Riddles in the Dark? The human use of caves during the 1st millennia BC and AD across the British Isles

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-Abstract-

This thesis explores the significance of the human use of caves across the British Isles during the first millennia BC and AD (c.800 BC- 800 AD). Thus far, work has often focused on individual cave assemblages or has discussed cave-use as an adjunct to wider research as part of specific regional and chronological narratives. Whilst such studies demonstrate the potential importance of caves in the lifeways of past communities, these sites lack an overall context and more work is needed in order to integrate these places within wider narratives of first millennia Britain. As such, this study provides the first comprehensive overview and discussion of the role of caves during the Iron Age, Roman Iron Age and Early Medieval period across England, Wales and Scotland.

Using an integrated approach, combining studies of patterns of deposition inside caves with spatial and viewshed analysis of location, this thesis sets out to move away from treating caves as isolated backdrops of activity to examine how these sites, through their morphology and landscape position, influenced human selection and use. It becomes evident that despite cave-use being chronologically and regionally diverse, caves were important sites in many coastal and upland regions, often chosen because of the nature of their morphology and relationship to certain areas of the landscape. Furthermore, similarities in the nature of deposition in caves to that recorded elsewhere in other natural places and archaeological sites, along with the use and construction of manmade subterranean spaces, demonstrates that cave-use was intrinsically linked to wider social concepts of natural places, landscapes and the underground in general. These results enhance our understanding not only of the nature of cave-use during the first millennia but also how these communities perceived the world around them.

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Acknowledgments

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Chapter 1 : Riddles in the Dark? Cavescape Archaeologies

1.1 Introduction

The human use of caves reverberates throughout the past. As archaeological sites, caves were at the forefront of early research and studies by the likes of William Buckland and William Boyd Dawkins, highlighted the multi-period significance of these sites. Paradoxically, despite a resurgence in cave archaeology in recent years across Europe (Bergsvik & Skeates 2012; Dowd 2015) and Central and Southern America (Brady et al. 2010; Chládek 2011; Palka 2014), caves are frequently overlooked in studies of 1st millennia landscapes across Britain. Current research has often focused on individual sites (e.g. Armit et al. 2011; Birch et al. 2009; Marcucci et al. 2011) or has studied caves as part of specific regional and chronological narratives (Branigan et al. 1992; Branigan 1997; Bryant 2011; Leach 2015). Whilst these studies highlight the importance of caves, an overall analysis of cave-use is needed to understand how these sites fitted within their archaeological landscapes. This not only includes discussion on how activity in caves related to activity in settlements and other natural places, but also how underground experiences may have influenced acts of cave-use.

The aim of this thesis is to explore the use of caves throughout England, Wales and Scotland between c.800 BC to 800 AD. By taking a holistic approach, combining discussions on cave morphology, location and deposition, this study will provide a comprehensive overview of cave-use. In doing so, the human-use of caves will be placed within wider narratives of the 1st millennia.

1.2 Aims of the thesis

In order to explore why caves were used and what motivated their selection, this study focuses on British cave-use during c.800 BC- 800 AD, encompassing the end of the Late Bronze Age, Iron Age, Roman Iron Age and Early Medieval period. Northern Ireland was not included as part of the study because caves in the whole of Ireland have recently been discussed by Dowd (2015). By considering the long durée of cave use, it was possible to explore how approaches towards caves may have been affected during periods of significant social change.

The main aims of the study can therefore be broadly defined as:

A) To understand the role of caves during the 1st millennia BC and AD (800 BC-800 AD) across England, Wales and Scotland; and to

B) Consider how cave-use may have related to the use of other natural places and underground spaces

These aims situate cave-use within broader narratives of the 1st millennia, in order to demonstrate that caves cannot be studied in isolation. The use of caves must be considered alongside activity recorded in other natural places, such as watery places, as well as in settlements. Therefore, the objectives of the study are to:

O1- Develop a database of caves used during the 1st millennia (A1, A2)

O2- Assess the temporal and spatial distribution of caves across England, Wales and Scotland (A1, A2)

O3- Explore the context of depositional practices within cavescapes (A1, A2)

O4- Consider the relationship of caves to patterns of land-use, other natural features and boundaries (A2)

1.3 Structure of the thesis

Chapter 1: outlines the broad structure of the thesis and explores the historiography of British cave archaeology and the role of caves in previous approaches to landscapes of the 1st millennia.

Chapter 2 introduces the theoretical and practical methodology of the study. Through a discussion of the ethnographic and archaeological use of caves in Central and Northern America, it will be argued that caves are active agents, capable of influencing human-use because of their diverse and unusual sensescapes. Drawing on this, a methodology will be introduced that combined studies of cave location and morphology, to explore what motivated cave-use.

Chapter 3 explores the regional use of caves during the 1st millennia. Discussion focuses on the chronology of cave-use and demonstrates that there were some significant variations, which highlight regional approaches towards cave-use during the Roman Iron Age and Early Medieval period. Furthermore, it will be shown that activity in some caves was connected to wider instances of deposition taking place in settlements.

Chapter 4 demonstrates the fundamental role cave experience and morphology had on the use of caves during the 1st millennia. Through a study of the morphological context of use, it will

be shown that complex cave environments, such as those with multiple chambers and vertical entrances, attracted long-term and complex orchestrated acts of deposition.

Chapter 5 will situate the use of caves within its landscape context. By analysing cave-use in two contrasting regions, Argyll & Bute and the Southern Craven district of the Yorkshire Dales, it will be shown that activity in caves were part of ritual 'cave landscapes' focused on areas of transition. Consequently, activity was often concentrated in multiple caves, reflecting the need for broader approaches towards cave-use.

Chapter 6 focuses on the nature of craftworking in cave environments, arguing that using such sites imbued craft workers and their material with metaphors attached to cavescapes. The underground was fundamental to processes of metalworking and may also have been closely associated with the metaphorical nature of bone working and weaving. From this, a number of metaphors will be discussed including concepts of fertility, regeneration and health, which might have been bound to communal practices in caves indicated by the deposition of symbolically important artefacts.

Chapter 7 discusses the cosmological nature of caves and cavescape experience through an analysis of the deposition of human and animal remains in caves. From this, it will be argued that votive use of caves could have been tied to cosmologies attached to water. Furthermore, through comparative analysis of the architecture of man-made underground spaces, such as fogous and souterrains, it will be argued that communities artificially attempted to simulate cave experiences.

Chapter 8 concludes the thesis through a discussion of the use of caves during the 1st millennia and avenues for further research.

1.3 Key terms

Cave is used in this thesis to describe both a natural underground feature accessible through an aboveground opening or a semi-subterranean rock overhang, or rockshelter. Within the methodology discussion in Chapters 2 and 4, I will outline a number of further cave morphologies used within this study.

Cave Morphology: can be defined as the physical structure of the cave. Whilst cavescapes encompass both morphology and sensescape.

Cavescape: is defined as a subterranean landscape, encompassing morphology but also the sensescapes associated with belowground experience. Cavescapes are not limited to the natural caves but can also be found in subterranean structures, as well as pits and ditches.

Re-Use: is used to discuss the nature of activity in caves with evidence of multiple periods of use. It is important to note that re-use does not imply a continuity in the type of activities in caves, but does highlight the complex nature of how people may have perceived antecedent activity that took place in caves. Rather than being two isolated points in time, evidence of multi-periods of activity were likely connected to a complex sequence of perception, memory and imagination.

World-Views: are defined as how people construct and relate to their shared environment. Consequently, world-views may be reinforced by individual agency and are therefore culturally and environmentally sensitive.

1.4 Stuck in the dark? The current state of British cave archaeology

Before assessing the role of caves within the research frameworks of the 1st millennia it is necessary to discuss how British caves have been studied in the past. By outlining key developments in the historiography of cave research, the following section will introduce a number of issues that face cave archaeologists, including the lack of systematic excavation and contextual studies and the need for greater dissemination.

1.4.1 Overview of cave excavations (1800-2015)

The exploration of caves has a specific historiography that has limited how much data has survived, which in turn has influenced current research and heritage frameworks. Figure 1.1 presents an overview of the number of cave excavations per decade both in England and Wales compared to Scotland between 1800 and 2015. It demonstrates that whilst caves continued to be excavated throughout the period, there were three notable peaks in the number of excavations occurring in England and Wales (1850-1880; 1910-1930; 1950-1970) and one peak during 2000-2010 in Scotland. These peaks can be explained through a discussion of key developments taking place in cave archaeology over the past two centuries.

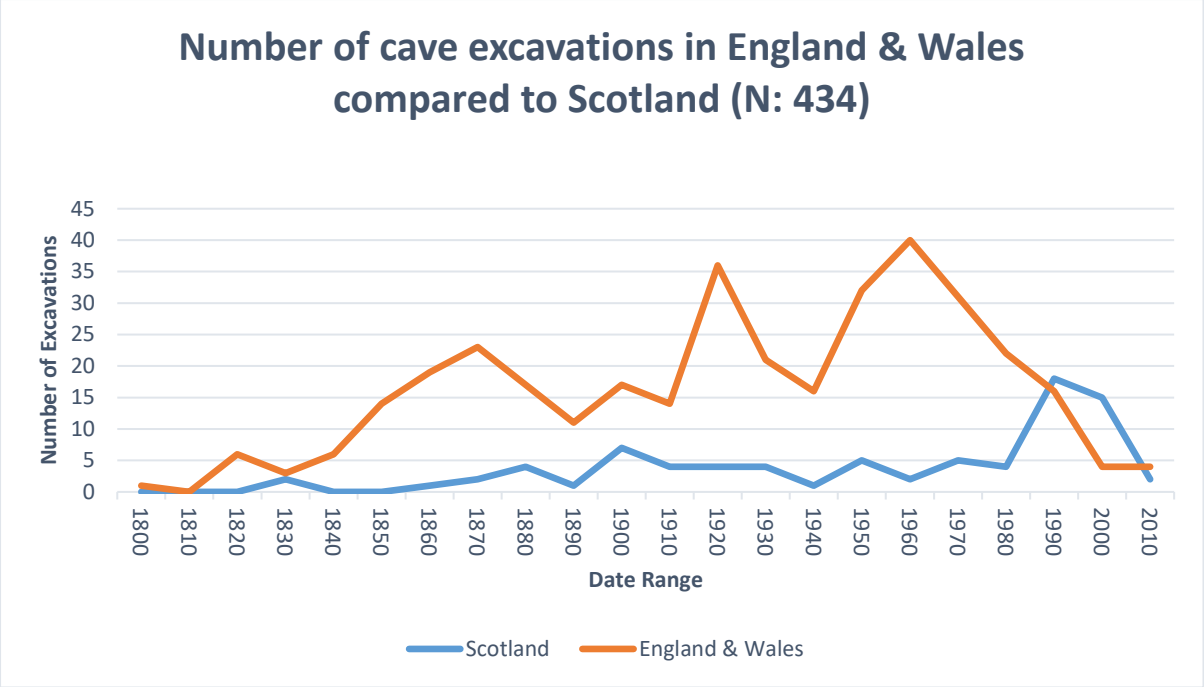


Figure 1-1: Cave excavations per decade in England & Wales (N:353) and Scotland (N:80) demonstrating increases during the Late 19th century, 1910-1930 and 1950-1980, whilst in Scotland there is an increase between 1990-2010.

1.4.2 Cave hunting: cave scholarship in the 19th century

British cave studies have a long tradition of research and have consequently played a fundamental role in the development of the disciplines of geology, archaeology and palaeontology. Archaeological investigation in caves by antiquarians such as William Boyd Dawkins (1837-1929) and William Buckland (1784-1856) were prompted by recreational cave exploration and the development of show caves (Jackson 1953; Chapman 1993; White 2016). Across upland limestone, such as in North Yorkshire, early exploration of sites including Alum Pot, first descended by John Birbeck in 1847 (Brook et al. 2014: 19) and Boggarts Roaring Holes first navigated in 1899 (Brook et al. 2014: 6), began a tradition of cave exploration that became a recreational sport from the turn of the 20th century (Chapman 1993: 13). Parallel to the development in recreational caving, or "cave-hunting holidays" (ibid.), geologists also noted the value of caves as a source of fossilised fauna and as archaeological sites. The discovery of the so-called 'Red Lady of Paviland', the articulated skeleton of an adult covered in red ochre, in Goat Hole Cave, Gower by William Buckland in 1823, was a result of the exploration of the cave for Pleistocene fauna (North 1942). Similarly, excavations motivated by the discovery of extinct animals within the caves of Creswell Crags, Derbyshire, also uncovered archaeological material, including finds dating to the Iron Age and Roman Iron Age (Dawkins 1877; Mello 1875).

1.4.2.1 Attitudes to 1st millennia cave-use in the 19th and Early 20th centuries

One of the first caves to be excavated was Victoria Cave, discovered in 1838, immediately west of Settle, North Yorkshire (Dearne et al. 1998). Excavations focused on recovery of Palaeolithic fauna and used dynamite to reach material buried under layers of stalagmite at the cave entrance (Dearne et al. 1998: 34; see below). Excavations at Greater Kelcoe Cave during 1846, 600 metres north-west of Victoria Cave, also focused on recovering early prehistoric material culture. Despite the loss of upper stratigraphic layers, excavations of both caves reported finds of Roman Iron Age metalwork (Denny 1859; Dawkins 1872; Simpson 1950). By the late 1850s a sequence of excavations occurred across England and Wales that aimed to recover remains of early humans and animals, which were reported in geological symposiums (e.g. Denny 1859; Dawkins 1877). Roman Iron Age and 'Celtic' material culture was also being reported in national journals (Farrer et al. 1865; Denny 1859; Dawkins 1872), publicising the extensive chronology of cave-use. By 1859, Arthur Denny, who also excavated Victoria Cave earlier in 1840, compared Roman Iron Age finds found in Dowkerbottom Hole to those discovered in Derbyshire and the Mendip Hills (Denny 1859: 44). Elsewhere, excavations at Attermire Cave, Settle in 1880 and Lady Algitha's Cave in 1885, referenced material culture found at Kelcoe and Victoria Caves earlier in the century (Raistrick 1939: 116; Jackson et al. 2007).

By the end of the 19th century, excavations of caves such as Dowkerbottom Hole and Victoria Cave led to an appreciation for the Roman Iron Age and earlier use of caves, reinforced by basic understandings of the stratigraphic formation of cave deposits. However, as a result of Colonialist frameworks, cave-use was often interpreted as evidence of "…fugitives, probably the wives and families of a persecuted or conquered people" (Denny 1859: 53) who "entered upon (caves) from urgent necessity and not as a matter of choice" (ibid.). This prevailing view continued in to the 20th century with excavators such as J.W Jackson (Jackson 1910: 10) suggesting that caves were occupied by:

"…the poorest and wildest among hillmen of the Pennine range, living (it may be) largely on robbery, suspected by their neighbours but seldom caught"

Similar interpretations were also used by Branigan and Dearne (1992) in their assessment of Roman Iron Age cave activity, largely arguing that caves were used by the rural poor, bandits and peddlers (see below). Elsewhere in Scotland, work by Kristjan and Charles-Edwards (Ahronson et al. 2010) has highlighted the role of the likes of Daniel Wilson (1816-1892) and

James Simpson (1811-1870) in establishing Scottish caves as key sites in early Christian monasticism. Antiquarian accounts of cave-use along the eastern (Smith 1889) and western coastlines (Maclagan 1876; Wace et al. 1915) of Scotland, argued that many caves were used as satellite hermitages tied to Early Medieval Saints.

1.4.3 Cave-men & cave scholarship in the early 20th century (1900-1940)

During the 20th century, cave archaeology relied on the impetus of a few individuals, notably Arthur Raistrick (1896-1991), Herbert Balch (1869-1958) and J.W. Jackson (1880-1978). Raistrick published extensively on the archaeology of northern England and excavated six caves, including Jubilee Cave on Attermire Scar between 1935-1939 (Raistrick 1939: 116) and Langscar Cave in 1940 (Branigan et al. 1991a).

Further south, Herbert Balch also excavated four caves in the Mendip Hills and between 1920 and 1940, he published four books that incorporated a mixture of geology, speleology and archaeology, demonstrating the wider naturalist interest in caves during the early 20th century. Balch worked extensively in Wookey Hole (1900-1915), one of the largest natural caves in the Mendips, which was previously investigated by William Buckland and William Boyd-Dawkins in the late 19th century. Here, he identified a sequence of archaeological deposits belonging to the Iron Age and Roman Iron Age that were interpreted as evidence of long term occupation (Balch et al. 1911).

1.4.3.1 Caving clubs and cave landscapes

As part of the Somerset and Wells Natural History Society and Wessex Caving Club, Balch was also involved in the excavation of caves across south-west England that intensified during the 1920s and 1930s. Similar to the Wessex Caving Club, one of the primary groups involved in cave exploration in northern England was the Pig Yard Club in Settle, including the landowner Tot Lord (1899-1965). The Pig Yard Club were responsible for a number of excavations across the region, including at Sewell's Cave in 1932. Unlike the focused research agendas of early 19th century antiquarians, local groups and the works of individuals such as Raistrick and J.W Jackson, aimed to understand how cave-use related to other archaeological sites.

In contrast to the piecemeal antiquarian excavation of caves as part of a tradition of fossil hunting during the late 18th century, work by individuals such as Raistrick and Balch helped to situate caves within regional narratives. Neolithic, Bronze Age, Iron Age and Roman Iron Age material was recorded with more frequency, in part down to a more scientific appreciation for

stratigraphy, but also because of an appreciation of caves as multi-period sites. The extent of Iron Age occupation of Yorkshire caves was discussed by Raistrick in his paper on Iron Age settlement published in 1939 in the *Yorkshire Archaeological Journal*. In this, Raistrick (1939: 122) argued that caves must be considered "with the adjacent enclosures and not as isolated inhabited sites divorced from the land". By placing such sites in a wider settlement framework, he concluded that caves were used as temporary shelter or specialised sites of metal or bone working (Raistrick 1939: 124). As a result, caves such as Jubilee Cave, excavated between 1936 and 1938, were interpreted as locales of Iron Age burial based on the presence of comparative finds from other caves and their relation to settlements (Raistrick 1939: 124).

1.4.4 Caving clubs & caving in the Post-War period (1950-1990)

After the Second World War, an interest in the archaeological-use of caves remerged as part of a wider resurgence in recreational caving, the establishment of new caving groups and new technologies. Many of these excavations aimed at understanding the stratigraphic and chronological relationship of cave deposits, as well as obtaining samples for radiocarbon dating.

1.4.4.1 Caving groups & archaeologists

This increase in the number of active cavers and organised caving groups led to an intensification of reported archaeological finds between 1960 and 1990. Exploration of previously inaccessible cave systems yielded archaeological deposits that were either excavated by caving clubs or reported to local authorities. A number of caves were excavated by speleological societies, including Swildon Hole in 1960 by Wessex Caving Club and Hope Wood Hole in 1950-1951 by the Westminster Speleological Society, who recorded deposits of archaeological material as part of systematic digging for cave passageways.

Whilst it is unclear how many finds went unreported to archaeology groups, without the development of public caving, many archaeological caves would have remained undiscovered. Indeed, many caves were -and still are- brought to the attention of archaeologists through recreational caving groups. J.A Gilks, who worked closely with caving groups, excavated a number of caves in the north of England, such as North End Pot in 1985-1989 (Gilks 1989; Gilks et al. 1993) and Raven Scar Cave in 1973-1983 (Gilks 1976, 1985). Through radiocarbon dating and by comparing site assemblages, he was able to identify fifty-six mortuary caves used during the Neolithic and Early Bronze Age and his work remains an important dataset for studies in early prehistoric cave-use. Parallel work on the caves during the 1950s and 1960s in the south-west of England by the likes of Tratman also demonstrates the close relationship

between public societies and archaeologists, seen in excavations of King Arthur's Cave, Symonds's Yat in 1952 (Apsimon 1992) and Long Hole Cave, Somerset between 1960 and 1977 (Tratman 1955).

1.4.5 The current state of cave archaeology in the British Isles

In the latter half of the 20th century the discovery of archaeological caves and deposits relied upon communication between archaeologists and caving groups, and combined systematic excavation with the careful recording of site visits. As figure 1.1 demonstrates, however, in the current century the number of cave excavations has declined across England and Wales. In Scotland, focused surveys of caves- including the Scotland's First Settler's Project (Ashmore et al. 2009), the Rosemarkie Cave's Project (Anderson-Whymark 2011), the Wemyss Caves Project (Gibson 2004; Gibson et al. 2007) and the Islay Cave's Project (Hardy 2002, 2004) - have used test-pitting and trial trenches to understand the anthropogenic use of caves in Scotland. As a result, a number of new caves have been identified alongside the re-analysis of caves, including the osteological analysis of the MacArthur's Cave assemblage (Saville et al. 1994) and re-excavation of Sculptor's Cave (Armit et al. 2011).

In England and Wales however, there has been little new cave survey or excavations. This can partly be explained by the allocation of resources to the excavation and study of sites discovered through developer funded programmes and aerial survey (e.g. Bradley 2006; Fulford et al. 2015). However, it may also be as a result of the difficulty in excavating caves, which are often hard-to-reach and require specialist excavation methods.

1.4.5.1 Caves as a potential archaeological resource

Recent conservation audits in both the Yorkshire Dales (Holderness et al. 2006) and the Manifold Valley Staffordshire, by Trent and Peak Archaeological Trust (1993), have identified potential archaeological deposits in caves, many of which remain unexcavated. Isolated stray finds of artefacts in caves also continue to be reported in active caving regions, including the Yorkshire Dales and the Peak District, although none have been excavated.

In a 2006 conservation audit in the Yorkshire Dales, thirty-five of 221 caves surveyed as part of the study (16%) were identified as containing possible or known archaeological deposits (Holderness et al. 2006). Furthermore, a recent Heritage Lottery Grant awarded for community excavation of Hags Brow Cave near Settle and the digitisation of cave excavation archives of caves in Cravendale, highlights the potential for further discoveries and the importance of caves as an archaeological resource (Moore 2015).

A recent report published by Historic England (2011) has also stressed the significance of caves as heritage assets requiring further protection and study. Similarly, period-specific research frameworks have stressed the need for broader understandings of caves within their landscape context, including those of the Scottish and English Iron Age (see below).

1.5 Issues facing cave archaeology

1.5.1 Sporadic excavations

The discussion above has focused on the history of cave archaeology and a number of influences this may have had on the current dataset. This history, coupled with the unique nature of caves, presents a number of significant challenges when researching their human-use. Given the long history of interest in speleology and cave archaeology, a number of sites have been subject to multiple excavations that have employed different techniques and interpretations. Well-known sites, including Wookey Hole (excavated four times between 1859-1973), Bacon Hole, Paviland (excavated seven times between 1848-1984) and Gough's New Cave, Mendip (excavated six times between 1890-1987), have been excavated multiple times using contrasting techniques under different research agendas.

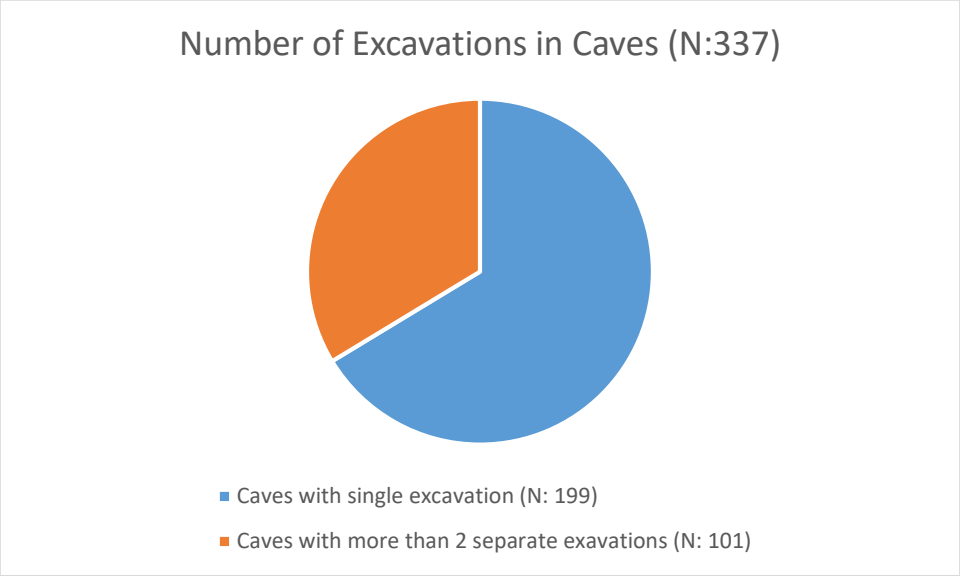


Figure 1-2: Caves with single and multiple archaeological investigations across the British Isles- 101 caves have been excavated more than once under different research agendas

Figure 1.2 presents the number of excavations in 337 caves across the British Isles and demonstrates that the majority of caves (N: 199) have only been excavated once, often during the 19th and early 20th centuries. The sporadic nature of cave excavation does present issues in corroborating archives and stratigraphic relationships, which is often impossible given that much of the material recovered from caves excavated during the 19th century is now lost.

Recent research has therefore often focused on reconstructing these archives or re-excavating spoil heaps and undisturbed contexts in caves. For example, work by Armit et. al (2011) at Sculptor's Cave, Covesea and by Marcucci et al. (2011) at Read's Cave, Somerset, has focused on re-cataloguing material recovered during antiquarian investigations.

1.5.2 Excavation techniques

As we have seen, the attractiveness of caves as sources of archaeological and paleontological objects resulted in antiquarian excavations, which often employed destructive excavation techniques, in order to access deeper deposits. Dynamite and the unsystematic recovery of material, has unsurprisingly damaged archaeological contexts, including deposits of prehistoric and early historic artefacts. In excavations of caves, such as Victoria Cave, Settle, dynamite was used to access the lower parts of the cave breccia and to allow easier access to the main cave chambers (Figure 1.3).

Explosives have also often led to the discovery of cave chambers during quarrying and mining, mostly in the upland lead rich regions of England, such as the Mendip Hills and Peak District. Whilst, such techniques have obvious implications for understanding the types of material found in caves, the use of evasive techniques has often destroyed, or significantly changed the morphology of many caves (Figure 1.4).

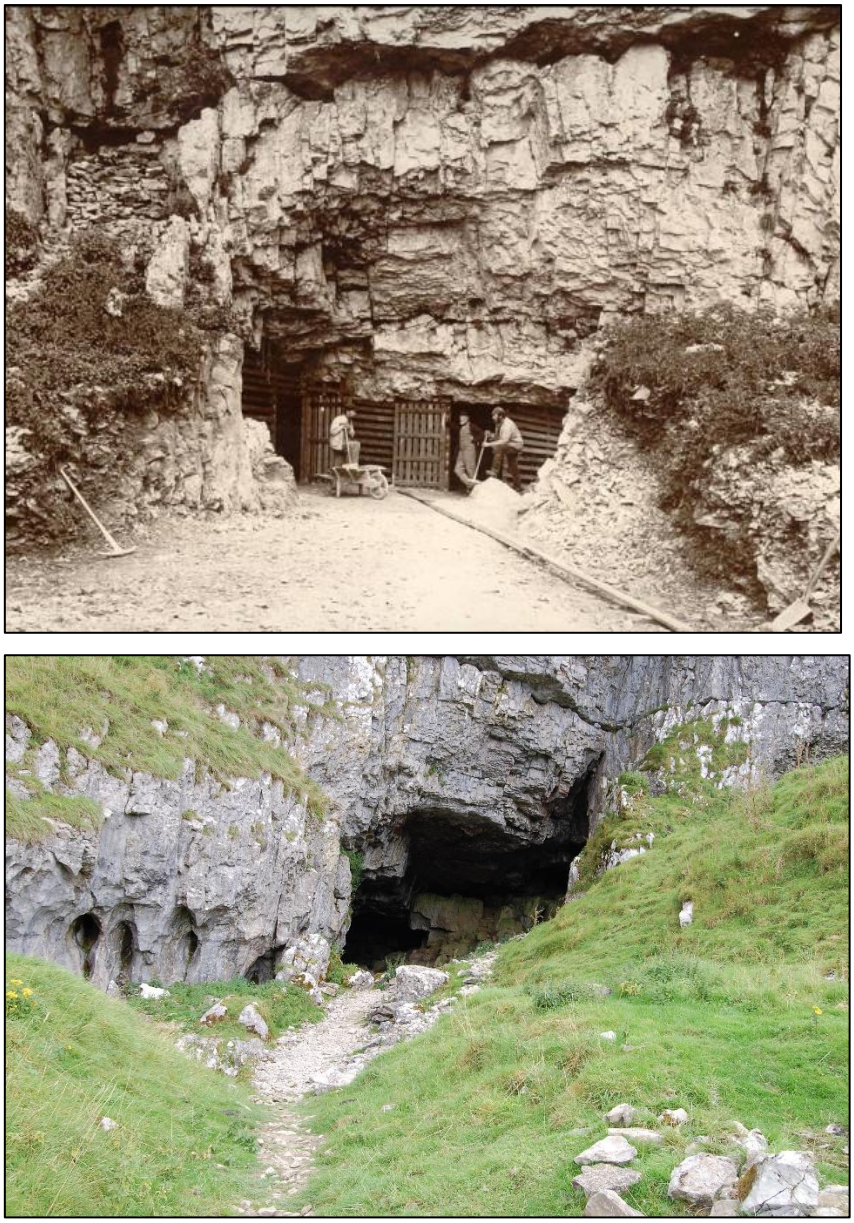


Figure 1-3: The changing nature of Victoria Cave- example of destructive excavation techniques. Above- entrance to the cave July 1870 (Moore 2015); Below- entrance to cave in 2012 (Author's photo)

Figure 1-4: Bishop Middleham, County Durham, location of a cave found during quarrying in 1932 (Raistrick 1933), which contained human remains and artefacts dating to the Bronze Age or Iron Age. The cave is now destroyed (Author's photo)

The use of such techniques in the 19th and early 20th century was necessitated by the difficult conditions in working in active karst caves, which are often dangerous and difficult to reach. Furthermore, caves regularly flood, which not only presents issues for excavation, but also in the understanding the stratigraphic context of material that could have been moved by flood waters, as well as by burrowing animals.

Unfortunately, because of the sporadic nature of many of these excavations, archives are not always fully published and in some cases have been lost. Many excavations have also been published in local caving journals, which have limited publication and are often difficult to access. For example, excavations of Sycamore Cave, Ecton, Staffordshire between 1985 and 1990 by members of the Peakland Archaeological Society, have never been fully published, with only preliminary reports being published in the society's newsletter.

1.5.3 Tourism and show caves

On top of the difficulties in reaching and excavating caves, many of these sites are popular tourist destinations, which presents significant logistical issues and has also damaged site stratigraphy and morphology. This issue was highlighted as far back as 1960, by E.K. Tratman, who during his excavation of Gough's Old Cave in Cheddar Gorge, Mendip suggested that:

"In the summer months, Cheddar is so thronged with people that archaeological excavations are virtually impossible to conduct" (Tratman 1960: 9)

Similar views were also shared by those who excavated caves in Creswell Crags, which were a popular holiday attraction during the 19th century (Dawkins 1877; Mello 1875). Tourists and those embarking on cave-hunting holidays also often removed fossils and archaeological objects from caves as souvenirs. For example, in his memoirs of Mendip caving, Balch (1907: 43) described his find of a young bear as his first "cave hunting trophy".

This development in cave-tourism led to the creation of show-caves, such as Wookey Hole and Gough's Cave in Cheddar Gorge (Irwin 1985), Smoo Cave, northern Scotland, Poole's Cavern, Buxton and the Dan-y-Ogof Caves, Brecon. Private landowners, often took tours through caves and would often modify them to accommodate tourists. Gas-powered lighting and steel walk ways were installed in number of Cheddar caves (Irwin 1986: 260), whilst cave entrances including those at Kent's Cavern, Torquay, Wookey Hole, Somerset and Poole's Cavern, Buxton were enlarged and landscaped (Bramwell et al. 1983). Consequently, this modification of the cave environment has not only damaged archaeological deposits but has also significantly changed cave sensescapes. High numbers of visitors in show-caves has also affected the survival of existing archaeological deposits. For example, at Smoo Cave, a show cave on the northern coast of Scotland, rescue excavations in the 1991, focused on an exposed midden dating to the 1st millennium AD, that was damaged by the public (Pollard 1992).

1.5.4 Interpreting and presenting multi-period sites

The public interest in caves has also significantly influenced archaeological research, which can be seen through how cave-use has been presented. Caves are complex and often multi-period sites but are often excavated as part of specific research agendas focused on particular types of material, such as human remains, or as period-specific research. Whilst such work provides valuable insights into the human-use of caves in specific periods, it often leads to the neglect of the influence of antecedent practices. For example, excavations at North End Pot, a vertical cave excavated by Gilks between 1985 and 1987, produced quantities of human bone

and a Neolithic antler mace head (Gilks 1989). However, a skull fragment belonging to a young adult found at the top of the cave's entrance shaft, suggests that the cave was also used between 310 and 130 cal BC (HAR-8056). Despite this, only one sentence covered the Iron Age use of the site in two published articles (Gilks 1989: 12; Gilks et al. 1993).

This bias is unsurprising, given the research interests of the author in the Neolithic. However, this also influences heritage frameworks. Victoria Cave is the only cave in the Yorkshire Dales to have an information board outside and places the site within a modern environmental framework. One paragraph discusses the Roman Iron Age metalwork found outside the cave and theorises that the site may have been used as a rural shrine (Figure 1.5). There is no mention of the preceding use between the Ice Age and Roman periods, including evidence of Iron Age activity. Crucially, it also fails to contextualise activity with that occurring in other caves nearby, including in Attermire Cave, Jubilee Cave and Albert's Cave.

Figure 1-5: Information board outside of Victoria Cave, Settle. The only cave in the Yorkshire Dales to have an information board, which focuses on the early history of the site and devotes a small paragraph to the Roman Iron Age use of the site. Despite rich finds of metalwork from two other caves in close proximity of the cave, no other sites are mentioned.

Victoria Cave is not an isolated example, at Creswell Crags, there is no mention of later prehistoric and Roman activity in caves and instead, information focuses on Palaeolithic use. Such examples demonstrate the difficulties in presenting the archaeology of caves to the public, which in turn drives research agendas. The apparent focus on the Palaeolithic use of caves is understandable given the attraction of cave art and finds of extinct animals. However, such sites must also be placed within their wider landscape and chronological context.

1.5.5 Landscape and cave contexts

As discussed above, accessing caves is a logistical challenge that often limits the scale of archaeological work. Furthermore, many caves are privately owned or are sealed because of illegal access or vandalism (CNCC 2015; UBSS 2015). This was also an issue during the 20th century where landowners restricted access to caves and often took possession of material recovered from antiquarian excavations. In his discussion of excavation during the early 20th century, Wilson (1934: 90) notes that landowners were 'hindering the free trade in bone hunting' because of the illegal and 'wild nature' of cave diggers. As a result, archives and site visits to caves are often difficult to arrange. The British Caving Associations, bodies responsible for monitoring caving activity, maintain lists of caves with restricted or forbidden access (i.e. Cambrian Caving Council 2015; CNCC 2015). Unfortunately, many of these have been sealed because of illegal digging or vandalism, including graffiti. Such activities may not only have influenced surviving archaeological deposits but also the phenomenology of cave environments.

Despite this, a number of recent studies have shown the significant extent of use of caves both regionally (e.g. Leach 2015; Murphy 2011 and nationally (e.g. Chamberlain et al. 2015). The Gazetteer of Human Remains in Caves now hosted by the Bristol University Speleological Society (2015) provides a valuable database of the extent of caves with recorded human remains, providing, where possible, an associated bibliography and archive location. Not only do these databases provide an overview of the extent of cave-use, but also allow for broader understandings of the distribution of human activity in local areas. Current survey projects have also highlighted the interconnected nature of cave-use in regional landscapes in western Scotland (Ashmore et al. 2009; Hardy 2004) and Wales (Davies 1989), yet there has been little focused analysis of the context of cave-use elsewhere.

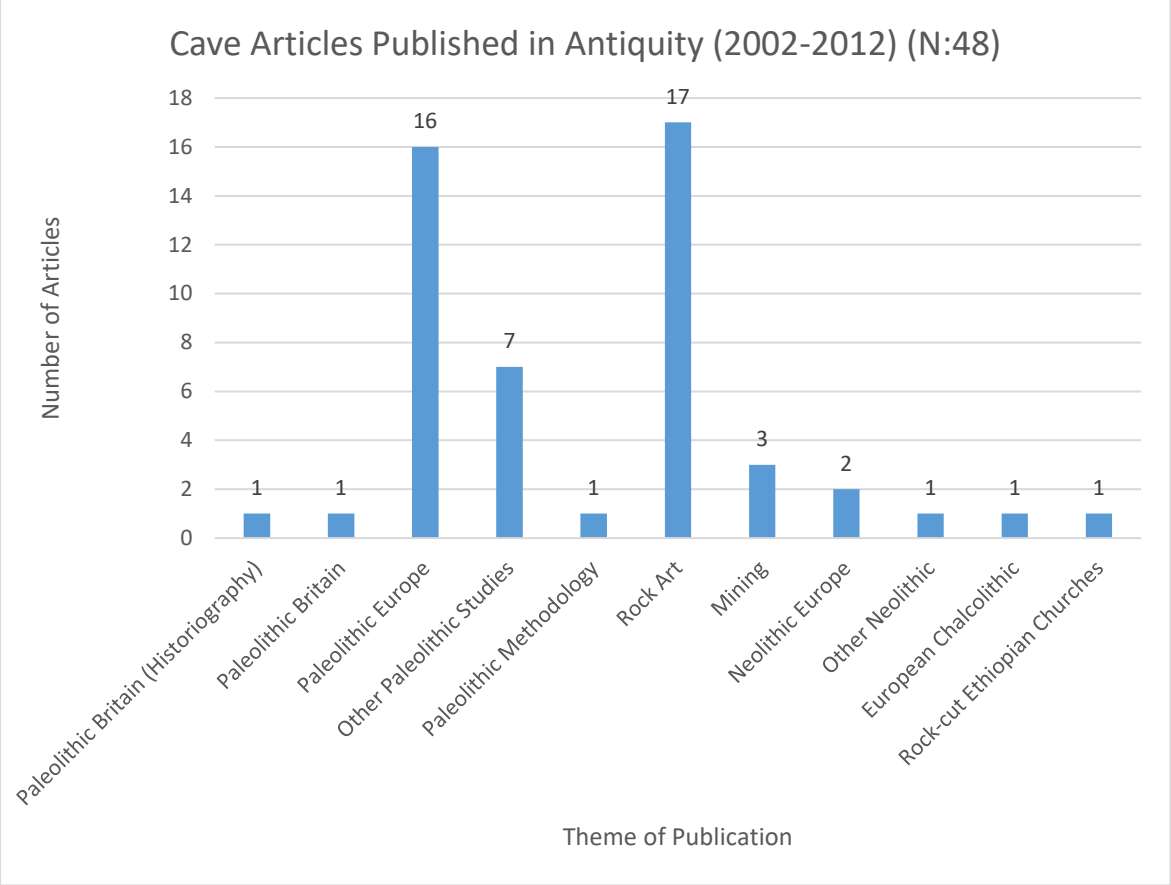
1.6 Caves in the landscapes of the 1st millennia

The section above discussed the historiography of cave archaeology in the British Isles, drawing out a number of issues facing approaches to cave archaeology, including the disparate nature of excavation, the damage to cave environments and the need for broader analysis of cave-use. The following section will explore how caves have been incorporated within 1st millennia studies and will show that these sites have often been marginalised in landscape studies.

1.6.1 Research interests in the 1st millennia

During the late 19th and early 20th centuries, the human-use of caves during the 1st millennia was considered a fundamental part of the archaeological landscapes; supported by the regional nature of excavation but also, conversely, because of the specific interests of the likes of Arthur Raistrick and J.W Jackson. However, as the 20th century progressed, research interests focused on the early prehistoric use of caves, because of new scientific frameworks and individual research interests.

This bias in recent research can be demonstrated through an analysis of cave-themed articles published in two international archaeological journals, *Antiquity* and the *Proceedings of the Prehistoric Society*, between 2002 and 2012. Considering the topics of articles that focus on caves in these journal shows that recent studies often focus on early prehistoric cave-use (Figure 1.6). Whilst cave archaeology has a healthy scholarship, as shown by the fifty-two recently published articles, a large proportion of these focus on rock art and Palaeolithic activity. Given the international focus of *Antiquity* it is not surprising that a number of studies discuss the cave-use across the world. However, only two articles focused on the Palaeolithic in Britain with one being an account of antiquarian engravings of Kent's Cavern (White et al. 2009) whilst the other discusses the finding of rock art at Creswell Crags (Bahn et al. 2003). This is compared to the sixteen discussing European contexts of cave use during the Paleolithic. Comparatively, evidence from the more regionally annual *Proceedings of the Prehistoric Society*, shows a limited publication of cave related articles in comparison to *Antiquity*. This suggests that, whilst caves continue to be the focus of papers, there are a limited number of studies focusing on British caves, which can be understood as part of the wider decline in cave excavation across the country (see above).



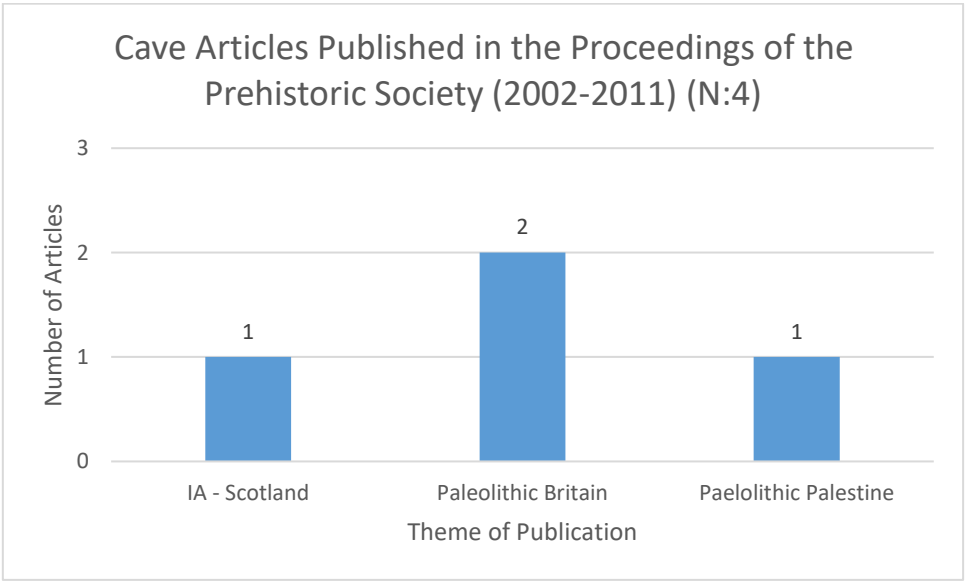


Figure 1-6: Research context of cave-focused articles in both Antiquity (above) and Proceedings of the Prehistoric Society (below) between 2002-2011 (Total N: 52). This demonstrates the overall nature of current cave research in scholarship and the general lack of focused discussion of later prehistoric cave-use.

In terms of studies of 1st millennia cave use over the last ten years, only one article published in 2011, concentrates on material found at Sculptor's Cave (Armit et al. 2011) and, as will be discussed further below, focuses on the re-analysis of human remains. This apparent need for a broader scholarship of cave-use during the 1st millennia has been highlighted by the Scottish Archaeological Research Framework (ScARF), published in 2012 (Hunter et al. 2012). This called for a greater understanding of the use of subterranean spaces including caves- not only during the Iron Age but also the Early Medieval period. Parallel to this, in their report for direction of Iron Age research, Champion et al. (2001) suggested that there was a need for wider approaches towards natural places, including caves.

1.6.2 Caves in research frameworks

Excavations at Glastonbury and Meare Lake Villages (Bulleid 1911) and at Little Woodbury (Bersu 1938) highlighted to early researchers, the importance of settlement archaeology in Iron Age studies. Whilst previous syntheses such as Raistrick's (1939) discussion of Iron Age settlement in West Yorkshire included caves as principal components of the landscape, the interest in settlement shifted attention towards sites such as hillforts and roundhouses. This, along with the increase of site visibility due to rescue excavations and large scale landscape projects (Bradley 2006: 3), provided a focus for interpretations of social organisation (e.g. in the Iron Age of Wessex Cunliffe 1971, 1984), where caves were marginalised or seen as temporary sites in the landscape (see below). Subsequently, as Iron Age archaeology became concerned with settlement and social organisation, the landscapes became 'domestic' in nature (Davis et al. 2008: 2). For Davies et al. (2008), this perception has hindered development of methodologies and theoretical approaches that take into account the role of natural places and caves (see below). Today, instead of being the focus of research, cave-use is often discussed as an adjunct to wider syntheses during the 1st millennia. Interpretations of cave-use, therefore, remain relatively underdeveloped and there is a need for a broader understanding of the scale of cave-use and how this may relate to practices occurring in other parts of the landscape.

1.6.3 Caves as burial spaces

In his *Iron Age Communities of Britain*, Cunliffe (2005: 411) devotes only a single paragraph to caves, where he suggests that they were used for predominantly ritual activity, whilst he also cites artefacts found in Wookey Hole in his discussion of Iron Age weaving practices (Cunliffe 2005: 446). This is despite the fact that caves have featured in a number of syntheses of aspects of Iron Age landscapes and are also part of a broader use of natural spaces such as rivers and bogs (Schulting et al. 2013; Giles 2009). For example, the use of caves for the treatment of the dead has been previously identified by Whimster (1981), who recorded ten caves containing human remains dating to the Iron Age and Roman Iron Age. For Whimster (1981: 184), such a low number of caves suggested that they were used for non-normative burial rites and that:

"the interiors of caves may sometimes have been used for interments or deposits of an abnormal, if not necessarily sacrificial character".

Whimster however, did not elaborate on the potential motivations behind the use of caves as burial spaces or their relationship to wider contemporary burial practices. Recent research on the use of caves as burial spaces has however, highlighted that caves were used for the deposition of the dead. In their reanalysis of material recovered in excavations of Sculptor's Cave, Covesea, Armit et al. (2011), noted instances of peri- and post mortem modification of human remains dating to the Late Bronze Age and Roman Iron Age and suggests that these were linked to processes of veneration and decapitation.

Other studies of cave-use have also explored the regional deposition of human remains in caves. In the Mendip Hills, work by Bryant (2011) focusing on the Iron Age and Hutton (2011) during the Roman Iron Age, have suggested that caves may have been used as repositories of material and therefore connected to processes of memory and antecedent practises. Indeed, Hutton (2011), drawing on earlier assessments by Branigan and Dearne (1991b), further emphasised the role of antecedent practices in motivating Roman Iron Age cave-use, suggesting that some caves served as ritual shrines attached to ancestral memory.

The effect of cave morphology on the deposition of the dead has also been demonstrated by a recent study by Leach (2015), who focused on the mortuary use of caves in Yorkshire. By analysing where human remains were found in caves, Leach showed that human remains, deposited during the Iron Age and Roman Iron Age, were predominately found near cave entrances, which contrasted with earlier prehistoric deposition that often took place inside caves.

1.6.4 Caves, landscapes and morphology

The importance of morphology and its experiences is however, often underemphasised in studies of cave use during the 1st millennia, despite research across Europe (see Chapter 2). The only national study of caves during the 1st millennia is by Branigan and Dearne (1992) who explored the functional role of caves during the Roman Iron Age. In their study, they identified ninety-seven caves across England and Wales, which they separate, based on function including burial sites, hideaways and seasonal occupied sites. Despite the morphological characteristics of caves being recorded in their accompanying database, there is little analysis of the types of caves used, with discussion often focusing on the material remains found within caves.

Critically their analysis rested on the assumption that:

"attitudes to cave usage must have been very different amongst stone age hunters and gatherers than what they were amongst farmers and craftsmen of the Romano-British period" (Branigan et al 1992: 8).

Consequently, it was thought that the "experience and capability to build artificial shelters" (ibid.) exceeded the need to use caves. For Branigan and Dearne, caves were used by 'poorer' rural communities, perhaps by seasonal shepherds, as hideaways for thieves, isolated shrines and as shelters for itinerant craftsman (ibid.). Whilst their interpretation relied upon a traditional distinction between ritual and domestic, which has now been widely critiqued (Bradley 2005; Giles 2007a), it also highlights the difficulty of interpreting the use of caves within a settled farming landscape. Unlike Palaeolithic studies, where caves are seen as a normative type-site, interpretations of cave-use have often been as part of references to specific archaeological process such as trade and exchange or the burial of the dead.

Research by Moore (2006) on the nature of trade and exchange in the Cotswolds and by Hingley (2006) on the deposition of metalwork for example, has considered specific uses of caves as spaces of communal interaction and ritual deposition associated with boundaries. As such, caves are considered as part of a broader milieu of sites used for the deposition of socially significant material. This has resulted in caves often being marginalised; considered alongside other types of site, which have a better-understood research framework, without reference to the context of cave-use, and the type of cave. They also raise questions as to what motivated the selection and use of caves and why such places acted as sites of deposition.

A similar issue is also seen in studies of Early Medieval landscapes, which have also included aspects of cave-use. As mentioned in the historiographical discussion above, cave excavations in western Scotland often focused on the Christian use of caves as hermitages and reliquaries associated with Saints, which has also been a focus of recent historiographical research (Ahronson et al. 2010). In his publication of early Christian art on the western coast of Scotland, Fisher (2001) also included eight caves which contained Christian artwork. Despite this, there has been little social interpretation of Christian art in caves since the late 19th century. Caves are not discussed in Gondek's (2006) discussion of power-play and Pictish and Christian artwork on the west Coast of Scotland, whilst key texts including Ritchie's *Archaeology of Argyll* (Ritchie 1997a) do not mention caves at all. On the east coast, Pictish artwork at the Wemyss Caves, Fife and Sculptor's Cave lack a comparative contextual overview. Ritchie, in his discussion of Pictish art provides the only current interpretation of artwork in the entrances to caves as talismans associated with supernatural entranceways (Ritchie 1997: 168).

1.6.5 Contextualising & experiencing caves

Despite such studies, the use of caves and their morphology has rarely been discussed in their own right. Instead, as has been discussed above, caves are often considered as an adjunct to wider research. While this helps to situate caves within specific archaeological frameworks, it is often at the expense of a wider understanding of cave-use and its situation within the wider landscape.

Studies of caves elsewhere have shown the importance of understanding cave morphology and human experiences of the cave environments. Research on the multi-sensory nature of cavescapes (see Chapter 2) has often considered the relationship of deposits and the morphological environment. Studies of prehistoric cave and rock-art (Upper Palaeolithic: Lewis-Williams et al. 1988; Lewis-Williams 2002; prehistoric south-west America: Simek et al. 2013) have highlighted the interplay between art, light and darkness (Clack 2007: 331; Bjerck 2012: 60). Placing art in dark zones, or light interfaces, necessitates the use of artificial light, which has a significant influence on the perception and experience of human action and the surrounding sensescape (Lewis-Williams 2002: 227; Clack 2007: 337; Clottes 2003). For Lewis-Williams (2002) this interconnected relationship between rock art and light, highlights a neurophysiological link between the cave and its user.

Placing art within dark areas of the cave and the interface between light and dark is therefore part of a wider symbolic appreciation of cave topography, which as a result animates the

cavescape with memory and emotion (Azéma et al. 2012). A similar argument is made by Skeates (2008: 209; 2012) who considers the 'kinesthesis' – the movement and action of the human body- alongside extra-sensory perception (Skeates 2008: 214), as a vital part of cave-use. Caves often require users to act in different ways, as part of unique sensescapes, which contrast to the outside world (Bjerck 2012:60; Clack 2007: 339; Tilley 1994: 73; Skeates 2008: 214; Whitehouse 2001). Within caves, these experiences also change, including sounds, smells and vision, which can vary in different areas of a cave. Entranceways and passages, still within reach of daylight and outside sensescapes, act as a mediator between the outside world and the underground. Moving deeper into caves results in heightened sensory perception, which transforms everyday sounds and movement.

Studies of British cave-use must therefore take into account the experience of caves and their morphology. Furthermore, because caves have been studied as a by-product of regional syntheses, there is currently no broad overview of cave-use during the 1st millennia as there is for regions such as Ireland (Dowd 2015). Such an overview is needed in order to understand the significance caves may have had throughout the British Isles, by outlining a cave's context as well as taking account of all facets of cave-use.

Chapter 2 Caves as Entities: Approaching Cave-Use in the 1st millennia BC and AD

2.1 Introduction

In Chapter 1, I highlighted a number of issues associated with studying cave archaeology. From the discussion of the current situation of caves in 1st millennia research, it has also been shown that these places are often treated as a backdrop to human activity, such as the deposition of human remains and objects, rather than being seen as an agent capable of influencing human action and experience. Studies of cave-use, elsewhere in Europe (Bergsvik & Skeates 2012), as well as Central America (Healy 2007), demonstrate the importance of caves and their sensescapes in attracting human-use, as well as the significance of cave choice. Whilst similar approaches have been taken towards natural places (Bradley 2000; Giles 2009; Mullin 2012), in Britain there is no similar focused approach to caves and other types of subterranean spaces. This chapter will introduce the theoretical basis of the study by discussing a number of comparative ethnographic and archaeological approaches. From this, the practical methodology will be introduced including data sources, catalogue structure and methods of analysis.

2.2 Experiencing caves in the 1st millennia

Recent theoretical perspectives have stressed the importance of understanding interactions between multiple agents (Thomas 2015:1288). Crucially, not only does this extend to human actors but also to so-called inanimate objects, animals, plants and places (Thomas 2015: 1288-1289). One of the ways this has been studied is by exploring the life histories of objects through analysis of the materials used to create them. For example, by studying the materiality of objects, including its decoration and manufacture, from Broxmouth Hillfort, East Lothian, Maxwell (2013a) explored the symbolic significance of artefacts. Objects, such as antler spindewhorls and metal tools, may have been bound to a combination of symbols that were attached to raw materials, including animals and ores, as well as to places where objects were made (Maxwell 2013b).

Similar to artefacts, natural places, including caves, have their own intrinsic agency. People, animals, plants and other natural entities such as rivers have used caves for millennia, which in turn has significantly influenced cave environments through the deposition of material and the modification of morphology. As sites, where multiple agents interact and, consequently, where

life histories intersect, caves may have become bound to the worldviews of multiple groups. Studying the use of caves, therefore necessitates a broader understanding of the interactions and histories of a group of actors, including humans, animals and natural features. Consequently, rather than serving as a backdrop to human activity, caves must be seen as interactive entities, who through a series of unique sensescapes, were capable of manipulating acts of use.

2.2.1 Ethnography and archaeology

One of the ways in which the active agency of caves can be explored is through a discussion of the ethnographic and archaeological data of cave-use in rich, symbolic landscapes. The value of using ethnographic data for aiding the interpretation of archaeological evidence has been the focus of theoretical debate throughout the history of the discipline. Following from the publication of Binford's (1962) article 'Archaeology as Anthropology', ethnographic analogies were used primarily to understand the exploitation of the landscape and resources (Hill 2015: 412-413) . In contrast, the post-processual rejection of environmental adaption and emphasis on human choice and agency, resulted in the use of cross-cultural studies aimed at understanding how material may have shaped human behaviour (Hodder 1982a, 1982b). In this respect, ethnographic data can help shed light on complex processes of agency.

Through careful analysis of cross-cultural reactions to comparable phenomenon, in this case cave-use, it is possible to explore a number of themes that highlight how caves may have influenced human-use. It is important from the outset to stress that the examples below are not intended to serve as direct parallels to processes of cave-use occurring during the 1st millennia in Britain. Instead, the discussion will outline how caves have been situated in the cosmologies of communities, which can then be related to the archaeological evidence of cave-use identified as part of the study.

2.2.2 Cave underworlds: ethnographic and archaeological approaches towards caves in Northern and Central America

Cave-use, as a phenomenon, is recorded throughout the world and is associated with different morphologies and landscape environments. The rich archaeological and ethnographic frameworks of Classical and contemporary Maya in Central America, as well as indigenous groups of Northern America, are some of the most compelling and well-studied examples of cave-use in karst environments. As such, the morphology of caves in Central, and Northern America, share a number of characteristics with those in Britain, including the rich variety of cave types and their association with water.

For the Maya, caves acted as a permeable doorway to the world of the dead and as a result played a fundamental role in the construction of cosmology (Bassie-Sweet 1991: 20; Fowler 1992: 163; Monaghan 1995: 111). The Maya inhabited a multi-dimensional world comprising of three layers: a heaven in the sky, the earth and the underworld (Bassie-Sweet 1991: 173; Chládek 2011: 8; Lucero et al. 2015: 63). The underworld, known as *Xibalba*, formed the basis of Mayan mythology and was made of nine layers inhabited by a range of monstrous beings (Bassie-Sweet 1991: 7; Chládek 2011: 10-11). Caves, as entrances to this layered underworld, acted as important thresholds of communication between the living, the ancestral and divine realms. As a result, they were often the focus of orchestrated rituals aimed at reciprocal communication with the spirits of the underworld (Brady et al. 1999: 129; Chládek 2011: 10; Palka 2014: 75). Natural and artificial cavescapes were significant locales in the Mayan world-view and served as a focus for ritual deposition of objects, human burial and sacrifice (Lucero et al. 2015: 163; Chládek 2011: 8; Palka 2014: 140-141; Schaafsma 2009: 682). Consequently, temples and other ritual structures sought to emulate caves evidenced through the decoration of doorways and the construction of large open chambers (Chládek 2011: 27; Palka 2014: 133).

2.2.2.1 Understanding the Mayan perception of caves: water, caves and earth

In Mesoamerica, the distinction between underground and underwater was blurred, with both serving as points of access to the underworld (Schaafsma 2009: 682). Consequently, water and caves were interwoven in cosmological schemes and were both the focus of votive deposition (Bassie-Sweet 1991: 80). This relationship was driven by the use of active karst caves, as well as the belief that water was thought to have originated from inside mountains (Bassie-Sweet 1991: 80; Chládek 2011: 67). Remarkable evidence of the interplay between the underground and underwater realms has been recently highlighted in excavations of the Mayan underwater temple at Cara Blanca, Belize (Lucero et al. 2015). In Pool 1, a sixty-metre-deep sinkhole a rich artefactual assemblage, containing human and animal remains dating to 250-950 AD, were thought to represent acts of deposition in response to long periods of drought (Lucero et al. 2015: 163-165). Ethnographic parallels have also demonstrated that horizontal caves and sinkholes were also seen as the same phenomenon known as *ch'enetik*- and serve as a focus for esoteric agricultural rituals focused on the bringing of rain and crop fertility (Basie-Sweet 1991: 80).

2.2.2.2 Ancestors, fertility and emergence

The emotive nature of cavescapes used by the communities in places such as Central and Northern America, and their close connection to water, may have been motivated by concerns

for agricultural and human fertility (Schaafsma 2009: 682). This may also be highlighted by the deposition of human and animal remains in caves. Finds of human bones in sinkholes and karst caves, such as Cara Blanca, Belize (Lucero et al. 2015) are thought to represent treatment of specific individuals, including so-called deviants. This includes those who died prematurely, such as infants and children, mothers during child birth and soldiers, ritual specialists, suicides, individuals with physical and mental disabilities and those selected for sacrifice (Crummy 2010:79).

2.2.2.3 Deviant cave burials: the agency of the dead

Studies have stressed that social deviants may have also been symbolically powerful because of their close relationship with the underworld (Palka 2014: 128). For example, excavations of Bats'ub Cave, Belize, identified the burial of an individual associated with shamanic paraphernalia dating to the Early Classic Period (200-400 AD) (Prufer et al. 2009). For the excavators, the cave was chosen to control the spiritual power of the shaman, by depositing the physical remains of the individual close to the threshold to the underworld.

For the Maya and other indigenous groups of Central and Northern America, caves were often haunted by negative supernatural entities often linked with shamanism (Palka 2014: 128). Ritual practitioners, who had the power to communicate with the perceived spirit realm, were buried in caves to provide a link between communities and the underworld (Prufer et al. 2009: 311). The power associated with ritual specialists is also closely associated with negative magic and the deposition of shaman remains in caves may also be as a direct concern for the negative spiritual forces that pose a risk to the living. For the Chontol of Oaxaca, caves were feared because of their use as burial places for shamans and were therefore bound to concepts of witchcraft and cursing (Prufer et al. 2009: 312; Palka 2014: 76). The negative forces associated with the spiritual energy of the dead may also be related to burial practices associated with those that died prematurely. Neonatal and perinatal infants, children and juveniles, women who died in child birth, criminals, soldiers, suicides and accident and murder victims are often considered to be a danger to the living (Crummy 2010: 79).

The negative association with caves appears to contrast to the use of caves for places of fertility and renewal. However, caves as a portal to the underworld in Mayan cosmography, provided a tangible link to the multi-dimensional underworld, which was often unpredictable and dangerous. This is seen through the association of the Mayan gods of the underworld with a range of contrasting metaphors. For example, the rain god, Chaak, was closely associated with

death and disease (Chládek 2011: 29; Lucero et al. 2015: 166). As a result, illness was thought to be spread through open sinkholes and pools of water, which were also used as foci for offerings for rain and fertility (Brady et al. 1999: 130).

2.2.2.4 Animals, guardianship and the dead

The belief in the active agency of the dead meant that certain caves might have been chosen to house potentially dangerous spirits and to aid the passing of individuals to the world of the dead. Further evidence of this may be seen in the higher instances of apparent child sacrifices recorded in underwater and underground locations, compared to aboveground ritual sites (Chládek 2011: 34). Young domestic animals, dogs and wild animals also appear to have been sacrificed along with these children, perhaps as guardians to accompany human journeys to the underworld (Chládek 2011: 35). These acts whilst being bound to concepts of agricultural and human fertility (Fowler 1992: 176; see above), also demonstrate the intertwining of animal and human agency in caves.

2.2.2.5 Ancestors and underworlds

The importance of caves for indigenous communities in Central America is further demonstrated by origin myths. Across Meso- and Northern America, communal ancestors were thought to originate from caves as part of a subterranean origin cosmography (Chládek 2011: 24; Monaghan 1995: 202-210; Palka 2014: 128-129, 131). Elements in both Aztec and Olmec art suggest that they were descendants of ancestors originating from caves, with Olmec art depicting men emerging from caves holding infants (Palka 2014: 129). For the Aztecs, the underworld, *Tlaloc,* was accessible through caves and was seen as home to the emergence of the Aztec people (Palka 2014: 128).

Importantly, the belief in caves as ancestral spaces has influenced human-use. For example, the Mixtee, who believe in an ancestral origin from seven wombs or caves (Monaghan 1995: 202-210), consider that the human body was made from cave earth (Monaghan 1995: 204). In her ethnographic study of the Cattail-Eaters of Nevada, Fowler (1992: 171-179) noted that cave sites and their associated mountains were often feared locales in the landscape and were said to be powerful spaces, containing the spirits of the ancestors. For the Cattail-Eater people, three caves were considered sacred and were used as sites of shamanic initiation and communication with the ancestors (Fowler 1992: 176).

2.2.2.6 Landscapes and cave-use

Rather than being isolated sites, caves were, and still are, attached to sacred landscapes, which include temple complexes, such as Cara Blanca, Belize (Lucero et al. 2015), as well as other

natural places, including rivers and mountains. In their analysis of the Kayuko Mound Group, Belize, Moyes et al. (2016) identified a possible festive site, located below Kayuka Naj Tunich, a cave that was used for possible accession rites during the early 1st millennium AD. From this, they argued that cave and festive sites were part of a sacred landscape that was used for large displays of power by the local elite (Moyes et al. 2016: 154).

The communal gathering in landscapes attached to caves is well reported in ethnographic accounts. Historically, caves and their associated landscapes had served as places of pilgrimage. Ritual journeys known as is *shimal ek'ab* are thought to mimic the cyclical nature of the passage of astral bodies and the spiritual essences of the dead as they move through the upper and underworld (Palka 2014: 59-60). For the Maya, pilgrimages to caves is a communal act focused on maintaining the balance between the natural and supernatural world by satisfying ancestral deities, performing agricultural rites and crucially, by reaffirming social identities within caves and waterscapes (Palka 2014: 62).

2.2.2.7 Caves and the Mayan underworld

The discussion above has explored a number of examples of how caves may have been associated with cosmological beliefs in the underworld, which may have motivated their selection and use. Furthermore, ethnographic models, such as those introduced above, demonstrate the importance of acknowledging the diversity of cave experiences and the role of agency. This is seen in the cross-cultural association of complex cavescapes, such as those with water, multiple chambers and those accessed through vertical shafts, which served as places of communication with the ancestral supernatural world.

2.3 Agency and place in the 1st millennia

A number of similar themes, to those explored above, have been discussed in relation to caves and other places during the 1st millennia in Britain. This includes the discussion of rivers as animate thresholds to the underworld(s) and the re-use of caves. In her discussion of burial practices in caves in North Yorkshire, Leach (2015) suggested that entranceways served as a focus for burial practices. Similar arguments have also been made by Brück (1995), who through her analysis of the context of Late Bronze Age human remains, suggested that caves may have served as entranceways to a supernatural underworld.

These studies highlight the fundamental role cave landscapes, or cavescapes, have in negotiating human use, as well as their role in wider cosmological schemes. Entranceways, as transitional spaces, are often associated with ritual deposits during the 1st millennia (Parker

Pearson 2003: 193). Studies by the likes of Giles (2009), Stevens (2008) and Bradley and Schulting (2013) have shown that such watery places may have acted as transitional places in the landscape, as well as acting as both physical and supernatural boundaries. The physical characteristics of water, including its moving translucent nature and its reflective qualities (Giles et al. 2007), offers a unique sensescape (Haughey 2007; Bradley et al. 2010), which may have also imbued rivers with a degree of agency.

2.3.1 The human-use of caves and other cavescapes

Alongside the need to situate cave-use within the archaeology of natural places, features, such as souterrains and deep storage pits also demonstrate interactions with subterranean environments beyond caves. Therefore, it is necessary to compare the use of caves to other types of belowground structures, including ritual wells, souterrains, fogous, ditches and deep storage pits.

Ritual wells have been associated with a number of brochs in Atlantic Scotland (Hedges et al. 1987; Downess et al. 2003; Royal Commission on the Ancient and Historical Monuments of Scotland 1946: 91, 196) but have also been recorded as an independent structure at Mine Howe (Downes et al. 2003). Generally, these wells are characterised by a stone lined cistern dug below the centre of the broch as at Midhowe and Knowe of Redland and are accessed by a stone stairway. Not only do such sites suggest a relationship between water and dark underground spaces (Downes et al. 2003: 17), similar to natural caves, but also could indicate a relationship between manmade underground spaces and cavescapes.

Souterrains and fogous also share similar structural elements to those of broch wells. Often characterised by a man-made underground passage and chamber, these are found in Scotland (Wainwright 1953; Armit 1999), Cornwall, Brittany (Quinnell 1986: 118) and Ireland, (Rynne 1958; Warner 1980; Clinton 1997). Although they have a complex chronology, many appear to have been in use during the end of the 1st millennium BC into the early part of the 1st millennium AD (Armit 1999). Souterrains in Ireland, also appear to have a long chronology, although many appear in ring forts dating to the 1st millennium AD (Rynne 1958; Warner 1980; Clinton 1997).

These sites are often associated with settlement, such as at Newmill, Scotland (Barclay 1980), and were therefore originally thought to have a domestic function such as grain storage, livestock shelters or defendable hideaways (Armit 1999; Wainwright 1953, 1963). A number of souterrains in southeast Scotland also show evidence of deliberate abandonment, best

highlighted at Newmill, Perthshire where there was a complex sequence of dismantlement (Armit 1999: 584). This, alongside finds of cup and ring marked stones and their underground nature has led to a number of authors to suggest these sites were bound to ritual functions associated with the agricultural cycles (Armit 1999; Hingley 1992: 29).

2.3 Research methodology

The theoretical discussion above has highlighted a number of key aspects that must be considered when studying caves used during the 1st millennia. Above all, what this shows is that caves and cave-use cannot be considered in isolation but rather as part of a complex association with other natural places and underground experiences. Caves must therefore be seen as situated within what was a metaphorically rich and diverse world. Furthermore, given the complex geologies and the extensive time span of this study, it is also likely that different types of caves were used for different purposes throughout the 1st millennia.

2.3.1 Cave database & catalogue

In order to study the nature of human-use of caves, a database of caves with relevant activity was compiled and is attached to the thesis as a separate volume. A digital database, created using Microsoft Access 2010, is also stored on a DVD, which records a number of aspects relevant to human-use and experience including- material recorded in caves, cave location and the morphological characteristics of the cave environment (see Appendix 1 for full data structure). During data collection, each cave was given a unique number that is represented in text within a bracket (e.g. (**12**). This is meant to allow the reader to look up additional information and relevant references.

2.3.2 Sources of data

As was outlined in the historiographical discussion of caves in Chapter 1 there are a number of broad synthesise that provide relevant data for understanding cave-use. The Gazetteer of Caves, Fissures and Rock Shelters in Britain Containing Human Remains (Chamberlain et al. 2015) and Branigan and Dearne's study of cave-use (1992) during the Iron Age and Roman Iron Age were used to identify relevant caves. Along with these, relevant searches were also undertaken in Historic Environment Records across England, Wales and Scotland for caves and rockshelters, as well as published and unpublished surveys and radiocarbon data. The source of data for each cave is referenced in the catalogue (Volume 2).

A total distribution of caves was also compiled, in order to study the relationship of archaeological sites to caves throughout the British Isles. Data was obtained from caving

registries- including the Mendip Caves Registry (2015) and the Northern caving volumes, which are general guide books for cavers (Brook et al. 1988; Brook et al. 1991; Brook 1994). For a complete list of the regional catalogues used to compile cave data see Appendix 1.

2.3.3 Regions used in analysis & data collection

To help facilitate data collection and a systematic analysis of cave-use, this study defined seven regions based on the natural distribution of caves (Figure 2.1) and numbered based on the stage of data collection. For convenience, the catalogue of cave-use (Volume 2) is arranged by region, rather than by site number. It is important to note that these regions are not intended to represent coherent past cultural entities and were used only to aid analysis of where and how caves were used. The regions in this study were: Region 1: Southern England, Region 2: Central England, Region 3: Northern England (including the Isle of Man), Region 4: Southern Scotland, Region 5: Western Scotland, Region 6: Northern Scotland and Region 7: Wales.

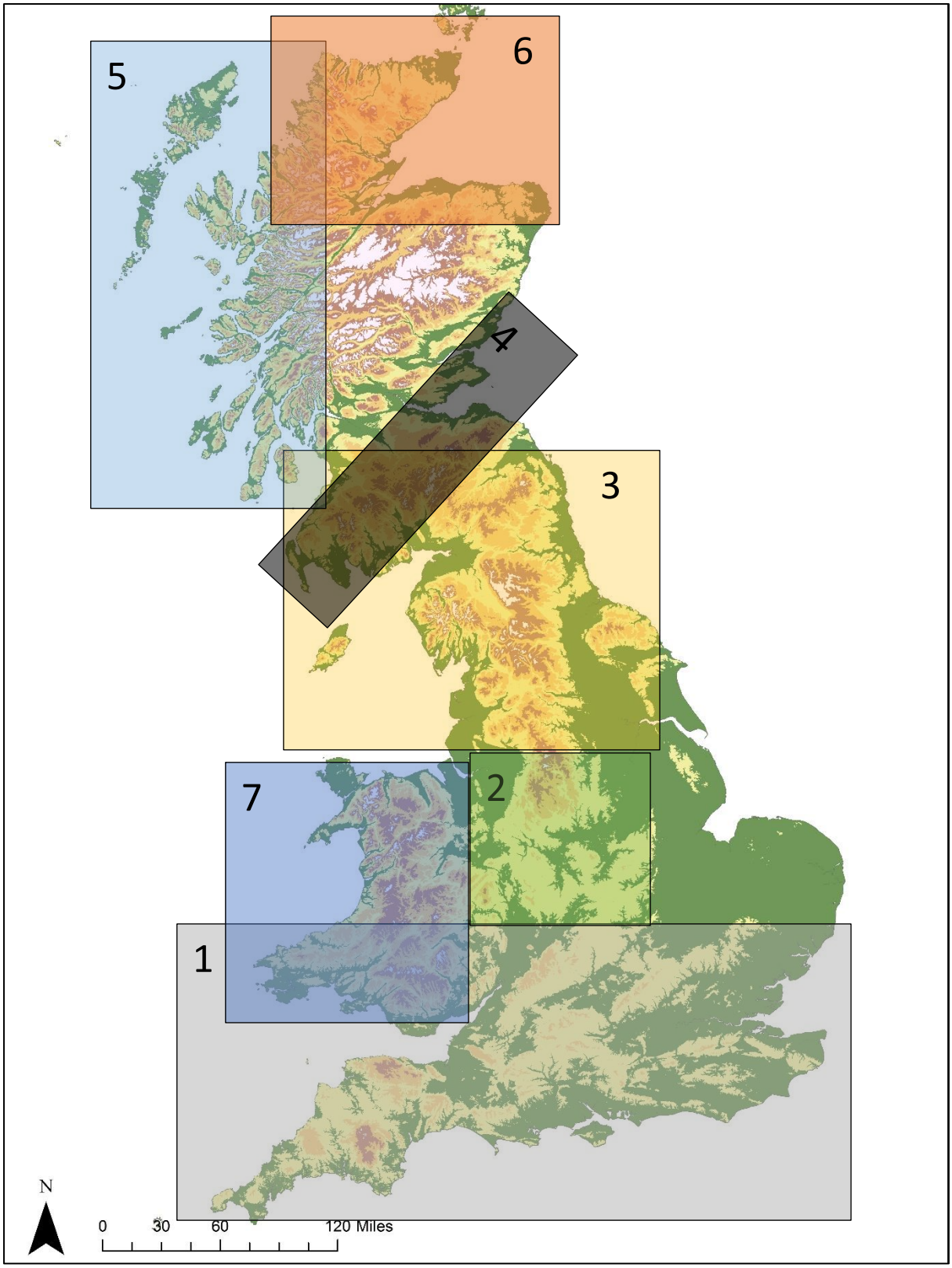


Figure 2-1: Regional groupings used during the study. Each colour represents a region area. Region 1: Southern England, Region 2: Central England, Region 3: Northern England, Region 4: Southern Scotland, Region 5: Western Scotland, Region 6: Northern Scotland, Region 7: Wales

2.3.5 Analysis of cave morphology

Geological studies, define caves as subterranean features accessed by an aboveground entrance (Waltham et al. 2013: 1). Consequently, geologists often separate caves from rockshelters, which are considered aboveground sheltered overhangs with no closed subterranean features (ibid.). Archaeological studies have also used this simplistic definition when approaching cave-use, including the databases of human remains in caves (Chamberlain et al. 2015) and Roman Iron Age cave-use (Branigan et al. 1991a). However, more recent approaches have taken a more nuanced approach towards cave morphology. In her study of caves in North Yorkshire, Leach (2015), further divided caves based on their size and incline of their entranceways.

Given the importance of cave morphology in my approach, a similar system was created that took into account whether a cave system is horizontal or vertical, along with the number of passageways and chambers. This aimed to assess comparatively, the broad morphology and sensescapes of caves across Britain. It is important to note that these categories are deliberately broad in nature so as to take into account the complex variety of cavescapes (Figure 2.2).

