijde	16b	3	2	Oudenberg	24	2.4	2.13
Raversijde	16b	2.11	1.41	Oudenberg	24	4.77	4.77
Raversijde	16b	7.31	4.96	Oudenberg	28a	25.27	1.49
Raversijde	16b	3.28	2.24	Oudenberg	28a	35.84	2.4
Raversijde	16b	3.07	2.13	Oudenberg	28a	9.34	0.67
Raversijde	16b	3.35	2.33	Oudenberg	28a	20.51	1.67
Raversijde	16b	4.33	3.02	Oudenberg	28a	22.69	2
Raversijde	16b	3.35	2.36	Oudenberg	28a	13.81	1.37
Raversijde	16b	2.36	1.67	Oudenberg	28a	16.55	1.67
Raversijde	16b	4.33	3.07	Oudenberg	28a	18.65	1.94
Raversijde	16b	2.33	1.67	Oudenberg	28a	34.44	3.59
Raversijde	16b	2.36	1.7	Oudenberg	28a	13.86	1.49
Raversijde	16b	2.75	2	Oudenberg	28a	6.87	0.75
Raversijde	16b	1.37	1	Oudenberg	28a	11.6	1.37
Raversijde	16b	4.53	3.33	Oudenberg	28a	16.34	2
Raversijde	16b	3.16	2.36	Oudenberg	28a	27.16	3.61
Raversijde	16b	4.53	3.54	Oudenberg	28a	17.48	2.36
Raversijde	16b	2.13	1.67	Oudenberg	28a	19.67	2.69
Raversijde	16b	4.96	3.89	Oudenberg	28a	14.43	2.13
Raversijde	16b	1.89	1.49	Oudenberg	28a	19.47	2.98
Raversijde	16b	3.35	2.67	Oudenberg	28a	18.48	2.87

Raversijde	16b	2.69	2.24	Oudenberg	28a	10.42	1.67
Raversijde	16b	2.13	1.8	Oudenberg	28a	10.46	1.8
Raversijde	16b	3.07	2.6	Oudenberg	28a	9.69	1.67
Raversijde	16b	3.07	2.6	Oudenberg	28a	12.97	2.24
Raversijde	16b	2.75	2.33	Oudenberg	28a	6.2	1.2
Raversijde	16b	2.36	2	Oudenberg	28a	5.37	1.05
Raversijde	16b	3.59	3.07	Oudenberg	28a	7	1.37
Raversijde	16b	1.7	1.49	Oudenberg	28a	21.68	4.27
Raversijde	16b	2.4	2.11	Oudenberg	28a	8.35	1.67
Raversijde	16b	2.67	2.36	Oudenberg	28a	9.67	1.94
Raversijde	16b	1.49	1.33	Oudenberg	28a	12.65	2.6
Raversijde	16b	3	2.75	Oudenberg	28a	11.69	2.54
Raversijde	16b	2.11	1.94	Oudenberg	28a	10.69	2.33
Raversijde	16b	3.07	2.85	Oudenberg	28a	4.53	1.05
Raversijde	16b	4.53	4.24	Oudenberg	28a	7.75	1.8
Raversijde	16b	3.28	3.14	Oudenberg	28a	14.94	3.61
Raversijde	16b	2.03	2	Oudenberg	28a	5.9	1.49
Raversijde	16b	2.4	2.4	Oudenberg	28a	14.15	3.61
Raversijde	23a	67.36	1.37	Oudenberg	28a	10.38	2.69
Raversijde	23a	36.88	1.05	Oudenberg	28a	8.98	2.36
Raversijde	23a	25.8	1.2	Oudenberg	28a	5.47	1.49
Raversijde	23a	34.23	1.67	Oudenberg	28a	17.65	4.96
Raversijde	23a	37.27	2.13	Oudenberg	28a	5.91	1.67
Raversijde	23a	17.29	1.2	Oudenberg	28a	7.36	2.11
Raversijde	23a	25.78	1.8	Oudenberg	28a	5.08	1.49
Raversijde	23a	25.44	1.89	Oudenberg	28a	9.01	2.87
Raversijde	23a	28.03	2.13	Oudenberg	28a	9.43	3.07
Raversijde	23a	50.47	3.9	Oudenberg	28a	4.47	1.49
Raversijde	23a	20.38	1.67	Oudenberg	28a	8.41	2.83
Raversijde	23a	31.25	2.69	Oudenberg	28a	3.54	1.2
Raversijde	23a	15.62	1.37	Oudenberg	28a	3.07	1.05
Raversijde	23a	18.77	1.67	Oudenberg	28a	7.67	2.67
Raversijde	23a	11.32	1.05	Oudenberg	28a	5.55	1.94
Raversijde	23a	14.93	1.41	Oudenberg	28a	3.4	1.2
Raversijde	23a	20.01	1.89	Oudenberg	28a	9.34	3.33
Raversijde	23a	20.72	2.13	Oudenberg	28a	9.29	3.33
Raversijde	23a	15.84	1.67	Oudenberg	28a	4.12	1.49
Raversijde	23a	21.19	2.24	Oudenberg	28a	5.34	2
Raversijde	23a	8.17	0.94	Oudenberg	28a	7.67	3.07
Raversijde	23a	15.54	1.8	Oudenberg	28a	8.33	3.35
Raversijde	23a	16.25	1.94	Oudenberg	28a	6.01	2.54
Raversijde	23a	14.1	1.7	Oudenberg	28a	5.67	2.43
Raversijde	23a	18.38	2.24	Oudenberg	28a	3.89	1.67
Raversijde	23a	25.52	3.14	Oudenberg	28a	5.37	2.33
Raversijde	23a	9.69	1.2	Oudenberg	28a	5.93	2.69
Raversijde	23a	11.18	1.41	Oudenberg	28a	4.64	2.13
Raversijde	23a	14.16	1.8	Oudenberg	28a	3.14	1.49
Raversijde	23a	11.48	1.49	Oudenberg	28a	5.43	2.6
Raversijde	23a	14.39	1.94	Oudenberg	28a	4.06	2.03
Raversijde	23a	11.04	1.49	Oudenberg	28a	3.59	1.8
Raversijde	23a	20.74	2.85	Oudenberg	28a	3.59	1.8
Raversijde	23a	25.06	3.59	Oudenberg	28a	3.73	1.89
Raversijde	23a	10.14	1.49	Oudenberg	28a	2.83	1.49
Raversijde	23a	11.28	1.67	Oudenberg	28a	5.37	2.87

Raversijde	23a	18.07	2.85	Oudenberg	28a	5.73	3.07
Raversijde	23a	13.41	2.13	Oudenberg	28a	6.32	3.59
Raversijde	23a	10.42	1.67	Oudenberg	28a	6.13	3.59
Raversijde	23a	12.41	2	Oudenberg	28a	2.75	1.67
Raversijde	23a	12.35	2.03	Oudenberg	28a	3.43	2.13
Raversijde	23a	17.21	2.85	Oudenberg	28a	2.98	1.94
Raversijde	23a	13.39	2.24	Oudenberg	28a	2.24	1.49
Raversijde	23a	13.41	2.4	Oudenberg	28a	4.07	3.07
Raversijde	23a	10.01	1.8	Oudenberg	28a	4.03	3.14
Raversijde	23a	7.81	1.41	Oudenberg	28a	2.11	1.67
Raversijde	23a	11.18	2.03	Oudenberg	28a	5.55	4.48
Raversijde	23a	16.01	3.07	Oudenberg	28a	3.43	3.02
Raversijde	23a	8.83	1.7	Oudenberg	28a	3.8	3.4
Raversijde	23a	14.76	2.87	Oudenberg	28a	3.07	2.75
Raversijde	23a	14.14	2.75	Oudenberg	28a	4.07	3.73
Raversijde	23a	10.38	2.11	Oudenberg	28a	4.01	3.68
Raversijde	23a	6.67	1.37	Oudenberg	28a	4.53	4.27
Raversijde	23a	10.35	2.13	Oudenberg	28a	2.85	2.69
Raversijde	23a	13.6	3	Oudenberg	28a	1.8	1.7
Raversijde	23a	16.34	3.68	Oudenberg	34/4	39.03	2.24
Raversijde	23a	13.37	3.02	Oudenberg	34/4	30.33	1.8
Raversijde	23a	7.45	1.8	Oudenberg	34/4	33.63	2.13
Raversijde	23a	8.69	2.13	Oudenberg	34/4	11.81	0.75
Raversijde	23a	7.32	1.8	Oudenberg	34/4	18.35	1.2
Raversijde	23a	10.3	2.6	Oudenberg	34/4	32.23	2.11
Raversijde	23a	16.85	4.27	Oudenberg	34/4	12.94	0.94
Raversijde	23a	9.85	2.6	Oudenberg	34/4	20.43	1.49
Raversijde	23a	6.44	1.7	Oudenberg	34/4	17.95	1.33
Raversijde	23a	6.37	1.7	Oudenberg	34/4	17.67	1.41
Raversijde	23a	9.07	2.43	Oudenberg	34/4	15	1.2
Raversijde	23a	7.81	2.13	Oudenberg	34/4	8.94	0.75
Raversijde	23a	8.75	2.43	Oudenberg	34/4	8.65	0.75
Raversijde	23a	6.01	1.7	Oudenberg	34/4	16.55	1.49
Raversijde	23a	9.94	2.83	Oudenberg	34/4	31.61	3
Raversijde	23a	8.14	2.43	Oudenberg	34/4	33.44	3.28
Raversijde	23a	9.02	2.75	Oudenberg	34/4	19.13	1.89
Raversijde	23a	8.75	2.67	Oudenberg	34/4	21.18	2.13
Raversijde	23a	3.8	1.2	Oudenberg	34/4	20.37	2.13
Raversijde	23a	11.6	3.68	Oudenberg	34/4	20.36	2.13
Raversijde	23a	5.17	1.67	Oudenberg	34/4	9.43	1
Raversijde	23a	9.2	2.98	Oudenberg	34/4	14.62	1.67
Raversijde	23a	4	1.33	Oudenberg	34/4	14.64	1.7
Raversijde	23a	5.01	1.67	Oudenberg	34/4	29.12	3.4
Raversijde	23a	5.82	2.03	Oudenberg	34/4	18.04	2.11
Raversijde	23a	9.34	3.28	Oudenberg	34/4	20.76	2.43
Raversijde	23a	5.75	2.03	Oudenberg	34/4	14.24	1.67
Raversijde	23a	8.69	3.14	Oudenberg	34/4	26.55	3.14
Raversijde	23a	4.07	1.49	Oudenberg	34/4	16.4	1.94
Raversijde	23a	5.93	2.4	Oudenberg	34/4	17.31	2.11
Raversijde	23a	4.77	1.94	Oudenberg	34/4	11.93	1.49
Raversijde	23a	6.47	2.69	Oudenberg	34/4	14.91	2
Raversijde	23a	5.37	2.24	Oudenberg	34/4	19.92	2.75
Raversijde	23a	7.77	3.28	Oudenberg	34/4	10.54	1.49
Raversijde	23a	10.82	4.63	Oudenberg	34/4	9.55	1.37

Raversijde	23a	5.67	2.43	Oudenberg	34/4	11.49	1.67
Raversijde	23a	10.38	4.53	Oudenberg	34/4	15.96	2.36
Raversijde	23a	4.01	1.8	Oudenberg	34/4	12.08	1.8
Raversijde	23a	3.67	1.67	Oudenberg	34/4	5	0.75
Raversijde	23a	4.92	2.24	Oudenberg	34/4	6.26	0.94
Raversijde	23a	3	1.41	Oudenberg	34/4	13.07	2
Raversijde	23a	12.12	5.83	Oudenberg	34/4	8.94	1.37
Raversijde	23a	5	2.43	Oudenberg	34/4	6.71	1.05
Raversijde	23a	7.4	3.68	Oudenberg	34/4	9.39	1.49
Raversijde	23a	3.4	1.7	Oudenberg	34/4	11.66	1.94
Raversijde	23a	3.28	1.7	Oudenberg	34/4	12.69	2.13
Raversijde	23a	5.19	2.69	Oudenberg	34/4	10.3	1.8
Raversijde	23a	5.27	2.85	Oudenberg	34/4	21.47	3.8
Raversijde	23a	5.04	2.75	Oudenberg	34/4	6.67	1.2
Raversijde	23a	3.68	2.03	Oudenberg	34/4	11.02	2
Raversijde	23a	5.27	2.98	Oudenberg	34/4	9.17	1.67
Raversijde	23a	4.96	2.83	Oudenberg	34/4	12.29	2.24
Raversijde	23a	5.21	3.07	Oudenberg	34/4	9.8	1.8
Raversijde	23a	3.61	2.4	Oudenberg	34/4	7.31	1.37
Raversijde	23a	3.35	2.36	Oudenberg	34/4	6.4	1.2
Raversijde	23a	4.35	3.07	Oudenberg	34/4	14.76	2.83
Raversijde	23a	4.35	3.07	Oudenberg	34/4	14.93	2.87
Raversijde	23a	5.01	3.73	Oudenberg	34/4	17.35	3.35
Raversijde	23a	3.61	2.87	Oudenberg	34/4	3.8	0.75
Raversijde	23a	3.14	2.6	Oudenberg	34/4	14.88	2.98
Raversijde	23a	3.07	2.6	Oudenberg	34/4	8.33	1.7
Raversijde	40c	47.25	1.2	Oudenberg	34/4	13.02	2.69
Raversijde	40c	39.21	1.2	Oudenberg	34/4	5.08	1.05
Raversijde	40c	38.68	1.2	Oudenberg	34/4	6.75	1.41
Raversijde	40c	21.34	0.67	Oudenberg	34/4	6.34	1.33
Raversijde	40c	44.13	1.41	Oudenberg	34/4	6.86	1.49
Raversijde	40c	18.41	0.75	Oudenberg	34/4	9.69	2.11
Raversijde	40c	36.41	1.49	Oudenberg	34/4	11.13	2.43
Raversijde	40c	67.19	2.98	Oudenberg	34/4	11.08	2.43
Raversijde	40c	31.75	1.41	Oudenberg	34/4	5.37	1.2
Raversijde	40c	27.31	1.37	Oudenberg	34/4	5.22	1.2
Raversijde	40c	27.4	1.49	Oudenberg	34/4	5.21	1.2
Raversijde	40c	12.08	0.67	Oudenberg	34/4	11.74	2.83
Raversijde	40c	21.08	1.2	Oudenberg	34/4	8.75	2.11
Raversijde	40c	41.56	2.54	Oudenberg	34/4	6.71	1.67
Raversijde	40c	24.13	1.49	Oudenberg	34/4	5.21	1.37
Raversijde	40c	14.32	0.94	Oudenberg	34/4	4.45	1.2
Raversijde	40c	49.61	3.43	Oudenberg	34/4	15.89	4.35
Raversijde	40c	23.12	1.7	Oudenberg	34/4	2.69	0.75
Raversijde	40c	13.2	1	Oudenberg	34/4	10.69	3.02
Raversijde	40c	12.86	1	Oudenberg	34/4	8.23	2.36
Raversijde	40c	22.98	1.8	Oudenberg	34/4	8.11	2.33
Raversijde	40c	18.97	1.49	Oudenberg	34/4	6.94	2.24
Raversijde	40c	17.59	1.41	Oudenberg	34/4	6.01	1.94
Raversijde	40c	12.67	1.05	Oudenberg	34/4	8.2	2.69
Raversijde	40c	19.15	1.67	Oudenberg	34/4	7.67	2.54
Raversijde	40c	11.4	1	Oudenberg	34/4	5.43	1.8
Raversijde	40c	18.31	1.67	Oudenberg	34/4	5	1.67
Raversijde	40c	12.58	1.2	Oudenberg	34/4	8.8	3.14

Raversijde	40c	12.26	1.2	Oudenberg	34/4	8.5	3.07
Raversijde	40c	19.87	2.03	Oudenberg	34/4	4.96	1.8
Raversijde	40c	11.4	1.2	Oudenberg	34/4	5.43	2
Raversijde	40c	15.85	1.8	Oudenberg	34/4	2.67	1
Raversijde	40c	17.04	2.03	Oudenberg	34/4	5	1.89
Raversijde	40c	8.77	1.05	Oudenberg	34/4	4.35	1.67
Raversijde	40c	11.24	1.41	Oudenberg	34/4	5.47	2.13
Raversijde	40c	14.07	1.8	Oudenberg	34/4	3.61	1.41
Raversijde	40c	12.97	1.67	Oudenberg	34/4	5.17	2.03
Raversijde	40c	8.11	1.05	Oudenberg	34/4	4.92	1.94
Raversijde	40c	18.76	2.43	Oudenberg	34/4	8.52	3.43
Raversijde	40c	13.12	1.7	Oudenberg	34/4	5.83	2.4
Raversijde	40c	10.03	1.33	Oudenberg	34/4	5.37	2.24
Raversijde	40c	17.74	2.36	Oudenberg	34/4	6.13	2.67
Raversijde	40c	11.1	1.49	Oudenberg	34/4	3.77	1.67
Raversijde	40c	11.08	1.49	Oudenberg	34/4	4.33	1.94
Raversijde	40c	12.4	1.67	Oudenberg	34/4	4.71	2.13
Raversijde	40c	17.16	2.33	Oudenberg	34/4	5.83	2.69
Raversijde	40c	10.03	1.41	Oudenberg	34/4	7.01	3.28
Raversijde	40c	7.38	1.05	Oudenberg	34/4	3.8	1.8
Raversijde	40c	8.35	1.2	Oudenberg	34/4	4.01	1.94
Raversijde	40c	12.39	1.89	Oudenberg	34/4	4.63	2.24
Raversijde	40c	11.08	1.7	Oudenberg	34/4	4.92	2.4
Raversijde	40c	15.06	2.4	Oudenberg	34/4	3.9	1.94
Raversijde	40c	13.02	2.11	Oudenberg	34/4	4.47	2.24
Raversijde	40c	13.87	2.36	Oudenberg	34/4	3.61	1.89
Raversijde	40c	8.25	1.41	Oudenberg	34/4	4.45	2.43
Raversijde	40c	11.21	1.94	Oudenberg	34/4	3.54	1.94
Raversijde	40c	13.74	2.4	Oudenberg	34/4	4.63	2.54
Raversijde	40c	5.96	1.05	Oudenberg	34/4	7.78	4.33
Raversijde	40c	10.18	1.89	Oudenberg	34/4	2.4	1.37
Raversijde	40c	9.06	1.7	Oudenberg	34/4	5.73	3.33
Raversijde	40c	12.53	2.36	Oudenberg	34/4	2.4	1.49
Raversijde	40c	12.87	2.43	Oudenberg	34/4	3.8	2.43
Raversijde	40c	12.26	2.36	Oudenberg	34/4	2.85	1.89
Raversijde	40c	10.46	2.03	Oudenberg	34/4	3.48	2.33
Raversijde	40c	10.65	2.11	Oudenberg	34/4	4.24	3.07
Raversijde	40c	5.96	1.2	Oudenberg	34/4	3.73	3.02
Raversijde	40c	11.74	2.43	Oudenberg	34/4	3.59	3.07
Raversijde	40c	12.83	2.75	Oudenberg	34/4	2.67	2.33
Raversijde	40c	5.39	1.2	Oudenberg	34/4	2.4	2.13
Raversijde	40c	9.07	2.11	Oudenberg	34/4	3.02	2.69
Raversijde	40c	10.02	2.36	Oudenberg	34/4	3.68	3.33
Raversijde	40c	6.29	1.49	Oudenberg	34/4	2.6	2.43
Raversijde	40c	14.38	3.43	Oudenberg	34/4	3.14	3.07
Raversijde	40c	8.44	2.03	Oudenberg	34/4	2.85	2.83
Raversijde	40c	5.66	1.41	Oudenberg	34/4	3.16	3.14
Raversijde	40c	11.49	2.87	Oudenberg	51/a	46.91	1.89
Raversijde	40c	8.52	2.13	Oudenberg	51/a	27.59	1.2
Raversijde	40c	6.67	1.67	Oudenberg	51/a	47.76	2.13
Raversijde	40c	8.5	2.13	Oudenberg	51/a	27.76	1.33
Raversijde	40c	4.18	1.05	Oudenberg	51/a	24.29	1.2
Raversijde	40c	5.93	1.49	Oudenberg	51/a	13.44	0.67
Raversijde	40c	6.57	1.67	Oudenberg	51/a	15.95	0.94

Raversijde	40c	12.82	3.43	Oudenberg	51/a	12.68	0.75
Raversijde	40c	9.87	2.67	Oudenberg	51/a	15.72	1
Raversijde	40c	3.68	1	Oudenberg	51/a	33.05	2.11
Raversijde	40c	4.77	1.33	Oudenberg	51/a	17.67	1.2
Raversijde	40c	6.87	1.94	Oudenberg	51/a	13.86	1
Raversijde	40c	5.19	1.49	Oudenberg	51/a	23.31	1.7
Raversijde	40c	9.2	2.69	Oudenberg	51/a	31.37	2.54
Raversijde	40c	7.18	2.13	Oudenberg	51/a	18.21	1.49
Raversijde	40c	4.01	1.2	Oudenberg	51/a	16.61	1.37
Raversijde	40c	6.41	1.94	Oudenberg	51/a	26.62	2.24
Raversijde	40c	6.94	2.11	Oudenberg	51/a	23.65	2.13
Raversijde	40c	8.54	2.6	Oudenberg	51/a	9.91	0.94
Raversijde	40c	3.89	1.2	Oudenberg	51/a	17.6	1.7
Raversijde	40c	8.23	2.54	Oudenberg	51/a	12.26	1.2
Raversijde	40c	11.47	3.54	Oudenberg	51/a	7.62	0.75
Raversijde	40c	7.77	2.4	Oudenberg	51/a	19.42	1.94
Raversijde	40c	6.75	2.13	Oudenberg	51/a	23.26	2.36
Raversijde	40c	5.93	1.89	Oudenberg	51/a	16.35	1.67
Raversijde	40c	3.28	1.05	Oudenberg	51/a	19.33	2
Raversijde	40c	4.12	1.33	Oudenberg	51/a	14.38	1.49
Raversijde	40c	6.29	2.11	Oudenberg	51/a	18.07	1.89
Raversijde	40c	4.96	1.67	Oudenberg	51/a	19.73	2.13
Raversijde	40c	4.18	1.41	Oudenberg	51/a	12.13	1.37
Raversijde	40c	5.55	1.94	Oudenberg	51/a	14.72	1.67
Raversijde	40c	5.67	2.03	Oudenberg	51/a	15.9	1.89
Raversijde	40c	5.93	2.13	Oudenberg	51/a	12.41	1.49
Raversijde	40c	6.15	2.24	Oudenberg	51/a	9.49	1.2
Raversijde	40c	6.13	2.24	Oudenberg	51/a	8.28	1.05
Raversijde	40c	3.61	1.33	Oudenberg	51/a	14.7	1.89
Raversijde	40c	4.77	1.8	Oudenberg	51/a	14.98	1.94
Raversijde	40c	3.9	1.49	Oudenberg	51/a	16.28	2.13
Raversijde	40c	4.35	1.7	Oudenberg	51/a	12.67	1.67
Raversijde	40c	4.96	1.94	Oudenberg	51/a	17.29	2.36
Raversijde	40c	4.53	1.8	Oudenberg	51/a	17.57	2.4
Raversijde	40c	3.67	1.49	Oudenberg	51/a	9.99	1.37
Raversijde	40c	4.12	1.7	Oudenberg	51/a	5.43	0.75
Raversijde	40c	4.01	1.67	Oudenberg	51/a	24.33	3.48
Raversijde	40c	4.01	1.7	Oudenberg	51/a	8.36	1.2
Raversijde	40c	5.67	2.43	Oudenberg	51/a	13.86	2
Raversijde	40c	3.89	1.67	Oudenberg	51/a	8.8	1.37
Raversijde	40c	8.36	3.68	Oudenberg	51/a	8.54	1.41
Raversijde	40c	5.17	2.33	Oudenberg	51/a	25.37	4.33
Raversijde	40c	6.6	2.98	Oudenberg	51/a	8.49	1.49
Raversijde	40c	5.27	2.4	Oudenberg	51/a	5.67	1
Raversijde	40c	2.98	1.37	Oudenberg	51/a	8.06	1.49
Raversijde	40c	6.34	3.02	Oudenberg	51/a	9.01	1.67
Raversijde	40c	5.55	2.69	Oudenberg	51/a	14.06	2.67
Raversijde	40c	4.35	2.13	Oudenberg	51/a	5.39	1.05
Raversijde	40c	3.77	1.89	Oudenberg	51/a	10.93	2.13
Raversijde	40c	4.67	2.36	Oudenberg	51/a	5.1	1
Raversijde	40c	4.07	2.11	Oudenberg	51/a	8.5	1.67
Raversijde	40c	2.87	1.49	Oudenberg	51/a	7.45	1.49
Raversijde	40c	4.53	2.4	Oudenberg	51/a	11.6	2.4
Raversijde	40c	4.74	2.54	Oudenberg	51/a	8.2	1.7

Raversijde	40c	5.66	3.07	Oudenberg	51/a	7.81	1.67
Raversijde	40c	3.07	1.67	Oudenberg	51/a	12.12	2.6
Raversijde	40c	4.33	2.36	Oudenberg	51/a	5.55	1.2
Raversijde	40c	5.59	3.07	Oudenberg	51/a	7.67	1.67
Raversijde	40c	3.68	2.03	Oudenberg	51/a	8.67	2
Raversijde	40c	4.06	2.24	Oudenberg	51/a	6.4	1.49
Raversijde	40c	6.57	3.73	Oudenberg	51/a	13.19	3.14
Raversijde	40c	3.73	2.13	Oudenberg	51/a	5.68	1.37
Raversijde	40c	4.77	2.75	Oudenberg	51/a	6.67	1.67
Raversijde	40c	3.35	1.94	Oudenberg	51/a	9.34	2.36
Raversijde	40c	3.33	1.94	Oudenberg	51/a	5.68	1.49
Raversijde	40c	3.35	2	Oudenberg	51/a	7.95	2.11
Raversijde	40c	3.35	2	Oudenberg	51/a	11.74	3.14
Raversijde	40c	3.4	2.03	Oudenberg	51/a	9.02	2.43
Raversijde	40c	4.01	2.4	Oudenberg	51/a	10.59	2.87
Raversijde	40c	3.33	2	Oudenberg	51/a	5.04	1.49
Raversijde	40c	3.68	2.24	Oudenberg	51/a	7.16	2.13
Raversijde	40c	4.07	2.54	Oudenberg	51/a	4.71	1.41
Raversijde	40c	3.33	2.13	Oudenberg	51/a	4.53	1.37
Raversijde	40c	5.55	3.61	Oudenberg	51/a	4.74	1.49
Raversijde	40c	9.61	6.29	Oudenberg	51/a	3.77	1.2
Raversijde	40c	4.74	3.14	Oudenberg	51/a	4.67	1.49
Raversijde	40c	4.63	3.07	Oudenberg	51/a	6.23	2.03
Raversijde	40c	4.18	2.85	Oudenberg	51/a	9.2	3.07
Raversijde	40c	3.89	2.69	Oudenberg	51/a	10.73	3.61
Raversijde	40c	3.33	2.36	Oudenberg	51/a	7.18	2.43
Raversijde	40c	3.14	2.24	Oudenberg	51/a	5.43	1.94
Raversijde	40c	2.69	1.94	Oudenberg	51/a	6.96	2.54
Raversijde	40c	5.52	4.01	Oudenberg	51/a	5.27	1.94
Raversijde	40c	2.6	1.94	Oudenberg	51/a	2.85	1.05
Raversijde	40c	3.16	2.36	Oudenberg	51/a	2.85	1.05
Raversijde	40c	2.4	1.8	Oudenberg	51/a	4.45	1.67
Raversijde	40c	2.83	2.13	Oudenberg	51/a	8.98	3.4
Raversijde	40c	5	3.8	Oudenberg	51/a	6.32	2.43
Raversijde	40c	3.07	2.36	Oudenberg	51/a	5.1	2
Raversijde	40c	2.6	2	Oudenberg	51/a	5.08	2.11
Raversijde	40c	3.02	2.36	Oudenberg	51/a	5.68	2.4
Raversijde	40c	4.74	3.77	Oudenberg	51/a	4.96	2.13
Raversijde	40c	5.73	4.64	Oudenberg	51/a	11.49	5.01
Raversijde	40c	4.74	3.89	Oudenberg	51/a	5.39	2.36
Raversijde	40c	3.73	3.07	Oudenberg	51/a	6.8	2.98
Raversijde	40c	2.6	2.24	Oudenberg	51/a	3.73	1.67
Raversijde	40c	2.6	2.24	Oudenberg	51/a	7.4	3.35
Raversijde	40c	2.98	2.6	Oudenberg	51/a	4.47	2.03
Raversijde	40c	3.48	3.07	Oudenberg	51/a	5.01	2.36
Raversijde	40c	4.27	3.8	Oudenberg	51/a	5.09	2.4
Raversijde	40c	3.48	3.14	Oudenberg	51/a	3.89	1.89
Raversijde	40c	5	4.53	Oudenberg	51/a	3.48	1.7
Raversijde	40c	2.11	1.94	Oudenberg	51/a	2.69	1.37
Raversijde	40c	4.01	3.8	Oudenberg	51/a	4	2.24
Raversijde	40c	2.4	2.36	Oudenberg	51/a	4.03	2.43
Raversijde	41b	31.16	0.67	Oudenberg	51/a	3.9	2.36
Raversijde	41b	19.19	0.47	Oudenberg	51/a	4.33	2.69
Raversijde	41b	15.29	0.67	Oudenberg	51/a	3.8	2.4