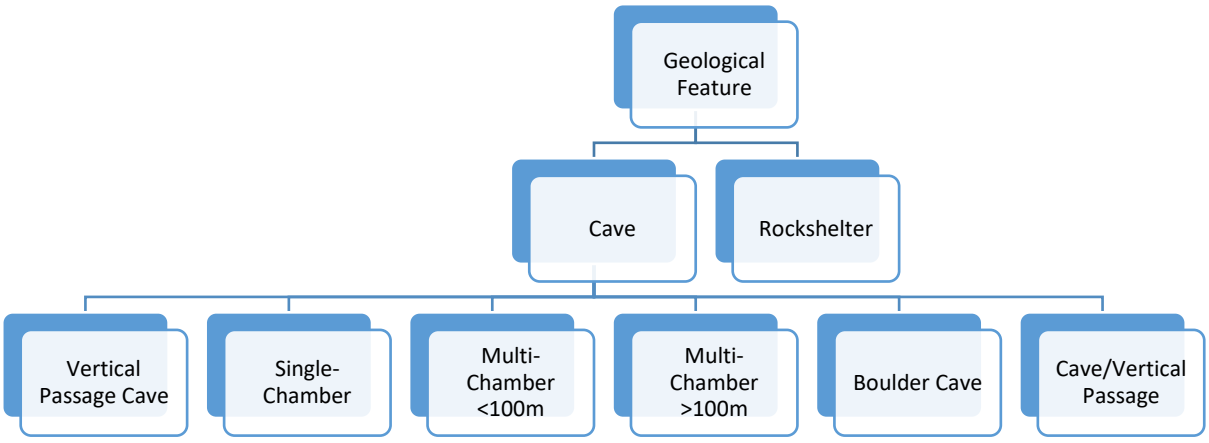


Figure 2-2: System of morphologies used during the thesis. Each site was identified as a cave or rockshelter. Where possible, caves were further divided into a number of different types based on the incline of the entrance, the length of the cave, and the number of passages and chambers

2.3.5.1 Definitions of morphology

Rockshelter

Rockshelters include overhangs or an open depression into a rock face. They differ from caves by having no accessible subterranean chambers.

Cave

Caves are chambered subterranean features that can be divided into a number of types, based on morphology, namely entrance type and the length and numbers of passages (i.e. complexity).

Types of Cave

1) *Vertical Shaft*

These caves are defined by a vertical or near-vertical entrance shaft, which are known by a number of terms, including fissure, swallet or pot hole. These types of caves can lead into horizontal chambers and can connect to extensive karst networks.

2) *Single-Chamber*

These caves are made of an entranceway that expands into a single chamber. Although a number of smaller passageways can extend from the chamber, there are no further substantial features.

3) *Multi-Chamber <100m*

These caves are made of a series of chambers and passageways that are under 100 metres in length.

4) *Multi-Chamber >100m*

Exceptional caves, often of karst formation, are included in this category. Found in limestone areas, such as North Yorkshire and the Mendip Hills, these cave systems incorporate a number of horizontal and vertical passageways and submerged chambers.

5) *Cave/Vertical Passage*

These caves are small caves, usually a single chamber that is connected to both a horizontal and vertical entrance. Given their combination of experiences, these caves were attributed to a separate category.

2.3.6 Deposit location

Where possible the location of archaeological material was recorded in relation to its cave environment, in order to study the effect of cave morphology on patterns of human use (see above). To allow for comparative analysis, a system was devised to identify the location of deposits in relation to the general area of the cave as well as its distance from the cave entrance (Figure 2.3).

The location of artefacts was recorded based on whether they were found outside or within the cave, as well as their proximity to the cave entrance. For the purpose of this study, entranceways and entrance passages were considered to be areas of transition, whilst chambers and ancillary passages were recorded as the cave interior. Such divisions take into account the different morphologies of caves outlined above and in detail in Chapter 4- including 1. vertical shaft caves, 2. rockshelters and 3. chambered-caves.

Whilst such an approach is relatively coarse, it does allow for a broad understanding of the patterns of deposition associated with cavescapes, in general areas such as zones between light and dark and the transition between aboveground and underground. As we explored above, such an approach was also necessary given the sporadic nature of cave excavation and the irregularity in excavation methods. Erosional processes could have also displaced material, which must also be taken into account when discussing the location of deposits within caves. Also noted within the dataset is the relation of material to natural features within caves, such as speleothems and water.

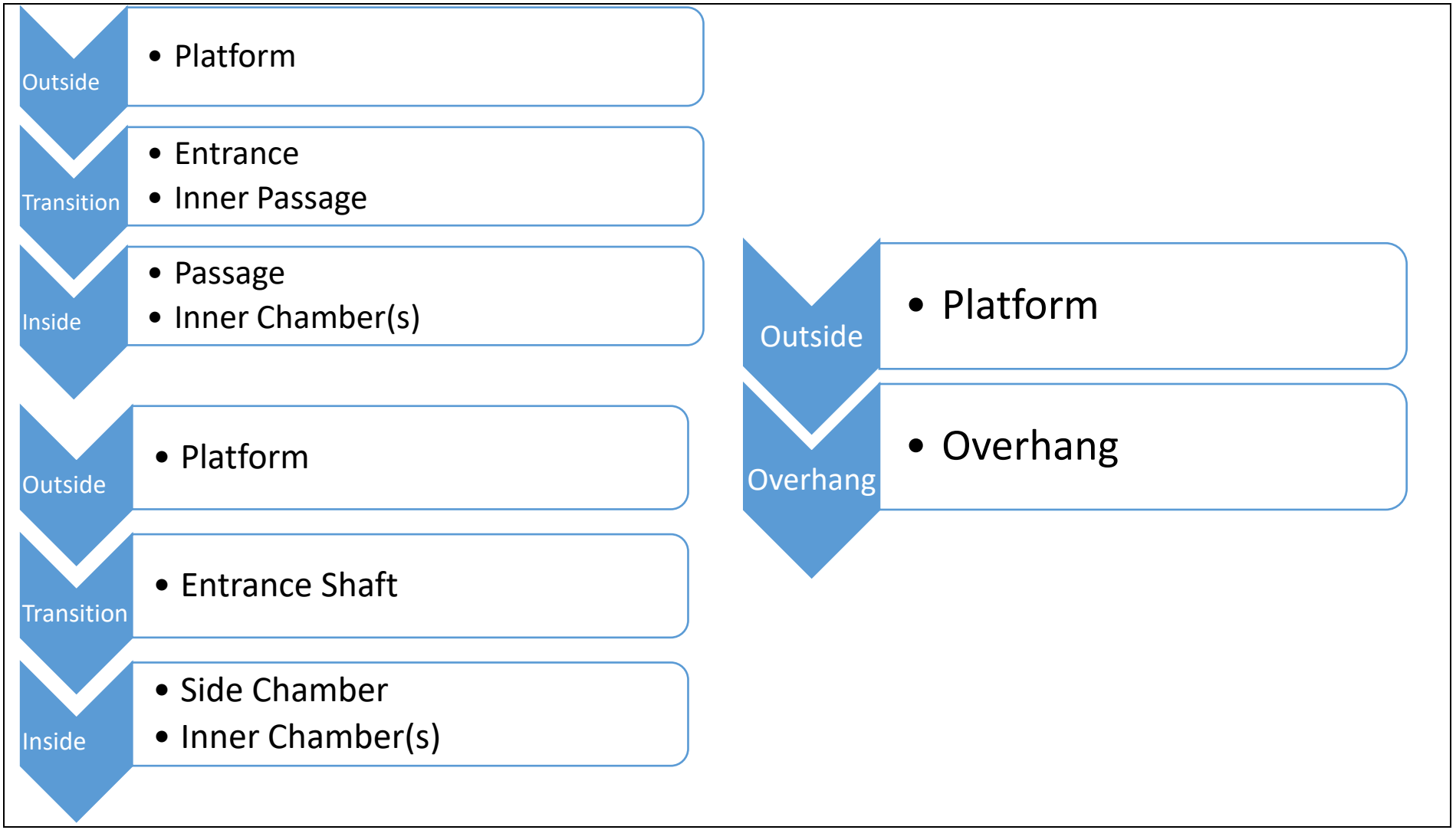


Figure 2-3: Categories of artefact location within caves. The system was intended to be broad to allow for inter-site comparison of artefact location and the associated experiences. Top left- location of deposits within chambered caves, bottom left- location of artefacts in vertical shafts, centre right- location of deposits in rockshelters

2.3.7 Landscape

Given the importance of understanding the landscape context of caves, locational data was also taken for each cave in order to compare caves that contained archaeological deposits to seemingly un-exploited sites. This aimed to explore potential processes of cave selection and its relationship to patterns of movement in, and perception of, the landscape. Two contrasting regional case studies, Southern Cravendale in North Yorkshire and the western coast of Scotland, were developed to explore such a relationship and how cave-use may have related to patterns of movement associated with the Atlantic Seaway.

The settlement frameworks for both regions was compiled through searches of Historic Environment Records and relevant publications (See Appendix 1 for database and sources). These frameworks could then be compared to the distribution of natural caves as well as caves with evidence of use. The visibility of each cave in the region was also assessed by combining both viewshed and least cost path analysis using ArcGis. By combining methods of movement with viewshed analysis it was possible to identify when caves were visible and invisible on the most cost effective path to the site (see Chapter 5 for methodology). By doing this it was possible to explore how difficult caves were to find and whether they required specific knowledge to find and access.

2.3.8 Conclusion

This chapter has outlined the theoretical and practical methodology employed in this thesis. Offering unusual and therefore emotive sensescapes, caves have often been seen as animate places in the landscape, capable of influencing human action. Given recent theoretical perspectives arguing that places, fauna and flora have their own fundamental agency, caves and their associated ecology may also be seen as active agents. Taking this into account, a practical methodology was devised that aimed to situate cave-use within its morphological and landscape environment. By exploring the types of caves used, the location and distribution of artefacts and the relation of caves to other sites in the landscape, it is possible to discuss the physical and possible symbolic aspects of cave-use during the 1st millennia.

Chapter 3 Cave Chronologies: Narratives of Cave-Use during the 1st Millennia BC and AD

3.1 Introduction

This chapter explores the chronological and spatial distribution of activity in caves between 800 BC and 800 AD. In total, **275** caves were identified as being used sometime during the 1st millennia. However, dating activity in many of these caves is restricted by limited number of finds, the majority of which were recovered during antiquarian excavations. Whilst, this could partly be a result of excavation practices and natural erosion in caves, it is also likely to be a product of the archaeological record of communities inhabiting upland areas where caves are found. This has a number of implications for understanding how cave-use may have changed throughout the first millennia, including understanding the continuity and change of activity taking place during periods of Romanisation. The discussion below will therefore explore the chronology and types of activities recorded in caves in each region before contextualising such data within its wider chronological framework.

3.2 Chronological framework

The chronological framework used in this study aimed to take into account regional, as well as national chronologies that are outlined in Figure 3.1. It is important to note that chronological classifications are used to aid in discussion rather than to facilitate analysis. Furthermore, whilst the established chronological frameworks in British archaeology are a vital framework, it is important to reinforce that these are arbitrary 'academic categories' (Shanks et al. 1992), aimed at contextualising material culture within a broader historical sphere (i.e. the Roman invasion). Recent research has demonstrated the complex and fluid nature of site histories, many of which present evidence of re-use (Borić 2010; Howell 2001; Semple 2013; Thomas 2007). Furthermore, significant regional variation in the adoption and use of Roman material culture must also be seen as part of existing regionalised developments.

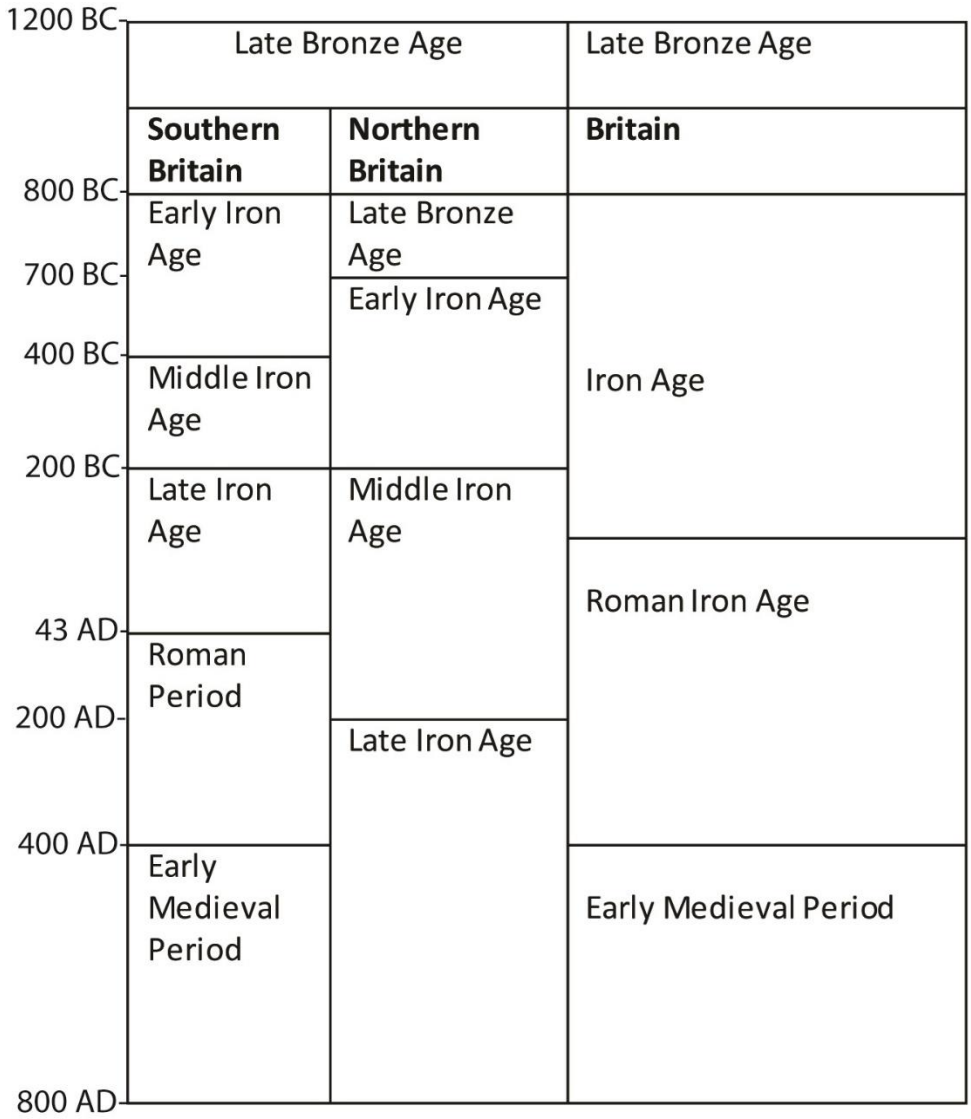


Figure 3-1: Chronological framework used during this study. The chart shows chronologies for both southern and northern Britain, whilst the column on the far right represents the chronology used throughout this study. This allows for an integrated approach to caves, which are often used over multiple periods.

3.2.2 Romanised chronologies and 'Barbaric Frontiers'

Chronological change across southern Scotland, England and Wales during the late 1st millennium has often focused on processes of Romanisation, often discussed through core-periphery models (Cunliffe 1988) centred on southern England (Mattingly 2006: 56-58). Understanding the chronology of change is complicated by the nature of individual responses to Romanisation, demonstrated by regional variations in material assemblages (Mattingly 2006:16). This suggests that communal agency and identity may have played an important part in accepting and rejecting elements of Roman material culture.

Traditionally, limited understanding of the archaeology of areas, such as north-west England and Wales, has led to these regions being dismissed as 'barbaric frontiers', which in turn has

marginalised these communities in Roman Iron Age research frameworks (Mattingly 2006: 59). Regions where communities rejected Roman material culture, or used it in archaeologically less visible ways, are often poorly understood given their lack of contemporary diagnostic material culture. (Harding 2004b; Hunter 2007). By selecting or rejecting robust and diagnostic Roman Iron Age artefacts, communities also impacted their archaeological visibility. Therefore, rather than reflecting new Romanised practices, the appearance of first century Roman artefacts, such as brooches, coins and pottery, were likely part of pre-existing social processes.

3.2.3 The Scottish 'Long Iron Age'

Similar issues also exist when interpreting chronological change across Scotland. Whilst diffusionist models proposed by the likes of Childe (1935) and Mackie (1971) have generally been dismissed, more recent synthesise on the Scottish Iron Age have criticised the overreliance on insular settlement typologies, which have led to the marginalisation of the region (e.g. Armit 1990, 2000, 2003; Dockrill 2003; Gilmour 2002, 2005; Lane 1990; Parker Pearson et al. 1996).

Studies of the chronology of pre-broch roundhouses, such as Dun Mor Vaul (MacKie 1974) and Dun Vulan (Parker-Pearson et al. 1999), have shown the complicated long term history of site use. Many of these also continued to be occupied during the latter half of the 1st millennium AD. For example, sites such as Mine Howe (Downess et al. 2003) and the broch at Howe on Orkney (Ballin Smith 1994), appear to have been periodically used up until the 8th or early 9th century AD (Foster 1997; Mulville et al. 2003). This obviously has implications for understanding social change in the region but also poses issues in dating sites through artefacts that often have long term chronologies (Ballin Smith 1990; Batey 2002; Dockrill et al. 2005; Raven 2012).

Certainly, site continuity does not necessarily demonstrate continuing social practices. Indeed, new forms of Pictish material culture, including symbol stones and freestanding Christian crosses, suggest new methods of social and spiritual expression (Mulville et al. 2003: 21). The abandonment of broch construction, between the 5th and 6th centuries AD, may further reflect changing attitudes towards monumentality (Armit 1990: 209) and expressions of social power, which were emphasised in new ways (e.g. Gleeson 2012; Gondek 2006).

Understanding cave-use in the region is therefore complicated by the apparent long-term use of sites, as well as by complex artefactual typologies. As such, dating activity is predominately

reliant on radiocarbon dating and the appearance of diagnostic forms of material, including Roman Iron Age and early Christian material culture. The action of individual agents and communities towards the use and deposition of Roman artefacts during the early 1st millennium AD must therefore be taken into account when discussing cave-use.

3.3 Overview of caves used during the 1st millennia

As discussed in Chapter 1, caves are subject to mechanical stresses that present a number of unique challenges when interpreting site history. Furthermore, many caves were excavated in the 19th and 20th centuries, using destructive and invasive methods that has limited the amount of material that is available for study. It is therefore necessary from the outset to note that only a tentative diachronic framework of when and how caves were used can be constructed. By discussing cave-use regionally however, it is possible to identify likely contemporary periods of human-use that can help better date activity in caves.

Overall, human-use, dating to the 1st millennia was identified in 275 caves across Britain (Figure 3.2). As can be expected, the majority of these were located in upland regions susceptible to cave generation and along exposed coastlines. In England, activity was mainly concentrated in the north and south Pennines and the Mendip Hills (see Chapter 4). Human-use was also recorded in isolated outcrops of limestone, including near Torbryan, Devon, Symonds's Yat, Gloucestershire and the North Yorkshire Moors. Elsewhere, activity in caves in Scotland was mainly focused in coastal caves around Fife and Argyll and Bute. Similarly, human-use was also recorded in caves on the north and west coasts of Wales and in the Black Mountains.

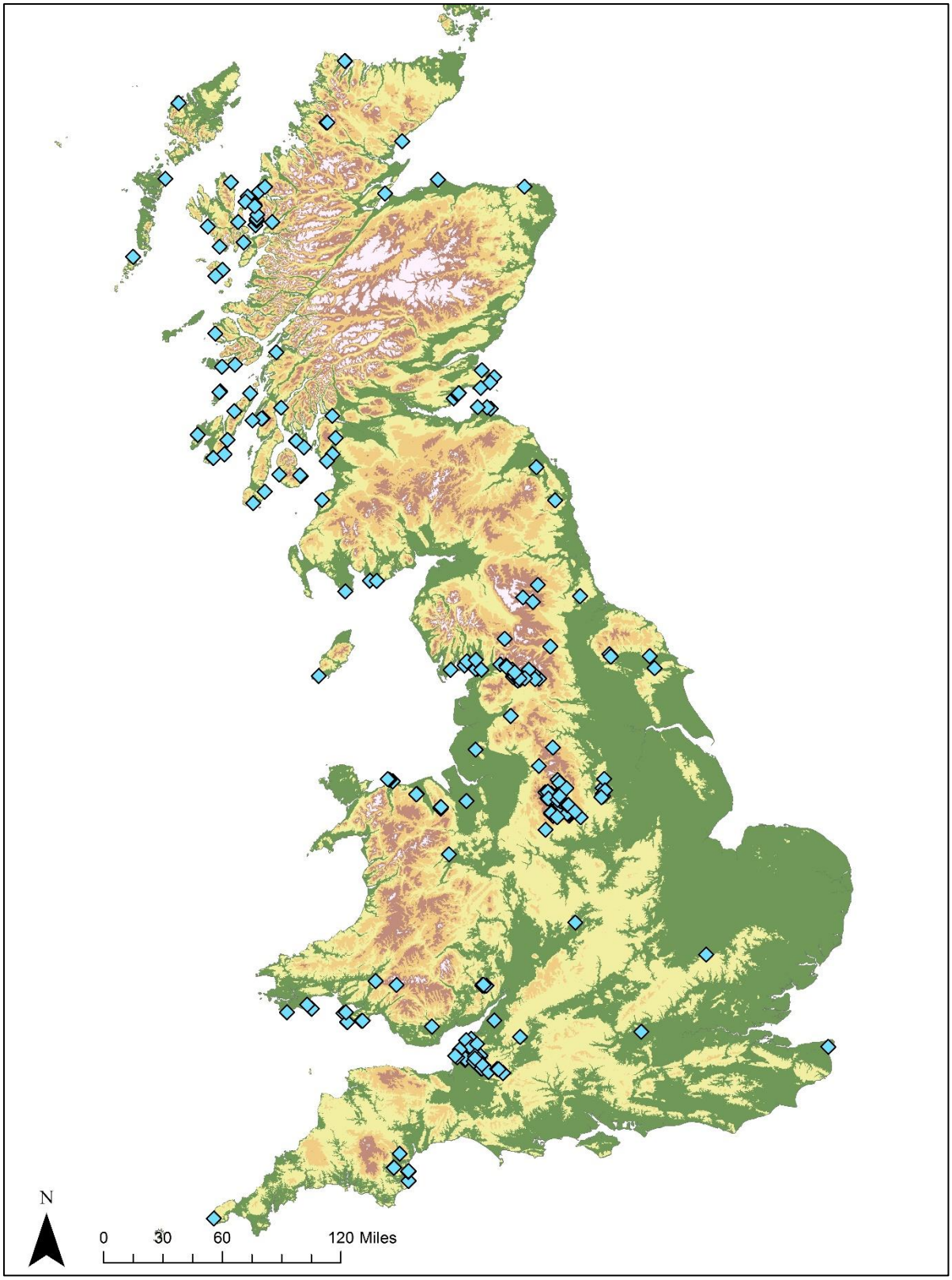


Figure 3-2: Distribution of caves used during the 1st millennia (N: 275). Each dot represents an individual cave that contained datable artefacts.

3.3.1 Scientific framework of the study

Excavation of forty-seven caves produced relevant radiocarbon dates (113 separate samples). These were recalibrated using Oxcal 4.2.3 at 95.4% probability (Reimer et al. 2013) and illustrated in Figure 3.3. Thirty-one samples were published by projects on the western coast of Scotland that focused on researching early prehistoric use of caves, including the Scotland's First Settler and the Islay Caves projects (see Chapter 1 for discussion of recent cave research). The majority of these were taken from sequences of midden deposits, which can help to define the length of activity For example, radiocarbon results from Uamh An Eich Bhric (**155**), a rockshelter on the Isle of Skye, taken from both basal and upper deposits of a midden, indicated only short term accumulation between c. 60 and 210 cal AD. Similar activity was also recorded by sampling of a midden at Crowlin 1 (**234**) another rockshelter on the Sound of Skye, however over a longer period beginning between 120-340 cal AD and running into the 1480-1660 cal AD. This could suggest that activity in certain caves were used periodically, whilst others were subject to more short-term processes (see Chapter 4).

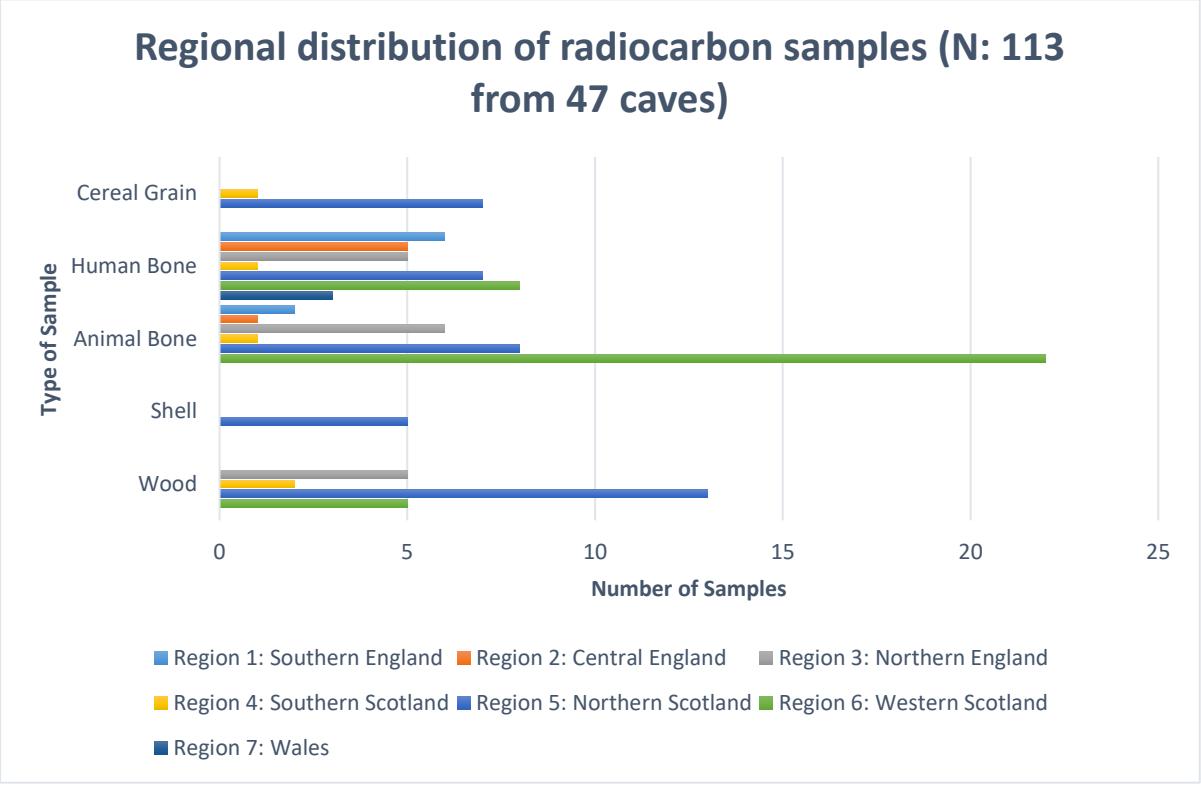


Figure 3-3: Radiocarbon samples (N: 113) from 47 caves, demonstrating that samples were taken from a variety of types- including human bone, as well as domestic and wild animals.

3.3.1.1 Type of samples used for radiocarbon dating

Of the 133 radiocarbon samples included as part of this study, thirty-five (31%) were taken from human remains, forty (35%) belonged to wild or domestic fauna and twenty-five (22%) were charcoal samples (Figure 3.4). When using radiocarbon dates to establish site chronology a number of issues must be taken into account. Firstly, it must be noted that many of these samples are from charcoal, which may have belonged to 'old wood' (Warner 1990). This is especially relevant when sampling drift wood from marine sources, which may have been used in caves close to coastlines (Church 2000). Similarly, cereal grains may have been deposited in archaeological contexts accidentally, such as being blown by wind or falling from clothing or hair. As a result, only cereal grains that came from secure archaeological deposits were selected as part of this survey.

Secondly, there are a number of issues regarding the collection of animal bone for radiocarbon sampling. Erosional processes may have led to animal bones being washed down into the cave from aboveground deposits. Samples of bones belonging to wolves and bears does suggests that carnivores also used caves throughout 1st millennia, which raises questions on the relational cohesion and nature of interaction between animals who used caves and human populations (see Chapters 6 and 7).

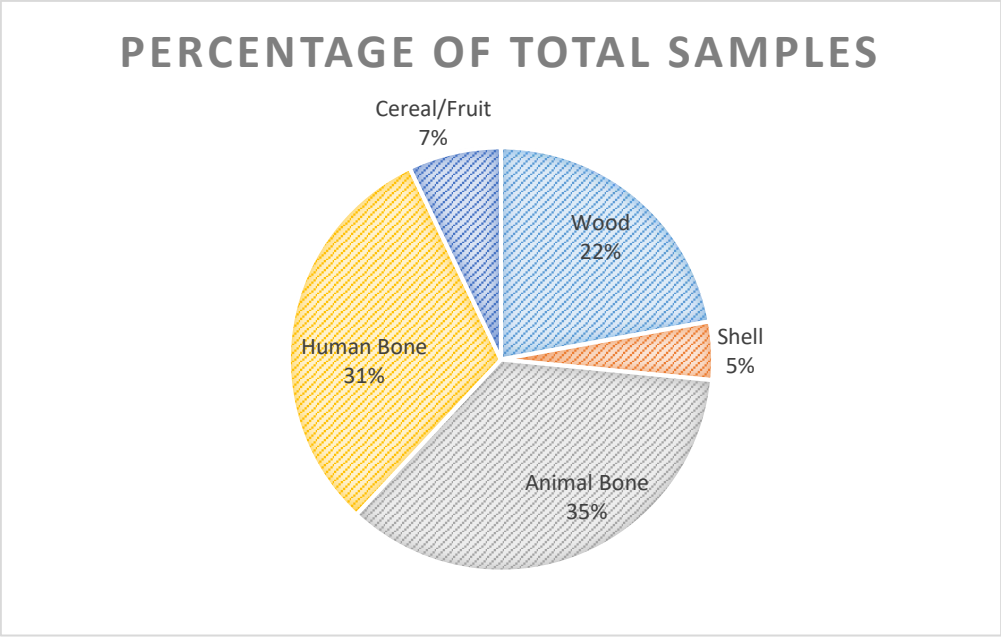


Figure 3-4: Distribution of radiocarbon samples by type (N: 113). These samples provided evidence for a range of activities in caves- including places of burial and the processing of animal bone.

3.4 Regional cave-use during the 1st millennia BC and AD

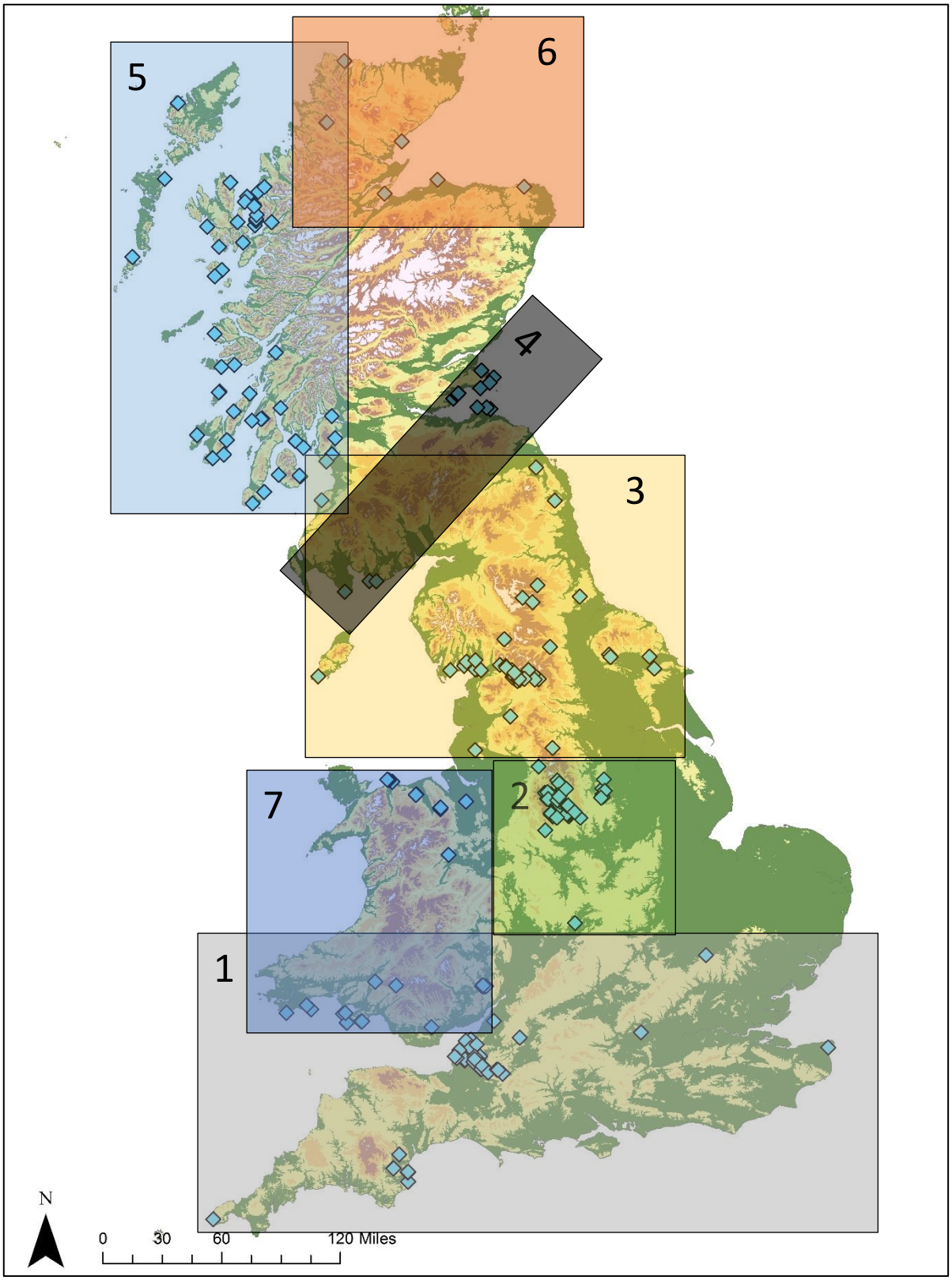


Figure 3-5: Regions used to study cave chronology and distribution. Region 1: Southern England, Region 2: Central England, Region 3: Northern England, Region 4: Southern Scotland, Region 5: Western Scotland, Region 6: Northern Scotland, Region 7: Wales.

3.5 Region 1: Southern England

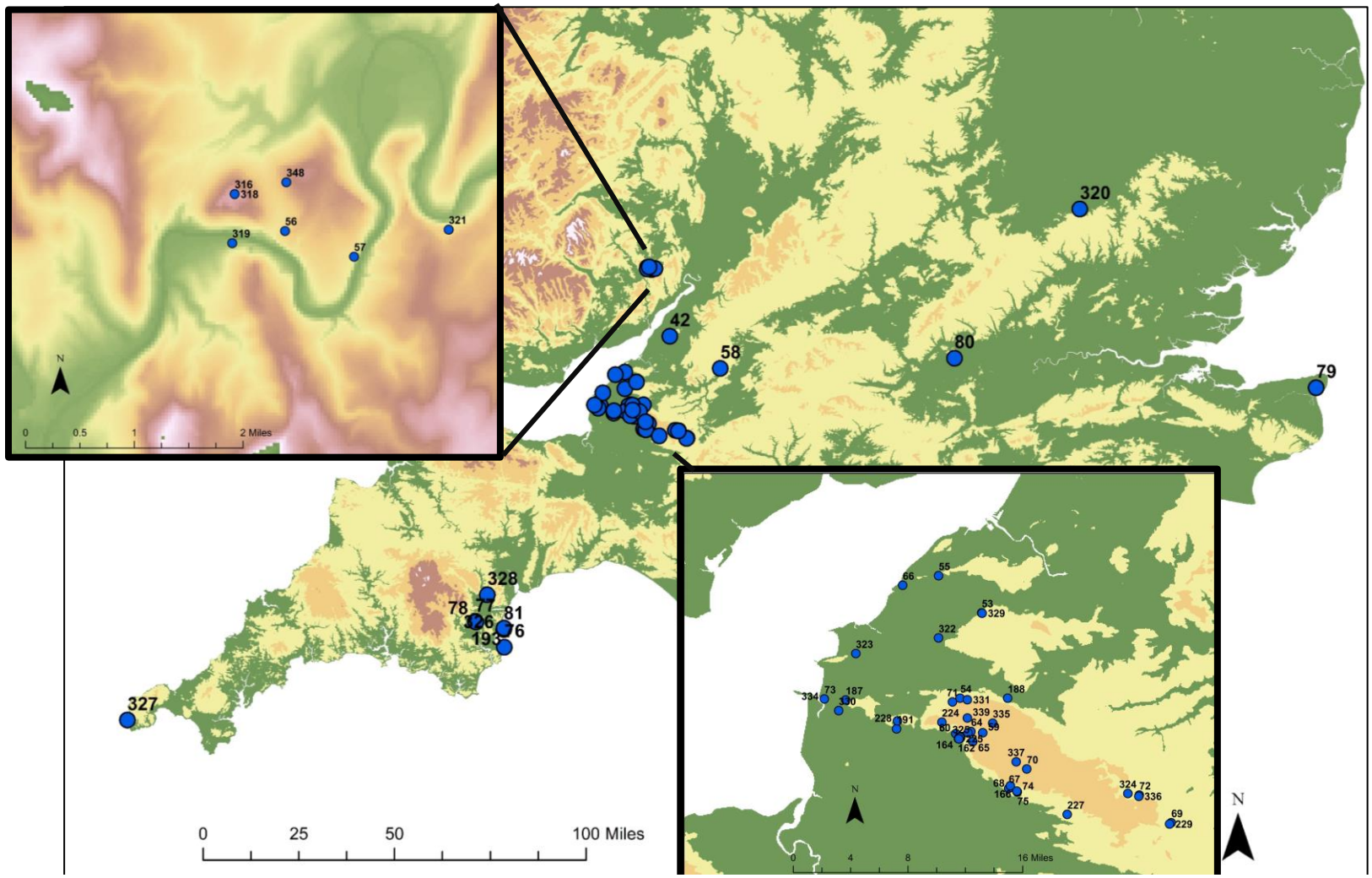


Figure 3-6: Distribution of caves in Region 1: The South of England (N:67). Concentrations of localised use of caves was identified in the Mendip Hills, Symond's Yat and Tobryan. Each dot represents an individual cave with its associated Cave ID number.

In southern England, a total of sixty-seven caves were identified as being used sometime during the 1st millennia (Figure 3.6). The majority of these were located on the highly soluble limestones of the Mendip Hills (N: 34 caves), as well as near Symonds's Yat, Gloucestershire (N:7 caves) and around Torbryn, Devon (N:7 caves). Possible Iron Age activity was also reported from a sea cave at Cennan Cove (**327**) southwestern Cornwall and Roman Iron Age finds were reported from Weycock Hill (**80**) and Royston Cave (**320**) located in chalk karst in eastern England. Excavations at Spratling Court Farm (**79**), Essex also uncovered a large pit dug during the Late Iron Age, and a chalk cave, which was modified and infilled during the 2nd and 3rd centuries AD (Baker 2011). The following section will summarise activity in caves across southern England before discussing the overall chronological evidence of cave-use (see Volume 2 for detailed analysis of individual cave assemblages).

3.5.1 Dating cave-use in southern England

As only seven caves (of a total of 67) provided radiocarbon dates, dating cave-use relied upon comparative artefact typologies and by identifying sequences of localised use in multiple caves. From the seven caves that contained sampled material (Table 3.1), six of these were from sites in the Mendip Hills (Charterhouse Warren Farm Swallet **59**; Gough's Cave **62**; Uphill Quarry Caves **73**; Badger Hole **75**; Tyning's Great Swallet **339**), whilst a human mandible (OxA-3210) from Three Holes Cave, Torbryan (**78**) was radiocarbon dated between 208 and 395 cal AD (OxA-3210). All but one sample was from human bone, reflecting the role of caves for the treatment of the dead, at least during the Iron and Roman Iron Ages (see Chapter 7).

3.5.2 Late Bronze Age and Iron Age cave-use in southern England

Evidence of Late Bronze Age cave-use in the region is limited to eight caves and was characterised by a range of metalwork, pottery and bonework. At Kent's Cavern, Torquay (**61**), excavation uncovered a diverse corpus of Late Bronze Age artefacts, including socketed tools, axes, bone tools and coarse pottery. A bronze ingot, slag and significant quantities of charcoal were also found, suggesting that metalworking may have taken place in the cave (Silvester 1986: 20-25) (see Chapter 6). The majority of finds were reported from charcoal rich layers, which were thought to indicate sporadic occupation of the cave throughout the 1st millennium BC (Silvester 1986: 10).

A similar sequence was also noted from Wookey Hole (**166**) located in Cheddar Gorge. During his excavation, Balch (1911: 575-577) identified a number of Late Bronze Age artefacts, which included socketed tools, axes and bonework. Evidence of activity in Wookey Hole can be compared to other caves in Cheddar Gorge. A bronze palstave was found at the entrance to

Long Hole (**61**) and at least one gold double-banded bracelet was recovered from Bracelet Cave, Ebbor Gorge (**67**). A human bone, radiocarbon dated to 1210-853 cal BC (OxA-1202), was also found in the entrance to Gough's Cave (**62**).

In contrast to Iron Age material culture found elsewhere across Britain, localised styles of pottery and metalwork are relatively well dated. As a result, Iron Age activity was identified in thirty-six caves in the region, the majority of which were found on the Mendip Hills and Cheddar Gorge (see Bryant 2011). Evidence from these caves included a mixed corpus of pottery, human and animal remains, metalwork and bonework. In their excavation of Backwell Cave, Avon (**53**) Tratman et al. (1938: 61-63) uncovered the remains of at least eighteen individuals within a charcoal layer that also contained worked bone and a spindle whorl. Excavation of Read's Cavern (**54**) produced a similar assemblage comprising of the remains of four individuals, a brooch dating to the middle Iron Age, Glastonbury type pottery and animal remains, within a charcoal midden. Reanalysis of the Read's Cavern assemblage by Marcucci et al (2011: 183-184) has demonstrated that the material found in the cave was likely a secondary deposit, deposited through a sinkhole in the roof of the cave. Similar evidence, of the deposition of artefacts and human remains dating to Iron Age, and Roman Iron Age, in vertical shafts has also been identified in other caves in the region, including Charterhouse Warren Farm Swallet (**59**) and Fishmonger's Swallet (**42**) and may suggest that these caves were used for ritual deposition (see Chapter 7 for discussion). Elsewhere in the Mendip Hills, finds of Glastonbury type pottery, worked animal bone, pottery and brooches dating to the Late Iron Age have also been found near the underground River Axe in Wookey Hole (**166**). Furthermore, outside the entrance to Wookey Hole, excavations have uncovered a structural sequence dating to the Late Iron Age and Roman Iron Age, as well as galena ore and slag (see Chapter 6 for discussion).

Despite this apparent focus of activity in caves across the Mendip Hills, there is also evidence of Iron Age cave-use in seven caves near Symond's Yat Gloucestershire. Excavation of King Arthur's (**56**) and Merlin's Caves (**57**) near Doward have produced carinated sherds dating to the 2nd and late 1st centuries BC. Alongside the Late Bronze Age material discussed above, excavation of Kent's Cavern also recovered at least 417 sherds of Late Iron Age pottery, bone tools, metal artefacts, including a Late Iron Age brooch and a number of stone querns and spindlewhorls (Silvester 1986: 12-13).

Table 3-1: Radiocarbon dates available for caves in Southern England (N: 9 samples from 7 caves).

Cave	Sample	Sample Type	Sample Date
Fishmonger's Swallet, Alveston (**42**)	Beta-150613	Human bone	88 cal BC-230 cal AD
	Wk-8222	Human bone	169 cal BC-129 cal AD
Charterhouse Warren Farm, Charterhouse (**59**)	SRR-3450	Human humerus	375-41 cal BC
Gough's Cave, Cheddar (**62**)	OxA-815	Maxilla of *Sus Scrofa*	135-410 cal AD
	OxA-1202	Human bone	1210-853 cal BC
Uphill Quarry Cave No. 2, Uphill (**73**)	OxA-4022	Human distal femur	138-527 cal AD
Badger Hole, Wookey (**75**)	OxA-680	Human cranial fragment	436-801 cal AD
Three Holes Cave, Torbryan (**78**)	OxA-3210	Human mandible	208-395 cal AD
Tyning's Great Swallet, Black Down (**339**)	OxA-15350	Human bone	395-208 cal BC

3.5.3 Roman Iron Age cave-use in southern England

Forty-one caves in southern England were potentially used during the Roman Iron Age. Of these, nineteen caves contained artefacts dating to the early 1st and early 2nd centuries AD (discussed below). This included finds of Early Roman Iron Age pottery, including sherds of East Grimstead Ware (Barrett 1966: 18) from Tom Tivy's Hole (**69**) dating to the 1st century AD and pre-Flavian Samian and Italian Ware Amphorae from Kent's Cavern (**81**). Coinage and metal objects, including medical instruments tools, Polden Hill and Dolphin type fibulae from caves in Cheddar Gorge (Badger Hole **75**; Wookey Hole **166**) also indicate possible continuity in cave-use from the Late Iron Age. Wookey Hole (**166**), has produced a remarkable assemblage of artefacts, which date throughout the Roman Iron Age, include metalworking tools and debris, weaving implements, complete ceramic vessels and human remains (Balch 1911: 575-577; Branigan et al 1991a: 149). At least, two separate instances of human

deposition were identified in the cave. The first, dating to the late 1st or early 2nd century AD, was characterised by the apparent deposition of human skulls and pottery directly into the River Axe stream way (Balch 1911: 585). Excavation of the fourth chamber, located across the river, also uncovered the inhumations of 21 individuals and material dating to the 3rd and 4th centuries AD (Hawkes et al. 1978). Possible coin hoards were also noted in at least three caves in Cheddar Gorge (Hyena's Den **72**; Long Hole **61**; Pride Evan's Hole **225** in Cheddar Gorge, whilst a further eighteen caves contained coins. Excavation of White Woman's Hole (**229**), a small single chambered cave near Nunnery. Somerset, also uncovered counterfeit coins, a deposit of coins minted during the reign of Theodosius (379-395 AD) and a dolorite touchstone, which may have been used to copy coins (Barret et al. 1972: 63).

3.5.4 Early Medieval cave-use in southern England

Two caves were possibly used during the Early Medieval period. Fragments of human bone, radiocarbon dated to the late 4th or earth 5th century AD, were found in Badger Hole (**75**), whilst a bone bead, decorated with a zig-zag pattern, was found in Tickenham Rockshelter (**55**) and dated stylistically to the 5th or 6th century AD (Savory 1924).

Cave names may also, however, demonstrate that Early Medieval communities continued to engage with caves. Derivative names for Wookey Hole (**166**), including Oochie, Owky and Oochies, contain the element Ogo, an Old British place-name for cave or hiding place (Binding et al. 2005: 60). Place-name evidence does not necessarily indicate physical use of caves, but does suggest that caves were at least perceived as part of world-views during the latter part of the 1st millennium AD (see below). Interestingly, this engagement with caves may also be further highlighted by Medieval ritual potential marks which have been found on cave walls (Binding et al. 2005). Nevertheless, the lack of diagnostic material is interesting across the south of England especially when compared to activities in caves in Wales and Scotland (see below).

3.5.5 Chronology of cave-use in southern England

From the discussion above it is clear that cave-use in the south of England was a complex and significant phenomenon occurring throughout the 1st millennia. Whilst cave-use appears to be persistent throughout the 1st millennia, the number of caves used and the scale and types of artefacts deposited does fluctuate (Figure 3.7). As I have discussed above, there are however a number of issues that could have resulted in a bias in the archaeological visibility of activity. Indeed, compared to other regions, there is a better Iron Age artefactual record, which may provide a more coherent picture of Iron Age activity in caves compared to other regions.

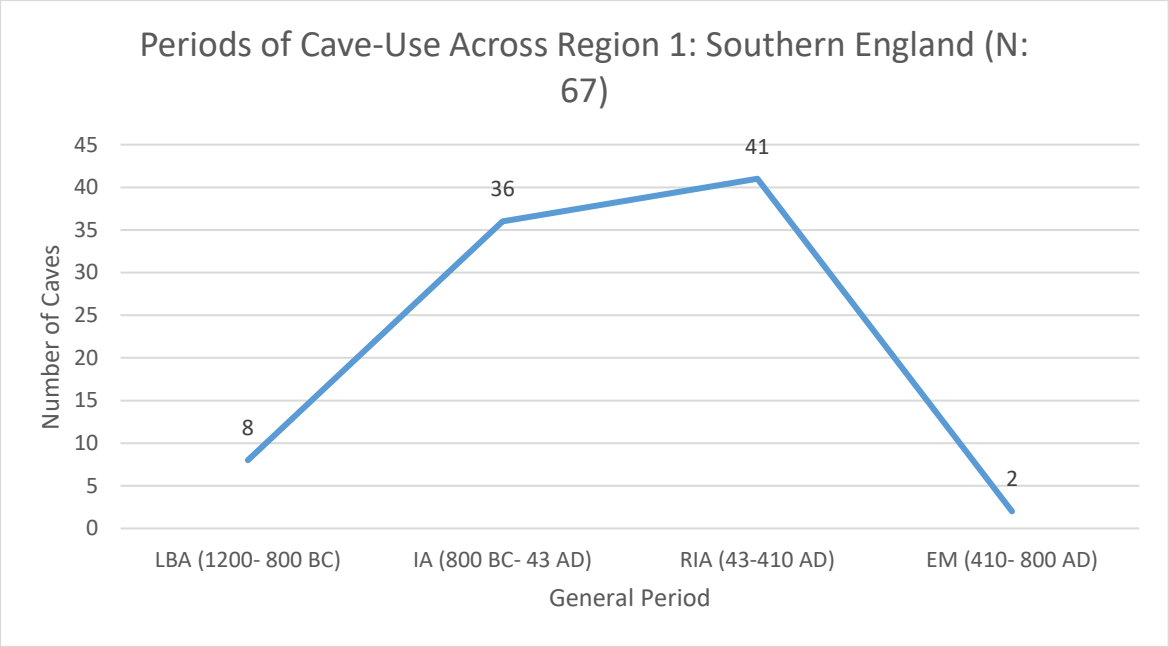


Figure 3-7: Number of caves with activity that could be dated to the 1st millennium in southern England (N: 67 of 275 total caves)

However, if we consider only those caves that contain material, which can be dated to a specific period (40 of 67 caves), a clearer picture of cave-use in the region can be constructed. Figure 3.8 illustrate the chronology of activity in caves with diagnostic material and highlights a number of important trends. Firstly, rather than seeing a significant increase of use during the Roman Iron Age, levels of cave-use appear to be consistent between the late 1st millennium BC and early 1st millennium AD. Finds of coins, metalwork and pottery of 1st and early 2nd century AD date, could also indicate that the deposition of material may have been associated with antecedent uses of caves during the Late Iron Age. Evidence of this may be seen in caves, which contained both Late Iron Age and Early Roman Iron Age material, including Wookey Hole (**166**) and Kent's Cavern (**61**). Secondly, the decline in Early Medieval activity is more

pronounced and must be considered as evidence of a possible shift in attitudes towards cave-use.

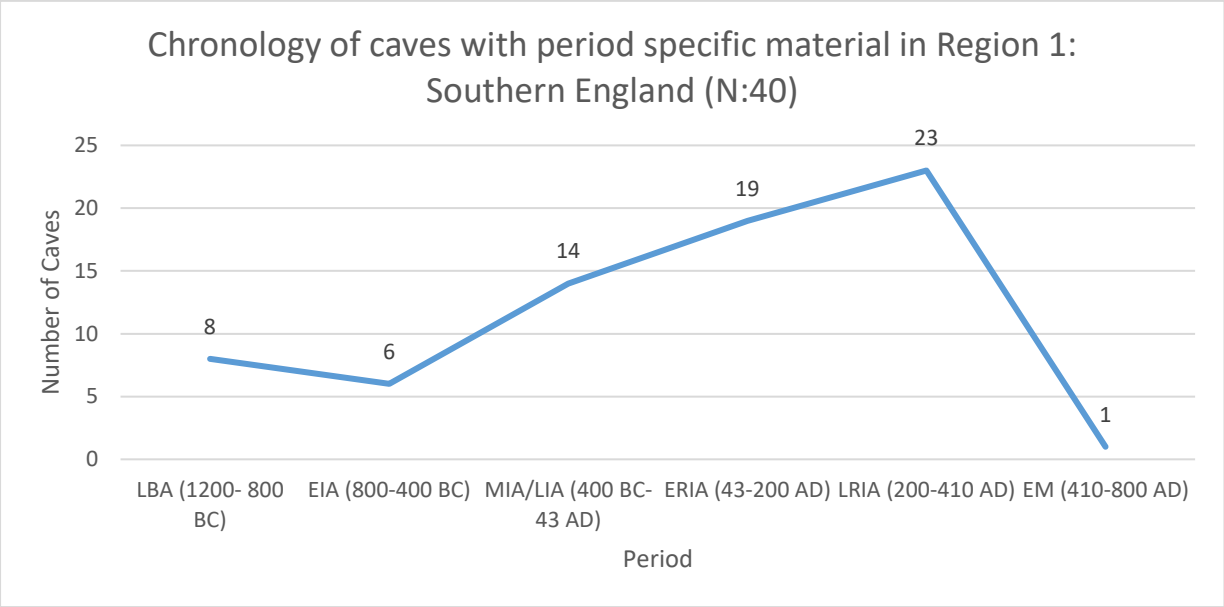


Figure 3-8: Cave use which can be dated to more specific periods across southern England (N:40)

Whilst a significant number of caves were possibly used during the 1st millennia, many of these caves contained limited artefactual evidence. This is perhaps, partly a result of the standard of excavation and conditions within caves that may have damaged artefacts (see Chapter 1). However, isolated finds of objects such as pottery and metalwork, may indicate that some caves were used more sporadically than others. Excavations of sites such as Symond's Yat East Rockshelter (**319**), Doward and Picken's Hole (**192**), Mendip, have produced only handfuls of pottery in isolated contexts (Barton 1994; Houston n.d.). This contrasts to extensive assemblages recorded in caves elsewhere in the region, including finds of animal and human bone, pottery, metal and bonework from Read's Cavern (**54**) and Wookey Hole (**166**), Cheddar, which demonstrates different types of activity occurring in different caves.

Analysing the overall types of materials deposited in caves (Figure 3.9) further demonstrates the complexity of cave-use in southern England. Whilst, the majority of material found in caves was pottery, there was also evidence of metalworking taking place in some caves, identified through finds of iron and galena slag and tools, as well as the deposition of personal items, including brooches and coins. Bone artefacts, including spindle whorls, bone points and rings also indicate that caves may have been used for the processing of bone and antler. Butchered and unprocessed animal bone was also recorded in a limited number of caves, which may

indicate that some caves could have been utilised for the processing of hunted animals or by those herding animals (see Chapter 5).

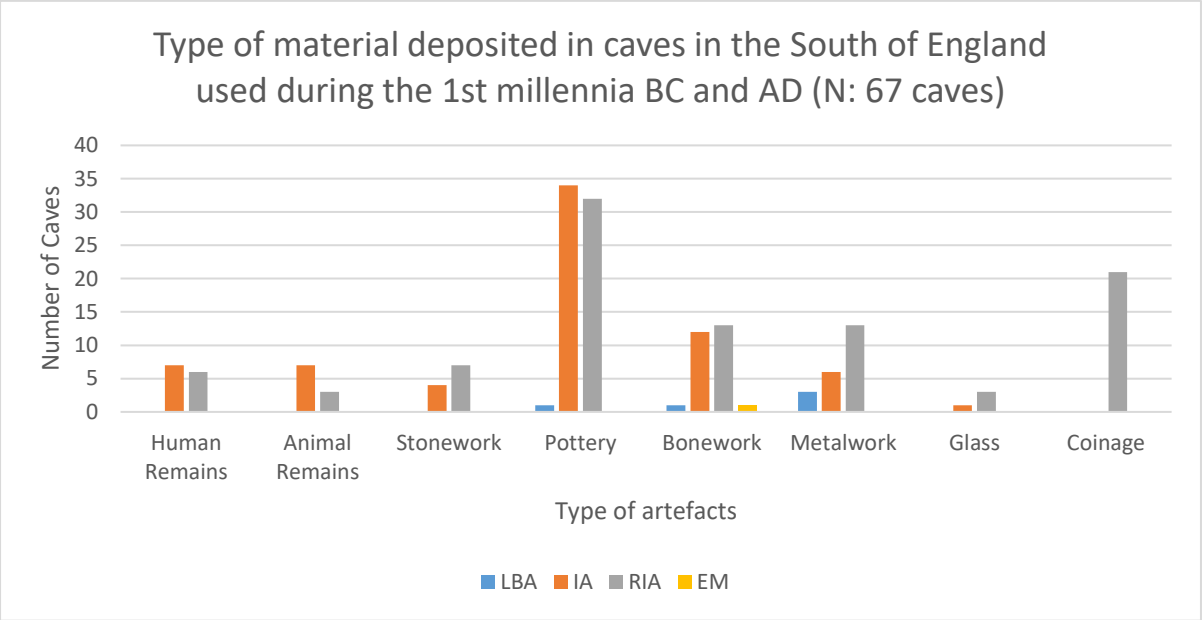


Figure 3-9: Material deposited in caves during the 1st millennia BC and AD in Region 1: Southern England

Despite the similarity in the types of materials being deposited in caves during the Iron Age and Roman Iron Age, new artefacts also suggest new mediums associated with acts of cave-use. Finds of coins, new forms of metalwork and glass demonstrate that new material culture was being deposited in caves perhaps as part of pre-existing Late Iron Age processes (see below). This is further demonstrated in the deposition of Roman coins, including Republican Denarii dating to the 1st century BC (Wookey Hole **166**), whilst there are no known Iron Age coins found in cave contexts in the south of England.

Figure 3-10: Chronology of coves with diagnostic material (N: 40 of 67 coves). Black represents the diagnostic range of material, whilst grey is other finds of broader date. The other 27 coves recorded in the study contained non-diagnostic or probable material

3.5.6 Conclusion: cave-use in southern England

Beginning in the Late Bronze Age, caves were used for the deposition of artefacts and the dead, as well as being used by those moving through the landscape, including craft workers and pastoral transhumanists. Differences in the scale and types of artefacts highlight the apparent complexity of cave-use in the south of England, which may have been connected to a range of practical and cosmological concerns. Concentrations of activity in caves in localised landscapes also demonstrates the need to contextualise cave-use within wider patterns of deposition within other caves and subterranean features in the landscape. For example, the similarity of the type of material deposited in caves in Cheddar Gorge, at least during the Iron Age and Roman Iron Age may suggest that cave-use was related. Evidence of complex and multi-period deposits at Wookey Hole (**166**), which included the deposition of human remains and complete artefacts, could have served as focus for the ritual use of caves during the 1st millennia in Cheddar Gorge. Elsewhere, finds from sites such as Kent' Cavern (**61**) and Merlin's Cave (**57**), indicate long-term use and re-use of certain caves. Fundamentally, however, these differences and similarities in the use of caves in the south of England also demonstrate intentional processes behind use of certain caves in the region, which will be explored in later chapters.

3.6 Region 2: Central England

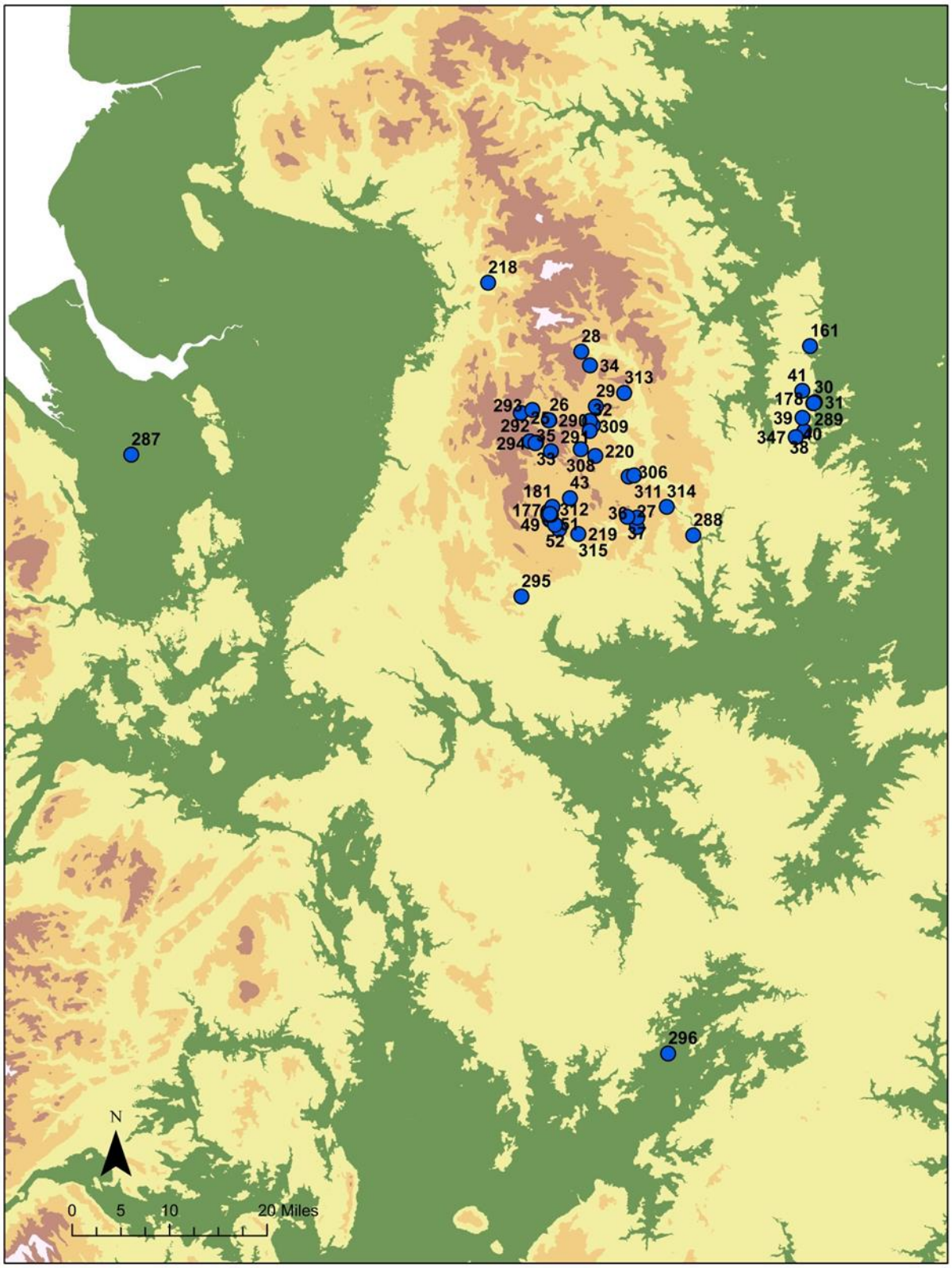


Figure 3-11 Distribution of caves with evidence of human-use during the 1st millennia BC and AD (N:56). The majority are located on the different limestones of the Peak District.

In Region 2, which encompasses the English midlands, fifty-six caves contain evidence of activity dating between c.800 BC- 800 AD (Figure 3.11). The majority of these caves (N: 54 caves) are located on the limestones of the Peak District and Southern Pennine Group, where there are high numbers of karst caves. Beyond the central Pennies, there was also evidence of use along the limestone of the Creswell Gorge, as well as isolated activity in Edgar's Cave, Cheshire (**287**) and Guy's Cave, Warwickshire (**296**). The discussion below will explore the types of evidence used to identify cave-use and how such activity was dated.

3.6.1 Dating cave-use in central England

There are six radiocarbon samples available from five caves in the region (Table 3.2). Parallel to cave-use in the south of England, all but one sample was obtained from human bone, suggesting that certain caves may have been used for the treatment of the dead. Furthermore, radiocarbon dates obtained from human remains from Robin Hood's Cave (**30**) and Mother Grundy's Parlour (**31**), both of which are located in Creswell Gorge, may indicate the contemporary mortuary use of caves during the Late Iron Age or Roman Iron Age (see Chapter 7).

Table 3-2 Radiocarbon dates available for caves in Central England (6 samples from 5 caves)

Cave	Sample	Sample Type	Sample Date
Carsington Pasture Cave, Carsington (**27**)	OxA-9806	Human femur	757-405 cal BC
Robin Hood's Cave, Creswell (**30**)	OxA-736	Human mandible	352 cal BC-204 cal AD
	OxA-6581	Second part of mandible	126-383 cal AD
Mother Grundy's Parlour, Creswell (**31**)	OxA-1832	Human juvenile cranium, collection	403-54 cal BC
Langwith Cave , Upper Langwith (**38**)	OxA-2232	Human adult male, calvaria	746-204 cal BC
Ossum's Cave, Grindon (**44**)	OxA-629	Cut-marked bovine right tibia	352 cal BC-132 cal AD

3.6.2 Late Bronze Age and Iron Age cave-use in central England

Artefacts dating to the Late Bronze Age were recorded in four caves in the region. Limited evidence of cave-use was reflected in isolated finds of fragments of a collared urn from Fissure Cave, Bradwell (**34**) and a cinerary urn from New Cave, Hartle Dale (**307**). A gold ellipse, found with sherds belonging to Pennine gritted urns, from Ravencliffe Cave, Cressbrook (**29**), were also considered to date to the Late Bronze Age, whilst a storage pit dug into the entrance of Fox Hole Cave, High Wheeldon (**35**), may have also dated to the early 1st millennium BC (Bramwell 1971: 16). As has been discussed above, rather than echoing contemporary attitudes towards cave-use, the paucity of early 1st millennium BC activity in caves is likely a result of a poor archaeological framework and limited diagnostic assemblage (Bramwell 1964). Finds of pottery and a gold ellipse may therefore indicate that caves may have been used for the ritual deposition of artefacts, which can be compared to instances of deposition in other natural places and subterranean features (see Chapter 7).

Twenty-seven caves present evidence of activity during the Iron Age, characterised by finds of pottery, human remains, bonework and some metal artefacts. Of these, eight caves produced finds dating to the Early Iron Age (c.800-400 BC), the majority of which contained isolated finds of coarse pottery, including Halstatt influenced types from Demon's Dale Cave (**32**), and thick-rimmed vessels from Old Woman's House Cave, Taddington (**291**). Excavation of Carsington Pasture Cave (**27**), a multi-chambered cave in a cliff face near Carsington, Derbyshire however, uncovered a sequence of material dating from the Neolithic, Iron Age and Roman Iron Age. Within the cave's second chamber, the inhumation of a middle aged female, radiocarbon dated to the Early Iron Age (757-405 cal BC), associated with the remains of neonatal and perinatal infants, were found above layers containing disarticulated remains dating to the Neolithic (Chamberlain 2001).

Disarticulated remains belonging to at least ten individuals were also found in upper layers within Frank i'th' Rocks Cave (**43**) that also contained Iron Age and Roman Iron Age artefacts. The diverse assemblage found within Frank i'th' Rocks Cave, located in Beresford Dale, included a bronze brooch dating to the Late Iron Age, an antler cheek piece and a glass bead (Branigan et al. 1991a: 30-31). A similar assemblage of Iron Age material was also found in Harborough Cave, Brassington (**38**). Finds from the cave included a coral mounted bronze brooch, bronze and iron tools, iron slag, barrel-shaped vessels, bone weaving implements, an antler cheek piece and a millstone grit pin block (Challis et al. 1975: 22, 75). The site, located

on a ridge above Brassington Dale, was close to a number of contemporary Iron Age settlements, suggesting that cave-use may have been connected to activity taking place in the wider landscape (see Chapter 5), including other caves. For example, at Thor's Cave (**51**), excavation produced a number of Iron Age finds, include a bone-weaving comb similar to that found at Harborough Cave, as well as a glass bead, antler cheek piece, a bronze armlet and wheel hub (Branigan et al. 1991a: 63; Challis et al. 1975: 4). The deposition of similar types of artefacts within caves in the region may suggest a number of broadly connected activities taking place in caves during the Iron Age that included the deposition of human remains and artefacts and craftworking.

3.6.3 Roman Iron Age cave-use in central England

Forty-two caves in central England were in use sometime during the Roman Iron Age. Of these, twenty-four contained artefacts dating to the Early Roman Iron Age (43-200 AD). Whilst the majority of these were characterised by isolated finds of pottery, a number of caves contained diverse assemblages of material dating to the late 1st century and early 2nd century AD. At Poole's Cavern, Buxton (**25**) excavation of the so-called Roman Chamber revealed an extensive corpus of metalwork and craftworking debris associated with a series of karst pools (Branigan et al. 1991a: 43-44; Smithson et al. 1991: 49). Finds included early Polden Hill type brooches, trumpet and knee fibulae, bronze mounts, tools and slag (ibid.). In their discussion of the human-use of the cave, Branigan et al. (1983: 69) suggested that metalworking took place within the chamber and was associated with ritual deposition connected to the karst pools (see Chapter 4). Similarly, excavation of Thor's Cave, Wetton (**51**), also produced a comparable assemblage of late 1st century and early 2nd century AD material, such as brooches, metal and bone tools and craftworking debris, which was concentrated within the entrance and main chambers (Branigan et al. 1991a: 61). A corpus of material similar to that recorded at Thor's Cave and Poole's Cavern was also found during excavation of Thirst House Cave (**26**). At least thirty-nine brooches were found in the cave, along with medical instruments, spindlewhorls and glass beads (Branigan et al. 1991c). Outside the cave, excavation of a rectangular cist uncovered a single adult inhumation found with an Iron Age spearhead and a secondary intrusive deposit, containing a cremation within a Roman Iron Age vessel (Ward 1897). Further evidence of the mortuary use of caves during the Roman Iron Age was identified in two caves, including a cremation at Thirst House Cave (**26**) and the deposition of an adult skull at Robin Hood's Cave, Creswell (**30**) (discussed above). Such evidence, alongside the diverse deposits discussed above, demonstrates a complex attitude towards cave-use during the

Roman Iron Age, which included the deposition of a rich corpus of metalwork and the use of caves as craftworking spaces.

3.6.4 Early Medieval cave-use in central England

Comparable to Early Medieval activity in both southern (Region 1) and northern England (Region 3), only five caves in central England contained datable artefacts. Limited evidence of cave-use was demonstrated by isolated finds, including two black zig-zag glass beads from Frank i'th' Rocks Cave (**43**) and Sevenways Cave, Manifold Valley (**46**) and a bronze annular brooch found in Thor's Cave (**51**). However, metalwork and coins from St Bertram's Cave, Wetton (**51**), may also suggest that some caves were used to store hoards. Excavation of the cave's main chamber uncovered 900 silver pennies, a silver brooch and a gold ring, deposited sometime during the 8th or 9th century AD (Davenport 1994: 4). A Mercian inscription written on the walls of Guy's Cave, Warwick (**296**) could also suggest that some caves were used as hermitages for early Christian communities (see Chapter 6).

3.6.5 Chronology and cave-use in central England

Throughout the 1st millennia cave-use appears to have been a recurrent phenomenon in the English Midlands, predominately focused on the limestone of the Peak District and Creswell valley. By considering, the overall chronological framework of human-use of caves (Figure 3.12) it is also apparent that, like in the Mendip Hills (region 1), the human use of caves in the region increased during the Iron Age and Roman Iron Age before declining during the Early Medieval period.

However, by comparing only those caves, which contained diagnostic material, the chronology of cave-use becomes more nuanced (Figure 3.13). Of the fifty-six caves identified as part of the current study, thirty-five contained artefacts, which could be dated to a specific period. From this, it appears that Early Iron Age (800-400 BC) and Late Iron Age (400 BC- 42 AD) cave-use remains at similar levels before increasing during the Early Roman Iron Age (42-400 AD). As discussed above this maybe as a result of a bias in the material record, because of an influx of new and more robust Roman material culture rather than as altering approaches towards cave-use.

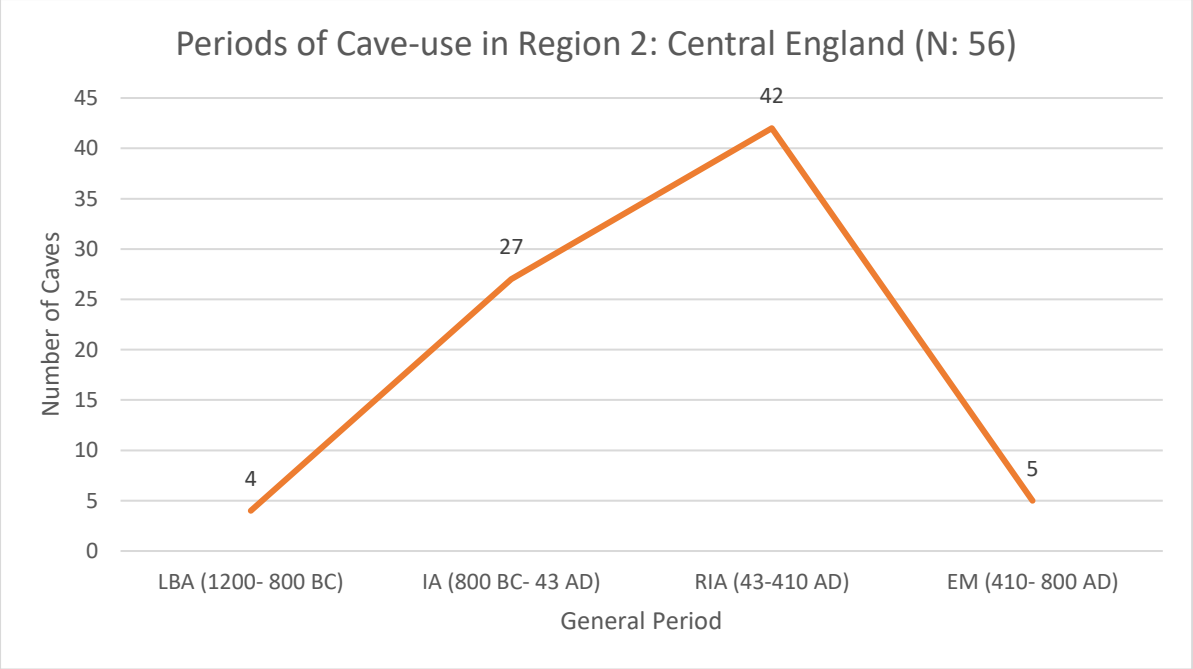


Figure 3-12: Numbers of caves with activity that could be dated to the 1st millennia in central England (N:56 of 275 caves)

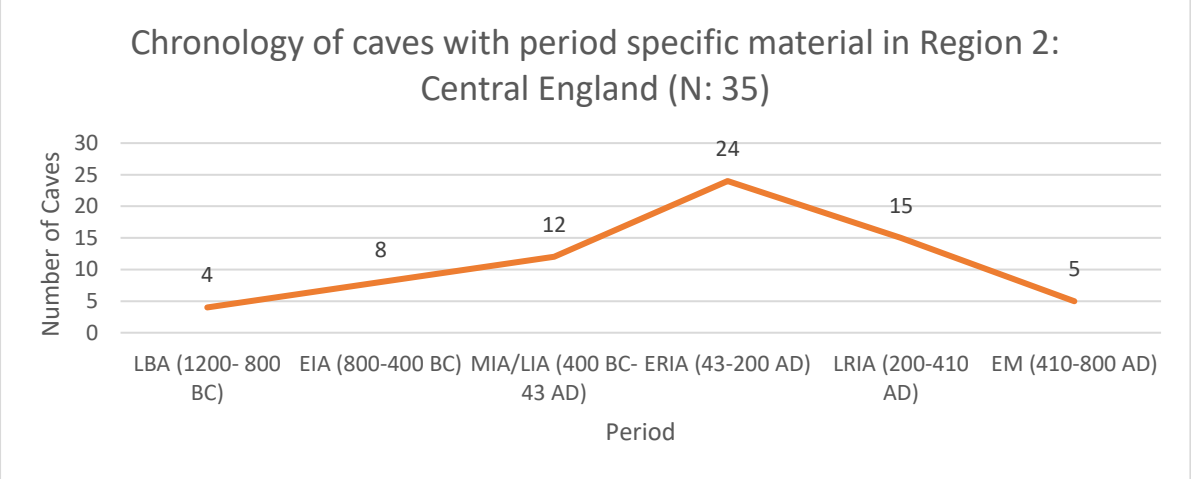


Figure 3-13: Cave-use which could be dated to a more specific period (N:35 of 56 caves)

Finds dating to the 1st and early 2nd centuries AD may also reflect antecedent activity in some caves. Evidence of this can be seen by the contemporary or near contemporary use of caves in Creswell Crags, Derbyshire. Both Robin Hood's Cave (**30**) and Mother Grundy's Parlour (**31**), contained human remains dating to the Late Iron Age and late 1st to early 2nd century AD respectively. Artefacts of possible contemporary date were also found in Pin Hole Cave (**178**), evidenced by a find of a Hod Hill type brooch dating between c.45 and 65 AD, and Church Hole Cave (**289**), where a Dolphin brooch (c.50-100 AD) and a Colchester derivative style brooch were also found.

Comparable brooches, including Dolphin (c.75-160 AD) and Colchester derivative styles (80-150 AD), have also been found associated with coins minted between 41 and 155 AD at Poole's Cavern (**25**). Crucially, Late Iron Age material was also found in the cave including pottery, a brooch of Fowler D1-type, dating to c.200-50 BC and a bronze Aucissa brooch dating to the 1st century AD (Branigan et al. 1983: 57). An Aucissa-style brooch was also found with twenty-six early Roman republican and Late Iron Corieltauvi coins in Reynard's Kitchen Cave in Dovedale (**315**). Whilst this hoard is the only known find of Late Iron Age coins found in a British cave, Republican coins and Aucissa-type brooches are recorded in cave assemblages in England. Immediately east of Reynard's Kitchen Cave a plate headed fibulae dating to the 1st century AD were found at Thor's Fissure Cavern (**50**) and at Thirst House Cave (**26**), which also contained a Neuheim derivative brooch thought to date to the first half of the 1st century AD (Branigan et al. 1991c: 85). Given the context of similar metalwork such as that recovered from the Mendip Hills (see Region 1) and in caves such as Poole's Cavern (**25**), finds dating to the late 1st century may represent continuity of Late Iron Age cave-use.

Despite this, there is an increase in new types of material culture, including new forms of brooches, coins and pottery beginning to be deposited in caves during the early Roman Iron Age (Figure 3.14). The large increase in the deposition of coinage, pottery and metalwork in caves may represent an intensification of cave-use during the Roman Iron Age as well as representing earlier antecedent practices. Whilst, many of caves contained only stray finds of diagnostic material, a number, including Poole's Cavern (**25**), Harborough Cave (**36**), and Thor's Cave (**51**), contain complex assemblages that may indicate votive cave-use, at least during the Roman Iron Age.

Comparable assemblages dating to the Early Roman Iron Age also likely demonstrate contemporary use of caves during the Roman Iron Age. For example, a sherd of Samian Form 32 recovered from Elder Bush Cave (**49**) joins with a sherd from Thor's Fissure Cave (**50**), which was dismissed by Branigan et al. (1991a: 26), as a stray find. Crucially however, another sherd of Black Burnished Bowl found in Thor's Fissure Cave also connected with one from Elder Bush Cave and suggests that, rather than being accidental, the fragmentation and deposition of pottery in nearby caves serves as evidence for the contemporary use of multiple caves during the Roman Iron Age (Branigan et al. 1991a: 26).

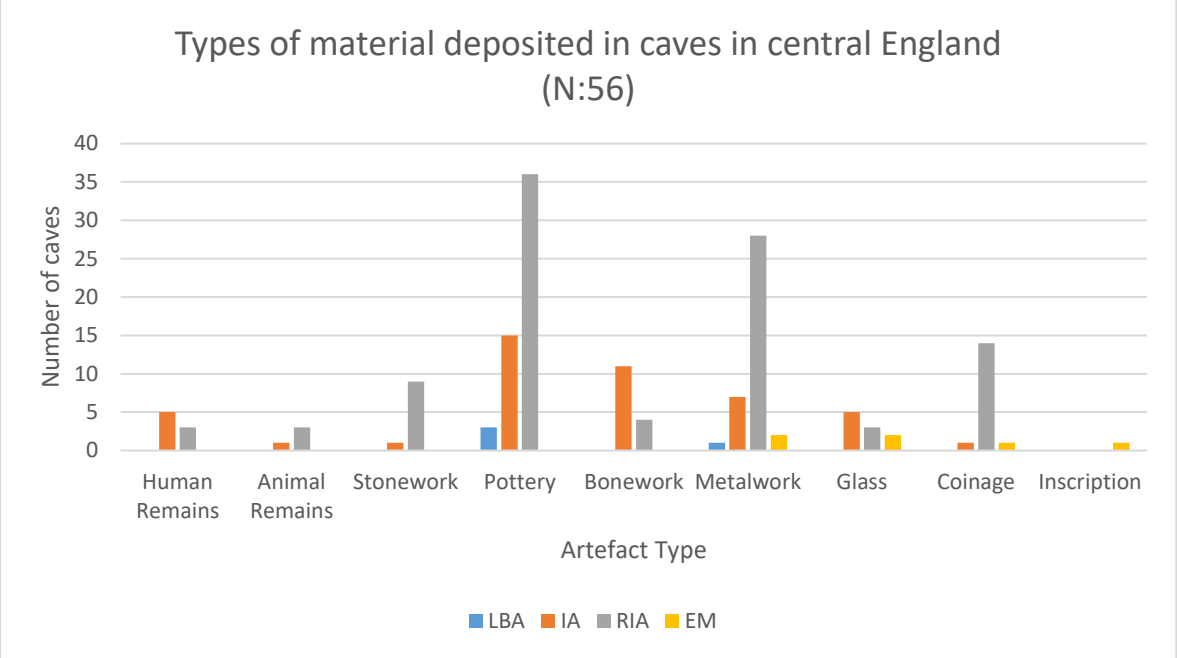


Figure 3-14: Types of material found in caves in central England (N: 56 caves). This demonstrates the overall increase of the range of material present during the Roman Iron Age but also indicates a persistence in the types of material deposited in caves.

Considering the different types of materials recorded in caves, highlights a similar dynamic assemblage to those found in southern England (Region 1) (Figure 3.14). Whilst, it is clear that a number of caves contained comparable types of artefacts, this does not necessary highlight a continuity in practices. The examples discussed above indicate that a certain number of caves saw extensive use, which may contrast to other caves in the region that contained only limited evidence of use. Furthermore, evidence of cave-use during the Early Medieval period also demonstrates the changing attitudes towards caves. Despite an apparent decline in activity during the latter part of the 1st millennium AD, sites such as Guy's Cave and St Bertram's Cave, demonstrate different activities taking place in central English caves, such as the hoarding of personal items and the use of caves as hermitages (see Chapter 6).

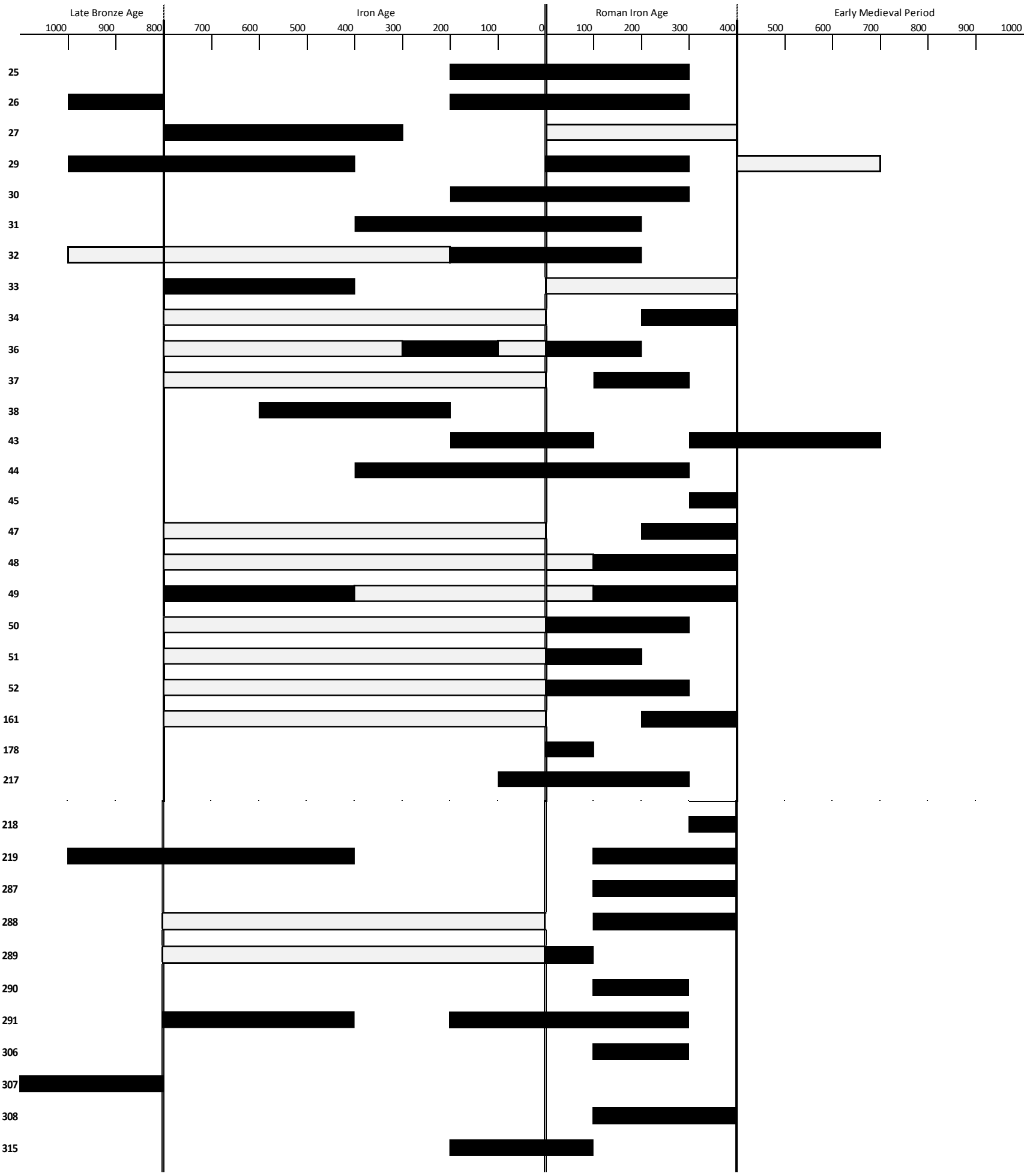


Figure 3-15: Chronology of coves with diagnostic material in central England (N: 35), demonstrating the dates of material recorded in each cove. Black represents the range of diagnostic material, whilst grey is material that cannot be given a more refined date.

3.6.6 Conclusion: cave-use in central England

Whilst cave-use in central England remained a persistent phenomenon throughout the 1st millennia, the significance and range of activities taking place in caves changed over time. This use was part of a broad spectrum of activity in caves, which included the deposition of human remains, craftworking and the deposition of personal objects such as coins and brooches. Significant deposits were found in a number of caves in the region, raising questions of intentional orchestrated acts of deposition, which contrasts to other caves in the region. Furthermore, the discussion above has highlighted a general increase of visible activity taking place in caves towards the end of the Iron Age and into the Early Roman Iron Age, which took place across multiple cavescapes. This was partly because of the introduction of material culture but may also have been related to contemporary patterns of deposition elsewhere (see Chapters 6 and 7). These nuances demonstrate the need for a robust approach towards cave-use, necessitating the contextualisation of cave-use within contemporary settlement frameworks.

3.7 Region 3: Northern England

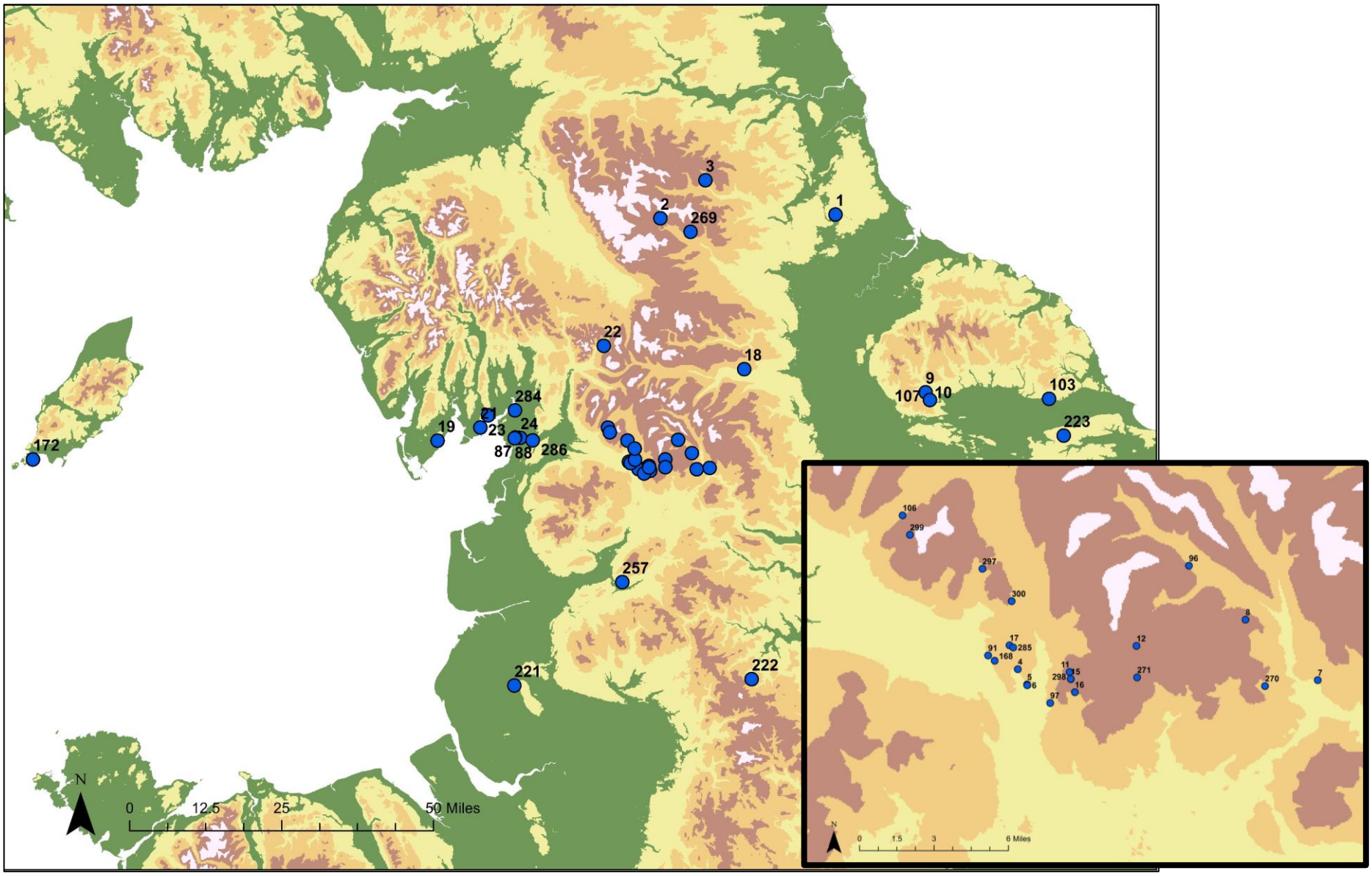


Figure 3-16: Distribution of caves across Region 3: Northern England (N: 45). Concentrations of activity was recorded in Southern Cravendale, North Yorkshire and Morecambe

Across the north of England, forty-five caves contained assemblages that can be dated to the 1st millennia (Figure 3.16). Activity was predominately located in caves in the Yorkshire Dales (N:22), as well as on Warton Crags near Morecambe (N:8). Elsewhere, there was also limited evidence of activity taking place in caves in the northern Pennines (N:4) and the North Yorkshire Moors (N:5). These distributions are somewhat unsurprising given that that the region is known for its high concentrations of caves that are focused along the soluble limestones of the northern Pennines.

3.7.1 Dating cave-use in northern England

Activity in eight caves was dated by radiocarbon dates (Table 3.3), which present evidence of cave-use occurring throughout the 1st millennia. Similar to data from southern (Region 1) and central (Region 2) England, human remains were radiocarbon dated in four caves in the region (North End Pot **10**; Rawthey Cave **22**; The Dog Hole Cave **284**; Dead Man's Cave **285)**.

3.7.2 Late Bronze Age and Iron Age cave-use in northern England

Similar to Central England (Region 2), identifying later prehistoric use in caves in northern England is limited by a restricted artefactual record. Nevertheless, Late Bronze Age activity was identified in five caves. Of these, the most notable, is the large corpus of metal and bone artefacts from Heathery Burn Cave, Stanhope (**3**). Multiple excavations of the site between 1859-1872, uncovered a diverse assemblage of material, which was thought to belong to a hoard containing a range of bronze tools, gold rings, brooches and bangles, ceramics and antler and bone tools (Hawkes et al. 1957; Greenwell 1894: 51).

Table 3-3: Radiocarbon dates available for caves in northern England

Cave	Sample	Sample Type	Sample Date
Fairy Hole, Grassington (**7**)	Reported Taylor 2013: 19	Bear fibula	c.500 AD
North End Pot, Ingleton (**10**)	HAR-8056	Juvenile skull	310-130 cal BC
Chapel Cave, Malham (**12**)	Reported Lord 2013: 246	Charcoal at cave mouth	'Iron Age'
Rawthey Cave, Cautley (**22**)	OxA-7449	Roe deer bone	1292-1410 cal AD
	OxA-7450	Human bone	62-241 cal AD
	OxA-7451	Roe deer bone	1155-1279 cal AD
	AA-22519	Human bone	1605-1286 cal BC
Perwick Cave, Isle of Man (**172**)		Carbonised wood	350 cal BC- 532 cal AD
Jack Scar Cave, Middleton-in-Teesdale (**269**)	OxA-121	Wooden shaft handle	1124-430 cal BC
The Dog Hole Cave, Haverbrack (**284**)	OxA-13593	Worked red deer antler	888-996 cal AD
	OxA-13594	Worked red deer antler	892-1013 cal AD
	OxA-14173	Human humerus	235-381 cal AD
	OxA-14174	Bos Taurus	715-890 cal AD
	OxA-15994	Human Bone	240-386 cal AD
	OxA-15995	Canis familiaris	56-217 cal AD
Dead Man's Cave, Giggleswick (**285**)	Reported Lord et al. 2013: 245	Human femur	511-376 cal BC

Comparable to finds from Heathery Burn Cave, a socketed spear and axe were found in a chamber found during work at Wegber Limestone Quarry, (**286**), whilst spear and wooden haft were also recovered from Jack Scar Cave, Middleton-in-Teesdale (**269**). Finds of metal objects in caves in northern England dating to the Late Bronze Age may therefore indicate the deliberate use of caves as places to store hoards, which may be compared to assemblages recorded in aboveground hoards (see Chapter 7). Elsewhere, finds of coarse sherds similar to those found at Heathery Burn Cave, were also recorded in a chamber at Bishop Middleham Quarry, County Durham (**1**) and Victoria Cave, Settle (**15**).

Cave-use dating to the Iron Age was identified in eighteen caves in northern England, characterised primarily by stray finds of local diagnostic artefacts beneath Roman Iron Age contexts. For example, conical limestone loom-weights and Giggleswick type toggles have been found in Kinsey Cave (**4**), Greater Kelcoe Cave (**6**), Victoria Cave (**15**), Attermire Cave (**16**), Dowkerbottom Cave (**8**) and Jubilee Cave (**11**); all of which are within a 10-mile radius of each other in Southern Cravendale, North Yorkshire.

Human remains found in six caves in northern England, also indicate that certain caves were used for the treatment of the dead. Mortuary use of caves appears to have been characterised by the deposition of fragmentary and modified human bone. This includes a piece of juvenile skull from the top of North End Pot, Ingleton (**10**) dated to 310-130 cal BC (HAR-8056) and a culturally smashed femur from Dead Man's Cave, Giggleswick (**285**) dated to 511-376 cal BC and Victoria Cave, Settle (**15**) (Lord et al. 2013: 245).

3.7.3 Roman Iron Age cave-use in northern England

Roman Iron Age activity was recorded in twenty-eight caves in northern England. Similar to activity elsewhere, artefacts dating to the 1st-2nd centuries AD were recorded in fourteen caves in northern England, included those in Southern Cravendale (see Chapter 6). Evidence of the deposition of comparable types of metalwork and bonework have been recorded in Attermire (**16**), Dowkerbottom (**8**) and Victoria Caves (**15**) and Sewell's Cave (**91**) (King 1970: 414) in the Yorkshire Dales, as well as in Dog Holes Cave, Warton Crags (**87**). Excavations of Victoria Cave (**15**), have uncovered a rich assemblage of Roman Iron Age material, the majority of which dated to the 2nd century AD (Dearne et al. 1998: 53). At least fifty-eight brooches, including Dragonesque-type fibulae dating to the late 1st century AD, as well as medical instruments, lead ingots, a seal box, glass beads and a ceramic corpus dating to the late 1st to 3rd centuries AD were found within the main cave chamber (Dearne et al. 1998: 77). Finds of

a Crossbow and Caterpillar-type brooch also demonstrate use during the late 3rd or early 4th century AD (ibid.). On the same scar face and towards the east of Victoria Cave, Attermire Cave (**16**), a complex karst cave, also contained an assemblage of Roman Iron Age metalwork and ceramics. Brooches found in the cave, including Dragonesque and trumpet style fibulae, identical to those found in Victoria cave, as well as fragments of a bronze and gold-gilded chariot (King 1970: 414). Similarly, in Dog Hole's Cave (**87**) on Warton Crags near Morecambe, excavation by J.W. Jackson, between 1910 and 1911, identified a number of Roman Iron Age artefacts, including an intaglio bronze brooch, a bronze balance, iron keys and bronze and iron slag (Jackson 1912).

Radiocarbon samples obtained from deposits in The Dog Hole Cave, Haverbrack (**284**) and Rawthey Cave, Cautley (**22**) also indicate the use of caves for the deposition of human remains during the Roman Iron Age. At the base of the entrance shaft to The Dog Hole Cave (**284**) a sample of human bone was dated to 240-386 cal AD (OxA-15994), whilst a bone belonging to a domestic dog, also found in the shaft, was dated to 56-217 cal AD (OxA-15995). Associated with these remains were a bronze penannular brooch, armlet and a number of iron studs, suggesting a period of deposition occurring sometime during the 3rd or 4th centuries AD (Bland 1994). Human bone from Rawthey Cave (**22**) was also dated between 62-241 cal AD (OxA-7450).

Rich and diverse assemblages, such as those discussed above, may indicate a number of interconnected uses for caves during the early part of 1st millennium AD. Whilst artefact finds may suggest that such caves were used for the deposition of personal items, finds of slag, bone weaving implements and tools, also suggest that craftworking likely took place within some caves (Chapter 6).

3.7.4 Early Medieval cave-use in northern England

At least six caves were used during the Early Medieval period in northern England. Stray finds recorded in caves, included a copper alloy fastener from Combe's Scar Cave, Giggleswick (**300**) and two combs dating to the late 5th or 6th centuries AD from Dowkerbottom Hole, Litttondale (**8**) and Victoria Cave, Settle (**15**). A hoard of coins belonging to Eanred (808-840 AD), Ethelred and Archbishop Vigmund (851 AD) were also found in Merlewood Cave, Grange (**23**). A number of Anglo-Saxon stycas of 7th or 8th century date were also reported from Attermire Cave (**16**), which may have belonged to a coin hoard (Branigan et al. 1991a: 72-74).

Radiocarbon samples taken from a dog (*Canis Familiaris*), a cow (*Bos Tauros)* and two-worked red deer antler from Dog Holes Cave, Haverbrack (**284**) also indicate activity taking place between the 9th and 10th centuries AD. Other finds from the cave included a Whitby jet bead and three glass beads that were considered to date to the Early Medieval period (Branigan et al. 1991a: 79-80).

3.7.5 Chronology and cave-use in northern England

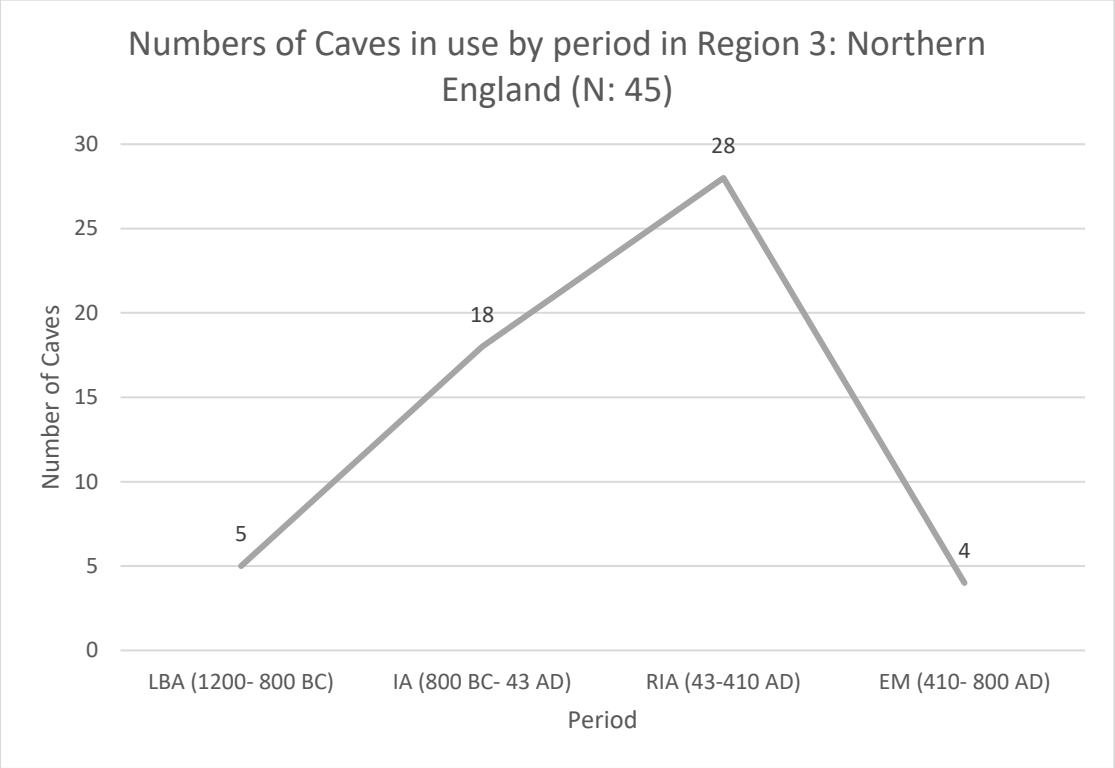


Figure 3-17: Numbers of caves with activity that could be dated to the 1st millennia (N: 45 of 275 caves).

Overall, the chronological distribution of cave-use in northern England can be compared to evidence recorded in the Mendip Hills and Peak District (Figure 3.17). Activity appears to increase significantly during the Iron Age and Roman Iron Age before declining during the Early Medieval period. Whilst finds of early Roman material in caves in northern England, may hint at earlier Iron Age use, the limited artefactual record for Iron Age communities inhabiting the Pennines, has meant that only eight of the eighteen caves with later prehistoric material, could be given a more refined date (Figure 3.18). It is therefore unclear if activity increased during the Early Roman Iron Age, although the period is defined by an increase in the range of artefacts being deposited in caves.

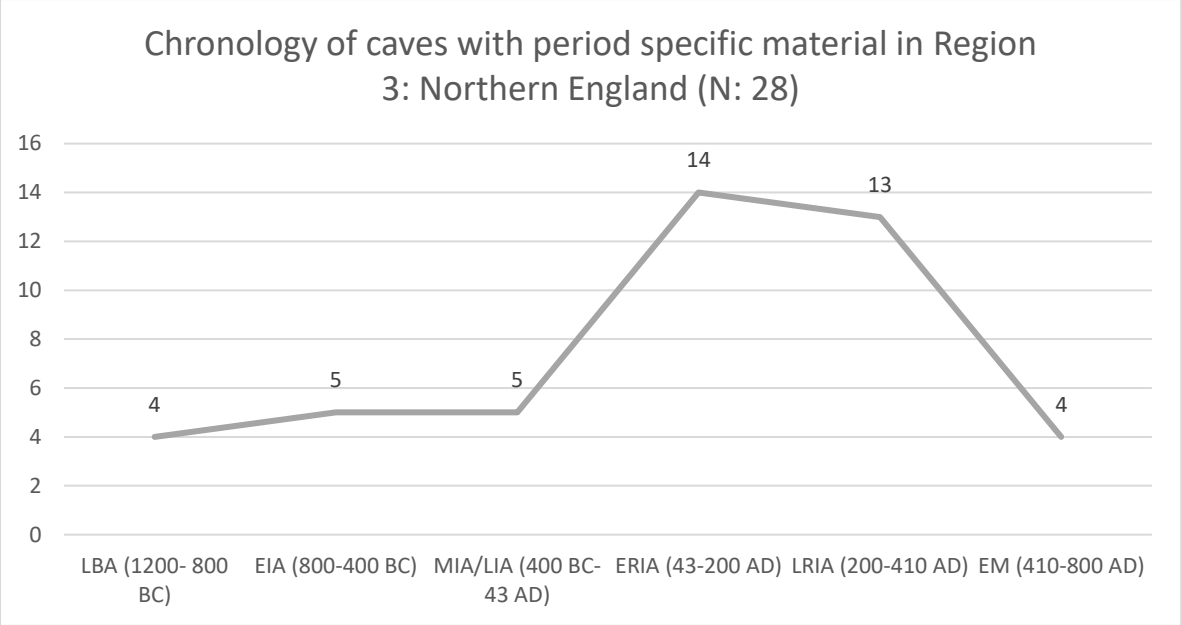


Figure 3-18: Cave-use which could be dated to a more specific period (N: 28 of 45 caves).

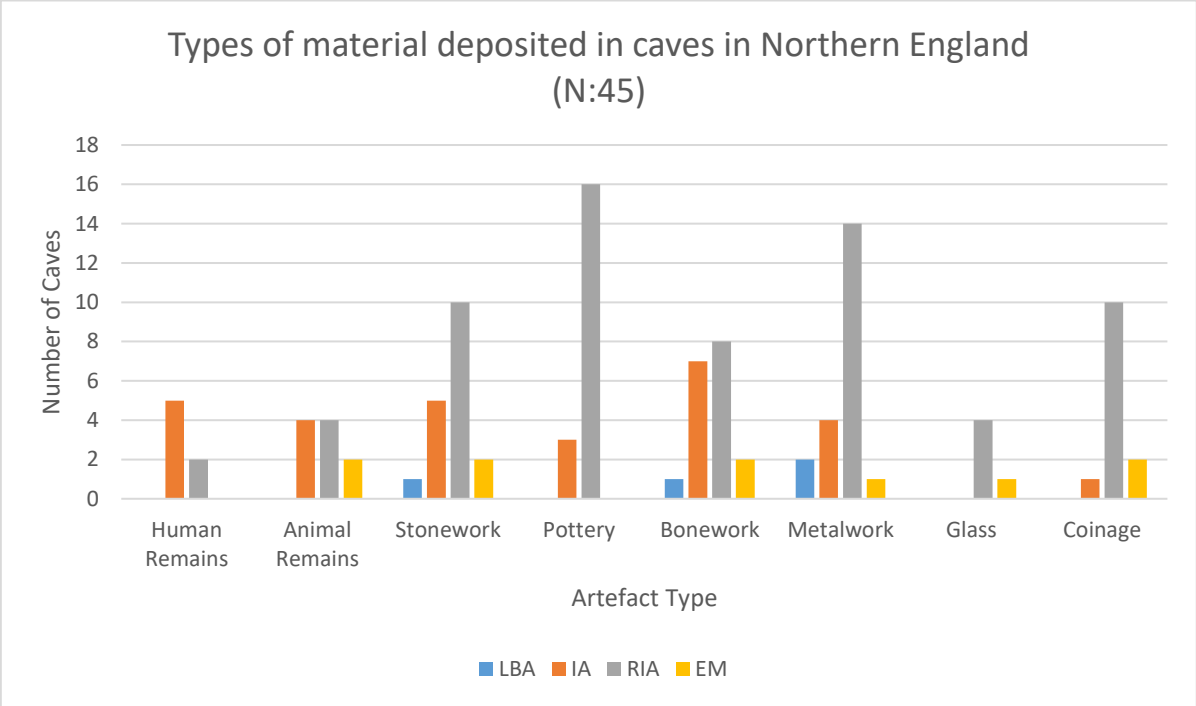


Figure 3-19: Different types of material recorded in caves in northern England (N: 45). This shows the varied types of assemblages recorded in caves deposited during the study period.

Considering the types of materials reported in caves also highlights a number of comparisons to other regions in England (Figure 3.19). This includes the deposition of human remains during the Iron Age and Roman Iron Age, whilst bone objects and unprocessed bone and antler indicate the use of caves for craftworking. Similarly, metal artefacts, including slag, tools and incomplete artefacts suggest that caves were likely used by craft workers. Multi-period

assemblages found in sites such as, Victoria (**15**) and Attermire (**16**) Caves in North Yorkshire and The Dog Holes Cave, Haverbrack (**285**) indicate possible periodic use of caves, characterised by significant deposition of personal items and human remains. Furthermore, finds of comparable assemblages in these caves could suggest contemporary use of multiple caves (see Chapter 5).

Figure 3-20: Chronology of caves with diagnostic material in northern England. Black represents the diagnostic range of material and grey represents material that could only be broadly d

3.7.6 Conclusion: cave-use in northern England

Cave-use in northern England was predominately focused on the limestone of the Yorkshire Dales, whilst concentrations of activity were also found in Morecambe Bay and the North York Moors. From this, it is clear that whilst cave use remained a persistent phenomenon, the quantity and types of material recorded in caves intensified during the 1st and 2nd centuries AD. These caves also contained limited evidence of antecedent Iron Age activity that may indicate that Early Roman Iron Age use was related to previous approaches to caves during the late 1st millennium BC. Furthermore, the similar nature of assemblages recorded across caves in southern Cravendale, also suggests that contemporary cave-use may have occurred in multiple caves during the Late Iron Age and Roman Iron Age. In the Early Medieval period, cave-use may have been influenced by broader changes demonstrated elsewhere in England. Despite this, at least two caves in the region were used to store hoards of coins and activity in The Dog Holes Cave (**285**) may suggest intentional deposition of artefacts in caves during the 7th and 8th centuries AD.

3.8 Region 4: Southern Scotland & Northumberland

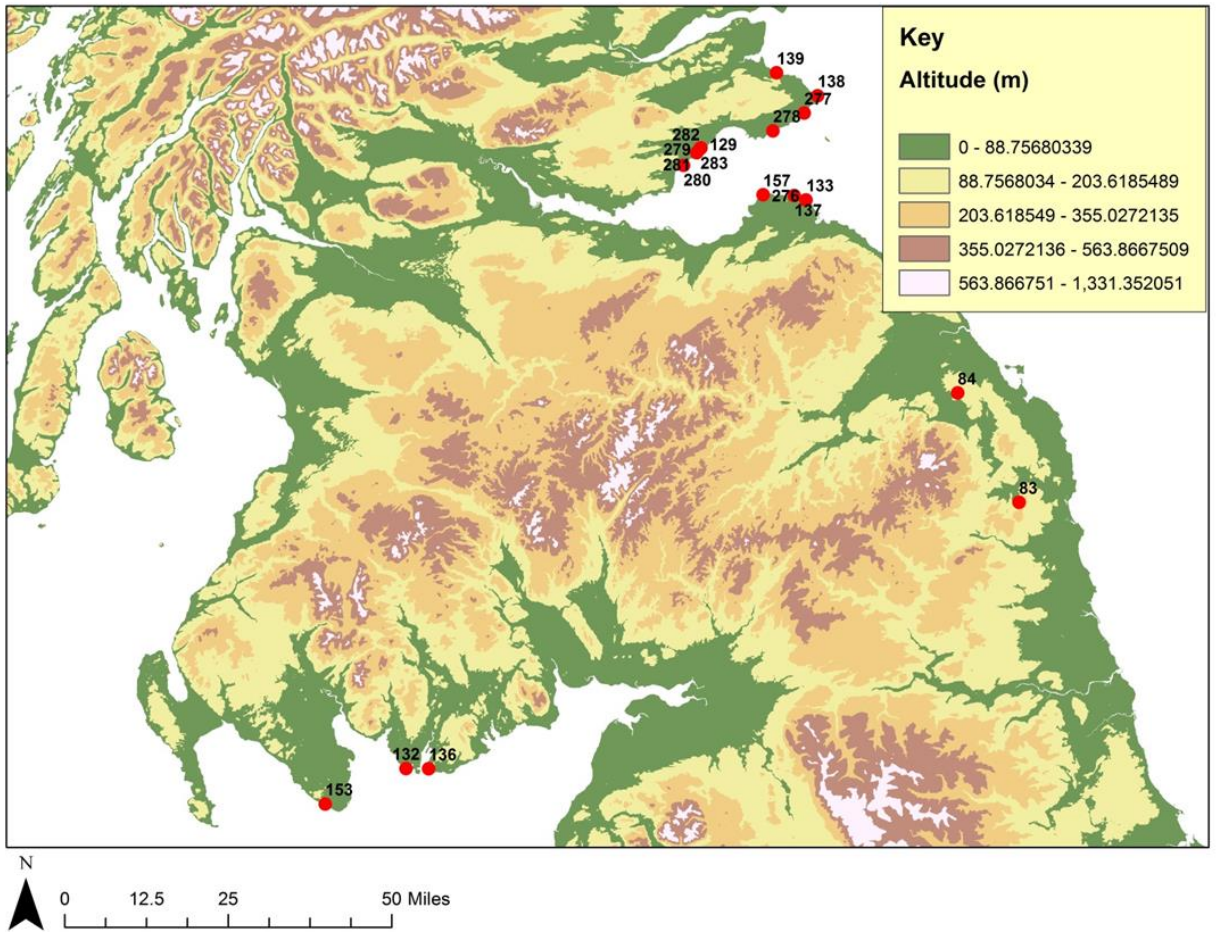


Figure 3-21: Distribution of caves with evidence of use during the 1st millennia BC and AD in southern Scotland and Northumberland (N:19)

Across southern Scotland and Northumberland there are nineteen caves that contained activity dating to the 1st millennia (Figure 3.21). Cave-use was predominately focused around the Firth of Forth in southern Scotland, whilst three caves were also in use along the southern coastline of Dumfries and Galloway. Elsewhere, two caves were included in the database from Northumberland, which can only be tentatively dated to the study period. Rock-cut animal figures found in Goatscrag Rockshelter (**84**) have been considered to tentatively date to the 1st millennium BC (Burgess 1972; Van Hoek et al. 1988), whilst activity in Corby Crags (**85**) another rockshelter close to Goatscrag, was located near Iron Age enclosures and therefore included in the database (Beckensall 1976; Smith 1990).

3.8.1 Dating cave-use in southern Scotland

Radiocarbon samples were obtained from three caves on the Wemys coastline on the Firth of Forth (Table 3.4). Two radiocarbon dates of 752-409 cal BC from a roundwood twig (Well Cave **283**) and 410-202 cal BC, from animal bone (Jonathan's Cave **129**) appear to indicate Iron Age activity in the caves, whilst a radiocarbon date from a barley grain may indicate Roman Iron Age use in Sliding Cave (**130**).

Table 3-4: 4 Radiocarbon dates available for caves in southern Scotland

Cave	**Sample**	**Sample Type**	**Sample Date**
Jonathan's Cave, Wemys (129)	GU-2138	Animal bone, midden layer	410-202 cal BC
	GU-1369	Charcoal, sandy layer	905-1241 cal AD
	GU-2038	Human bone, burial at entrance	892-1220 cal AD
Sliding Cave, Wemys (130	NZA-20755	Barley grain, floor deposit	244-388 cal AD
Well Cave, Wemys (283)	NZA-25540	Roundwood twig, midden	752-409 cal BC

3.8.2 Late Bronze Age and Iron Age cave-use in southern Scotland

Limited evidence of cave use during the 1st millennium BC is recorded in six caves in southern Scotland. This includes evidence of radiocarbon dates from Jonathan's Cave (**129**) and Well Cave (**283**), both of which were located on sandstone cliffs near Wemys in Fife. Iron Age activity in Jonathan's Cave may also be confirmed by a jet spindlewhorl found in a midden layer at the entrance (Gibson et al. 2007: 92). Elsewhere, finds of human remains from St Baldred's Cave, East Lothian (**133**) have been thought to date to the Iron Age. Excavations by Sligo in 1831 uncovered a large number of disarticulated human remains that were said to have been located near a raised stone with a number of red earthenware vessels (Sligo 1857: 358) . Finds from the cave were considered contemporary to hut circles found directly outside the cave and thus dated to the Iron Age (Sligo 1857: 359). Because of the lack of diagnostic material, however, activity in St Baldred's Cave cannot be firmly dated. At Hanging Rocks (**157**), a rockshelter also located in East Lothian, an iron knife, spearhead and rotary quern were also considered to date to the Iron Age (Kilbride-Jones 1938).

3.8.3 Roman Iron Age cave-use in southern Scotland

Roman Iron Age artefacts were recorded in eight caves in southern Scotland that can be compared to similar assemblages found in England. Excavation of Borness Cave, Dumfries and Galloway (**132**), recovered a Dragonesque brooch, similar to those found in caves in North Yorkshire dating to the late 1st and early 2nd centuries AD, a bronze mount, slag and bonework, including a spoon-brooch also comparable to those found in caves in the Yorkshire Dales (Corrie et al. 1875). A glass armlet similar to that found at Borness Cave (**132**), made of re-used Roman glass, was also found at Hanging Rocks 1 (**157**), along with Samian Ware dating to the 2nd century AD, similar to that found at Torr's Cave, Dumfries and Galloway (**136**). A further four caves also contained Roman pottery (The Yellow Man **137**; Constantine's Cave **138**; Kinkell Cave **139;** Hanging Rocks 2 **276**). Whilst it is unclear whether activity in these caves was contemporaneous with cave-use further south, the deposition of similar types of Roman Iron Age material culture in caves will be explored in Chapters 6 and 7.

3.8.4 Early Medieval cave-use in southern Scotland

Early Medieval activity in cave was identified in thirteen caves in the region. Predominate amongst these cave assemblages was Pictish and early Christian artwork, dating between c.500-900 AD found in the Wemyss Caves (Jonathan's Cave **129**; Sliding Cave **130**; Court Cave **279**; Michael's Cave **281**; Doo Cave **282**; Well Cave **283**) and further along the coast of East Fife (Constantine's Cave **138**; Kinkell Cave **139**; Chapel Cave **277**; St Monan's Cell **278**). The corpus of artwork, indicates a symbolic association with caves during the late 1st millennium AD, as well as the use of certain caves as hermitages (see Chapter 5). Two burials outside Jonathan's Cave (**129**) may also date to this period, which provided a radiocarbon range of 892-1220 cal AD. A Norse pin was also recovered from the cave, along with Ogham inscription, suggesting further cave activity during the late 1st millennium AD (MacKie 1986).

3.8.5 Chronology and cave-use in southern Scotland

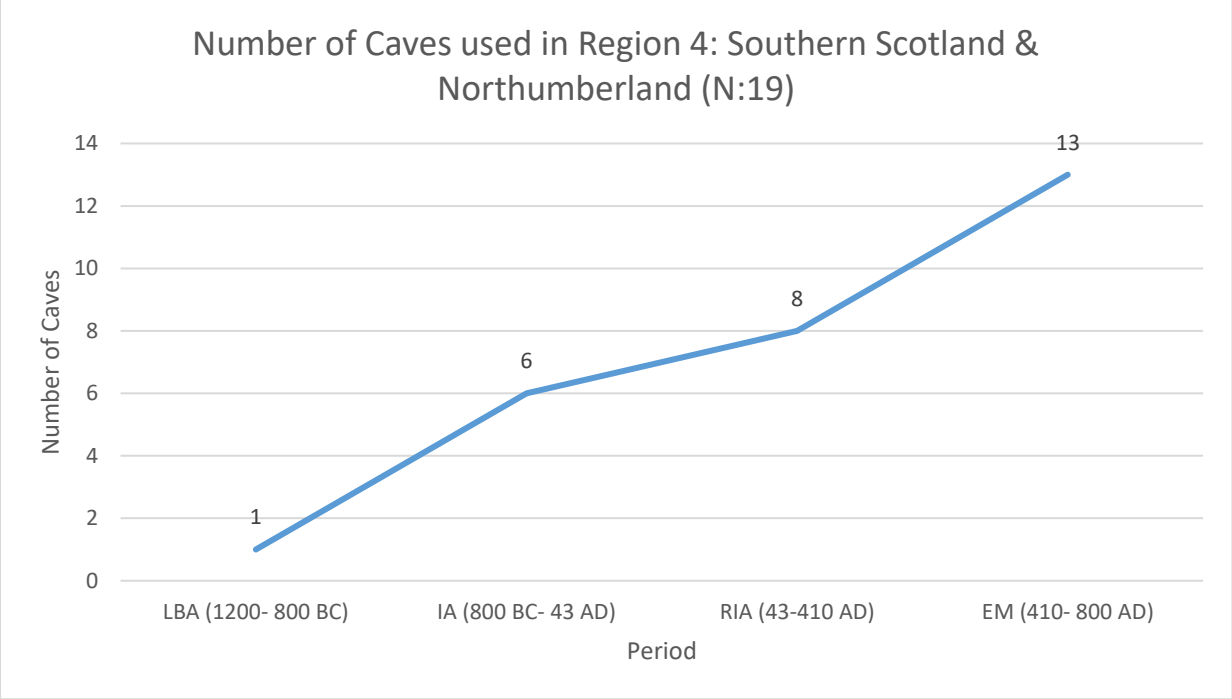


Figure 3-22: Number of caves with activity that could be dated to the 1st millennia in southern Scotland (N: 19)

Unlike the apparent patterns of cave-use in England (Regions 1, 2 and 3), cave-use in southern Scotland appears to increase throughout the 1st millennium AD and was focused on the coastline around Fife (Figure 3.22). However, there was limited evidence of earlier activity in these caves during the Iron Age and Roman Iron Age. Finds of Roman Iron Age material, including reworked glass and rare finds of spoon-brooches and Dragonesque fibulae from Borness Cave (**131**) may have been linked to the deposition of Roman artefacts recorded in

northern England. Sites such as Constantine's Cave, Fife (**139**) also suggest that caves were used for metal smelting and craftworking during the Roman Iron Age (Figure 3.23).

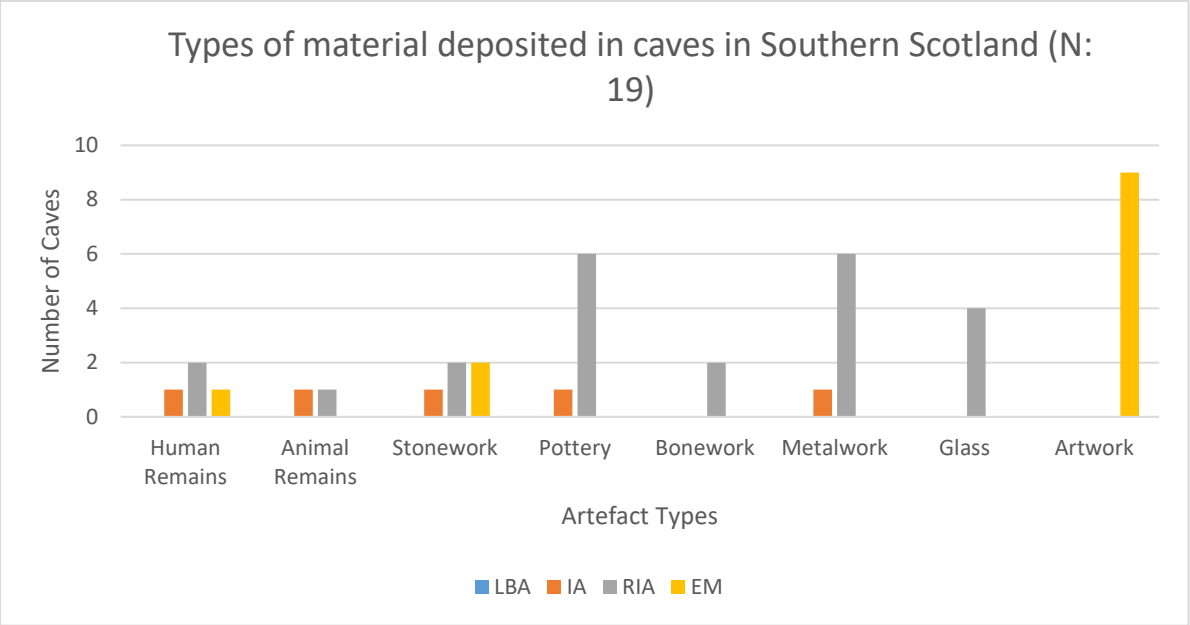


Figure 3-23: Types of artefacts recorded in caves in southern Scotland. Given the restricted artefactual framework, there is limited evidence of activity in caves during the 1st millennium BC. Early Medieval use is characterised by Pictish and early Christian association with cavescapes.

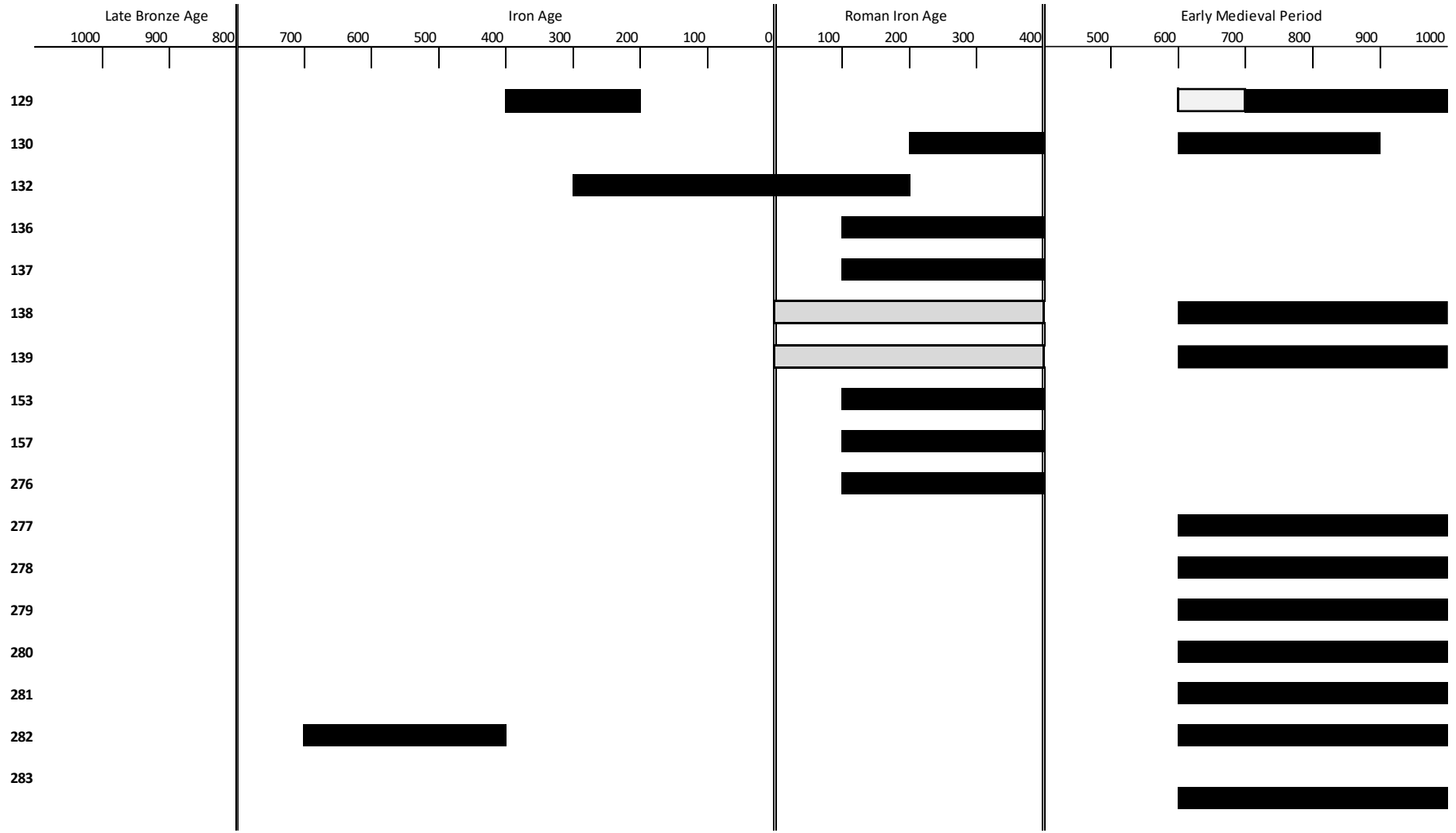


Figure 3-24: Chronology of caves with diagnostic material across Northumberland and western Scotland. Black represents the dating range of diagnostic material in caves whilst grey represents material that can only be broadly dated

3.8.6 Conclusion: cave-use in southern Scotland

Cave-use in southern Scotland was defined by the Early Medieval use of caves, characterised by early Christian and Pictish artwork. Concentrations of Pictish and early Christian artwork in caves along the Firth of Forth, indicate regional activity that can be paralleled to activities recorded in caves in western (region 5) and northern (region 6) Scotland. As such, cave-use may have become bound to novel processes of monumentality and monasticism that occurred throughout Scotland (see Chapter 6). Finds of Roman Iron Age material in caves in the region also highlight interaction with caves during the early 1st millennium AD, including the deposition of metalwork and bonework comparable to that recorded in caves in North Yorkshire. Whilst this may suggest contemporary activities in caves, it may also highlight the deposition of Roman artefacts in non-Roman contexts. This raises questions on the role of caves in processes of Romanisation, as well as their use by craft workers (see Chapter 6).

3.9 Region 5: Western Scotland

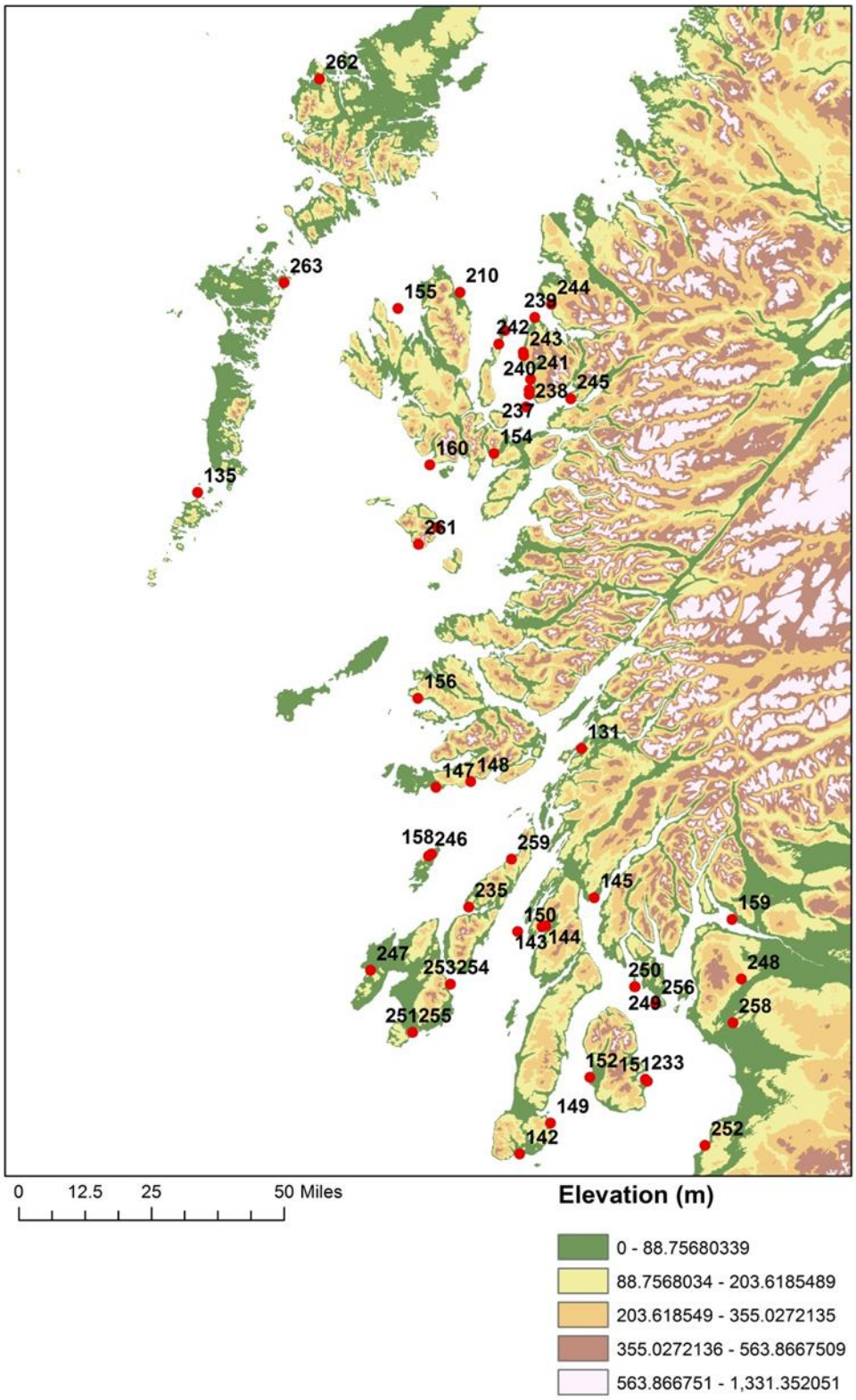


Figure 3-25: The distribution of caves with dated activity to the 1st millennia BC and AD across western Scotland (N: 52)

Along the western coast of Scotland, fifty-two caves contained material dating to the 1st millennia (Figure 3.25). The majority of these were located on the coastline of the islands and mainland of Argyll and Bute. Out of these, five caves presented only tentative evidence of use during this period (Kilchoman **247**; Meikle Cloak Cave **248**; Duangoil Cave **256**; Uamh Breidairton **259**; Bagh Na H-Uamha **260**). These include reported finds of quern stones by school children in a rockshelter behind Meikle Cloak waterfall (Newall 1961) and a find of sheet bronze from a test pit in Uamh Breidairton (Brabin 1984).

3.9.1 Dating cave-use in western Scotland

Radiocarbon samples were taken from eighteen caves in the region, which provide a vital narrative of cave-use, given issues in continuity of material culture in the region during the 1st millennia (Table 3.5). Many of the radiocarbon dates were taken during test pit surveys of caves as part of the Scotland's First Settlers Project (Ashmore et al. 2009: 7-8) and the Islay Caves Project (Hardy 2002, 2003). Many of these samples were taken from caves located on the eastern coastline along the Sound of Skye and may indicate contemporary use of multiple caves (see Chapter 5).

Table 3-5: Radiocarbon dates available for caves in western Scotland (N: 34 samples from 18 caves)

Cave	Sample	Sample Type	Sample Date
MacArthur Cave, Oban (**131**)	OxA-4485	Human humerus	380-50 cal BC
	OxA-4486	Human distal femur	800-200 cal BC
	OxA-4487	Human left talus	770-400 cal BC
	OxA-4488	Human right patella	520-170 cal BC
Ellary Boulder Cave, Knapdale (**144**)	GU-2660	Stone lined hearth charcoal	360 cal BC- 20 cal AD
Uamh An Ard Achadh, Skye (**154**)	SUERC-2435	Animal bone	390-160 cal BC
Uamh An Eich Bhric, Skye (**155**)	SUERC-14657 SUERC-23650	Sequence of 10 dates from two trenches.	c.50-250 AD
An Corran Rockshelter, Skye (**210**)	AA-29312	Roe deer bone point	336-78 cal BC
Crowlin 1, Applecross (**234**)	OxA-9250	Birch charcoal	120-340 cal AD
	OxA-9251	Birch charcoal	650-810 cal AD
Toscaig 2, Applecross (**237**)	AA-50667	Ungulate bone	350 cal BC- 10 cal AD
	AA-50668	Deer bone	170 cal BC- 30 cal AD

	AA-50669	Hazelnut shell	390-100 cal BC
Toscaig 9, Applecross (**238**)	AA-50677	Birch charcoal	630-990 cal AD
Creag na Uamha, Applecross (**239**)	AA-50681	Ungulate rib	370-50 cal BC
Allt na Criche, Applecross (240)	AA-50685	Hazelnut shell	180 cal BC-30 cal AD
	AA-50687	Hazelnut shell	350 cal BC-10 cal AD
Camusteel Bay 2, Applecross (**241**)	AA-50688	Hazelnut shell	690-960 cal AD
	AA-50689	Pig tibia	780-1000 cal AD
	AA-50690	Charcoal	800-200 cal BC
	AA-50691	Hazel charcoal	680-890 cal AD
Loch A Sguirr, Portree (**242**)	OxA-9254	Birch charcoal	170 cal BC- 50 cal AD
Inchmarnok, Site 9, North Bute (**249**)	AA-39966	Hazelnut shell	346-43 cal BC
Ichmarnok Site 16, North Bute (**250**)	AA-39967	Hazelnut shell	BP 358-57 cal BC
	AA-39968	Hearth charcoal	680-875 cal AD
Kilnaughton Bay 2, Kildalton (**251**)	SUERC-3384	Limpet shell	680-970 cal AD
Culzean Cove Main System, Kirkoswald (**252**)	WK-14017	Human cervical vertebra	777-985 cal AD
MacArthur's Head ICP 109, Kildalton (**253**)	SUERC-3381	Limpet shell	676-880 cal AD
	SUERC-3382	Limpet shell	744-971 cal AD
MacArthur's Head ICP 110, Kildalton (254)	SUERC-3383	Limpet shell	1271-1397 cal AD
North Carraig Fhadda ICP 7, Kildalton (255)	SUERC-3385	Limpet shell	346-560 cal AD

3.9.2 Late Bronze Age and Iron Age cave-use in western Scotland

Activity dating to the 1st millennium BC was recorded in fifteen caves in the region. At Uamh An Ard Achadh (High Pastures Cave) (**154**) a large assemblage, dating to the Late Bronze Age and Iron Age, was found associated with a stone stairway leading into an active resurgence chamber. At the base of the stairway a large faunal assemblage, which included the articulated bones belonging to cow and disarticulated sheep/goat, red deer and pig, as well as neonatal and prenatal human remains, bone weaving instruments, pottery and a broken rotary quern were discovered with at least three hearths (Birch et al. 2008). During the Late Iron Age, the stairwell

was sealed by a burial of a middle-aged woman and neonatal human remains before being infilled (Birch & Wildgoose 2005). Above the stone stairway, and contemporary to activity taking place within the cave, excavation uncovered a rectangular enclosure, which produced significant quantities of iron slag, worked bone, iron knives, tools and worked pieces of glass (Birch et al. 2009). The diverse assemblage, along with finds of neonatal animal remains, have led the excavators to argue that the site served as a focus for ritual deposition and craftworking during the Iron Age (Birch et al. 2005).

Similar to Uamh An Ard Achadh, excavation of MacArthur's Cave, Oban (**134**) also recovered the disarticulated remains of four individuals dating to the 4th or 3rd centuries BC (Saville et al. 1994: 719). Furthermore, quantities of slag have been found in contexts dating to the Iron Age n Rubh'An Dunain on Skye, found with Iron Age pottery and Ellary (**143**) and St Columba's Caves, Kintyre (**144**).

Despite evidence of significant periods of deposition occurring in caves during the Iron Age, contextualising such evidence is restricted by long-term artefact typologies. A number of caves contain deposits of sherds of coarse pottery, similar to that recovered from complex round houses such as Dun Mor Vaul and Dunagoil (Uamh an Duin **135**; St Columba's Cave **143**; Ellary Boulder Cave **144**; The Tinkler's Cave **145**; Allt Dubhaig **156**; Uamh Na Mine **158**; Ardmore Point **159**; Rubh' an Dunain **160**; Uamh Righ **235**; Church Cave **236**; Loch A Sguirr **242**; Sand Rockshelter **243**; Allt na Uamha **244**; Meall na Hairdie **245**; Uamh Ur **246**; Papadil **261**; Loch Gille-Ghoid **263**). Recent studies have argued that these fabrics continued to be used into the Roman Iron Age (Topping 1987; Lane 1990; MacSween 2003). Therefore, only broad dates could be applied to activity in caves that contained only fragments of coarse pottery.

3.9.3 Roman Iron Age cave-use in western Scotland

Similar to activity in southern Scotland, nine caves were potentially used during the early 1st millennium AD. This includes finds of Roman material, including a sherd of Samian Ware (DR18/31) dating to the 2nd century AD (Tolan-Smith 2001: 45), found at St Columba's Cave, Mid-Argyll (**143**) and Imitation Samian Ware, thought to date to the 4th century AD, and a Fowler A2 penannular brooch (Ritchie 1968:105) from at Keil Cave, Kintyre (**142**). Further finds recovered during excavation of Keil Cave, included colour-coated wares, composite and weaving combs (ibid.). Interestingly, a triangular weaving tablet, similar to one found in Late Iron Age contexts in Wookey Hole in Somerset was also found in the cave, as were significant

quantities of iron slag (Ritchie 1968: 105). The date of the weaving tablet is unclear, given that material found in the cave predominately dated to the 3rd and 4th centuries AD.

Other evidence of cave-use dating to the Roman Iron Age was also identified in the excavation of a souterrain at Ardeer, southern Argyll (**275**). The souterrain, made of a single corbelled passage, led into a natural cave chamber. Finds of re-used Roman glass, charcoal and slag were found at the entrance to the passage, which was likely, based on comparable chronologies of souterrain construction elsewhere, built during the 2nd or 3rd centuries AD (Hunter 1973). Two further examples of souterrains incorporating caves as terminal chambers in western Scotland are at Cnoc An Aoil on Lewis (**262**) and Uamh nan Ramh on Skye (**272**) which suggests that activity at Ardeer was not an isolated phenomenon but rather, may indicate a relationship between the use of some caves and souterrain construction (see Chapter 7).

3.9.4 Early Medieval cave-use in western Scotland

Twenty-one caves contained evidence of Early Medieval activity in western Scotland. As in the south of Scotland, activity was predominately identified through Pictish and Early Christian artwork (St Columba's Cave **143**; Scoor Cave **147**; Nun's Cave **148**; St Ciaran's Cave **149**; St Cormac's Cave **150**; St Molaise's Cave **151**; King's Cave **152**; Smuggler's Cave **233**; Uamh Righ **235**).

The drawing of crosses on cave walls was part of a series of events in caves. Different styles of inscribed crosses and art on the walls of Scoor's Cave (**147**) suggests that caves were visited periodically between the 7th and 9th centuries AD (Fisher 2001:12). Such use also demonstrates a close relationship between cave-use and regional monasticism (see Chapter 5). This relationship is further highlighted by a shale box, constructed in a monastic workshop on the Isle of Bute during the 7th or 8th centuries AD, found at St Columba's Cave, Mid-Argyll (**133**).

Sampling of middens in ten caves also provided material that dated to the Early Medieval period, which may indicate the periodic use of caves located on Atlantic seaways (see Chapter 5). A human cervical vertebra found in Culzean Cove, Kirkoswald (**252**), dating to 777-985 cal AD (WK-14017) also presents an isolated example of the deposition of human remains towards the end of the 1st millennium AD.

3.9.5 Chronology and cave-use in western Scotland

Understanding the history of cave-use in western Scotland is limited by the long term typologies of material culture during the 1st millennia. Considering the overall evidence of cave-use in the region does however, demonstrate a number of similarities to cave-use

occurring elsewhere in Scotland (Figure 3.26). Overall, activity in caves appears to have been a persistent phenomenon across western Scotland but does increase significantly during the Early Medieval period. This was potentially part of an association of caves with the establishment of monasteries, which began in the 7th century AD (see Chapter 5).

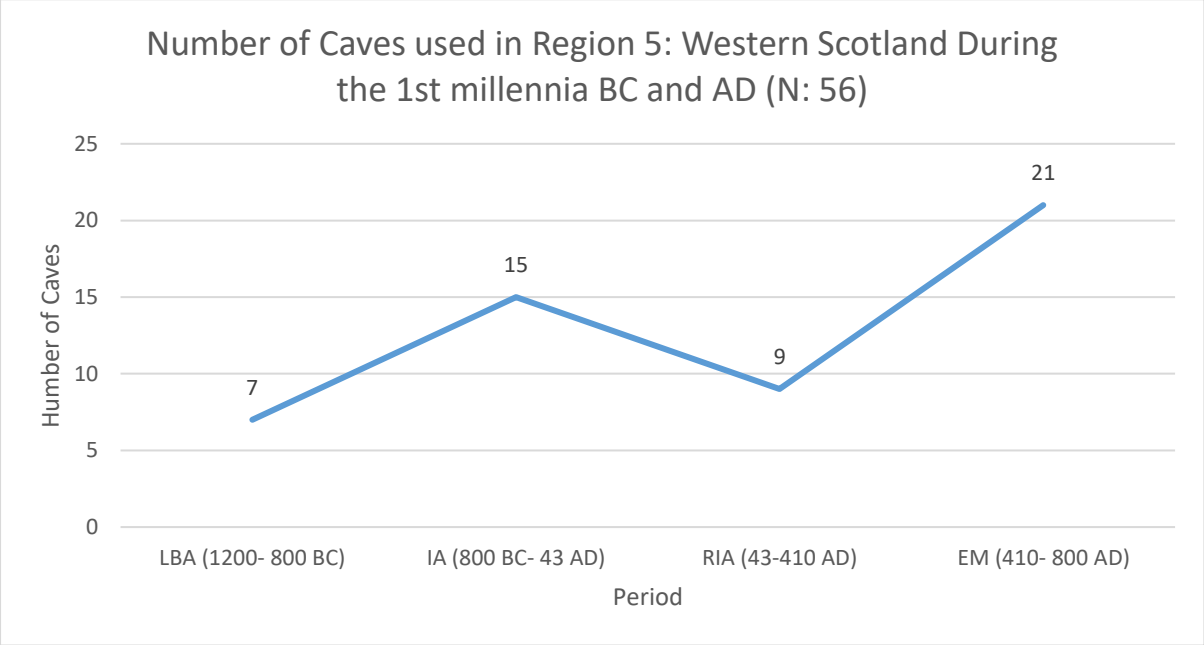


Figure 3-26: Number of caves with activity that could be dated to the 1st millennia (N: 56 of 275 caves).

Dating activity in the early 1st millennium AD was predominately reliant on finds of imported Roman objects, which can be compared to similar patterns of deposition elsewhere in northern (Region 6) and southern Scotland (Region 4). It is therefore unclear whether the apparent increase in cave-use during the Early Medieval period represents new attitudes towards caves or is a product of the archaeological record.

Considering the overall types of material deposited in caves in western Scotland also indicates different uses of caves throughout the 1st millennia (Figure 3.27). This includes the use of caves by mobile communities demonstrated by finds of midden debris and processed animal bone in caves. Evidence of the possible votive deposition of human remains, as well as rich artefactual assemblages at sites such as Uamh an Ard Achadh (**154)** and Uamh An Eich Bhric (**155**), also likely indicate ritual deposition taking place in caves during the Iron Age and Roman Iron Age (see Chapter 7).

Whilst there appears to be much variation in the scale and type of evidence for cave-use in western Scotland, it is also clear that many sites continued to be visited periodically overtime. Evidence obtained from midden deposits across the Sound of Skye and Islay, suggest

contemporary use of caves over multiple periods. Sites such as Crowlin (**231**) and St Columba's (**144**) and Ellary Boulder Caves (**145**) in Mid-Argyll, suggest that midden build-up occurred throughout the Late Iron Age, Roman Iron Age and Early Medieval periods, which raises questions on the relationship between caves and seaways.

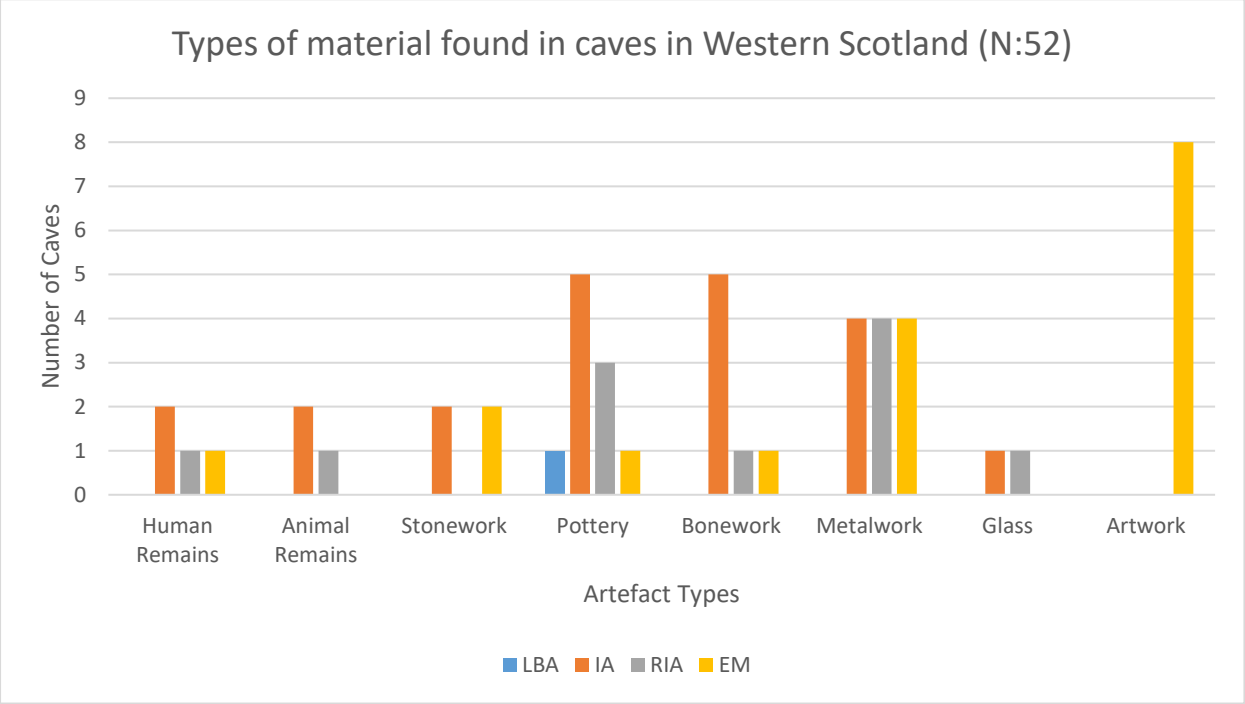


Figure 3-27: Types of artefacts recorded in caves in western Scotland during the 1st millennia. This suggests that an array of different material was deposited in caves throughout the period of the study.