Raversijde	41b	22.47	1.05	Oudenberg	51/a	4.33	2.75
Raversijde	41b	19.68	0.94	Oudenberg	51/a	2.03	1.33
Raversijde	41b	34.88	1.67	Oudenberg	51/a	2.54	1.67
Raversijde	41b	13.57	0.75	Oudenberg	51/a	1	0.67
Raversijde	41b	21.42	1.2	Oudenberg	51/a	5.21	3.54
Raversijde	41b	30.64	1.89	Oudenberg	51/a	7.2	4.92
Raversijde	41b	25.63	1.67	Oudenberg	51/a	2.43	1.67
Raversijde	41b	15.73	1.05	Oudenberg	51/a	3.28	2.36
Raversijde	41b	20.37	1.37	Oudenberg	51/a	2.36	1.7
Raversijde	41b	17.75	1.2	Oudenberg	51/a	3.33	2.54
Raversijde	41b	13.27	0.94	Oudenberg	51/a	2.4	1.94
Raversijde	41b	24.53	1.8	Oudenberg	51/a	3.73	3.02
Raversijde	41b	8.34	0.67	Oudenberg	51/a	2	1.67
Raversijde	41b	18.21	1.49	Oudenberg	51/a	2.87	2.54
Raversijde	41b	15.85	1.33	Oudenberg	51/a	2.69	2.6
Raversijde	41b	15.79	1.33	Oudenberg	51/a	1.7	1.7
Raversijde	41b	15.79	1.33	Oudenberg	51/a	2.6	2.6
Raversijde	41b	20.56	1.8	Oudenberg	20/01b	34.77	0.47
Raversijde	41b	20.33	1.8	Oudenberg	20/01b	72.43	1.8
Raversijde	41b	15.84	1.41	Oudenberg	20/01b	14.62	0.75
Raversijde	41b	10.03	0.94	Oudenberg	20/01b	48.16	2.69
Raversijde	41b	13.68	1.33	Oudenberg	20/01b	29.31	1.67
Raversijde	41b	16.86	1.67	Oudenberg	20/01b	19.73	1.2
Raversijde	41b	11.91	1.2	Oudenberg	20/01b	16.55	1.05
Raversijde	41b	11.79	1.2	Oudenberg	20/01b	13.22	0.94
Raversijde	41b	10.15	1.05	Oudenberg	20/01b	16.4	1.2
Raversijde	41b	16.11	1.67	Oudenberg	20/01b	11.82	0.94
Raversijde	41b	9.81	1.05	Oudenberg	20/01b	12.97	1.05
Raversijde	41b	9.71	1.05	Oudenberg	20/01b	16.87	1.41
Raversijde	41b	9.17	1	Oudenberg	20/01b	24.13	2.03
Raversijde	41b	12.12	1.33	Oudenberg	20/01b	15.51	1.33
Raversijde	41b	14.68	1.67	Oudenberg	20/01b	17.25	1.49
Raversijde	41b	15.81	1.8	Oudenberg	20/01b	11.6	1.05
Raversijde	41b	17.03	1.94	Oudenberg	20/01b	11.38	1.05
Raversijde	41b	14.24	1.67	Oudenberg	20/01b	16.1	1.49
Raversijde	41b	18.86	2.36	Oudenberg	20/01b	15.84	1.49
Raversijde	41b	11.79	1.49	Oudenberg	20/01b	11.08	1.05
Raversijde	41b	11.74	1.49	Oudenberg	20/01b	15.29	1.49
Raversijde	41b	9.07	1.2	Oudenberg	20/01b	6.8	0.67
Raversijde	41b	7.78	1.05	Oudenberg	20/01b	10.59	1.05
Raversijde	41b	7.61	1.05	Oudenberg	20/01b	6.74	0.67
Raversijde	41b	6.71	0.94	Oudenberg	20/01b	14.87	1.49
Raversijde	41b	8.5	1.2	Oudenberg	20/01b	13.5	1.37
Raversijde	41b	9.33	1.33	Oudenberg	20/01b	13.68	1.41
Raversijde	41b	13.21	1.89	Oudenberg	20/01b	12.98	1.37
Raversijde	41b	8.28	1.2	Oudenberg	20/01b	6.13	0.67
Raversijde	41b	8.07	1.2	Oudenberg	20/01b	8.5	0.94
Raversijde	41b	8.07	1.2	Oudenberg	20/01b	10.67	1.2
Raversijde	41b	5.04	0.75	Oudenberg	20/01b	14.79	1.7
Raversijde	41b	8.06	1.2	Oudenberg	20/01b	11.18	1.33
Raversijde	41b	9.1	1.37	Oudenberg	20/01b	8.2	1
Raversijde	41b	4.96	0.75	Oudenberg	20/01b	8.52	1.05
Raversijde	41b	6.94	1.05	Oudenberg	20/01b	11.93	1.49
Raversijde	41b	22.01	3.35	Oudenberg	20/01b	7.87	1

Raversijde	41b	10.77	1.7	Oudenberg	20/01b	18.66	2.4
Raversijde	41b	8.39	1.33	Oudenberg	20/01b	12.65	1.67
Raversijde	41b	7.36	1.2	Oudenberg	20/01b	10.02	1.33
Raversijde	41b	8.35	1.41	Oudenberg	20/01b	12.98	1.8
Raversijde	41b	4.12	0.75	Oudenberg	20/01b	21.38	2.98
Raversijde	41b	7.49	1.41	Oudenberg	20/01b	14.35	2.03
Raversijde	41b	9.55	1.8	Oudenberg	20/01b	7.13	1.05
Raversijde	41b	7.34	1.41	Oudenberg	20/01b	11.31	1.67
Raversijde	41b	6.13	1.2	Oudenberg	20/01b	4.33	0.67
Raversijde	41b	6.67	1.33	Oudenberg	20/01b	14.47	2.33
Raversijde	41b	3.67	0.75	Oudenberg	20/01b	11.4	1.89
Raversijde	41b	6.87	1.41	Oudenberg	20/01b	11.38	1.89
Raversijde	41b	5.04	1.05	Oudenberg	20/01b	9.69	1.67
Raversijde	41b	6.67	1.41	Oudenberg	20/01b	10.88	1.94
Raversijde	41b	7.87	1.67	Oudenberg	20/01b	7.67	1.37
Raversijde	41b	10.54	2.24	Oudenberg	20/01b	11.08	2
Raversijde	41b	7.78	1.7	Oudenberg	20/01b	7.34	1.33
Raversijde	41b	8.81	1.94	Oudenberg	20/01b	7.77	1.41
Raversijde	41b	6	1.33	Oudenberg	20/01b	7.4	1.37
Raversijde	41b	9.55	2.13	Oudenberg	20/01b	9.01	1.67
Raversijde	41b	5.27	1.2	Oudenberg	20/01b	7.33	1.37
Raversijde	41b	5.71	1.33	Oudenberg	20/01b	5.34	1
Raversijde	41b	6.37	1.49	Oudenberg	20/01b	7.31	1.37
Raversijde	41b	14.24	3.35	Oudenberg	20/01b	7.28	1.37
Raversijde	41b	5.91	1.41	Oudenberg	20/01b	5.19	1
Raversijde	41b	6.87	1.67	Oudenberg	20/01b	9.67	1.94
Raversijde	41b	5.59	1.37	Oudenberg	20/01b	6.84	1.41
Raversijde	41b	5.67	1.41	Oudenberg	20/01b	8.65	1.8
Raversijde	41b	4.77	1.2	Oudenberg	20/01b	6.01	1.33
Raversijde	41b	7.4	1.89	Oudenberg	20/01b	4.63	1.05
Raversijde	41b	6.41	1.67	Oudenberg	20/01b	8.25	1.89
Raversijde	41b	4.01	1.05	Oudenberg	20/01b	7.13	1.67
Raversijde	41b	6.37	1.67	Oudenberg	20/01b	5	1.2
Raversijde	41b	5.67	1.49	Oudenberg	20/01b	11.79	2.87
Raversijde	41b	6.34	1.67	Oudenberg	20/01b	5.93	1.49
Raversijde	41b	7.7	2.03	Oudenberg	20/01b	6.62	1.67
Raversijde	41b	4.85	1.33	Oudenberg	20/01b	4.12	1.05
Raversijde	41b	3.59	1	Oudenberg	20/01b	4.45	1.2
Raversijde	41b	6.32	1.8	Oudenberg	20/01b	6.15	1.7
Raversijde	41b	3.67	1.05	Oudenberg	20/01b	4.77	1.33
Raversijde	41b	5.09	1.49	Oudenberg	20/01b	6.84	1.94
Raversijde	41b	2.54	0.75	Oudenberg	20/01b	4.18	1.2
Raversijde	41b	7.56	2.24	Oudenberg	20/01b	6.67	2.03
Raversijde	41b	4.01	1.2	Oudenberg	20/01b	6.13	1.89
Raversijde	41b	3.33	1	Oudenberg	20/01b	2.98	0.94
Raversijde	41b	5.66	1.7	Oudenberg	20/01b	4.33	1.37
Raversijde	41b	4.96	1.49	Oudenberg	20/01b	5.34	1.7
Raversijde	41b	7.01	2.11	Oudenberg	20/01b	3.61	1.2
Raversijde	41b	7.81	2.36	Oudenberg	20/01b	4.22	1.41
Raversijde	41b	3.8	1.2	Oudenberg	20/01b	4.92	1.67
Raversijde	41b	6.12	1.94	Oudenberg	20/01b	4.96	1.7
Raversijde	41b	8.98	2.85	Oudenberg	20/01b	5.17	1.8
Raversijde	41b	9.43	3.02	Oudenberg	20/01b	4.68	1.67
Raversijde	41b	7.87	2.54	Oudenberg	20/01b	4.71	1.7

Raversijde	41b	3	1	Oudenberg	20/01b	6.94	2.54
Raversijde	41b	5.22	1.8	Oudenberg	20/01b	7.06	2.6
Raversijde	41b	3.02	1.05	Oudenberg	20/01b	5.34	2.11
Raversijde	41b	4.77	1.67	Oudenberg	20/01b	4.96	2
Raversijde	41b	4.77	1.7	Oudenberg	20/01b	5.9	2.4
Raversijde	41b	4.64	1.67	Oudenberg	20/01b	8.14	3.33
Raversijde	41b	3.68	1.33	Oudenberg	20/01b	4.74	1.94
Raversijde	41b	7.81	2.83	Oudenberg	20/01b	6.37	2.69
Raversijde	41b	2.75	1	Oudenberg	20/01b	3.33	1.41
Raversijde	41b	4.85	1.8	Oudenberg	20/01b	6.67	2.87
Raversijde	41b	4.45	1.67	Oudenberg	20/01b	2.75	1.2
Raversijde	41b	5.67	2.24	Oudenberg	20/01b	5.34	2.36
Raversijde	41b	5.47	2.24	Oudenberg	20/01b	3.33	1.49
Raversijde	41b	6.2	2.54	Oudenberg	20/01b	5.17	2.36
Raversijde	41b	4.03	1.67	Oudenberg	20/01b	6.87	3.14
Raversijde	41b	5.08	2.11	Oudenberg	20/01b	3.9	1.8
Raversijde	41b	5.68	2.36	Oudenberg	20/01b	3.8	1.8
Raversijde	41b	5.37	2.24	Oudenberg	20/01b	3.8	1.8
Raversijde	41b	2.87	1.2	Oudenberg	20/01b	4.22	2.03
Raversijde	41b	3.54	1.49	Oudenberg	20/01b	4.01	2
Raversijde	41b	2.85	1.2	Oudenberg	20/01b	4.53	2.4
Raversijde	41b	4.47	1.94	Oudenberg	20/01b	5.01	2.69
Raversijde	41b	2.75	1.2	Oudenberg	20/01b	4.07	2.43
Raversijde	41b	4.12	1.8	Oudenberg	20/01b	4.01	2.4
Raversijde	41b	5.43	2.4	Oudenberg	20/01b	2.43	1.49
Raversijde	41b	6.01	2.67	Oudenberg	20/01b	3.28	2.03
Raversijde	41b	4.77	2.13	Oudenberg	20/01b	3.77	2.36
Raversijde	41b	3.33	1.49	Oudenberg	20/01b	2.11	1.33
Raversijde	41b	3.14	1.41	Oudenberg	20/01b	3.67	2.33
Raversijde	41b	4.74	2.13	Oudenberg	20/01b	2.69	1.8
Raversijde	41b	5.1	2.33	Oudenberg	20/01b	2.36	1.8
Raversijde	41b	4.53	2.11	Oudenberg	20/01b	3.4	2.67
Raversijde	41b	3.8	1.8	Oudenberg	20/01b	1.41	1.2
Raversijde	41b	5.47	2.6	Oudenberg	20/01b	2.98	2.6
Raversijde	41b	2.11	1.05	Oudenberg	20/01b	2.87	2.54
Raversijde	41b	3.4	1.7	Oudenberg	20/01b	2.85	2.54
Raversijde	41b	4	2	Oudenberg	20/01b	2.11	2
Raversijde	41b	3.8	1.94	Oudenberg	20/01b	2.11	2
Raversijde	41b	1.8	0.94	Oudenberg	20/01b	4.03	3.9
Raversijde	41b	3.59	1.94	Oudenberg	20/01b	1.41	1.37
Raversijde	41b	3.89	2.13	Oudenberg	20/01b	2.69	2.67
Raversijde	41b	3.02	1.67	Oudenberg	24/2a	34	1.67
Raversijde	41b	3	1.7	Oudenberg	24/2a	29.22	1.94
Raversijde	41b	2.6	1.49	Oudenberg	24/2a	26.08	1.94
Raversijde	41b	4	2.33	Oudenberg	24/2a	15.55	1.2
Raversijde	41b	3.33	1.94	Oudenberg	24/2a	15.51	1.2
Raversijde	41b	3.33	1.94	Oudenberg	24/2a	20.92	1.67
Raversijde	41b	2.33	1.37	Oudenberg	24/2a	12.35	1
Raversijde	41b	4.01	2.36	Oudenberg	24/2a	26.7	2.4
Raversijde	41b	3.35	2	Oudenberg	24/2a	16.58	1.8
Raversijde	41b	3.8	2.33	Oudenberg	24/2a	12.87	1.49
Raversijde	41b	2.69	1.67	Oudenberg	24/2a	10.09	1.2
Raversijde	41b	2.67	1.67	Oudenberg	24/2a	7.7	0.94
Raversijde	41b	3.07	2	Oudenberg	24/2a	14.24	1.8

Raversijde	41b	2.54	1.67	Oudenberg	24/2a	14.93	1.89
Raversijde	41b	4.96	3.35	Oudenberg	24/2a	15.71	2.03
Raversijde	41b	3.48	2.36	Oudenberg	24/2a	7.67	1
Raversijde	41b	3.07	2.13	Oudenberg	24/2a	10.46	1.37
Raversijde	41b	3.73	2.6	Oudenberg	24/2a	12.57	1.67
Raversijde	41b	3.73	2.6	Oudenberg	24/2a	12.33	1.7
Raversijde	41b	3.33	2.33	Oudenberg	24/2a	9.48	1.33
Raversijde	41b	3.43	2.43	Oudenberg	24/2a	8.49	1.2
Raversijde	41b	2.36	1.7	Oudenberg	24/2a	9.34	1.33
Raversijde	41b	2.69	2.03	Oudenberg	24/2a	11.84	1.7
Raversijde	41b	1.94	1.49	Oudenberg	24/2a	17.83	2.6
Raversijde	41b	3.07	2.43	Oudenberg	24/2a	19.23	2.87
Raversijde	41b	3.28	2.6	Oudenberg	24/2a	9.91	1.49
Raversijde	41b	2.54	2.03	Oudenberg	24/2a	14.64	2.24
Raversijde	41b	3.8	3.07	Oudenberg	24/2a	6.37	1
Raversijde	41b	2.6	2.13	Oudenberg	24/2a	10.14	1.7
Raversijde	41b	2.85	2.36	Oudenberg	24/2a	9.91	1.67
Raversijde	41b	2.03	1.7	Oudenberg	24/2a	11.04	1.89
Raversijde	41b	3.14	2.69	Oudenberg	24/2a	9.02	1.7
Raversijde	41b	1.94	1.67	Oudenberg	24/2a	8.69	1.67
Raversijde	41b	2.69	2.36	Oudenberg	24/2a	8.43	1.67
Raversijde	41b	2.4	2.13	Oudenberg	24/2a	8.34	1.67
Raversijde	41b	1.33	1.2	Oudenberg	24/2a	6.26	1.33
Raversijde	41b	2.6	2.36	Oudenberg	24/2a	10.85	2.33
Raversijde	41b	1.94	1.8	Oudenberg	24/2a	7.67	1.67
Raversijde	41b	2.4	2.24	Oudenberg	24/2a	9.62	2.11
Raversijde	41b	2.36	2.24	Oudenberg	24/2a	7.67	1.8
Raversijde	41b	2.98	2.83	Oudenberg	24/2a	7.01	1.67
Raversijde	41b	2.43	2.33	Oudenberg	24/2a	8.33	2.03
Raversijde	41b	2.11	2.03	Oudenberg	24/2a	7.49	1.94
Raversijde	41b	2.43	2.36	Oudenberg	24/2a	8.67	2.33
Raversijde	41b	1.94	1.89	Oudenberg	24/2a	12.04	3.28
Raversijde	41b	2.11	2.11	Oudenberg	24/2a	5.37	1.49
Raversijde	47a	45.96	1.37	Oudenberg	24/2a	8.98	2.54
Raversijde	47a	28.25	1.33	Oudenberg	24/2a	4.77	1.37
Raversijde	47a	12.67	0.67	Oudenberg	24/2a	5.08	1.49
Raversijde	47a	21.45	1.2	Oudenberg	24/2a	10.35	3.07
Raversijde	47a	16.1	1.2	Oudenberg	24/2a	6.04	1.8
Raversijde	47a	9.99	0.75	Oudenberg	24/2a	5.96	1.89
Raversijde	47a	13.87	1.05	Oudenberg	24/2a	3.14	1
Raversijde	47a	13.23	1.05	Oudenberg	24/2a	5.08	1.67
Raversijde	47a	18.35	1.49	Oudenberg	24/2a	5.82	1.94
Raversijde	47a	12.12	1.05	Oudenberg	24/2a	4.22	1.41
Raversijde	47a	37.85	3.43	Oudenberg	24/2a	5.47	1.89
Raversijde	47a	14.52	1.33	Oudenberg	24/2a	4.03	1.41
Raversijde	47a	12.87	1.2	Oudenberg	24/2a	5	1.8
Raversijde	47a	10.01	1	Oudenberg	24/2a	6.13	2.24
Raversijde	47a	9.69	1	Oudenberg	24/2a	5.47	2.11
Raversijde	47a	8.65	0.94	Oudenberg	24/2a	5.04	2
Raversijde	47a	15.15	1.67	Oudenberg	24/2a	5.01	2
Raversijde	47a	13.39	1.49	Oudenberg	24/2a	5.27	2.11
Raversijde	47a	13.93	1.8	Oudenberg	24/2a	3.43	1.41
Raversijde	47a	7.31	1	Oudenberg	24/2a	2.54	1.05
Raversijde	47a	9.67	1.37	Oudenberg	24/2a	2.85	1.2

Raversijde	47a	6.75	1	Oudenberg	24/2a	7.01	3
Raversijde	47a	18.04	2.75	Oudenberg	24/2a	4.96	2.13
Raversijde	47a	6.71	1.05	Oudenberg	24/2a	5.52	2.43
Raversijde	47a	14.07	2.24	Oudenberg	24/2a	3.73	1.67
Raversijde	47a	23.6	3.8	Oudenberg	24/2a	5.27	2.36
Raversijde	47a	14.36	2.54	Oudenberg	24/2a	4.53	2.03
Raversijde	47a	19.94	3.61	Oudenberg	24/2a	8.01	3.61
Raversijde	47a	10.35	1.89	Oudenberg	24/2a	5.67	2.6
Raversijde	47a	7.45	1.37	Oudenberg	24/2a	2.98	1.37
Raversijde	47a	8.98	1.67	Oudenberg	24/2a	2.87	1.37
Raversijde	47a	7.6	1.49	Oudenberg	24/2a	4.06	2
Raversijde	47a	5.04	1	Oudenberg	24/2a	3.3	1.67
Raversijde	47a	7.4	1.49	Oudenberg	24/2a	4.71	2.4
Raversijde	47a	6.41	1.33	Oudenberg	24/2a	3.73	1.94
Raversijde	47a	11.13	2.33	Oudenberg	24/2a	4.53	2.36
Raversijde	47a	7.95	1.67	Oudenberg	24/2a	5.71	3.02
Raversijde	47a	10.01	2.11	Oudenberg	24/2a	1.41	0.75
Raversijde	47a	9.6	2.03	Oudenberg	24/2a	4.71	2.54
Raversijde	47a	10.35	2.24	Oudenberg	24/2a	3.54	1.94
Raversijde	47a	5.47	1.2	Oudenberg	24/2a	2.54	1.49
Raversijde	47a	7.67	1.7	Oudenberg	24/2a	3.59	2.11
Raversijde	47a	6.71	1.49	Oudenberg	24/2a	3.77	2.24
Raversijde	47a	17.91	4.01	Oudenberg	24/2a	5.09	3.07
Raversijde	47a	7.85	1.8	Oudenberg	24/2a	3.89	2.36
Raversijde	47a	12.49	2.87	Oudenberg	24/2a	3.16	1.94
Raversijde	47a	5.08	1.2	Oudenberg	24/2a	3.59	2.24
Raversijde	47a	9.69	2.36	Oudenberg	24/2a	2.67	1.7
Raversijde	47a	6.84	1.67	Oudenberg	24/2a	3.73	2.4
Raversijde	47a	7.31	1.8	Oudenberg	24/2a	4.07	2.69
Raversijde	47a	7.78	1.94	Oudenberg	24/2a	3	2
Raversijde	47a	4.81	1.2	Oudenberg	24/2a	3.3	2.24
Raversijde	47a	4	1	Oudenberg	24/2a	5.37	3.67
Raversijde	47a	5.91	1.49	Oudenberg	24/2a	3.07	2.11
Raversijde	47a	9.36	2.36	Oudenberg	24/2a	3.73	2.6
Raversijde	47a	9.3	2.4	Oudenberg	24/2a	1.89	1.37
Raversijde	47a	9.26	2.4	Oudenberg	24/2a	3.89	2.83
Raversijde	47a	3.54	0.94	Oudenberg	24/2a	4.64	3.61
Raversijde	47a	5	1.33	Oudenberg	24/2a	2.67	2.11
Raversijde	47a	6.12	1.67	Oudenberg	24/2a	3.73	2.98
Raversijde	47a	6.01	1.67	Oudenberg	24/2a	2.87	2.36
Raversijde	47a	5.96	1.67	Oudenberg	24/2a	3.54	2.98
Raversijde	47a	6.67	1.89	Oudenberg	24/2a	3.07	2.6
Raversijde	47a	6.44	1.89	Oudenberg	24/2a	2.83	2.69
Raversijde	47a	7.18	2.11	Oudenberg	24/2a	3.73	3.68
Raversijde	47a	4.07	1.2	Oudenberg	24/2a	1.94	1.94
Raversijde	47a	9.53	2.87	Oudenberg	24/2a	3.02	3.02
Raversijde	47a	6.7	2.03	Oudenberg	29/1	19.41	0.67
Raversijde	47a	6.2	1.89	Oudenberg	29/1	40.37	1.49
Raversijde	47a	3.9	1.2	Oudenberg	29/1	35.03	1.37
Raversijde	47a	4.53	1.41	Oudenberg	29/1	25.49	1.2
Raversijde	47a	4.77	1.49	Oudenberg	29/1	25.1	1.2
Raversijde	47a	3.33	1.05	Oudenberg	29/1	32.89	1.8
Raversijde	47a	5.96	1.94	Oudenberg	29/1	18.87	1.05
Raversijde	47a	8.75	2.85	Oudenberg	29/1	18.87	1.05

Raversijde	47a	5.09	1.67	Oudenberg	29/1	8.03	0.47
Raversijde	47a	4.53	1.49	Oudenberg	29/1	15.5	0.94
Raversijde	47a	6.04	2	Oudenberg	29/1	11.51	0.75
Raversijde	47a	4.01	1.33	Oudenberg	29/1	20.73	1.37
Raversijde	47a	4.67	1.67	Oudenberg	29/1	19.31	1.37
Raversijde	47a	6.55	2.36	Oudenberg	29/1	14.31	1.05
Raversijde	47a	4.12	1.49	Oudenberg	29/1	25.98	1.94
Raversijde	47a	7.01	2.54	Oudenberg	29/1	11.95	0.94
Raversijde	47a	4.07	1.49	Oudenberg	29/1	17.21	1.37
Raversijde	47a	4.63	1.7	Oudenberg	29/1	12.45	1
Raversijde	47a	5.34	2	Oudenberg	29/1	9.29	0.75
Raversijde	47a	6.15	2.36	Oudenberg	29/1	17	1.41
Raversijde	47a	2.69	1.05	Oudenberg	29/1	16.97	1.41
Raversijde	47a	3.4	1.33	Oudenberg	29/1	17.5	1.49
Raversijde	47a	10.75	4.22	Oudenberg	29/1	13.74	1.2
Raversijde	47a	5.7	2.24	Oudenberg	29/1	17.01	1.49
Raversijde	47a	7.31	3.02	Oudenberg	29/1	13.67	1.2
Raversijde	47a	4.03	1.67	Oudenberg	29/1	9.67	0.94
Raversijde	47a	6.12	2.54	Oudenberg	29/1	28.14	2.75
Raversijde	47a	3.9	1.67	Oudenberg	29/1	16.86	1.67
Raversijde	47a	2.33	1	Oudenberg	29/1	7.56	0.75
Raversijde	47a	4.67	2.03	Oudenberg	29/1	13.07	1.37
Raversijde	47a	3.8	1.67	Oudenberg	29/1	22.98	2.43
Raversijde	47a	2.69	1.2	Oudenberg	29/1	15.2	1.67
Raversijde	47a	6.7	3.07	Oudenberg	29/1	9.02	1
Raversijde	47a	3.61	1.67	Oudenberg	29/1	18.24	2.03
Raversijde	47a	4.18	1.94	Oudenberg	29/1	8.98	1
Raversijde	47a	5.68	2.69	Oudenberg	29/1	14.93	1.67
Raversijde	47a	3.14	1.49	Oudenberg	29/1	27.67	3.16
Raversijde	47a	2.87	1.37	Oudenberg	29/1	10.46	1.2
Raversijde	47a	3.07	1.49	Oudenberg	29/1	10.18	1.2
Raversijde	47a	4.12	2	Oudenberg	29/1	8.5	1.05
Raversijde	47a	4.33	2.11	Oudenberg	29/1	12.05	1.49
Raversijde	47a	2.11	1.05	Oudenberg	29/1	17.18	2.13
Raversijde	47a	3.35	1.67	Oudenberg	29/1	19.23	2.4
Raversijde	47a	4.48	2.24	Oudenberg	29/1	17.59	2.24
Raversijde	47a	3.33	1.7	Oudenberg	29/1	10.75	1.37
Raversijde	47a	4.35	2.24	Oudenberg	29/1	13	1.67
Raversijde	47a	6.41	3.33	Oudenberg	29/1	8.06	1.05
Raversijde	47a	2.85	1.49	Oudenberg	29/1	11.32	1.49
Raversijde	47a	6.01	3.16	Oudenberg	29/1	10.03	1.37
Raversijde	47a	4.01	2.13	Oudenberg	29/1	7.61	1.05
Raversijde	47a	3.54	1.94	Oudenberg	29/1	11.7	1.67
Raversijde	47a	3.54	1.94	Oudenberg	29/1	11.64	1.67
Raversijde	47a	3.28	1.8	Oudenberg	29/1	13.93	2.03
Raversijde	47a	4.24	2.36	Oudenberg	29/1	5.01	0.75
Raversijde	47a	4.01	2.36	Oudenberg	29/1	8.86	1.33
Raversijde	47a	5.1	3.02	Oudenberg	29/1	9.69	1.49
Raversijde	47a	3.59	2.13	Oudenberg	29/1	8.83	1.37
Raversijde	47a	4.01	2.4	Oudenberg	29/1	11.57	1.8
Raversijde	47a	4.01	2.4	Oudenberg	29/1	5.82	0.94
Raversijde	47a	3.73	2.24	Oudenberg	29/1	10.41	1.7
Raversijde	47a	3.54	2.13	Oudenberg	29/1	8.36	1.37
Raversijde	47a	2.75	1.67	Oudenberg	29/1	7.92	1.33