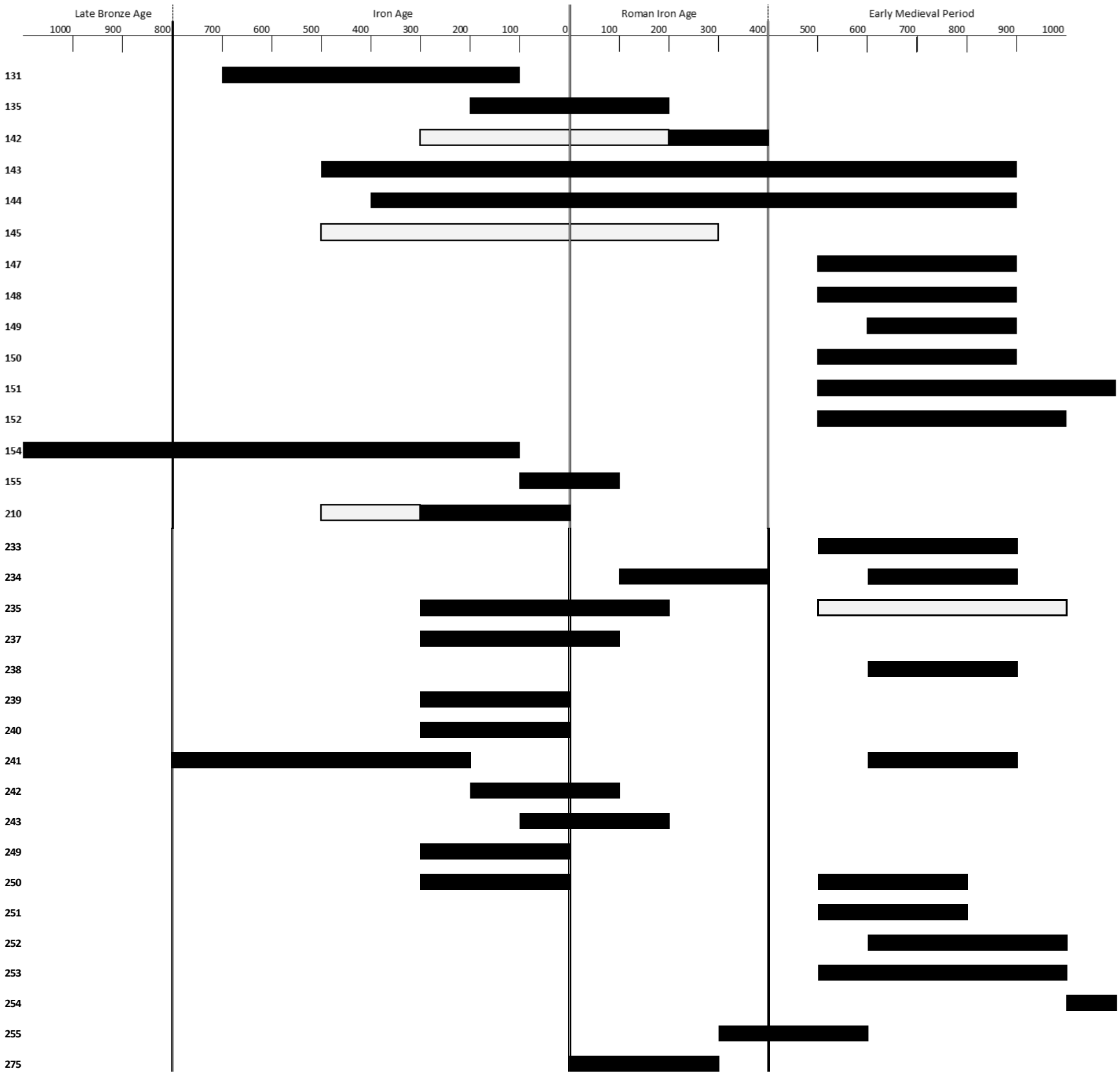


Figure 3-28: Chronology of coves with diagnostic material in western Scotland. Black represents the dating range of diagnostic material in coves whilst grey represents material that could only be broadly dated

3.9.6 Conclusion: cave-use in western Scotland

Cave-use across western Scotland appears to be a persistent phenomenon throughout the 1st millennia, focused on island and mainland coastlines. Beginning in the Late Bronze Age, a number of caves appear to have served as a focus for ritual deposition, feasting and craftworking, suggesting that caves played a fundamental role in local cosmologies. During the Roman Iron Age, the use of natural cave chambers in souterrain construction and the deposition of Roman artefacts in non-Roman contexts, may further highlight the symbolic significance of caves and their relationships to other types of manmade subterranean structures. Later, in the Early Medieval period some caves appear to have been used by monastic communities and may therefore have become part of Celtic Christian cosmologies that built upon pre-existing perceptions of cave environments (see Chapter 7). Nevertheless, evidence of midden build-up throughout the 1st millennia, also suggests that caves on the coast, continued to be visited periodically, likely by those who moved along seaways. Such use demonstrates the various complex approaches towards caves in the region, which can be compared to evidence occurring in northern (Region 6) and southern (Region 5) Scotland.

3.10 Region 6: Northern Scotland

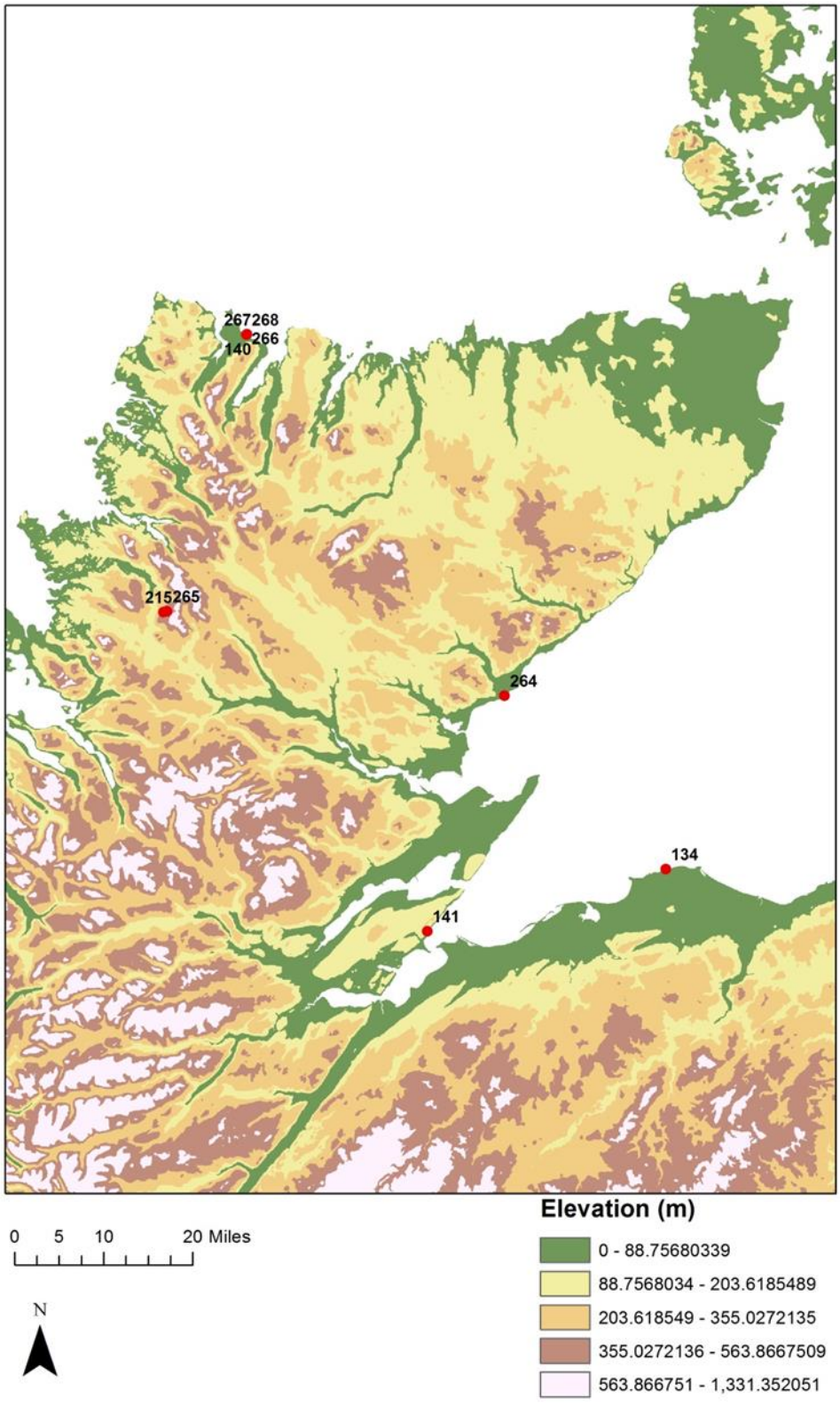


Figure 3-29: Distribution of caves with activity dating to the 1st millennia in Northern Scotland (N: 10) with 4 focused on the Geodh Smoo headland.

Ten caves in northern Scotland, taken here to include the northern mainland, Orkney and Shetland, were identified as being used at some point during the 1st millennia (Figure 3.29). The majority of activity in caves during this period was concentrated on the limestone of the Geodha Smoo and Cambrian limestone of Allt nan Uamh in north-western Scotland, whilst three were located on the coastline north of Inverness. Such limited evidence of cave-use in the region can be explained by the lack of suitable geology for cave generation, as well as a limited number of coastal cave surveys.

3.10.1 Dating cave-use in northern Scotland

Of the ten caves included in the study, excavation of six produced radiocarbon dates (Table 3.6). One of these, a radiocarbon sample of a brown bear femur dating to 969- 776 cal BC (BM-724) from Bear's Cave (**265**), Allt na Uamh was included in the database as evidence of the use of caves by active populations of bears during the early 1st millennium BC (Burleigh et al. 1976: 3).

Radiocarbon analysis of deposits in Sculptor's Cave, Covesea (**134**) indicate at least two instances of the deposition of human remains during the Late Bronze Age and Roman Iron Age (Table 3.6). A dog burial dated to the late 1st millennium BC also suggests that the cave continued to be used during the Iron Age (Benton 1931; Shepherd et al. 1995; Ian Armit et al. 2007; Armit et al. 2011). Pictish artwork outside the entrance to the cave, also suggests the site was further used during the Early Medieval period. Similarly, radiocarbon dates taken from Caird's Cave, Rosemarkie (**141**) also reflect multi period activity taking place during the mid-1st millennium BC (400-210 cal BC), the Roman Iron Age (230-390 cal AD) and Early Medieval period (710-940 cal AD).

Evidence of multi-period use was also detected during rescue excavations of four caves on the Geodha Smoo tidal inlet. Radiocarbon dates obtained from middens outside both Smoo Cave (**140**) (780-1020 cal AD) and Glassknapper's Cave (**262**) (690-990 cal AD) appear to indicate contemporary periods of use during the late 1st millennium AD (Pollard 2005). At Antler Cave (**267**), a small slot trench uncovered a thick midden sequence at a similar depth to the nearby Glassknapper's Cave (**262**), which was in use during the Early Medieval period. Activity in Wet Weather Cave (**268**) another cave in the Geodha Smoo was also considered contemporary to Early Medieval use at Smoo Cave (**140**), Glassknapper's Cave (**262**) and Antler Cave (**267**). Whilst the majority of activity appears to date to the latter part of the 1st millennium AD, finds

of an Iron Age bipartite bowl from Glassknapper's cave demonstrates earlier use of caves along the tidal inlet (Pollard 2005: 24).

Table 3-6: Radiocarbon dates available for caves in northern Scotland (N: 31 samples from 6 caves)

Cave	**Sample**	**Sample Type**	**Sample Date**
Sculptor's Cave, Covesea (**134**)	GU-15949-GU-15972	Animal and human bone	1200-900 cal BC; 400-200 cal BC; 230-400 cal AD
Smoo Cave, Geodha Smoo (**140**)	GU-4545	Birch and hazel charcoal	780-1020 cal AD
Cairds' Cave, Rosemarkie (**141**)	GU-23932-GU-23938	Charcoal and animal bone	400-210 cal BC 230-390 cal AD
Reindeer Cave, Allt nan Uamh (**215**)	OxA-3527	Double ring headed pin of walrus ivory	89 cal BC- 330 cal AD
Bear Cave, Allt nan Uamh (**265**)	BM-724	Femur of brown bear	969- 776 cal BC
Glassknapper's Cave, Geodha Smoo (**262**)	OxA-8210	Birch/willow round wood charcoal	890-1160 cal AD
	OxA-8211	Birch charcoal	690-990 cal AD
	OxA-8212	Hazel charcoal	780-1010 cal AD

3.10.2 Cave-use and chronology in northern Scotland

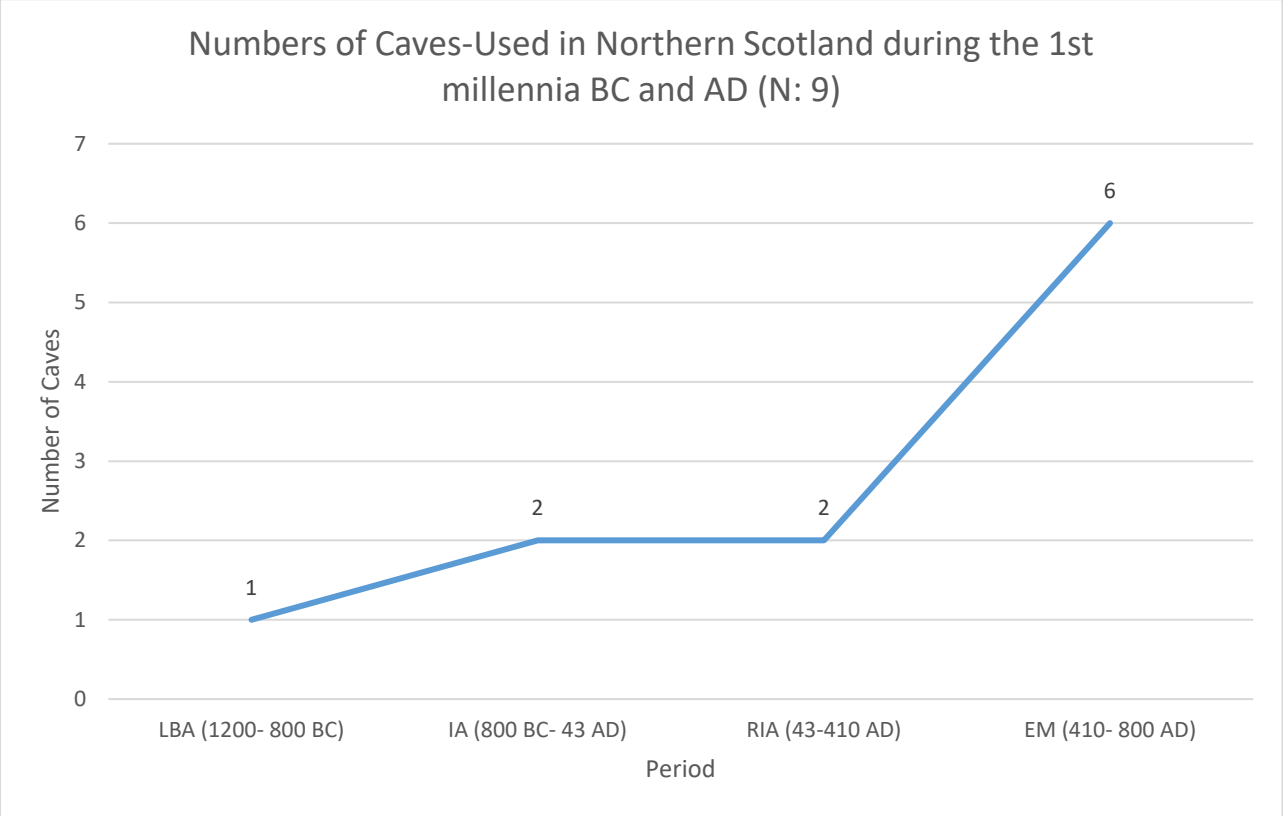


Figure 3-30: Number of caves in use during the 1st millennia (N:9), similar to patterns elsewhere in Scotland there is an increase in use during the Early Medieval period, although there is only a small number of caves.

The limited evidence of activity in caves restricts any meaningful discussion of cave-use in northern Scotland (Figure 3.30). However, similar to that recorded elsewhere in Scotland; the majority of activity recorded in caves appears to date to the latter half of the 1st millennium AD. However, evidence of multi-period use of sites such as Sculptor's Cave, Ceard's Cove and those along the Geodha Smoo inlet does demonstrate the complex history of cave-use.

Caves in the region also appear to have been used for a number of different purposes. Evidence of the multi-period deposition of human and animal remains at Sculptor's Cave, Covesea (**134**) does indicate possible orchestrated ritual activity. In contrast, the build-up of midden deposits at Ceard's Cove and those along the Geodha Smoo tidal inlet may also demonstrate the temporary use of caves as shelters (see Chapter 5).

3.10.4 Conclusion: Cave-Use in northern Scotland

Cave-use in northern Scotland appears to have been focused in a limited number of coastal caves. This can be compared to similar periods of use occurring on the eastern and western coasts of Scotland and may suggest a similar association of caves with the movement of peoples along seaways. Furthermore, instances of complex depositional practices, such as the votive deposition of human and animal remains and Roman material culture, can also be paralleled to acts of cave-use seen in western Scotland (Region 5), as well as in other caves across Britain. This suggests that, whilst there is limited evidence of cave-use in the region, activity in caves was motivated by a range of different factors.

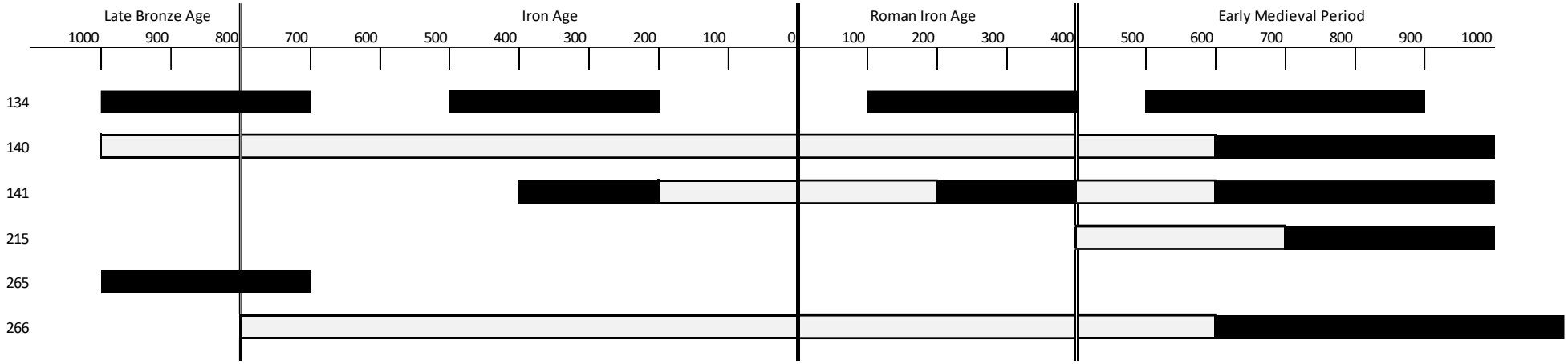


Figure 3-31: Chronology of cave-use in northern Scotland (6 of 9 caves). Black represents the date range of diagnostic material (dated through radiocarbon and artefactual typology) and grey represents material that can only be broadly dated

3.11 Region 7: Wales

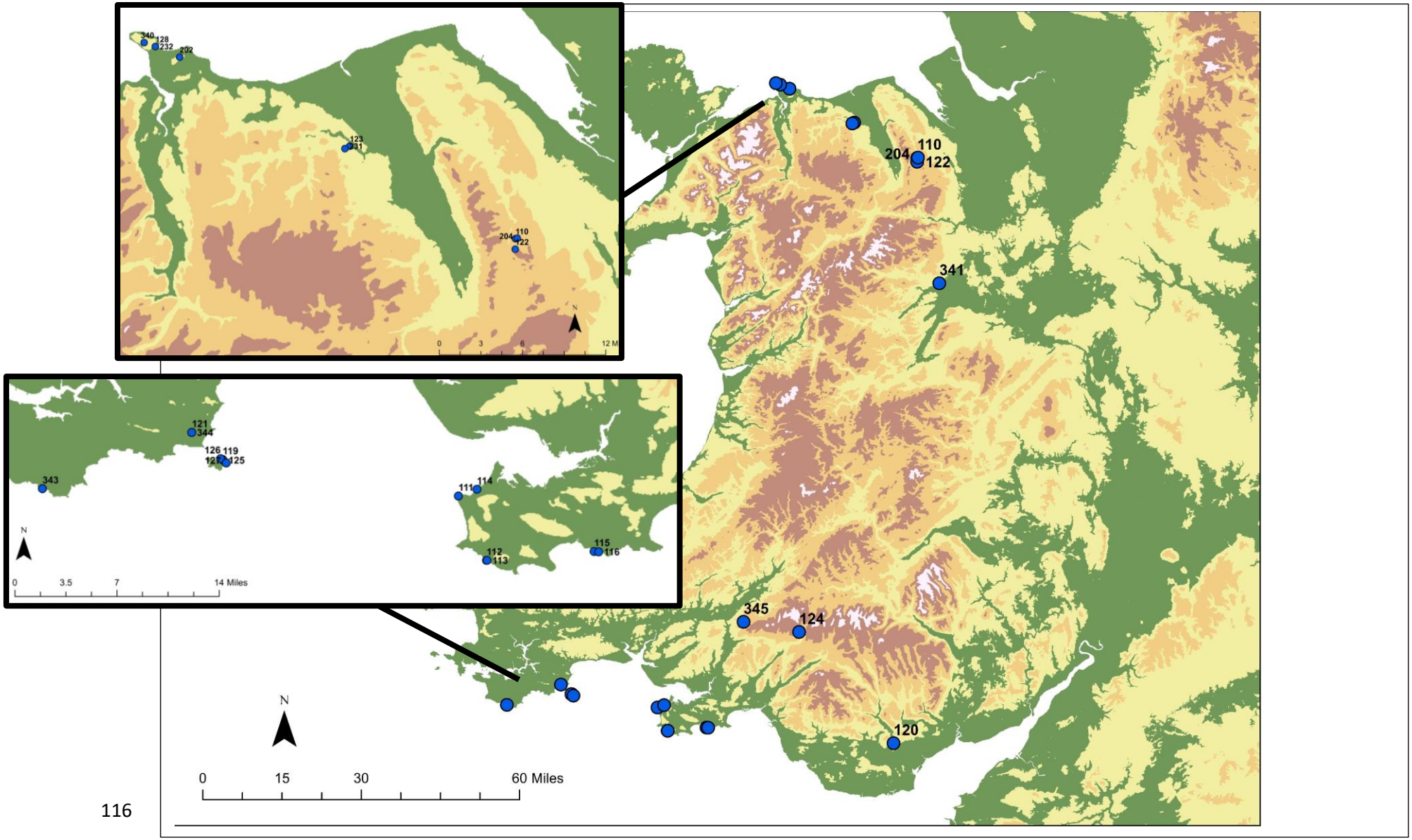


Figure 3-32: Distribution of cave-use across Wales (N: 26), concentrations of use are focused on caves on the northern and southern coasts

Across Wales, twenty-six caves contained evidence of activity during the 1st millennia (Figure 3.32). Concentrations of human-use focused predominately along the Gower Peninsula in the south (N:13) and around Great Orme in the north (N: 4). Activity was also recorded inland and was focused on the limestones of the Brecon Beacons and Black Mountains.

3.11.1 Dating cave-use in Wales

Only three caves contained material that has been sampled for radiocarbon dating (Table 3.7). Samples obtained from human remains indicate Roman Iron Age and Early Medieval activity in Daylight Rock (**127**) and Lesser Garth Cave (**120**). Elsewhere, radiocarbon analysis of crucibles used for copper smelting near Llanymynech Ogof, Powys (**341**) suggest use of the cave during the Late Iron Age between 363 and 119 cal. BC (Musson et al. 1989).

3.11.2 Late Bronze Age and Iron Age cave-use in Wales

Late Bronze Age activity was recorded in seven caves in Wales, attested through the presence of stylistic forms of metalwork and pottery. Finds of metal objects, including a bronze palstave, tool and gold earrings, dating to the 9th or 8th centuries BC from outside Pigeon's Cave, Great Orme (**340**) and a bronze rapier, razor awl and gold bead from Ogof-yr-Esgyrn, Brecon (**124**), may suggest that certain caves were used to store metal hoards. Sherds of Devel-Rimbury type pottery was also found in Ogof-yr-Esgyrn, whilst similar Late Bronze Age fabrics were also recorded in four other caves, presenting limited evidence of activity during the late 2nd or early 1st millennium BC (Potter's Cave **126**; Culver Hole **111**; Lesser Garth Cave **120**; Ogof Morfran **343)**.

Finds of Iron Age artefacts have been recorded in ten caves in Wales. Bone artefacts, including pins, needles and weaving implements dating to the Iron Age have been found in five caves (Culver Hole **111** Lesser Garth Cave **120**; Little Hoyle **121**; Ogof Pant Y Wennol **202**; Orchid II **204**). Finds of shell-tempered pottery, comparable to that found at Glastonbury Lake Village recorded at Culver Hole (**111**) and Bacon Hole (**116**) also suggest that a number of caves were used sometime during the Late Iron Age. A similar Late Iron Age date has also been proposed for copper extraction taking place in Llanymynech hillfort in Powys (Musson et al. 1989). Llanymynech Ogof (**341**), which was located at the centre of the hillfort, may have been used to extract copper and was also used during the Roman Iron Age (Jones et al. 2012).

Table 3-7: Radiocarbon dates available for caves in Wales (N: 8 from 3 caves)

Cave	Sample	Sample Type	Sample Date
Daylight Rock, Caldey Island (127)	OxA-7685	Human Bone	333-539 cal AD
Lesser Garth Cave, Radyr (120)	UBA10638	Individual 3	1261-1288 cal AD
	UBA10639	Individual 1	1051-1297 cal AD
	UBA10640	Individual 6	425-544 cal AD
	UBA 10641	Individual 7	572-655 cal AD
	UBA10642	Individual 5	1629-1667 cal AD
Llanymynech Cave, Llanymynech (341)	Recorded in Musson & Northover 1989	Human bone	162 cal. BC – AD cal 53
	Recorded in Musson & Northover 1989	Human bone	363-119 cal. BC

3.11.3 Roman Iron Age cave-use in Wales

Activity dating to the Roman Iron Age was identified in twenty caves in Wales, characterised by finds of pottery, coinage, metalwork and human remains. Similar to activity reported in England, artefacts dating to the late 1st and 2nd centuries AD were recorded in five caves in Wales (Maesafn Cave **110**; Paviland Cave **113**; Nanna' Cave **119**; Lynx Cave **122**; Ogof-Yr-Esgryn **124**). At Ogof-Yr-Esgryn, Brecon (**124**), a karst cave that contains the subterranean stream of the Afon Llynfell, finds included two Vespasian Denarii (72-73 AD), a Trajan Sesterius (103-111 AD), two Hadrian Denarii (118 AD) and two sestertii (125-8 AD and 119 AD). A series of brooches were also found in the cave, including a Dolphin-type fibula dating to the late 1st century AD (Branigan et al. 1991a: 177).

Similar deposits were also recorded at Culver Hole (**111**), where a ring shaped bead of glass, thought to have been an import dating between the late 1st century BC to early 1st century AD, was found along with human and animal remains. Also found within a karst pool at the entrance of the cave, was a bronze statuette of Late-Celtic style (Taylor 1935: 201-201) with a 2nd century Headstud fibula and a sestertius belonging to the reign of Hadrian (Branigan et al. 1991a: 155).

Such finds demonstrate deposition of Roman Iron Age artefacts in a number of caves in the region associated with flowing and stagnant water, which may indicate a ritual use of caves (see Chapter 7). Human remains dating to the Roman Iron Age were recorded in a further four caves in the region. This included a human bone found at the entrance to Daylight Rock (**127**), which provided a radiocarbon date of 333-539 AD (OxA-7685) and a single inhumation found with a bracelet dating to the late 4th or 5th century AD inside Llanymenech Ogof (**341**).

3.11.4 Early Medieval cave-use in Wales

Six caves in Wales contained evidence of Early Medieval activity. At Lesser Garth Cave (**120**), a multi-chamber cave located at the base of a hill near Radyr, samples taken from two inhumations provided radiocarbon dates belonging to the 6 to 7th centuries AD (UBA10640 and UBA1064). Finds from the cave, included Dinas Powys type pottery and an Irish bronze ring-pin thought to date between the 5th and 7th centuries AD (Hussey 1966: 29-31). Crucially, two further caves (Bacon Hole **116**; Culver Hole **111**) contained similar Irish-type brooches (Glamorgan Gwent 00306w; RCAHWSL 17), perhaps suggesting comparable periods of deposition. Excavations of Minchin Hole (**115**), a cave located on the southern coast of Gower also produced coins of Lothaire I (Holy Roman Emperor 840-855 AD) and Charles the Bold (768-814 AD), whilst bronze and silver sheets found in Little Hoyle (**121**) were considered Early Medieval in date and evidence of metalworking taking place in caves (Rae et al. 1987).

3.11.5 Chronology and cave-use in Wales

The discussion above has explored how cave-use was identified and dated in Wales. From this, it is clear that an array of different types of material has been reported, suggesting that caves were used for a range of different activities. Considering only those caves which contained material that dated to a specific period, further complicates the chronology of cave-use in Wales (Figure 3.33). Of the twenty-six caves, seventeen contained suitable diagnostic material (Figure 3.34). From this, cave use appears to increase during the Late Iron Age (N: 4 caves) and Early Roman Iron Age (N: 12 caves) that can be compared to part of wider trends of use occurring elsewhere in England (Regions 1, 2 and 3). However, as discussed elsewhere, it is unclear whether this increase is a product of an influx of a more robust material record or part of an intensity in cave-use during the early 1st millennium AD.

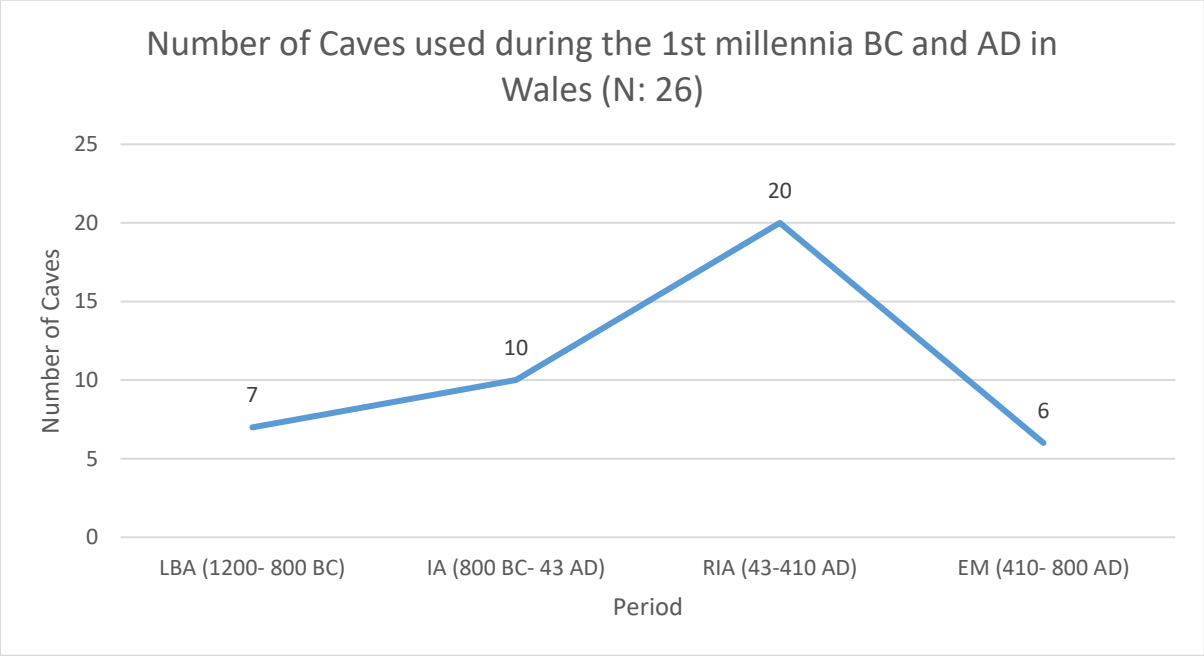


Figure 3-33: Number of caves with activity that could be dated to the 1st millennia in Wales (N: 26 of 275 caves)

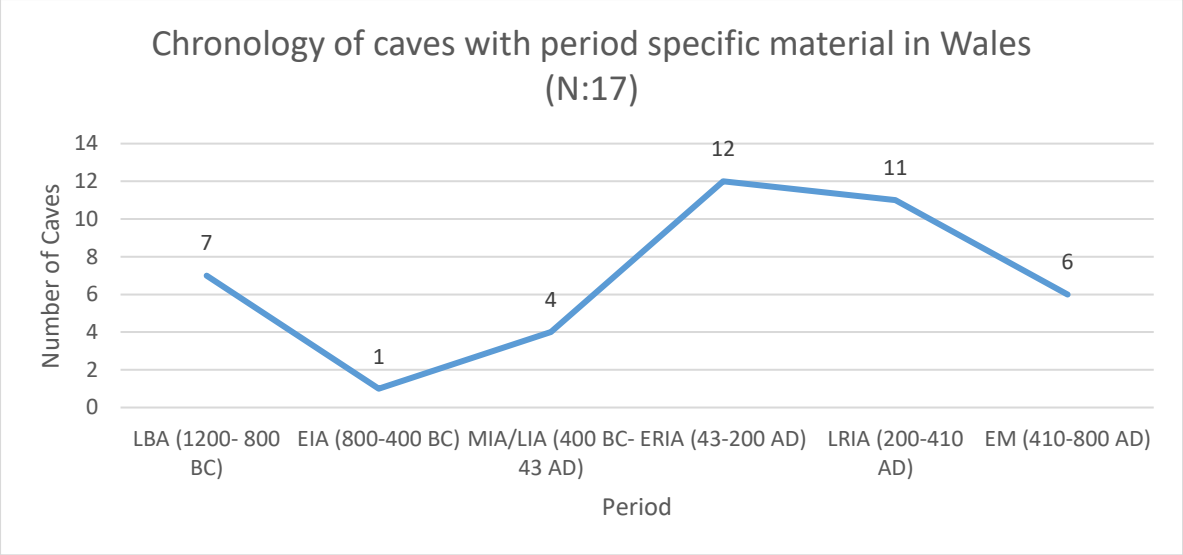


Figure 3-34: Cave-use which could be dated to a more specific period (N: 17 of 26 caves)

During the Roman Iron Age, concentrations of cave-use identified in four caves located on the northeast coast of Caldey Island, Gower, may also reflect contemporary use of multiple caves. Excavation of Nanna's Cave (**119**) uncovered an assemblage of Roman Iron Age artefacts including a folded bronze sheet, a trumpet fibula and a Crummy type two pin, both of which date to the 2nd century AD (Taylor 1935: 201-202). Roman pottery was also reported in Potter's Cave (**126**), as well as from a layer of charcoal in the entrance passage of Ogof-yr-Ychen (**125**). A child's jaw was also found in the charcoal layer, which can be compared to the articulated burial of an individual, dating to 333-539 cal AD, from Daylight Rock (**127**).

Similar to activity in caves in England, the number of caves in use during the Early Medieval period appears to decline. Nevertheless, unlike areas such as the Mendip Hills where there is no firm evidence of utilisation, in Wales there is a good record of cave-use dated in at least six caves (of 26 total caves). In this respect, parallels can be drawn between the Early Medieval activity in Welsh Caves to those in western and northern Scotland, as well as evidence of metalwork deposition in caves in northern (Region 3) and central (Region 2) England. This suggests that, rather than being ignored, some caves continued to be used as places of burial, craftworking and the deposition of personal objects (Figure 3.35).

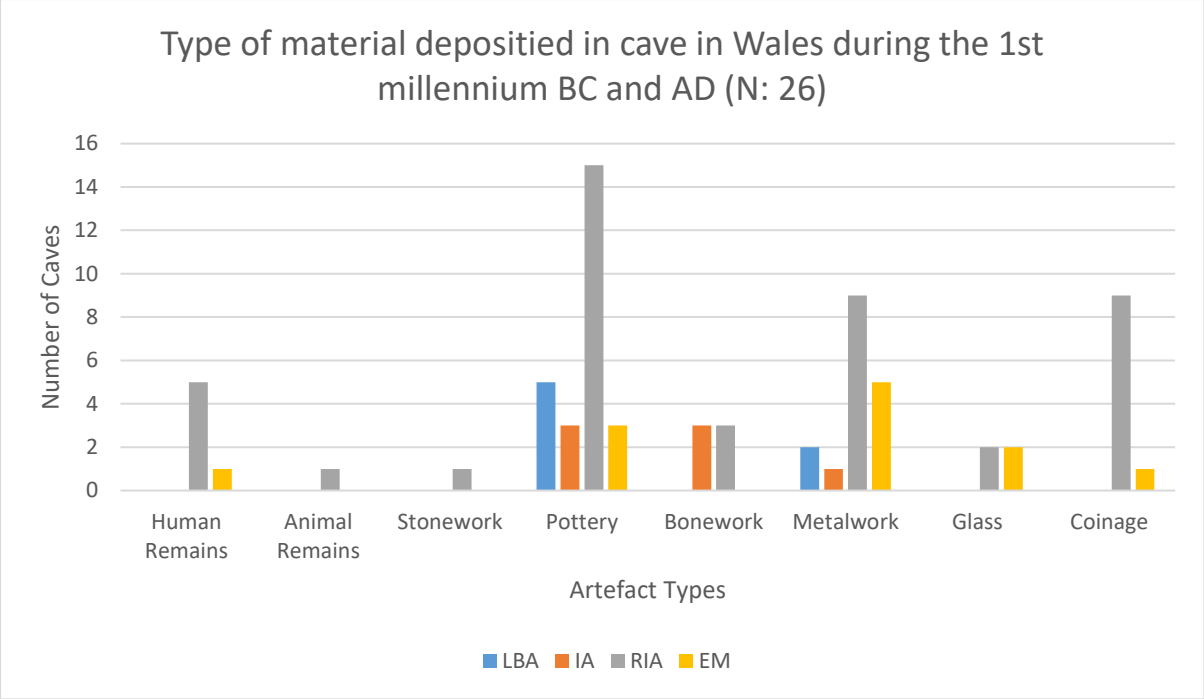


Figure 3-35: Types of artefact found in caves dating to the 1st millennia, suggesting that an array of material were deposited in caves, including a significant amount of Roman Iron Age material.

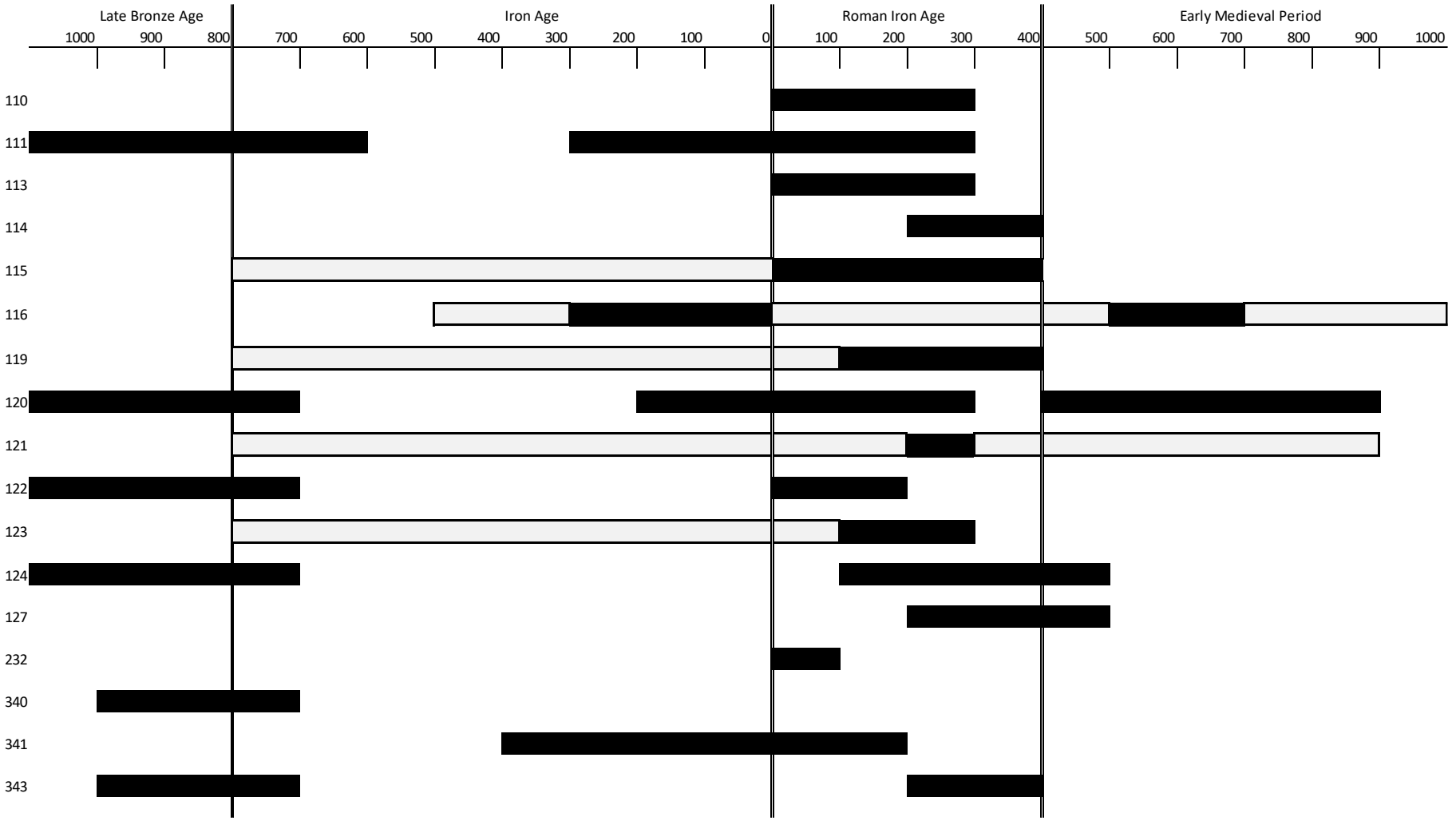


Figure 3-36: Chronology of caves with diagnostic material in Wales (N: 17 of 26 caves). Black represents the dating range of diagnostic deposits (i.e. radiocarbon samples or artefacts with typologies), whilst grey represents material that could be only broadly dated

3.11.6 Conclusion: cave-use in Wales

During the Late Bronze Age, a number of caves in Wales were used for the deposition of metal hoards, which may have been linked to finds of metal objects in other natural places, including lakes and rivers. Similarly, in the Late Iron Age and Roman Iron Age, certain caves, including Ogof-yr-Esgryn (**124**) and Culver Hole (**111**) also appear to have been used for the ritual deposition of objects and human and animal remains. Craftworking debris and finds of bone and metal tools dating to the Iron Age, Roman Iron Age and Early Medieval period may also indicate that mobile communities, including craft workers, also used some caves (see Chapter 6). Whilst cave-use appears to decline in the Early Medieval period, evidence from Lesser Garth Cave (**121**) indicate the continuing mortuary role of caves, as well as the deposition of new types of artefacts, including Irish imported metalwork and hoards of coins.

3.12 Reliability of dating cave-use

The discussion above focused on the regional nature of cave-use during the 1st millennia. From this, it is clear that there a number of chronological issues, which impact the reliability of identifying and dating activity in caves. As part of the critique of cave archaeology in Chapter 1, we explored how erosional processes and the quality and nature of excavation negatively impacted the amount of archaeological material found in caves. This in turn has limited the ability to refine dates of human cave-use, which is further exacerbated by the general lack of diagnostic artefacts found in upland and coastal regions, where the majority of caves are found. Dating cave-use in these areas therefore relies primarily on available radiocarbon dates (see above) and where possible on established artefact typologies. As such, much of the activity in these caves can only be broadly dated.

3.12.1 Iron Age

The reliability of dating Iron Age cave-use is regionally, as well as chronologically biased. In southern England (Region 1) well-studied ceramic typologies, including those found at Glastonbury and Meare, and finds of diagnostic metalwork, such as La Tene style brooches, help to date cave-use to specific periods during the 1st millennium BC and can generally be considered as reliable indictors of cave-use. In contrast, the aceramic nature of many communities in upland regions of central Britain (Regions 2 and 3) and Wales (Region 7) limits the dating of cave-use to available radiocarbon dates, imported Roman Iron Age artefacts and to some limited diagnostic finds, including regionally restricted bone and metal work (see discussion of Region 3). Because of this, activity in many of these caves cannot be given a more refined date, which complicates inter-regional comparisons of cave-use during the 1st millennium BC.

Alongside the regional biases in material culture, dating activity to the early part of the first millennium (c. 800- 400 BC) is also complicated by the radiocarbon plateau, as well as by the limited artefactual frameworks of many Iron Age communities. It is therefore likely that the evident increase in cave-use during the Late Iron Age is partly the result of the survival of assemblages, rather than evidence of specific social processes.

3.12.2 Roman Iron Age

During the Roman Iron Age, the chronology of cave-use is more refined due to the introduction of a more robust and widespread material culture compared to the limited assemblages of many Iron Age communities. The apparent overall increase in cave-use during the Roman Iron Age may therefore be the result of more reliable dating rather than an indicating changing attitudes towards cave-use. Nevertheless, finds of Roman material, especially in previously aceramic regions, may help to identify Iron Age use of caves (see below).

3.12.3 Early Medieval

In contrast to the earlier centuries AD, the reliability of dating cave-use during the Early Medieval period is limited by a restricted artefactual record and the apparent aceramic nature of some upland communities. Nevertheless, the use of widely imported artefacts, examples of which are seen in the deposition of Irish metalwork in a number of caves in western Scotland (Region 5) and Wales (Region 7), can confirm the use of caves at least during the latter half of the 1st millennium AD. Similarly, monastic artwork and material culture also confirms activity in caves between 700-900 AD in western Scotland (see Chapter 5), though it is likely that such material was deposited in caves periodically over a significant length of time. Because of the restricted record, evidence of cave-use during the first part of the late 1st millennium AD is limited to a number of radiocarbon dates.

3.13 Aspects of cave-use during the 1st millennia BC and AD across the British Isles.

A number of key similarities and differences can be seen from the above regional discussion of the data. Firstly, it is important to stress that it is clear that caves were used throughout Britain during the 1st millennia (Figure 3.37). Whilst this may seem like an obvious point, such a distribution indicates that caves continued to be significant places in a range of worldviews for a number of different coastal and upland communities. This is important when considering how caves have often been marginalised in research frameworks and consequently in archaeological landscapes (see Chapter 1). This can be further emphasised by the fact that processes governing other archaeological sites also influenced the visibility of cave-use. This includes the limited artefactual assemblages of Iron Age and Roman Iron Age communities and the decline in visible Early Medieval activity. Fundamentally, this suggests that caves were interconnected to processes occurring elsewhere in the landscape and that these sites were influenced by similar social processes.

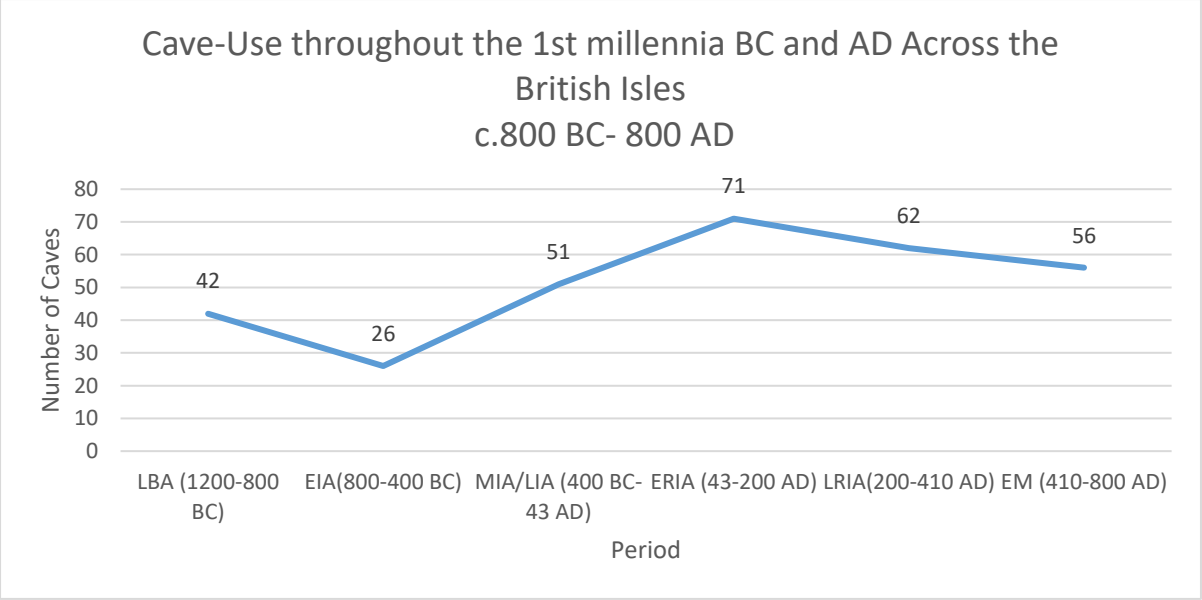


Figure 3-37: Overview of number of caves in use during the 1st millennia, demonstrating that cave-use remained persistent throughout the time period of study (N: 275)

Overall, these patterns may be seen by an apparent decline in Early Iron Age cave-use that was influenced by the radiocarbon plateau and a general increase in cave-use during the late 1st millennium BC, which is marked by the introduction of a more robust and visible material culture. Secondly, there appears to be a number of regional biases in cave-use. In England and Wales, there is an intensification of cave-use occurring during the late 1st and early 2nd centuries AD and a subsequent decline in the number of caves used during the Early Medieval period. This contrasts to evidence from Scotland, which indicates a continuation or increase in the use of caves during the Early Medieval period.

3.13.1 The Late Iron Age and Early Roman Iron Age use of caves

In the beginning of the chapter, I highlighted the archaeological influences of individual and communal responses to the introduction of Roman Iron Age material culture during periods of Romanisation. From this, it was suggested that finds of artefacts dating to the late 1st and early 2nd centuries AD in caves likely reflected the continuation of previous Late Iron Age practices. However, such processes may have also been connected to an intensification of deposition in response to social pressure created by the introduction of such material culture.

During the Roman Iron Age, 151 caves present evidence of human-use, characterised by finds including metalwork, pottery, coinage, glass and human and animal remains. Significantly, across Britain seventy-one sites contained assemblages dating to the 1st and 2nd centuries AD, whilst sixty-two contained assemblages of the 3rd and 4th centuries AD. Some of the earliest examples of Roman Iron Age artefacts found in caves included brooches made during the 1st

century AD, including Aucissa (6 brooches from 6 caves) and Nauheim (2 brooches from 2 caves) type fibulae, Colchester derivate (11 brooches from 8 caves) and Polden Hill type brooches (5 brooches from 5 caves) (see Table 3.8).

Importantly, many of the caves, which contained artefacts dating to the late 1st century AD have also produced finds dating to the Iron Age and Late Iron Age. For example, at Poole's Cavern (**25**) and Thirst House Cave (**26**), extensive assemblages of Roman Iron Age metalwork, including 1st century brooches, have been found in chambers that also contained pottery dating to the 1st century BC (Branigan et al. 1991a: 44; Branigan et al. 1991c). Similarly, at Wookey Hole, Cheddar Gorge (**166**), Balch (1911: 575-577) recorded finds of carinated sherds also thought to date the 1st century BC, as well as Roman Iron Age material, including a Polden Hill type fibula, dating to c.50-75 AD.

Table 3-8 Early forms of Roman brooches found in caves

Region 1: Southern England		
Cave	Brooch types	Context
Chelm's Combe Shelter (**60**)	Aucissa	Brooch found inside rockshelter and was considered to date before c. 70 AD (Branigan et al. 1991a: 135).
Charterhouse Warren Farm Swallet (**59**)	Aucissa	Brooch was found inside cave's entrance shaft, which also included human remains dated to 375-41 cal BC (SRR-3450) and an inhumation dating to the late 1st century AD (Audsley 1988: 176).
Wookey Hole (**166**)	Polden Hill	Brooch was found in the main chamber and was part of an extensive multi-period assemblage dating to the Iron Age and Roman Iron Age (Balch 1911: 575-577).
Region 2: Central England		
Poole's Cavern (**25**)	Aucissa; Colchester; Polden Hill (2)	Brooches were recorded as part of an extensive collection of metalwork dating to the late 1st and early 2nd century AD (Branigan et al. 1991a: 49). Belgic style pottery, dating to the 1st century BC, was also found in the chamber (Branigan et al.1991a: 44)
Thirst House Cave (**26**)	Colchester (4); Polden Hill; Nauheim	The earliest brooch found in the cave entrance, was a Neuheim derivative fibula, thought to date to the first part of the 1st century AD (Branigan et al. 1991c). Other brooches were found inside the cave and considered to date to the late 1st and early 2nd century AD (ibid.). Iron Age finds, including pottery and metal objects, were also found in the cave (Ward 1897; Branigan et al. 1991c).
Ravencliffe Cave (**29**)	Colchester	The brooch was found towards the rear of the cave, which also included a gold ellipse and bronze awl, which were considered to date to the Iron Age (Branigan et al. 1991a: 70; (Smith 1912: 55).
Demon's Dale (**32**)	Aucissa	Brooch was found inside the rockshelter (Challis et al. 1975: 37).
Harborough Cave (**36**)	Polden Hill	The brooch was found inside the cave with a multi-period assemblage dating to the Iron Age and Roman Iron Age ((Brailsford 1957: 55; Branigan et al. 1991a: 34).
Thor's Cave (**51**)	Colchester	The brooch, similar to those found at Thirst House Cave (**26**) and dated to 50-70 AD, was found within an extensive corpus of metalwork and

		bonework dating to the Iron Age and Roman Iron Age (Branigan et al. 1991a: 61).
Church Hole (**289**)	Colchester	The brooch, dating between c.50-100 AD, was recovered with human remains at the entrance to the cave, which also contained Iron Age bonework and pottery (Branigan et al. 1991a: 84).
Old Woman's House (**291**)	Polden Hill	Brooch was found within the inner chamber, that also contained pottery dating to the 1st century BC (Challis et al. 1975: 75) and Roman Iron Age material (Branigan et al. 1991a: 37).
Reynard's Kitchen Cave (**315**)	Aucissa	The brooch was found in a context that also contained 26 Iron Age and early Roman republican coins (Derbyshire 14385).
Region 3: Northern England		
Great Kelcoe Cave (**6**)	Neuheim	The brooch was found with other examples of Roman Iron Age metalwork, above finds of Iron Age material (Branigan et al. 1991a: 90-91; King 1970: 415).
Dowkerbottom (**8**)	Colchester	The brooch, similar to those recorded at Poole's Cavern (**25**) was found in the second chamber of the cave, which also contained an extensive Roman Iron Age assemblage (Branigan et al. 1991a: 84).
Attermire Cave (**16**)	Aucissa	The brooch was part of a metalwork assemblage, which included pieces of a gilded chariot that were considered to date to the late 1st century AD (King 1970: 411).
Region 7: Wales		
Ogof-yr-Esgryn (**124**)	Colchester	The brooch was found in a deposit of human remains within the main chamber that also included coins minted during the reign of Vespasian (72-73 AD) (Branigan et al. 1991a: 177).

This possible continuation of Iron Age practices in some caves during the early Roman Iron Age is best demonstrated by recently reported finds from Reynard's Kitchen Cave, Derbyshire (**315**). In total, twenty-six Late Iron Age Corieltauvi and early Republican coins were found in the cave with an Aucissa-type brooch (Derbyshire 14385).

3.13.2 Boundaries, social pressure and cave-use

It is therefore likely that a number of caves containing artefacts dating to the mid to late 1st century AD, may have also been used during the Late Iron Age. However, this does not necessarily indicate direct continuity in the activity in caves during the 1st century AD. As we have seen, in the early Roman Iron Age, new forms of material culture begin to be deposited in caves, including coins, glass and metalwork. Evidence from sites such as Poole's Cavern, Buxton (**25**), Wookey Hole, Cheddar (**166**) and Ogof-Yr-Esgryn (**124**), Brecon also demonstrate intensive acts of deposition, which contrasts to limited evidence of cave-use that took place in these caves during the Late Iron Age.

This general increase in the range of material being deposited in caves can be compared to examples of deposition associated with boundaries and settlement thresholds. In his study of the deposition of metalwork, Hingley (2007) noted an increase in finds of metalwork in settlement boundaries, pits and wells, during the 1st century AD. For Hingley, this was bound to a broader phenomenon in the changing expression of communal identity, evidenced through the construction and maintenance of physical boundaries (also see Giles 2007b, 2009). Crucially, these changes may have been partly the result of increasing contact with the Roman world and the introduction of new types of material culture during the late 1st century BC and early 1st century AD. This may have driven communities to symbolise and reinforce their own social identities in the face of Romanisation, by intensifying acts of deposition (Pitts et al. 2006; Woolf 2002). Therefore, increases in cave-use during the late 1st century and early 2nd century AD, may have been connected to processes that influenced deposition in other physical boundaries. Consequently, this suggests that communities may have used certain caves to express identities and that acts of cave-use were also bound to similar processes occurring in other sites in the landscape (see Chapters 5 and 7).

3.13.3 Christianity and Early Medieval cave-use

In contrast to the increase of Roman Iron Age material deposited in caves, during the Early Medieval period across England and Wales there appears to be a decline in the numbers of caves used, as well as the variety of deposits being found in each individual cave. Whilst this can partly be explained through the limited artefactual framework of the 5th and 6th centuries AD, it could also reflect changes in attitudes towards cave-use.

As we have seen, activity in caves during the latter half of the 1st millennium AD was predominately focused in Scotland, where forty caves (of a total of 56) present evidence of use, compared to ten in England and six in Wales (Figure 3.39). Generally, in England and Wales, cave-use is characterised by stray finds of metal, glass and bone objects (Figure 3.38). However, there are a number of exceptions, which hint at specific uses of some caves. For example, hoards of coins and metal objects have been reported from Attermire Cave, North Yorkshire (**16**), Merlewood Cave, Cumbria (**23**), St Bertram's Cave, Staffordshire (**52**) and Minchin Hole, Glamorgan (**115**).

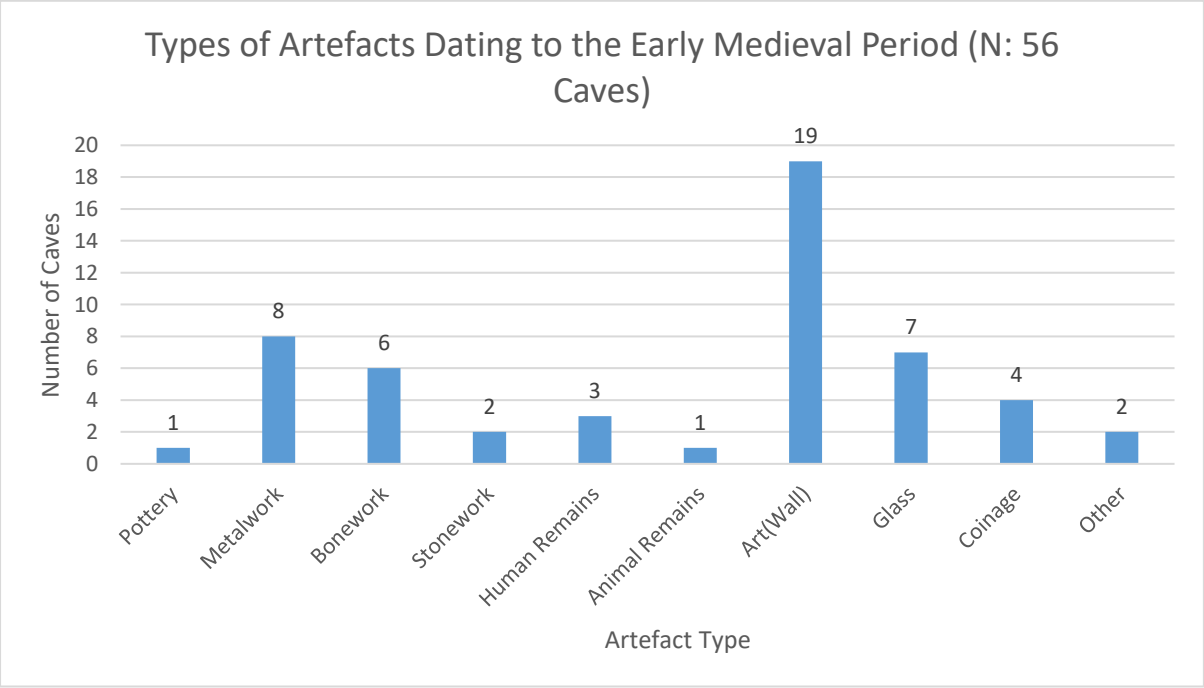


Figure 3-38: Types of artefacts recorded in caves dating to the Early Medieval Period (400-800 AD)

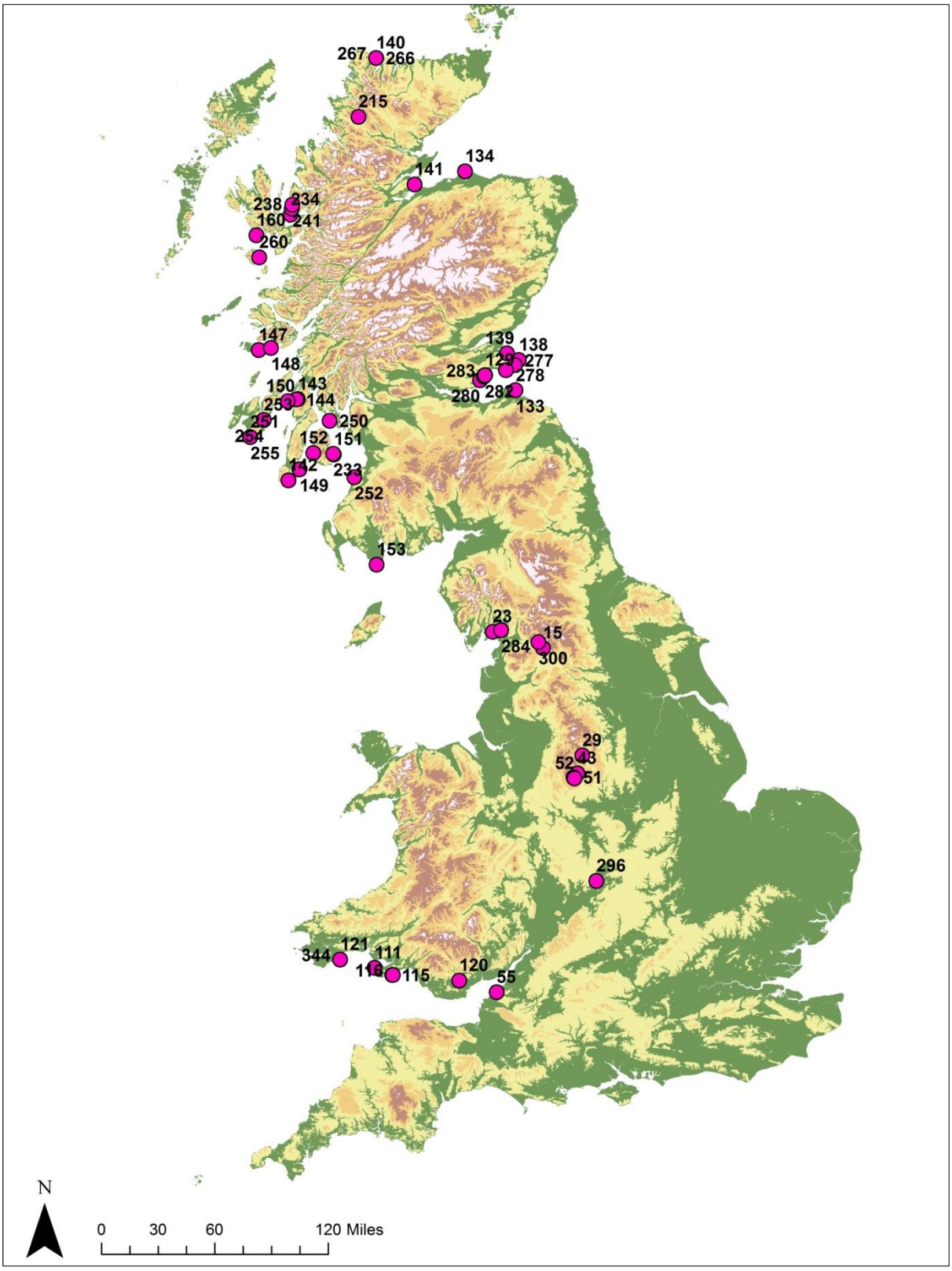


Figure 3-39: Distribution of caves with activity dating to Early Medieval Period (N: 56)

Despite evidence of the use of caves for hoarding, as well as for craftworking (see Chapter 6) and the treatment of the dead (see Chapter 7), the majority of caves appear to have been associated with early Christian and Pictish artwork. In western Scotland, early Christian artwork, dated stylistically to the 6th and 10th centuries AD, has often been associated with the establishment of monastic communities beginning from the 7th century AD (Fisher 2001). Therefore, the use of caves as hermitages attached to Celtic Christian communities likely explains the general increase in cave-use during the Early Medieval period across the region (see Chapter 5).

Evidence of Pictish artwork in caves predominately focused on the coast of Fife, as well as in Sculptor's Cave in northern Scotland, may also be compared to similar inscriptions found on symbol stones and natural boulders. Recent studies have stressed the symbolic importance of Pictish symbols in the expression of power and communal identity (Gondek 2006; Ritchie 1997). For example, stones erected in Argyll and Bute, during the 6th and 7th centuries AD, are often located in prominent areas in the landscape (Lane 2000). Pictish artwork at the entrances to caves has also been considered to have acted as talismanic symbols, as well as being visible markers in the landscapes (Gleeson 2012; Ritchie et al. 1993; see Chapter 6).

The arrival of Celtic Christianity and the use of Pictish symbols can therefore explain the apparent increase in cave-use across Scotland. Evidence of a decline of cave-use in England may also be connected to changes in social perception towards caves. During the Early Medieval period, natural places, such as bogs, rivers and forests were perceived as dangerous, supernatural places (Semple 1998). Caves therefore, may have also become feared places in the landscape, reinforced by the perception of their unusual and dangerous nature (see Chapter 7). Whilst the experience and nature of this perception will be explored in more detail in the next chapter, it is important to note that this belief may account for a decline in the overall evidence of cave-use during the 1st millennium AD. As feared locales, a number of caves may have been avoided or even purposefully forgotten. Crucially, this does not indicate that caves were no longer used; communities may have still been interacted with these sites as part broader cosmologies, albeit in less archaeologically visible ways.

3.13.4 Conclusion

Activity was recorded in 275 caves across Britain and was identified through a range of finds that also indicate that caves were used for a number of purposes. This includes evidence of possible votive deposition, human burial and the use of caves for craftworking. Crucially, whilst cave-use remained a persistent phenomenon throughout the 1st millennia, it has been shown that cave-use was influenced by broad social and cosmological changes, such as Romanisation and the arrival of Christianity. For example, evidence of the increased deposition of material in caves in England during the late 1st century BC and 1st century AD, may reflect communal and individual responses to wider social pressures. Importantly, this also suggests that caves were connected to broader practices that took place in other sites, including the deposition of material in boundaries and the use of caves as hermitages during the Early Medieval period. Building on this, the following chapter will explore the role of cave morphology during the 1st millennia and how this may have influenced site selection and human use.

Chapter 4 Cave Biographies: Approaching Cave Morphology & Experience

4.1 Introduction

Traditional definitions, which consider small single chambered caves similar to extensive karst drainage systems, are in danger of underestimating the contrasting experiences of different caves. As argued in Chapter 2, studies of British cave-use often neglect the morphology of caves treating them as backgrounds to artefact deposition, rather than as an interactive entity capable of influencing experience.

Each cave has its own biography, which not only includes its superstructure and the presence of speleothems, such as stalagmite and water, but also its experience. Ethnographic approaches towards caves often stress the importance of sensescapes in human negotiation of cavescapes (see Chapter 2). As such, caves are often attributed with agency and are capable of influencing human action and experience.

Cave formation processes have meant however, that caves share a number of morphological characteristics, which can form the basis of a broader methodological approach to understanding the influence of cave experience on patterns of deposition and activity. This chapter seeks to establish the relationship between cave morphology and human-use. By discussing the speleological and morphological context of cave-use it will be demonstrated that morphology played an important role in influencing human actions towards cave selection.

4.2 Karst & cave geomorphology of the British Isles

Despite theories of uniform processes of cave inception, geomorphological studies (Brook et al. 1991; Waltham et al. 1997; Lord et al. 2013) have highlighted the influence of local lithology (i.e. rock structure) in the formation of caves. For karst caves, the varying characteristics of limestones, affect the rock's response to mechanical, gravitational and paleo-environmental stresses, which combined with rock thickness, the presence of faults and intruding impermeable geologies, lead to complex variation in cavescapes. Understanding these geomorphological processes of cave evolution, is vital in not only outlining cave distribution but also accounting for the different types of caves found across the British Isles.

In Britain, caves typically occur across highly soluble limestone karst landforms. These landscapes are heavily reliant on efficient underground drainage (Ford 1977: 1; Gill et al. 1991), which leads to the formation of deep gorges, dry valleys and exposed limestone pavements. In England and Wales, caves are formed (Figure 4.1) on a number of limestones,

including areas of chalk, the Carboniferous limestones of the Yorkshire Pennines, Peak District, Mendip Hills and South Wales (Waltham et al. 1997: 27; Waltham et al. 2013) and the older limestones of north Wales, Devon and the Forest of Dean (Waltham et al. 1997: 4). In northern Scotland, an isolated outcrop of karst is also found in the Cambrian-Ordovician limestone (ibid.).

Because of this geology, cave formation is restricted to a number of contexts, namely soluble limestone and exposed coastlines. In order to understand the relationship between caves a total distribution map was created using the speleological databases outlined in Chapter 1 (Figure 4.1). In total, 5522 caves were recorded with regional distribution detailed in Table 4.1. As outlined above many caves are located on the harder Palaeozoic limestones with significant distributions located on the Pre-Cambrian limestones of the Yorkshire Dales and the White Limestones of the Peak District. Elsewhere, there are concentrations of coastal caves recorded along Cornwall, Devon, southern Wales and western Scotland. The absence of caves across southeast England can be explained due to a lack of suitable geology for cave generation, although a number of natural chambers in chalk karst have been modified in the past (see below).

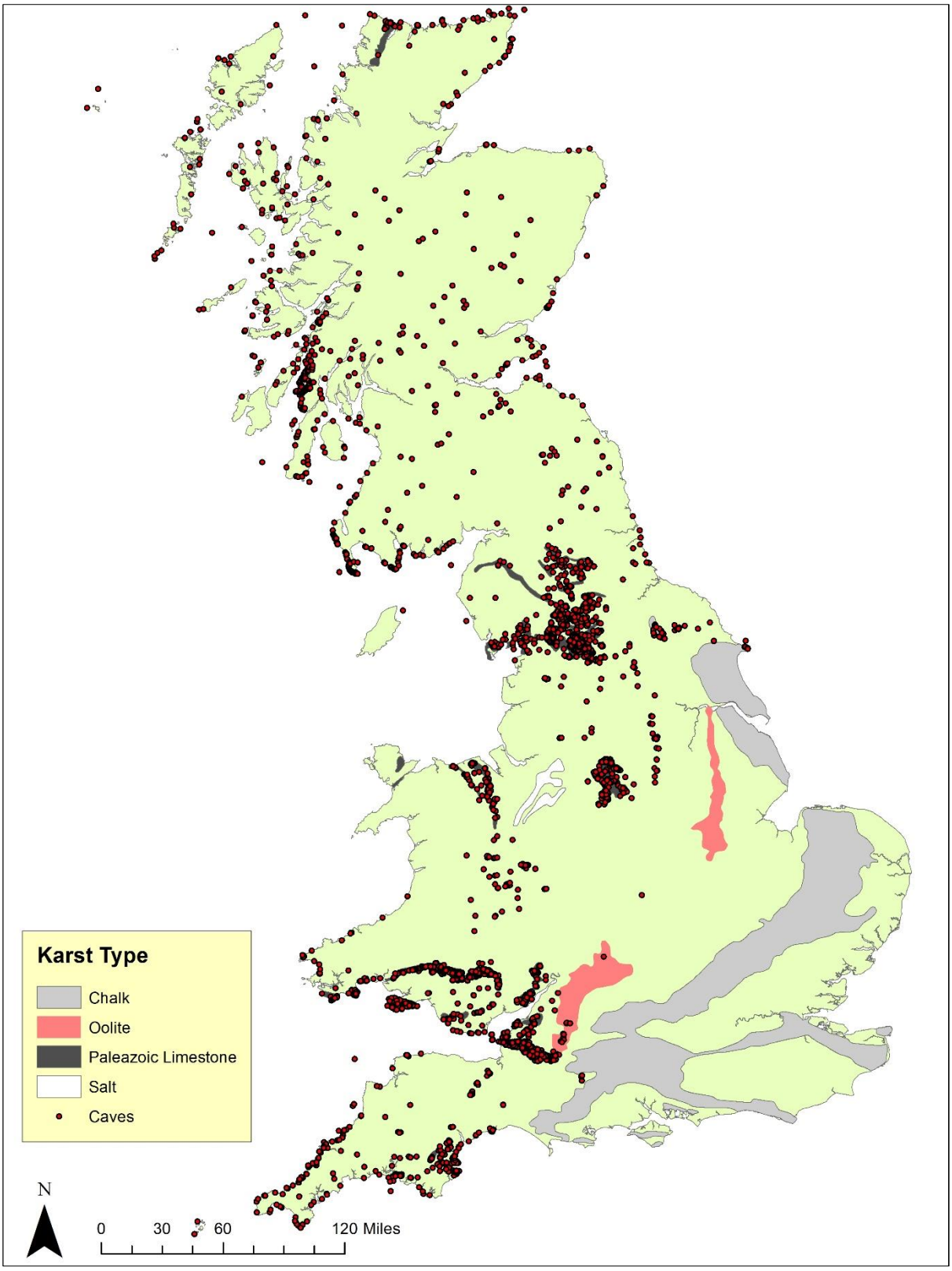
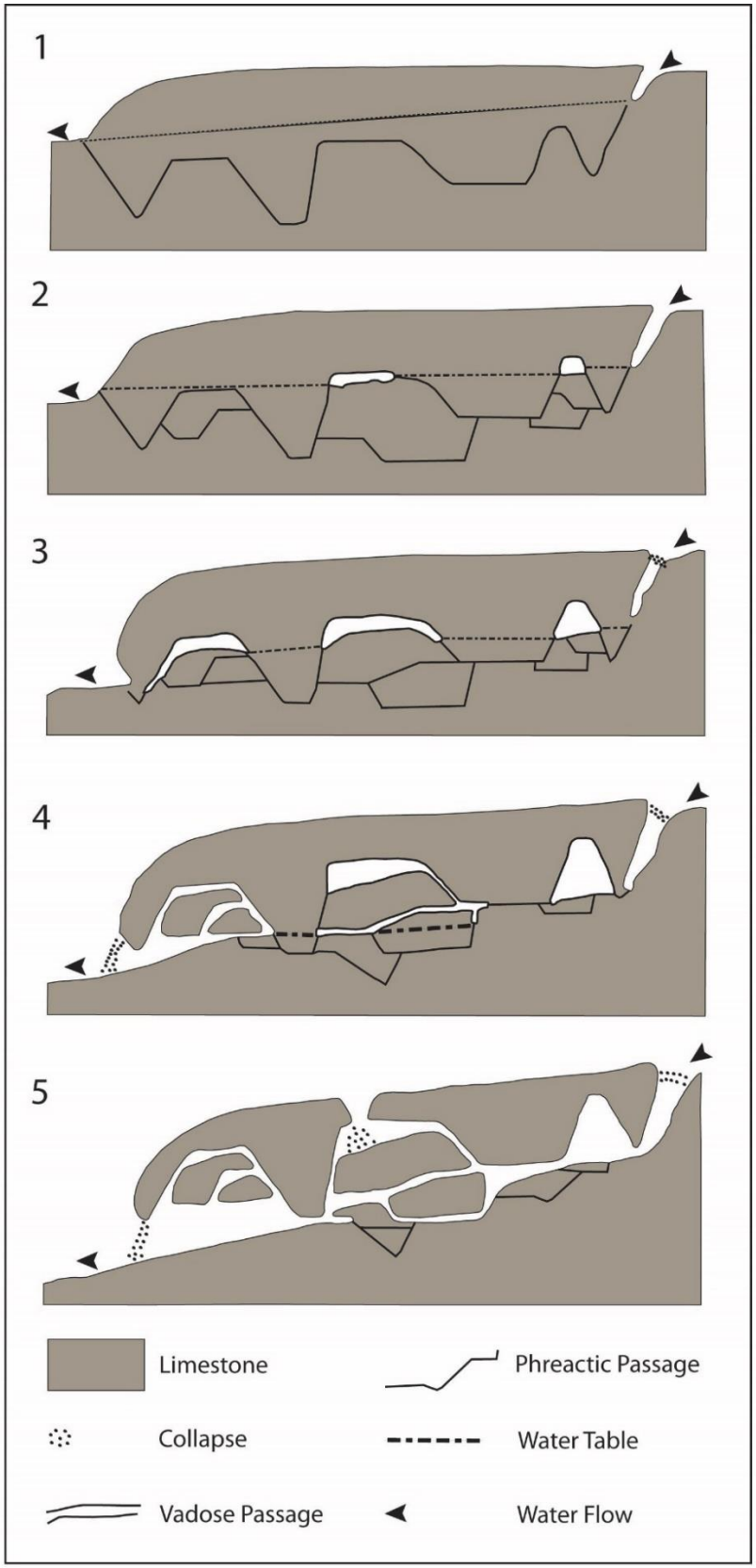


Figure 4-1: Karst geology in the United Kingdom and the total distribution of caves.