Raversijde	47a	2.67	1.67	Oudenberg	29/1	11.84	2.03
Raversijde	47a	2.6	1.67	Oudenberg	29/1	3.89	0.67
Raversijde	47a	2.6	1.67	Oudenberg	29/1	11.24	2.03
Raversijde	47a	2.54	1.67	Oudenberg	29/1	5.08	0.94
Raversijde	47a	4.06	2.69	Oudenberg	29/1	12.81	2.43
Raversijde	47a	2.83	1.89	Oudenberg	29/1	8.65	1.67
Raversijde	47a	3.89	2.6	Oudenberg	29/1	10.03	1.94
Raversijde	47a	2.98	2.03	Oudenberg	29/1	3.8	0.75
Raversijde	47a	3.4	2.33	Oudenberg	29/1	8.35	1.67
Raversijde	47a	3.35	2.33	Oudenberg	29/1	12.02	2.43
Raversijde	47a	2.13	1.49	Oudenberg	29/1	5.09	1.05
Raversijde	47a	2.36	1.67	Oudenberg	29/1	6.75	1.41
Raversijde	47a	3.16	2.24	Oudenberg	29/1	6.75	1.41
Raversijde	47a	3.33	2.4	Oudenberg	29/1	5	1.05
Raversijde	47a	2.69	1.94	Oudenberg	29/1	6.47	1.37
Raversijde	47a	2.69	1.94	Oudenberg	29/1	7.67	1.7
Raversijde	47a	4.35	3.16	Oudenberg	29/1	10.01	2.24
Raversijde	47a	3.43	2.54	Oudenberg	29/1	4.68	1.05
Raversijde	47a	3.61	2.69	Oudenberg	29/1	9.01	2.03
Raversijde	47a	2.85	2.13	Oudenberg	29/1	7.4	1.67
Raversijde	47a	1.33	1	Oudenberg	29/1	4.63	1.05
Raversijde	47a	4.33	3.33	Oudenberg	29/1	7.34	1.67
Raversijde	47a	3.35	2.67	Oudenberg	29/1	6.41	1.49
Raversijde	47a	2.13	1.7	Oudenberg	29/1	9.1	2.13
Raversijde	47a	5.52	4.48	Oudenberg	29/1	6.29	1.49
Raversijde	47a	4.07	3.35	Oudenberg	29/1	3.9	0.94
Raversijde	47a	3.07	2.54	Oudenberg	29/1	3.07	0.75
Raversijde	47a	3.8	3.16	Oudenberg	29/1	11.97	2.98
Raversijde	47a	3.02	2.54	Oudenberg	29/1	10.77	2.69
Raversijde	47a	3.89	3.28	Oudenberg	29/1	2.98	0.75
Raversijde	47a	2.36	2	Oudenberg	29/1	5.91	1.49
Raversijde	47a	1.94	1.67	Oudenberg	29/1	8.36	2.11
Raversijde	47a	2.4	2.11	Oudenberg	29/1	7.2	1.94
Raversijde	47a	2.4	2.13	Oudenberg	29/1	7.75	2.11
Raversijde	47a	2	1.8	Oudenberg	29/1	9.24	2.54
Raversijde	47a	2.6	2.36	Oudenberg	29/1	5.37	1.49
Raversijde	47a	4.77	4.35	Oudenberg	29/1	6.44	1.8
Raversijde	47a	4.38	4.01	Oudenberg	29/1	12.78	3.61
Raversijde	47a	4.71	4.35	Oudenberg	29/1	5.83	1.67
Raversijde	47a	4.01	3.8	Oudenberg	29/1	7.01	2.03
Raversijde	47a	2.36	2.24	Oudenberg	29/1	8.98	2.69
Raversijde	47a	3.28	3.14	Oudenberg	29/1	8.88	2.69
Raversijde	47a	1.89	1.89	Oudenberg	29/1	4.33	1.33
Raversijde	47a	4.81	4.81	Oudenberg	29/1	6.57	2.03
Raversijde	48c	61.12	1.2	Oudenberg	29/1	3.33	1.05
Raversijde	48c	48.45	1.05	Oudenberg	29/1	5.17	1.7
Raversijde	48c	22.66	0.75	Oudenberg	29/1	7.38	2.43
Raversijde	48c	46.71	1.7	Oudenberg	29/1	1.41	0.47
Raversijde	48c	18.19	0.75	Oudenberg	29/1	6.87	2.43
Raversijde	48c	16.61	0.94	Oudenberg	29/1	5.59	2.03
Raversijde	48c	21.18	1.2	Oudenberg	29/1	5.82	2.13
Raversijde	48c	27.59	1.67	Oudenberg	29/1	12.65	4.64
Raversijde	48c	21.04	1.37	Oudenberg	29/1	7.7	2.85
Raversijde	48c	13.49	0.94	Oudenberg	29/1	1.8	0.67

Raversijde	48c	35.94	2.6	Oudenberg	29/1	4.48	1.67
Raversijde	48c	16.93	1.33	Oudenberg	29/1	3.89	1.49
Raversijde	48c	22.53	1.8	Oudenberg	29/1	6.15	2.36
Raversijde	48c	22.45	1.8	Oudenberg	29/1	5.27	2.04
Raversijde	48c	22.07	1.8	Oudenberg	29/1	6.8	2.69
Raversijde	48c	11.51	0.94	Oudenberg	29/1	3.73	1.49
Raversijde	48c	9.1	0.75	Oudenberg	29/1	6.04	2.54
Raversijde	48c	14.27	1.2	Oudenberg	29/1	5	2.11
Raversijde	48c	21.22	1.89	Oudenberg	29/1	5.21	2.24
Raversijde	48c	10.75	1	Oudenberg	29/1	6.94	3.02
Raversijde	48c	14.8	1.41	Oudenberg	29/1	4.64	2.13
Raversijde	48c	19.79	1.89	Oudenberg	29/1	4.01	1.89
Raversijde	48c	15.1	1.49	Oudenberg	29/1	4.35	2.13
Raversijde	48c	10.44	1.05	Oudenberg	29/1	3	1.49
Raversijde	48c	16.09	1.67	Oudenberg	29/1	2.98	1.49
Raversijde	48c	10.05	1.05	Oudenberg	29/1	3.33	1.67
Raversijde	48c	11.04	1.2	Oudenberg	29/1	3.07	1.67
Raversijde	48c	24.7	2.69	Oudenberg	29/1	4.24	2.4
Raversijde	48c	14.24	1.67	Oudenberg	29/1	3	1.7
Raversijde	48c	8.52	1	Oudenberg	29/1	3.33	1.94
Raversijde	48c	11.32	1.37	Oudenberg	29/1	2.98	1.8
Raversijde	48c	9.85	1.2	Oudenberg	29/1	3.35	2.03
Raversijde	48c	15.62	1.94	Oudenberg	29/1	3.3	2
Raversijde	48c	13.22	1.67	Oudenberg	29/1	3.43	2.11
Raversijde	48c	17.6	2.24	Oudenberg	29/1	2.4	1.49
Raversijde	48c	9.27	1.2	Oudenberg	29/1	1.2	0.75
Raversijde	48c	9.26	1.2	Oudenberg	29/1	4.96	3.28
Raversijde	48c	19.42	2.54	Oudenberg	29/1	4.01	2.69
Raversijde	48c	14.18	1.94	Oudenberg	29/1	4.53	3.07
Raversijde	48c	8.69	1.2	Oudenberg	29/1	2.13	1.49
Raversijde	48c	5.39	0.75	Oudenberg	29/1	2.43	1.7
Raversijde	48c	18.66	2.69	Oudenberg	29/1	2.4	1.7
Raversijde	48c	12.37	1.8	Oudenberg	29/1	3.8	2.75
Raversijde	48c	6.37	0.94	Oudenberg	29/1	3.9	2.85
Raversijde	48c	11.28	1.67	Oudenberg	29/1	2.54	1.89
Raversijde	48c	13.21	2.03	Oudenberg	29/1	3.61	2.75
Raversijde	48c	12.62	1.94	Oudenberg	29/1	3.89	2.98
Raversijde	48c	12.53	1.94	Oudenberg	29/1	2.43	1.89
Raversijde	48c	12.29	1.94	Oudenberg	29/1	1.8	1.41
Raversijde	48c	9.29	1.49	Oudenberg	29/1	1.89	1.49
Raversijde	48c	8.34	1.37	Oudenberg	29/1	4.27	3.48
Raversijde	48c	8.28	1.37	Oudenberg	29/1	1.67	1.41
Raversijde	48c	11.38	1.94	Oudenberg	29/1	2.36	2.03
Raversijde	48c	8.12	1.41	Oudenberg	29/1	3.07	2.69
Raversijde	48c	11.1	1.94	Oudenberg	29/1	2.4	2.13
Raversijde	48c	9.55	1.7	Oudenberg	29/1	3.4	3.02
Raversijde	48c	14.91	2.69	Oudenberg	29/1	3.02	2.69
Raversijde	48c	11.05	2.03	Oudenberg	29/1	3.68	3.48
Raversijde	48c	8.01	1.49	Oudenberg	29/1	2.98	2.83
Raversijde	48c	5.37	1	Oudenberg	29/1	2.43	2.4
Raversijde	48c	10.38	1.94	Ename	33c	46.45	0.75
Raversijde	48c	16.4	3.14	Ename	33c	38.2	0.75
Raversijde	48c	7.03	1.37	Ename	33c	16.74	0.33
Raversijde	48c	11.72	2.36	Ename	33c	61.06	1.8

Raversijde	48c	8.2	1.7	Ename	33c	33.39	1.05
Raversijde	48c	16.92	3.54	Ename	33c	13.96	0.47
Raversijde	48c	15.56	3.3	Ename	33c	13.42	0.47
Raversijde	48c	8.98	1.94	Ename	33c	33.27	1.2
Raversijde	48c	7.73	1.67	Ename	33c	18.31	0.67
Raversijde	48c	4.85	1.05	Ename	33c	37.74	1.67
Raversijde	48c	10.14	2.24	Ename	33c	16.28	0.75
Raversijde	48c	6.01	1.33	Ename	33c	25.7	1.2
Raversijde	48c	7.4	1.67	Ename	33c	25.41	1.2
Raversijde	48c	4.33	1	Ename	33c	15.09	0.75
Raversijde	48c	9.69	2.24	Ename	33c	23.49	1.2
Raversijde	48c	7.78	1.8	Ename	33c	12.87	0.67
Raversijde	48c	6.41	1.49	Ename	33c	58.34	3.07
Raversijde	48c	6.4	1.49	Ename	33c	19.08	1.05
Raversijde	48c	7.92	1.89	Ename	33c	23.84	1.49
Raversijde	48c	15.07	3.61	Ename	33c	9.67	0.67
Raversijde	48c	9.91	2.4	Ename	33c	19.26	1.37
Raversijde	48c	8.5	2.11	Ename	33c	34.06	2.54
Raversijde	48c	10.47	2.6	Ename	33c	11.64	0.94
Raversijde	48c	4	1	Ename	33c	27.1	2.36
Raversijde	48c	4.01	1.05	Ename	33c	18.91	1.67
Raversijde	48c	7.21	1.89	Ename	33c	16.18	1.49
Raversijde	48c	5	1.33	Ename	33c	10.18	0.94
Raversijde	48c	8.98	2.4	Ename	33c	10.16	0.94
Raversijde	48c	8.8	2.4	Ename	33c	24.13	2.24
Raversijde	48c	5.43	1.49	Ename	33c	9.84	0.94
Raversijde	48c	5.37	1.49	Ename	33c	6.75	0.67
Raversijde	48c	6.04	1.7	Ename	33c	7.36	0.75
Raversijde	48c	7.03	2.03	Ename	33c	20.54	2.11
Raversijde	48c	5.75	1.67	Ename	33c	8.14	0.94
Raversijde	48c	6.67	1.94	Ename	33c	14.15	1.67
Raversijde	48c	4.68	1.37	Ename	33c	16.4	1.94
Raversijde	48c	4.68	1.37	Ename	33c	8.6	1.05
Raversijde	48c	4.07	1.2	Ename	33c	8	1
Raversijde	48c	8.6	2.54	Ename	33c	9.55	1.2
Raversijde	48c	4.63	1.37	Ename	33c	19.09	2.43
Raversijde	48c	4.45	1.33	Ename	33c	7.07	0.94
Raversijde	48c	8.67	2.6	Ename	33c	13.33	1.8
Raversijde	48c	5.59	1.7	Ename	33c	2.36	0.33
Raversijde	48c	3.9	1.2	Ename	33c	14.58	2.11
Raversijde	48c	6.87	2.13	Ename	33c	16.58	2.4
Raversijde	48c	4.77	1.49	Ename	33c	9.91	1.49
Raversijde	48c	6.47	2.03	Ename	33c	9.84	1.49
Raversijde	48c	5.73	1.8	Ename	33c	8.86	1.37
Raversijde	48c	5.9	1.89	Ename	33c	9.1	1.49
Raversijde	48c	5.21	1.67	Ename	33c	9.8	1.67
Raversijde	48c	6.04	1.94	Ename	33c	13.44	2.36
Raversijde	48c	7.03	2.33	Ename	33c	10.2	1.89
Raversijde	48c	5.04	1.7	Ename	33c	5.37	1.05
Raversijde	48c	3.9	1.37	Ename	33c	5	1
Raversijde	48c	6	2.11	Ename	33c	5.93	1.2
Raversijde	48c	5.1	1.8	Ename	33c	6.55	1.33
Raversijde	48c	9.55	3.4	Ename	33c	12.08	2.69
Raversijde	48c	6.7	2.43	Ename	33c	6.67	1.49

Raversijde	48c	3.73	1.37	Ename	33c	7.21	1.67
Raversijde	48c	7.01	2.6	Ename	33c	7.21	1.67
Raversijde	48c	5.67	2.11	Ename	33c	5.83	1.41
Raversijde	48c	3.68	1.37	Ename	33c	6.41	1.7
Raversijde	48c	5.34	2	Ename	33c	9.74	2.6
Raversijde	48c	6.37	2.4	Ename	33c	5.47	1.49
Raversijde	48c	3.14	1.2	Ename	33c	6.8	2
Raversijde	48c	4.35	1.67	Ename	33c	5.22	1.8
Raversijde	48c	5.83	2.24	Ename	33c	4.63	1.7
Raversijde	48c	9.34	3.59	Ename	33c	3.8	1.41
Raversijde	48c	4.27	1.67	Ename	33c	4.01	1.49
Raversijde	48c	3.73	1.49	Ename	33c	4.01	1.49
Raversijde	48c	4.06	1.67	Ename	33c	5.73	2.13
Raversijde	48c	4	1.67	Ename	33c	4.18	1.67
Raversijde	48c	7.34	3.07	Ename	33c	5.83	2.4
Raversijde	48c	5.09	2.13	Ename	33c	5.67	2.36
Raversijde	48c	4.85	2.03	Ename	33c	2.36	1
Raversijde	48c	5.39	2.36	Ename	33c	5.27	2.36
Raversijde	48c	4.35	1.94	Ename	33c	3.07	1.49
Raversijde	48c	6.8	3.07	Ename	33c	4.71	2.36
Raversijde	48c	3.02	1.37	Ename	33c	1.8	0.94
Raversijde	48c	5.19	2.36	Ename	33c	4.74	2.6
Raversijde	48c	3.07	1.41	Ename	33c	3.07	1.7
Raversijde	48c	4.33	2	Ename	33c	2.13	1.2
Raversijde	48c	6.12	2.83	Ename	33c	3.43	1.94
Raversijde	48c	3.59	1.67	Ename	33c	3.73	2.11
Raversijde	48c	3.73	1.8	Ename	33c	2.4	1.37
Raversijde	48c	2.03	1	Ename	33c	1.8	1.05
Raversijde	48c	2.4	1.2	Ename	33c	3.89	2.36
Raversijde	48c	3.59	1.8	Ename	33c	2.87	1.8
Raversijde	48c	1.33	0.67	Ename	33c	3.07	1.94
Raversijde	48c	4.64	2.36	Ename	33c	1.89	1.2
Raversijde	48c	4.07	2.11	Ename	33c	6.29	4.18
Raversijde	48c	3.67	1.94	Ename	33c	2.24	1.49
Raversijde	48c	3.68	2	Ename	33c	2.11	1.49
Raversijde	48c	3.67	2	Ename	33c	1.94	1.37
Raversijde	48c	3.68	2.03	Ename	33c	4.03	2.87
Raversijde	48c	6.15	3.4	Ename	33c	2.33	1.67
Raversijde	48c	2.69	1.49	Ename	33c	3.59	2.6
Raversijde	48c	4.64	2.6	Ename	33c	2.75	2
Raversijde	48c	7.18	4.03	Ename	33c	2.98	2.24
Raversijde	48c	5.55	3.14	Ename	33c	4.85	3.73
Raversijde	48c	2.6	1.49	Ename	33c	4.03	3.33
Raversijde	48c	3.14	1.8	Ename	33c	3.07	2.6
Raversijde	48c	2.43	1.41	Ename	33c	2.36	2
Raversijde	48c	2.43	1.41	Ename	33c	4.27	4.01
Raversijde	48c	2.33	1.37	Ename	33c	1.05	1.05
Raversijde	48c	4.53	2.69	Ename	33c	1.67	1.67
Raversijde	48c	3.14	1.89	Ename	33c	3	3
Raversijde	48c	2.98	1.8	Ename	49b	42.94	2.4
Raversijde	48c	2.67	1.67	Ename	49b	48.86	2.87
Raversijde	48c	2.83	1.8	Ename	49b	33.33	2.13
Raversijde	48c	2.33	1.49	Ename	49b	25.22	1.67
Raversijde	48c	2.98	1.94	Ename	49b	17.87	1.33

Raversijde	48c	6.47	4.24	Ename	49b	12.4	0.94
Raversijde	48c	2.4	1.67	Ename	49b	15.11	1.2
Raversijde	48c	2.11	1.49	Ename	49b	11.31	0.94
Raversijde	48c	2.36	1.67	Ename	49b	31.76	2.87
Raversijde	48c	4.63	3.3	Ename	49b	16.28	1.49
Raversijde	48c	2.98	2.13	Ename	49b	14.34	1.33
Raversijde	48c	2.98	2.13	Ename	49b	59.45	5.66
Raversijde	48c	3.61	2.6	Ename	49b	15.36	1.49
Raversijde	48c	2.36	1.7	Ename	49b	12.78	1.37
Raversijde	48c	3.33	2.4	Ename	49b	11.64	1.33
Raversijde	48c	2.6	1.89	Ename	49b	8.01	0.94
Raversijde	48c	2.33	1.7	Ename	49b	16.09	1.94
Raversijde	48c	3.02	2.24	Ename	49b	9.48	1.2
Raversijde	48c	2.24	1.67	Ename	49b	12.49	1.67
Raversijde	48c	2.67	2.03	Ename	49b	5.47	0.75
Raversijde	48c	2.54	1.94	Ename	49b	13.68	1.94
Raversijde	48c	4.53	3.48	Ename	49b	8.36	1.2
Raversijde	48c	3.07	2.4	Ename	49b	7.01	1.05
Raversijde	48c	2.98	2.36	Ename	49b	7.67	1.2
Raversijde	48c	3.73	3	Ename	49b	16.47	2.6
Raversijde	48c	2.83	2.36	Ename	49b	19.09	3.02
Raversijde	48c	2	1.67	Ename	49b	11.82	1.89
Raversijde	48c	2.36	2	Ename	49b	10.41	1.67
Raversijde	48c	3.14	2.69	Ename	49b	4	0.67
Raversijde	48c	1.94	1.67	Ename	49b	5.96	1
Raversijde	48c	1.89	1.67	Ename	49b	9.74	1.67
Raversijde	48c	3.02	2.67	Ename	49b	7.6	1.41
Raversijde	48c	2.87	2.54	Ename	49b	13.8	2.6
Raversijde	48c	0.75	0.67	Ename	49b	12.17	2.43
Raversijde	48c	3.14	2.83	Ename	49b	9.87	2
Raversijde	48c	2.69	2.43	Ename	49b	11.31	2.4
Raversijde	48c	3.07	2.83	Ename	49b	7.78	1.67
Raversijde	48c	3.8	3.61	Ename	49b	6.62	1.49
Raversijde	48c	3.73	3.59	Ename	49b	6.62	1.49
Raversijde	48c	3.43	3.33	Ename	49b	8.6	1.94
Raversijde	48c	3.4	3.33	Ename	49b	10.35	2.4
Raversijde	48c	3.33	3.28	Ename	49b	12.12	2.83
Raversijde	48c	2.33	2.33	Ename	49b	10.01	2.36
Raversijde	48c	1.67	1.67	Ename	49b	5.9	1.41
Raversijde	48c	2.85	2.85	Ename	49b	9.71	2.43
Raversijde	54b	31.22	0.67	Ename	49b	6.75	1.7
Raversijde	54b	14.27	0.33	Ename	49b	5.93	1.67
Raversijde	54b	69.54	2.03	Ename	49b	5.21	1.67
Raversijde	54b	41.44	1.67	Ename	49b	6.4	2.13
Raversijde	54b	46.14	2.54	Ename	49b	3.43	1.2
Raversijde	54b	22.65	1.41	Ename	49b	5.73	2.11
Raversijde	54b	15.16	1.05	Ename	49b	6.12	2.43
Raversijde	54b	27.83	1.94	Ename	49b	4.47	2.03
Raversijde	54b	14.7	1.05	Ename	49b	5.19	2.36
Raversijde	54b	16.55	1.2	Ename	49b	2.6	1.2
Raversijde	54b	26.72	1.94	Ename	49b	3.07	1.49
Raversijde	54b	34.39	2.54	Ename	49b	8.14	4.01
Raversijde	54b	28.29	2.13	Ename	49b	4.81	2.54
Raversijde	54b	34.53	2.75	Ename	49b	5.37	2.87

Raversijde	54b	9.34	0.75	Ename	49b	4.35	2.36
Raversijde	54b	11.49	1	Ename	49b	6.26	3.43
Raversijde	54b	18.13	1.67	Ename	49b	4.68	2.69
Raversijde	54b	29.08	2.69	Ename	49b	6.55	3.8
Raversijde	54b	24.16	2.24	Ename	49b	3.33	1.94
Raversijde	54b	10.46	1.05	Ename	49b	2.4	1.49
Raversijde	54b	12.69	1.33	Ename	49b	2.4	1.49
Raversijde	54b	35.85	3.8	Ename	49b	4.64	3.07
Raversijde	54b	15.76	1.7	Ename	49b	2.13	1.67
Raversijde	54b	11.1	1.2	Ename	49b	2.13	1.67
Raversijde	54b	27.16	3.07	Ename	49b	2.13	1.67
Raversijde	54b	14.97	1.8	Ename	49b	2.13	1.94
Raversijde	54b	10.59	1.37	Ename	49b	3.43	3.14
Raversijde	54b	9.22	1.2	Ename	49b	2.83	2.6
Raversijde	54b	9.15	1.2	Ename	49b	2.98	2.87
Raversijde	54b	14.35	1.94	Ename	49b	3.14	3.14
Raversijde	54b	12.37	1.7	Ename	16a	24.78	1.05
Raversijde	54b	15.09	2.13	Ename	16a	31.34	1.41
Raversijde	54b	16.67	2.36	Ename	16a	25.94	1.37
Raversijde	54b	14.9	2.13	Ename	16a	17.03	0.94
Raversijde	54b	9.8	1.41	Ename	16a	24.07	1.41
Raversijde	54b	11.57	1.67	Ename	16a	34.47	2.03
Raversijde	54b	14.04	2.03	Ename	16a	16.87	1.05
Raversijde	54b	18.35	2.75	Ename	16a	32.18	2.03
Raversijde	54b	11.04	1.67	Ename	16a	21.69	1.41
Raversijde	54b	13.2	2.13	Ename	16a	14.15	0.94
Raversijde	54b	17.67	3	Ename	16a	21.17	1.41
Raversijde	54b	6.13	1.05	Ename	16a	22.65	1.67
Raversijde	54b	11.28	1.94	Ename	16a	21.52	1.7
Raversijde	54b	23.74	4.27	Ename	16a	23.95	1.94
Raversijde	54b	20.62	3.8	Ename	16a	30.7	2.69
Raversijde	54b	11.35	2.11	Ename	16a	8.43	0.75
Raversijde	54b	11.32	2.13	Ename	16a	21.02	2.03
Raversijde	54b	10.54	2	Ename	16a	32.02	3.14
Raversijde	54b	8.23	1.67	Ename	16a	23.69	2.4
Raversijde	54b	13.74	2.83	Ename	16a	7.36	0.75
Raversijde	54b	8.07	1.67	Ename	16a	10.03	1.05
Raversijde	54b	9.8	2.03	Ename	16a	18.19	1.94
Raversijde	54b	8.5	1.94	Ename	16a	15.08	1.67
Raversijde	54b	6.41	1.49	Ename	16a	13.23	1.49
Raversijde	54b	14.64	3.43	Ename	16a	10.38	1.2
Raversijde	54b	9.81	2.36	Ename	16a	26.64	3.14
Raversijde	54b	16.2	4.03	Ename	16a	25.1	3.14
Raversijde	54b	6.55	1.67	Ename	16a	16.12	2.11
Raversijde	54b	8.17	2.11	Ename	16a	18.38	2.6
Raversijde	54b	8.2	2.13	Ename	16a	7.21	1.05
Raversijde	54b	5.47	1.49	Ename	16a	11.04	1.67
Raversijde	54b	7.28	2.03	Ename	16a	11.64	1.94
Raversijde	54b	13.04	3.73	Ename	16a	15.15	2.54
Raversijde	54b	10.54	3.14	Ename	16a	10.64	1.8
Raversijde	54b	9.07	2.75	Ename	16a	13.91	2.36
Raversijde	54b	8.14	2.54	Ename	16a	8.25	1.49
Raversijde	54b	7.54	2.4	Ename	16a	5.73	1.05
Raversijde	54b	7.07	2.36	Ename	16a	9.67	1.89

Raversijde	54b	8.54	3.07	Ename	16a	6.32	1.37
Raversijde	54b	6.2	2.24	Ename	16a	9.26	2.13
Raversijde	54b	5.66	2.13	Ename	16a	6.44	1.49
Raversijde	54b	5.09	1.94	Ename	16a	6.62	1.67
Raversijde	54b	5.7	2.24	Ename	16a	4.74	1.2
Raversijde	54b	10.08	4.27	Ename	16a	4.53	1.2
Raversijde	54b	9.15	3.9	Ename	16a	3.43	0.94
Raversijde	54b	5.19	2.24	Ename	16a	8.06	2.24
Raversijde	54b	6.7	3.02	Ename	16a	6.6	1.89
Raversijde	54b	5.22	2.36	Ename	16a	6.13	1.8
Raversijde	54b	5.43	2.54	Ename	16a	3.54	1.2
Raversijde	54b	5.73	2.69	Ename	16a	2.54	1
Raversijde	54b	8.69	4.22	Ename	16a	4.48	1.89
Raversijde	54b	4.68	2.33	Ename	16a	4.03	1.8
Raversijde	54b	4.22	2.13	Ename	16a	5.27	2.43
Raversijde	54b	5.67	2.87	Ename	16a	4.68	2.33
Raversijde	54b	3.4	1.8	Ename	16a	4.18	2.24
Raversijde	54b	3.14	1.8	Ename	16a	4.38	2.67
Raversijde	54b	4.33	2.54	Ename	16a	2.6	1.67
Raversijde	54b	9.53	5.9	Ename	16a	4.03	2.6
Raversijde	54b	4.33	2.69	Ename	16a	3.07	2.13
Raversijde	54b	4.85	3.16	Ename	16a	4.63	3.48
Raversijde	54b	2.03	1.33	Ename	16a	2.13	1.8
Raversijde	54b	3.16	2.13	Ename	16a	3.43	2.98
Raversijde	54b	3.07	2.13	Ename	16a	2.75	2.43
Raversijde	54b	4.67	3.4	Ename	16a	4.07	3.61
Raversijde	54b	2.83	2.13	Ename	16a	2.4	2.13
Raversijde	54b	2.98	2.4	Ename	16a	2.36	2.13
Raversijde	54b	4.07	3.3	Ename	16a	1.49	1.37
Raversijde	54b	3.07	2.54	Ename	16a	3.8	3.54
Raversijde	54b	3.59	3.07	Ename	16a	2.24	2.13
Raversijde	54b	3	2.67	Ename	16a	2.4	2.4
Raversijde	54b	4.71	4.33	Ename	32b	34.87	1.37
Raversijde	54b	2.83	2.69	Ename	32b	52.47	2.24
Raversijde	56a	32.57	1.37	Ename	32b	15.06	0.67
Raversijde	56a	32.57	1.37	Ename	32b	18.04	0.94
Raversijde	56a	26.44	1.33	Ename	32b	17.45	0.94
Raversijde	56a	26.44	1.33	Ename	32b	32.76	1.8
Raversijde	56a	13.04	0.67	Ename	32b	13.6	0.75
Raversijde	56a	13.04	0.67	Ename	32b	19.73	1.2
Raversijde	56a	44.32	2.33	Ename	32b	23.15	1.49
Raversijde	56a	44.32	2.33	Ename	32b	24.47	1.67
Raversijde	56a	17.4	1	Ename	32b	16.74	1.2
Raversijde	56a	17.4	1	Ename	32b	24.93	1.8
Raversijde	56a	32.69	2.11	Ename	32b	19.71	1.49
Raversijde	56a	32.69	2.11	Ename	32b	9.15	0.75
Raversijde	56a	14.18	0.94	Ename	32b	27.34	2.36
Raversijde	56a	14.18	0.94	Ename	32b	25.2	2.24
Raversijde	56a	35.85	2.43	Ename	32b	13.44	1.2
Raversijde	56a	35.85	2.43	Ename	32b	10.8	1
Raversijde	56a	25.51	1.8	Ename	32b	28.54	2.75
Raversijde	56a	25.51	1.8	Ename	32b	9.69	0.94
Raversijde	56a	23.14	1.67	Ename	32b	9.69	0.94
Raversijde	56a	23.14	1.67	Ename	32b	21.34	2.33

Raversijde	56a	22.16	1.7	Ename	32b	10.92	1.2
Raversijde	56a	22.16	1.7	Ename	32b	11.95	1.37
Raversijde	56a	19	1.67	Ename	32b	10.27	1.2
Raversijde	56a	19	1.67	Ename	32b	8.98	1.05
Raversijde	56a	28.78	2.54	Ename	32b	14.14	1.67
Raversijde	56a	28.78	2.54	Ename	32b	10.59	1.37
Raversijde	56a	20.92	1.89	Ename	32b	13.87	1.89
Raversijde	56a	20.92	1.89	Ename	32b	5.47	0.75
Raversijde	56a	16.47	1.49	Ename	32b	14.94	2.13
Raversijde	56a	16.47	1.49	Ename	32b	13.04	1.89
Raversijde	56a	15.06	1.37	Ename	32b	4.92	0.75
Raversijde	56a	15.06	1.37	Ename	32b	10.27	1.67
Raversijde	56a	17.94	1.67	Ename	32b	9.1	1.49
Raversijde	56a	17.94	1.67	Ename	32b	8.65	1.49
Raversijde	56a	12.41	1.2	Ename	32b	12.3	2.13
Raversijde	56a	12.41	1.2	Ename	32b	6.75	1.2
Raversijde	56a	17.95	1.8	Ename	32b	13.04	2.33
Raversijde	56a	17.95	1.8	Ename	32b	7.38	1.37
Raversijde	56a	19.47	2	Ename	32b	8.94	1.67
Raversijde	56a	19.47	2	Ename	32b	11.18	2.11
Raversijde	56a	7.21	0.75	Ename	32b	12.69	2.43
Raversijde	56a	7.21	0.75	Ename	32b	7.03	1.37
Raversijde	56a	16.06	1.8	Ename	32b	3.4	0.67
Raversijde	56a	16.06	1.8	Ename	32b	8.75	1.8
Raversijde	56a	21.21	2.4	Ename	32b	13.83	2.85
Raversijde	56a	21.21	2.4	Ename	32b	7.9	1.67
Raversijde	56a	6.62	0.75	Ename	32b	8.11	1.8
Raversijde	56a	6.62	0.75	Ename	32b	7.38	1.67
Raversijde	56a	11.72	1.37	Ename	32b	4.07	0.94
Raversijde	56a	11.72	1.37	Ename	32b	4.01	0.94
Raversijde	56a	14.24	1.67	Ename	32b	5.73	1.41
Raversijde	56a	14.24	1.67	Ename	32b	6.57	1.67
Raversijde	56a	13.89	1.67	Ename	32b	5.75	1.49
Raversijde	56a	13.89	1.67	Ename	32b	11.49	2.98
Raversijde	56a	11.02	1.37	Ename	32b	6.87	1.8
Raversijde	56a	11.02	1.37	Ename	32b	7.13	1.89
Raversijde	56a	8.35	1.05	Ename	32b	5.27	1.41
Raversijde	56a	8.35	1.05	Ename	32b	8.8	2.4
Raversijde	56a	31.37	4.06	Ename	32b	6.47	1.94
Raversijde	56a	31.37	4.06	Ename	32b	6.87	2.11
Raversijde	56a	10.64	1.41	Ename	32b	7.49	2.36
Raversijde	56a	10.64	1.41	Ename	32b	6.87	2.24
Raversijde	56a	12.22	1.67	Ename	32b	4.35	1.49
Raversijde	56a	12.22	1.67	Ename	32b	6.13	2.13
Raversijde	56a	11.47	1.67	Ename	32b	5.01	2.03
Raversijde	56a	11.47	1.67	Ename	32b	5.22	2.13
Raversijde	56a	9.39	1.37	Ename	32b	3.59	1.49
Raversijde	56a	9.39	1.37	Ename	32b	3.73	1.67
Raversijde	56a	9.87	1.49	Ename	32b	4.96	2.24
Raversijde	56a	9.87	1.49	Ename	32b	4.24	1.94
Raversijde	56a	11.18	1.7	Ename	32b	4.22	1.94
Raversijde	56a	11.18	1.7	Ename	32b	3.89	1.8
Raversijde	56a	4.38	0.67	Ename	32b	4.81	2.24
Raversijde	56a	4.38	0.67	Ename	32b	4.45	2.11

Raversijde	56a	21.67	3.33	Ename	32b	5.47	2.6
Raversijde	56a	21.67	3.33	Ename	32b	5.71	2.75
Raversijde	56a	11.49	1.8	Ename	32b	3.61	1.8
Raversijde	56a	11.49	1.8	Ename	32b	3.54	1.8
Raversijde	56a	9.85	1.67	Ename	32b	2.69	1.37
Raversijde	56a	9.85	1.67	Ename	32b	5.83	3.16
Raversijde	56a	12.49	2.13	Ename	32b	4.74	2.6
Raversijde	56a	12.49	2.13	Ename	32b	3.07	1.7
Raversijde	56a	7.92	1.37	Ename	32b	3.43	1.94
Raversijde	56a	7.92	1.37	Ename	32b	5.19	3.07
Raversijde	56a	14.61	2.54	Ename	32b	3.14	1.94
Raversijde	56a	14.61	2.54	Ename	32b	3.77	2.4
Raversijde	56a	7.73	1.37	Ename	32b	4.35	2.98
Raversijde	56a	7.73	1.37	Ename	32b	3.43	2.4
Raversijde	56a	8.34	1.49	Ename	32b	2.85	2.13
Raversijde	56a	8.34	1.49	Ename	32b	1.67	1.33
Raversijde	56a	12.88	2.36	Ename	32b	3.16	2.54
Raversijde	56a	12.88	2.36	Ename	32b	3.35	2.75
Raversijde	56a	5.67	1.05	Ename	32b	3.07	2.6
Raversijde	56a	5.67	1.05	Ename	32b	2.11	1.8
Raversijde	56a	11.38	2.13	Ename	32b	3.67	3.33
Raversijde	56a	11.38	2.13	Ename	32b	3.07	2.87
Raversijde	56a	5.34	1	Ename	32b	3.61	3.43
Raversijde	56a	5.34	1	Ename	114b	47.39	1.8
Raversijde	56a	7.31	1.37	Ename	114b	22.41	0.94
Raversijde	56a	7.31	1.37	Ename	114b	22.75	1.05
Raversijde	56a	8.65	1.67	Ename	114b	62.94	3.02
Raversijde	56a	8.65	1.67	Ename	114b	9.26	0.47
Raversijde	56a	11.02	2.13	Ename	114b	60.87	3.14
Raversijde	56a	11.02	2.13	Ename	114b	53.69	2.98
Raversijde	56a	12.45	2.43	Ename	114b	30.09	1.8
Raversijde	56a	12.45	2.43	Ename	114b	11.81	0.75
Raversijde	56a	10.14	2	Ename	114b	21.47	1.49
Raversijde	56a	10.14	2	Ename	114b	9.43	0.67
Raversijde	56a	6.75	1.37	Ename	114b	64.38	4.63
Raversijde	56a	6.75	1.37	Ename	114b	20.67	1.49
Raversijde	56a	19.67	4.06	Ename	114b	17.94	1.41
Raversijde	56a	19.67	4.06	Ename	114b	19.69	1.7
Raversijde	56a	8.06	1.67	Ename	114b	15.8	1.41
Raversijde	56a	8.06	1.67	Ename	114b	30.97	2.85
Raversijde	56a	13.93	3.02	Ename	114b	16	1.49
Raversijde	56a	13.93	3.02	Ename	114b	15.67	1.49
Raversijde	56a	14	3.14	Ename	114b	7.8	0.75
Raversijde	56a	14	3.14	Ename	114b	16.83	1.67
Raversijde	56a	7.49	1.7	Ename	114b	14.06	1.41
Raversijde	56a	7.49	1.7	Ename	114b	21.65	2.24
Raversijde	56a	9.07	2.11	Ename	114b	30.68	3.28
Raversijde	56a	9.07	2.11	Ename	114b	15.54	1.67
Raversijde	56a	5.75	1.37	Ename	114b	15.44	1.67
Raversijde	56a	5.75	1.37	Ename	114b	15.35	1.67
Raversijde	56a	10.88	2.69	Ename	114b	17.48	1.94
Raversijde	56a	10.88	2.69	Ename	114b	14.15	1.67
Raversijde	56a	6.74	1.7	Ename	114b	13.78	1.67
Raversijde	56a	6.74	1.7	Ename	114b	8.07	1.05

Raversijde	56a	5.47	1.41	Ename	114b	5.73	0.75
Raversijde	56a	5.47	1.41	Ename	114b	7.7	1.05
Raversijde	56a	10.38	2.69	Ename	114b	11.95	1.67
Raversijde	56a	10.38	2.69	Ename	114b	11.93	1.67
Raversijde	56a	10.92	2.83	Ename	114b	20.73	2.98
Raversijde	56a	10.92	2.83	Ename	114b	11.34	1.7
Raversijde	56a	4.63	1.2	Ename	114b	8.83	1.33
Raversijde	56a	4.63	1.2	Ename	114b	10.35	1.67
Raversijde	56a	6.4	1.67	Ename	114b	8.72	1.41
Raversijde	56a	6.4	1.67	Ename	114b	11.08	1.8
Raversijde	56a	5.68	1.49	Ename	114b	10.09	1.67
Raversijde	56a	5.68	1.49	Ename	114b	15.04	2.6
Raversijde	56a	9.89	2.6	Ename	114b	6.94	1.2
Raversijde	56a	9.89	2.6	Ename	114b	17.16	2.98
Raversijde	56a	9.01	2.43	Ename	114b	13.86	2.43
Raversijde	56a	9.01	2.43	Ename	114b	18.87	3.33
Raversijde	56a	7.54	2.11	Ename	114b	12.69	2.24
Raversijde	56a	7.54	2.11	Ename	114b	11.41	2.03
Raversijde	56a	6.75	1.89	Ename	114b	14.73	2.69
Raversijde	56a	6.75	1.89	Ename	114b	14.68	2.69
Raversijde	56a	6.75	1.89	Ename	114b	14.97	2.75
Raversijde	56a	6.75	1.89	Ename	114b	6.41	1.2
Raversijde	56a	8.14	2.36	Ename	114b	10.29	1.94
Raversijde	56a	8.14	2.36	Ename	114b	7.18	1.37
Raversijde	56a	5.75	1.67	Ename	114b	14.47	2.87
Raversijde	56a	5.75	1.67	Ename	114b	11.79	2.43
Raversijde	56a	11.28	3.28	Ename	114b	5.59	1.2
Raversijde	56a	11.28	3.28	Ename	114b	10.8	2.33
Raversijde	56a	8.33	2.43	Ename	114b	5.27	1.2
Raversijde	56a	8.33	2.43	Ename	114b	8.5	1.94
Raversijde	56a	4.67	1.37	Ename	114b	7.21	1.67
Raversijde	56a	4.67	1.37	Ename	114b	9.6	2.24
Raversijde	56a	4.53	1.33	Ename	114b	12.53	2.98
Raversijde	56a	4.53	1.33	Ename	114b	8.65	2.13
Raversijde	56a	4.74	1.41	Ename	114b	9.76	2.43
Raversijde	56a	4.74	1.41	Ename	114b	10.67	2.67
Raversijde	56a	6.41	1.94	Ename	114b	12.21	3.07
Raversijde	56a	6.41	1.94	Ename	114b	7.67	1.94
Raversijde	56a	4.85	1.49	Ename	114b	10.03	2.54
Raversijde	56a	4.85	1.49	Ename	114b	10.76	2.87
Raversijde	56a	5.37	1.67	Ename	114b	8.98	2.4
Raversijde	56a	5.37	1.67	Ename	114b	13.2	3.54
Raversijde	56a	4.74	1.49	Ename	114b	6.62	1.8
Raversijde	56a	4.74	1.49	Ename	114b	11.28	3.07
Raversijde	56a	7.62	2.4	Ename	114b	8.43	2.33
Raversijde	56a	7.62	2.4	Ename	114b	7.67	2.13
Raversijde	56a	10.41	3.43	Ename	114b	6.87	1.94
Raversijde	56a	10.41	3.43	Ename	114b	5.21	1.49
Raversijde	56a	4.12	1.37	Ename	114b	6.13	1.8
Raversijde	56a	4.12	1.37	Ename	114b	6.74	2
Raversijde	56a	5	1.67	Ename	114b	5.55	1.67
Raversijde	56a	5	1.67	Ename	114b	9.22	2.83
Raversijde	56a	7.77	2.6	Ename	114b	5.9	1.94
Raversijde	56a	7.77	2.6	Ename	114b	5.17	2.03

Raversijde	56a	4.77	1.67	Ename	114b	9.1	3.59
Raversijde	56a	4.77	1.67	Ename	114b	13.37	5.37
Raversijde	56a	10.73	3.77	Ename	114b	6.67	2.69
Raversijde	56a	10.73	3.77	Ename	114b	3.33	1.37
Raversijde	56a	5.52	1.94	Ename	114b	4.18	1.8
Raversijde	56a	5.52	1.94	Ename	114b	5.82	2.54
Raversijde	56a	4.77	1.7	Ename	114b	5.22	2.4
Raversijde	56a	4.77	1.7	Ename	114b	3.89	1.8
Raversijde	56a	6.6	2.36	Ename	114b	3.89	1.8
Raversijde	56a	6.6	2.36	Ename	114b	4.01	1.89
Raversijde	56a	5.82	2.13	Ename	114b	4.96	2.36
Raversijde	56a	5.82	2.13	Ename	114b	5	2.43
Raversijde	56a	7.34	2.69	Ename	114b	4.92	2.4
Raversijde	56a	7.34	2.69	Ename	114b	5.82	2.85
Raversijde	56a	4.03	1.49	Ename	114b	4.53	2.54
Raversijde	56a	4.03	1.49	Ename	114b	5.43	3.07
Raversijde	56a	6.37	2.36	Ename	114b	5.27	3
Raversijde	56a	6.37	2.36	Ename	114b	2.6	1.49
Raversijde	56a	5.67	2.11	Ename	114b	3.67	2.11
Raversijde	56a	5.67	2.11	Ename	114b	7.34	4.27
Raversijde	56a	4.48	1.67	Ename	114b	6.41	3.73
Raversijde	56a	4.48	1.67	Ename	114b	4.48	2.87
Raversijde	56a	7.34	2.75	Ename	114b	4.71	3.02
Raversijde	56a	7.34	2.75	Ename	114b	5.68	3.8
Raversijde	56a	7.73	3.02	Ename	114b	3.07	2.11
Raversijde	56a	7.73	3.02	Ename	114b	3.4	2.36
Raversijde	56a	6.12	2.4	Ename	114b	2.13	1.49
Raversijde	56a	6.12	2.4	Ename	114b	3.8	2.69
Raversijde	56a	6.12	2.4	Ename	114b	4.74	3.43
Raversijde	56a	6.12	2.4	Ename	114b	5.37	3.9
Raversijde	56a	5.04	2.03	Ename	114b	3.43	2.6
Raversijde	56a	5.04	2.03	Ename	114b	3.35	2.69
Raversijde	56a	5.82	2.4	Ename	114b	2.6	2.11
Raversijde	56a	5.82	2.4	Ename	114b	2.36	2.13
Raversijde	56a	4.27	1.8	Ename	114b	2.13	2.13
Raversijde	56a	4.27	1.8	Ename	32a	62.02	1.41
Raversijde	56a	5.96	2.54	Ename	32a	64.53	2.03
Raversijde	56a	5.96	2.54	Ename	32a	167.72	5.59
Raversijde	56a	4.96	2.13	Ename	32a	79.46	2.87
Raversijde	56a	4.96	2.13	Ename	32a	26.54	1.05
Raversijde	56a	4.85	2.13	Ename	32a	38.01	2.13
Raversijde	56a	4.85	2.13	Ename	32a	38.43	2.36
Raversijde	56a	5.37	2.36	Ename	32a	43.33	2.83
Raversijde	56a	5.37	2.36	Ename	32a	54.3	3.61
Raversijde	56a	6.01	2.67	Ename	32a	48.79	3.54
Raversijde	56a	6.01	2.67	Ename	32a	26.69	1.94
Raversijde	56a	5.19	2.33	Ename	32a	17.45	1.49
Raversijde	56a	5.19	2.33	Ename	32a	19.53	1.67
Raversijde	56a	4.74	2.13	Ename	32a	35.01	3.73
Raversijde	56a	4.74	2.13	Ename	32a	29.41	3.14
Raversijde	56a	5.17	2.33	Ename	32a	21.62	2.36
Raversijde	56a	5.17	2.33	Ename	32a	16.74	1.94
Raversijde	56a	7.2	3.33	Ename	32a	20.28	2.36
Raversijde	56a	7.2	3.33	Ename	32a	29.68	3.48

Raversijde	56a	5.73	2.69	Ename	32a	15.51	1.89
Raversijde	56a	5.73	2.69	Ename	32a	10.92	1.37
Raversijde	56a	5.83	2.75	Ename	32a	14.9	1.89
Raversijde	56a	5.83	2.75	Ename	32a	19.49	2.54
Raversijde	56a	5	2.4	Ename	32a	22.59	2.98
Raversijde	56a	5	2.4	Ename	32a	19	2.69
Raversijde	56a	5	2.4	Ename	32a	16.85	2.4
Raversijde	56a	5	2.4	Ename	32a	17.9	2.87
Raversijde	56a	9.39	4.53	Ename	32a	20.67	3.35
Raversijde	56a	9.39	4.53	Ename	32a	8.01	1.33
Raversijde	56a	4.12	2.03	Ename	32a	6.01	1
Raversijde	56a	4.12	2.03	Ename	32a	14.88	2.54
Raversijde	56a	5.73	2.87	Ename	32a	18.45	3.16
Raversijde	56a	5.73	2.87	Ename	32a	15.38	2.69
Raversijde	56a	4.18	2.13	Ename	32a	23.65	4.35
Raversijde	56a	4.18	2.13	Ename	32a	18.38	3.73
Raversijde	56a	3.89	2.13	Ename	32a	7.92	1.67
Raversijde	56a	3.89	2.13	Ename	32a	10	2.13
Raversijde	56a	6.44	3.67	Ename	32a	12.13	2.69
Raversijde	56a	6.44	3.67	Ename	32a	12.87	3.07
Raversijde	56a	2.4	1.37	Ename	32a	11.1	2.67
Raversijde	56a	2.4	1.37	Ename	32a	12.45	3.02
Raversijde	56a	3.68	2.11	Ename	32a	16.06	4
Raversijde	56a	3.68	2.11	Ename	32a	19.39	4.96
Raversijde	56a	8.5	4.96	Ename	32a	11.1	2.85
Raversijde	56a	8.5	4.96	Ename	32a	6.32	1.67
Raversijde	56a	4.81	2.87	Ename	32a	11.01	2.98
Raversijde	56a	4.81	2.87	Ename	32a	6.15	1.7
Raversijde	56a	4.18	2.54	Ename	32a	6.62	2.13
Raversijde	56a	4.18	2.54	Ename	32a	8.54	2.75
Raversijde	56a	2.24	1.49	Ename	32a	11.95	3.89
Raversijde	56a	2.24	1.49	Ename	32a	7.01	2.36
Raversijde	56a	3.8	2.54	Ename	32a	9.8	3.35
Raversijde	56a	3.8	2.54	Ename	32a	6.15	2.13
Raversijde	56a	3.59	2.4	Ename	32a	5.19	1.89
Raversijde	56a	3.59	2.4	Ename	32a	8.88	3.33
Raversijde	56a	4.48	3.07	Ename	32a	7.06	2.69
Raversijde	56a	4.48	3.07	Ename	32a	5.21	2.13
Raversijde	56a	4.71	3.28	Ename	32a	6.84	2.87
Raversijde	56a	4.71	3.28	Ename	32a	4.68	2
Raversijde	56a	2.87	2.03	Ename	32a	5.22	2.24
Raversijde	56a	2.87	2.03	Ename	32a	8.97	4.06
Raversijde	56a	2.33	1.7	Ename	32a	5.73	2.6
Raversijde	56a	2.33	1.7	Ename	32a	11.04	5.09
Raversijde	56a	5.33	3.89	Ename	32a	5.75	2.67
Raversijde	56a	5.33	3.89	Ename	32a	6.32	3
Raversijde	56a	4.33	3.33	Ename	32a	8.96	4.27
Raversijde	56a	4.33	3.33	Ename	32a	6.87	3.3
Raversijde	56a	3.48	2.83	Ename	32a	6.15	3.16
Raversijde	56a	3.48	2.83	Ename	32a	6.57	3.59
Raversijde	56a	3.33	2.75	Ename	32a	6.12	3.43
Raversijde	56a	3.33	2.75	Ename	32a	5.33	3.16
Raversijde	56a	3.9	3.3	Ename	32a	4.74	2.83
Raversijde	56a	3.9	3.3	Ename	32a	7.49	4.53

Raversijde	56a	2.69	2.36	Ename	32a	4.35	2.69
Raversijde	56a	2.69	2.36	Ename	32a	4.48	2.83
Raversijde	56a	2.54	2.24	Ename	32a	3.14	2.13
Raversijde	56a	2.54	2.24	Ename	32a	4.81	3.43
Raversijde	56a	1.67	1.49	Ename	32a	2.98	2.13
Raversijde	56a	1.67	1.49	Ename	32a	6.04	4.35
Raversijde	56a	3.3	2.98	Ename	32a	4.38	3.28
Raversijde	56a	3.3	2.98	Ename	32a	4.53	3.59
Raversijde	56a	2.6	2.4	Ename	32a	5.19	4.35
Raversijde	56a	2.6	2.4	Ename	32a	3.54	3.14
Raversijde	56a	2.54	2.4	Ename	32a	4.45	4.22
Raversijde	56a	2.54	2.4	Ename	52c	88.33	2
Raversijde	56a	4.01	3.8	Ename	52c	36.55	1.67
Raversijde	56a	4.01	3.8	Ename	52c	23.78	1.2
Raversijde	56a	3.3	3.16	Ename	52c	25.34	1.49
Raversijde	56a	3.3	3.16	Ename	52c	35.93	2.13
Raversijde	59b	63	1.37	Ename	52c	29.94	1.8
Raversijde	59b	56	1.8	Ename	52c	48.27	3.3
Raversijde	59b	26.54	1.05	Ename	52c	31.67	2.36
Raversijde	59b	42.9	1.89	Ename	52c	30.71	2.6
Raversijde	59b	25.79	1.2	Ename	52c	15.62	1.33
Raversijde	59b	15.29	0.75	Ename	52c	24.48	2.11
Raversijde	59b	39.4	2.54	Ename	52c	27.55	2.43
Raversijde	59b	11.18	0.75	Ename	52c	47.12	4.18
Raversijde	59b	39.05	2.69	Ename	52c	23.65	2.24
Raversijde	59b	15.5	1.2	Ename	52c	25.31	2.4
Raversijde	59b	17.64	1.37	Ename	52c	15.41	1.49
Raversijde	59b	26.44	2.24	Ename	52c	25.41	2.69
Raversijde	59b	27.52	2.36	Ename	52c	18.19	2
Raversijde	59b	33.05	2.85	Ename	52c	14	1.67
Raversijde	59b	19.42	1.94	Ename	52c	11.18	1.37
Raversijde	59b	12.02	1.41	Ename	52c	13.57	1.67
Raversijde	59b	14.19	1.67	Ename	52c	20.31	2.6
Raversijde	59b	14.13	1.67	Ename	52c	18.51	2.4
Raversijde	59b	21.46	2.6	Ename	52c	16.28	2.13
Raversijde	59b	6.13	0.75	Ename	52c	11.38	1.49
Raversijde	59b	19.53	2.4	Ename	52c	14.7	1.94
Raversijde	59b	10.69	1.37	Ename	52c	16.09	2.13
Raversijde	59b	16.23	2.13	Ename	52c	12.87	1.8
Raversijde	59b	31.93	4.33	Ename	52c	11.74	1.67
Raversijde	59b	22.49	3.07	Ename	52c	16.12	2.4
Raversijde	59b	15.1	2.13	Ename	52c	15.72	2.36
Raversijde	59b	14.24	2.03	Ename	52c	12.81	1.94
Raversijde	59b	17.74	2.54	Ename	52c	13.33	2.03
Raversijde	59b	12.34	1.8	Ename	52c	10.82	1.67
Raversijde	59b	7.9	1.2	Ename	52c	12.22	1.89
Raversijde	59b	16.68	2.67	Ename	52c	6.41	1
Raversijde	59b	10.12	1.7	Ename	52c	11.34	1.8
Raversijde	59b	7.87	1.41	Ename	52c	8.33	1.33
Raversijde	59b	10.76	1.94	Ename	52c	16	2.6
Raversijde	59b	5.75	1.05	Ename	52c	16.83	2.85
Raversijde	59b	6.47	1.2	Ename	52c	16.61	2.85
Raversijde	59b	8.83	1.67	Ename	52c	12.37	2.13
Raversijde	59b	17.59	3.33	Ename	52c	17.8	3.07