4.2.1 Cave formation & morphology

Because caves are found in a number of different lithologies, formation processes lead to a range of cave types that offer unique and contrasting experiences. In a karst environment, cave evolution involves a sequence of processes that are reliant on a number of factors (Figure 4.2). Cave formation begins in submerged areas of weakness within a limestone mass, such as a fault or bedding plane (Waltham et al 1997: 6). Here the passage of water begins to dissolve the limestone, which coupled with the hydraulic gradient, leads to the creation of horizontal or vertical passages (Waltham et al. 1997: 13; Waltham et al 2013: 4). Enlargement of these cave passages relies upon gravitational hydraulic flow, which form different passageways based on conditions during formation. Vadose passageways, are those enlarged above the water table cut headwards or downwards by water (Waltham et al. 1997: 13). Because of the flow of water, these passages tend to have meandering profiles (Waltham et al. 1997: 13). Phreatic passages are submerged and enlarged by continuing solution processes. Found below the water table, they are characterised by rounded chambers with looping profiles (Waltham et al. 2013: 4). Importantly, many of the deep caves such as those around Ingleborough in the Yorkshire Dales have passages undergoing both types of development above and below the water table. The final stage of cave development, known as degradation, sees the abandonment of vadose passages and the build-up of clastic sediment from the surface, along with the deposition of speleothems (Waltham et al. 2013: 4). It is during this stage that passage collapse can occur, particular in regions of doline activity resulting in slumping and further gravitational stress.



1. Cave Inception

Water enters through a fault or crack in soluble limestone leading to the creation of vadose passages

2. Phreatic Development

Continuing dissolution of limestone results in large passages of phreatic form with more vadose passages occurring below the water table

3. Cave Extension

Larger phreatic chambers are connected by larger phreatic passages with a reduction in the water table- the cave is accessible to wild fauna

4. Cave Extension (2)

With further dissolving of limestone the cave becomes accessible to humans at either water interfaces

5. Cave Collapse

The final form of cave generation results in the collapse of the superstructure of many of the phreatic passages and entrance ways.

Figure 4-2: Processes of cave formation in karst geology (After Waltham et al. 1997: 12)

4.2.2 Cave geomorphology

Whilst theoretically, cave formation follows the process outlined above, studies in geomorphology have highlighted the importance of local lithology in cave generation. Factors such as hydraulic control, known as dip, which regulates the flow of allergenic waters in caves, are directly affected by gravitational stress and local geology (Ford et al. 2007; Waltham et al. 1997: 4). Furthermore, a number of other elements influence development including external erosional processes, including water and wind erosion.

Many of the karst regions were formed under a number of different conditions and ages, leading to regionally specific lithology (Table 4.1). For example, the exposed step-like scars of Glaciokarst around the Ingleborough-Malham district of the Yorkshire Dales (Figure 4.3) are as a direct result of weak impermeable shale beds and differences in the geological make-up of limestone (Waltham et al. 1997: 4). Therefore, caves are formed along boundaries, joints and bedding planes within the thick limestone, creating both horizontal and vertical passageways. Entranceways tend to either focus on glacially scoured scar faces or pavements focusing on collapsed dolines (Waltham et al. 2013: 3). The presence of impermeable layers will often lead to the formation of fissures guided by the presence of intruding geologies or shale beds.

Elsewhere, Fluviokarst such as that in the Peak District, resulted in the creation of periglacial valleys with less exposed limestone, contrasting to the Glaciokarst of the Yorkshire Dales. As a result, there are few vertical type caves across the limestones of Derbyshire. Furthermore, many of the regions contain thinner beds of limestone or lack the intricate layering lithology of the Yorkshire Dales, resulting in smaller vadose systems, less active than their Yorkshire counterparts. Across chalk karst, many of the caves cannot be entered due to the limestones weakness to mechanical stresses resulting in small caves. As a result, many chalk caves have been found during quarrying and mining, notably at the flint mines of Grimes Graves (Clutton-Brock 1984; Topping et al. 2005).

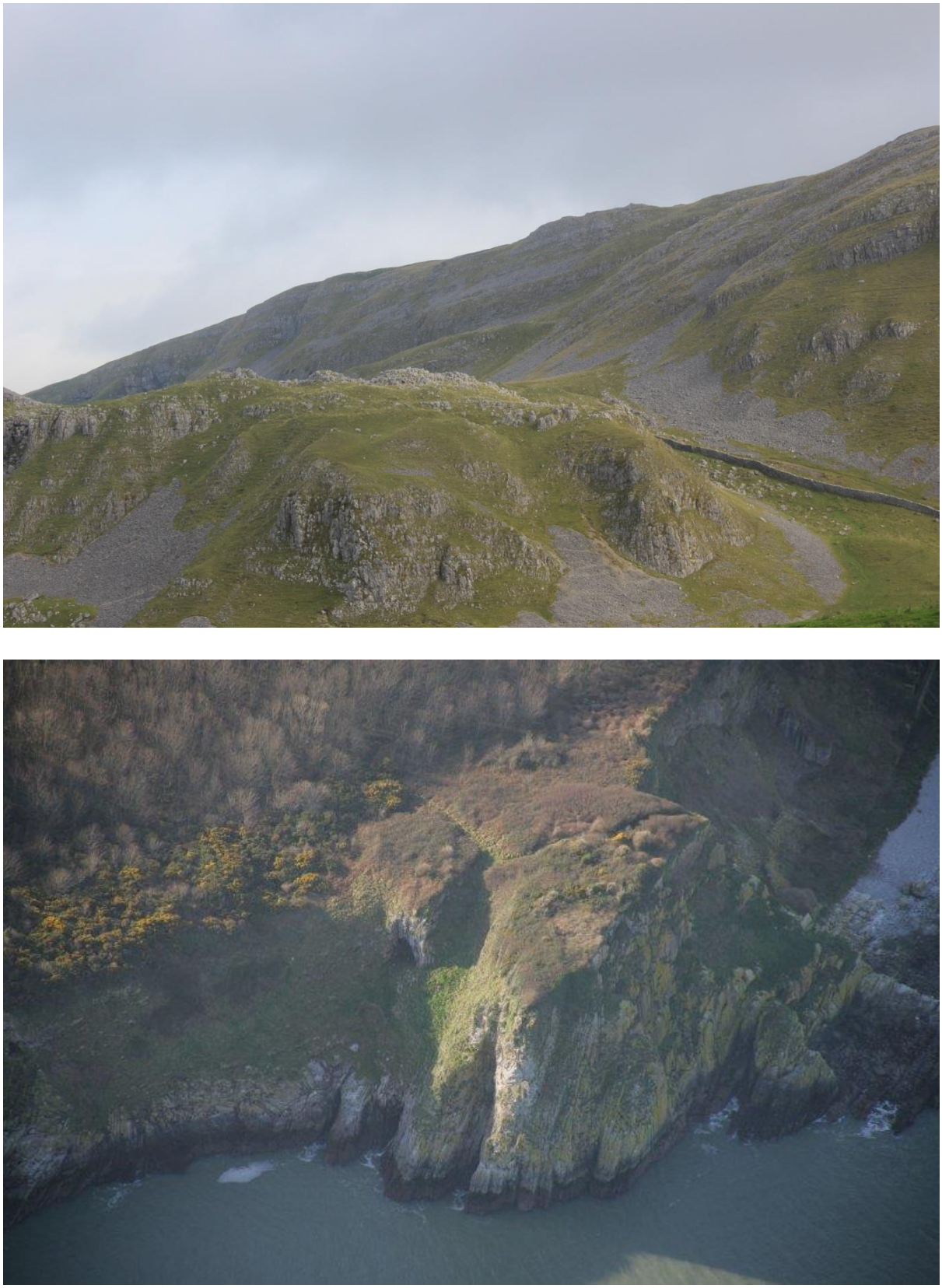


Figure 4-3: Attermire Scar, Yorkshire Dales (Author's Photo) Below: Nanna's Cave, Caldey Island (Cadw 2015)

4.2.3 Cave evolution beyond karst

Whilst solution erosion in karst environments is the primary method of cave evolution across the British Isles, mechanical erosion processes also lead to the formation of caves. Marine caves, such as those in the limestones of Morecambe Bay and the coast of Devon, are formed by variation in rates of marine retreat and terracing (Gillieson 2009: 29). As with caves formed in karst, lithology and bedding influences the morphology of sea caves (Figure 4.3). Significantly, wave action also influences the formation of caves by attacking the cave roof forming tall and narrow caves (Lace et al. 2013: 111).

A number of coastal Scottish caves were also formed by marine action, namely those found on northern and western coasts, although in a mixed geology including quartzite, basalt and slate (Tolan-Smith 2001: 4). Many of these caves are therefore found at the face of cliffs and are often smaller than caves formed in limestone. In harder geologies, rare occurrences of boulder collapse may also lead to the formation of sheltered boulder caves.

Table 4-1: Karst and cave geomorphology (After Waltham et al. 1997: 19)

Region	**Yorkshire Dales**	**Northern Pennines (Nidderdale, Morecambe Bay, Lake District)**	**Peak District**	**Mendip Hills**	**South Wales**	**Rest of Britain**
Karst						
-Dominant Type	Galciokarst	Glaciokarst	Fluviokarst	Fluviokarst	Interstratal Karst	Chalk, Non-Karst
Geology						
-Area	320 km^2	220 km^2	420 km^2	110 km^2	220 km^2	9000 km^2
-Relief	270 m	70 m	260 m	260 m	330 m	
-Limestone Thickness	200 m	40 m	400 m	700 m	150 m	
-Typical dip	1	1	5	30	10	
-Last Glaciation	Devensian	Devensian	Anglian	None	Devensian	
-Pavement Area	677 ha	613 ha	0	0	8 ha	
Geomorphology						
-Dry Valleys	X		XX	X	X	
-Karst Gorges	XX	X	X	XX		
-Collapse Features	X		X			
-Doline Fields	XX				XX	
-Ephemeral lakes					X	
-Polygonal Karst	X			X		
Caves						
Number of Caves	1420	620	210	220	270	1900
Cave Morphology						
-Major Passage Type	Vadose joints	Joint mazes	Phreatic	Phreatic	Vadose and strike phreatic	
-Total Cave Length	325 km	65 km	50 km	55 km	195 km	45 km
-Caves over 1 km long	50	9	9	10	12	6

4.3 Archaeological caves and cave distribution

The overall distribution of caves is useful in identifying the broader character of caves as an archaeological resource, which is often overlooked in modern landscape studies. Through a survey of Historic Environment Records and published surveys of caves containing Palaeolithic (Valdemar 1972) and human remains (Chamberlain et al. 2015), a total number of **1108** caves were identified across the British Isles (see Chapter 1 for methodology). In this respect 20% of total surveyed caves, of which there are 5522 known caves, contain evidence of archaeological activity or have been identified as containing potential deposits (Davies 1989, 1993; Figure 4.4).

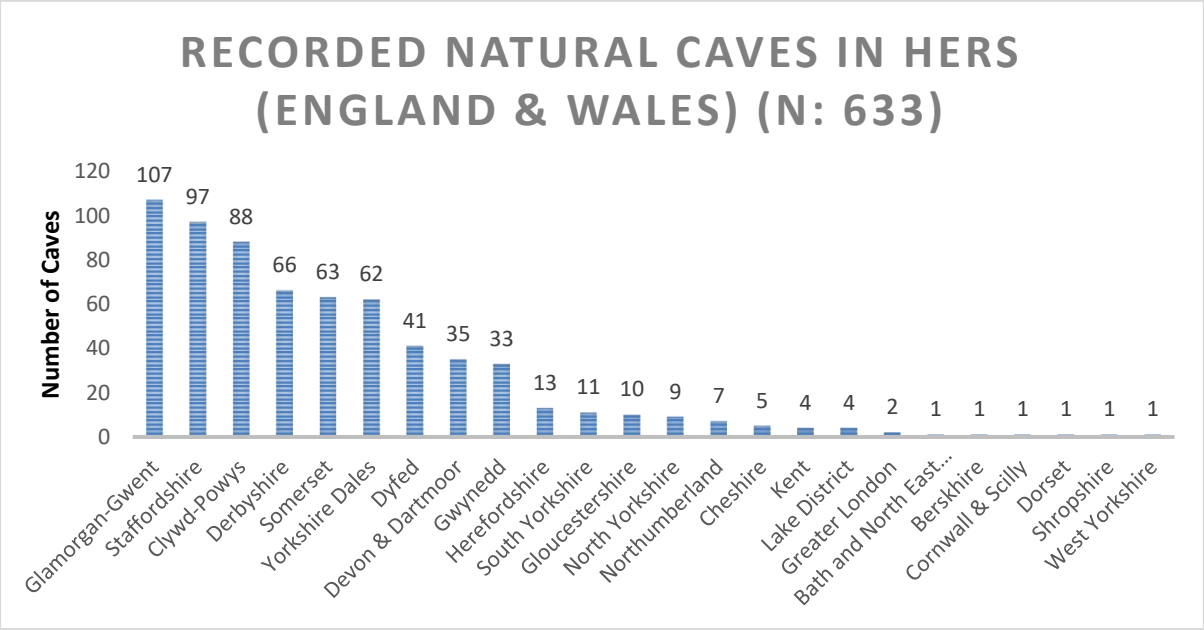


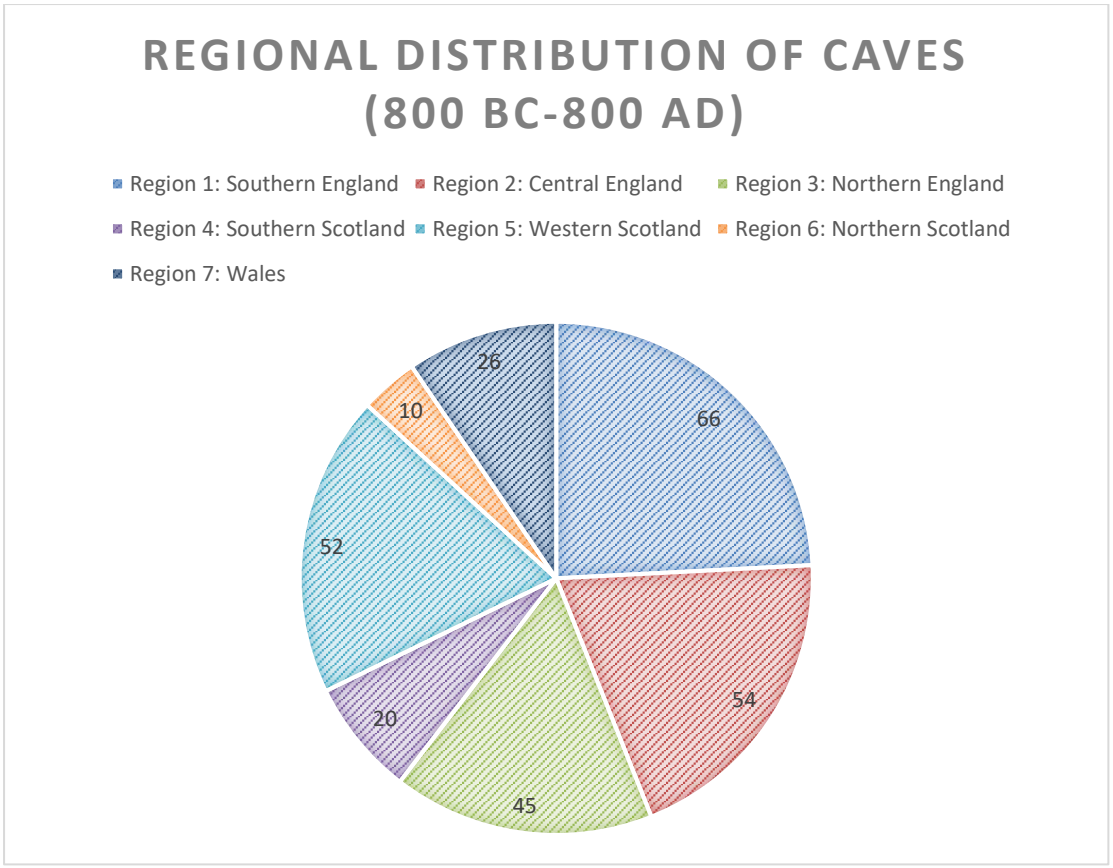
Figure 4-4: Recorded natural caves with archaeological activity in HERS in England and Wales (N: 663)

Regionally, caves with archaeological deposits are found in areas with natural densities of caves including Derbyshire and the Yorkshire Dales. Intensive surveys of sites across the Manifold Valley (Trent and Peak Archaeological Trust 1993), the Gower coastline (Davies 1993) and western Scotland (Wickham-Jones 2003) explain the large number of caves with archaeological activity in their respective HER databases, especially when compared to understudied regions, such as north and central England, which may be expected to have more caves with archaeological remains. Elsewhere, other factors may distort this picture, for example high instances of cave-use in Scotland (N: 445), must be understood within the longevity of cave-use into the 20th century as places of worship and shelter (see Chapter 7).

4.3.1 The speleological context of cave-use c.800 BC- 800 AD

This study has identified 275 caves in use between c.800 BC- 800 AD (N: 275), which accounts for **24.6%** of total known caves (N: 1108) with archaeological deposits, but only **5%** (N: 5522) of all caves across the British Isles. Such low occurrences are somewhat unsurprising given developments within modern speleology and recreational caving, along with the destruction caused by mining (see Chapter 1). Equally, erosional mechanisms specifically in sea caves affect the survivability of archaeological deposits, as recently highlighted by Scottish coastal assessments (SCAPE Trust 2010). Nevertheless, such numbers suggest specific reasoning behind cave choice, rather than coincidental use.

Regional distributions of caves (outlined in Figure 4.5; see Chapter 3) conform to variations in lithology and cave location, suggesting that areas with caves generally attracted use. Because of this, concentrations of caves are located in relation to Palaeozoic limestones, including Devonian limestone across Devon (N: 7) and south-west Wales (N: 13) and the White Limestones of Derbyshire (N: 40) and the Mendip Hills (N: 34). Elsewhere, erosion of harder rocks such as Gneiss, Felsic and Schistose in Scotland has led to a number of coastal caves, which were in use during the 1st millennia (N: 43).



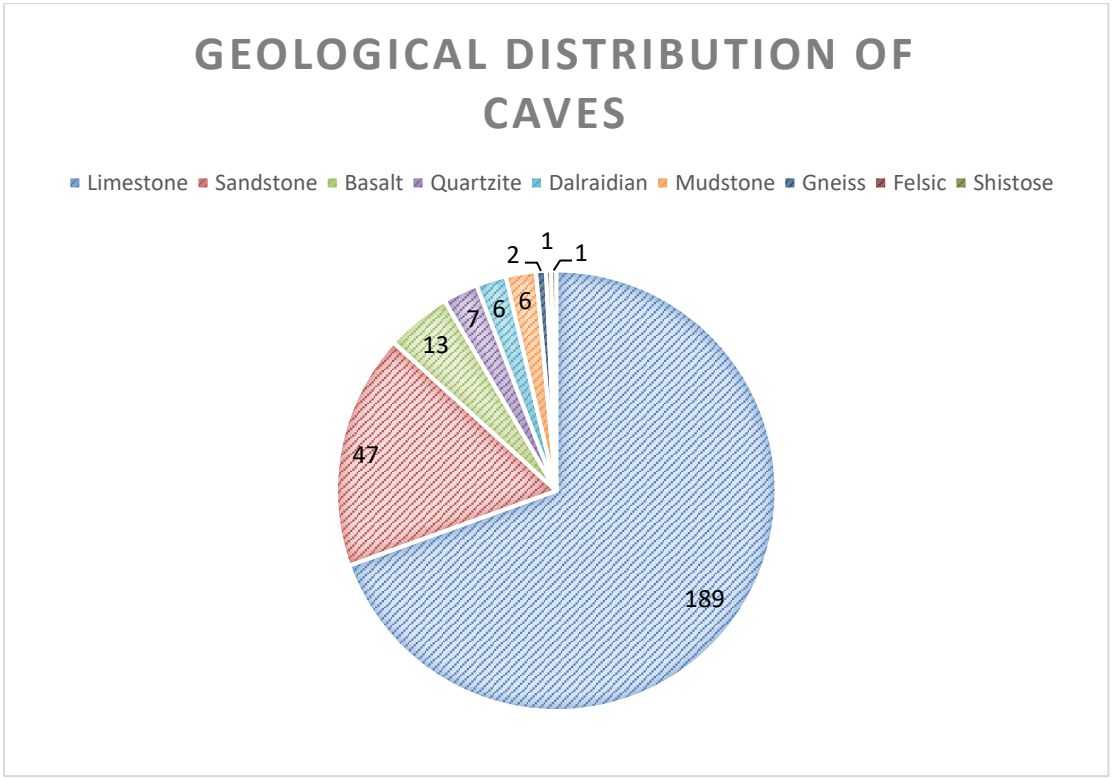


Figure 4-5: Above: Regional distribution of caves with dated activity, Below: Geology of caves in the study (N: 275)

4.4 The importance of cave morphology and experience

Whilst occurrences of cave-use are located in areas where there are known caves, the low number of overall caves with activity suggests that sites were selected rather than randomly used. There are a number of factors that potentially influenced cave choice, including location and cavescape experience. The discussion below will focus on the influence of cave morphology on activity and deposition in cavescapes, outlining the types of caves used before discussing the possible influences of experience.

As outlined in Chapter 2, recent studies have questioned traditional approaches towards caves, which have often relied on a division between caves and rockshelters. In such approaches, caves are often considered passive during human-use rather than active entities. However, studies of cave experience have highlighted the importance of the unique and transformative nature of cave sensescapes in influencing human experience and consequently use (e.g. Skeates 2007; Whitehouse 2001).

In order to assess this relationship between cave experience and activity, caves were divided into a range of types based on their morphology. As outlined above, the formation processes that lead to the development of caves in Britain has resulted in a variety of different types of cavescapes, characterised by horizontal and vertical inclines and the length and size of passageways, chambers and entranceways. These cave morphologies are not intended to serve as rigid typologies but rather to facilitate broad comparisons of cave experience in relation to patterns of human activity (Figure 4.6). Below I will outline the number of caves in each different morphological category as well as discussing how and why these caves may have been experienced differently in the past.

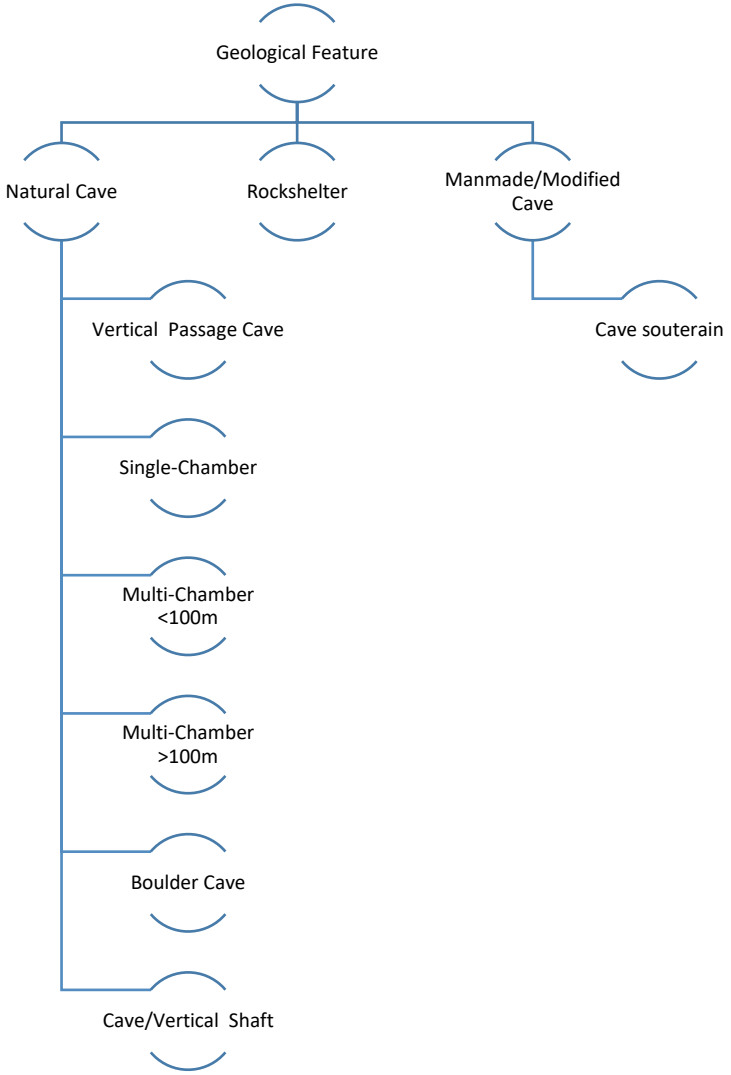


Figure 4-6: Cave morphologies used in this study, see Chapter 2 on how and why these categories were chosen

4.4.1 Rockshelter: morphology & distribution

Forty rockshelters were identified during the study and were defined as sheltered rock overhangs or open depressions in a rock face (Figure 4.7, 4.8). They are ubiquitous features in the landscapes, restricted only by the presence of erodible rock faces and are found both in upland and coastal landscapes (Figure 4.9). Rockshelters are not typically subterranean, although a number of sites have inaccessible rear drainage gullies or vertical shafts in the rock overhang. A number of sites are also associated with natural caves, sealed by mechanical processes such as rock fall and are also often sheltered by substantial overhangs.

Given their morphology (Table 4.2), rockshelters offer experiences that contrast greatly to other subterranean caves. The aspect and size of rockshelter overhangs dictates the amount of light, exposure and visibility inside the shelter. Generally, the human experience of these sites is characterised by extensive viewsheds and light spaces, especially when compared to other caves. Furthermore, depending on whether rockshelters are located on open faces or at the bases of cliffs, they are often difficult to access. Accessing sites on cliff faces further intensifies the human experience of rockshelter use and often means that users need knowledge of the access route in order to reach the site (see Chapter 5).

Table 4-2: Morphological characteristics of rockshelters (N: 40)

Average Mouth Size (m)	Average Mouth Height(m)	Length (m)	Width (m)	Height(m)	Altitude (m)
8	2.4	7.8	8.8	4.5	115

Figure 4-7: Example of a limestone rockshelter at Roche Valley, South Yorkshire (Author's Photo)

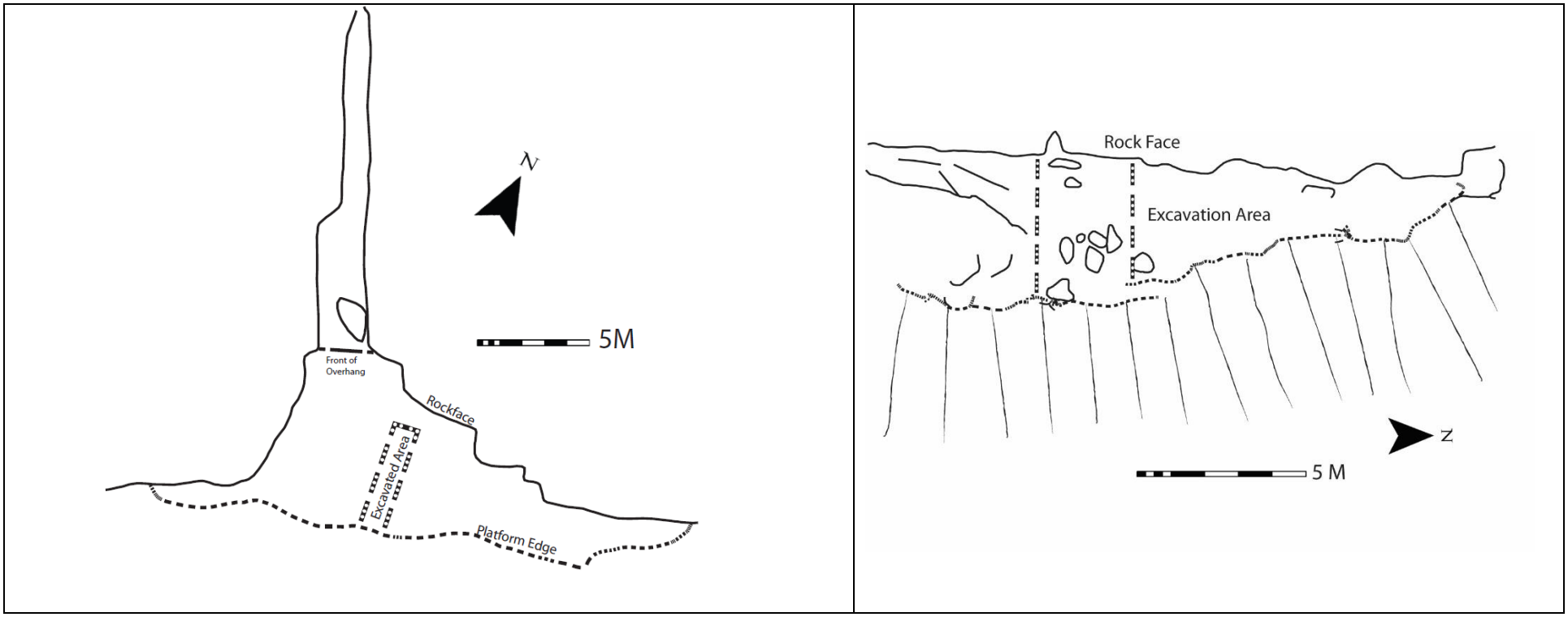


Figure 4-8: Example of rockshelters identified during the study. Left- Uamh an Duin, Barra (135) a rockshelter located on a sea cliff (After: Branigan et al. 2000: 225) and Right- An Corran Rockshelter, Skye (210; After Cowie 2012)

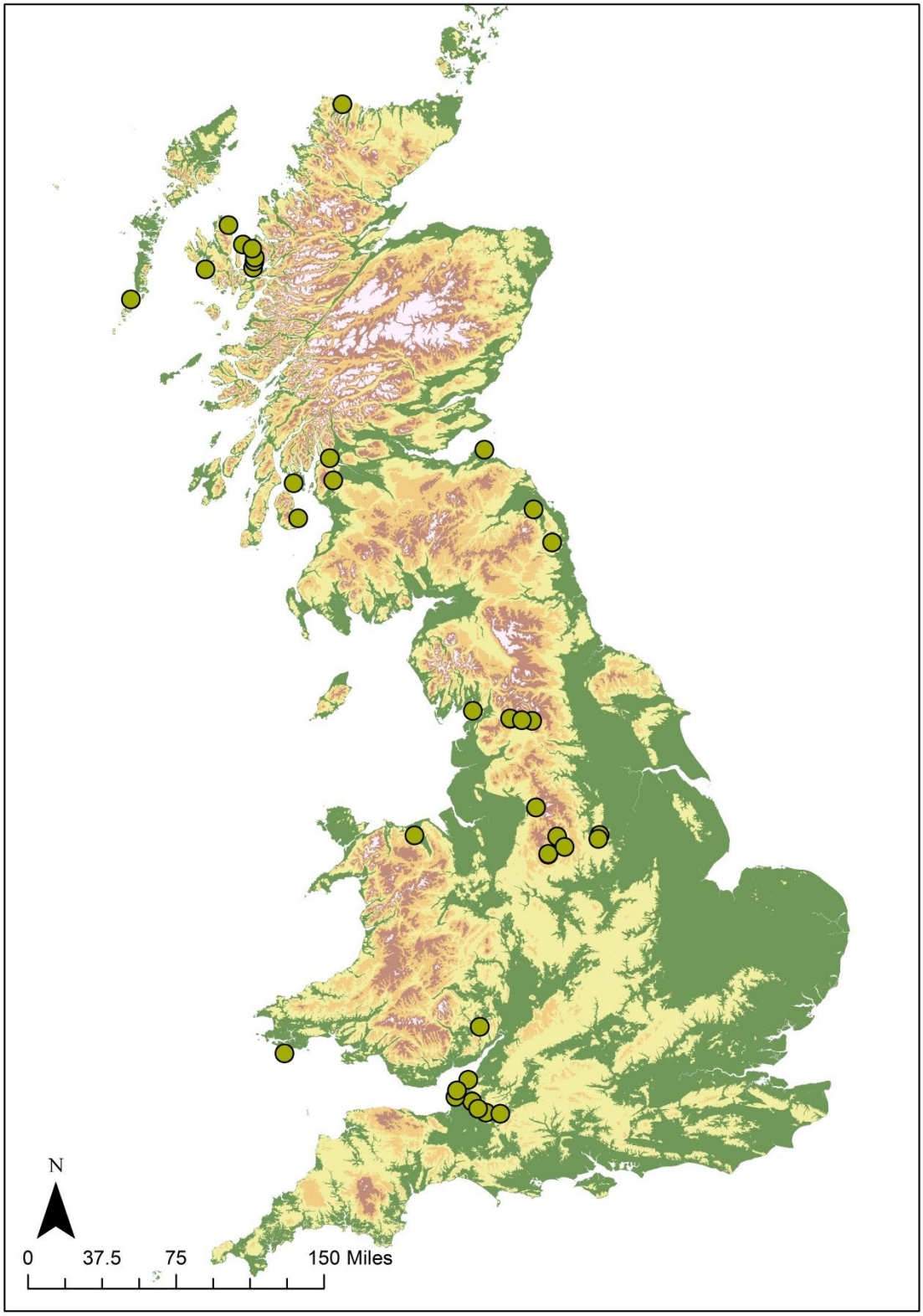


Figure 4-9: Distribution of rockshelters across the British Isles (N: 40).

4.4.2 Vertical passage cave: morphology & distribution

These caves are defined by vertical or near-vertical shafts located in exposed limestone pavements (Figures 4.10, 4.11). In total, seventeen vertical passage type caves were identified as part of this study (Table 4.3). Vertical passage caves are restricted to exposed areas of limestone mainly in the Northern Pennines and the Mendip Hills (Figure 4.12). However, as outlined above they are also often part of drainage systems in karst landforms. For example, Charterhouse Warren Farm Swallet (**59**) in the Mendip Hills, connects to a series of extensive drainage networks containing chambers and horizontal passageways. A unique example in this category is Dowkerbottom Hole, Littondale (**8**), North Yorkshire, which is an example of the collapse of a cave roof leading to the formation of a vertical passage type cave (Figure 4.10).

Given the location of sites such as Dowkerbottom Hole in exposed limestone pavements, the entrances to these caves are often hidden to those moving on the pavement. In order to access these sites, users would need to know the cave's location and how to negotiate the vertical entrance safely, which would have become more difficult during periods of wet weather. The appearance of these caves, coupled with the esoteric nature of their location creates unique sensescapes, which contrasts to those found in horizontal caves. Significantly, vertical passage caves often appear as deep vertical holes in the ground and as such seem to be bottomless. Movement in these caves also creates unusual kinetic experiences, perhaps comparable to the movement down man-made pits (see Chapter 7).

Table 4-3: Morphological characteristics of vertical passage caves (N: 17)

Average Mouth Size (m)	Average Mouth Height(m)	Length (m)	Altitude (m)
1.5	1.7	2407	212

Figure 4-10: Dowkerbottom Hole, Littondale (8, Author's Photo): The cave appears as a bottomless shaft in the flat limestone pavement

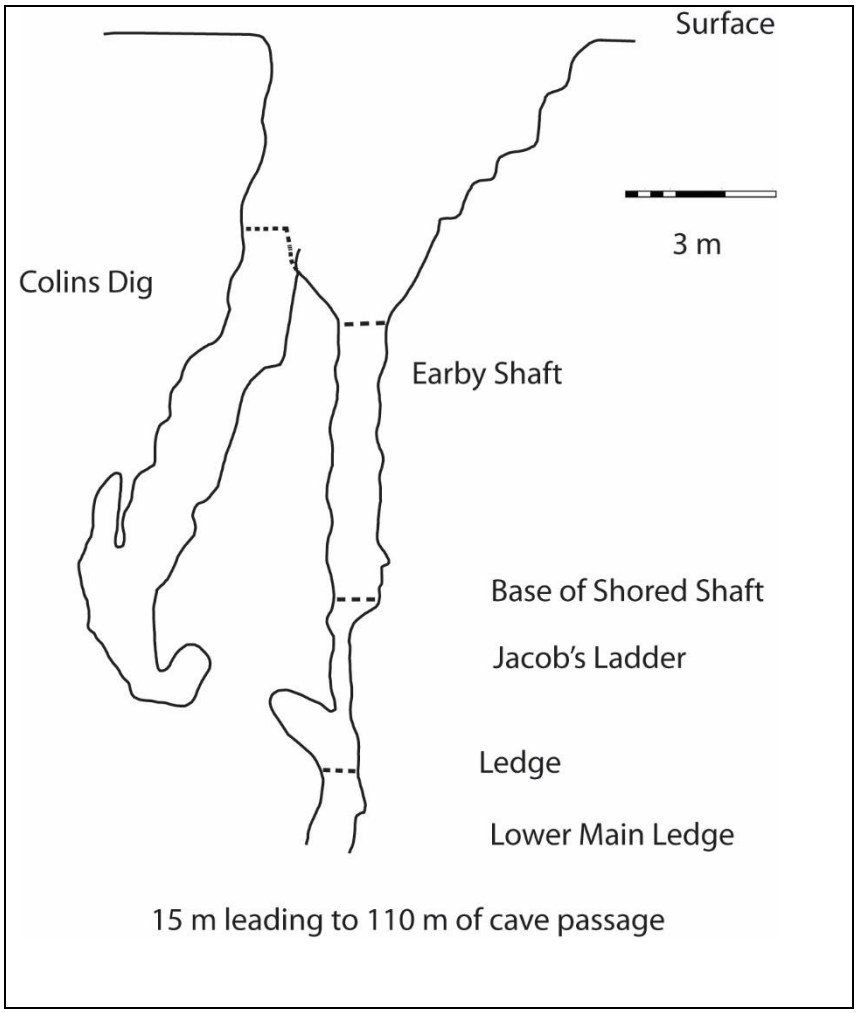


Figure 4-11: Example of a vertical shaft- Plan of North End Pot (10; After Earby Pothole Club 2013)

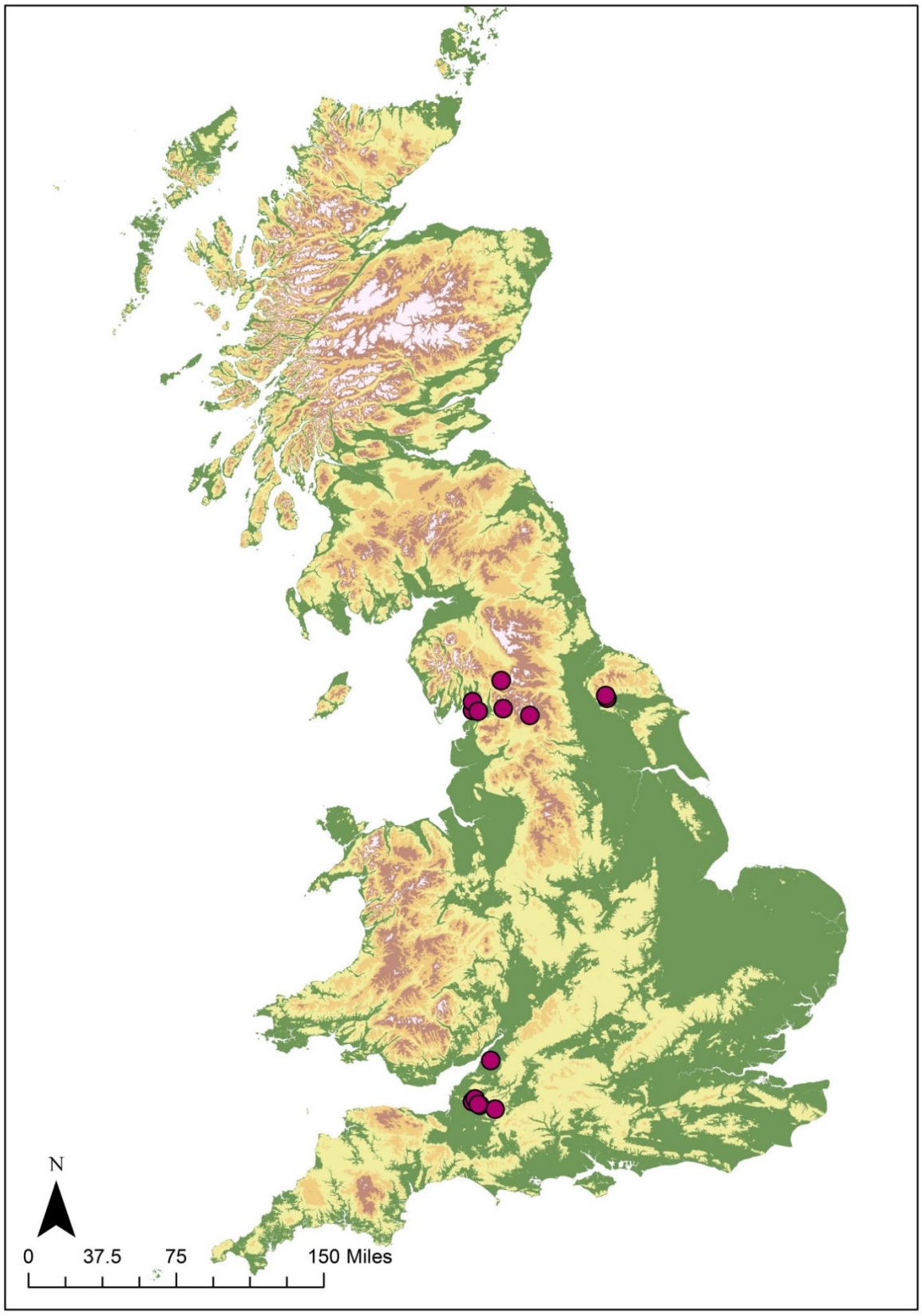


Figure 4-12: Distribution of vertical passage type caves across Britain (N: 17). These are restricted to limestone in North Yorkshire and the Mendip Hills

4.4.3 Single-chamber cave: morphology & distribution

Single-chambered caves can be defined as a horizontal entranceway expanding into a single chamber (Table 4.4). These are the most ubiquitous type of cave found across Britain, with 92 caves identified during the study (Figure 4. 13). These caves can be of varying lengths and can comprise either a single drainage passage or chamber or have both an entrance passage leading into a single chamber. Figure 4.14 illustrates two different types of single chambered cave: Constantine's Cave (**138**) made of a single small chamber, and Wet Cave (**298**), which is formed of a single narrow drainage passage.

Table 4-4: Morphological characteristics of single-chambered caves (N: 92)

Average Mouth Size (m)	Average Mouth Height(m)	Length (m)	Width (m)	Height(m)	Altitude (m)
4.9	3.3	12	7.2	3.7	107

Figure 4-13: Interior of Wet Cave, North Yorkshire a single chambered cave (Author's Photo)

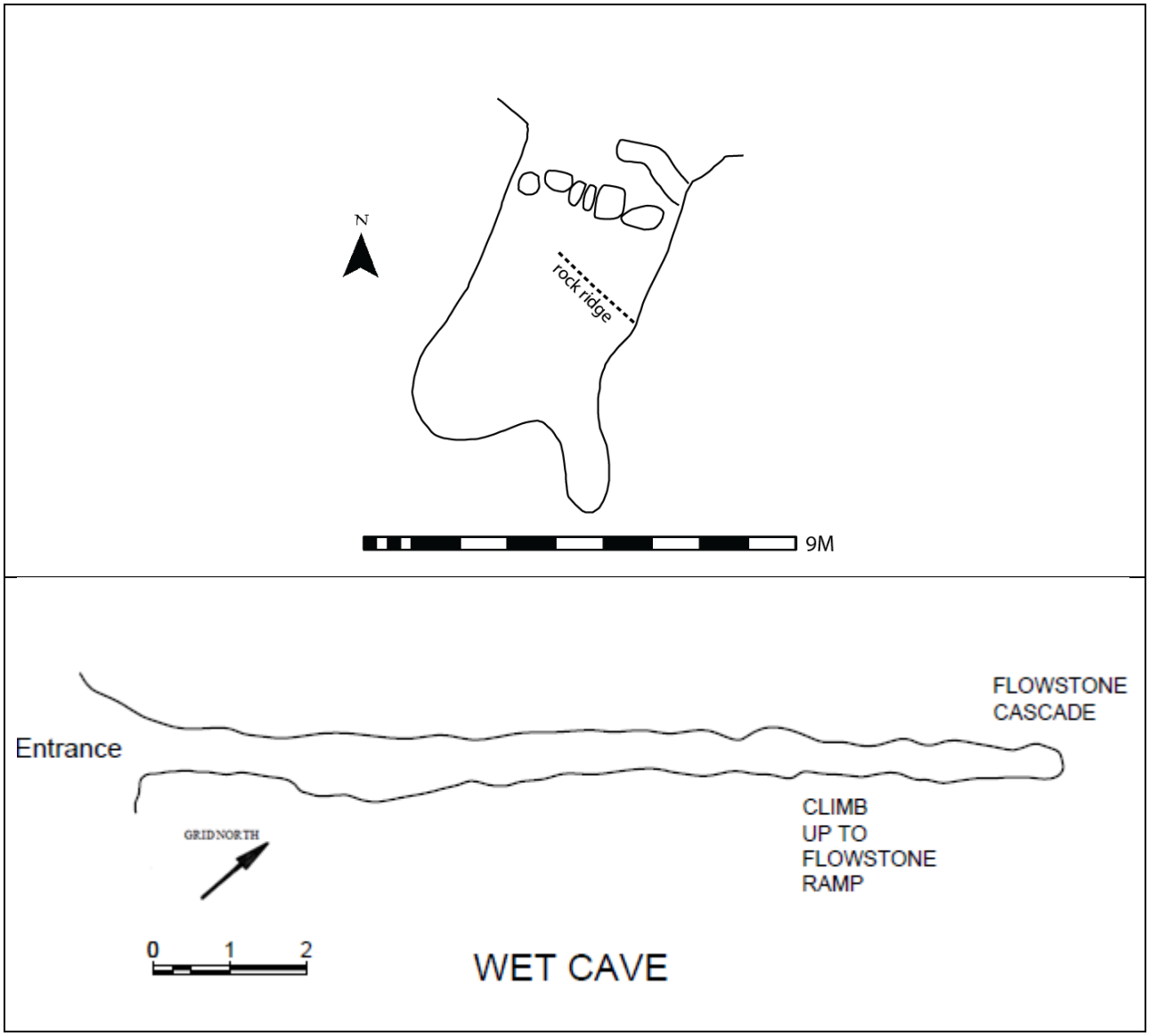


Figure 4-14: Examples of single-chambered caves. Above- Constantine's Cave (138), Fife (After Wace et al. 1915:240) made of a single chamber within the rock face. Below: Wet Cave, Settle (After cavemaps n.d.a), made of a single c.12-metre-long passage.

As a result, the experiences of single-chambered caves maybe distinct, given the differences in the sensescapes associated with negotiating different sizes of entrances and chambers. Nevertheless, these caves also share similar experiences in terms of the nature of transition from cave entrances and the presence of a less complex cavescape in the form of a single chamber or passage. This contrasts to vertical shaft like caves and more complex multi-chambered caves, which can be made of multiple passages and chambers, enhancing the human experience of negotiating underground spaces.

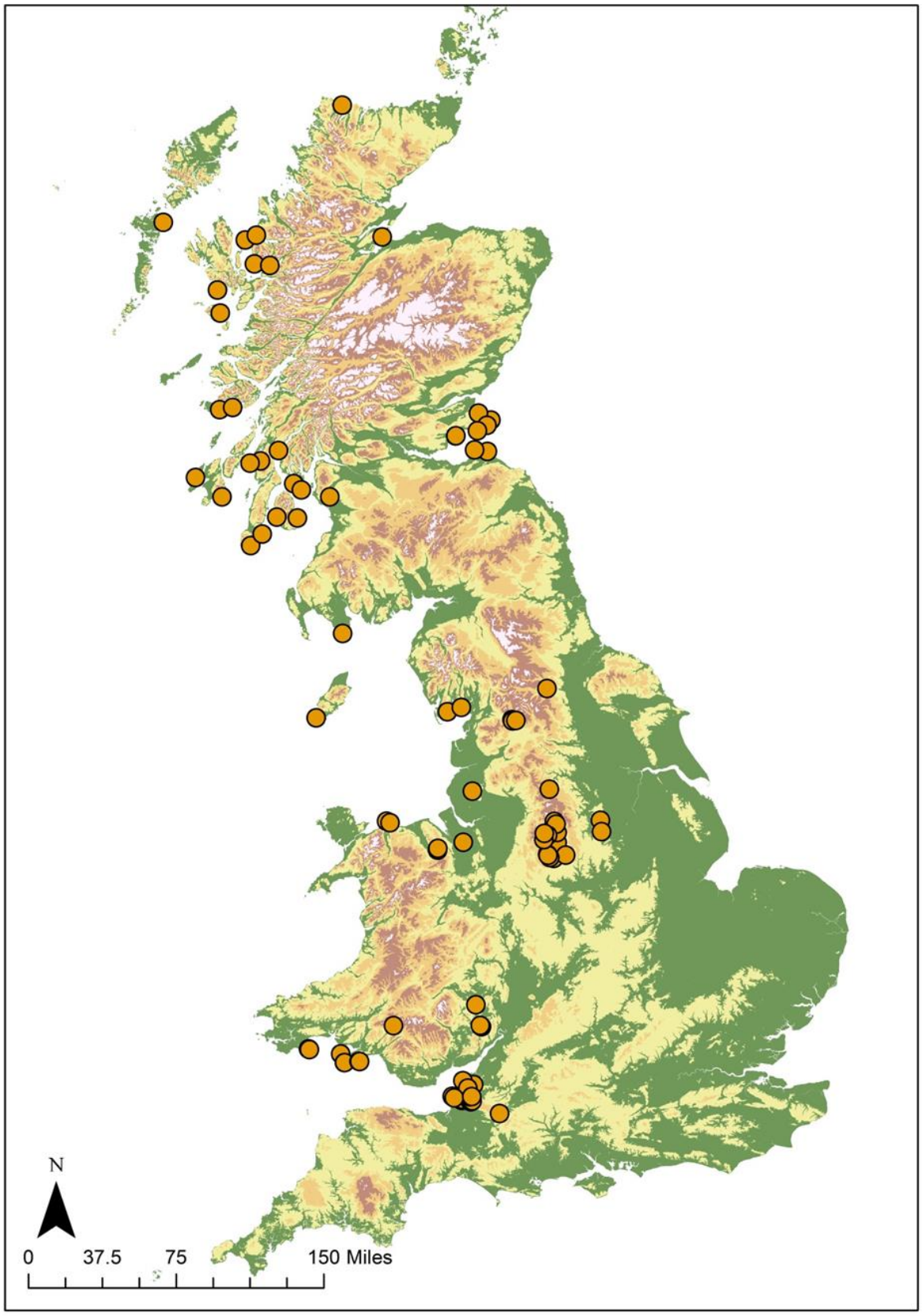


Figure 4-15: Distribution of single chambered caves across Britain, demonstrating the ubiquity of this type of cave (N: 92)

4.4.4 Multi chamber caves <100 metres: morphology & distribution

Unlike, single chambered cavescapes, multi chamber caves are more complex and are made of more than one chamber or passageway up to a length of less than 100 metres (Figure 4.17). In total, fifty-two multi chamber caves were identified in a range of geologies, although the majority were located in soluble upland limestone (Figure 4.18).

Table 4-5: Morphological characteristics of multi chamber caves (N: 52)

Average Mouth Size (m)	Average Mouth Height(m)	Length (m)	Width (m)	Height(m)	Altitude (m)
3.9	3.6	19.4	7.4	5.4	164

Given their size, such caves can have two or more entrances, leading to a series of chambers that can be of varying depth and incline (Table 4.5). As a result, they can be comprised of a mixture of vadose and phreatic passages, along with sequences of restrictive crawls. The nature of experience in multi-chambered caves, therefore contrasts significantly to those of less morphological complex caves, including single chambered caves and rockshelters. The presence of passages and chambers of varying height and width may confuse users by altering the kinetic experience of cave-use (Figure 4.16).

Figure 4-16: Entrance to King Arthur's Cave, Gloucestershire (56), a multi-chamber cave with double entrance (Author's photo)

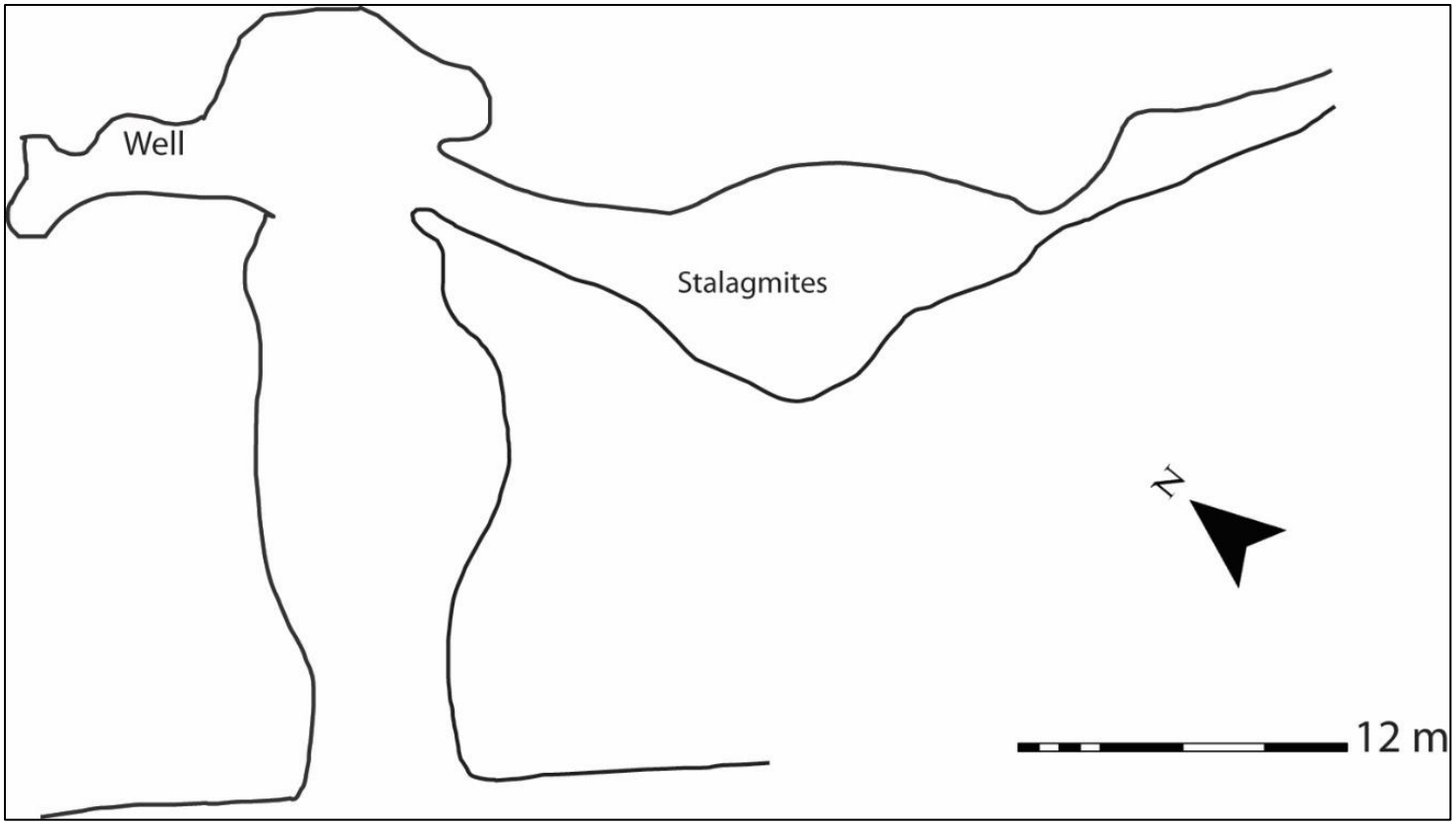


Figure 4-17: Examples of a Multi-Chamber type cave. Uamh Um Colonsay (246 ; After Grieve 1880: 352)

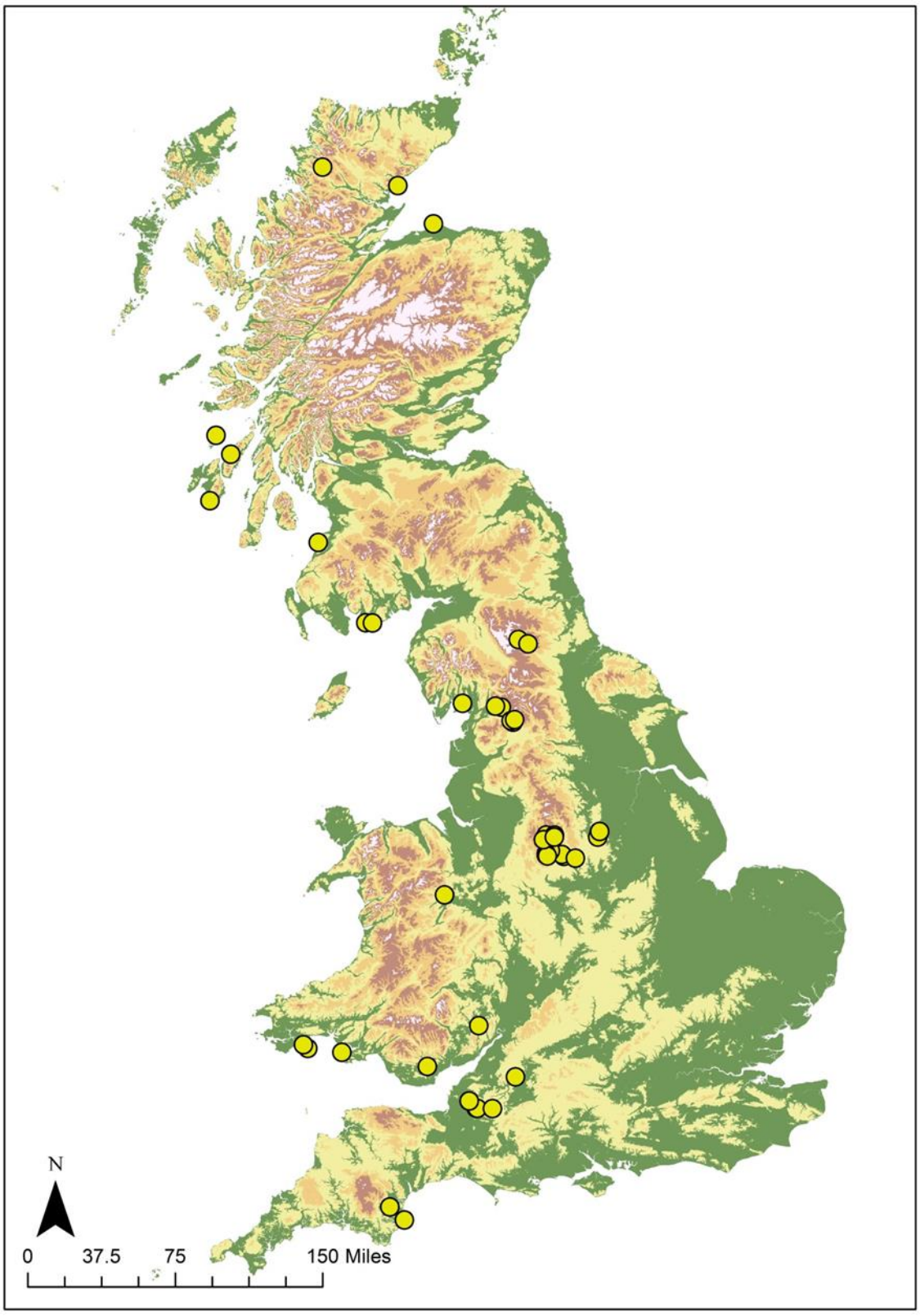


Figure 4-18: Distribution of multi chamber caves in Britain (N: 53)

4.45 Multi-Chamber >100m: morphology & distribution

Multi-chambered caves of exceptional length are included in this category (Table 4.6). Sixteen of these caves were identified, which were restricted to areas of karst drainage (Figure 4.19, 4.20). These caves are made of extensive and complex cavescapes and often more than one kilometre long.

Table 4-6: Morphological characteristics of multi-chamber caves over 100m in length

Average Mouth Size (m)	Average Mouth Height(m)	Length (m)	Altitude (m)
8	2.5	830	188

Due to the size of the caves, many of the passages form active water permeating the water table and have a number of vadose and phreatic passages. Extensive multi-chambered caves also contain a variety of speleothems including underground river systems, stalagmites, calcite growth and stalactites. Examples of caves in this category include well-known sites, such as Poole's Cavern (**25**), Buxton, which extends at least c.310 metres in length forming part of the River Wye system (see below) and the extensive Mendip karst cave of Browne's Hole (**72**) c.275 metres in length.

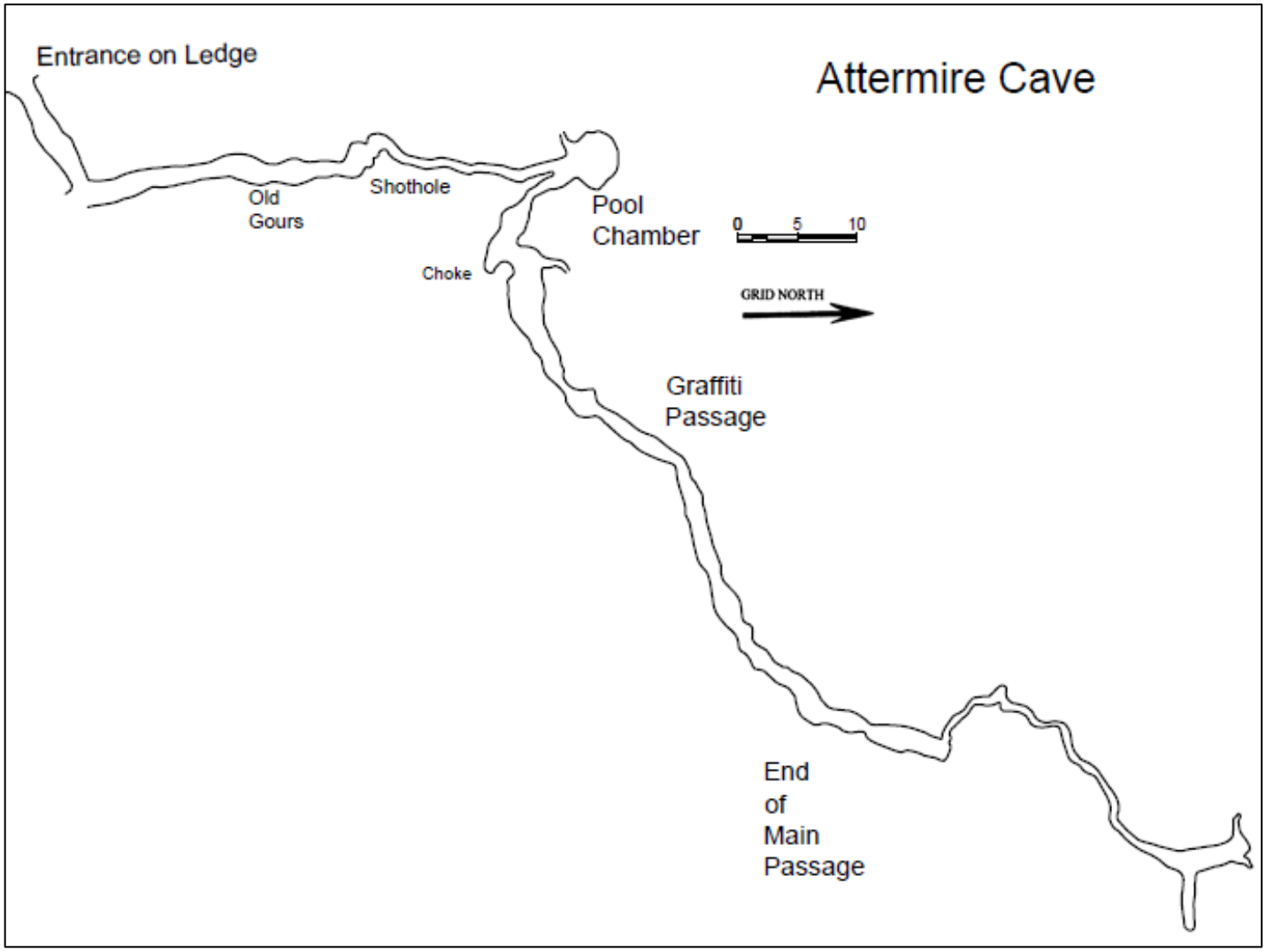


Figure 4-19: Example of a multi-chamber cave in excess of 100m. Attermire Cave (16), Settle is made of a sequence of chambers and passages including a number of creeps and climbs, demonstrating the complex experiences offered by multi-chambered karst caves (After cavemaps n.d.b)

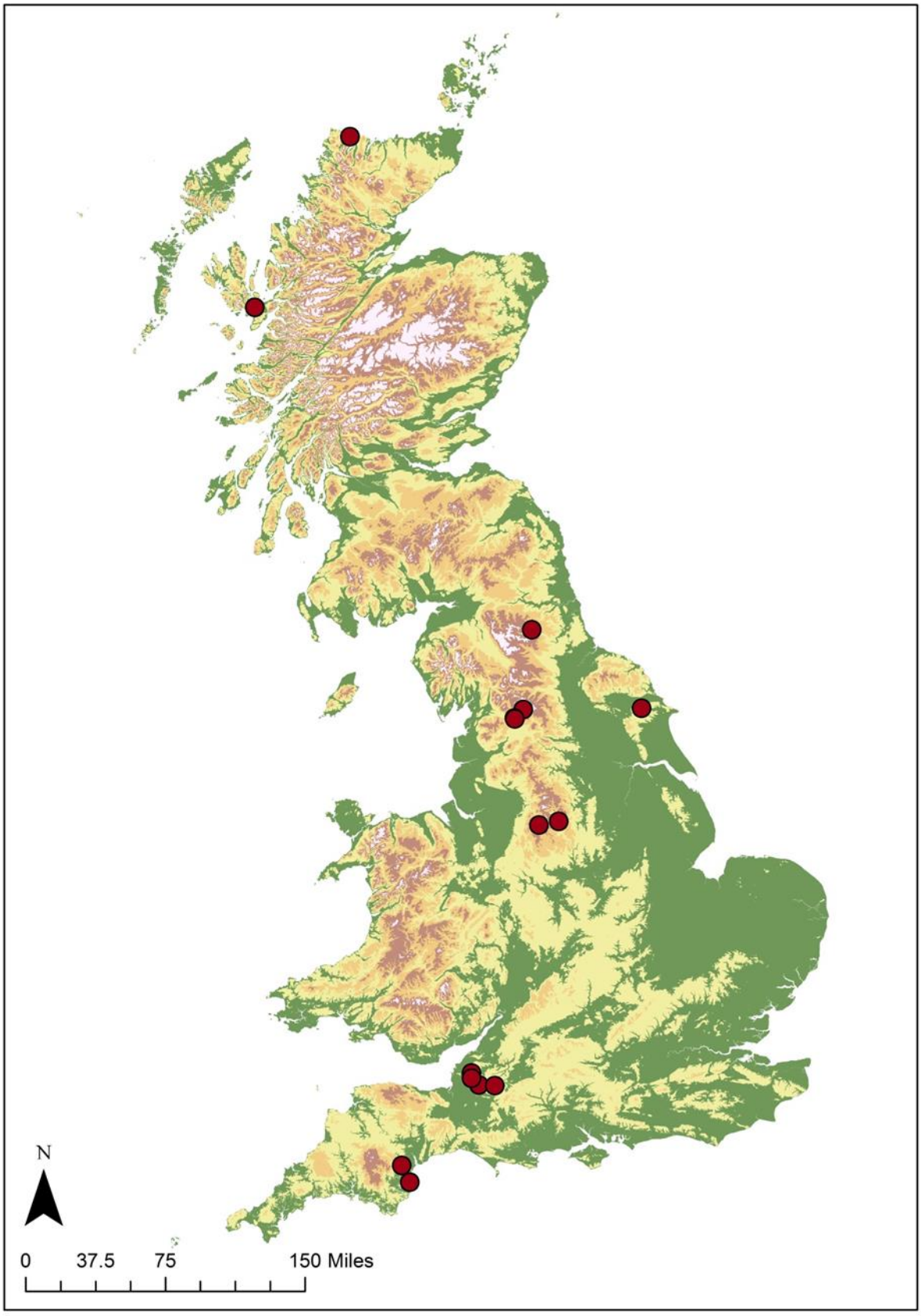


Figure 4-20: Distribution of multi-chambered caves in excess of 100m in Britain. These are restricted to areas of karst limestone drainage. (N: 16)

4.4.6 Boulder Cave: morphology & distribution

The collapse of sandstone, gneiss and Dalridian rocks in western Scotland has also led to the formation of accessible irregular shaped chambers under fallen boulders, which are further enhanced by erosion and sediment build-up (Figure 4.21, 4.22). Given the unique processes leading to the creation of boulder caves, these sites are rare with only four identified as part of this study (Table 4.7). The experiences offered by such sites are comparable to single-chamber type caves, although crevices in the boulder roof offer more exposure to natural light.

Table 4-7: Morphological characteristics of boulder caves (N: 4)

Average Mouth Size (m)	Average Mouth Height(m)	Length (m)	Width (m)	Height(m)	Altitude (m)
1.5	2	3.1	3.9	2.6	48

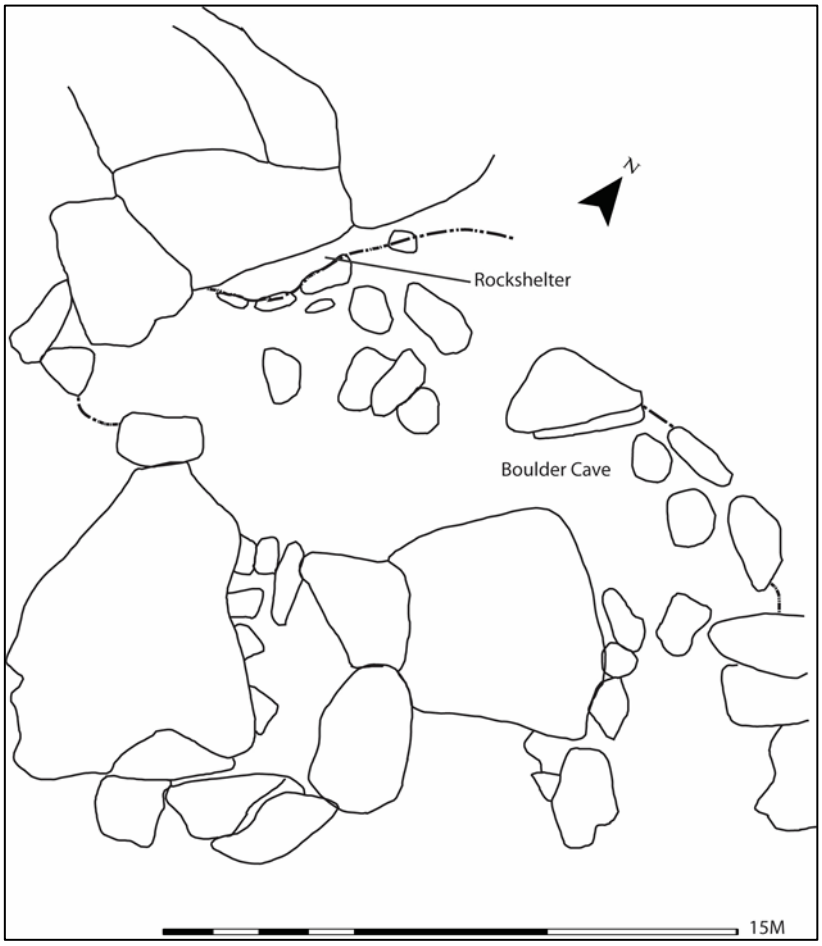


Figure 4-21: Example of a boulder cave in western Scotland. Ellary boulder cave (144), is made of a series of boulders near a natural rock overhang (Tolan-Smith 2001: 75)

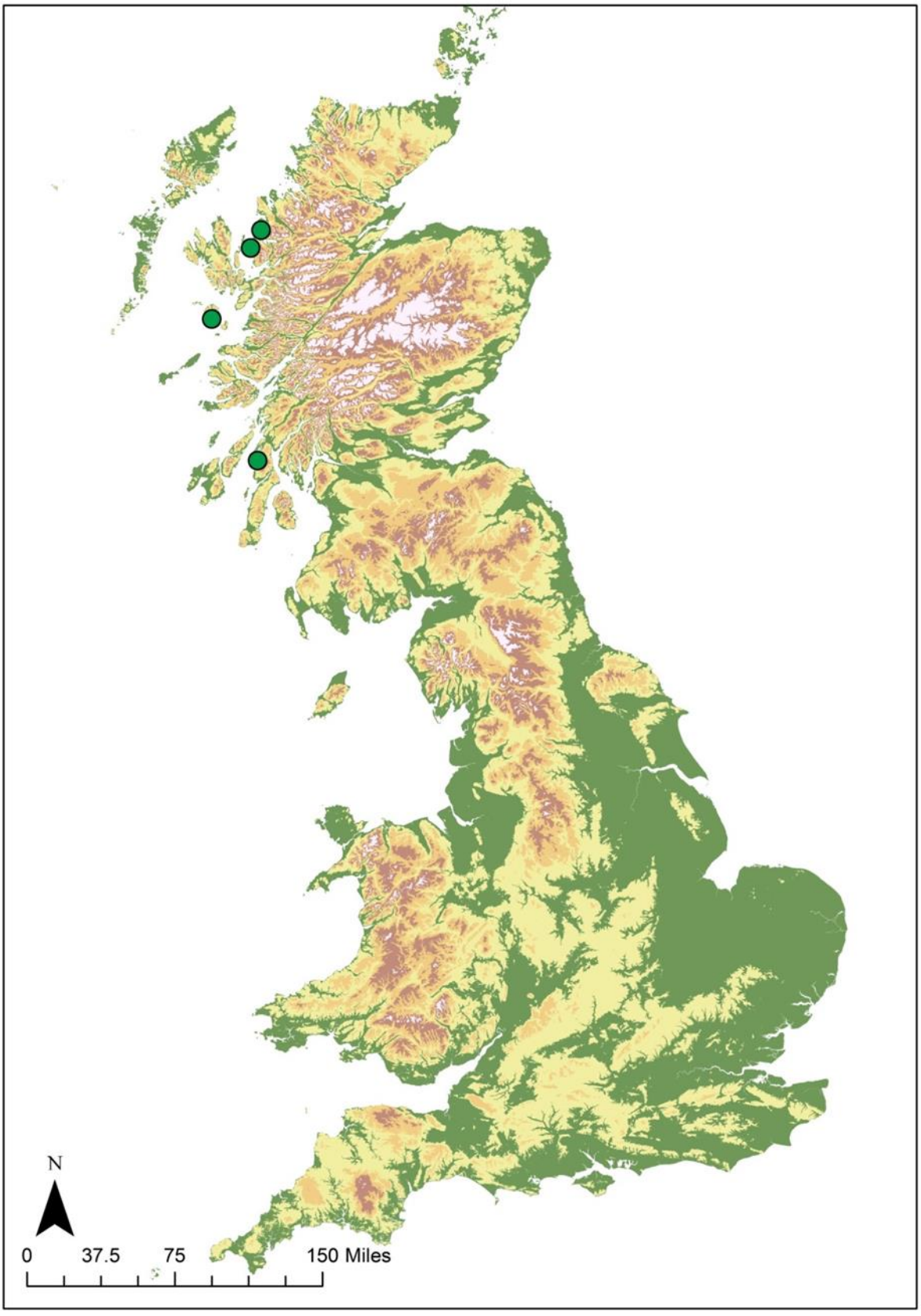


Figure 4-22: Distribution of boulder caves in western Scotland (N: 4)

4.4.7 Cave/ Vertical shaft: morphology & distribution

Formation of cave passages by water is often dictated by gravitation dip in vertical cracks. Over time, the unstable nature of many vertical cave passages leads to collapse (see above). If collapse does not occur, caves can have multiple entrances of both vertical and horizontal horizons. However, smaller caves with an associated open vertical shaft, often found towards the rear of a cave chamber can be considered distinct in nature. Six caves were included in the database with two types of entrances (Figure 4.24). These caves offer contrasting experiences depending on the entrance used (Table 4.8). Consequently, these caves are often brighter than other caves making them easier to navigate.