Raversijde	59b	10.2	1.94	Ename	52c	10.34	1.8
Raversijde	59b	6.67	1.33	Ename	52c	13.57	2.4
Raversijde	59b	12.83	2.6	Ename	52c	15.09	2.67
Raversijde	59b	5.83	1.2	Ename	52c	21.45	3.8
Raversijde	59b	6.41	1.33	Ename	52c	15.88	2.87
Raversijde	59b	6.44	1.37	Ename	52c	11.4	2.11
Raversijde	59b	6.26	1.41	Ename	52c	6.47	1.2
Raversijde	59b	12.49	2.85	Ename	52c	9.67	1.89
Raversijde	59b	8.67	2.03	Ename	52c	16.7	3.28
Raversijde	59b	12.98	3.07	Ename	52c	13.6	2.75
Raversijde	59b	4.96	1.2	Ename	52c	14.15	2.87
Raversijde	59b	9.24	2.4	Ename	52c	16.28	3.33
Raversijde	59b	8.14	2.13	Ename	52c	11.63	2.6
Raversijde	59b	8.8	2.36	Ename	52c	14.66	3.4
Raversijde	59b	17	4.68	Ename	52c	8.81	2.11
Raversijde	59b	6.84	1.89	Ename	52c	11.04	2.69
Raversijde	59b	9.1	2.54	Ename	52c	6.8	1.7
Raversijde	59b	6.8	1.94	Ename	52c	15.23	3.89
Raversijde	59b	8.11	2.33	Ename	52c	8.72	2.24
Raversijde	59b	14.24	4.12	Ename	52c	7.78	2.03
Raversijde	59b	8.06	2.36	Ename	52c	8.54	2.24
Raversijde	59b	11.08	3.28	Ename	52c	11.64	3.14
Raversijde	59b	6.37	1.89	Ename	52c	8.17	2.24
Raversijde	59b	7.13	2.13	Ename	52c	4.96	1.37
Raversijde	59b	6.47	1.94	Ename	52c	10.16	2.83
Raversijde	59b	8.97	2.69	Ename	52c	8.03	2.24
Raversijde	59b	9.17	2.75	Ename	52c	7.92	2.24
Raversijde	59b	16.47	4.96	Ename	52c	8.41	2.4
Raversijde	59b	8.54	2.6	Ename	52c	7	2
Raversijde	59b	6.15	1.89	Ename	52c	8.33	2.4
Raversijde	59b	5.43	1.7	Ename	52c	8.36	2.43
Raversijde	59b	4.48	1.41	Ename	52c	8.06	2.4
Raversijde	59b	4.33	1.41	Ename	52c	4.92	1.49
Raversijde	59b	8.06	2.69	Ename	52c	5.22	1.67
Raversijde	59b	5.55	1.89	Ename	52c	4	1.33
Raversijde	59b	6.84	2.36	Ename	52c	7.49	2.54
Raversijde	59b	6.08	2.11	Ename	52c	9.87	3.35
Raversijde	59b	5.93	2.13	Ename	52c	5.75	2.03
Raversijde	59b	14.05	5.08	Ename	52c	9.27	3.28
Raversijde	59b	7.6	2.75	Ename	52c	3.33	1.2
Raversijde	59b	11.08	4.03	Ename	52c	11.49	4.18
Raversijde	59b	5.68	2.13	Ename	52c	5	1.89
Raversijde	59b	6.57	2.54	Ename	52c	6.86	2.6
Raversijde	59b	7.31	2.83	Ename	52c	7.03	2.69
Raversijde	59b	5.09	2.03	Ename	52c	4.12	1.67
Raversijde	59b	5.08	2.03	Ename	52c	2.43	1
Raversijde	59b	9.36	4.03	Ename	52c	7.62	3.28
Raversijde	59b	6.57	2.87	Ename	52c	5.5	2.43
Raversijde	59b	5.08	2.24	Ename	52c	5.9	2.69
Raversijde	59b	4.81	2.24	Ename	52c	5.17	2.36
Raversijde	59b	4.53	2.24	Ename	52c	4.71	2.24
Raversijde	59b	4.67	2.33	Ename	52c	6.01	3.07
Raversijde	59b	4.85	2.43	Ename	52c	4.47	2.4
Raversijde	59b	4.74	2.43	Ename	52c	5.71	3.07

Raversijde	59b	5.52	2.98	Ename	52c	5.68	3.14
Raversijde	59b	6.23	3.48	Ename	52c	5.96	3.33
Raversijde	59b	5.34	3	Ename	52c	5.55	3.14
Raversijde	59b	3.14	1.8	Ename	52c	4.18	2.43
Raversijde	59b	4.01	2.36	Ename	52c	2.87	1.67
Raversijde	59b	4.35	2.6	Ename	52c	3.61	2.11
Raversijde	59b	4.71	2.87	Ename	52c	3.61	2.11
Raversijde	59b	4.48	2.75	Ename	52c	11.32	6.7
Raversijde	59b	3.43	2.13	Ename	52c	5	3.07
Raversijde	59b	4.27	2.87	Ename	52c	5.5	3.4
Raversijde	59b	3.54	2.4	Ename	52c	3.59	2.24
Raversijde	59b	3.4	2.33	Ename	52c	3.07	2
Raversijde	59b	4.71	3.35	Ename	52c	3.59	2.36
Raversijde	59b	3.48	2.69	Ename	52c	3.14	2.24
Raversijde	59b	4.47	3.59	Ename	52c	4.38	3.16
Raversijde	59b	3.54	2.87	Ename	52c	2.36	1.8
Raversijde	59b	3.07	2.69	Ename	52c	3.35	2.67
Raversijde	59b	4.63	4.06	Ename	52c	3.8	3.07
Raversijde	59b	3.02	2.69	Ename	52c	3.14	2.54
Raversijde	59b	2.13	2	Ename	52c	3.28	2.75
Raversijde	59b	2.54	2.43	Ename	52c	2.75	2.43
Raversijde	74c	22.96	1.2	Ename	52c	3.48	3.16
Raversijde	74c	43.24	2.4	Ename	52c	3.35	3.07
Raversijde	74c	24.16	1.67	Ename	52c	3.3	3.3
Raversijde	74c	13.57	1.05	Ename	52c	2.6	2.6
Raversijde	74c	13.04	1.05	Ename	106c	58.02	1.89
Raversijde	74c	20.56	1.67	Ename	106c	29.79	2
Raversijde	74c	20.33	1.67	Ename	106c	48.14	3.67
Raversijde	74c	29.29	2.69	Ename	106c	18.27	1.41
Raversijde	74c	10.2	0.94	Ename	106c	15.38	1.2
Raversijde	74c	15.56	1.49	Ename	106c	11.08	0.94
Raversijde	74c	10.34	1	Ename	106c	31.42	2.69
Raversijde	74c	13.51	1.33	Ename	106c	17.89	1.67
Raversijde	74c	6.47	0.67	Ename	106c	15.07	1.49
Raversijde	74c	12.87	1.49	Ename	106c	15.93	1.67
Raversijde	74c	11.21	1.37	Ename	106c	15.62	1.67
Raversijde	74c	9.43	1.2	Ename	106c	19.19	2.24
Raversijde	74c	9.1	1.2	Ename	106c	9.91	1.2
Raversijde	74c	18.21	2.43	Ename	106c	11.56	1.49
Raversijde	74c	15.04	2.03	Ename	106c	12.81	1.67
Raversijde	74c	7.31	1.05	Ename	106c	17.74	2.4
Raversijde	74c	12.88	1.89	Ename	106c	17.67	2.4
Raversijde	74c	10.14	1.49	Ename	106c	17.21	2.4
Raversijde	74c	8.67	1.37	Ename	106c	20.1	2.85
Raversijde	74c	9.87	1.67	Ename	106c	14.02	2.03
Raversijde	74c	8.33	1.41	Ename	106c	11.67	1.7
Raversijde	74c	19.74	3.35	Ename	106c	8.98	1.33
Raversijde	74c	7.38	1.33	Ename	106c	18	2.67
Raversijde	74c	8.2	1.49	Ename	106c	11.1	1.67
Raversijde	74c	8.5	1.7	Ename	106c	7.7	1.2
Raversijde	74c	10.35	2.13	Ename	106c	9.55	1.49
Raversijde	74c	5.04	1.05	Ename	106c	18.34	2.87
Raversijde	74c	11.08	2.4	Ename	106c	13.44	2.11
Raversijde	74c	11.57	2.6	Ename	106c	14.93	2.36

Raversijde	74c	4.53	1.05	Ename	106c	11.84	1.94
Raversijde	74c	5.96	1.49	Ename	106c	8.89	1.49
Raversijde	74c	10.71	2.69	Ename	106c	16.99	2.87
Raversijde	74c	9.07	2.33	Ename	106c	9.8	1.67
Raversijde	74c	5.47	1.41	Ename	106c	7.9	1.37
Raversijde	74c	6.2	1.67	Ename	106c	8.39	1.49
Raversijde	74c	10.63	2.87	Ename	106c	9.07	1.67
Raversijde	74c	12.48	3.61	Ename	106c	11.21	2.13
Raversijde	74c	4.63	1.37	Ename	106c	7.78	1.49
Raversijde	74c	4.03	1.2	Ename	106c	8.83	1.7
Raversijde	74c	4.53	1.37	Ename	106c	11.47	2.24
Raversijde	74c	8.86	2.69	Ename	106c	5.27	1.05
Raversijde	74c	7.32	2.36	Ename	106c	5	1
Raversijde	74c	4.74	1.67	Ename	106c	5.17	1.05
Raversijde	74c	7.16	2.54	Ename	106c	8.67	1.8
Raversijde	74c	6.29	2.24	Ename	106c	5	1.05
Raversijde	74c	9.48	3.4	Ename	106c	8.96	1.89
Raversijde	74c	9.1	3.3	Ename	106c	6.37	1.37
Raversijde	74c	4.53	1.67	Ename	106c	6.87	1.49
Raversijde	74c	6.32	2.36	Ename	106c	6.08	1.37
Raversijde	74c	6.13	2.36	Ename	106c	10.33	2.33
Raversijde	74c	3.07	1.2	Ename	106c	7.52	1.7
Raversijde	74c	4.27	1.67	Ename	106c	11.74	2.67
Raversijde	74c	4.81	1.94	Ename	106c	7.4	1.7
Raversijde	74c	5.96	2.43	Ename	106c	7.01	1.67
Raversijde	74c	5.21	2.13	Ename	106c	4.35	1.05
Raversijde	74c	4.06	1.67	Ename	106c	11.05	2.67
Raversijde	74c	4.85	2	Ename	106c	6.87	1.67
Raversijde	74c	5.7	2.36	Ename	106c	6.75	1.67
Raversijde	74c	4.33	1.8	Ename	106c	3.89	1
Raversijde	74c	5.01	2.11	Ename	106c	17.59	4.53
Raversijde	74c	4.03	1.7	Ename	106c	6.55	1.7
Raversijde	74c	5.39	2.43	Ename	106c	5.71	1.49
Raversijde	74c	4.81	2.43	Ename	106c	7.4	1.94
Raversijde	74c	3.89	2.11	Ename	106c	5	1.33
Raversijde	74c	3.8	2.13	Ename	106c	7.6	2.24
Raversijde	74c	2.33	1.33	Ename	106c	4.06	1.2
Raversijde	74c	3.73	2.13	Ename	106c	3.35	1
Raversijde	74c	3.89	2.24	Ename	106c	4.38	1.33
Raversijde	74c	7.01	4.06	Ename	106c	5.37	1.67
Raversijde	74c	2.36	1.41	Ename	106c	6.34	2
Raversijde	74c	3.14	1.89	Ename	106c	7.34	2.33
Raversijde	74c	2.69	1.7	Ename	106c	7.4	2.36
Raversijde	74c	1	0.75	Ename	106c	8.36	2.69
Raversijde	74c	5.43	4.27	Ename	106c	5.08	1.7
Raversijde	74c	3.8	3.07	Ename	106c	5.37	1.89
Raversijde	74c	3.8	3.07	Ename	106c	4.22	1.49
Raversijde	74c	2.69	2.24	Ename	106c	8.07	2.87
Raversijde	74c	2.43	2.03	Ename	106c	5.5	2
Raversijde	74c	4.77	4.03	Ename	106c	3.68	1.37
Raversijde	74c	5.68	5.19	Ename	106c	7.78	3.02
Raversijde	74c	2.54	2.33	Ename	106c	7.52	2.98
Raversijde	91a	40.34	1.49	Ename	106c	6.01	2.4
Raversijde	91a	25.9	1.2	Ename	106c	5.9	2.36

Raversijde	91a	20.29	1.05	Ename	106c	5.82	2.36
Raversijde	91a	18.55	1.05	Ename	106c	3.59	1.49
Raversijde	91a	16.16	1	Ename	106c	6.87	2.87
Raversijde	91a	19.24	1.2	Ename	106c	4.27	1.8
Raversijde	91a	22.93	1.49	Ename	106c	6.01	2.6
Raversijde	91a	10.12	0.67	Ename	106c	7.6	3.3
Raversijde	91a	25.06	1.67	Ename	106c	5.93	2.6
Raversijde	91a	17.35	1.33	Ename	106c	5.91	2.6
Raversijde	91a	13.62	1.05	Ename	106c	5.52	2.43
Raversijde	91a	17.92	1.49	Ename	106c	5.08	2.24
Raversijde	91a	16.45	1.37	Ename	106c	6.71	2.98
Raversijde	91a	10.73	1	Ename	106c	6.41	2.87
Raversijde	91a	15.06	1.49	Ename	106c	6.26	2.85
Raversijde	91a	13.6	1.37	Ename	106c	3.54	1.67
Raversijde	91a	13.07	1.33	Ename	106c	4.22	2
Raversijde	91a	11.51	1.2	Ename	106c	7.7	3.68
Raversijde	91a	10	1.05	Ename	106c	4.64	2.24
Raversijde	91a	9.41	1	Ename	106c	7.31	3.54
Raversijde	91a	12.62	1.37	Ename	106c	4.35	2.11
Raversijde	91a	19.19	2.11	Ename	106c	3.68	1.8
Raversijde	91a	21.67	2.4	Ename	106c	2.67	1.37
Raversijde	91a	18.19	2.03	Ename	106c	4.92	2.6
Raversijde	91a	8.33	0.94	Ename	106c	9.34	5
Raversijde	91a	17.9	2.11	Ename	106c	4.77	2.6
Raversijde	91a	7.92	0.94	Ename	106c	6.01	3.3
Raversijde	91a	15.5	1.94	Ename	106c	4.35	2.54
Raversijde	91a	10.88	1.37	Ename	106c	3.07	1.8
Raversijde	91a	14.06	1.8	Ename	106c	5.19	3.07
Raversijde	91a	14.79	1.94	Ename	106c	4.03	2.4
Raversijde	91a	17.45	2.4	Ename	106c	4.06	2.43
Raversijde	91a	19.08	2.67	Ename	106c	2.24	1.37
Raversijde	91a	9.1	1.33	Ename	106c	4.64	2.85
Raversijde	91a	8.14	1.2	Ename	106c	2.75	1.7
Raversijde	91a	7.9	1.2	Ename	106c	3.4	2.11
Raversijde	91a	2.13	0.33	Ename	106c	2.69	1.67
Raversijde	91a	7.7	1.2	Ename	106c	4.33	2.69
Raversijde	91a	6.29	1	Ename	106c	5.73	3.59
Raversijde	91a	2.87	0.47	Ename	106c	5.33	3.35
Raversijde	91a	8.11	1.33	Ename	106c	4.01	2.54
Raversijde	91a	8.98	1.49	Ename	106c	3.67	2.33
Raversijde	91a	9.67	1.67	Ename	106c	2.67	1.7
Raversijde	91a	17.71	3.33	Ename	106c	4.81	3.07
Raversijde	91a	8.75	1.67	Ename	106c	5.37	3.43
Raversijde	91a	4.92	0.94	Ename	106c	4.07	2.6
Raversijde	91a	8.67	1.67	Ename	106c	2.69	1.8
Raversijde	91a	10.35	2	Ename	106c	3	2.03
Raversijde	91a	8.77	1.7	Ename	106c	6.94	4.71
Raversijde	91a	8.6	1.67	Ename	106c	3.8	2.6
Raversijde	91a	14.47	2.83	Ename	106c	3.3	2.36
Raversijde	91a	9.89	1.94	Ename	106c	4.53	3.35
Raversijde	91a	12.02	2.43	Ename	106c	5.09	3.8
Raversijde	91a	8.25	1.67	Ename	106c	2.85	2.13
Raversijde	91a	6.71	1.41	Ename	106c	2.67	2
Raversijde	91a	6.23	1.37	Ename	106c	3.14	2.4

Raversijde	91a	9.55	2.13	Ename	106c	2.75	2.11
Raversijde	91a	5.37	1.2	Ename	106c	5.71	4.53
Raversijde	91a	10.85	2.43	Ename	106c	5.93	4.71
Raversijde	91a	4.18	0.94	Ename	106c	4.27	3.43
Raversijde	91a	7.31	1.67	Ename	106c	5.91	4.85
Raversijde	91a	10.23	2.36	Ename	106c	2.33	1.94
Raversijde	91a	9.2	2.13	Ename	106c	2.03	1.7
Raversijde	91a	7.13	1.67	Ename	106c	2.24	1.89
Raversijde	91a	4.47	1.05	Ename	106c	2	1.7
Raversijde	91a	9.62	2.36	Ename	106c	2.69	2.36
Raversijde	91a	9.71	2.4	Ename	106c	2.13	1.94
Raversijde	91a	6.75	1.67	Ename	106c	4.35	4.01
Raversijde	91a	8.5	2.11	Ename	106c	1.8	1.7
Raversijde	91a	5.59	1.41	Ename	106c	2.33	2.24
Raversijde	91a	5.37	1.37	Ename	106c	1.67	1.67
Raversijde	91a	6.47	1.67	Ename	106c	2.36	2.36
Raversijde	91a	6.57	1.7	Ename	106c	2.6	2.6
Raversijde	91a	6.13	1.67	Ename	123b	58.43	1.37
Raversijde	91a	8.75	2.4	Ename	123b	29.95	1
Raversijde	91a	3.8	1.05	Ename	123b	29.68	1.7
Raversijde	91a	7.45	2.11	Ename	123b	18.07	1.05
Raversijde	91a	7.4	2.11	Ename	123b	18.97	1.2
Raversijde	91a	9.39	2.69	Ename	123b	18.14	1.2
Raversijde	91a	6.57	1.89	Ename	123b	13.89	1.2
Raversijde	91a	7.32	2.11	Ename	123b	13.5	1.33
Raversijde	91a	7.01	2.03	Ename	123b	23.93	2.4
Raversijde	91a	3.4	1	Ename	123b	11.34	1.2
Raversijde	91a	10.67	3.14	Ename	123b	12.37	1.33
Raversijde	91a	6.04	1.8	Ename	123b	10.73	1.2
Raversijde	91a	3.14	0.94	Ename	123b	9.3	1.05
Raversijde	91a	4.96	1.49	Ename	123b	14.7	1.7
Raversijde	91a	5.55	1.67	Ename	123b	9.02	1.05
Raversijde	91a	5.5	1.67	Ename	123b	5.75	0.67
Raversijde	91a	8.98	2.75	Ename	123b	8.67	1.05
Raversijde	91a	6.62	2.03	Ename	123b	7.92	1
Raversijde	91a	6.94	2.13	Ename	123b	16.03	2.11
Raversijde	91a	6.26	1.94	Ename	123b	30.76	4.22
Raversijde	91a	8.06	2.54	Ename	123b	10.2	1.41
Raversijde	91a	7.6	2.43	Ename	123b	8.98	1.37
Raversijde	91a	6.26	2.03	Ename	123b	7.49	1.2
Raversijde	91a	4.22	1.37	Ename	123b	6.34	1.05
Raversijde	91a	5.52	1.8	Ename	123b	14.36	2.43
Raversijde	91a	7.13	2.33	Ename	123b	22.35	4
Raversijde	91a	6.12	2.03	Ename	123b	9.48	1.7
Raversijde	91a	4.48	1.49	Ename	123b	8.23	1.49
Raversijde	91a	6.4	2.13	Ename	123b	14.91	2.75
Raversijde	91a	7.09	2.36	Ename	123b	14.98	2.83
Raversijde	91a	5.37	1.8	Ename	123b	8.89	1.8
Raversijde	91a	3.73	1.33	Ename	123b	15.12	3.07
Raversijde	91a	2.6	0.94	Ename	123b	7.21	1.49
Raversijde	91a	5.22	1.89	Ename	123b	9.87	2.11
Raversijde	91a	7.13	2.6	Ename	123b	9.43	2.03
Raversijde	91a	5.73	2.11	Ename	123b	4.64	1.05
Raversijde	91a	7.03	2.6	Ename	123b	11.18	2.6

Raversijde	91a	7.9	3.02	Ename	123b	10.59	2.54
Raversijde	91a	2.69	1.05	Ename	123b	5.7	1.37
Raversijde	91a	3.4	1.33	Ename	123b	5.33	1.37
Raversijde	91a	6.13	2.4	Ename	123b	4	1.05
Raversijde	91a	7.61	3	Ename	123b	5.22	1.41
Raversijde	91a	3.77	1.49	Ename	123b	7.81	2.13
Raversijde	91a	3.43	1.37	Ename	123b	3.43	0.94
Raversijde	91a	5.52	2.24	Ename	123b	4.24	1.2
Raversijde	91a	5.5	2.24	Ename	123b	8.36	2.4
Raversijde	91a	5.93	2.43	Ename	123b	12.48	3.59
Raversijde	91a	6.41	2.69	Ename	123b	6.08	1.8
Raversijde	91a	8.72	3.68	Ename	123b	5.59	1.67
Raversijde	91a	5.01	2.13	Ename	123b	7.32	2.24
Raversijde	91a	2.4	1.05	Ename	123b	6.57	2.03
Raversijde	91a	3.8	1.67	Ename	123b	5.47	1.7
Raversijde	91a	2.69	1.2	Ename	123b	5.43	1.7
Raversijde	91a	2.69	1.2	Ename	123b	4.22	1.37
Raversijde	91a	11.28	5.08	Ename	123b	6.47	2.11
Raversijde	91a	3.67	1.67	Ename	123b	7.34	2.54
Raversijde	91a	3.73	1.7	Ename	123b	5.17	1.8
Raversijde	91a	3.61	1.67	Ename	123b	6.62	2.36
Raversijde	91a	11.28	5.27	Ename	123b	7.03	2.67
Raversijde	91a	7.13	3.35	Ename	123b	2.75	1.05
Raversijde	91a	6.37	3.02	Ename	123b	5.52	2.13
Raversijde	91a	5.04	2.4	Ename	123b	8.75	3.8
Raversijde	91a	3.73	1.8	Ename	123b	4.53	2.13
Raversijde	91a	1.94	0.94	Ename	123b	9.53	4.53
Raversijde	91a	4.35	2.13	Ename	123b	3.43	1.67
Raversijde	91a	3.02	1.49	Ename	123b	3.02	1.49
Raversijde	91a	4.24	2.11	Ename	123b	5.22	2.6
Raversijde	91a	4.01	2	Ename	123b	6.2	3.28
Raversijde	91a	3.4	1.7	Ename	123b	4.96	2.69
Raversijde	91a	3.8	1.94	Ename	123b	3.68	2
Raversijde	91a	5.27	2.75	Ename	123b	3.68	2
Raversijde	91a	2.6	1.37	Ename	123b	3.43	1.94
Raversijde	91a	4.71	2.54	Ename	123b	4.74	2.69
Raversijde	91a	5.82	3.16	Ename	123b	8.23	4.74
Raversijde	91a	3.07	1.67	Ename	123b	3.16	1.89
Raversijde	91a	5.21	2.87	Ename	123b	6.04	3.68
Raversijde	91a	3.02	1.67	Ename	123b	3.8	2.4
Raversijde	91a	3.4	1.89	Ename	123b	4.06	2.67
Raversijde	91a	1.2	0.67	Ename	123b	4.12	2.75
Raversijde	91a	2.13	1.2	Ename	123b	3.89	2.6
Raversijde	91a	3.43	1.94	Ename	123b	4.24	2.87
Raversijde	91a	7.67	4.38	Ename	123b	4.18	2.85
Raversijde	91a	5.5	3.16	Ename	123b	4.01	2.75
Raversijde	91a	5.33	3.07	Ename	123b	2.67	2
Raversijde	91a	2.87	1.67	Ename	123b	3.59	2.85
Raversijde	91a	2	1.2	Ename	123b	2.6	2.11
Raversijde	91a	3.14	1.94	Ename	123b	2.13	1.8
Raversijde	91a	3.4	2.13	Ename	123b	2.4	2.13
Raversijde	91a	5.96	3.8	Ename	123b	3.07	2.87
Raversijde	91a	2.98	1.94	Ename	111c	32.95	1.33
Raversijde	91a	4.07	2.69	Ename	111c	21.68	1.05

Raversijde	91a	4.33	2.87	Ename	111c	24.39	1.33
Raversijde	91a	3.8	2.54	Ename	111c	26.44	1.49
Raversijde	91a	3.59	2.4	Ename	111c	22.24	1.41
Raversijde	91a	4.67	3.14	Ename	111c	16.42	1.05
Raversijde	91a	3.16	2.13	Ename	111c	17	1.49
Raversijde	91a	2.43	1.67	Ename	111c	18.69	1.67
Raversijde	91a	3.14	2.24	Ename	111c	14.76	1.33
Raversijde	91a	2.98	2.13	Ename	111c	19.83	1.8
Raversijde	91a	4.85	3.59	Ename	111c	20.73	1.94
Raversijde	91a	3.02	2.24	Ename	111c	18.04	1.8
Raversijde	91a	2.24	1.67	Ename	111c	6.67	0.67
Raversijde	91a	3.48	2.6	Ename	111c	25.11	2.67
Raversijde	91a	2.98	2.24	Ename	111c	10.61	1.2
Raversijde	91a	2.36	1.8	Ename	111c	8.88	1.05
Raversijde	91a	3.73	2.85	Ename	111c	6.34	0.75
Raversijde	91a	4.48	3.43	Ename	111c	10.67	1.33
Raversijde	91a	3.48	2.69	Ename	111c	11.84	1.49
Raversijde	91a	3.54	2.75	Ename	111c	8.12	1.05
Raversijde	91a	2.69	2.11	Ename	111c	7.73	1
Raversijde	91a	1.89	1.49	Ename	111c	7.33	1
Raversijde	91a	3.07	2.43	Ename	111c	10.59	1.49
Raversijde	91a	3.02	2.4	Ename	111c	7.03	1
Raversijde	91a	4.24	3.43	Ename	111c	18.24	2.6
Raversijde	91a	4.68	3.8	Ename	111c	9.33	1.33
Raversijde	91a	4.35	3.54	Ename	111c	12.57	1.8
Raversijde	91a	2.4	2	Ename	111c	9.8	1.41
Raversijde	91a	2.11	1.8	Ename	111c	7.92	1.2
Raversijde	91a	3.8	3.33	Ename	111c	18.26	2.87
Raversijde	91a	3.14	2.85	Ename	111c	11.35	1.8
Raversijde	91a	3.67	3.35	Ename	111c	7.34	1.2
Raversijde	91a	2.54	2.36	Ename	111c	10.2	1.67
Raversijde	91a	2.03	1.89	Ename	111c	14.52	2.4
Raversijde	91a	2.6	2.43	Ename	111c	4.48	0.75
Raversijde	91a	2.54	2.43	Ename	111c	12.08	2.03
Raversijde	91a	4.24	4.07	Ename	111c	9.91	1.67
Raversijde	91a	2.69	2.6	Ename	111c	7.03	1.2
Raversijde	91a	2.6	2.54	Ename	111c	20.74	3.61
Raversijde	91a	2.4	2.36	Ename	111c	13.34	2.33
Raversijde	91a	2.6	2.6	Ename	111c	6.87	1.2
Veurne	42b	76.94	1.7	Ename	111c	7.49	1.37
Veurne	42b	22.84	1.05	Ename	111c	9.72	1.8
Veurne	42b	13.37	0.67	Ename	111c	4.03	0.75
Veurne	42b	40.16	2.13	Ename	111c	11.33	2.13
Veurne	42b	45.21	2.43	Ename	111c	8.8	1.67
Veurne	42b	32.35	2.03	Ename	111c	10.15	1.94
Veurne	42b	15.84	1.05	Ename	111c	13.54	2.6
Veurne	42b	28.26	2.43	Ename	111c	6.2	1.2
Veurne	42b	23.33	2.03	Ename	111c	9.69	1.89
Veurne	42b	18.48	1.67	Ename	111c	7.62	1.49
Veurne	42b	21.67	2.03	Ename	111c	5.34	1.05
Veurne	42b	17.48	1.67	Ename	111c	6.75	1.33
Veurne	42b	13.27	1.33	Ename	111c	10.63	2.13
Veurne	42b	11.82	1.37	Ename	111c	7.38	1.49
Veurne	42b	16.12	2.03	Ename	111c	11.35	2.36