Table 4-8: Morphological characteristics of caves with horizontal and vertical entrances (N: 6)

Average Mouth Size (m)	Average Mouth Height(m)	Length (m)	Width (m)	Height(m)	Altitude (m)
7.6	4.7	7.8	3.5		134

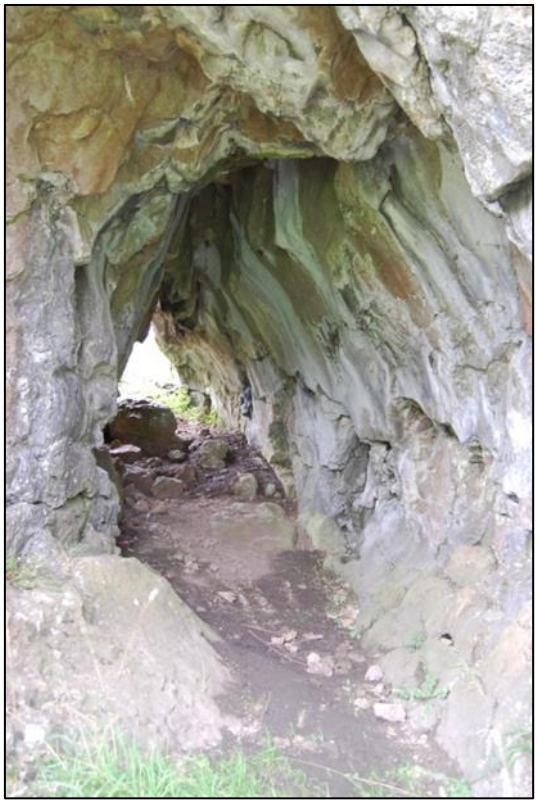


*Figure 4-23: Example of a cave with both a horizontal entrance and vertical shaft. Fairy Hole (**7**), North Yorkshire, is made of a single passage leading to a vertical and horizontal cave entrance (Author's Photo)*

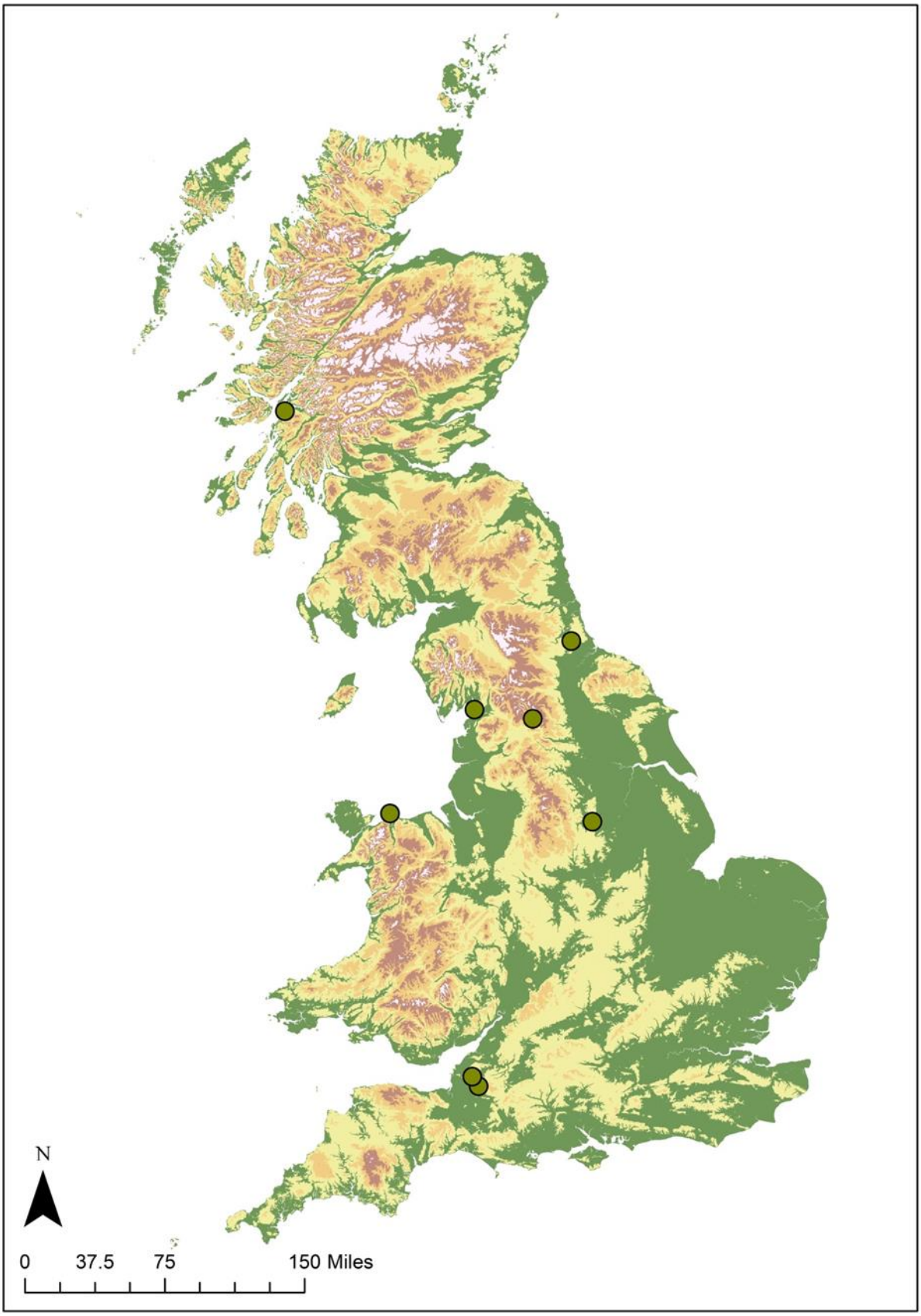


Figure 4-24: Distribution of caves with both vertical and horizontal entrances (N: 6)

4.4.8 Manmade/Altered caves: morphology & distribution

Within this category are caves that were accessed by activities such as mining or purposefully enhanced through human activity (Figure 4.25). Three caves located in chalk karst were accessed by man-made passages (see above) whilst a mine dug in Little Doward hillfort (**318**) was reported to have entered a natural chamber containing two human skulls (Bowden 2009: 8).

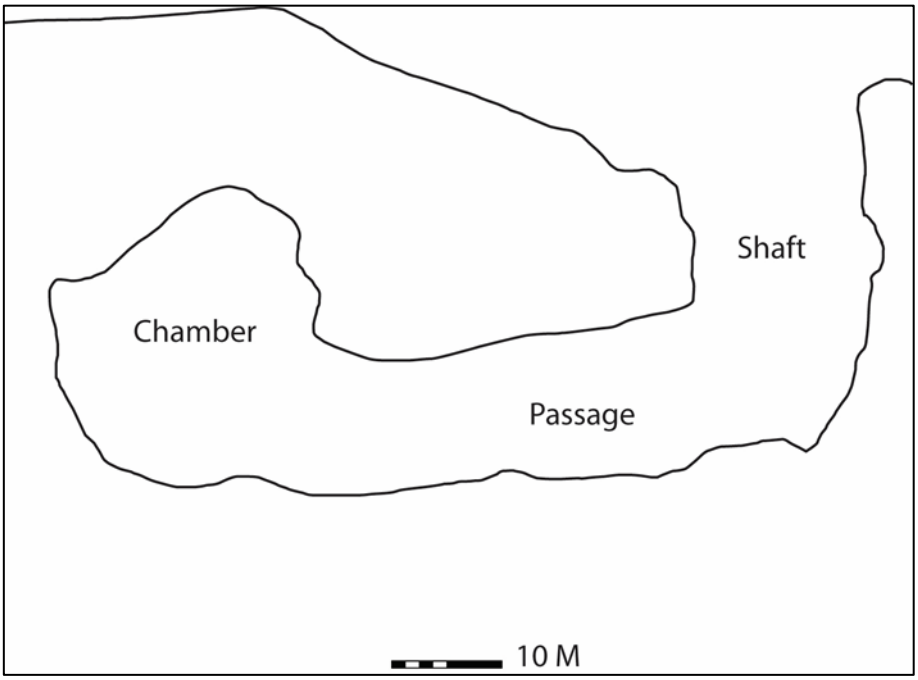


Figure 4-25: Section of the man-made chamber cut into chalk bedrock at Spratling Court Farm, Kent (79) This is a type of man-altered cave, dug into the Kentish chalk (After Baker 2011)

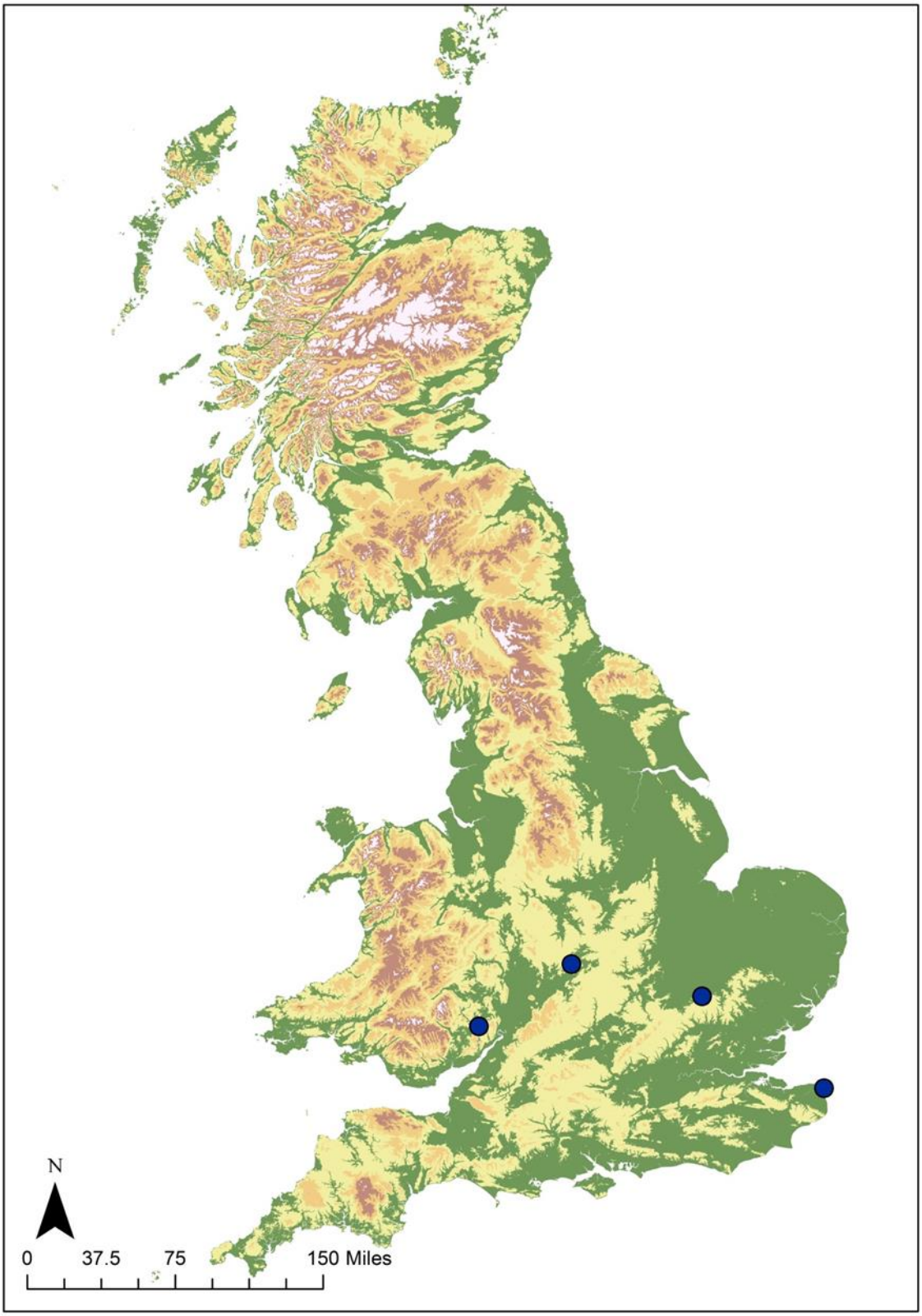


Figure 4-26: Distribution of man-made caves in Britain (N: 4)

4.4.9 Cave souterrain: morphology & distribution

The simulation of cave experiences can also be demonstrated by souterrains that incorporated natural chambers. Three examples are recorded in the database, Cnoc An Aoil (**262**), Uamh nan Ramh (**272**) and Ardeer (**275**) (Figure 4.27, 4.28). All three, are comprised of a constructed passage, which leads to a natural cave that serves as a terminal chamber. This may demonstrate that through constructing souterrains communities intentionally sought to simulate cave-like experiences, using architectural devices that emulate cave sensescapes (see Chapter 7).

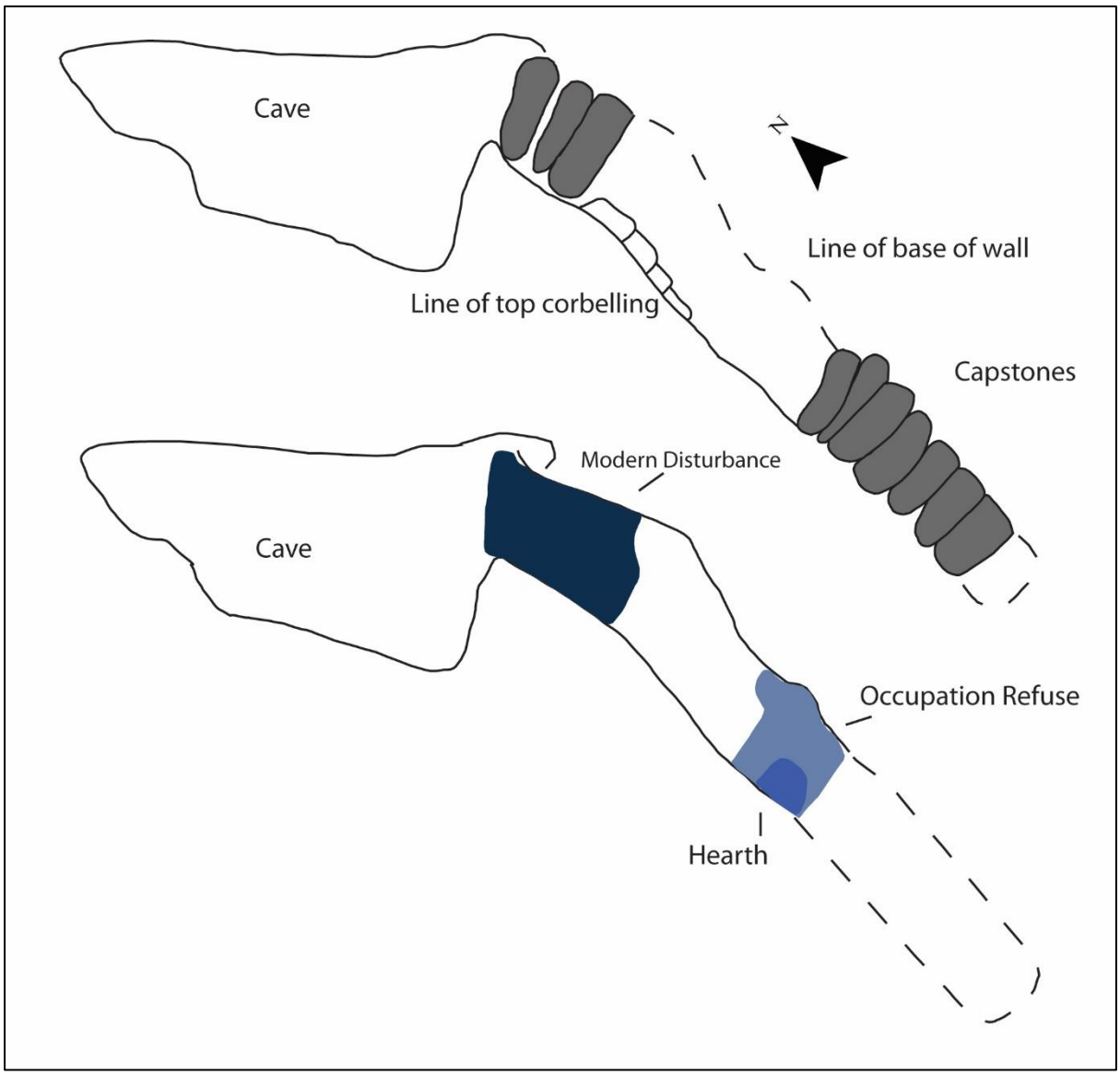


Figure 4-27: The cave souterrain at Ardeer, Ayrshire (275). This site is made of a natural cave chamber with a man-made corbelled passage leading into it (After Hunter 1973)

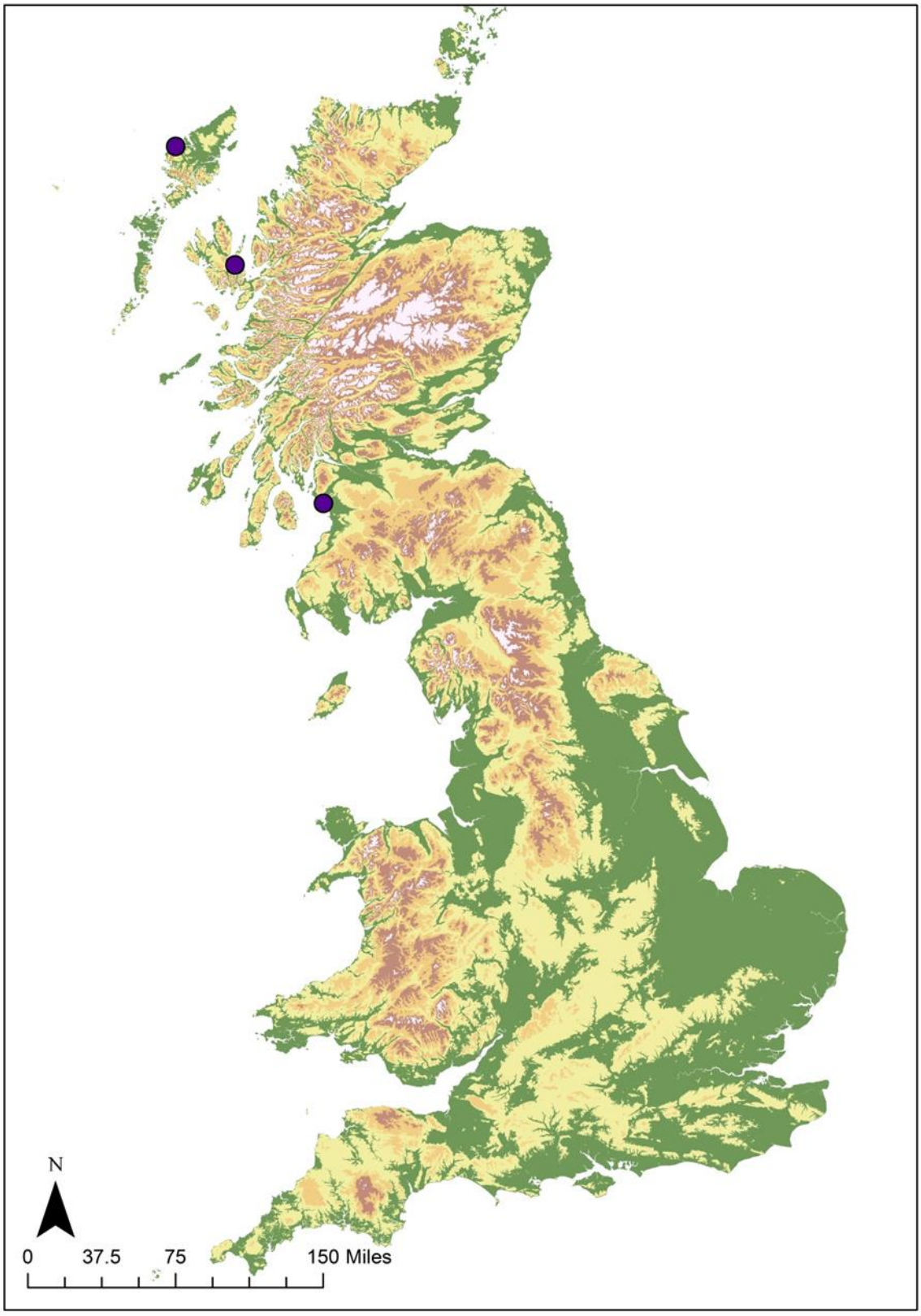


Figure 4-28: Distribution of man-made cave souterrains in Scotland (N: 3).This demonstrates an interesting relationship between subterranean man-made structures and natural cavescapes

4.5 Morphology, experience & cave-use in the 1st millennia BC and AD

The discussion above has illustrated the broad array of cave morphologies encountered by cave users during the 1st millennia. Using these different types of caves would also mean that a range of experiences confronted people. Therefore, in order to discuss how cave morphology may have influenced cave selection and use, it is necessary to explore the types of activity recorded in different cave morphologies. By comparing types of cave-use in rockshelters to archaeological evidence of use of more complex multi-karst environments, the possible relationship between human action and cavescape experience can be explored.

4.5.1 Overview of cave morphology & regional distribution

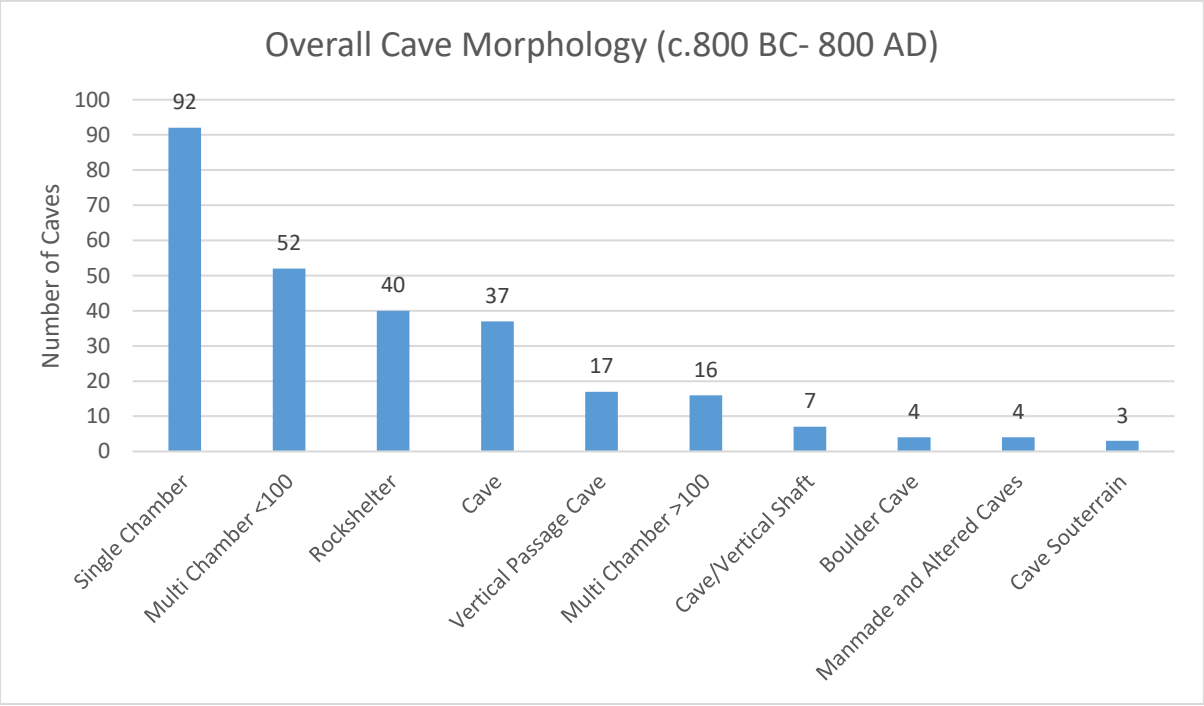


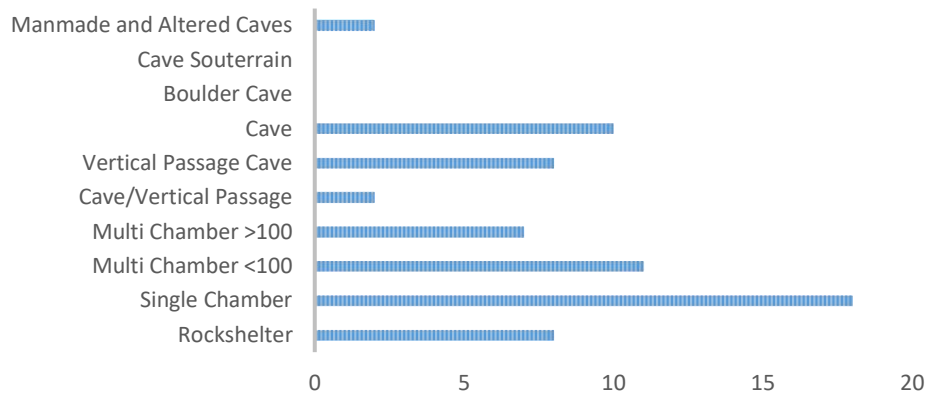
Figure 4-29: Overview of morphology types identified in the current study (N: 275)

Before focusing on the archaeological evidence of use at different caves, it is necessary to outline the broad nature of cave morphology, in order to identify any regional bias in the types of caves recorded during the study. Figure 4.29 illustrates the overall morphology of caves, which were used between 800 BC- 800 AD. Along with the morphologies outlined above, poor recording and the destruction of caves, such as through mining or excavation has meant that the morphologies of thirty-seven of 275 caves cannot be better defined.

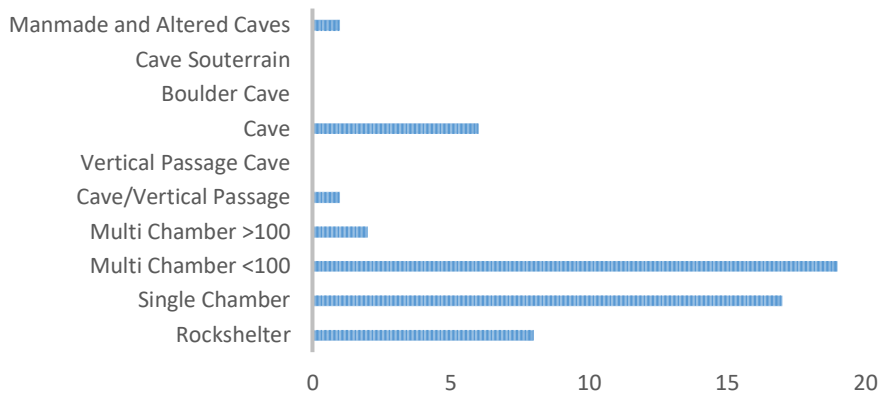
Unsurprisingly, given their ubiquity, single chamber caves account for 33.5% (N: 92) of caves used during the 1st millennia and were therefore the most commonly experienced type of cave in Britain. There is however, evidence of regional variation in cave morphologies that was influenced by local lithology's and regional geologies (Figure 4.30). For example, vertical

passage caves are limited to areas of exposed limestone pavements and are therefore restricted to the Northern Pennines (in Region 3: Northern England) and the Mendip Hills (in Region 1: Southern England). Furthermore, longer network of caves can only be found in limestone karst found in the Mendip Hills (Region 1), Peak District (Region 2) and Pennine Ranges (Region 3). Smoo Cave (**140**) and High Pasture's Cave (**154**) are the only two extensive karst caves used outside this group and were formed of Durness Limestone along the northern coast of Scotland (Region 6).

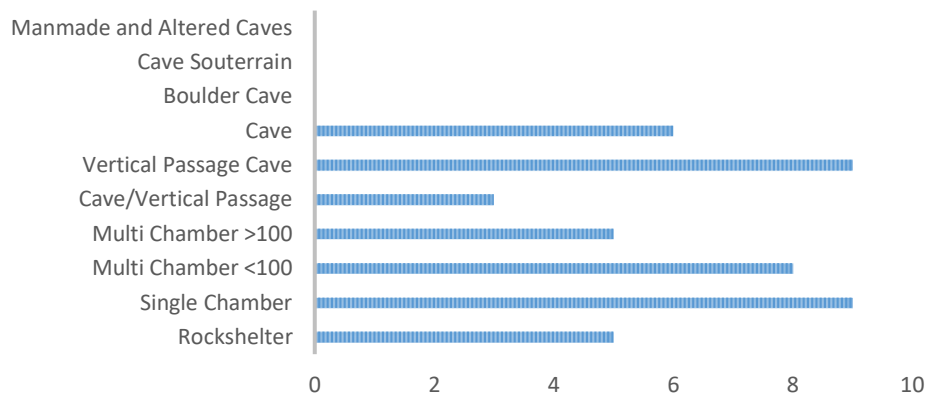
REGION 1: SOUTHERN ENGLAND(N:67)



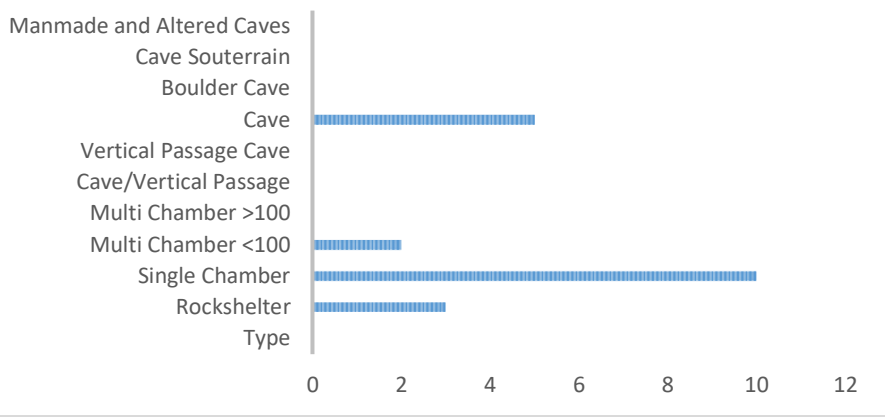
REGION 2: CENTRAL ENGLAND (N: 56)



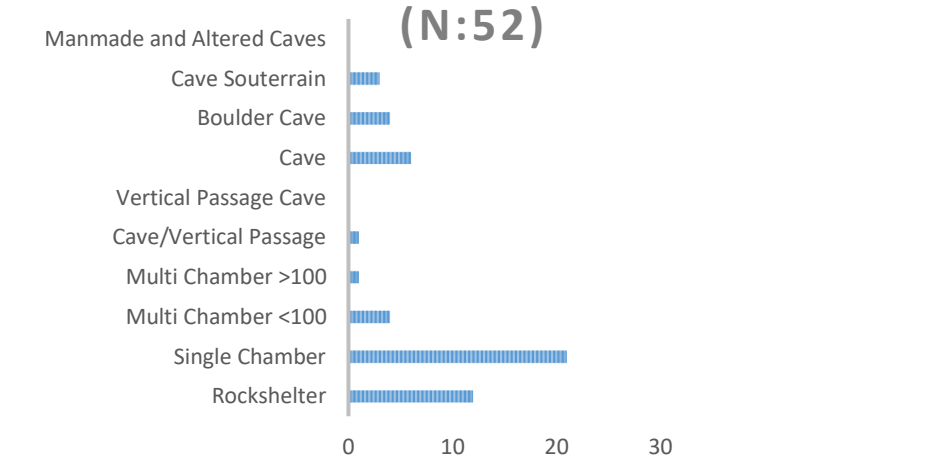
REGION 3: NORTHERN ENGLAND (N:45)



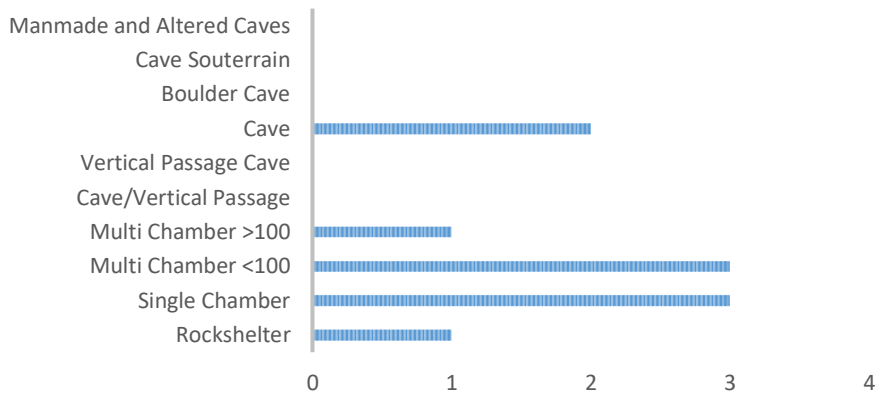
REGION 4: SOUTHERN SCOTLAND (N:20)



REGION 5: WESTERN SCOTLAND (N:52)



REGION 6: NORTHERN SCOTLAND (N: 9)



REGION 7: WALES (N: 26)

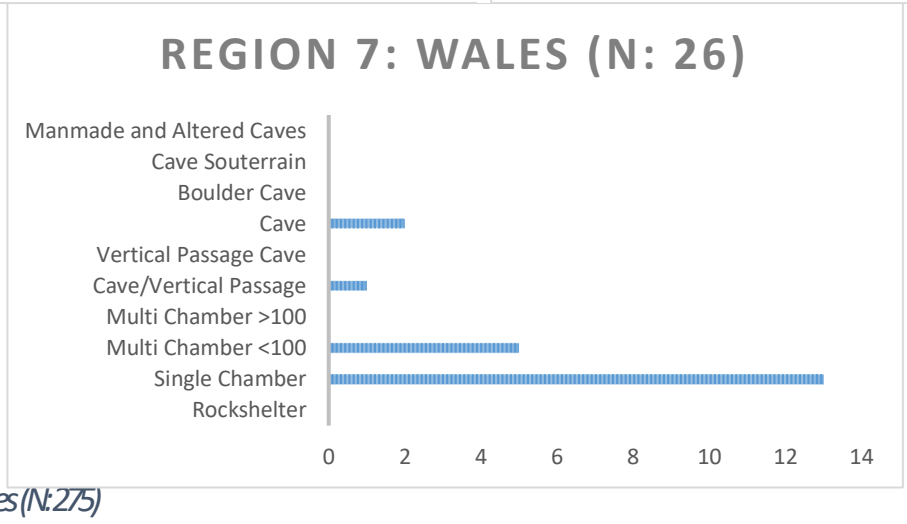


Figure 4-30: Regional morphologies of study caves (N: 275)

4.5.2 Experiencing caves: an overview of the phenomenology of visiting and inhabiting caves

As dark, wet and claustrophobic spaces, caves have unique and intense sensescapes which often contrast to those above ground. Whilst each user's experiences of using caves are influenced by a variety of factors, such as the weather and individual cultural responses to sensory phenomena, there are a number of shared experiences, encountered by those inhabiting and visiting caves during the 1st millennia. This includes the manipulation and absence of light, the distortion of sound and the sensory perception of water.

4.5.2.1 Light

Perhaps one of the most fundamental experiences when using caves is the transition between natural light and darkness. The lightest part of a cave is typically its entrance passage and chamber, although the amount of light the cave receives depends on the size and aspect of the entrance and the presence of any holes in the ceiling.

As a person descends deeper into the cave, the absence of light necessitates the use of artificial light sources or requires the user to move more carefully and slowly. Navigating such a dark environment is dangerous especially when considering the varying cave morphologies, which often require users to move in unusual ways (see Chapter 2). In turn, this has a significant influence on the overall experience of cave-use as the lack of light has a psychological impact on cave users.

4.5.2.2 Sound

Alongside the transformation of light, sounds are also manipulated in underground spaces creating unique soundscapes. Everyday sounds, including footsteps, running water and voices are amplified and distorted within caves because of the acoustic properties of rock passages and chambers. Whilst the degree of manipulation changes somewhat between caves, cave soundscapes contrast to those aboveground. Furthermore, sounds can also echo over great distances throughout the cave and can also be heard by those outside.

4.5.2.3 Water

Experiencing water is a fundamental component of many sensescapes attached to caves. As active systems of karst drainage, many upland caves contain some form of water. Cave walls are often wet and there are often pools of standing water within caves, especially during periods of prolonged rain. A number of karst caves also contain active flows of streams and rivers, which given the acoustic properties of caves, are often associated with sounds of running water. Coastal caves also often contain water with some often being flooded during high tide or during periods of rain. Therefore, those using caves in the 1st millennia would have regularly

encountered water, either by seeing still pools and running rivers, touching wet walls or hearing water dripping from the ceiling.

4.5.3 Human-use and experience of rockshelters

Despite this regional variation in cave morphology, it appears that there may be similar processes of activity occurring in certain types of caves. For example, regional influences of cavescape morphology can be identified through a study of activity in rockshelters along the Inner Sound of Skye (Figure 4.31). Here erosion of harder rocks of Scotland has created a number of coastal caves, eighteen of which contain archaeological deposits dating to the 1st millennia (see Chapter 3 for dating discussion; Figure 4.32)

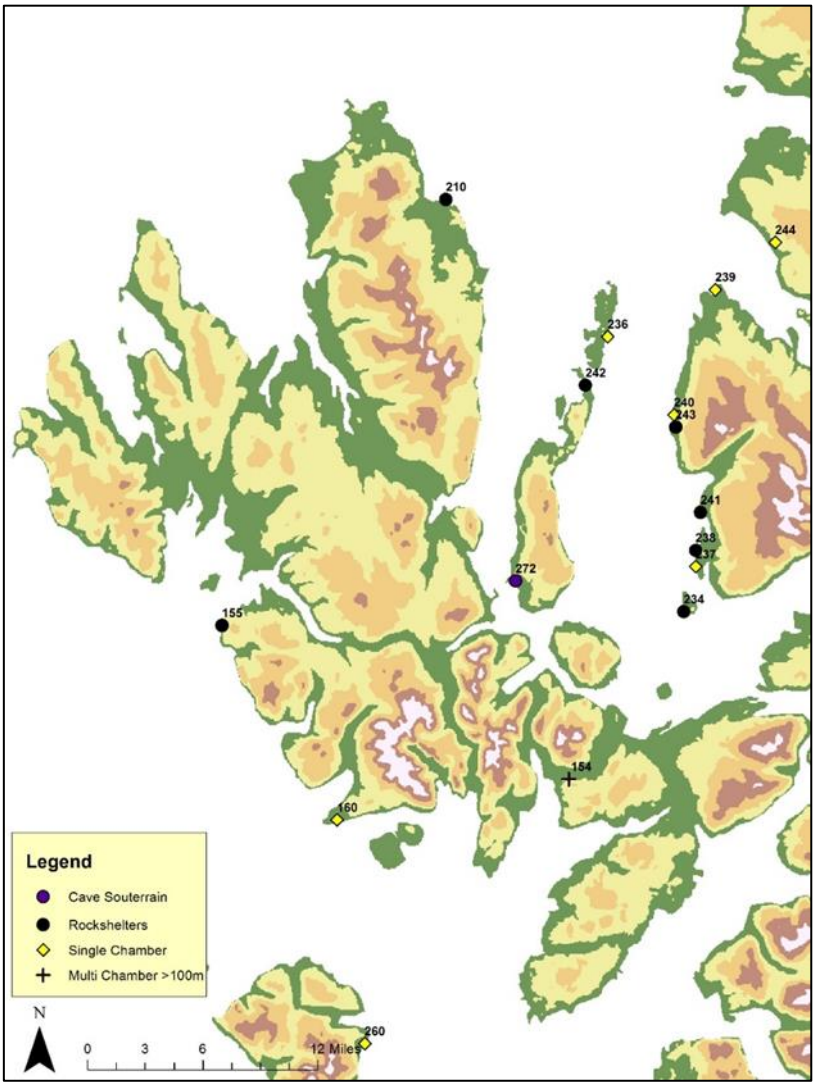


Figure 4-31: Different types of caves located in the Inner Hebrides, including a series of rockshelters and single chamber caves along the Inner Sound.

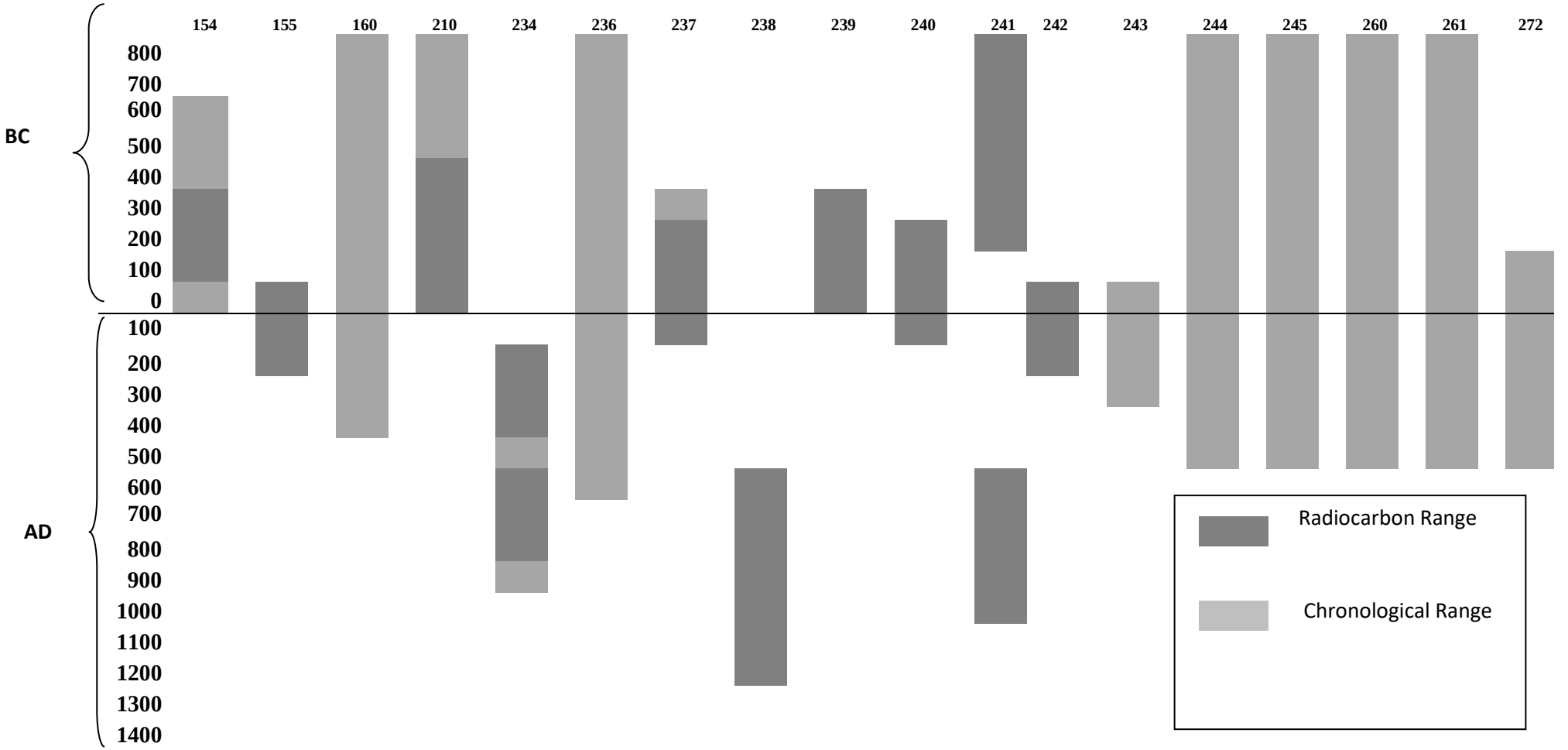


Figure 4-32 Chronology of cave-use in the caves located in the Inner Hebrides

Cave surveys across the Inner Hebrides have identified potentially contemporary use of caves, focused on single chamber caves and rockshelters located near Applecross in the Inner Sound of Skye, a tidal strait to the east of the Isle of Skye (Hardy et al 2009; Wickham-Jones 2003; Figure 4.33).

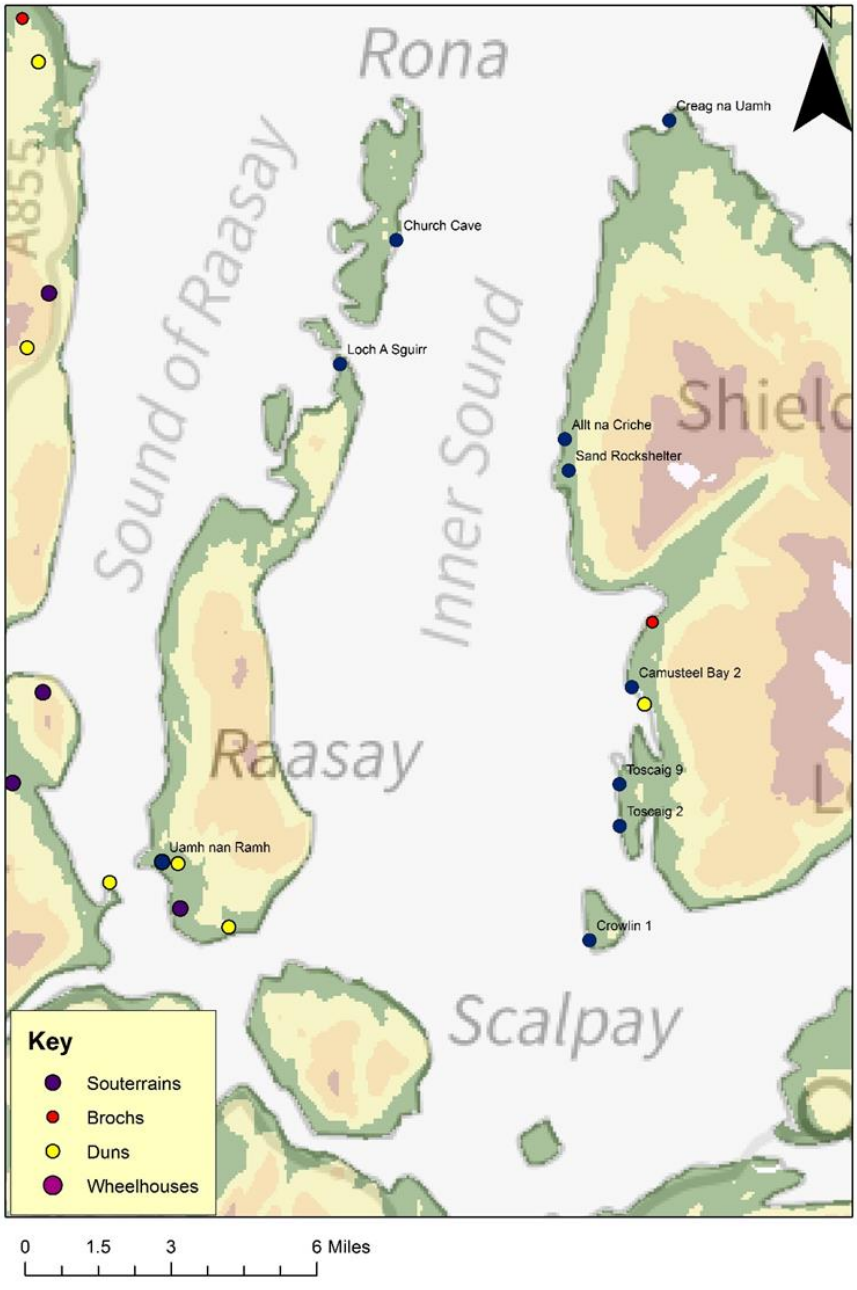


Figure 4-33: Caves and possible contemporary sites to the east of the Isle of Skye

Excavations of these caves, indicate sporadic human activity during the 1st millennia BC and AD, characterised by the build-up of midden deposits. At sites such as Allt na Criche (**240**) and Crowlin Bay (**234**) on Scalpay radiocarbon dates suggest that the caves were used periodically during the 1st millennia, whilst sampling of similar deposits in Toscaig (**238**) also suggests these sites were used during the later 1st millennium AD.

The similarity of material in caves across the Inner Sound, supported by scientific dating, suggests possible contemporary use of morphologically similar caves. The use of coastal single chamber caves and rockshelters, all of which are located on the base of sea cliffs, could also indicate contemporaneous use of shared cavescape experiences. Whilst the possible relationship between cave-use and seascapes will be explored in Chapter 5, the concentration of use of along the Inner Sound may demonstrate the selection and use of coastal caves by those moving along seaways.

Studies of the early prehistoric use of coastal rockshelters have argued that these sites played an important role in the lifeways of itinerant groups. In their study of rockshelters on the coast of Norway during the Mesolithic, Bergsvik et al (2012) argued that itinerant groups of hunter-gatherers used caves seasonally. Comparable to the evidence of cave-use along the Inner Sound, the human-use of rockshelters in Norway was also characterised by limited artefact assemblages and midden material (Bergsvik et al. 2012: 35).

Similarly, the maritime nature of Iron Age societies inhabiting Atlantic Scotland is also supported by the distribution of settlements on coastal fringes and the exploitation of sea mammals and birds (Fleming 2009). It is possible that rockshelters and caves accessible from the sea would have provided shelter to those travelling along the Inner Sound. Sites such as Sand Rockshelter (**243**) in use periodically at least from the Mesolithic (Hardy 2009), are easily accessible from the sea and wild faunal remains found within middens, including radiocarbon dated deer bone, shellfish and hazelnuts, suggest the exploitation of local resources.

4.5.4 Contrasting experiences: the human-use of High Pastures Cave

In contrast to the sporadic evidence of use in rockshelters across the Inner Sound, activity at High Pasture's Cave (**156**), an extensive and active karst cave, was likely part of intensive periods of ritual deposition associated with a manmade stairway leading into the cave. This stairway served as a focus for deposition of a large assemblage of butchered animal bone, carbonised cereals, metalwork, glass beads, broken quernstones and human remains (Birch et al. 2005). Towards the end of the 1st millennium BC the stairway was sealed by the burial of a

woman aged between 30 and 40, along with the fragmented remains of a neonatal and perinatal human and animal remains (ibid.).

Surrounding the cave entrance was a 1.5-metre deep Iron Age deposit, characterised by a series of hearths and postholes with significant evidence of craftworking, including copper, iron and bronze metalworking (Birch et al. 2005: 56). Animal bone, beads, pottery and a unique wooden bridge for a lyre (Birch et al. 2009) were found with the hearths leading the excavators to conclude that an open platform, above the cave entrance, served as a centre for craftworking and feasting (Birch et al. 2007).

This extensive activity contrasts with activity in caves elsewhere on Skye, which may be influenced by the unique morphological nature of High Pasture's Cave. The cave is one of a handful of limestone karst caves in Scotland and is associated with an active underground river. Consequently, the visual and audible experiences generated by the cavescape, such as the vertical climb to enter the cave and the sense of flowing water, significantly contrast to other cave experiences elsewhere in the Inner Hebrides.

The focus of activity associated with the natural sink hole and inner chambers suggests that the cavescape experience played a significant role in attracting ritual activity, feasting and communal gathering. Interestingly, morphometric analysis of piglet remains and tooth eruption from a final deposit found in the vertical shaft indicated a slaughter period between November-January (Rowley-Conway pers. comms), demonstrating seasonal activity at the site, perhaps associated with feasting during the Winter Solstice (see Chapter 7).

Whilst the unique nature of High Pasture's Cave drew significant ritual deposition during the Late Iron Age, the cave was also bound to similar seasonal patterns of activity, demonstrated elsewhere in the rockshelters of the Inner Sound. This suggests a broader regional connection with caves and landscape movement, which is explored in the discussion of the wider landscape significance of caves in Chapter 5.

4.5.5 Human activity in complex cave environments

Significantly, comparable intensive activity in complex and emotive multi-chambered cavescapes can also be identified in a number of morphologically similar caves to High Pasture's Cave. Evidence from these caves demonstrate the importance of understanding the human experience of using caves may have influenced how caves were used.

Similar to High Pastures Cave, Wookey Hole (**166**), Cheddar, is a four-mile-long limestone cave made of a series of chambers and is part of the outflow for the River Axe. Excavations of the cave during the late 19th and early 20th centuries (Balch et al. 1911; Balch 1923, 1928; Hawkes et al. 1978) uncovered significant cultural deposits from the first three cave chambers dating from the Mesolithic into the Post-Medieval period (Figure 4.34). Late Bronze Age, Iron Age and Roman Iron Age material culture was reported from the entrance and at the bottom of 'Hell's Ladder', which was approximately forty-five metres from the entrance (Balch et al. 1911:571). Finds from the cave included a large array of bonework, metalwork and pottery (Balch 1913), slag and cast waste, Early Republican and Roman Iron Age coins (Branigan et al. 1991a:149) and quernstones (Balch 1911: 581).

Human remains were also recorded in a number of separate contexts within the cave (see Chapter 7), including within the River Axe associated with Samian Ware dating to the 1st century AD (Hawkes et al 1978: 23). This association with material deposition and underground streams is paralleled with material from continental Europe (Cahen-Delhaye 1996; Vidal et al. 2000; Colleter et al. 2007; see Chapter 7) but also from elsewhere in Britain, including High Pasture's Cave. Significantly, excavations outside the entrance of Wookey Hole cave (SY24355), also noted a Late Iron Age hut circle overlain by Roman Iron Age structures, containing hearth deposits with lead caste waste, iron and bone (see Chapter 6).

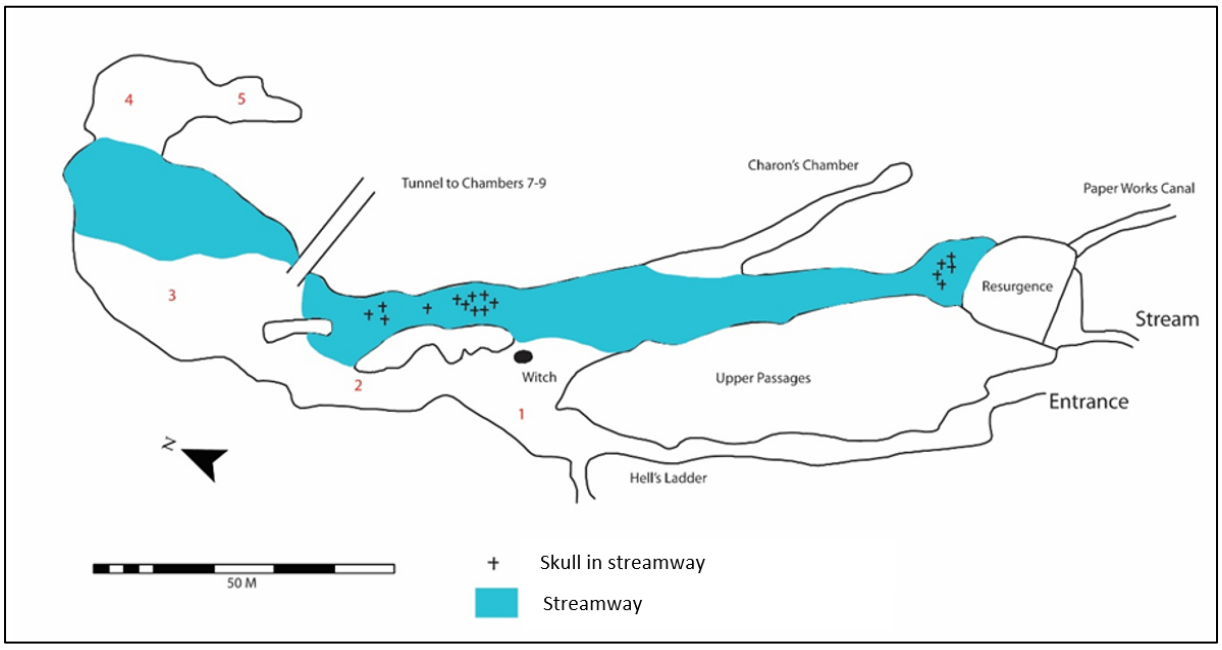


*Figure 4-34: Plan of Wookey Hole (166), Cheddar (*After Hawkes et al. 1978: 25*)*

The experience offered by Wookey Hole is comparable to that of High Pasture's Cave. Both are associated with underground river systems as well as extensive cave environments that were used to deposit extensive material, including human remains and metalwork. Similar contemporary deposits of Late Iron Age and Roman Iron Age material culture were also reported at Poole's Cavern (**25**), Buxton. The cave, as part of the resurgence of the River Wye, shares similar morphological characteristics to Wookey Hole, with the presence of speleothems and an active underground river, some 300 metres in length (Figure 4.35). Iron Age and Roman Iron Age artefacts were found in the so-called 'Roman Chamber' located off the main entrance passage. The assemblage, was made primarily of metalwork, include caste waste and slag, pottery, coinage and glass beads (Bramwell et al. 1983; Branigan et al. 1983; Smithson et al. 1991). The majority of finds dated between the late 1st and 2nd centuries AD and focused around a stalactite water pool in an alcove on the western side of the chamber (Bramwell et al. 1983).

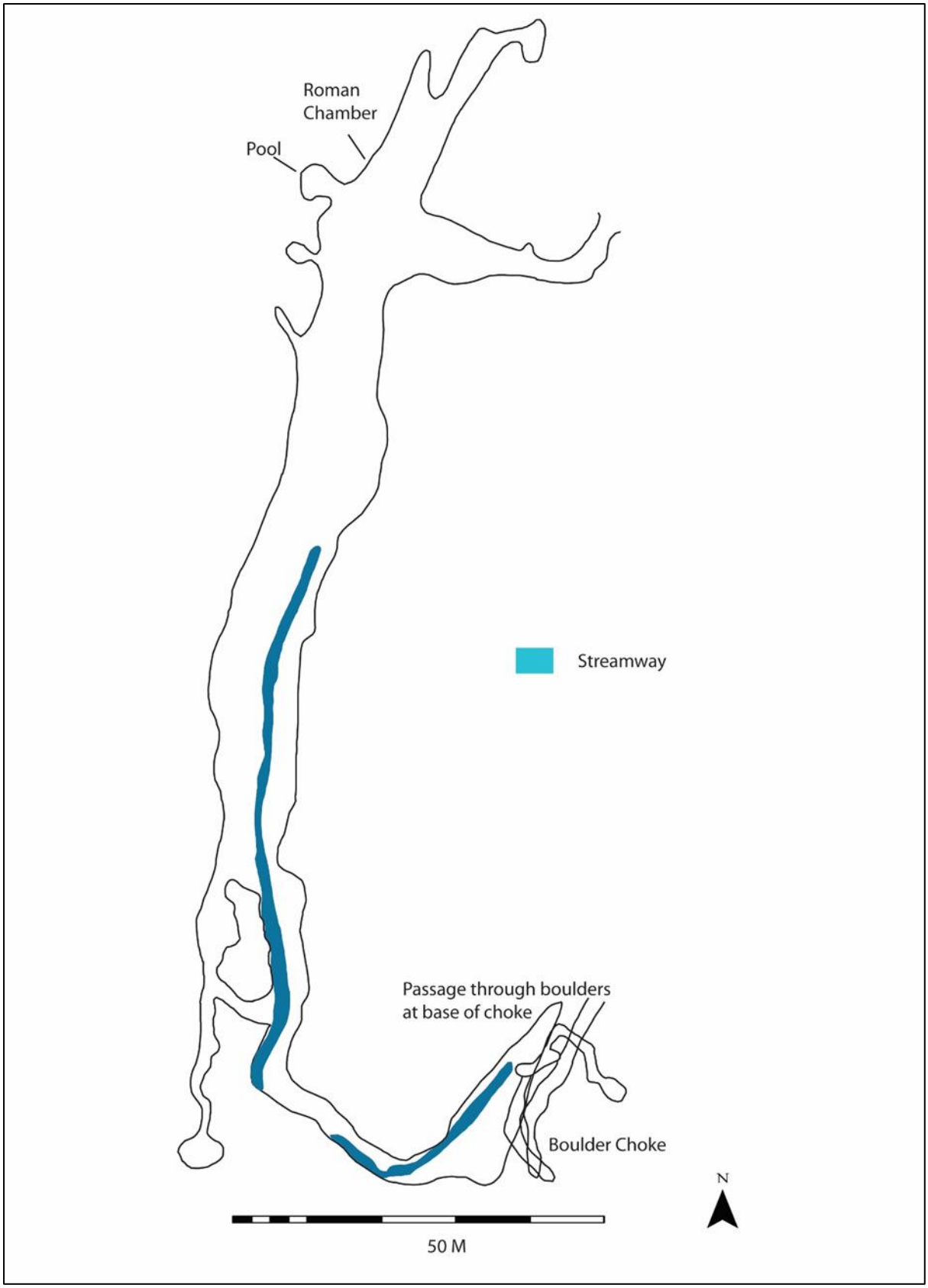


Figure 4-35: Plan of Poole's Cavern, Buxton (After Peak District SSSI Cave Conservation Monitoring Scheme 2013)

The range of material and the association of finds with aspects of karst morphology suggest a relationship with certain aspects of complex caves. The influence of cave morphology on the range and types of objects deposited in caves can also be seen by comparing overall patterns of artefact deposition. Figure 4.36 illustrates the different types of artefacts recorded in single chamber caves and rockshelters. This shows that the majority of caves contained pottery, midden and animal bone as well as bonework and metalwork. As discussed above, rockshelters located in western Scotland contained limited artefactual assemblages, characterised by midden material. This is also reflected in the overall percentage of material recorded in rockshelters, which accounted for only 19% of total deposits and produced limited amounts of human remains, glass and coinage.

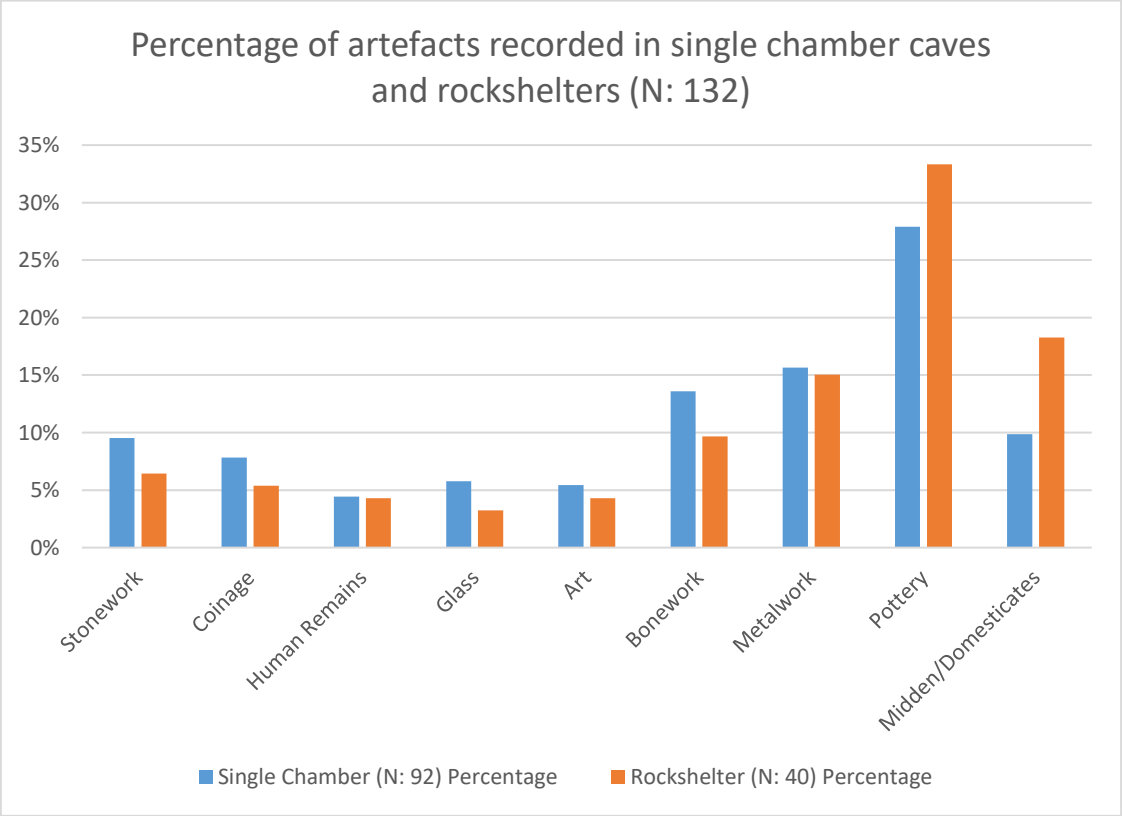


Figure 4-36: Comparison of artefacts recorded in single chamber and rockshelters (N: 132 individual caves)

In contrast, more complex cave environments (Figure 4.37) contained a broader array of material including human remains, coinage, glass and metalwork. This suggests that more complex cave sites may have attracted the deposition of different types of material. In turn this could suggest that certain types of caves were used in certain ways. For example, the limited assemblages recorded in rockshelters may suggest that these were associated with seasonally motivated transhumance and perhaps used periodically for shelter.

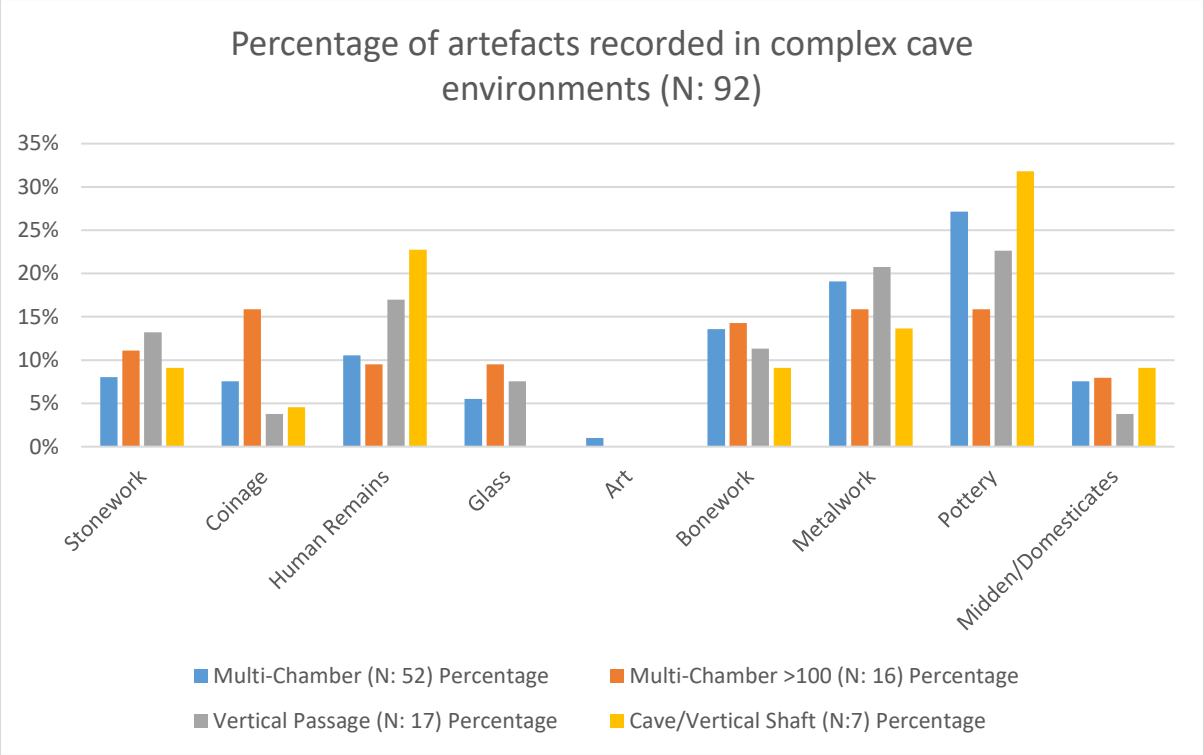


Figure 4-37: Comparison of artefacts recorded in complex caves in Britain

Evidence of extensive deposition of symbolical material, including human remains, inside complex cavescapes also contrasts to activity within rockshelters. Sites such as Wookey Hole, Poole's Cavern and High Pasture's Cave, demonstrate the potential influence complex and unusual cavescape experiences may have had in influencing human activity within caves. The sensescapes and experiences associated with these caves differ to those associated with lighter and more accessible rockshelters, which further highlights the importance of cave morphology in understanding the human-use of underground spaces.

It is important to note that I am not arguing for a dichotomy between more functional roles for less morphologically complex caves and intensive ritual activity in more complex caves. The dismissal of such a division has been recently argued in many archaeological periods (Hamilton et al. 2006; Pope 2007; Rennell 2008; Chadwick 2012; see Chapter 2) and may be applied to understandings of cave-use (see Chapter 7). Furthermore, as outlined above the regional nature of geomorphology and archaeological communities, suggests that experiences of cavescapes varied across the landscape (see Chapter 5). Given such a variation, other factors must be considered alongside morphology in order to better understand cave-use, including its role in the landscape (see Chapter 5).

Despite this, convincing evidence of comparable activity within morphologically similar complex caves, suggests that cave experience may have played a vital role in the negotiation of human-use. Navigating the complex cavescapes of karst environments would present unique challenges that may have reinforced the significance of acts associated with these caves. Activity in these caves would therefore have been closely connected to the experience of cavescapes. This includes not only the way in which users moved when inside caves, but also the close connection between complex cavescapes and running water, which may have also been an important metaphorical medium (see Chapter 7). Those who were able to successfully navigate these complex caves and return to the world aboveground may have also become symbolically associated with metaphors attached to these cavescapes. Similarly, those that used rockshelters as places for shelter may have also associated these sites with certain metaphors (see Chapter 5).

4.5.6 Conclusion: cave morphology and experience

This chapter has introduced the different types of cavescapes encountered by communities during the 1st millennia. Through an analysis of the types of activity recorded in two contrasting types of caves, rockshelters and multi-chambered karst caves, it has been demonstrated that cave morphology may have played a vital role in the human selection and use of caves. Crucially, these different morphologies also presented different types of experience, demonstrated by the contrasting nature of kinetic experience in rockshelters compared to complex subterranean caves. This suggests that cave experience may have been fundamental in attracting and consequently, influencing human activity.

Chapter 5 : Caves, Landscapes & Waterscapes

5.1 Introduction

"Caves must be considered along with the adjacent enclosures and not as isolated inhabited sites divorced from the land"

Raistrick 1939: 122

Despite the work of Arthur Raistrick across West Yorkshire, modern studies of British caves have often neglected the role landscape can play in the motivation of site selection and depositional experience. In the previous chapter, I outlined an approach for understanding the morphological influence of caves on human-use, arguing that cave experience was a significant factor behind human-use. Fundamental to exploring this motivation behind cave selection, is the analysis of possible symbolic associations with cavescape experience and how this may relate to other archaeological sites.

As we discussed in Chapter 2, a cave's location significantly influences human experience. The topographic position of a cave leads to different ways caves are accessed and consequently experienced. Physical exertion and mental stresses associated with senses of danger, which change depending on how difficult caves are to access, may have significantly influenced how caves were used. Furthermore, in order to access caves, found in difficult or hidden places in the landscape, users would have required previous knowledge of a cave's location. This esoteric awareness may have placed social significance on cave-users, who knew how to access and navigate through hard-to-reach caves. By using these caves, and having knowledge of their challenging environments, cave-users and the acts of cave-use, may have become symbolically bound to the wider perception of caves. As such, certain caves, such as those near regional route ways, rivers and human land-use, may have acted as natural mnemonics in the landscape, symbolising metaphors attached to caves, cave-use and cave users.

Using an integrated approach, combining GIS analysis with patterns of cave deposition outlined previously (see Chapters 3 and 4), this chapter will present a regional analysis of cave location across two contrasting landscapes: (1) the Craven district of the Yorkshire Dales and (2) Argyll and Bute. Analysis will focus on a cave's relationship to nearby topographic markers including coastal bays, valley interfaces and rivers, as well as contemporary archaeological activity occurring elsewhere in the landscape. Furthermore, by combining least cost path analysis and incremental viewshed data, discussion will focus on how caves were accessed and experienced by those moving through the landscape.

5.2 Methodology: The importance of the landscape context of cave-use

Analysing the location of caves in two contrasting landscapes allows for an assessment of different topographies that may be associated with different cavescape experiences (see Chapter 2 for rationale for case study selection). Recent research has highlighted the need for an integrated approach in understanding the landscape context of cave-use. In Europe, work by the likes of Skeates (2008) and Bergsvik (2012), has demonstrated the importance of understanding how cave-use may have related to other sites. Studies of Mesolithic cave-use in Scotland (Bishop et al. 2015; Saville et al. 2004), as well as in Norway (Riede et al. 2014) have also highlighted the need to situate cave-use within lifeways and patterns of transhumance by comparing the morphology and landscape position of caves.

Understanding the relationship of cave-use to contemporary practices is therefore fundamental when exploring why and how caves were used. As we have seen in the regional analysis of cave-use in Chapter 3, the deposition of similar types of artefacts of contemporary date in multiple caves may demonstrate concentrations of activity focused in cave landscapes. Furthermore, excavations outside cave entrances have also recorded evidence of possible contemporary use. For example, outside Wookey Hole (**166**), Mendip, excavations uncovered an Iron Age and Roman Iron Age structural sequence, contemporary to activity within the cave.

5.2.1 Approaching caves and landscapes

In order to study how cave-use related to activity and topography, a methodology was devised that aimed to assess the relationship between cave-use and contemporary human activity within the surrounding landscape, as well as individual cave location. Three incremental searches were performed to gauge the density of possible contemporary activity occurring near each cave. Searches focused on a mile radius, a 2-mile radius centred on the cave, along with a 5-mile radius of caves in the Craven district of the Yorkshire Dales and a 10-mile radius of Argyll and Bute, because of the size of study area (see Chapter 1 for methodology).