Veurne	42b	10.53	1.37	Ename	111c	5.59	1.2
Veurne	42b	10.2	1.41	Ename	111c	4.53	1
Veurne	42b	18.81	2.69	Ename	111c	12.13	2.69
Veurne	42b	18.36	2.67	Ename	111c	12.02	2.69
Veurne	42b	13.92	2.13	Ename	111c	7.31	1.67
Veurne	42b	9.62	1.49	Ename	111c	6.15	1.41
Veurne	42b	12.87	2.03	Ename	111c	7.8	1.8
Veurne	42b	17.21	2.75	Ename	111c	7.77	1.8
Veurne	42b	13.31	2.13	Ename	111c	4.48	1.05
Veurne	42b	16.68	2.69	Ename	111c	5.82	1.37
Veurne	42b	5.7	0.94	Ename	111c	8.06	1.94
Veurne	42b	8.5	1.41	Ename	111c	8.33	2.03
Veurne	42b	15.34	2.6	Ename	111c	9.55	2.36
Veurne	42b	28.14	4.77	Ename	111c	5.52	1.37
Veurne	42b	10.3	1.8	Ename	111c	9.01	2.24
Veurne	42b	10.88	1.94	Ename	111c	10.41	2.69
Veurne	42b	9.3	1.67	Ename	111c	6.57	1.7
Veurne	42b	6.64	1.37	Ename	111c	6.01	1.67
Veurne	42b	11.28	2.36	Ename	111c	5	1.41
Veurne	42b	13.62	3.48	Ename	111c	8.98	2.69
Veurne	42b	7.9	2.11	Ename	111c	4.77	1.49
Veurne	42b	10.59	2.87	Ename	111c	4.35	1.37
Veurne	42b	8.83	2.43	Ename	111c	9.61	3.07
Veurne	42b	4.67	1.33	Ename	111c	4.27	1.37
Veurne	42b	16.41	4.68	Ename	111c	9.74	3.16
Veurne	42b	11.49	3.28	Ename	111c	3.16	1.05
Veurne	42b	6.96	2.11	Ename	111c	5.68	1.94
Veurne	42b	9.69	2.98	Ename	111c	4	1.37
Veurne	42b	9.2	2.83	Ename	111c	5.22	1.8
Veurne	42b	5.83	1.8	Ename	111c	6.41	2.24
Veurne	42b	16.55	5.39	Ename	111c	4.24	1.49
Veurne	42b	5.93	1.94	Ename	111c	4.64	1.7
Veurne	42b	3.02	1	Ename	111c	5.47	2.13
Veurne	42b	5.04	1.7	Ename	111c	6.2	2.43
Veurne	42b	4.63	1.67	Ename	111c	3.35	1.33
Veurne	42b	8.01	3.14	Ename	111c	9.01	3.67
Veurne	42b	6.32	2.69	Ename	111c	7.34	3.07
Veurne	42b	3.33	1.49	Ename	111c	6.84	2.87
Veurne	42b	3.33	1.49	Ename	111c	6.41	2.69
Veurne	42b	7.01	3.35	Ename	111c	3.8	1.67
Veurne	42b	8.67	4.33	Ename	111c	3.8	1.67
Veurne	42b	3.16	1.67	Ename	111c	5.39	2.4
Veurne	42b	3.07	1.67	Ename	111c	5.08	2.36
Veurne	42b	2.98	1.67	Ename	111c	5.68	2.69
Veurne	42b	4.77	2.69	Ename	111c	5.52	2.75
Veurne	42b	3.73	2.11	Ename	111c	3.33	1.67
Veurne	42b	4.71	2.75	Ename	111c	4.64	2.33
Veurne	42b	3.59	2.13	Ename	111c	2.69	1.37
Veurne	42b	2.85	1.7	Ename	111c	5	2.6
Veurne	42b	2.69	1.7	Ename	111c	3.73	1.94
Veurne	42b	4.01	2.69	Ename	111c	4.35	2.36
Veurne	42b	4.53	3.07	Ename	111c	3.89	2.13
Veurne	42b	4.47	3.14	Ename	111c	4.74	2.69
Veurne	42b	2.33	1.67	Ename	111c	4.33	2.54

Veurne	42b	2.36	1.7	Ename	111c	4.01	2.36
Veurne	42b	5.27	3.89	Ename	111c	2.85	1.7
Veurne	42b	4.48	3.43	Ename	111c	3.14	1.89
Veurne	42b	5.83	4.53	Ename	111c	7.6	4.64
Veurne	42b	2.87	2.4	Ename	111c	3.07	1.89
Veurne	42b	3.8	3.33	Ename	111c	3.4	2.13
Veurne	42b	3.4	3	Ename	111c	3.02	2.03
Veurne	42b	1.33	1.2	Ename	111c	4	2.75
Veurne	42b	2.83	2.69	Ename	111c	4.22	3.02
Veurne	42b	3.54	3.48	Ename	111c	1.67	1.2
Veurne	30c	49.29	1.37	Ename	111c	1.67	1.33
Veurne	30c	24.75	1	Ename	111c	3.4	2.75
Veurne	30c	63.51	3.02	Ename	111c	2.6	2.13
Veurne	30c	26.67	1.67	Ename	111c	3.73	3.33
Veurne	30c	28.71	2.11	Londerzeel	37b	50.57	1.37
Veurne	30c	18.92	2	Londerzeel	37b	21.38	0.67
Veurne	30c	26.74	2.87	Londerzeel	37b	28.53	1.33
Veurne	30c	8.25	1	Londerzeel	37b	35.32	1.67
Veurne	30c	13.35	2	Londerzeel	37b	30.16	1.49
Veurne	30c	8.39	1.33	Londerzeel	37b	6	0.33
Veurne	30c	9.26	1.49	Londerzeel	37b	28.18	1.7
Veurne	30c	12.49	2.03	Londerzeel	37b	25.24	1.67
Veurne	30c	10.14	1.67	Londerzeel	37b	19.61	1.41
Veurne	30c	21.23	3.9	Londerzeel	37b	9.29	0.67
Veurne	30c	11.47	2.24	Londerzeel	37b	31.75	2.36
Veurne	30c	15.79	3.35	Londerzeel	37b	16.1	1.2
Veurne	30c	7.8	1.67	Londerzeel	37b	19.84	1.49
Veurne	30c	8.36	2	Londerzeel	37b	13.89	1.05
Veurne	30c	8.03	2.03	Londerzeel	37b	26.48	2.11
Veurne	30c	6.15	1.7	Londerzeel	37b	16.34	1.33
Veurne	30c	8.23	2.54	Londerzeel	37b	17.04	1.49
Veurne	30c	5.96	2.03	Londerzeel	37b	10.23	0.94
Veurne	30c	5.9	2.36	Londerzeel	37b	14.88	1.41
Veurne	30c	6.8	2.75	Londerzeel	37b	14.36	1.41
Veurne	30c	6.64	2.69	Londerzeel	37b	6.75	0.67
Veurne	30c	5.04	2.11	Londerzeel	37b	9.72	1
Veurne	30c	4.35	2	Londerzeel	37b	9.72	1
Veurne	30c	2.87	1.37	Londerzeel	37b	15.92	1.67
Veurne	30c	4.03	1.94	Londerzeel	37b	13.22	1.41
Veurne	30c	4.77	2.69	Londerzeel	37b	13.8	1.49
Veurne	30c	3	1.7	Londerzeel	37b	13.23	1.49
Veurne	30c	3.16	1.8	Londerzeel	37b	9	1.05
Veurne	30c	2.85	1.94	Londerzeel	37b	15.36	1.8
Veurne	30c	3.28	2.4	Londerzeel	37b	10.18	1.2
Veurne	30c	4.35	3.4	Londerzeel	37b	8.83	1.05
Veurne	30c	2.4	1.94	Londerzeel	37b	16.88	2.03
Veurne	30c	3.33	3	Londerzeel	37b	9.69	1.2
Veurne	30c	4	3.68	Londerzeel	37b	5.39	0.67
Veurne	30c	1.94	1.8	Londerzeel	37b	10.96	1.37
Veurne	30c	3.07	2.85	Londerzeel	37b	14.33	1.8
Veurne	30c	3.07	2.87	Londerzeel	37b	12.17	1.67
Veurne	30c	5.34	5.04	Londerzeel	37b	6.75	0.94
Veurne	33b	27.51	1	Londerzeel	37b	14.1	2
Veurne	33b	62.19	2.36	Londerzeel	37b	7.33	1.05

Veurne	33b	43.03	2.54	Londerzeel	37b	8.25	1.2
Veurne	33b	61.45	3.68	Londerzeel	37b	7.07	1.05
Veurne	33b	40.47	2.43	Londerzeel	37b	12.08	1.8
Veurne	33b	14.64	0.94	Londerzeel	37b	5	0.75
Veurne	33b	22.7	1.94	Londerzeel	37b	7.81	1.2
Veurne	33b	34.69	3	Londerzeel	37b	7.7	1.2
Veurne	33b	16.93	1.49	Londerzeel	37b	14.35	2.24
Veurne	33b	17.82	1.67	Londerzeel	37b	7.6	1.2
Veurne	33b	10.35	1.05	Londerzeel	37b	13.34	2.11
Veurne	33b	28.46	3.02	Londerzeel	37b	12.24	2.13
Veurne	33b	22.25	2.43	Londerzeel	37b	8.5	1.49
Veurne	33b	19.38	2.33	Londerzeel	37b	14.81	2.6
Veurne	33b	34.47	4.18	Londerzeel	37b	11.32	2.03
Veurne	33b	31.32	3.9	Londerzeel	37b	7.81	1.49
Veurne	33b	7.78	1	Londerzeel	37b	11.08	2.13
Veurne	33b	13.74	1.89	Londerzeel	37b	12.48	2.43
Veurne	33b	16.01	2.33	Londerzeel	37b	8.43	1.67
Veurne	33b	20.73	3.07	Londerzeel	37b	10.53	2.11
Veurne	33b	9.2	1.41	Londerzeel	37b	9.24	1.89
Veurne	33b	24.48	3.9	Londerzeel	37b	7.8	1.67
Veurne	33b	11.18	1.8	Londerzeel	37b	5.47	1.2
Veurne	33b	8.01	1.33	Londerzeel	37b	2.98	0.67
Veurne	33b	11.33	1.89	Londerzeel	37b	9.41	2.13
Veurne	33b	12.62	2.11	Londerzeel	37b	12.49	2.85
Veurne	33b	12.57	2.13	Londerzeel	37b	8.97	2.13
Veurne	33b	10.59	1.94	Londerzeel	37b	9.91	2.36
Veurne	33b	14.67	2.69	Londerzeel	37b	11.67	2.98
Veurne	33b	12.98	2.4	Londerzeel	37b	10.93	3.07
Veurne	33b	11.9	2.33	Londerzeel	37b	5	1.41
Veurne	33b	17.26	3.4	Londerzeel	37b	3.68	1.05
Veurne	33b	10.02	2.03	Londerzeel	37b	7.34	2.13
Veurne	33b	14.81	3.07	Londerzeel	37b	5.83	1.8
Veurne	33b	15.8	3.28	Londerzeel	37b	6.12	1.89
Veurne	33b	15.08	3.43	Londerzeel	37b	7.56	2.4
Veurne	33b	10.16	2.36	Londerzeel	37b	3.73	1.2
Veurne	33b	6.75	1.67	Londerzeel	37b	2.03	0.67
Veurne	33b	7.61	1.89	Londerzeel	37b	7.07	2.36
Veurne	33b	9.33	2.36	Londerzeel	37b	8.52	2.85
Veurne	33b	6.57	1.67	Londerzeel	37b	5.5	1.89
Veurne	33b	8.65	2.36	Londerzeel	37b	5.09	1.94
Veurne	33b	7.16	2.03	Londerzeel	37b	4.45	1.7
Veurne	33b	7.61	2.24	Londerzeel	37b	6.67	2.67
Veurne	33b	7.78	2.36	Londerzeel	37b	4.03	1.67
Veurne	33b	6.55	2	Londerzeel	37b	2.33	1
Veurne	33b	12.53	4.03	Londerzeel	37b	3.07	1.37
Veurne	33b	5	1.67	Londerzeel	37b	3.73	1.7
Veurne	33b	7.03	2.4	Londerzeel	37b	3.16	1.49
Veurne	33b	6.84	2.36	Londerzeel	37b	3.14	1.49
Veurne	33b	8.06	2.87	Londerzeel	37b	6.2	3.07
Veurne	33b	15.13	5.67	Londerzeel	37b	5	2.54
Veurne	33b	9.89	3.77	Londerzeel	37b	3.73	1.94
Veurne	33b	8.43	3.33	Londerzeel	37b	5.17	2.69
Veurne	33b	3.33	1.33	Londerzeel	37b	2.85	1.49
Veurne	33b	5.59	2.24	Londerzeel	37b	2.24	1.2

Veurne	33b	4.48	1.8	Londerzeel	37b	5	2.69
Veurne	33b	3.43	1.49	Londerzeel	37b	5.39	3.07
Veurne	33b	7.03	3.07	Londerzeel	37b	1.8	1.05
Veurne	33b	6.08	2.69	Londerzeel	37b	3.8	2.24
Veurne	33b	6.01	2.69	Londerzeel	37b	3.35	2.03
Veurne	33b	3.43	1.8	Londerzeel	37b	3.3	2.13
Veurne	33b	3.33	1.8	Londerzeel	37b	3.07	2.11
Veurne	33b	5.47	3.28	Londerzeel	37b	4.03	2.83
Veurne	33b	3.3	2.11	Londerzeel	37b	2.36	1.67
Veurne	33b	4.63	3	Londerzeel	37b	3.67	2.67
Veurne	33b	2.69	1.8	Londerzeel	37b	2.13	1.7
Veurne	33b	3.48	2.36	Londerzeel	37b	2.4	1.94
Veurne	33b	3.14	2.13	Londerzeel	37b	3.02	2.54
Veurne	33b	4.64	3.16	Londerzeel	37b	4.53	3.89
Veurne	33b	3.07	2.11	Londerzeel	37b	3.33	2.87
Veurne	33b	2.75	1.94	Londerzeel	37b	1.94	1.8
Veurne	33b	1.67	1.2	Londerzeel	37b	2.6	2.6
Veurne	33b	3.43	2.6	Londerzeel	47a	60.23	1.33
Veurne	33b	3.16	2.43	Londerzeel	47a	12.71	0.33
Veurne	33b	3.61	3.07	Londerzeel	47a	45.02	1.37
Veurne	33b	3.07	2.69	Londerzeel	47a	22.8	0.75
Veurne	33b	3	2.69	Londerzeel	47a	28.89	2.03
Veurne	33b	3.14	2.87	Londerzeel	47a	17.68	1.37
Veurne	33b	3.07	2.85	Londerzeel	47a	23.95	1.94
Veurne	33b	2.69	2.54	Londerzeel	47a	20.8	1.94
Veurne	33b	3.48	3.4	Londerzeel	47a	24.7	2.36
Veurne	33b	2.67	2.67	Londerzeel	47a	13.91	1.41
Veurne	63a	89.98	2.98	Londerzeel	47a	17.29	1.8
Veurne	63a	47.67	2.87	Londerzeel	47a	13.27	1.49
Veurne	63a	20.14	1.33	Londerzeel	47a	20.41	2.36
Veurne	63a	29.11	2.24	Londerzeel	47a	19.29	2.24
Veurne	63a	18.25	1.49	Londerzeel	47a	20.62	2.4
Veurne	63a	10.93	0.94	Londerzeel	47a	27.37	3.33
Veurne	63a	26.77	2.36	Londerzeel	47a	30.53	3.73
Veurne	63a	29.77	3.14	Londerzeel	47a	16.55	2.03
Veurne	63a	27.83	2.98	Londerzeel	47a	16.76	2.24
Veurne	63a	18.14	2.03	Londerzeel	47a	8.75	1.2
Veurne	63a	17.78	2.4	Londerzeel	47a	27.05	3.73
Veurne	63a	7.07	1	Londerzeel	47a	12.34	1.8
Veurne	63a	17.64	2.54	Londerzeel	47a	15.34	2.4
Veurne	63a	18.27	2.69	Londerzeel	47a	22.87	3.61
Veurne	63a	19.19	2.85	Londerzeel	47a	10.38	1.7
Veurne	63a	20.07	3.16	Londerzeel	47a	14.47	2.4
Veurne	63a	14.17	2.24	Londerzeel	47a	11.51	2.11
Veurne	63a	11.21	1.8	Londerzeel	47a	14.43	2.69
Veurne	63a	11.21	1.8	Londerzeel	47a	10.85	2.24
Veurne	63a	11.04	1.8	Londerzeel	47a	8.67	1.8
Veurne	63a	12.02	2.33	Londerzeel	47a	8.5	1.8
Veurne	63a	12.87	2.54	Londerzeel	47a	9.22	2.03
Veurne	63a	12.78	3.02	Londerzeel	47a	15.69	3.48
Veurne	63a	6.47	1.67	Londerzeel	47a	10.54	2.36
Veurne	63a	7.67	2	Londerzeel	47a	8.86	2.11
Veurne	63a	10.67	3.43	Londerzeel	47a	12.67	3.07
Veurne	63a	13.22	4.27	Londerzeel	47a	6.7	1.67

Veurne	63a	8.11	2.67	Londerzeel	47a	10.77	2.69
Veurne	63a	8.72	3.33	Londerzeel	47a	6.55	1.67
Veurne	63a	4.45	1.8	Londerzeel	47a	6.57	1.89
Veurne	63a	4.18	2.36	Londerzeel	47a	5.68	1.67
Veurne	63a	5	3.28	Londerzeel	47a	7.09	2.13
Veurne	63a	5.75	3.9	Londerzeel	47a	8.5	2.69
Veurne	63a	4.35	3.02	Londerzeel	47a	7.8	2.54
Veurne	63a	2.69	2.43	Londerzeel	47a	8.75	2.85
Veurne	63a	2.33	2.11	Londerzeel	47a	4.12	1.49
Veurne	103b	55.6	1.67	Londerzeel	47a	4.53	1.7
Veurne	103b	35.95	1.2	Londerzeel	47a	7.31	2.87
Veurne	103b	45.69	1.89	Londerzeel	47a	7.87	3.14
Veurne	103b	15.68	0.67	Londerzeel	47a	8.75	3.68
Veurne	103b	28.68	1.33	Londerzeel	47a	4.85	2.11
Veurne	103b	26.08	1.37	Londerzeel	47a	2.33	1.05
Veurne	103b	22.78	1.49	Londerzeel	47a	3.8	1.94
Veurne	103b	17.78	1.33	Londerzeel	47a	3.07	1.7
Veurne	103b	15.67	1.2	Londerzeel	47a	3.77	2.13
Veurne	103b	23.02	1.89	Londerzeel	47a	3.73	2.13
Veurne	103b	23.59	1.94	Londerzeel	47a	3.35	2
Veurne	103b	14.43	1.2	Londerzeel	47a	4.22	2.75
Veurne	103b	25	2.13	Londerzeel	47a	4.53	3.07
Veurne	103b	13.7	1.2	Londerzeel	47a	5.37	3.73
Veurne	103b	18.77	1.67	Londerzeel	47a	2.4	1.67
Veurne	103b	11.64	1.05	Londerzeel	47a	2.36	1.94
Veurne	103b	11.57	1.05	Londerzeel	27b	29.67	1.67
Veurne	103b	6.96	0.67	Londerzeel	27b	20.92	1.7
Veurne	103b	20.88	2.13	Londerzeel	27b	9.55	0.94
Veurne	103b	14.55	1.49	Londerzeel	27b	25	2.6
Veurne	103b	13.54	1.41	Londerzeel	27b	28.04	3.07
Veurne	103b	12.98	1.37	Londerzeel	27b	18.45	2.03
Veurne	103b	13.13	1.41	Londerzeel	27b	15.55	1.89
Veurne	103b	22.16	2.4	Londerzeel	27b	13.5	1.7
Veurne	103b	10.85	1.2	Londerzeel	27b	26.37	3.33
Veurne	103b	12.51	1.41	Londerzeel	27b	18.88	2.4
Veurne	103b	12.97	1.49	Londerzeel	27b	18	2.36
Veurne	103b	10.88	1.41	Londerzeel	27b	12	1.7
Veurne	103b	9.91	1.33	Londerzeel	27b	12.02	1.8
Veurne	103b	17.54	2.36	Londerzeel	27b	17.92	2.75
Veurne	103b	12.78	1.8	Londerzeel	27b	15.81	2.43
Veurne	103b	4.71	0.67	Londerzeel	27b	14.34	2.36
Veurne	103b	11.64	1.67	Londerzeel	27b	15.37	2.69
Veurne	103b	5.21	0.75	Londerzeel	27b	17.4	3.3
Veurne	103b	4.35	0.67	Londerzeel	27b	8.67	1.67
Veurne	103b	7.67	1.2	Londerzeel	27b	12.57	2.43
Veurne	103b	13.12	2.13	Londerzeel	27b	8.77	1.7
Veurne	103b	9.07	1.49	Londerzeel	27b	8.57	1.67
Veurne	103b	8.28	1.41	Londerzeel	27b	11.33	2.24
Veurne	103b	5.52	0.94	Londerzeel	27b	13.74	2.85
Veurne	103b	15.55	2.69	Londerzeel	27b	9.34	1.94
Veurne	103b	13.7	2.4	Londerzeel	27b	10.46	2.24
Veurne	103b	5.27	0.94	Londerzeel	27b	9.39	2.03
Veurne	103b	5.27	0.94	Londerzeel	27b	7.62	1.67
Veurne	103b	9.91	1.8	Londerzeel	27b	10.14	2.24

Veurne	103b	11.38	2.24	Londerzeel	27b	8.75	1.94
Veurne	103b	3.35	0.67	Londerzeel	27b	12.69	2.83
Veurne	103b	8.36	1.7	Londerzeel	27b	5.82	1.33
Veurne	103b	4.53	0.94	Londerzeel	27b	7.81	1.8
Veurne	103b	6.55	1.37	Londerzeel	27b	8.98	2.11
Veurne	103b	9.24	1.94	Londerzeel	27b	14.07	3.35
Veurne	103b	5	1.05	Londerzeel	27b	11.94	2.87
Veurne	103b	4.18	0.94	Londerzeel	27b	5.43	1.33
Veurne	103b	7.54	1.8	Londerzeel	27b	7.92	1.94
Veurne	103b	8.06	1.94	Londerzeel	27b	8.25	2.03
Veurne	103b	6.87	1.67	Londerzeel	27b	8.75	2.36
Veurne	103b	9.61	2.4	Londerzeel	27b	10.76	3.16
Veurne	103b	18.44	4.71	Londerzeel	27b	6.67	2.11
Veurne	103b	8.23	2.11	Londerzeel	27b	4.64	1.49
Veurne	103b	5.75	1.49	Londerzeel	27b	6.32	2.11
Veurne	103b	3.9	1.05	Londerzeel	27b	8.36	2.85
Veurne	103b	7.67	2.13	Londerzeel	27b	5.75	2.03
Veurne	103b	4.68	1.33	Londerzeel	27b	4.18	1.49
Veurne	103b	5.21	1.49	Londerzeel	27b	6.01	2.36
Veurne	103b	4.64	1.33	Londerzeel	27b	4.24	1.7
Veurne	103b	4.77	1.41	Londerzeel	27b	7.87	3.16
Veurne	103b	3.33	1	Londerzeel	27b	8.01	3.35
Veurne	103b	3.9	1.2	Londerzeel	27b	6.87	3.07
Veurne	103b	3.35	1.05	Londerzeel	27b	3.73	1.7
Veurne	103b	4.33	1.37	Londerzeel	27b	6.15	2.87
Veurne	103b	6.75	2.24	Londerzeel	27b	7.21	3.54
Veurne	103b	4.96	1.67	Londerzeel	27b	4.68	2.36
Veurne	103b	7.75	2.69	Londerzeel	27b	7.38	3.8
Veurne	103b	4.03	1.41	Londerzeel	27b	5.27	2.75
Veurne	103b	4.47	1.67	Londerzeel	27b	8.23	4.33
Veurne	103b	3.73	1.41	Londerzeel	27b	5.04	2.75
Veurne	103b	7.49	2.87	Londerzeel	27b	4.18	2.36
Veurne	103b	4.33	1.67	Londerzeel	27b	4.77	2.75
Veurne	103b	4.96	1.94	Londerzeel	27b	10.12	6.44
Veurne	103b	3.68	1.49	Londerzeel	27b	7.28	4.85
Veurne	103b	13.49	5.68	Londerzeel	27b	3.16	2.11
Veurne	103b	3.07	1.37	Londerzeel	27b	4.27	2.87
Veurne	103b	3.02	1.37	Londerzeel	27b	3	2.03
Veurne	103b	4.38	2.11	Londerzeel	27b	3.61	2.69
Veurne	103b	4.01	1.94	Londerzeel	27b	4	3.02
Veurne	103b	2.67	1.33	Londerzeel	27b	3.3	2.87
Veurne	103b	4.01	2.03	Londerzeel	27b	3.48	3.07
Veurne	103b	3.54	1.89	Londerzeel	65b	8.5	0.33
Veurne	103b	3.54	1.94	Londerzeel	65b	30.09	1.2
Veurne	103b	4.07	2.24	Londerzeel	65b	47.27	2.24
Veurne	103b	3	1.7	Londerzeel	65b	34.83	1.7
Veurne	103b	2.83	1.7	Londerzeel	65b	33.39	1.67
Veurne	103b	3.43	2.13	Londerzeel	65b	46.87	2.75
Veurne	103b	2	1.33	Londerzeel	65b	16.17	1
Veurne	103b	3.07	2.11	Londerzeel	65b	20.68	1.33
Veurne	103b	2.13	1.49	Londerzeel	65b	14.61	0.94
Veurne	103b	3.33	2.4	Londerzeel	65b	22.77	1.49
Veurne	103b	2.85	2.13	Londerzeel	65b	12.53	0.94
Veurne	103b	2.98	2.24	Londerzeel	65b	9.76	0.75