Access and incremental viewshed analysis were also used to understand the visibility and access to caves by those inhabiting in- and moving through the landscape. Access to all fifty-seven caves, was analysed utilising two least cost paths from a mile radius of the cave, which accounted for inaccuracies in route-way analysis. The least cost path start locations were selected based on topographic location. Caves in Argyll and Bute near the sea were analysed by a route starting a mile from the cave both inland and at sea. Route points for those caves located away from the sea (3 in North Ayrshire and 23 in the Yorkshire Dales) were based on

locations above and below the cave. These points were chosen in order to understand the easiest routes that would have been taken to reach the cave from both upland and more lowland positions. Where possible, caves were assessed using the same access and viewpoints starting a mile away from the cave. This was done in order to compare visibility and access, thereby allowing for a comparative discussion of shared experiences when using multiple caves.

Incremental viewshed data was also collected along the two least cost paths to explore the experience and visibility of caves for those moving in the landscape (Figure 5.1). Three points were chosen along the two least cost paths, which included: the start point (1), a transition point (2), such as moving from sea to land or navigating round a topographic marker, and a position in front of the cave (3). Six viewshed points were therefore collected per-cave allowing for an understanding of the experience of landscape by those moving towards the cave.

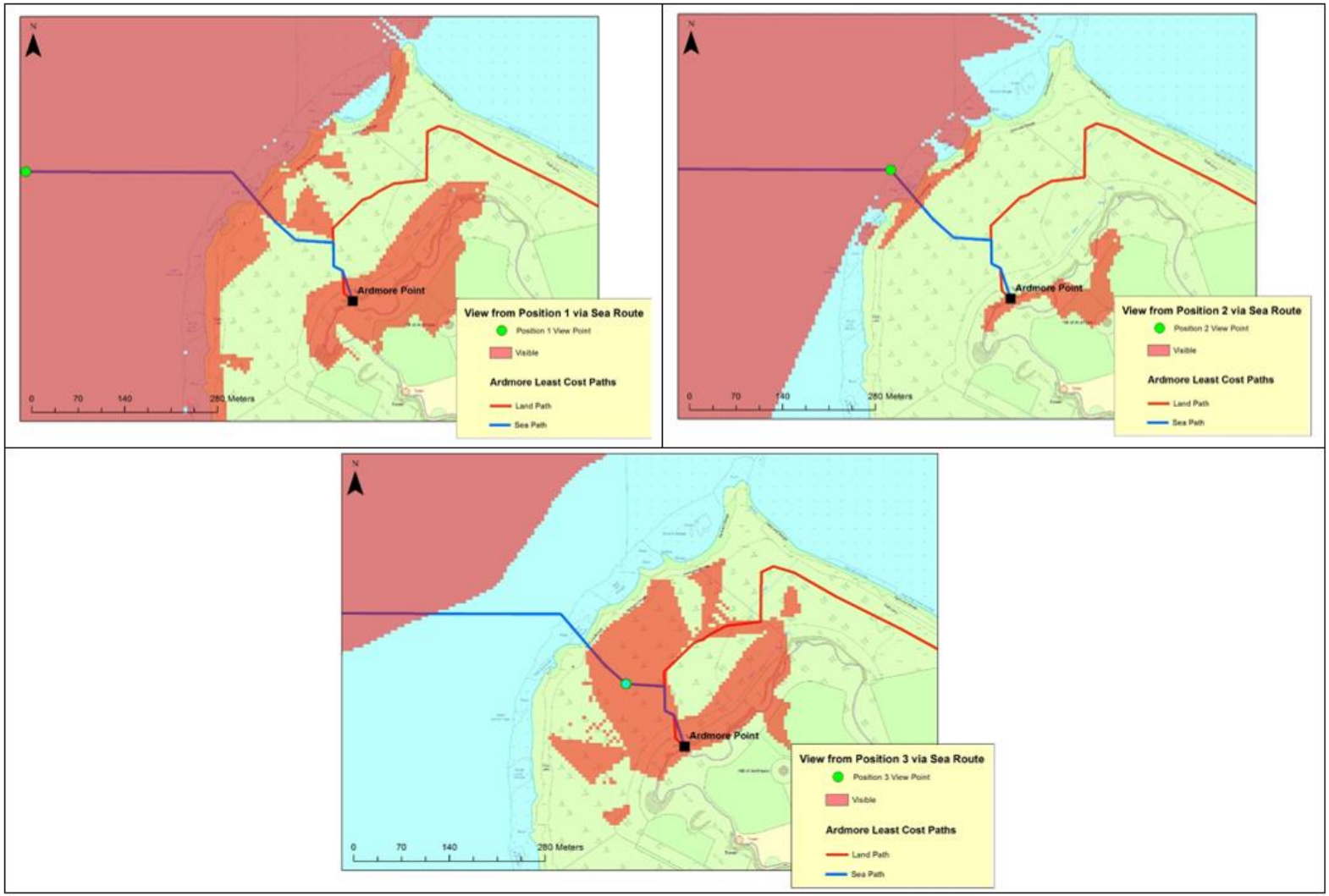


Figure 5-1: Example of viewshed and cost analysis used in this study. This demonstrates the easiest route of access to Ardmore Point, a rockshelter on a cliff near Ardmore, North Ayrshire (159), both by land (red line) and sea (blue line) as well as what can be seen from the three incremental view points from those approaching the cave by sea (Source: OS MasterMap 2009).

5.2.2 Argyll & Bute: seaways and sea caves

Argyll and Bute, located on the western coast of Scotland (taken here at its furthest extent from the North of Mull down into Northern Ayrshire) is comprised of ten glacially hewn islands consisting of approximately 7, 000 kilometres of coastline (Sutherland 1991: 10). As a result, the majority of caves in the region are located on raised beach deposits, coastal bays or exposed cliff faces (Figure 5.2).

In total, there are 206 known caves found in Argyll and Bute (Figure 5.3). Amongst these, there were thirty-one caves that were identified as being used sometime during the 1st millennia (see Chapter 3: Region 5: Western Scotland for dating discussion). This accounts for 15% of the total known caves in the region, which is paralleled by similar low percentages when compared with national levels of cave-use (see Chapter 4). This likely indicates that caves in Argyll and Bute were deliberately chosen for human-use and that the location of caves may have been an important influence on the choice of caves.

In terms of morphology, the majority of caves used were single chambered caves (N: 14 of 31), and indicates that single chambered cavescapes were the most likely to be experienced in Argyll and Bute. However, this is to be expected given that this type of cave is the most ubiquitous type of cave across the British Isles and may not indicate deliberate choice of single chambered type caves in western Scotland.

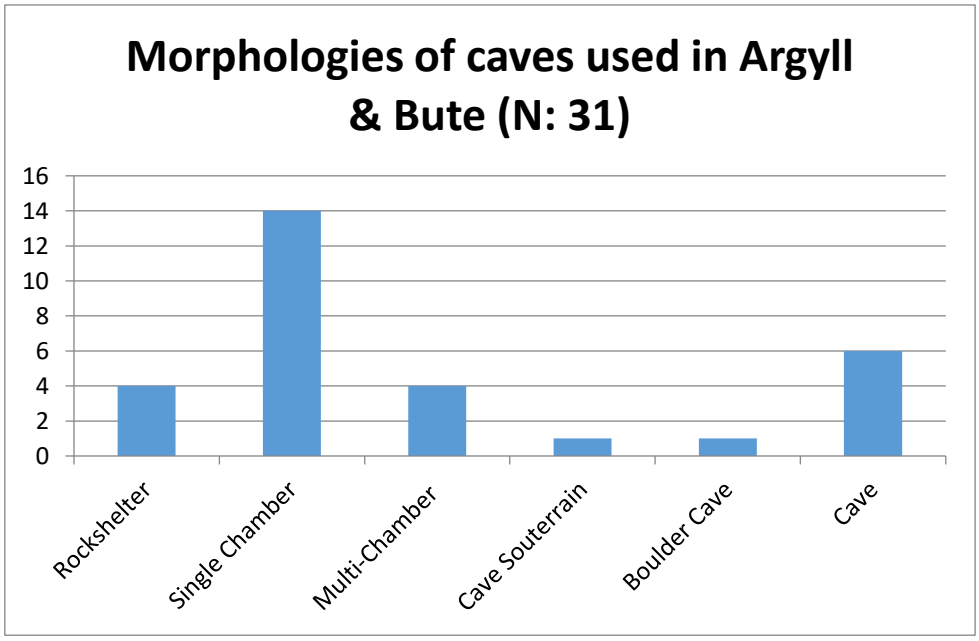


Figure 5-2: Morphology of caves used during the 1st millennia in Argyll & Bute (N: 31). Given that many caves in the region were created through sea action, it is unsurprising that the majority are single chambered caves (N: 14)

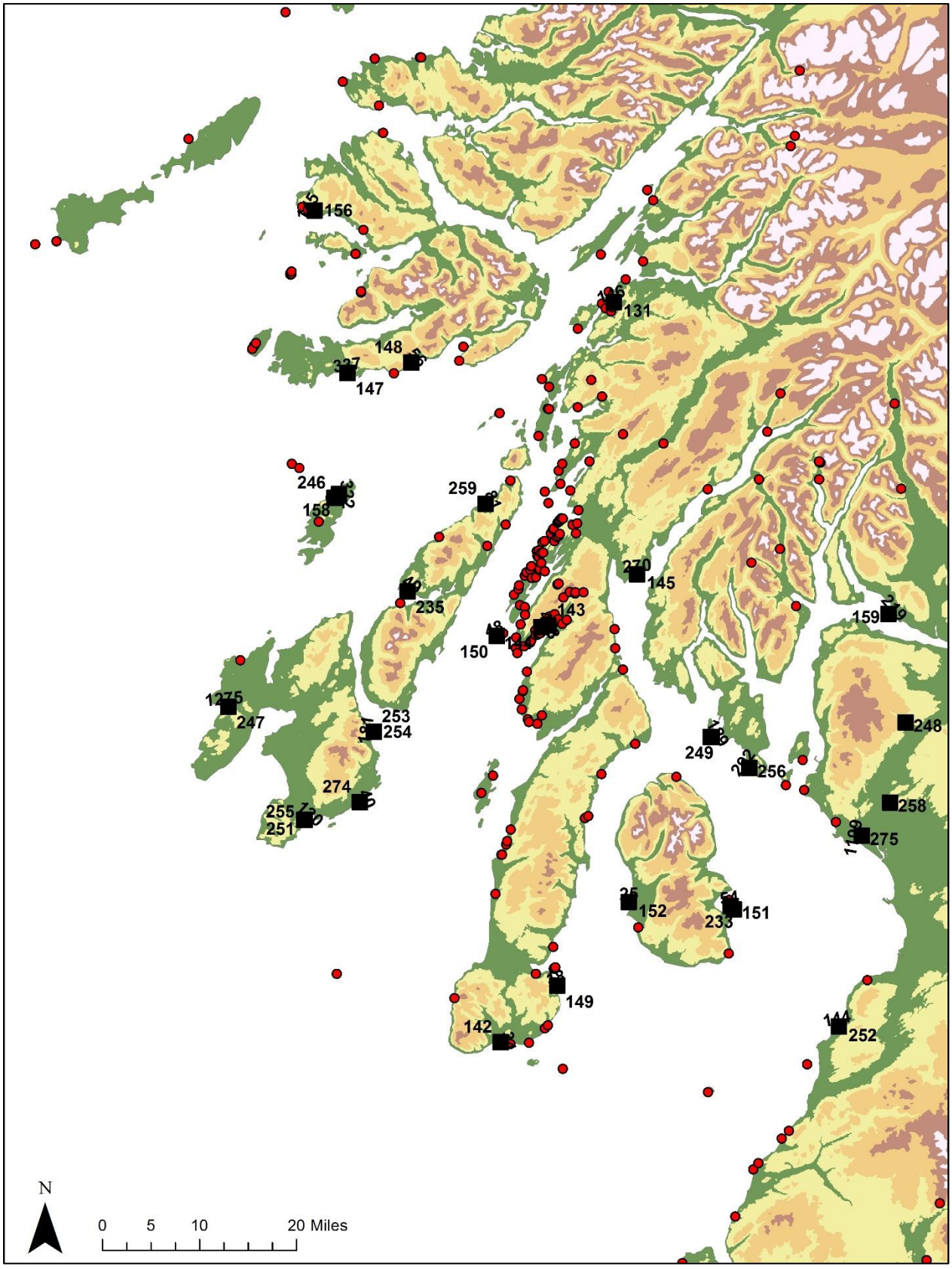


Figure 5-3: Distribution of natural caves in Argyll & Bute. Each red dot represents a natural cave, whilst black squares the location of caves with activity dating to c. 800 BC- 800 AD

5.2.3 Southern Craven: upland cave landscapes

Compared to the coastal nature of caves in western Scotland, those found in the Southern Craven district of the County of North Yorkshire are found exclusively in karst limestone. Indeed, the area is part of a comprehensive node of Carboniferous Limestone that comprises a total of 320 km^2 of karst (Waltham et al. 2013: 2). There are approximately 916 surveyed caves in the Craven Uplands, accounting for 61% of the total surveyed caves recorded north of the Southern Pennines (Brooke et al. 1975; Brooke et al. 1977; Brook et al 1979; Brook et al. 1981; Brook et al. 1981; Brook et al. 1982).

Amongst these, twenty-one caves were likely used sometime between c.800 BC-800 AD (Figure 5.5), accounting for only approximately 3 % of total caves within the region. Clearly this demonstrates that, like western Scotland, specific caves were chosen for human-use. In terms of morphology, more varieties of caves were experienced in the region compared to Argyll and Bute, which in part may be a result of how caves were formed in karst. Nevertheless, it also suggests that communities were engaging with- and experiencing different types of cavescapes (Figure 5.4).

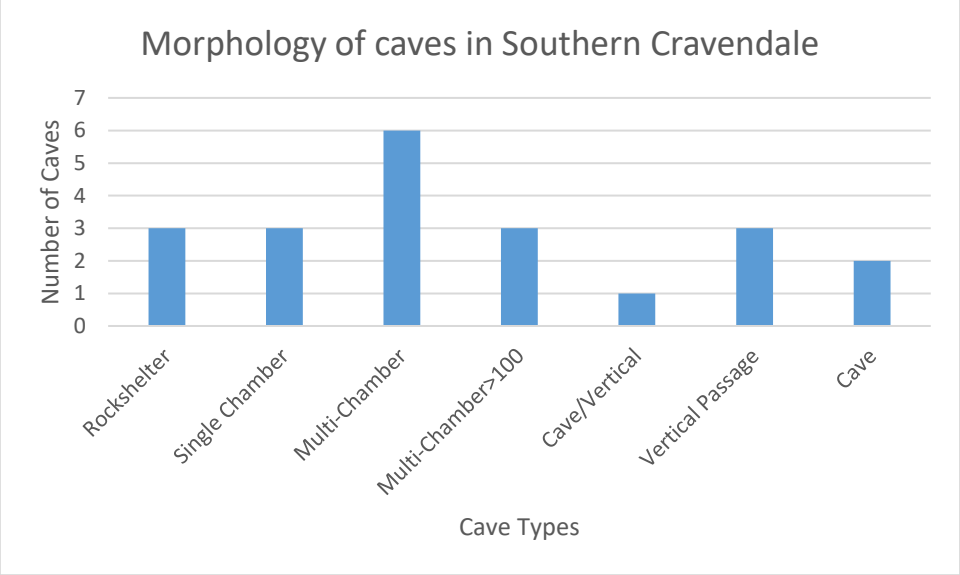


Figure 5-4: Morphology of caves with evidence of human-use dating to the 1st millennia (N: 21). In contrast to western Scotland, there is a greater variety in cavescape morphology, which is as a consequence of cave formation in the karst landscape.

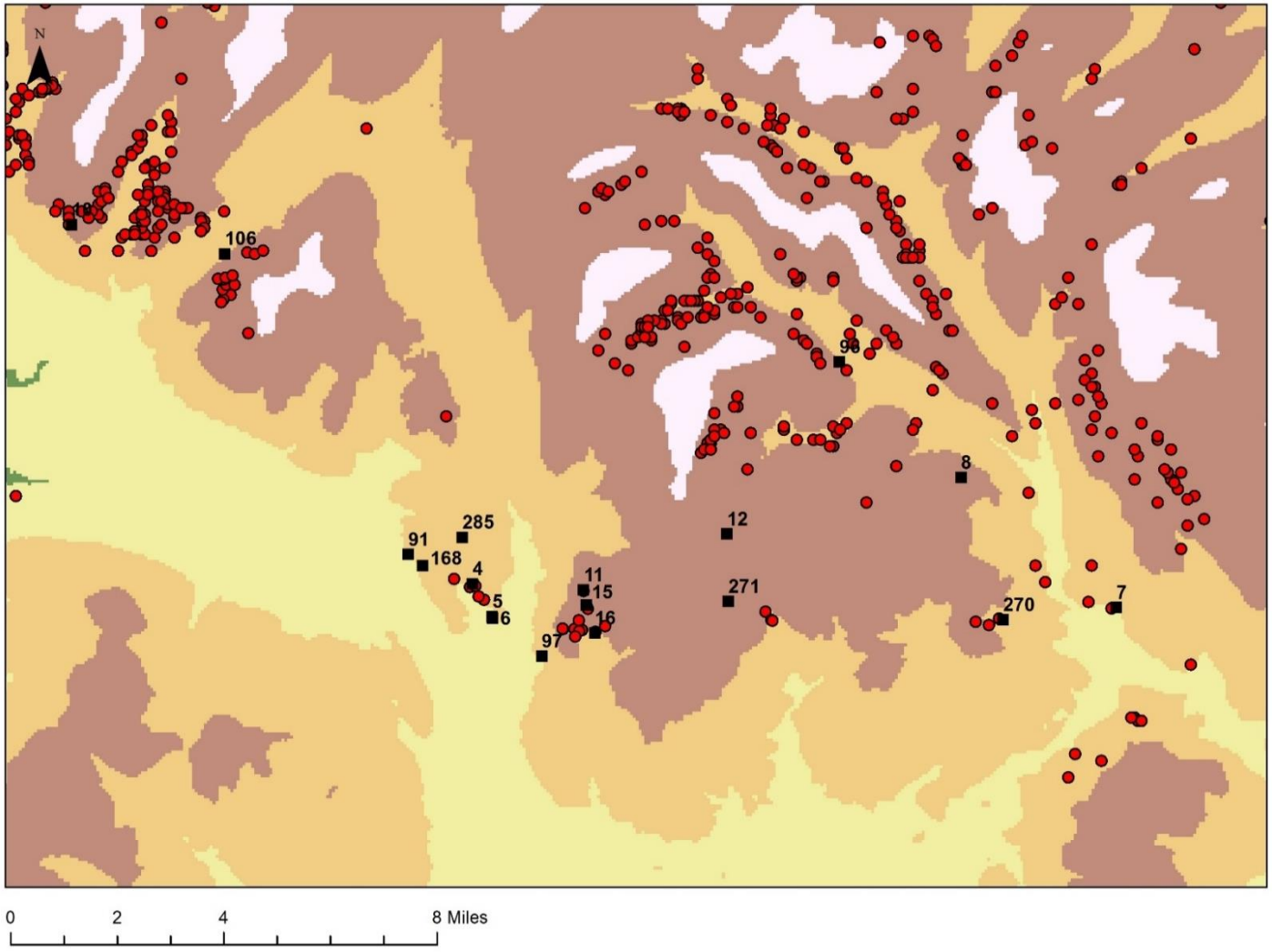


Figure 5-5: Distribution of natural caves in the Craven District of North Yorkshire. Each red dot represents an individual cave, whilst each black square is a cave containing human activity dating to c. 800 BC- 800 AD

5.3 Transition & mobility: comparative archaeologies of Argyll & Southern Craven

The discussion above has focused on the approach taken to understand the landscape context of cave-use. By outlining the regional distribution of caves, it has also been demonstrated that, whilst the topographic nature of caves differed greatly between Argyll and South Craven, caves were intentionally selected. The following section will discuss the landscape context of caves focusing on their relationship to the settled landscape and topography.

5.3.1 The location of caves and settlement in Argyll & Bute

As discussed above, the majority of caves found in Argyll and Bute are found on the coast and consequently, activity in these must be considered as being closely connected to seascapes. Only four (Kilchoman **247**; Meikle Cloak Cave **248**; Ceeves Cove **258**; Ardeer **275**) of thirty-two caves were located beyond a mile from the sea (Figure 5.6). In this respect, caves share similar locations to other types of contemporary archaeological sites (Figure 5.7).

The settlement framework for Argyll and Bute during the 1st millennia is currently dominated by discussions of typology and chronology of the regions two main forms of settlement: forts, which are characterised by large enclosures and smaller enclosed duns (Harding 2004b). Nevertheless, the majority of these sites are located in close proximity to the sea and would likely be visible to those moving along the shoreline. As such, these sites are located in areas with caves and crucially, they also share similar evidence of archaeological activity.

Figure 5-6: Distribution of caves with activity dating to the 1st millennia in Argyll & Bute, demonstrating the close relationship between caves and the sea (N: 31)

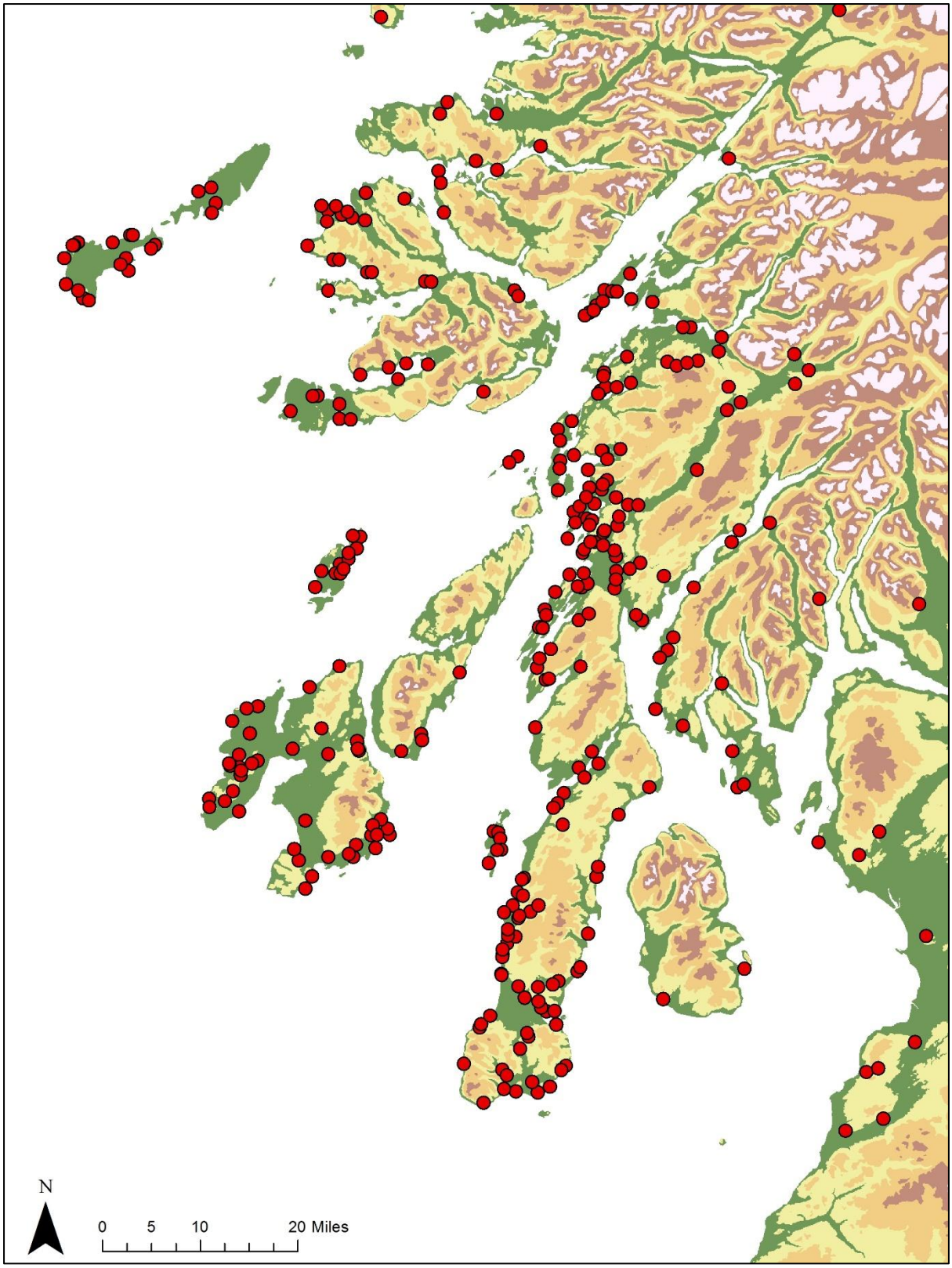


Figure 5-7: Distribution of duns in Argyll & Bute, demonstrating their coastal location (N: 315)

Like caves, understanding the history of settlement in the region is complicated by apparent evidence of long-term use of sites during the 1st millennia (see Chapter 3). Excavations of the multivallate fort at Balloch Hill (Peltenburg 1983) uncovered a sequence of successive ramparts and hut circles on top of a rocky knoll. Radiocarbon dates indicated long term human use of the hill beginning in the Neolithic, with the primary phase of rampart construction dated to a period of 400 cal BC and 200 cal AD. Similar dates for rampart construction during the late 1st millennium BC was also obtained from Duntroon (Campbell et al. 1964: 55) and Eilean an Duin (Harding 1997: 121; Nieke et al. 1987).

Despite this, the lack of diagnostic material culture has complicated comprehensive dating of activity during the 1st millennium BC. In contrast, during the 1st millennium AD, the increased survivability of material, included imported ceramics and metalwork, has helped to date activity. Finds of Samian Ware and Roman Iron Age metalwork have been recorded at Kingarth and Little Dunagoil, along with fragments of Iron Age pottery (Marshall 1915). Similar finds of Roman Iron Age pottery in caves (see Chapter 3) may also indicate a close association of cave-use and activity at dun sites. Furthermore, excavations of nuclear forts typified by sites such as Dunadd (Lane 2000), Dunagoil (Harding 2004a; Mann 1915) and Dunollie Castle (Alcock 1979; Alcock et al. 1988), have produced evidence of craftworking, comparable to activity recorded in caves. For example, at sites such as Dunadd and Dunollie Castle (Alcock 1981), evidence of bronze and iron working were recorded alongside assemblages of worked bone. This again is similar to evidence of metal and bone working taking place inside caves across western Scotland and may indicate contemporary associations with settlement sites and cavescapes. This is demonstrated by finds of metalworking debris recorded from the Tinkler's Cave (**145**), Ellary Boulder Cave (**143**) and St Columba's Cave (**144**), all of which are located within a miles reach of each other in Knapdale (Figure 5.8).

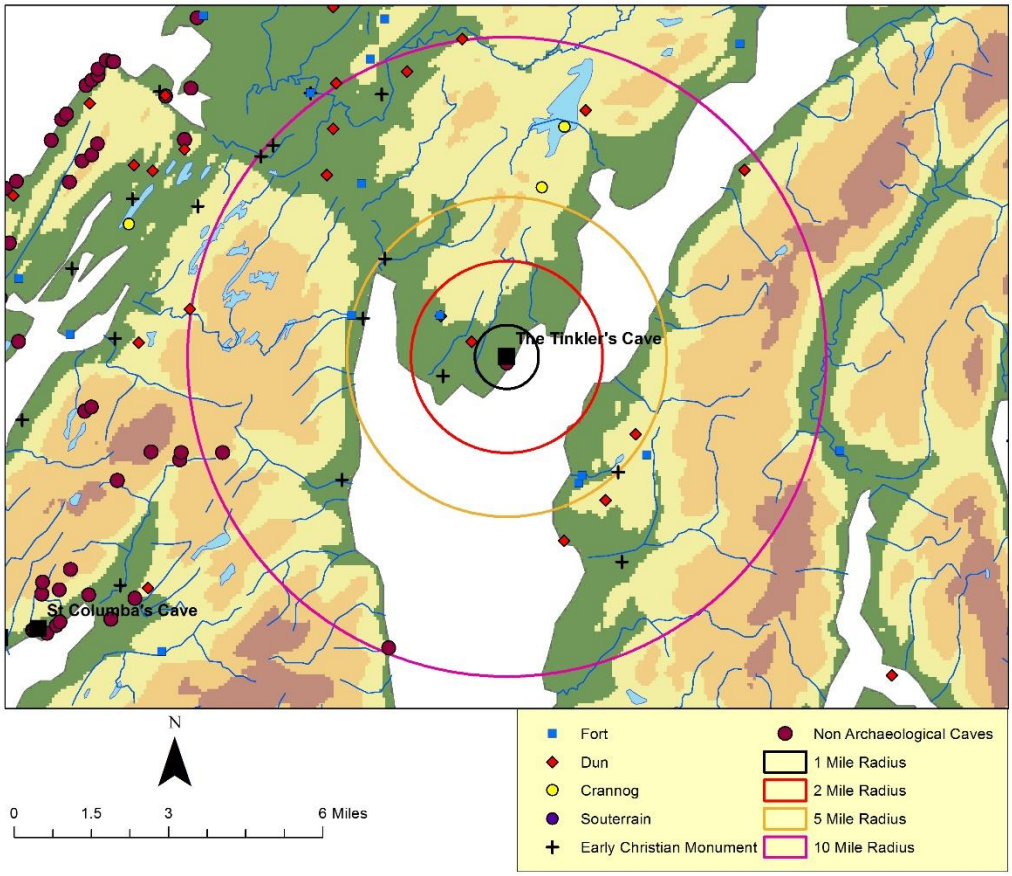


Figure 5-8: Evidence of other archaeological sites in proximity to The Tinkler's Cave (145), Knapdale

Alongside the use of these caves for metalworking, finds of metal objects and debris have been recorded from the excavated D-shaped dun at Caisteal Mhic Eoghainn (RCAHMS 1988: 195-196) and the Early Medieval crannog at Loch Glashan (Cavers et al. 2005), all of which are within a 1-2-mile radius of The Tinkler's Cave.

This relationship between caves and other archaeological sites can be further highlighted by the spatial relationship of caves and other sites elsewhere in the region. Figure 5.9 illustrates the proximity of caves to possible contemporary settlement in Argyll and Bute. It demonstrates that whilst the majority (90%) of sites are within a 5-10 mile radius of other sites, which is to be expected given the broader search radius, thirteen caves (40 %) are within a mile of another archaeological sites, whilst twenty-one (65%) were found within a 1-2-mile radius.

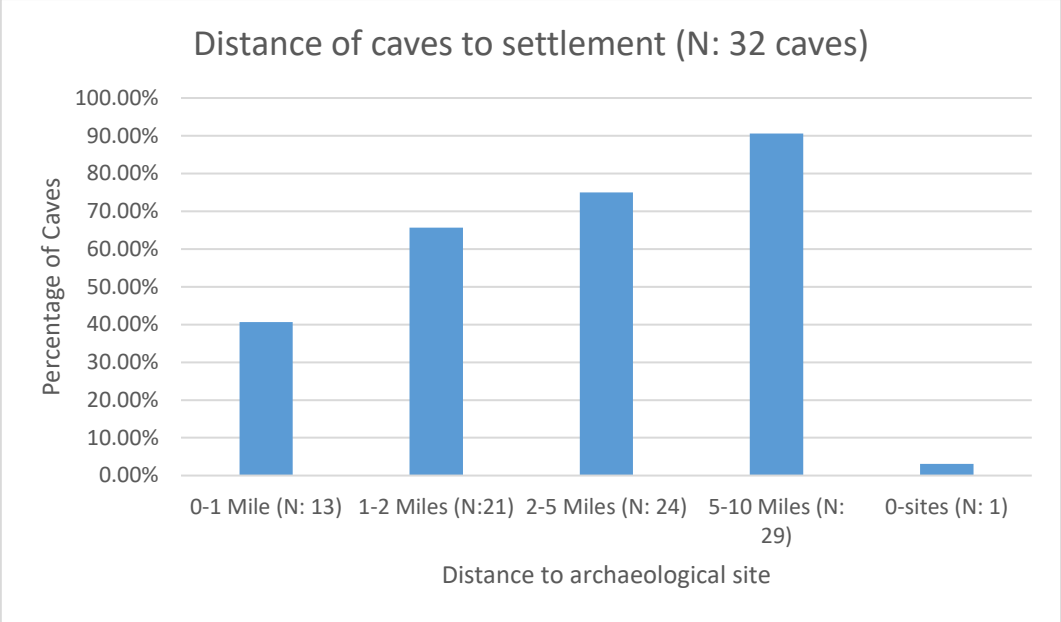


Figure 5-9: Settlements near caves in Argyll & Bute.

Examples of the close proximity of possible contemporary settlement is best highlighted by the cave at Dunagoil, Bute (**265**). The site is located directly below the rampart of a fort and is in close proximity to a second fort known as Little Dunagoil (Marshall 1915, 1938). Excavations of both forts have indicated a duration of activity beginning in the Late Bronze Age and continuing into the Early Medieval period (Harding 2004a; Geddes et al. 2010). Unfortunately, activity in the small single chambered cave cannot be firmly dated, however, finds of animal bone and non-diagnostic pottery, may indicate contemporary use to that of either hillfort.

Despite issues in dating activity in the cave, viewshed analysis of the least cost routes taken to reach Dunagoil Cave, reflect the interconnected nature of experiencing both the cave and hillforts (Figure 5.9). Both Dunagoil and Little Dunagoil forts are located on a small coastal promontory overlooking a small tidal bay. Given their location on prominent features in the landscape, these sites would have been highly visible to those moving through the landscape. Consequently, those wishing to use the cave, which was hidden at the base of the hillfort, would be able to see both forts before they had sight of the cave (Figure 5.10, 5.11).

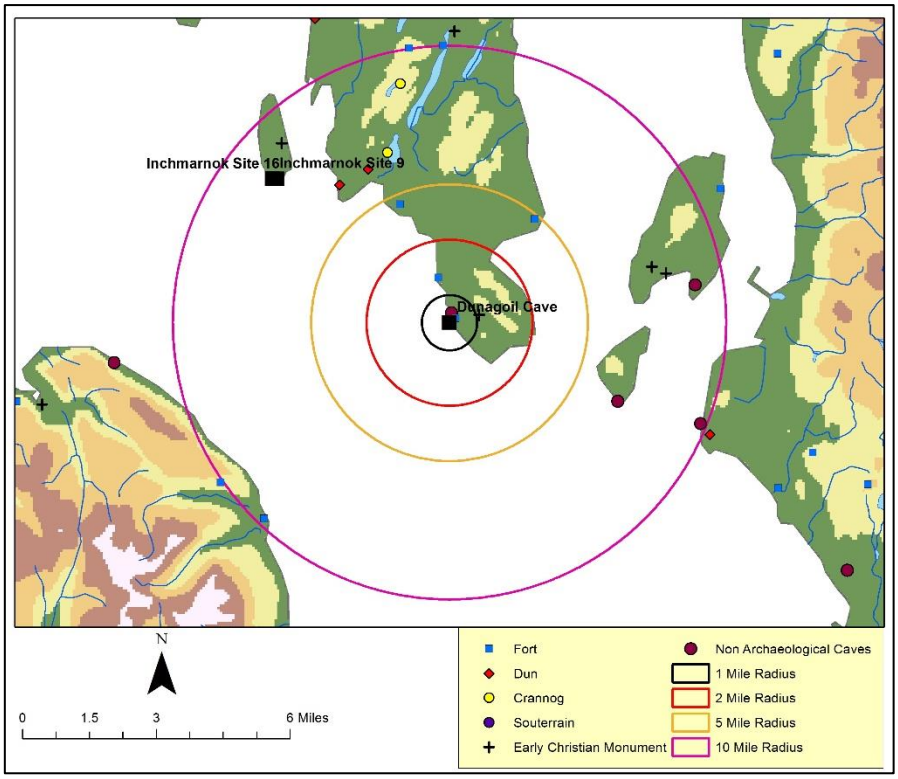


Figure 5-10: Location of archaeological sites in relation to Dunagoil Cave (265), Bute demonstrating the sites close proximity to hillforts.

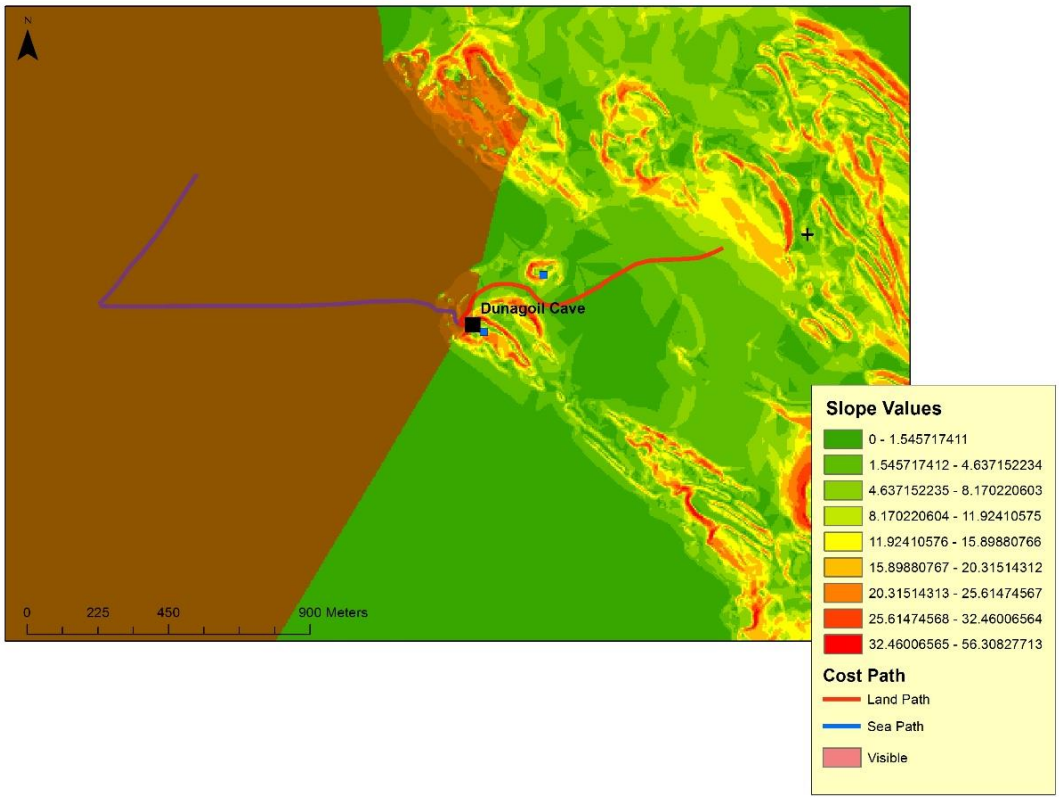


Figure 5-11: Viewshed from Dunagoil Cave (265) and the two least cost paths towards the site- the two hillforts would be visible before the cave, which suggests that those wishing to access would have had to move past the hillforts.

There are a number of other examples of caves closely associated with the superstructure of contemporary settlement. These include Uamh an Duin (**135**), a rockshelter on the cliff face underneath Dun Scurrival, Barra, Llanymynech Cave (**315**) in the centre of Llanymynech Fort and King Arthur's Hall Cave (**316**), underneath and incorporated within the ramparts of Little Doward hillfort, Symonds's Yat, Gloucestershire.

5.3.2 Caves, bays & transitions

Despite the integrated nature of cave-use and settlement, if we considered where caves are in relation to overall densities of human activity during the 1st millennia, it suggests that the majority of activity took place on the periphery of dense areas of human activity (Figure 5.12). By taking into account the distribution of all types of settlement (Table 5.1) in Argyll and Bute, densities of human activity can be calculated using kernel density analysis of sites. This can be used to identify areas of human activity, which can then be compared to the location of caves.

Table 5-1: Types of settlement found in Argyll & Bute dating to the 1st millennia. Data was obtained through the RCAHMS catalogues for the region. Total number of sites= 808

Site Type	**Number of sites**
Crannog	91
Fort	221
Dun	315
Broch	10
Early Christian	166
Other (Wheelhouse/ Open Air Site)	5

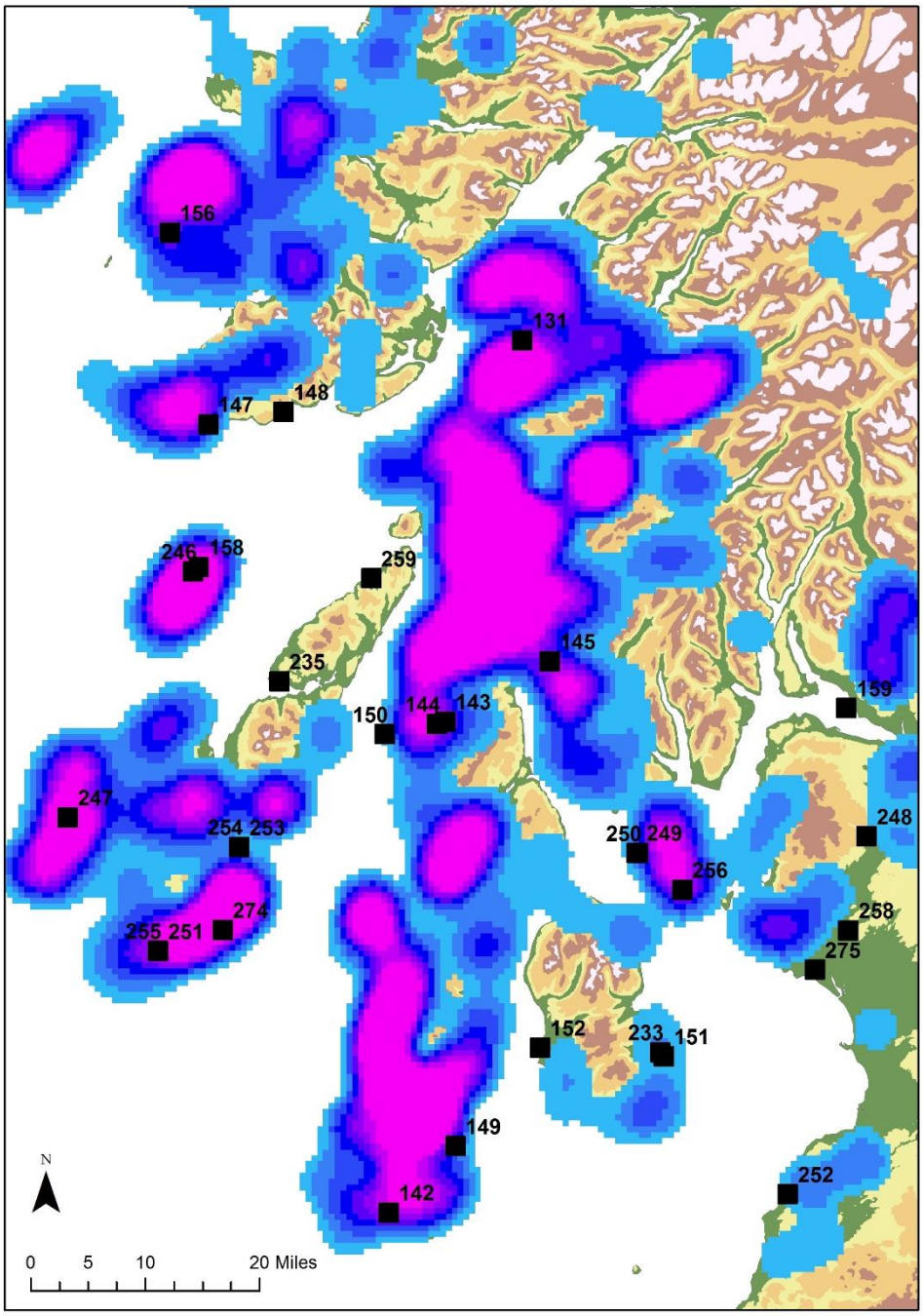


Figure 5-12: Relationship of caves with density of all archaeological sites dating to the 1st millennia BC and AD. Darker purple represents more evidence of activity.

Given the coastal nature of caves in the region, the location of these sites on the edge of settlement densities is unsurprising. However, many caves were often located between dense areas of landscape activity, suggesting that cave-use may have been connected to human movement and landscape transition. This is further demonstrated by the relationship of caves and coastal bays, which mark areas of physical transition between land and sea. Of the thirty-one caves found in Argyll and Bute, twelve are located on a coastal bay (38%) whilst ten are

with 100-300 metres of a bay (32%). Only four caves lie more than 400m away from a bay (Figure 5.13).

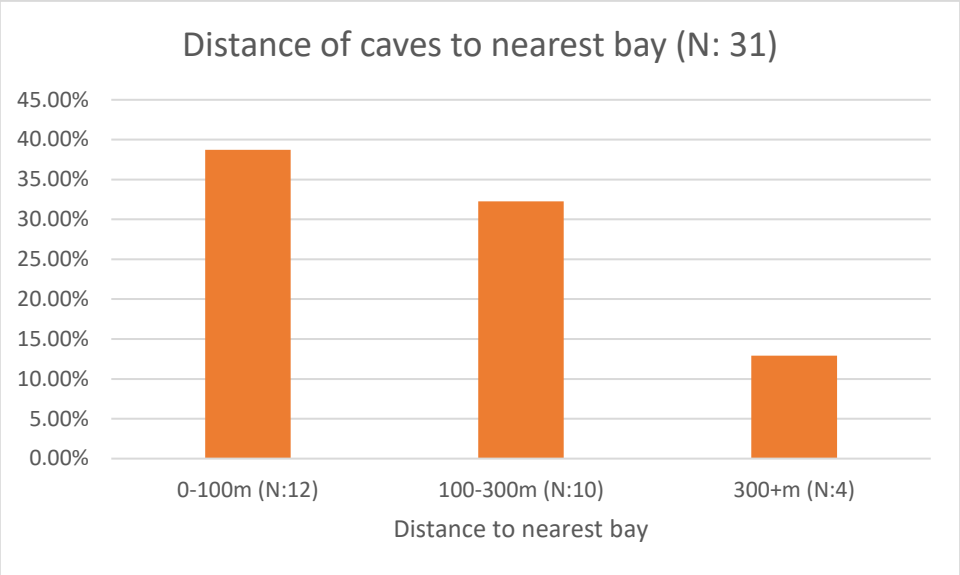


Figure 5-13: Distance to the nearest coastal bay from caves in Argyll & Bute (31 cave). Bays are defined as accessible areas in the landscape, which allow for movement between the sea and land, as such they are often characterised by open sandy areas flanked by sea cliffs.

Caves such as Keil Cave (**142**) on the southern edge of Kintyre, are located on the edge of small coastal bays, whilst sites such as Uamh Ur (**158**) and Uamh Na Mine (**246**), located on opposite cliffs of Kiloran Bay, Colonsay, demonstrate association between caves and large sandy bays (Figure 5.14). Similarly, the importance of a cave's relationship with seascapes may also be seen through the orientation of cave mouths and their respective viewsheds. Figure 5.15 illustrates the broad orientation of the entranceways of caves, with the majority orientated with views towards the sea. Regionally, many of the caves also command good viewsheds of tidal bays, inlets and Sounds, which may have served as principal route ways. Sites such as MacArthur's Cave, Oban (**131**; Figure 5.16), which overlooks the Sound of Kerrera and St Columba's (**143**) and Ellary Boulder Caves (**144**), overlooking Loch Caolisport (Figure 5.16), command good views of the waterways into the island suggesting a concern for coastal movement and access. Furthermore, a number of caves, including Dunagoil discussed above, as well the rockshelter at Ardmore Point (**159**), are located on rock promontories, commanding good views of their associated waterscapes, as well as being visible at sea.

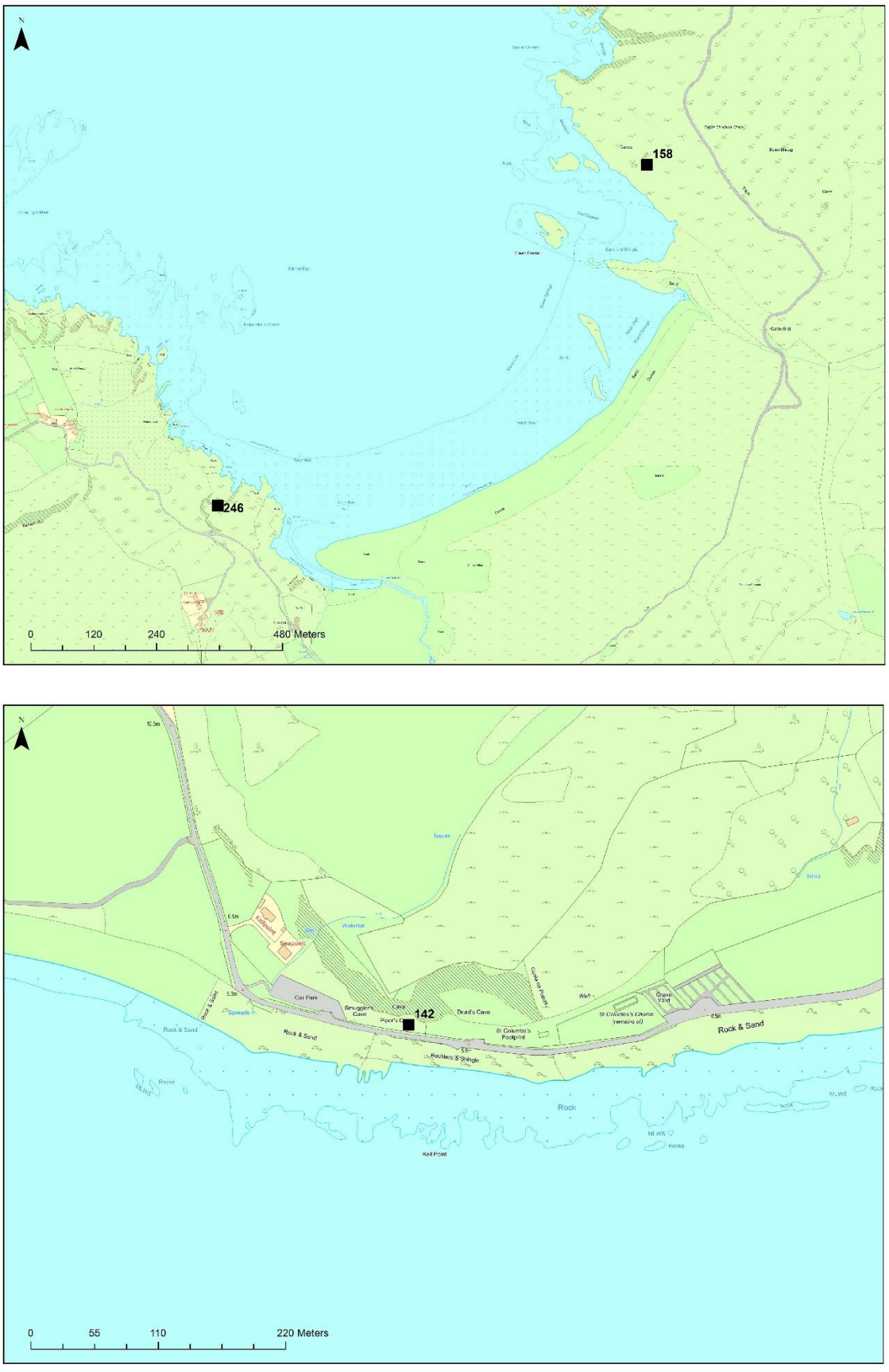


Figure 5-14 Above- location of Uamh Ur (158) and Uamh na Mine (256) overlooking Kiloran Bay, Colonsay. Below- the location of Keil Cave (142) overlooking a small open bay, southern Kintyre (Source: OS MasterMap 2009).

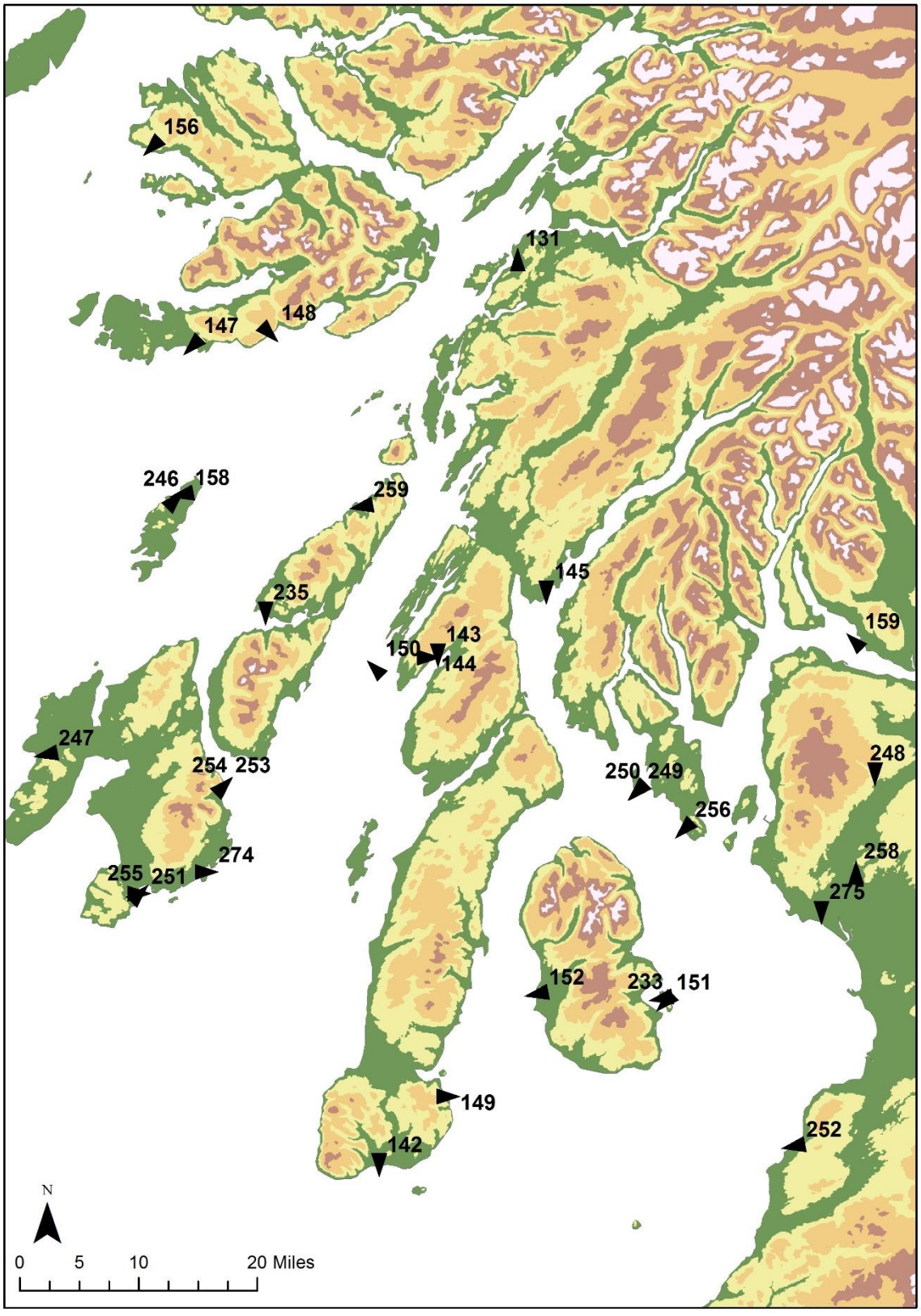
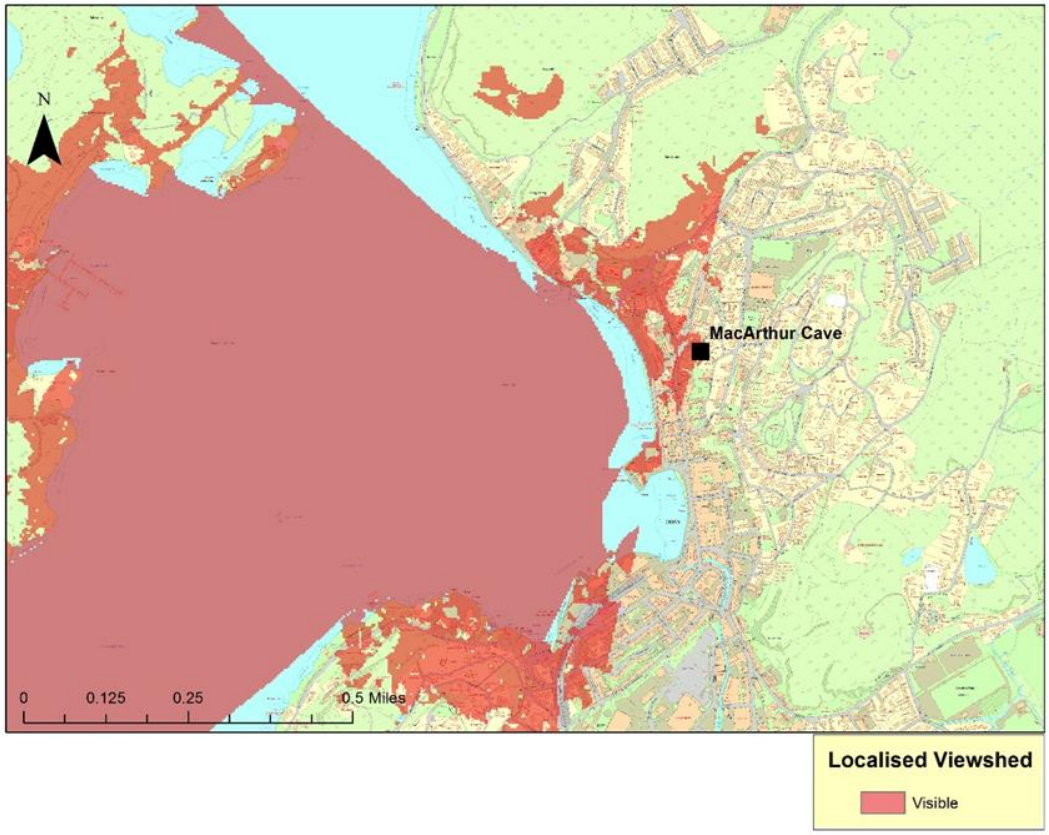


Figure 5-15: Orientation of cave entranceways in Argyll & Bute (N: 31 caves) demonstrating that caves chosen for use often overlooked the sea and coastal bays.



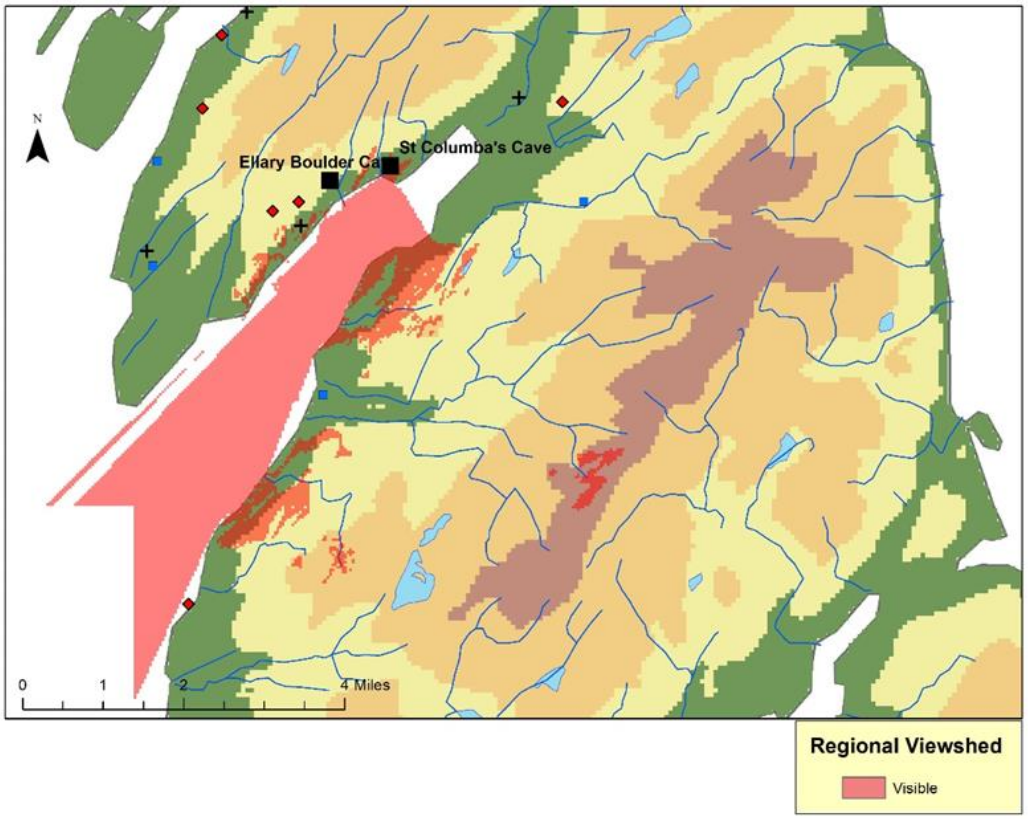


Figure 5-16: Above: Localised viewshed of MacArthur's Cave (131), Oban with extensive views of the tidal bay. Below: viewshed from Ellary Boulder Cave (141) Knapdale with views out along a tidal bay (Source: OS MasterMap 2009).

This apparent concentration of cave-use on coastal bays can be compared to the location and visibility of contemporary sites. A number of authors have stressed the importance of islandness and the projection of island identity in patterns of settlement during the 1st millennia (Kohn 2002; Lenfert 2013; Ritchie 1997b: 3). This may be seen in the location of sites across islands such as Colonsay, where sites are located on prominent hills and accessible beaches (see below). Evidence of regional variation in settlement may also support this, such as on Islay (RCAHMS 1984), although clearly more work is needed to establish a firm chronology (Ritchie 1997: 5-10).

The selection of caves near, or on coastal bays, as well as those that command good views out to sea, may therefore have been connected to projections of island identity, by marking the transition between land and sea. Comparing the relationship of caves and other sites may also support this interpretation and could suggest that cave-use was bound to movement between islands and seaways. Finds of Late Bronze Age and Roman Iron Age material culture in caves also support this and may demonstrate the use of caves by transient populations moving around the archipelago along the Atlantic seaway.

5.3.3 The location of caves and settlement in Southern Craven

Similar interpretations of cave-use in Argyll and Bute may also be relevant for the use of caves near landscape interfaces in Cravendale. Overall, cave-use appears to have been concentrated within a 5-mile radius in the south of the region, associated with caves located on exposed limestone along valley edges (Figure 5.17).

In order to understand this concentration, it is necessary to contextualise elements of cave-use within contemporary settlement frameworks. However, unlike regions elsewhere where caves are relatively understudied, in the Yorkshire Dales they remain a key site in understanding Iron Age and Roman Iron Age society. Excavations of settlement enclosures and field systems often produce limited artefactual assemblages, which has restricted archaeological understanding of the nature of societies inhabiting the upland regions of North Yorkshire.

Despite this, new research initiatives have begun to provide new interpretations of the archaeological record in the region (See papers in Martlew 2011). For example, excavation and analysis of settlement nuclei at places such as Chapel House Wood, Upper Wharfedale (Martlew 2011a) and Upper Swaledale (Laurie et al. 2011), are beginning to reveal the complex nature of settlement and their associated field systems, in which caves can be contextualised. In comparison to cave assemblages in the region, the restricted Iron Age artefactual framework

has limited the visibility of sites dating to the 1st millennium BC. Evidence of occupation often relies on finds of early Roman artefacts, such as at Prior Rakes, Malham (King 1986; Raistrick et al. 1962) and East Attermire Camp (King et al. 2011: 33), which may suggest antecedent use during the Late Iron Age. Similar evidence is also seen in the juxtaposition of Iron Age and Roman field systems at Fort Gregory, Grassington (King 1986: 183; Martlew 2011b), Haelaugh, Swaledale (Fleming 1998: 149-152) and Greenber Edge (Bowden et al. 2004: 92).

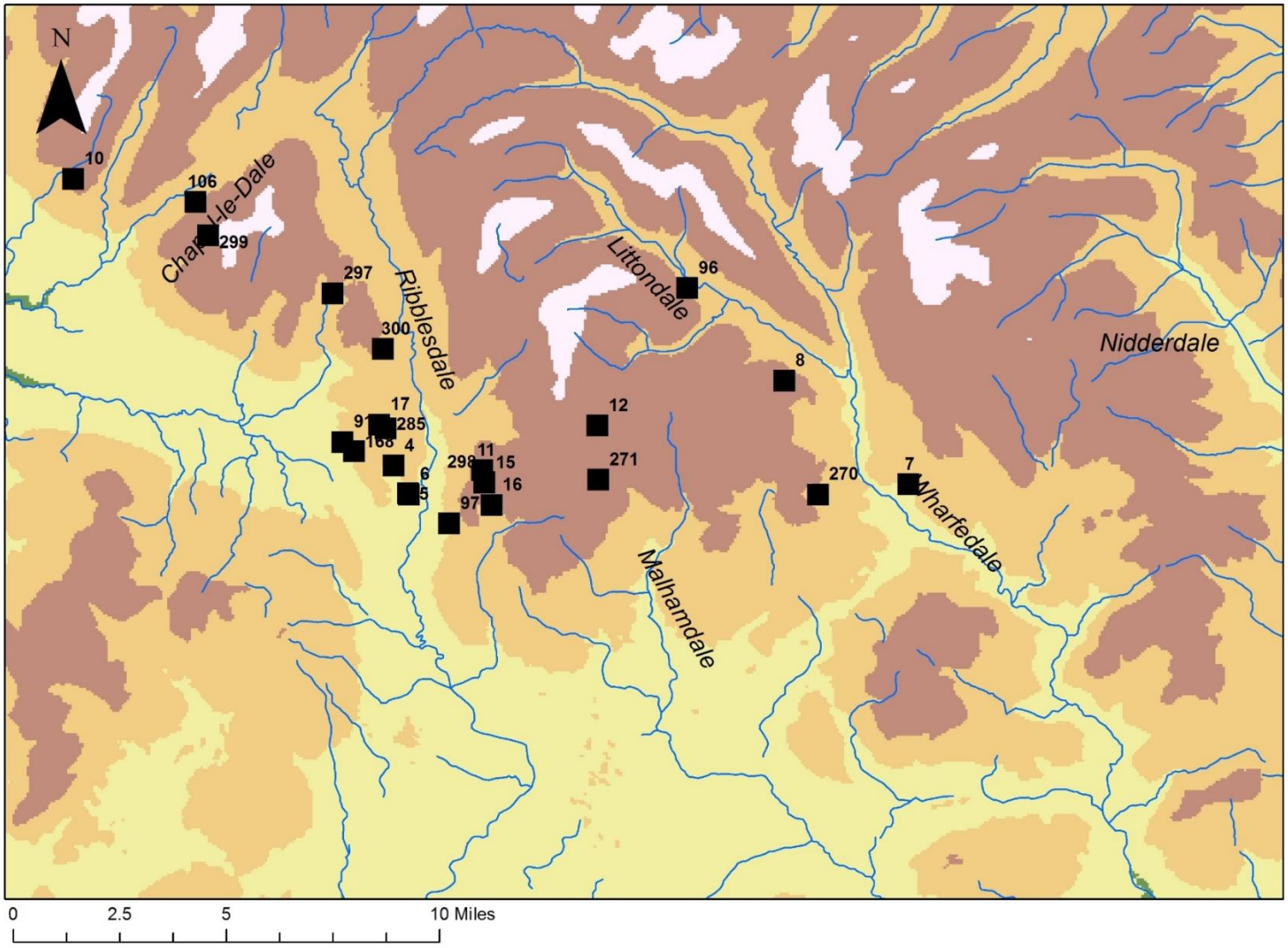


Figure 5-17: Distribution of caves with known activity dating to c.800 BC-800 AD in Southern Cravendale (N: 21)

Similarities can be drawn between the apparent continuity in settlement and evidence of cave-use (Figure 5.18). This is further demonstrated by finds dating to the 2nd century AD, such as at Malham Tarn, where excavation of an enclosure with two circular buildings, produced an iron sickle and dish dating to the 2nd century AD (King 1986: 182; Raistrick et al. 1962). Advances in aerial photography (Horne et al. 2001; Riley et al. 1980) also identified sequences of field systems and rectilinear buildings, which are thought to date to the Iron Age or Roman Iron Age. Excavations of these have produced a mixture of material including 4th century Roman pottery at Smearsett (King 2004: 337) along with an 8-9th century Tewhiddle style strap end. This long-term continuity of enclosures has also been identified through excavation of a rectilinear structure at Selside, Horton in Ribblesdale, which dated to the 7th century AD (Johnson et al. 2014).

Such activity can be compared to caves in the region, including those centred on the entrances to Ribblesdale and Chapel-le-Dale. Post-Roman artefacts were also recovered from field systems at Lea Green near Grassington (King 2004: 336), Clapham Bottom (Batty 2010) and two sites at Chapel-le-Dale of Anglo-Saxon date (Johnson 2013). Further finds of Anglo-Saxon material include two Northumbrian styca of Eanred at an enclosure at Prior Rakes, Malham and coins of Archbishop Wilfhere minted by Wulfred c.850 AD and Ethelred II at Ribblehead (King 2004: 338-340). This suggests that cave-use may have been bound to broader contemporary activity in the landscape, characterised by small enclosures and field systems.

This is further demonstrated by finds of metalworking debris such as galena, azurite and malachite ore, from East Attermire Camp (King et al. 2011: 33-34). Use of the site for craftworking may be considered contemporary to metalworking at Victoria (**15**) and Attermire (**16**) Caves, directly north of East Attermire Camp, dating to the early Roman Iron Age (see Chapter 3).

Elsewhere, finds of a bronze coin dating to the 3rd century AD at the entrance of Scoska Cave (**96**) can be compared to finds of a coin of Gordianus Pius c.288-244 AD and mortarium dating to the 3rd century AD found at Thornsber Barn Settlement (MYD4194), 200 metres to the east of the cave. Furthermore, close to Grassington in Upper Wharfedale, a number of enclosures have provided dates of contemporary character to activity in Fairy Hole (**7**) (Taylor 2011: 19).

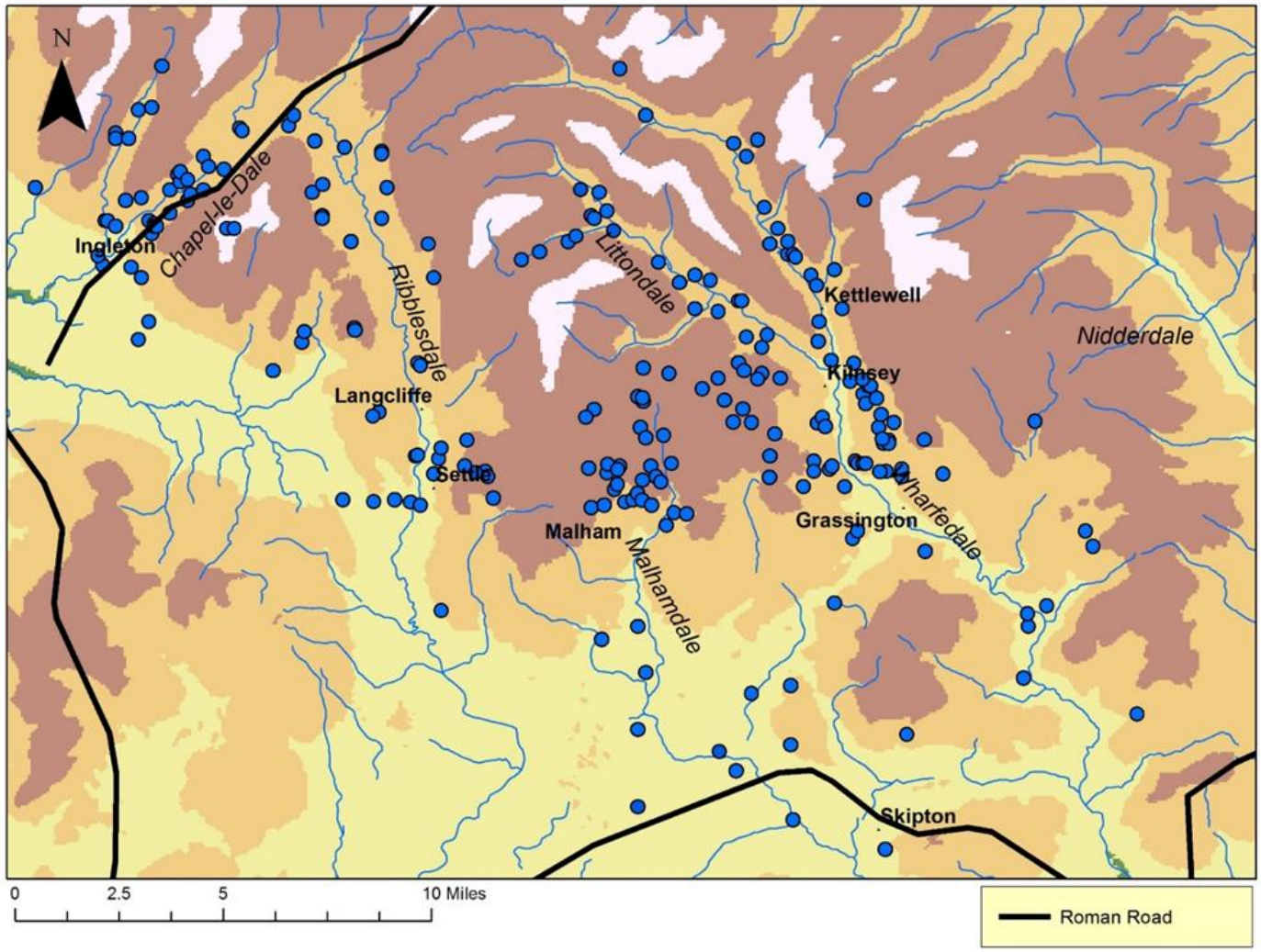


Figure 5-18: Distribution of archaeological sites in Southern Craven dating to the 1st millennia BC and AD

5.3.4 Familiar caves and unfamiliar landscapes

Contemporary activity in close proximity to caves suggests that these sites were part of broader patterns of human activity within landscape. In total, eighteen caves (N: 85%) were within a mile radius of possible contemporary sites (Figure 5.19). However, similar to patterns of cave-use in Argyll and Bute, caves used during the 1st millennia were often located on the edge of settled landscapes (Figure 5.20). This suggests that, like Argyll and Bute, cave-use in Southern Cravendale may be related to patterns of movement and crucially transition.

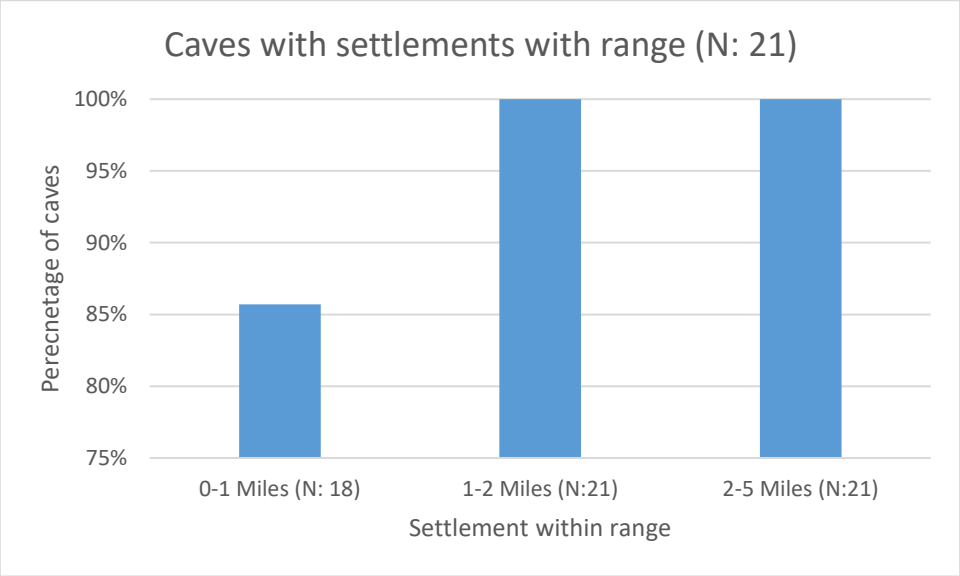


Figure 5-19 Settlement within a 5 mile radius of caves, demonstrating that all caves lie between 1-2 miles of possible contemporary settlement, whilst 85% (N: 18) are within a mile radius

This relationship can be seen through a focused discussion of cave-use dating to the Late Iron Age and Early Roman Iron Age, around Settle in the south of the region. Activity in caves appears to have been concentrated in eleven caves along the Giggleswick and Attermire scars, which lie at the interface between the Ribblesdale and the more fertile lowlands towards the south (Figure 5.21). To the east, both Fairy (**7**) and Calf Hole Caves (**270**) are also found on the interface to the narrower and less fertile Lower Wharfedale valley, whilst Dowkerbottom (**8**) sits on the transition to the steep sided valleys of Littondale. Elsewhere, both Langscar (**271**) and Chapel (**12**) Caves, near Malham Tarn, are close to the modern day road, as well as the old 'Monk's Way', thought to represent the transitional route between Littondale to Ribblesdale during the Monastic period.