Veurne	103b	2.13	1.67	Londerzeel	65b	15.35	1.2
Veurne	103b	2.54	2	Londerzeel	65b	13.93	1.2
Veurne	103b	2.36	1.89	Londerzeel	65b	19	1.67
Veurne	103b	2.24	2.11	Londerzeel	65b	15.55	1.37
Veurne	103b	2.11	2	Londerzeel	65b	17.97	1.67
Veurne	103b	3.77	3.61	Londerzeel	65b	10.9	1.05
Veurne	103b	1.41	1.41	Londerzeel	65b	12.41	1.2
Veurne	98a	56.42	0.94	Londerzeel	65b	30.81	2.98
Veurne	98a	18.41	0.75	Londerzeel	65b	25.05	2.43
Veurne	98a	22.1	1	Londerzeel	65b	14.06	1.37
Veurne	98a	34.53	1.7	Londerzeel	65b	19.7	1.94
Veurne	98a	22.03	1.37	Londerzeel	65b	7.31	0.75
Veurne	98a	21.5	1.37	Londerzeel	65b	13.44	1.41
Veurne	98a	31.34	2.11	Londerzeel	65b	9.67	1.05
Veurne	98a	28.47	1.94	Londerzeel	65b	12.08	1.37
Veurne	98a	17.34	1.41	Londerzeel	65b	11.64	1.33
Veurne	98a	16.25	1.37	Londerzeel	65b	12.26	1.49
Veurne	98a	5.08	0.47	Londerzeel	65b	19.07	2.4
Veurne	98a	24.06	2.24	Londerzeel	65b	13	1.67
Veurne	98a	12.24	1.2	Londerzeel	65b	12.34	1.67
Veurne	98a	22.4	2.24	Londerzeel	65b	12.29	1.67
Veurne	98a	21.18	2.13	Londerzeel	65b	10.18	1.41
Veurne	98a	11.34	1.2	Londerzeel	65b	10.59	1.49
Veurne	98a	11.32	1.2	Londerzeel	65b	17	2.4
Veurne	98a	19.51	2.13	Londerzeel	65b	9.69	1.37
Veurne	98a	8.35	0.94	Londerzeel	65b	9.74	1.41
Veurne	98a	17.34	2.03	Londerzeel	65b	9.39	1.37
Veurne	98a	11.38	1.49	Londerzeel	65b	13.28	1.94
Veurne	98a	12.94	1.7	Londerzeel	65b	11.28	1.7
Veurne	98a	12.08	1.89	Londerzeel	65b	9.27	1.41
Veurne	98a	8.8	1.41	Londerzeel	65b	9.27	1.49
Veurne	98a	8.03	1.49	Londerzeel	65b	11.18	1.8
Veurne	98a	6.4	1.2	Londerzeel	65b	8.5	1.37
Veurne	98a	6.96	1.33	Londerzeel	65b	14.56	2.36
Veurne	98a	11.61	2.24	Londerzeel	65b	19.42	3.16
Veurne	98a	5.33	1.05	Londerzeel	65b	8.98	1.49
Veurne	98a	6.7	1.33	Londerzeel	65b	12.04	2
Veurne	98a	20.04	4.01	Londerzeel	65b	24.5	4.27
Veurne	98a	13.54	2.85	Londerzeel	65b	14.68	2.6
Veurne	98a	9.2	1.94	Londerzeel	65b	11.93	2.13
Veurne	98a	7.52	1.7	Londerzeel	65b	11.18	2.03
Veurne	98a	7.36	1.67	Londerzeel	65b	7.9	1.49
Veurne	98a	8.88	2.13	Londerzeel	65b	9.26	1.8
Veurne	98a	10.84	2.69	Londerzeel	65b	11.97	2.36
Veurne	98a	11.08	2.87	Londerzeel	65b	5.96	1.2
Veurne	98a	10.27	2.67	Londerzeel	65b	9.55	1.94
Veurne	98a	7.2	1.94	Londerzeel	65b	15.47	3.28
Veurne	98a	6.01	1.67	Londerzeel	65b	6.26	1.33
Veurne	98a	8.06	2.24	Londerzeel	65b	9.55	2.03
Veurne	98a	6.84	1.94	Londerzeel	65b	11.14	2.4
Veurne	98a	4.96	1.41	Londerzeel	65b	14.49	3.14
Veurne	98a	6.57	1.89	Londerzeel	65b	9.26	2.11
Veurne	98a	6.26	1.89	Londerzeel	65b	7.87	1.94
Veurne	98a	5.82	1.8	Londerzeel	65b	5.33	1.33

Veurne	98a	3.8	1.2	Londerzeel	65b	6.74	1.7
Veurne	98a	5.21	1.7	Londerzeel	65b	10.2	2.69
Veurne	98a	4	1.33	Londerzeel	65b	13.96	3.89
Veurne	98a	8.5	2.83	Londerzeel	65b	13.22	3.73
Veurne	98a	5.66	1.89	Londerzeel	65b	6.67	2
Veurne	98a	5.01	1.7	Londerzeel	65b	9.06	2.75
Veurne	98a	7.62	2.6	Londerzeel	65b	8.49	2.69
Veurne	98a	3.33	1.2	Londerzeel	65b	8.65	2.87
Veurne	98a	3.67	1.33	Londerzeel	65b	4.68	1.7
Veurne	98a	8.88	3.28	Londerzeel	65b	4.92	1.8
Veurne	98a	5.75	2.13	Londerzeel	65b	8.86	3.73
Veurne	98a	4.01	1.49	Londerzeel	65b	2.33	1
Veurne	98a	6.01	2.4	Londerzeel	65b	6.2	2.69
Veurne	98a	4.18	1.67	Londerzeel	65b	4.47	1.94
Veurne	98a	3.3	1.37	Londerzeel	65b	5.66	2.69
Veurne	98a	3.28	1.37	Londerzeel	65b	3.4	1.67
Veurne	98a	3.89	1.67	Londerzeel	65b	4.53	2.33
Veurne	98a	6.26	2.69	Londerzeel	65b	3.35	1.8
Veurne	98a	6.15	2.67	Londerzeel	65b	4.71	2.6
Veurne	98a	3.02	1.33	Londerzeel	65b	6.6	3.89
Veurne	98a	4.24	1.89	Londerzeel	65b	4.35	2.6
Veurne	98a	5.27	2.4	Londerzeel	65b	3.54	2.13
Veurne	98a	2.85	1.33	Londerzeel	65b	3.8	2.36
Veurne	98a	3.48	1.67	Londerzeel	65b	3.8	2.4
Veurne	98a	3.9	1.89	Londerzeel	65b	3.8	2.69
Veurne	98a	2.75	1.37	Londerzeel	65b	3.35	2.43
Veurne	98a	3.33	1.67	Londerzeel	65b	3.33	2.54
Veurne	98a	2.69	1.37	Londerzeel	65b	2.69	2.24
Veurne	98a	4.71	2.4	Londerzeel	20a	23.21	0.67
Veurne	98a	4.07	2.11	Londerzeel	20a	22.01	0.67
Veurne	98a	4.03	2.13	Londerzeel	20a	14.94	0.67
Veurne	98a	3	1.67	Londerzeel	20a	16.25	0.75
Veurne	98a	4.74	2.69	Londerzeel	20a	33.36	1.67
Veurne	98a	3.61	2.13	Londerzeel	20a	14.58	0.75
Veurne	98a	3.4	2.03	Londerzeel	20a	23.9	1.49
Veurne	98a	3.07	1.94	Londerzeel	20a	21.47	1.37
Veurne	98a	3.07	2	Londerzeel	20a	32.3	2.13
Veurne	98a	4.45	3	Londerzeel	20a	10.75	0.75
Veurne	98a	3.35	2.33	Londerzeel	20a	14.14	1
Veurne	98a	3.02	2.11	Londerzeel	20a	29.29	2.24
Veurne	98a	2.75	1.94	Londerzeel	20a	19.05	1.7
Veurne	98a	2.6	2.11	Londerzeel	20a	7.4	0.67
Veurne	98a	2.03	1.67	Londerzeel	20a	21.82	2.13
Veurne	98a	2.4	2.13	Londerzeel	20a	12.04	1.2
Veurne	98a	2.43	2.36	Londerzeel	20a	14.67	1.49
Veurne	98a	1.7	1.67	Londerzeel	20a	12.37	1.33
Veurne	23b	27.51	1.49	Londerzeel	20a	16.35	1.8
Veurne	23b	19	1.2	Londerzeel	20a	11.46	1.33
Veurne	23b	16.41	1.05	Londerzeel	20a	14	1.67
Veurne	23b	23.86	1.89	Londerzeel	20a	5.9	0.75
Veurne	23b	26.67	2.69	Londerzeel	20a	10.88	1.41
Veurne	23b	17.01	1.89	Londerzeel	20a	10.47	1.37
Veurne	23b	17.48	2.13	Londerzeel	20a	7.92	1.05
Veurne	23b	11.18	1.37	Londerzeel	20a	7.77	1.05

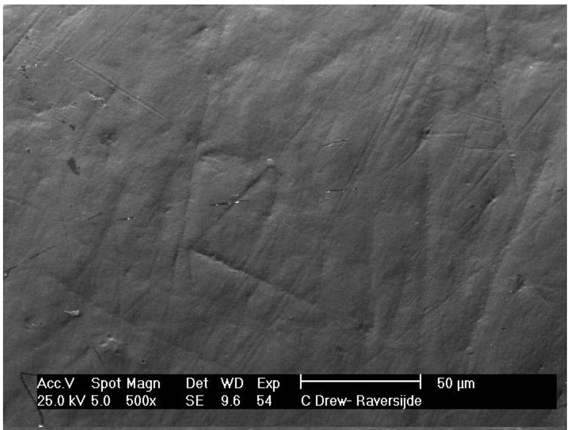
Veurne	23b	20.99	2.69	Londerzeel	20a	8.41	1.2
Veurne	23b	23.84	3.07	Londerzeel	20a	6.4	0.94
Veurne	23b	21.17	2.75	Londerzeel	20a	8.17	1.2
Veurne	23b	25.43	3.33	Londerzeel	20a	13.42	2.11
Veurne	23b	9.72	1.33	Londerzeel	20a	6.34	1
Veurne	23b	8.72	1.2	Londerzeel	20a	10.35	1.67
Veurne	23b	7.34	1.05	Londerzeel	20a	10.34	1.67
Veurne	23b	6.75	1	Londerzeel	20a	5.82	1
Veurne	23b	13.6	2.13	Londerzeel	20a	10.46	1.8
Veurne	23b	12.24	1.94	Londerzeel	20a	11.79	2.03
Veurne	23b	19.13	3.14	Londerzeel	20a	9.55	1.67
Veurne	23b	10.12	1.67	Londerzeel	20a	10.01	1.8
Veurne	23b	10.01	1.67	Londerzeel	20a	6.33	1.2
Veurne	23b	8.06	1.37	Londerzeel	20a	7.4	1.41
Veurne	23b	8.75	1.49	Londerzeel	20a	9.53	1.94
Veurne	23b	15.67	2.69	Londerzeel	20a	7.31	1.49
Veurne	23b	11.33	2	Londerzeel	20a	10.34	2.11
Veurne	23b	31.65	6.23	Londerzeel	20a	7.67	1.67
Veurne	23b	5.01	1	Londerzeel	20a	6.44	1.41
Veurne	23b	7.31	1.49	Londerzeel	20a	5.37	1.2
Veurne	23b	11.78	2.43	Londerzeel	20a	4.67	1.05
Veurne	23b	4.71	1	Londerzeel	20a	11.39	2.67
Veurne	23b	7.78	1.7	Londerzeel	20a	5.68	1.37
Veurne	23b	7.95	1.8	Londerzeel	20a	7.03	1.7
Veurne	23b	5.27	1.2	Londerzeel	20a	6.13	1.49
Veurne	23b	6.15	1.41	Londerzeel	20a	11.79	2.87
Veurne	23b	8.33	1.94	Londerzeel	20a	2.75	0.67
Veurne	23b	8.81	2.13	Londerzeel	20a	10.85	2.69
Veurne	23b	12.24	2.98	Londerzeel	20a	5.34	1.37
Veurne	23b	5.5	1.37	Londerzeel	20a	7.92	2.11
Veurne	23b	8.36	2.11	Londerzeel	20a	9.72	2.69
Veurne	23b	7.09	1.8	Londerzeel	20a	3.73	1.05
Veurne	23b	3.9	1.05	Londerzeel	20a	4.96	1.41
Veurne	23b	7.8	2.24	Londerzeel	20a	7.49	2.13
Veurne	23b	6.15	1.8	Londerzeel	20a	5.19	1.49
Veurne	23b	9.1	2.69	Londerzeel	20a	6.08	1.8
Veurne	23b	5.47	1.67	Londerzeel	20a	5.67	1.7
Veurne	23b	7.34	2.33	Londerzeel	20a	5.43	1.67
Veurne	23b	8.44	2.69	Londerzeel	20a	5.67	1.8
Veurne	23b	4.63	1.49	Londerzeel	20a	5.19	1.67
Veurne	23b	6.47	2.11	Londerzeel	20a	3.61	1.2
Veurne	23b	7.67	2.69	Londerzeel	20a	3	1
Veurne	23b	4.92	1.8	Londerzeel	20a	7.16	2.4
Veurne	23b	6.87	2.54	Londerzeel	20a	4.96	1.67
Veurne	23b	2.54	0.94	Londerzeel	20a	4.96	1.67
Veurne	23b	7.9	3.14	Londerzeel	20a	7.49	2.54
Veurne	23b	3.73	1.49	Londerzeel	20a	6.57	2.24
Veurne	23b	4.48	1.8	Londerzeel	20a	7.4	2.6
Veurne	23b	6.57	2.69	Londerzeel	20a	3.89	1.37
Veurne	23b	3.4	1.41	Londerzeel	20a	6.2	2.24
Veurne	23b	5.34	2.33	Londerzeel	20a	5.37	2
Veurne	23b	4.45	2	Londerzeel	20a	6.75	2.6
Veurne	23b	6.29	2.85	Londerzeel	20a	2.6	1.05
Veurne	23b	5	2.36	Londerzeel	20a	3.8	1.67

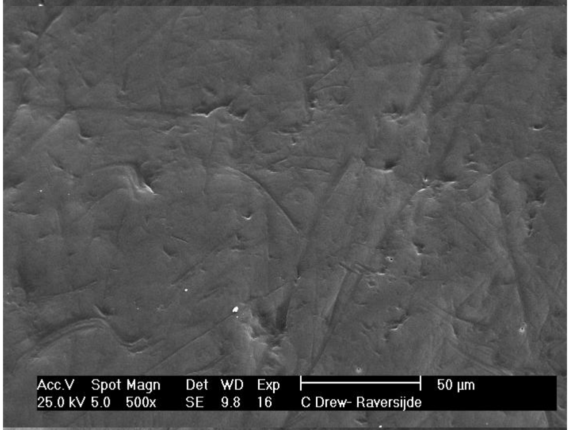
Veurne	23b	1.8	1	Londerzeel	20a	2.98	1.49
Veurne	23b	3.35	2.03	Londerzeel	20a	6.13	3.07
Veurne	23b	1.7	1.05	Londerzeel	20a	5.47	2.87
Veurne	23b	2.69	1.67	Londerzeel	20a	4.47	2.36
Veurne	23b	3.07	1.94	Londerzeel	20a	4.53	2.4
Veurne	23b	4.71	3.02	Londerzeel	20a	4.48	2.4
Veurne	23b	3.07	2.13	Londerzeel	20a	3.89	2.11
Veurne	23b	3.02	2.11	Londerzeel	20a	4.53	2.69
Veurne	23b	3	2.11	Londerzeel	20a	2.6	1.67
Veurne	23b	2.36	1.7	Londerzeel	20a	2.11	1.37
Veurne	23b	2.69	1.94	Londerzeel	20a	2.69	1.8
Veurne	23b	3.67	2.69	Londerzeel	20a	2.36	1.67
Veurne	23b	3.14	2.36	Londerzeel	20a	2.98	2.13
Veurne	23b	1.94	1.49	Londerzeel	20a	3.3	2.4
Veurne	23b	4.33	3.33	Londerzeel	20a	3.73	2.75
Veurne	23b	2.11	1.67	Londerzeel	20a	4.03	3.02
Veurne	23b	3.28	2.69	Londerzeel	20a	2.13	1.67
Veurne	23b	2.75	2.33	Londerzeel	20a	2.4	1.94
Veurne	23b	2.36	2.03	Londerzeel	20a	2.13	2.13
Veurne	23b	2.69	2.33	Londerzeel	20a	2.33	2.33
Veurne	23b	2.87	2.69				

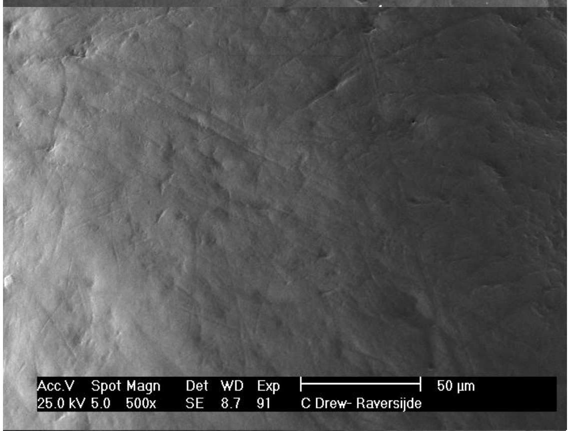
	Identified as a pit
	Identifed as a striation

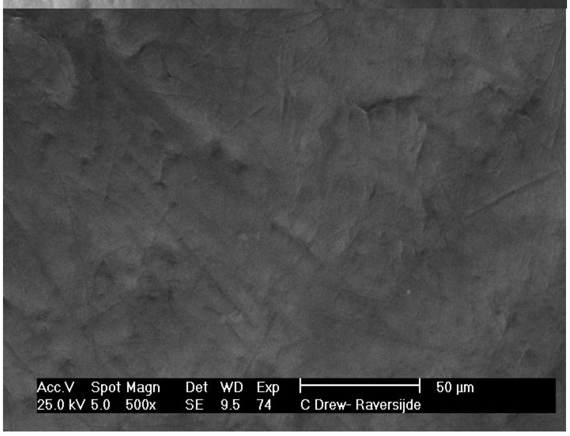
Appendix 7.8. Photomicrographs examined in this study

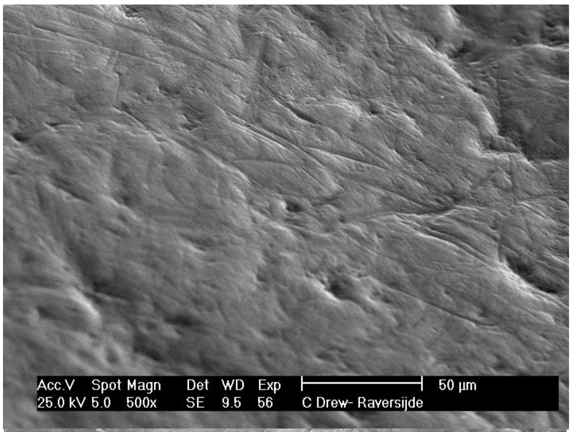
Raversijde Photomicrographs

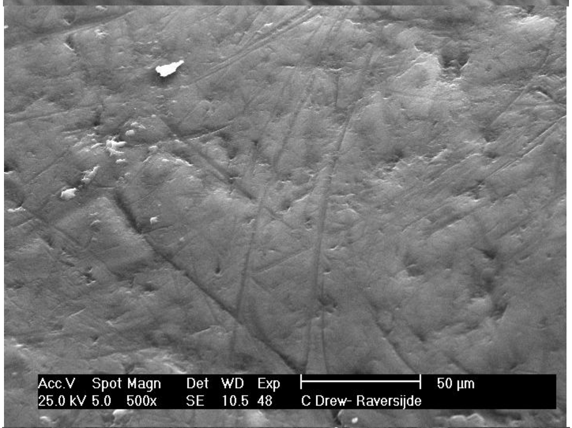


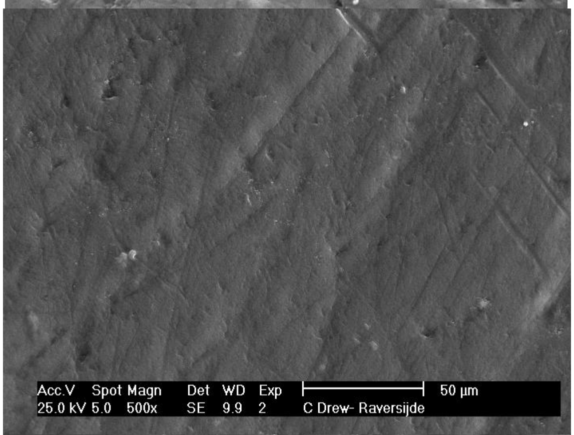


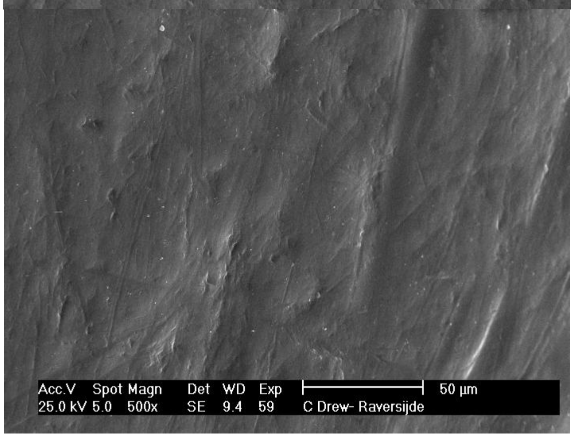


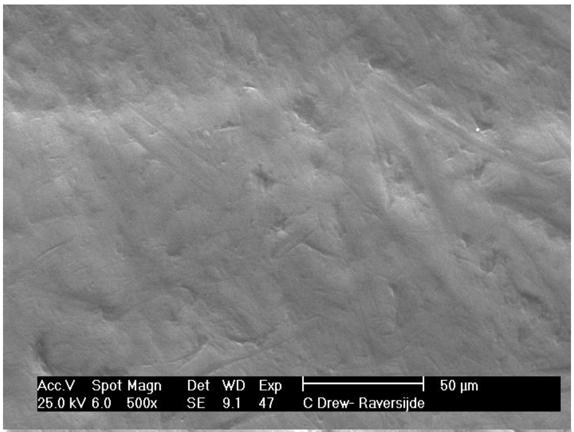


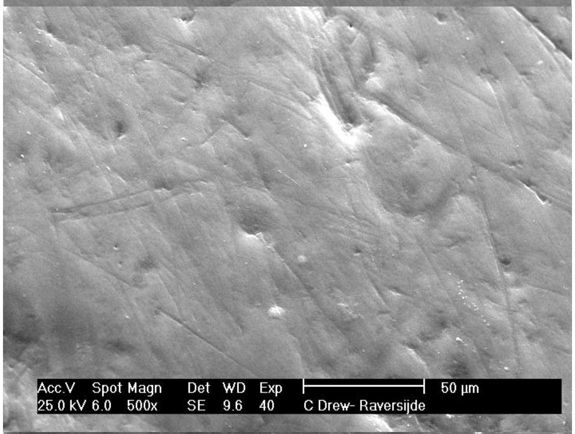

Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 5.0 500x SE 9.5 56 C Drew- Raversijde


Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 5.0 500x SE 10.5 48 C Drew- Raversijde


Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 5.0 500x SE 9.9 2 C Drew- Raversijde


Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 5.0 500x SE 9.4 59 C Drew- Raversijde


Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 6.0 500x SE 9.1 47 C Drew- Raversijde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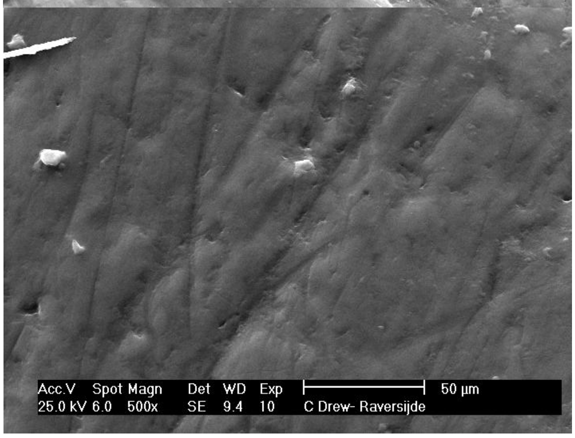
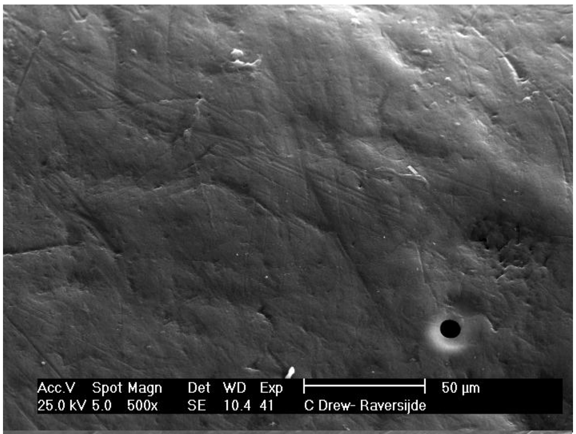
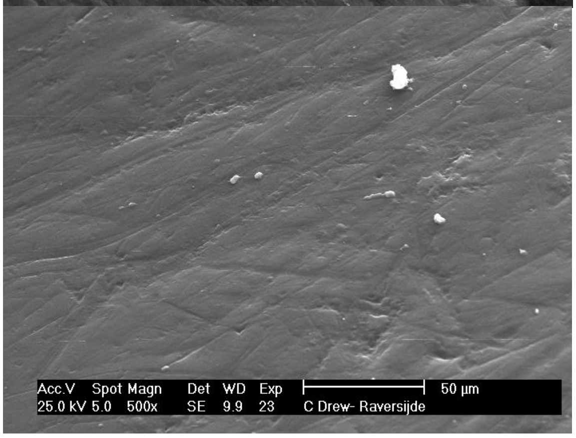
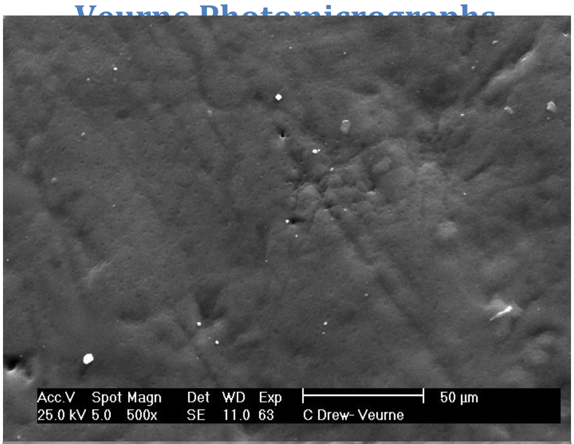
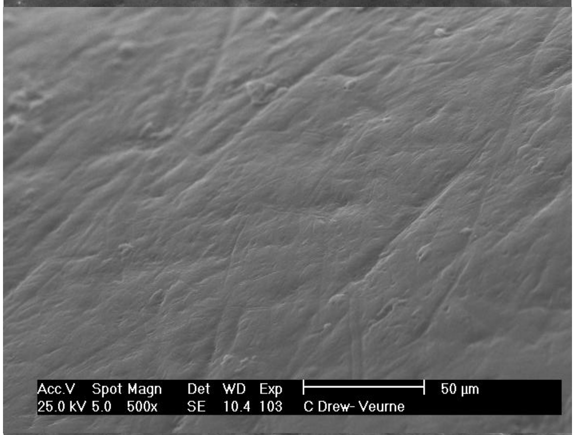

Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 6.0 500x SE 9.4 10 C Drew- Raversijde

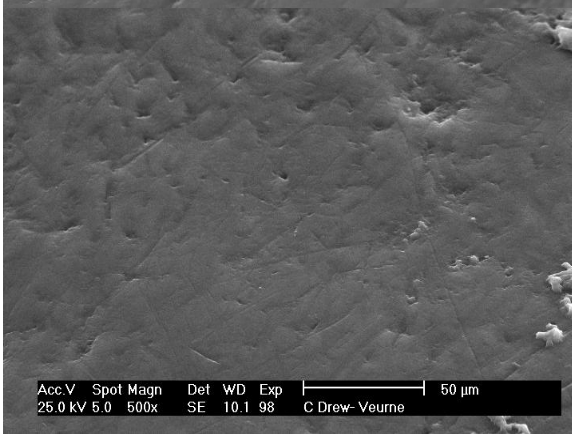

Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 5.0 500x SE 10.4 41 C Drew- Raversijde

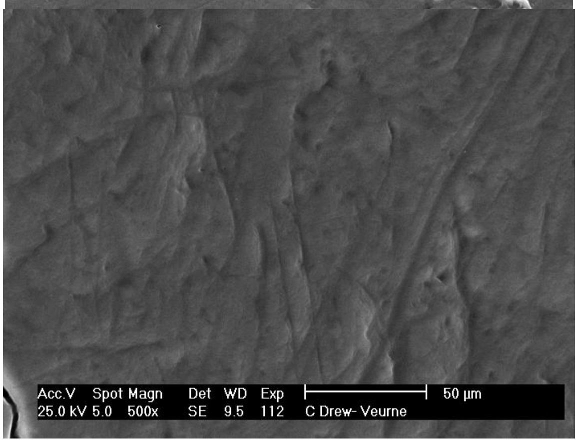

Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 5.0 500x SE 9.9 23 C Drew- Raversijde

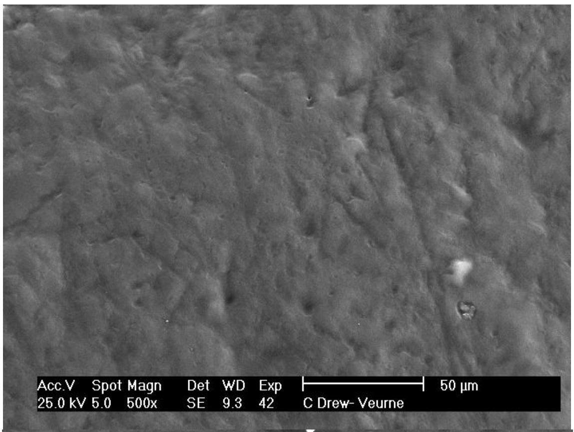
Veurne Photomicrographs

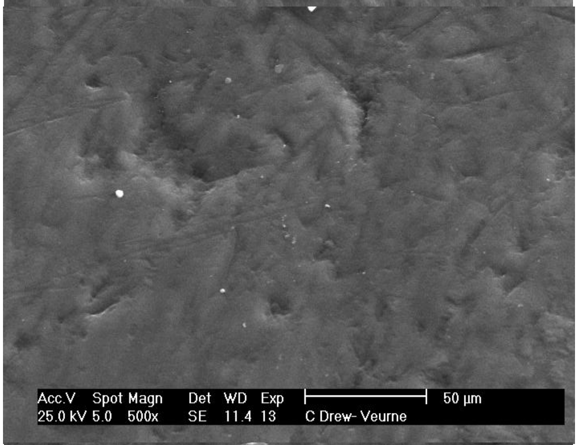


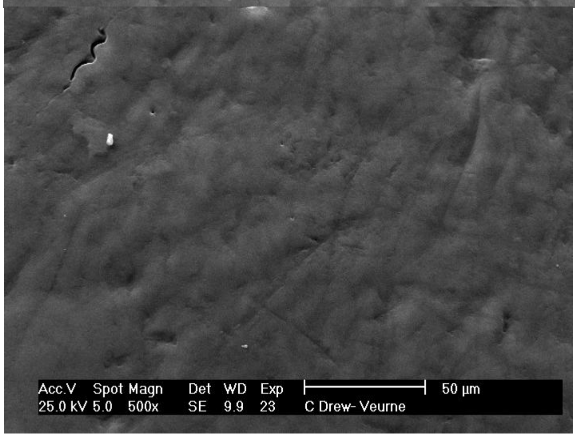


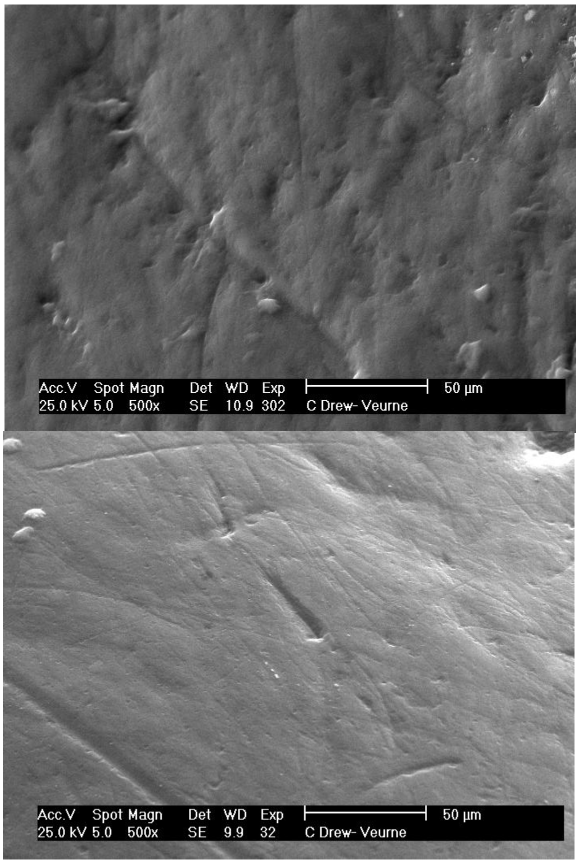





Acc.V Spot Magn Det WD Exp
25.0 kV 5.0 500x SE 9.3 42
50 µm
C Drew- Veurne

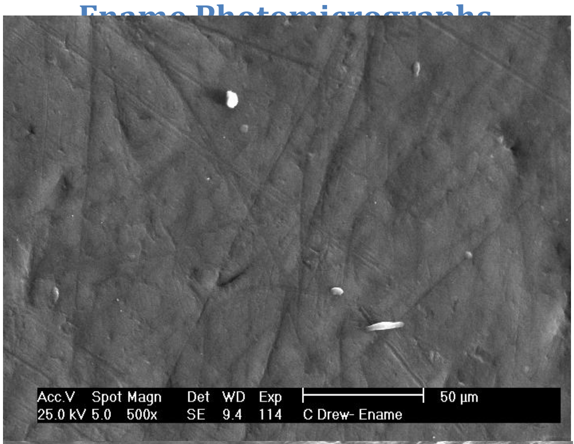

Acc.V Spot Magn Det WD Exp
25.0 kV 5.0 500x SE 11.4 13
50 µm
C Drew- Veurne

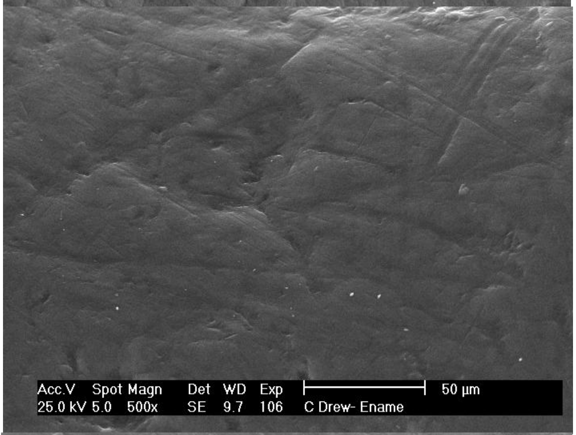

Acc.V Spot Magn Det WD Exp
25.0 kV 5.0 500x SE 9.9 23
50 µm
C Drew- Veurne

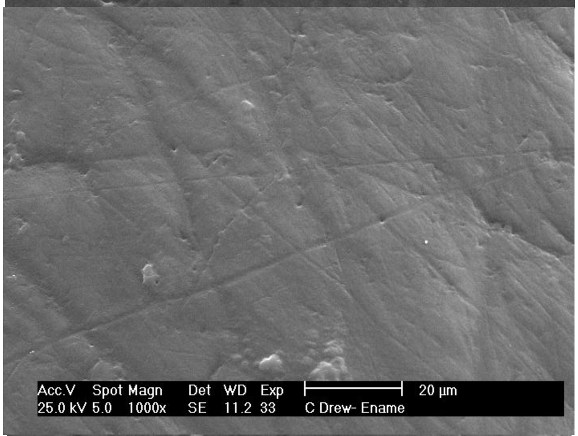


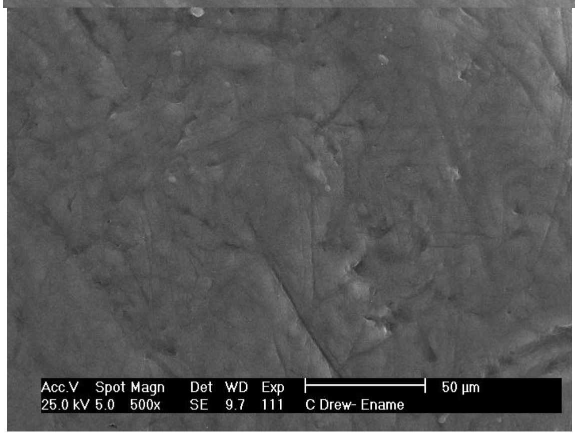
(Stub 112= Jaw 33b)

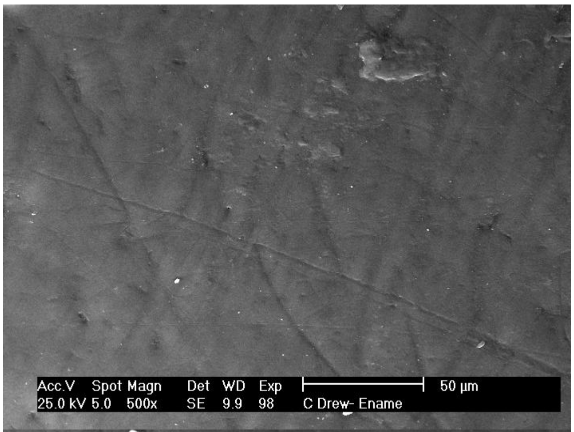
Ename Photomicrographs

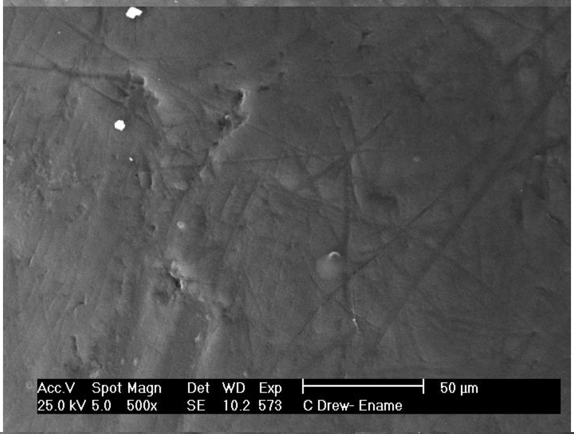


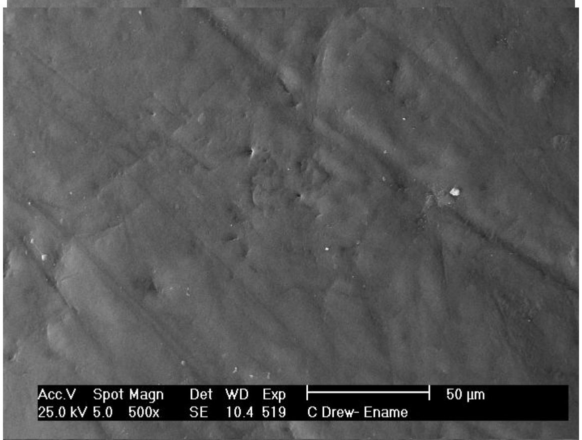


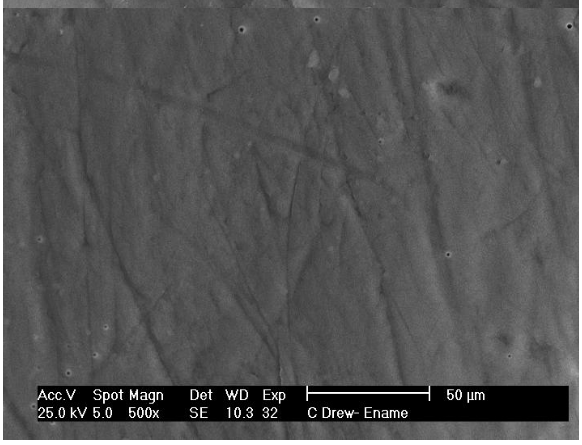


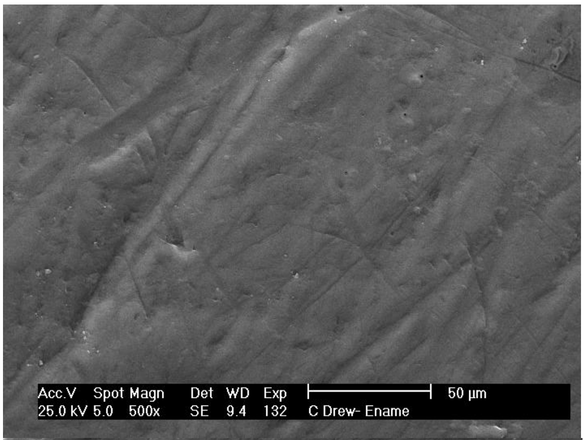


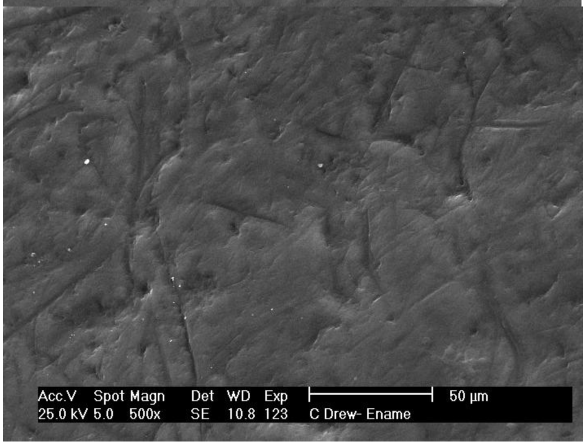

Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 5.0 500x SE 9.9 98 C Drew- Ename


Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 5.0 500x SE 10.2 573 C Drew- Ename


Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 5.0 500x SE 10.4 519 C Drew- Ename

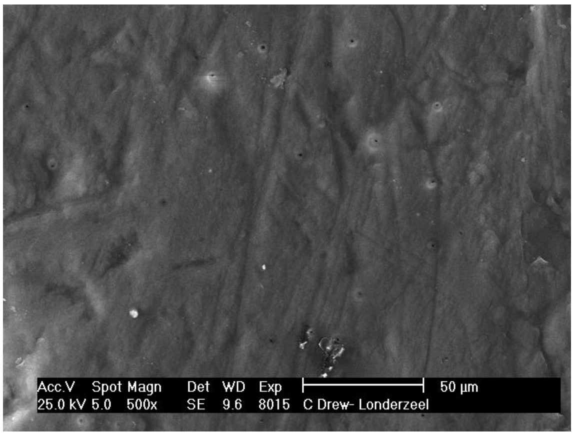

Acc.V Spot Magn Det WD Exp 50 µm
25.0 kV 5.0 500x SE 10.3 32 C Drew- Ename



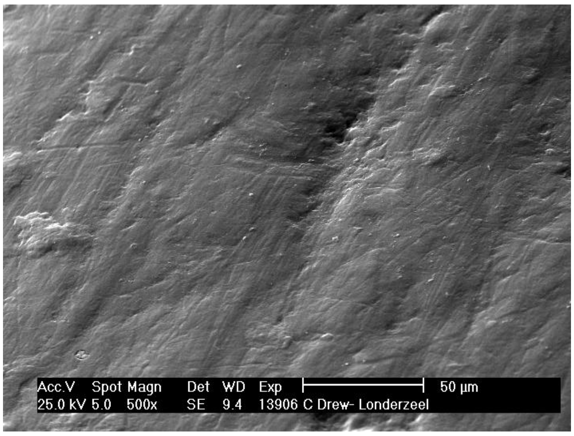


(Stub 98= Jaw 49b, Stub 573= Jaw 58c, Stub 132= Jaw 32c, Stub 519= Jaw 16a)

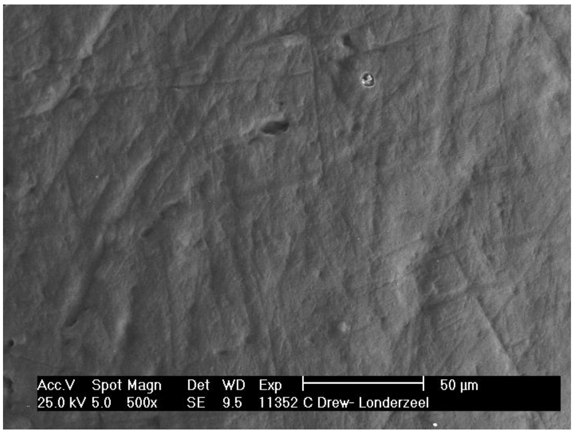
Londerzeel Photomicrographs



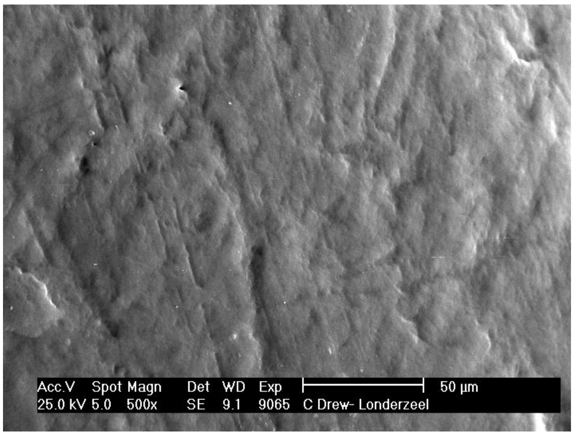
Stub 8015= Jaw 20a



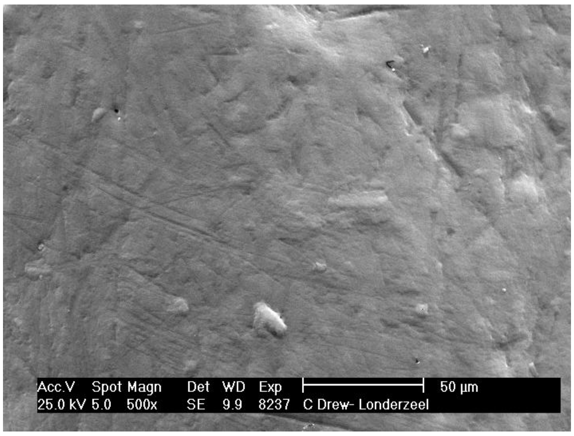
Stub 13906= Jaw 47a



Stub 11352= Jaw 27b

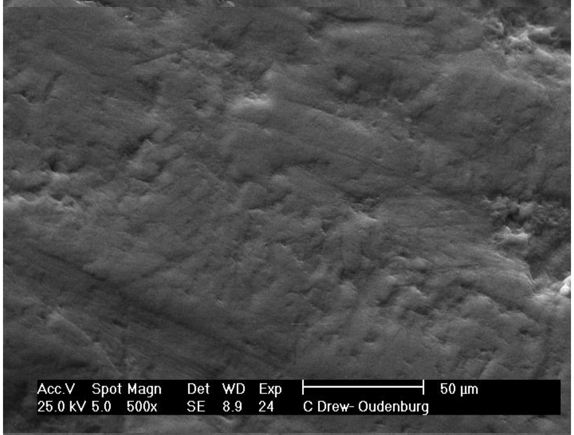


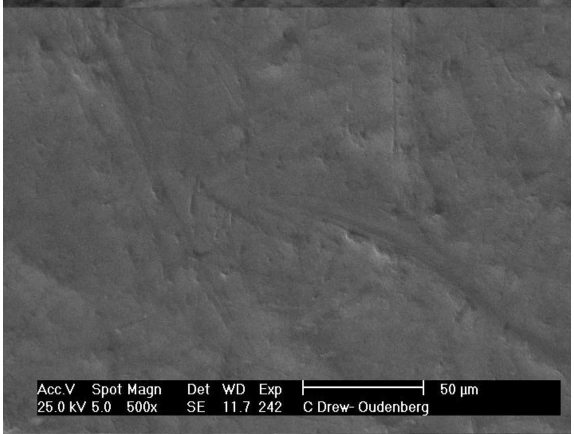
Stub 9065= Jaw 65b

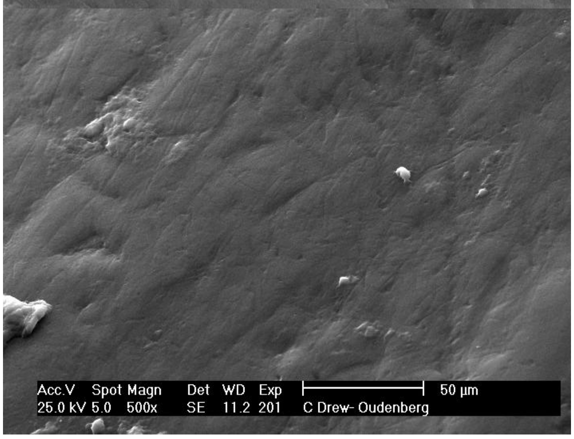


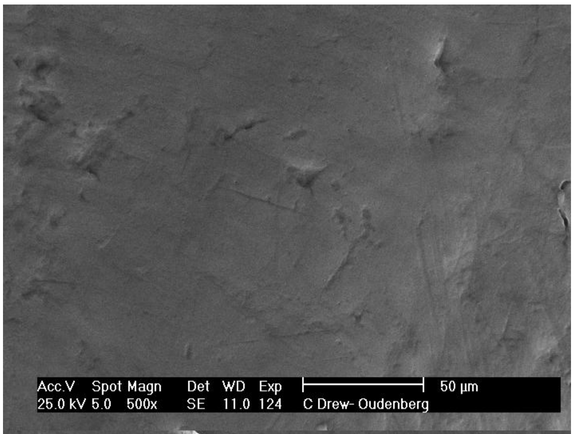
Stub 8237= Jaw 37

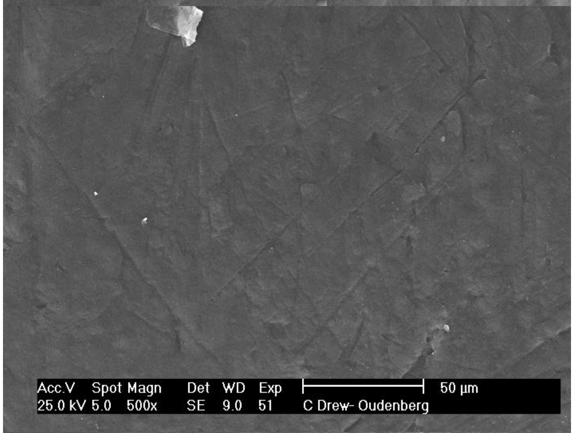
Oudenberg Photomicrographs

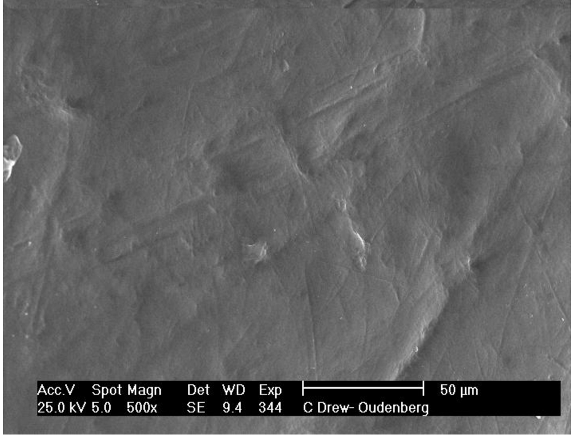


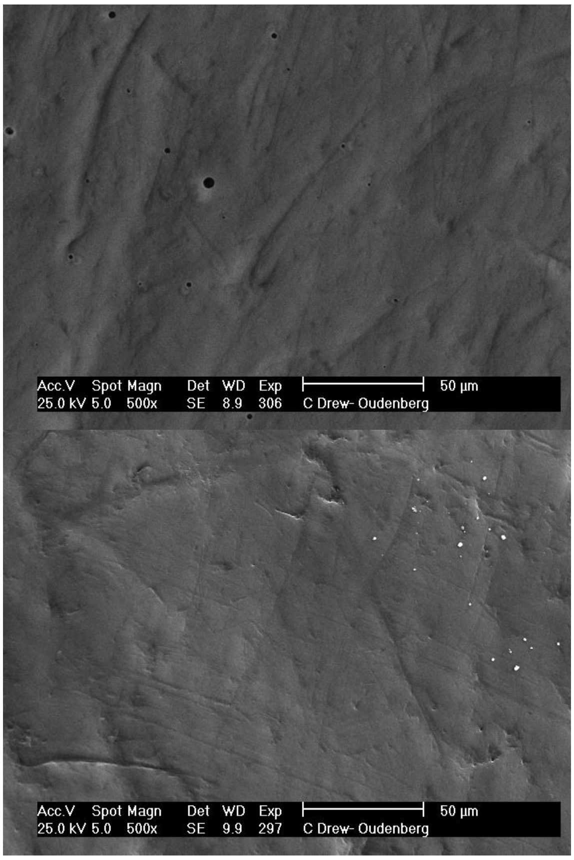





Acc.V Spot Magn Det WD Exp
50 µm
25.0 kV 5.0 500x SE 11.0 124
C Drew- Oudenberg


Acc.V Spot Magn Det WD Exp
50 µm
25.0 kV 5.0 500x SE 9.0 51
C Drew- Oudenberg


Acc.V Spot Magn Det WD Exp
50 µm
25.0 kV 5.0 500x SE 9.4 344
C Drew- Oudenberg



(stub 297= Jaw 291)

(All Stubs labelled with correct Exp numbers relating to jaw numbers used in this chapter except where noted, where different numbers had to be employed due to duplicate stub numbers on the SEM image bank)

Appendix 8.1. Stable isotope results

Site	*Species*	*Sample Number*	*$\delta^{13}C$*	*$\delta^{15}N$*	*C:N*	*% Collagen*
Veurne	Cattle	1	-22.0	8.1	3.3	2.9
Veurne	Cattle	2	-21.9	9.2	3.3	4.1
Veurne	Cattle	3	-21.3	7.7	3.2	5.2
Veurne	Cattle	4	-21.7	8.6	3.4	4.2
Veurne	Cattle	5	-21.0	7.0	3.2	6.3
Veurne	Pig	1	-21.2	8.6	3.4	5.8
Veurne	Pig	2	-20.6	10.3	3.2	5.1
Veurne	Pig	3	-21.2	12.0	3.2	3.5
Veurne	Pig	4	-20.4	7.2	3.3	3.0
Veurne	Pig	5	-20.7	6.8	3.4	4.5
Ename	Cattle	1	-22.2	6.4	3.3	2.1
Ename	Cattle	2	-22.6	7.6	3.3	2.1
Ename	Cattle	3	-22.3	9.6	3.2	1.6
Ename	Cattle	4	-22.1	8.6	3.2	1.6
Ename	Cattle	5	-22.5	5.7	3.3	2.9
Ename	Dog	1	-20.0	9.4	3.3	5.8
Ename	Pig	1	-20.7	5.7	3.4	2.0
Ename	Pig	2	-21.8	7.7	3.4	2.7
Ename	Pig	3	-21.1	6.9	3.2	5.2
Ename	Pig	4	-22.3	8.8	3.3	2.7
Ename	Pig	5	-22.1	8.6	3.2	4.8
Londerzeel	Cattle	1	-22.7	6.3	3.5	0.6
Londerzeel	Cattle	2	-22.1	6.2	3.3	4.4
Londerzeel	Cattle	3	-22.3	6.3	3.3	3.5
Londerzeel	Cattle	4	-22.4	7.2	3.3	3.2
Londerzeel	Cattle	5	-22.0	5.9	3.3	4.3
Londerzeel	Dog	1	-21.1	11.1	3.4	2.5
Londerzeel	Dog	2	-20.4	10.7	3.3	2.8
Londerzeel	Pig	1	-22.0	5.9	3.3	1.6
Londerzeel	Pig	2	-21.4	6.2	3.3	1.9
Londerzeel	Pig	3	-21.8	8.3	3.8	0.3
Londerzeel	Pig	4	-21.2	8.7	3.3	1.5
Londerzeel	Pig	5	-22.2	9.1	3.5	0.6
Raversijde*	Cattle	1	-21.5	6.2	3.7	0.3
Raversijde	Cattle	2	-21.8	6.2	3.2	2.7
Raversijde	Cattle	3	-22.0	7.0	3.2	4.5
Raversijde	Cattle	4	-21.9	7.5	3.2	2.2
Raversijde	Cattle	5	-22.6	6.0	3.6	0.9
Raversijde	Dog	1	-15.7	13.6	3.2	6.1
Raversijde	Dog	2	-18.3	12.5	3.2	5.5
Raversijde	Dog	3	-21.9	8.1	3.4	7.2
Raversijde	Pig	1	-20.1	9.4	3.4	1.8
Raversijde	Pig	2	-20.5	7.3	3.2	5.6
Raversijde	Pig	3	-20.8	9.2	3.2	6.3
Raversijde	Pig	4	-19.5	9.7	3.3	3.3
Raversijde*	Pig	5	-21.8	7.0	3.7	0.3

Appendix 8.1. Stable isotope measurements obtained for the material at the University of Bradford. Two samples excluded from the analysis are indicated by an asterix (*). (Table reproduced from Ervynck et al., 2007:183).