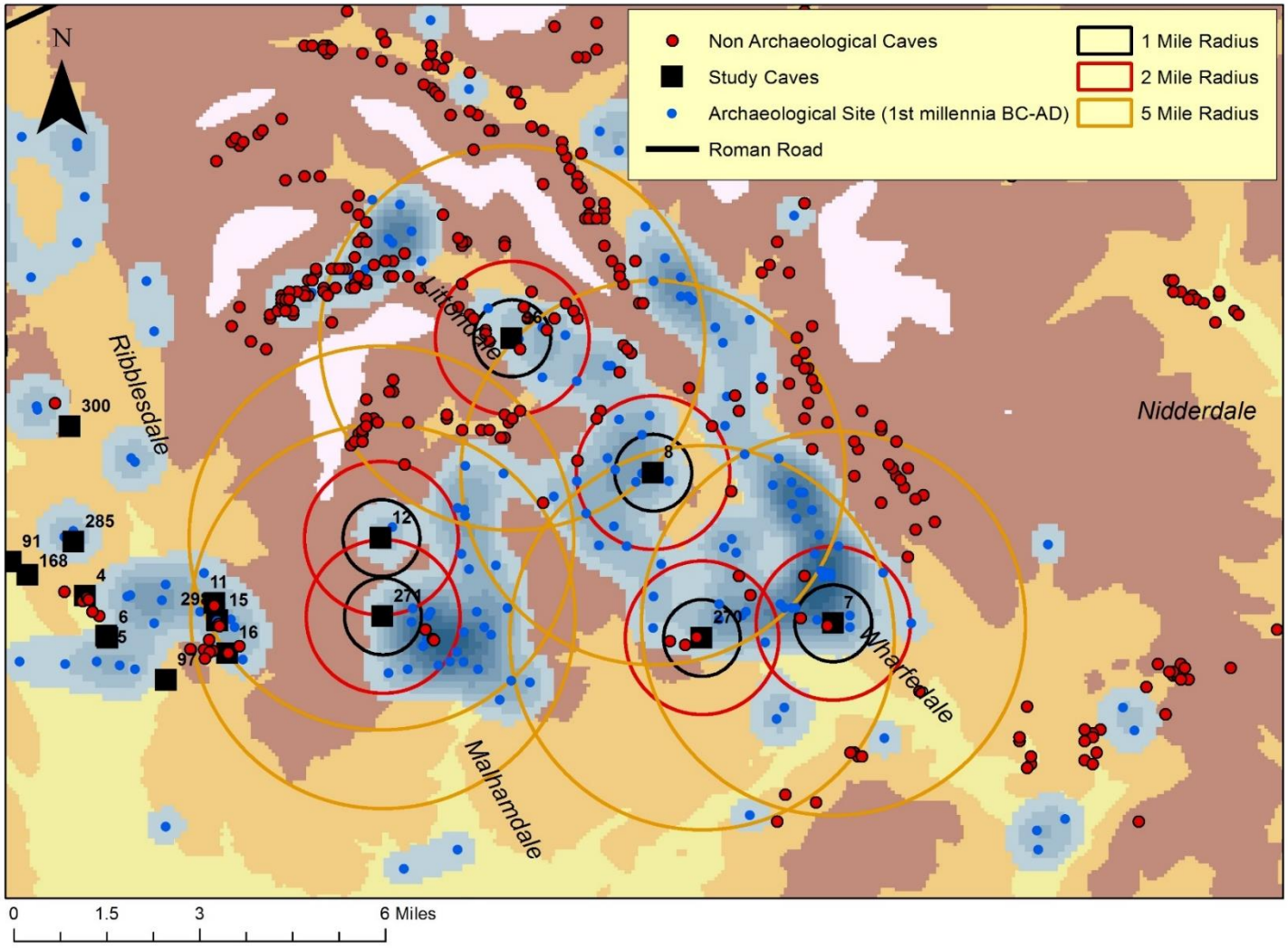


Figure 5-20: Location of caves in relation to settlement densities and natural caves in Wharfedale, Malhamdale and Ribblesdale

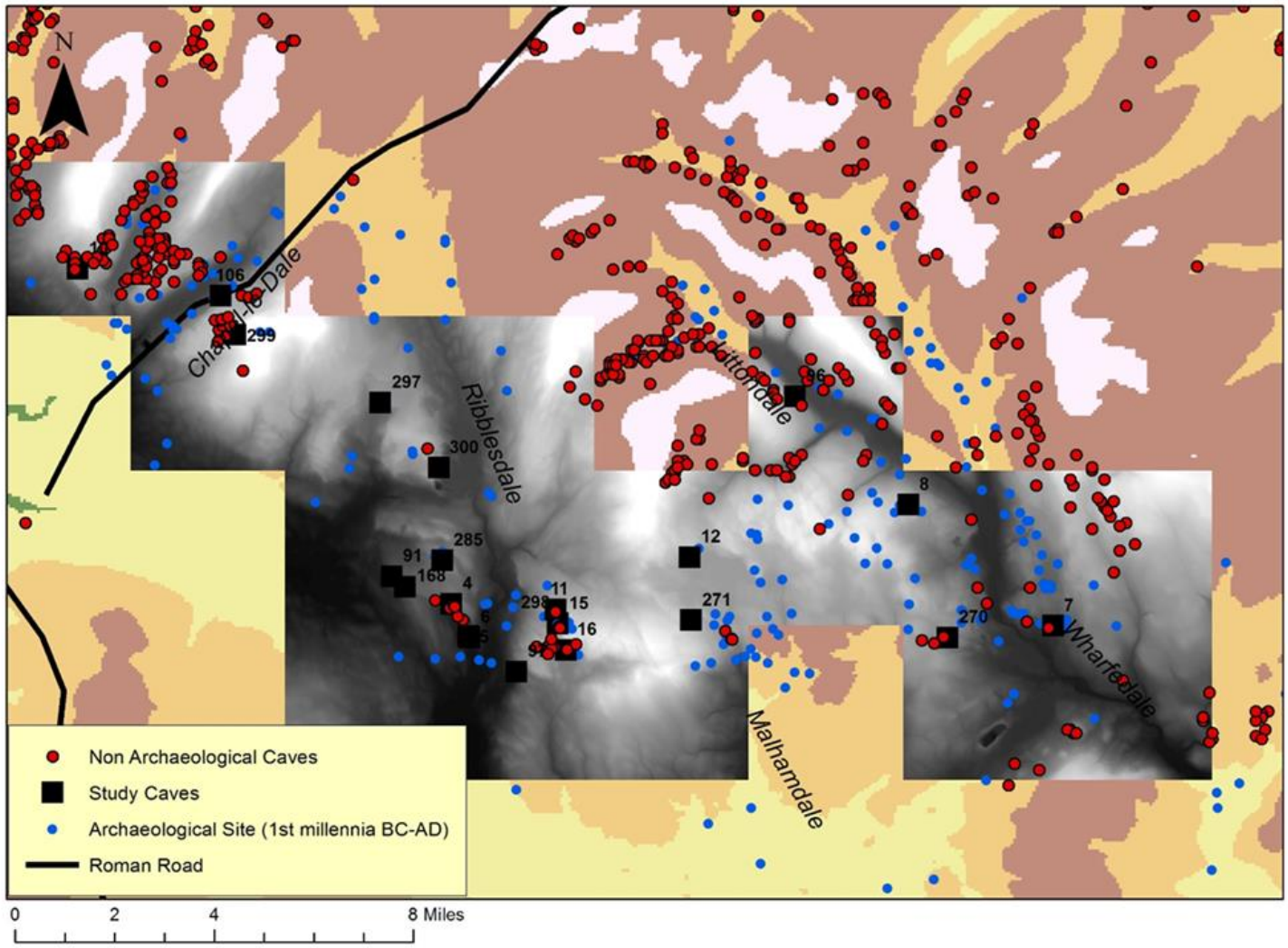


Figure 5-21: Location of caves near route ways and areas of transition in Southern Craven

5.3.5 Caves, scars and mnemonics

The use of caves on the limestone scars of Giggleswick and Attermire, may also suggest that contemporary cave-use was bound to wider topophillic association with other natural features (Figure 5.22). This is demonstrated through viewshed and access analysis of three caves, Jubilee (**11**), Victoria (**15**) and Attermire (**16**) Caves on Attermire Scar, east of Settle, overlooking the entrance to Ribblesdale (Figure 5.23, 5.24).

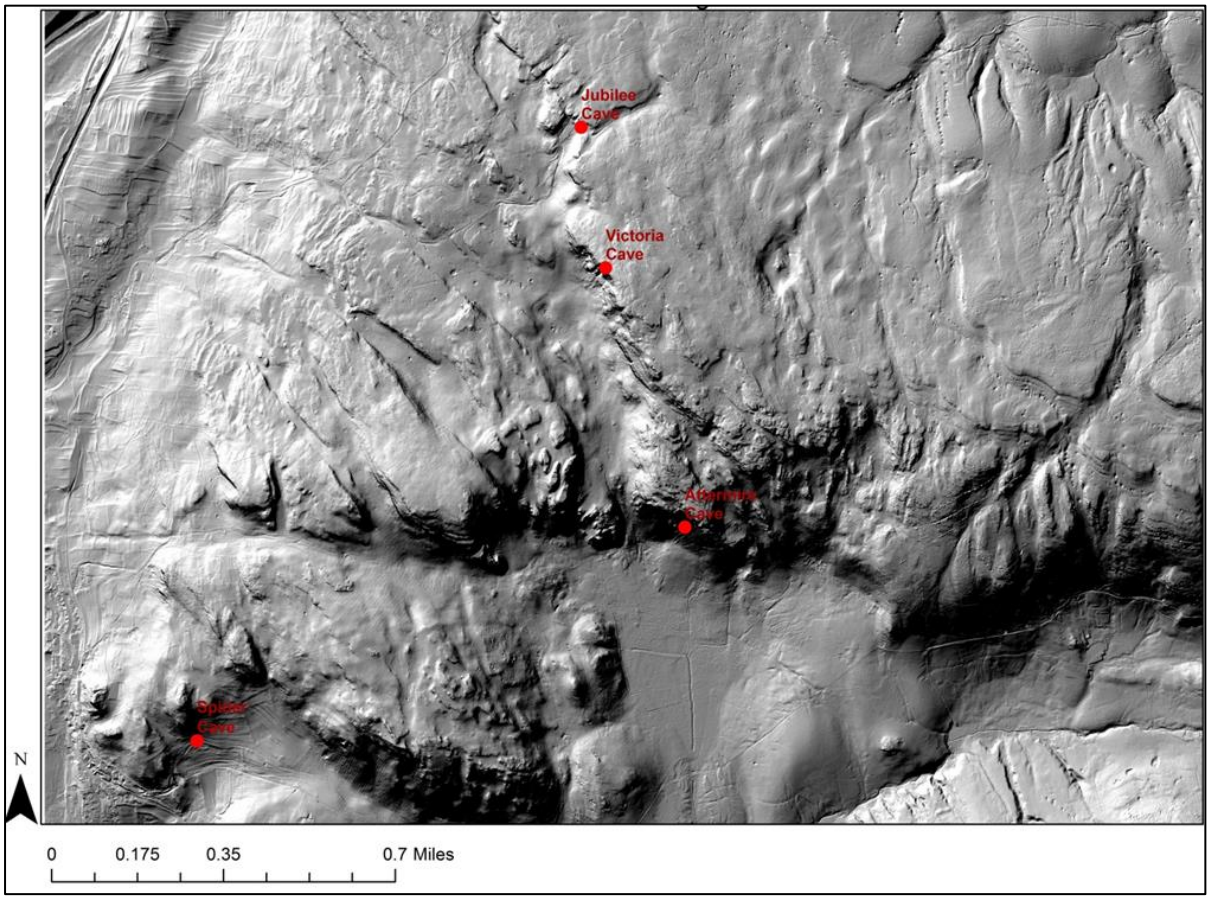


Figure 5-22: Location of caves with activity dating to the 1st millennia on Attermire Scar, with Spider Cave located to the southwest on Sugar Loaf Hill (Source: Landmap 2014)

All three caves were likely used around the same time and produced finds dating to the Late Iron Age and Roman Iron Age. However, the majority of artefacts point towards an intensification of use in all three caves during the 1st and 2nd centuries AD (see Chapter 3). This includes finds of S-shaped and Dragonesque fibulae from Victoria (**15**), Jubilee (**11)** and Attermire Caves (**16**) that were likely made during the late 1st century AD (King 1970: 411). An early Roman cast mirror handle, of similar date, was also found in Spider Cave (**19**) located on Sugar Loaf Hill to the south of Attermire Scar (ibid.).

Figure 5-23: Attermire Scar looking east (Author's Photo)

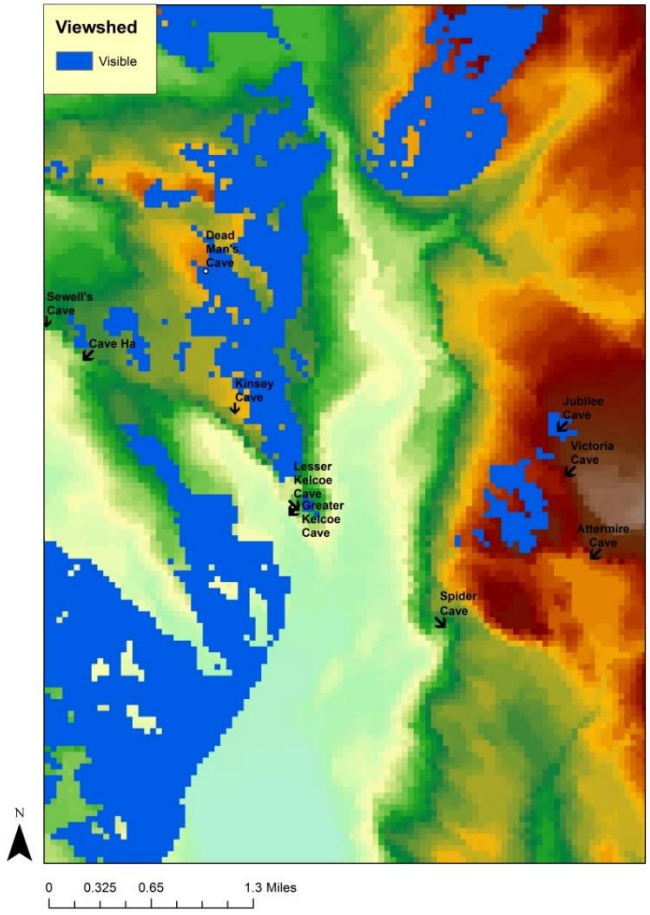
Figure 5-24: The location of Attermire Cave (16) on the southern edge of Attermire Scar, the cave is accessed through a climb over a rock ledge and a steep talus slope (Author's Photo)

The contemporary character of cave deposition in these caves, suggests that the scar may have served as foci for cave-use at least during the early Roman Iron Age. This is further confirmed by the negative evidence of use in other caves in the area including those on Sugar Loaf Hill facing north.

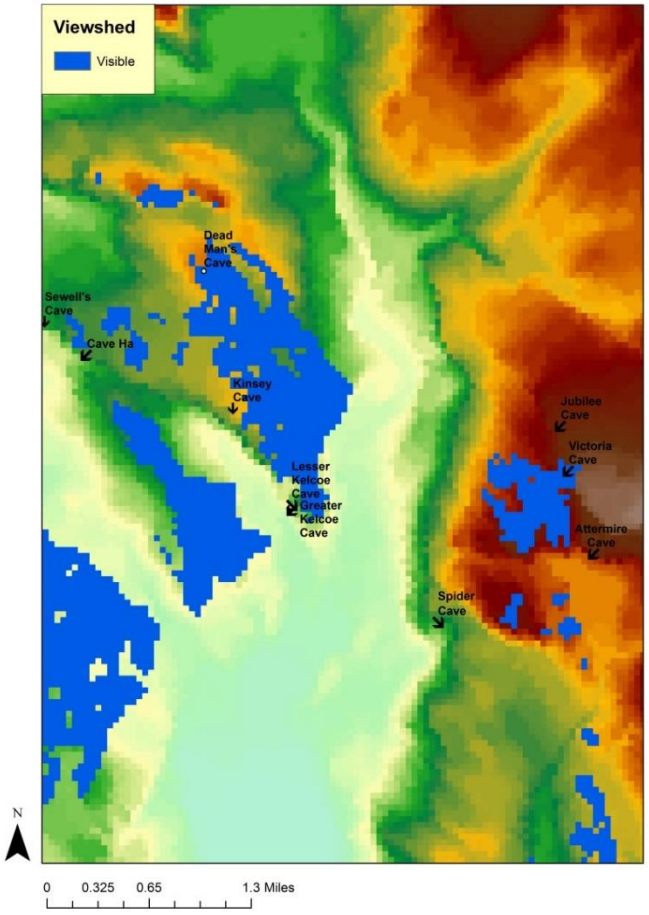
The reasons behind this apparent concentration of use on the scar can be explored through comparative viewshed analysis from the entrance to each cave, as well as from a route below the scar. Analysis of all three caves on Attermire Scar demonstrate that observers standing at the entrance to each cave would have had views of Attermire plateau, the entrance to Ribblesdale and the flatter more fertile plain reaching south to Skipton. Consequently, these caves share similar experiences through connected sensescapes, which may have motivated human-use (Figure 5.25, 5.26).

The prominent appearance of the scar may also suggest that the scar face served as an important topographic marker for those moving through the valley. This is reflected by viewshed analysis of a path below the scar, which demonstrates that observers would have seen the scar face before seeing any of the caves (Figure 5.27). Whilst this may seem like an obvious point, this highlights a number important factors of using and experiencing caves on Attermire Scar. Firstly, it is likely that cave-users would have needed knowledge of site location. For example, the small keyhole shaped entrance to Attermire Cave is hidden behind a rock face and is reached by a steep talus climb. Therefore, users would have needed prior knowledge of at least the cave's location on the scar in order to attempt to access the cave. Secondly, the shared experiences offered by the viewsheds of each cave and the prominent visibility of the scar face may indicate that use in multiple caves was bound to wider perceptions attached to the scar itself.

Viewshed from Jubilee Cave



Viewshed from Victoria Cave



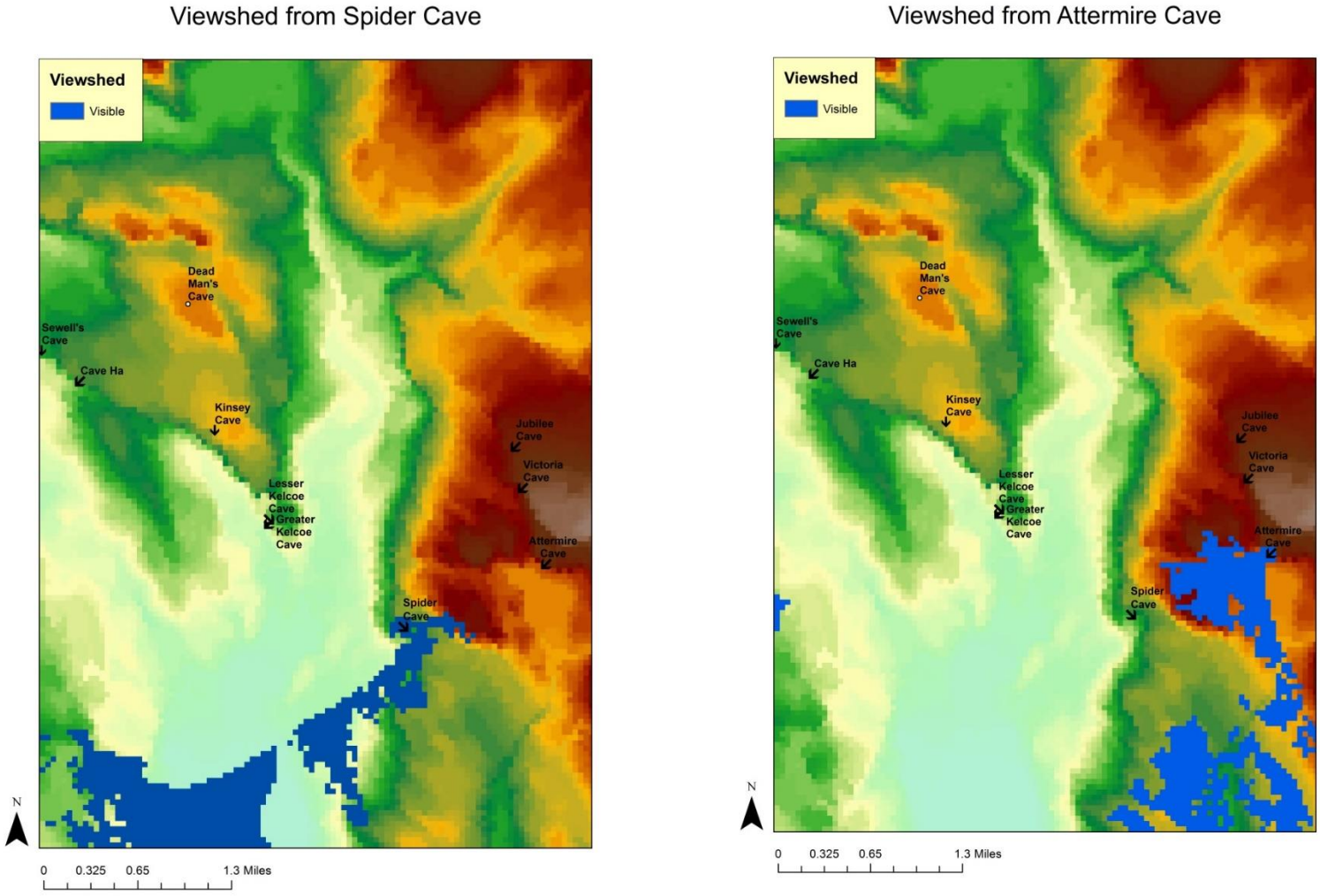


Figure 5-25: Viewshed analysis of the four caves east of Settle demonstrating the shared aspects of the cave entranceways on Attermire Scar, whilst Spider Cave shares similar views as Attermire Cave.

Figure 5-26: Viewshed southwest from Victoria Cave and southwest from Jubilee Cave (Author's Photos)

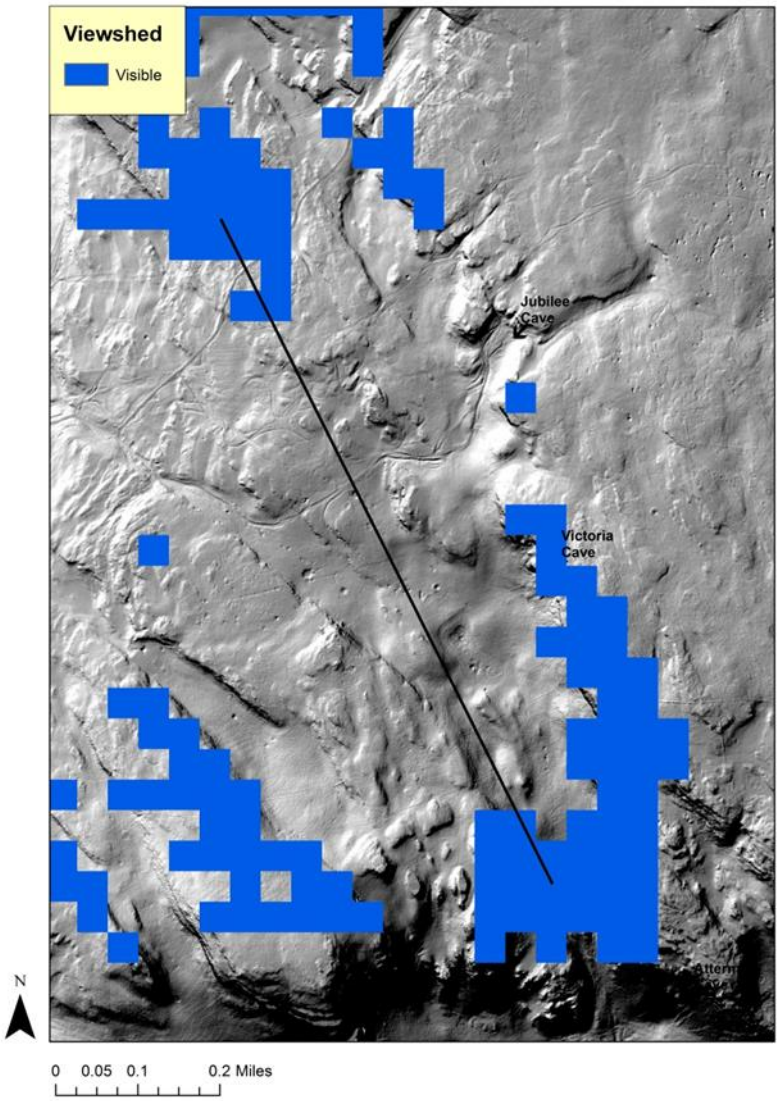


Figure 5-27: View line from plateau near Attermire Scar- blue indicates constantly visible areas in the landscape (Source: Landmap 2014)

5.3.6 Topophilia and movement

The importance of cave-use on these edges of valleys and on visible scar faces can be further explored through a discussion of the possible nature of 1st millennia society in the Yorkshire Dales. In their summary of the archaeology of the northern Pennines, Challis and Harding (1975: 185), agreeing with earlier assessments by Piggott (1958: 28), argued that upland valleys had a limited capacity to support a population and concluded "semi-nomadic pastoralism was the only practicable way of life".

As we have seen however, a number of field systems, originally thought to be Roman in date, are providing evidence of Iron Age antecedence. In fact, dense settlement and field systems are recorded in Upper Wharfedale around Grassington (King 1986: 183; Martlew 2011), as well as in Swaledale (Fleming 1998: 137). Whilst the archaeological record is fragmentary, it does correlate with pollen records indicating land clearances during the mid-Iron Age in landscapes around Ingleborough (King et al. 2011: 33) and Swaledale (Fleming 1998: 137; Laurie 2004: 89). Such evidence hints at a more complex pattern of settlement and land-use than suggested by the 'Celtic Cowboy' model. The long duration of many of the networks of field systems and settlements indicates that communities may have practiced a mixed farming system with some permanent settlement. Importantly, however, within these communities, there may have also been groups of seasonal transhumanists.

Useful parallels may be seen from studies of Medieval communities in the Yorkshire Dales (e.g. Moorhouse 2003: 305-311, 2009), which have shown the development of spaced settlement on the valley edges in upland areas. Route ways were also focused on valley edges, connecting settlements and valley shelves, which were eventually moved down to the base of valleys by the mid-18th century (Moorhouse 2009: 69). Importantly, land-use was dictated by the geology and geography of the valley (ibid.), where communities operated a mixture of farming systems, including seasonal transhumance and permanent farming (Moorhouse 2003).

From the distribution of settlement outlined above, valley edges served as a focus for settlement and therefore also as avenues of communication and movement. In contrast to the broad assumption of nomadic pastoralism, applied by the likes of Challis and Harding (1975), a more complex sequence of settlement and farming systems may have characterised the 1st millennia, which was dependant on the geography and geology of the individual dales. This is supported by recent dating of many of the field systems and enclosures to multiple periods of use (see above), as well as the intensive distribution of settlement in certain areas of the landscape.

Whilst parts of the landscape may have been permanently occupied, there was also likely a population that practiced seasonal transhumance moving animals from both the uplands and valley floors.

This relationship with individual dales and transhumance is important in understanding the experience of place. For communities inhabiting these dales, the persistent experience of the landscape around them may have resulted in topophilic associations, which would have played a fundamental part in the creation of world-views and cosmography. Anthropological studies on the perception of place (e.g. Rural United States: Lokocz et al. 2011; Tuan 1974; Walker et al. 2008) have demonstrated the importance of persistent experience in the creation of world-views. Topophilic association with natural places is well recorded in the ethnographic record, including in the upland marginal landscapes of Tibet (Adams 1996; Akasoy et al. 2011), Mongolia (Davaa-Ochir 2008) and Finland (Lahelma 2005, 2007). Here natural features such as rock faces, water bodies and waterfalls are attached with memories and become integrated within inhabitant's world-views.

Similar arguments may therefore be relevant for the use of caves along Attermire Scar, given its position between valley interfaces and the similarities between the types of activities taking place in the caves. The scar, which lies on the interface between the uplands of Ribblesdale and the flatter fertile soils stretching down to Settle, may have acted as a topographic marker for those who moving between valleys.

5.3.7 Caves & transition in the landscape

As a natural mnemonic, the features of Attermire Scar may have served as important focal points for those moving in the landscape, as guidance for route ways and symbols of transition between valleys. In this respect, cave-use in the Southern Craven can be compared to the location of activity in caves in Argyll and Bute. As we have seen, cave-use was associated with the movement between land and sea, as well as island identity. Consequently, it may have been bound to the attachment of place and the transition away from the familiar into more unfamiliar landscapes.

Out of the thirty-one caves analysed across Argyll and Bute, only Meikle Cloak Cave (**248**) and Ceeve's Coves (**258**) share an inland location. Out of the rest of the caves, Kilchoman Cave (1275 metres) and the cave-souterrain at Ardeer (1199 metres) lie beyond a mile away from the sea; although both caves share viewsheds out to sea (see Appendix 2).

The majority of caves were related to seascapes, with many being located near, or directly on coastal bays. For example, sites such as Uamh Ur (**158**) and Uamh Na Mine (**246**), located on opposite cliffs of Kiloran Bay, Colonsay, demonstrate association of caves with large open sandy bays (Figure 5.36). Other sites are also found on smaller restricted bays, including Keil Cave (**142**) on the southern point of Kintyre. Analysis indicates that these bays served as an easier point of access to the caves and to islands. Importantly, the location of caves on the base of cliffs on coastal terraces means that many of these sites could only be accessed by sea or by travelling along the base of the cliff. This is seen at sites such as Keil Cave (**142**) and Nun's Cave (**148**), both of which are located at the base of cliffs that cannot be accessed from above.

5.4 Hidden earth: finding caves in the landscape

Anthropological studies of landscape movement and attachment suggest that natural places were significant focal points to mark their transition from, or to, familiar landscapes. Interestingly, the location of caves in both case studies, hint at similar associations with caves and topographic features, which marked the beginning and end of a journey.

As we explored in the morphological discussion in Chapter 4, those moving through the landscape may have used small single chambered caves and rockshelters for refuge. The close association of sites with coastal landscapes also likely reflects the choice of caves for temporary shelter. Despite this, the use of some caves may have also been tied to wider symbolic elements in the landscape, which may be seen by the association of sites to significant topographic features and caves that are difficult to access.

5.4.1 Esoteric caves & hidden knowledge

Viewshed and access analysis of the caves across Craven have highlighted a number of different trends when understanding patterns of access and visibility. At least seven caves across the study area were obscured from those moving in the immediate area surrounding the site. For example, analysis of Chapel Cave (**12**), located on a small glacial ridge, suggests that whilst the cave presents good views of the surrounding landscape, those moving below the cave would be unable to see the cave's entrance (see Appendix 2).

A similar pattern of restricted site visibility is seen in the location of Dowkerbottom Hole (**8**). The vertical passage cave situated on the base of a flat limestone plateau is visible to anyone moving above the plateau but invisible to those walking near the cave (See Appendix 2; Figure 5.28).

Figure 5-28: View of Dowkerbottom Hole (8), Littondale North Yorkshire, as approaching from the west. The cave is hidden from view (Author's Photo)

The use of obscure and restricted sites clearly indicates that not all caves were used for shelter. Accessing and leaving sites such as the vertical shafts of Dowkerbottom Hole and North End Pot (**10**) requires not only knowledge of the sites location, but also necessitates a dangerous descent, which would worsen depending on weather conditions. Evidence of the dangerous and difficult access is also seen in Argyll and Bute, particularly in accessing both Meikle Cloak Cave (**248**) and Ceeves Coves (**258**), which are located on cliffs obscured by waterfalls.

In their discussion of the Bronze Age use of caves in the Derbyshire Peak District, Barnatt et al. (2002) suggested that knowledge of a cave's location and how to access the site was socially significant, with only a few being able to find and access the site. Esoteric knowledge of a cave's location became a vital part of the social display and deposition in the cave and would have formed part of memoryscapes attached to cave-use (see Johnston 2008).

Similar implications may also be relevant for the use of hidden caves in both Argyll and Bute and Southern Craven, which would have required knowledge of topographic markers, location of bays and a specific restricted pattern of access. Such processes fundamentally enhance the experience of use, and accessing caves. Users who have no prior knowledge of how to move

through caves would have been confronted by a more intensive sensescape, reinforced by uncertainties in navigating unfamiliar cavescapes (see Chapter 4).

5.4.2 Visible display in caves

A number of instances of cave deposition may have also been visible to those moving in the wider landscape. Fairy Hole (**7**) Grassington is visible from below and from a network of possible contemporary sites. Unlike the less visible caves discussed above, those entering the cave, in this case for the deposition of human remains and pottery during the Iron Age, would have been visible to the landscape below. Similar examples of this are seen in the use of caves on open bays in Argyll and those on promontories such as Ardmore Point (**159**) and Dunagoil (**256**). Significantly, however, once inside the cave, the users and the acts of deposition would have been secluded from those outside.

This seclusion of cave-use may have been fundamental in enhancing the theatre of display. In his discussion on the ritual role of Sculptors' Cave, Armit (et al. 2011) highlighted the importance of display behind the deposition of human remains at the cave entranceway. For Armit, (et al. 2011: 252), this was enhanced by the restricted location of the site which is accessible by sea or by a climb down a sea cliff.

This may also be highlighted by relationship of contemporary settlements and caves. Sites such as Wookey Hole (**166**), Cheddar, High Pastures Cave, Skye (**154**) as well as the caves on Attermire Scar (see above) were associated with contemporary enclosures in close proximity to cave entrances. Whilst activities taking place inside the caves would have been obscured from those outside, they would have still have been aware of activity taking place inside caves. For example, smoke, firelight and sounds would have emanated from the caves, which would have created a rich sensescape experienced by those outside the cave.

As already outlined in Chapter 4, caves themselves are also transitional and transformative places in the landscape, often making the user disorientated and physically exerted. Everyday experiences within caves, including the movement and appearance of water, sounds and light, are significantly different underground, often intensified in the acoustic environment (see Chapter 7).

Another form of transition is also seen in the contemporary, long-term deposition in four caves along Attermire Scar (see Chapter 3 and 4 for chronology and morphology discussion). As well as sharing parallel finds of craftworking and metalwork debris, the caves also have similar

viewsheds out to the lowlands below. Incremental analysis along cost paths, as well as digital photography, also confirms that, whilst the caves command good views of the surrounding landscape, caves are often hidden from those moving in the landscape (see Appendix 2).

5.4.3 Caves & Celtic Christianity

The location of caves that contain early Christian crosses also highlights the importance of cave location and use during the late 1st millennia. These caves, all of which were located on coastlines, appear to have been relatively isolated, or were associated with Monastic centres (Table 5.2).

Table 5-2 Location of caves with Early Christian material to nearby settlements

		Sites			
Cave ID	**Cave Name**	**0-1 Mile**	**1-2 Miles**	**2-5 Miles**	**5-10 Miles**
143	St Columba's Cave	0	5	8	14
147	Scoor Cave	0	1	4	8
148	Nun's Cave	0	1	0	7
149	St Ciaran's Cave	0	2	2	20
150	St Cormac's Cave	2	0	3	18
151	St Molaise's Cave	1	1	2	2
152	King's Cave	0	0	1	3
233	Smuggler's Cave	2	2	1	2

The isolation and location of these caves does support the possible use of these caves as anchorites or hermitages during the Early Medieval period (Dales 1997: 56; Fisher 1997: 182, 2001: 87; Knight 2013: 101; Zaluckyj et al. 2006: 17). Christian texts also help to identify the perception of caves and islands as attractive places of meditation and prayer (Fisher 1997: 98). One text, the 'Hermit in the Cave' (Van de Weyer 1990: 65) hints at the association of caves with seascapes:

*"*As I look out from my cave, I can see the wide ocean, stretching west, north and south to the ends of the earth"

A similar location is also recorded in the hunt for the Welsh monk Illtud (Van de Weyer 1990: 57-58). Illtud, who was the teacher of St David, fled to a remote cave:

*"*At the end of a golden beach on a long peninsula (he found a cave) - a flat rock was his bed and seagulls were his companions"

It is interesting to note the parallels between the caves described in Celtic Christian literature and the topographic location of caves across Argyll and Bute, which show a concern for views of seascapes and coastal access. Importantly, Early Christian texts also point out that many hermitages were not disconnected nor isolated places in the landscape. The most compelling evidence of this derives from the tale of the itinerant St. Brendan (c.484-c.577) (Ahronsen et al. 2010: 457; Van de Weyer 1990: 27), who during his journey lands his boat on a 'small creek' and finds two caves facing each other. At the mouth of one of the caves is a spring and in the other was a hermit who gave the travelling monks guidance (Van de Weyer 1990: 27).

Rather than being isolated places, stories such as Abbot Brendan's, suggest that monks were often visited for guidance and healing. Indeed, whilst on his hermitage on the Farne Islands, St Cuthbert was also said to have built a guest-house near a landing bay to receive guests (Bonner et al. 2002: 425). Whilst such texts cannot be seen as credible primary sources, they offer interesting parallels to the use of caves as hermitages and also as mnemonic places in the Celtic Christian worldview. Furthermore, this association of meditation and a connection with the natural world is seen in the simulation of cave-like environments by the construction of beehive cells at monastic enclosures, which demonstrates a number of architectural devices that serve to mimic cavescape experiences. Many caves also continued to hold significance in the landscape demonstrated by caves used as places of worship (see Chapter 7).

5.4.4 Conclusion: caves & landscapes

By integrating cave-use within its landscape contexts, this chapter has explored how location may have influenced the selection and use of caves. Evidence of activity in caves located on route ways, near coastal seaways as well as valley transitions, may suggest the use of caves by mobile populations such as those practicing seasonal transhumance. However, the association of caves with visible natural features, such as scar faces and coastal bays may also indicate that cave-use was also bound to the symbolic transition between familiar and unfamiliar landscapes.

Consequently, deposition in these caves may have been tied to broader concepts of identity and the topophilic attachment to place.

Chapter 6 : Underworld Arts & Crafts: Craftworking in Caves

6.1 Introduction

As I have argued in previous chapters, the morphological and landscape experience of cave-use significantly influenced the selection and types of activity taking place in underground places. In order to explore how caves influenced human-use this chapter will focus on the use of caves for craftworking and the deposition of crafting material, by first outlining the nature and location of activity and then exploring why caves may have been chosen by craft workers.

Previous studies have highlighted the dangerous and marginal nature of metalworking during the 1st millennia BC and AD (e.g. Budd et al. 1995; Heald 2010; Hingley 1997, 2006; Giles 2007b) and have highlighted the deposition of metalwork in boundaries and transitional spaces in the landscape. By using caves for metalworking, as well as for bone and antler working, craft workers were also working in unpredictable and dangerous spaces. Working in caves would therefore have intensified the experience of craftworking by presenting a series of unique challenges that transformed everyday sensescapes.

6.2 Craftworking & the deposition in objects in caves

6.2.1 The significance of craftworking during the 1st millennia

Studies of craftworking during the 1st millennia have often highlighted the metaphorical and social significance of craftworking. Authors such as Giles (2007, 2012) and Hingley (2006) have demonstrated the relationship of discrete deposits of ironworking to processes of liminality, transformation and control over dynamic elemental forces. Drawing upon anthropological and earlier work on the nature of structured deposition (e.g. Cunliffe 1992; Wilson 1999; Hill 1995), Giles (2007: 406-409) has argued that metalworking processes were bound to elements of fertility within Iron Age society, as well as control of supernatural forces (Giles et al. 2007; Joy 2010: 88). Finds of metalworking debris, as well as tools, moulds and crucibles, have been noted in a range of contexts dating not only to the Iron Age but also the Roman Iron Age (Davis et al. 2008: 149; Fulford 2001; Hingley 1990, 2006) and Early Medieval Period (Crawford 2004; Hamerow 2006; Morris et al. 2011: 67-68) in subterranean spaces. Such deposits highlight the integrated nature of landscape and processes of exchange and manufacture (Hingley 1984: 85; Hingley 1990; Moore 2006: 78-84; Hill 2011: 248) that is further demonstrated by the wider sensescapes associated with metalwork.

Elements of decoration, noted on a range of metal objects, including coins (Creighton 2000), as well as the combination of elements such as coral and bronzes (Giles 2007b: 409), would

have likely had a significant effect on the perception of artefacts (Giles 2007b: 409; Giles 2008; Joy 2009). A number of authors have focused on the aesthetic agency of objects (Joy 2011: 206-207) and their role as social and cosmological mediums (Barrett et al. 2003: 208-210; Ingold 2007, 2011). The dazzling and reflective nature of metalwork must have also been an intrinsic part of the visual cognition of metal objects (Giles 2008: 69-74). In a world that lacked reflective surfaces such as window glass and readily available mirrors, reflection on metal of the human body would have had a significant influence on the perception of metalwork (Giles et al. 2007; Giles 2007b: 408).

Such a reflective quality may also explain the association of metalwork deposition in watery contexts. By comparing the types of material found on wet and dry locales during the British Bronze Age, Bradley (2010; Bradley et al. 2010) has shown a dichotomy between depositions of incomplete or broken metal hoards on land, which included smelting material and complete artefacts found in water. During the Iron and Roman Iron Age, water continued to act as a medium for artefact deposition, which included complete metal artefacts and human remains (see below).

Studies of craftworking during late prehistory have often focused on metallurgy, however similar processes have also been highlighted in other mediums - namely bone-work. In her discussion on the symbolic role of decoration on Iron Age bone weaving combs, Chittock (2014: 318) noted the possibility of comparable metaphorical associations with specialist bone crafting and metalworking. The appearance of objects of bone in pits and ditches in settlement contexts, as well as in watery and cave contexts, supports the comparative nature of bone and metalwork and their relationship with underground spaces (see Chapter 7). However, the use and modification of bone also indicates wider symbolic associations with animals and seasonal cosmology (see below).

The apparent lack of specialist bone debitage in settlement sites during the 1st millennia BC (Tuohy 1999) and AD (Crummy 2001: 97) has led authors to argue that specialist bone-workers were often itinerant (ibid). Similar arguments have also been made for non-ferrous and ferrous metalworkers (Ehrenreich 1995; Rowlands 1971: 233). During the Early Medieval period, groups of specialist metalworkers may have also been itinerant, working under patronage at so-called elite enclosures (Arnold 2005: 145), whilst localised ferrous metalwork may have been organised into a form of market economy (Bayley 1991; Ulmschneider 2000; Leahy 2011: 449-454). Furthermore, supplies needed for metal and bone working, including beeswax and

antler (Giles 2007b:407) would have only been seasonally available, which may suggest that craft workers were seasonally itinerant. As such, processes of craftworking may have been bound to wider perceptions of animals and natural places.

6.2.2 Metalworking in caves

Metalworking in a cave creates an intense and dangerous experience, which contrasts to smithing outdoors. In enclosed and poorly ventilated spaces, fires used for smithing could create lethal emissions of carbon dioxide and monoxide, as well as filling chambers with smoke, which can disorientate cave-users. Previous work on metallurgy in British caves has attempted to outline the practicalities behind maintaining fires in cavescapes. Branigan and Dearne's (1992: 9-12) study of the location of fires in the caves of Creswell Crags, building on experimental work by Gentles et al. (1986), suggested that cave fires would have been hazardous and dependent on seasonal airflow. Prehistoric metallurgy, which would have required temperatures in excess of 1100 degrees Celsius (Collis 2003: 30), would have also increased demand for air flow and would have produced excessive smoke and heat. Whilst every cave has a unique morphology, in order to avoid asphyxiation, generally fires would need to be near cave entranceways or open air shafts (Branigan et al. 1992: 10). Therefore, cave morphology would have played an important part in how metalworking was performed in caves and the sensescapes it created.

6.2.2.1 Overall distribution and frequency of metal objects in caves

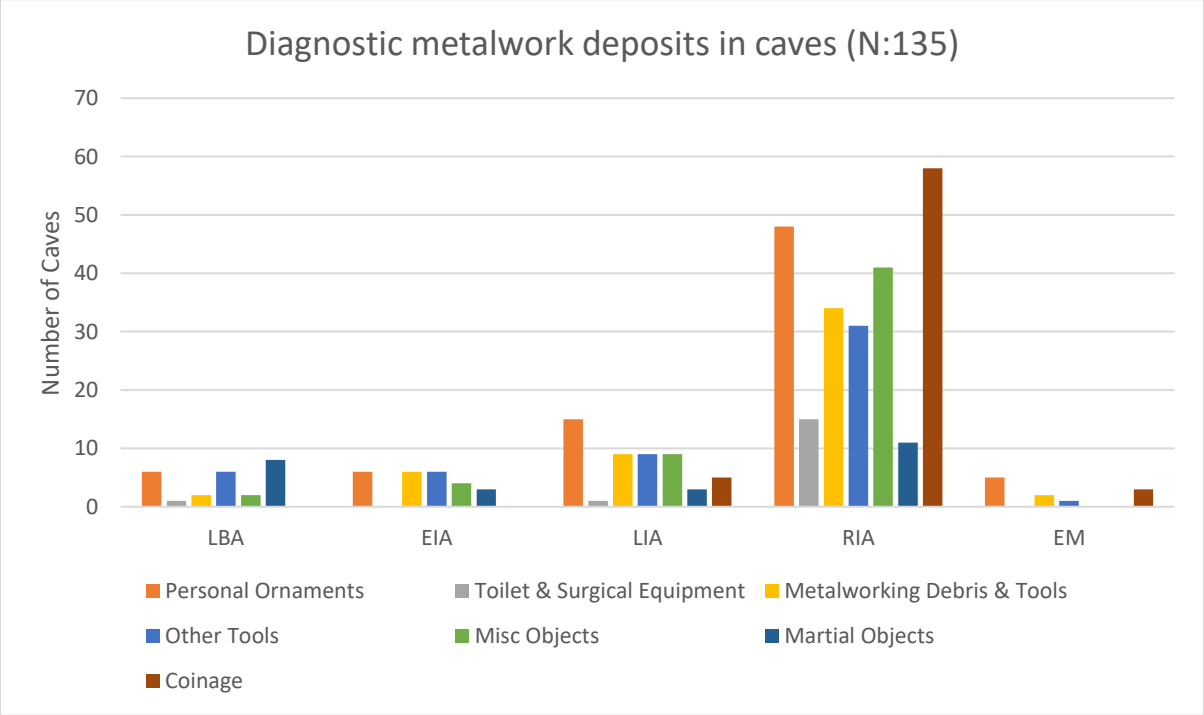


Figure 6-1: Types of datable metalwork deposits recorded in caves (135 of 275 total caves)

Figure 6.1 illustrates the overall nature of metalwork deposits recorded in 135 caves across the British Isles (for distribution see Figure 6.2). It demonstrates that a variety of artefacts were found in caves across Britain, including concentrations of activity in the Mendip Hills, Yorkshire Dales and Peak District.

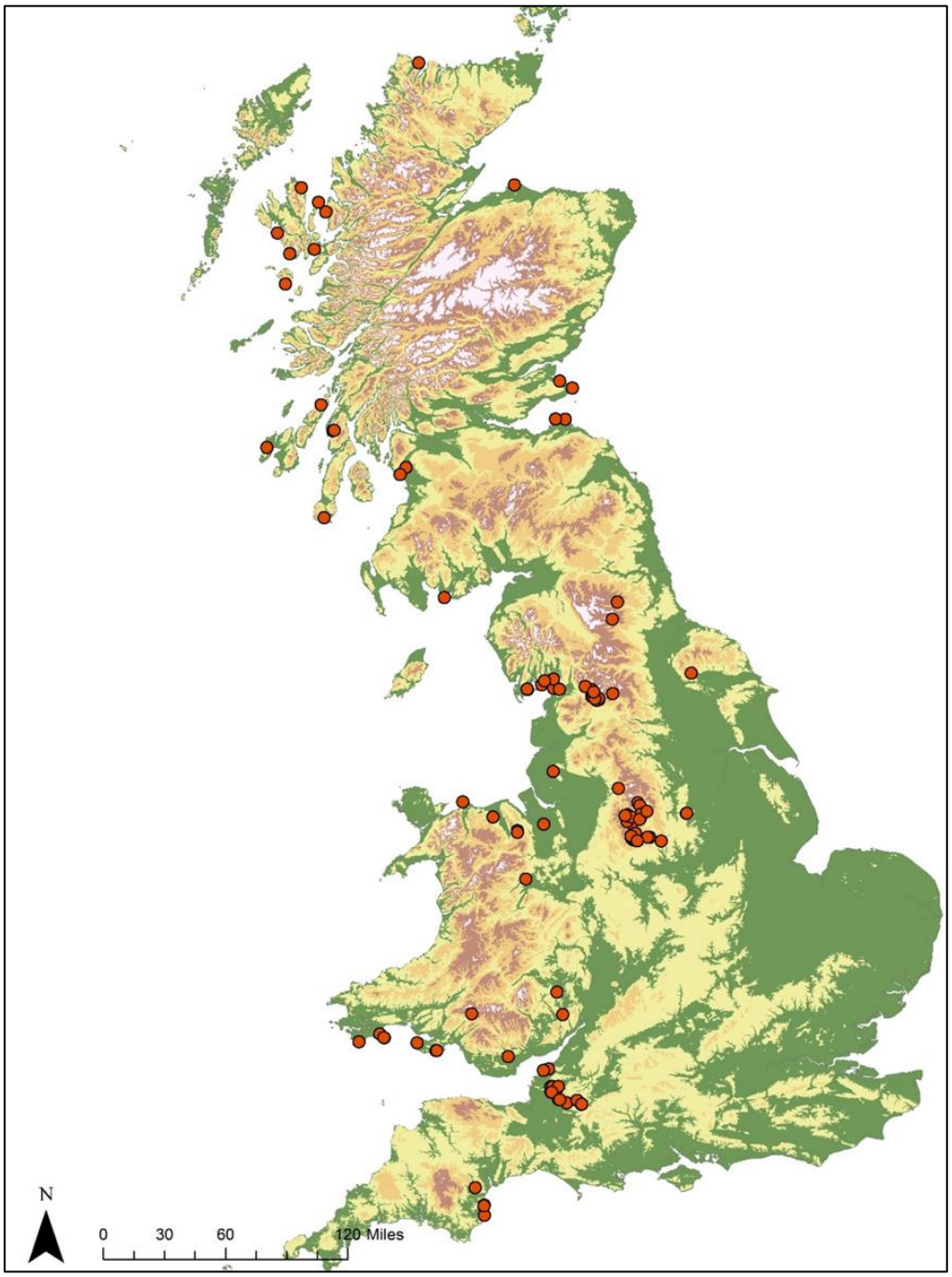


Figure 6-2: Map showing the distribution of caves with metalwork deposits. Each dot is a single cave, with deposits that can be dated between 800 BC-800 AD (N: 135)

6.2.2.2 Dating & regional distributions of metalwork deposits

As previously discussed in Chapter 3, the dating of metal objects located in caves is subject to biases in preservation and the influx of material culture during the Roman Iron Age. An

increase in deposits of metalwork hoards dating between the 3rd century BC- 2nd century AD however has previously been identified by Hingley (2007: 220) who has suggested that this may be part of a wider significance of boundaries and social identity. Nevertheless, as I have argued, evidence of early 1st millennium BC activity in caves may suggest a continuing, or re-imagining of associations with caves (see Chapter 3). The decline in Late Roman and Early Medieval deposition in caves, may be as a result in a changing perception of cave environments and the introduction of Christianity (see Chapter 3 and 7). Despite this, there is evidence of limited use of caves for metalworking during the Early Medieval period, namely in Wales and Atlantic Scotland (see below), as well as coin and artefact deposition (see Chapter 3).

6.2.2.3 Caves with metalworking associations

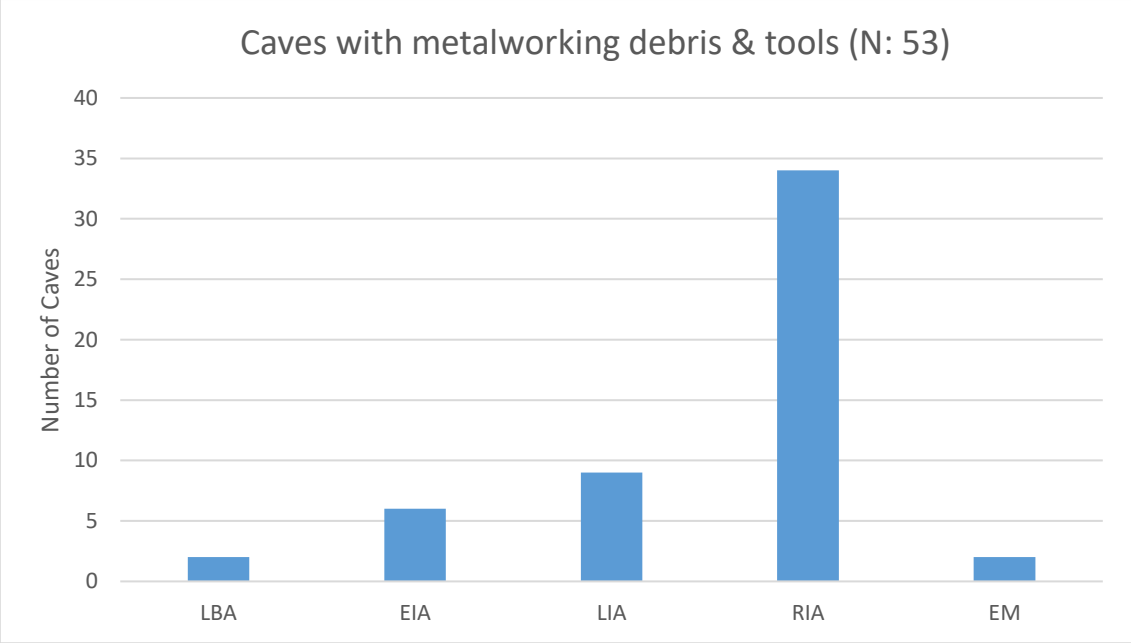


Figure 6-3: Caves with evidence of metalworking debris and tools (53 of 135 caves that contained metal artefacts)

Evidence of metalworking through the identification of anthropogenic deposits of metalworking debris and finds of tools, including crucibles, moulds and tools, is demonstrated in fifty-three caves (of a total of 275) (Figures 6.3, 6.4). Crucially, such evidence suggests that the underground was intrinsically linked to all stages of metalworking from mining to the deposition of finished artefacts (Table 6.1).

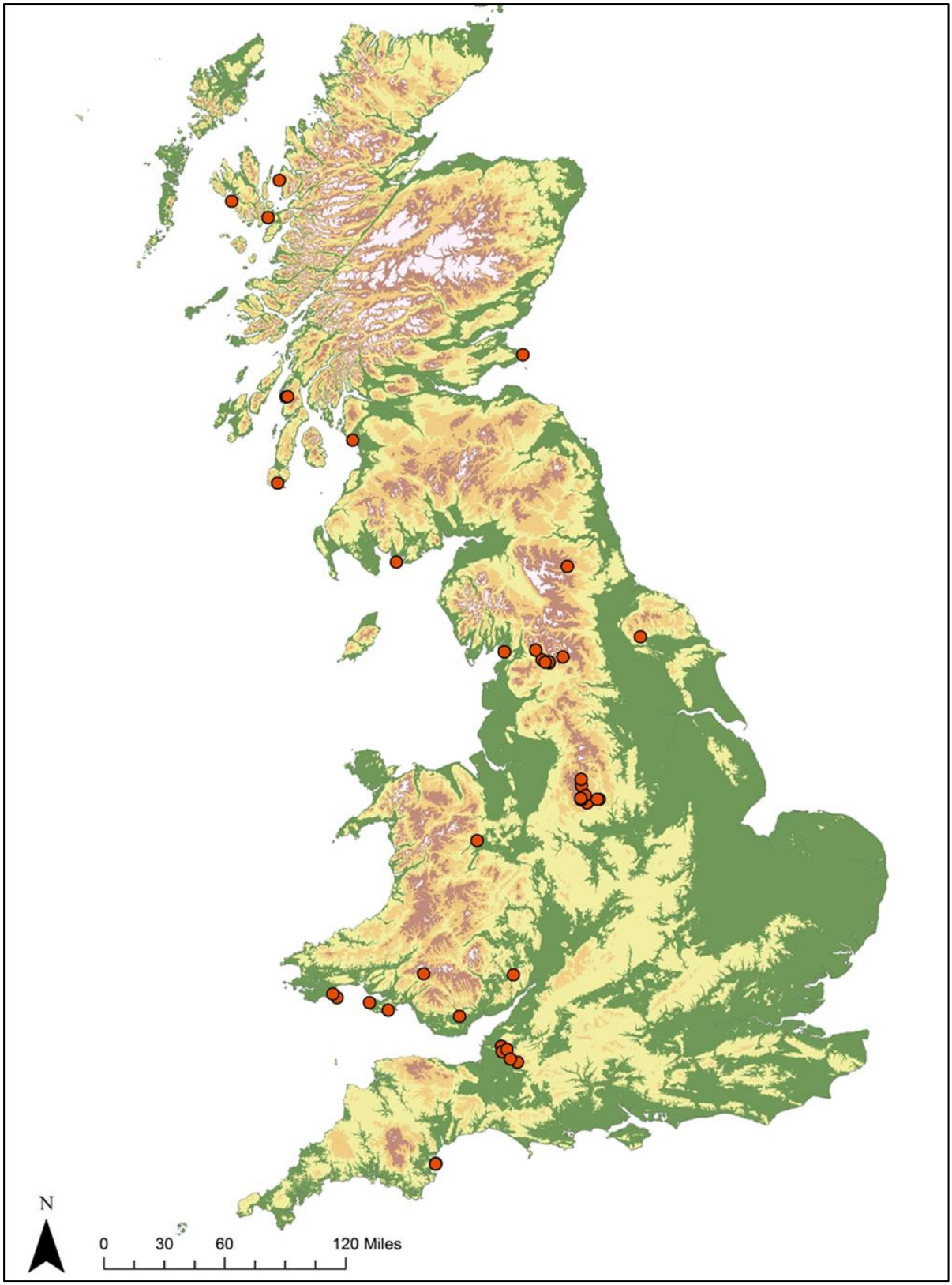


Figure 6-4: Map showing the distribution of caves with evidence of metalworking. Each dot is a single cave that has evidence of metalworking (N: 53 of 135)

Table 6-1: Types of metalworking processes recorded in caves (N: 53)

Metalworking Process	***Type of Deposit***	***Number of Caves***
Mining/Mineral	Ore	3
	Calcite Deposit	1
	Haematite Fragment	1
Processing	Ingot	3
	Currency Bar	2
Production	Mould	3
	Crucible	7
	Bronze Sheet/ Binding	11
	Iron Sheet/Binding	14
	Silver Sheet/Binding	2
	Tool	15
Waste	Furnace Bloom	2
	Iron Caste Waste/Slag	15
	Galena Caste Waste/Slag	8
	Copper/Bronze Caste Waste/Slag	7
	Unidentified Slag	5

6.2.2.4 Caves as workshops?

A number of caves present evidence of iron, bronze and lead working. From the current study, twenty-three caves contained deposits associated with the creation of metal artefacts, evidenced through finds of incomplete artefacts, metal tools, moulds, crucibles and caste waste. As argued in previous chapters, complex sequences of metalwork appear in morphologically similar caves that were part of wider landscapes of cave-use. Evidence of smithing in extensive multi-karstic caves (see Chapter 4) is found throughout the British Isles, including Wookey Hole (**166**), Poole's Cavern (**25**), Thirst House Cave (**26**), Ravencliffe Cave (**29**), Harborough Cave (**36**), Thor's Cave (**51**), Victoria Cave (**15**), Attermire Cave (**16**), Uamh An Ard Achadh (**154**) and Ogof-yr-Esgryn (**120**) (Figure 6.5).

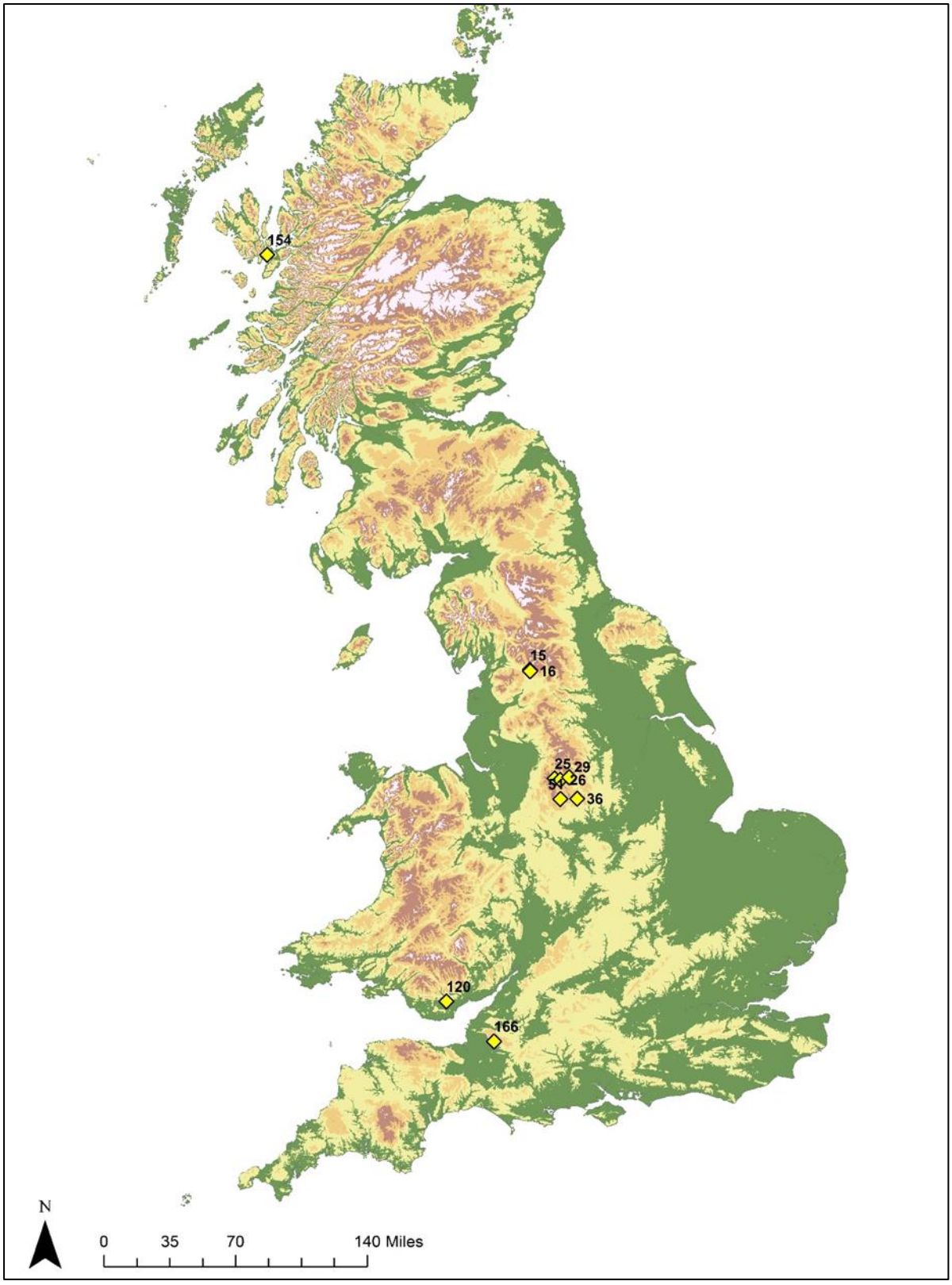


Figure 6-5: Location of multi-karst or riverine caves with metalworking evidence. Each dot represents an individual cave, labelled with corresponding cave ID (N: 10)

6.2.2.5 Location of metalworking in caves: Poole's Cavern

The location of smithing deposits within these caves is also significant in understanding the reasons why caves may have been chosen for metalworking. At Poole's Cavern, Buxton (**25**), excavations uncovered a sequence of extensive Roman Iron Age bronze and iron-working restricted to an ante-chamber north of the River Wye chamber, fifty metres from the cave entrance (Figure 6.6). Hearth deposits, finds of caste waste and unfinished 2nd century brooches (Bramwell et al. 1983:49; Branigan et al. 1983: 34; Smithson et al. 1991: 40) further confirm that the chamber was used for metalworking and deposition associated with pools of water and the River Wye (Figure 6.7).

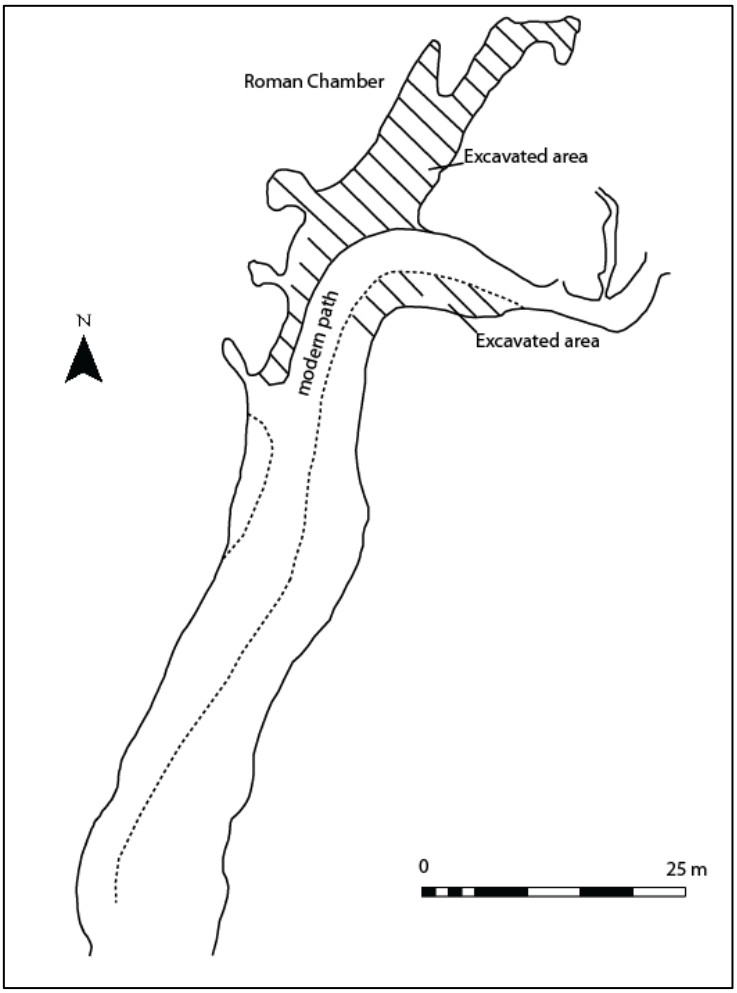


Figure 6-6: Poole's Cavern (25): Location of Roman Chamber and excavated areas (After Bramwell et al. 1983: 48)

Metalworking took place within a chamber that ran parallel to the cave entrance without natural light (Bramwell et al. 1983: 49). Work within the chamber would have relied upon artificial light, provided by the metalworker's furnace and by lead lamps, one of which was recovered during excavation (Branigan et al. 1983:42-43; Branigan et al. 1991a: 49).

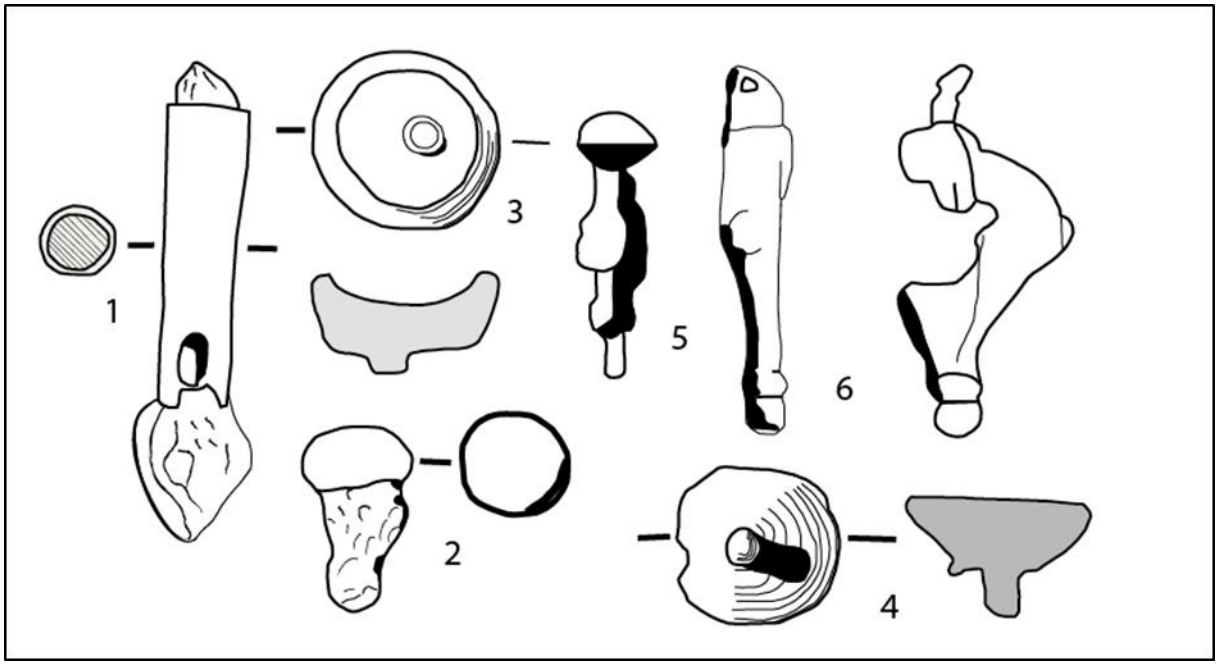


Figure 6-7: Poole's Cavern (25): Evidence of metalworking. 1: iron punch, 2 bronze doming bowl, 3-4 punches, 5 casting sprue, 6 lead fibula caste (After Smithson et al. 1991: 41)

Working in such a low light environment, as well as the experience of smoke and heat would have created an intense sensescape. This must have also been complemented by the unique soundscapes offered by the cave. In Poole's Cavern, noises of metalworking would have become intertwined with sounds of running water from the River Wye and as a result become linked to the waterscape.

6.2.2.6 The location of metalworking in caves

At Poole's Cavern metalworking took place within a transitional passage from the cave entranceway. Indeed, this is part of a wider focus on transitional zones in caves and metalworking, demonstrated by overall analysis of metalworking location in caves.

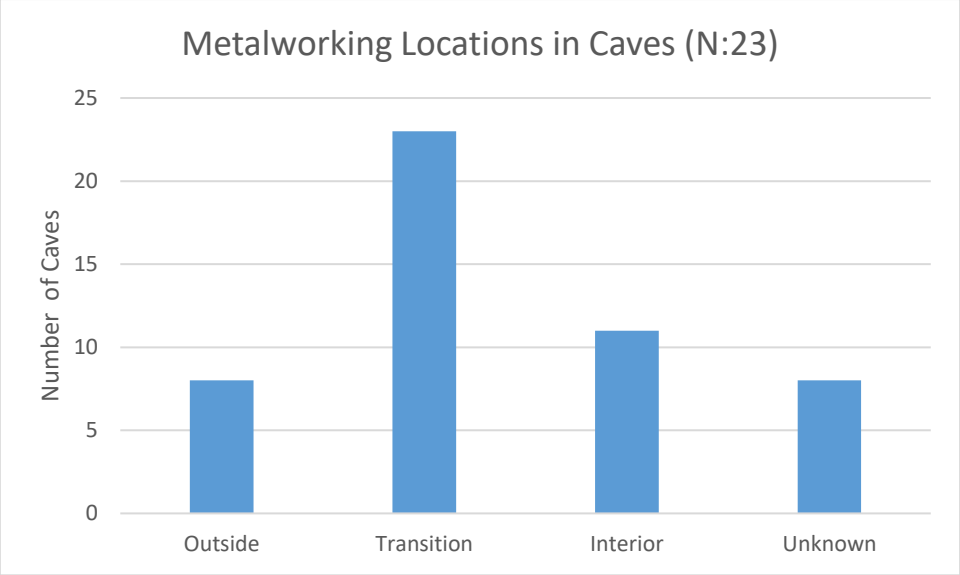


Figure 6-8: Location of metalworking deposits (caste waste, tools) within caves. Thirteen caves had material that could not be given a location within a cave

Figure 6.8 shows the general location of all metalworking deposits located in caves and demonstrates a bias towards transitional spaces within cavescapes. As I outlined in the discussion of the morphology of caves in Chapter 4, transitional spaces are entranceways or entrance passages, or shafts, and are linked with transition from the outside into the cave and therefore between light and dark. This significance of transitional also extends inside caves evidenced by artefacts found in interfaces between cave chambers, demonstrated by finds of Iron Age and Roman material culture, including slag, from Rain's Cave (**37**), Derbyshire, 6.1m from the cave entrance (Ward 1889: 67).

6.2.2.7 Symbolic nature of water and location

Whilst this may indicate a practical approach to maximising light by using cave mouths and entranceways it also represents a symbolic relationship with boundaries and transitional zones, similar to evidence discussed by the likes of Hingley (2007) in settlement contexts. This is further seen in the association of underground pools and stream ways and metal artefacts and metalworking debris. In Poole's Cavern, concentrations of bronze finds were recorded around a calcite pool in an alcove within the Roman Chamber, which was thought to have been a shrine to a water nymph or spirit (Bramwell et al. 1983:49; Branigan et al. 1983: 34; Smithson et al. 1991: 40).

Crucially, Iron Age and Roman Iron Age artefacts, including metalwork and craftworking debris, have been found associated with water in a number of other caves. Metalworking took place in caves connected to underground rivers including the River Axe in Wookey Hole (**166**),

the Afon Llynfell in Ogof-Yr-Esgryn (**124**) and the underground river at Uamh an Ard Achadh (**154**). Below and aboveground, rivers often serve as foci for deposition, demonstrated by the long-term deposition of late prehistoric and Roman Iron Age material at Hans-sur-Lesse, Belgium (Warmenbol 2004). Furthermore, the morphological nature of many of the carbonate limestone caves has led to the creation of pools that served as a focus for deposition of artefacts. Excavation of sites such as Culver Hole (**111**), south Wales and Saye's Hole (**164**), Cheddar has uncovered metalwork within or near pools, parallel to finds in Poole's Cavern. Artefacts recovered in Culver Hole, came directly from silt deposits of a pool at the entrance to the cave, suggesting intentional use of the pool within a transitional zone

6.2.2.8 Other types of caves used for metalworking

Alongside the evidence of metalworking in complex karst environments, other types of caves were also used for metalworking (Figure 6.9). The majority of caves used were small single chambered caves (N: 18 of 89 caves), which are the most ubiquitous types of caves in Britain (see Chapter 4). In contrast only two rockshelters, Whetton Mill (**48**), where bronze slag was recorded alongside material of Roman Iron Age date, and Sewell's Cave (**91**), where a worked iron sheet was found of similar date, present tentative evidence of metalworking.

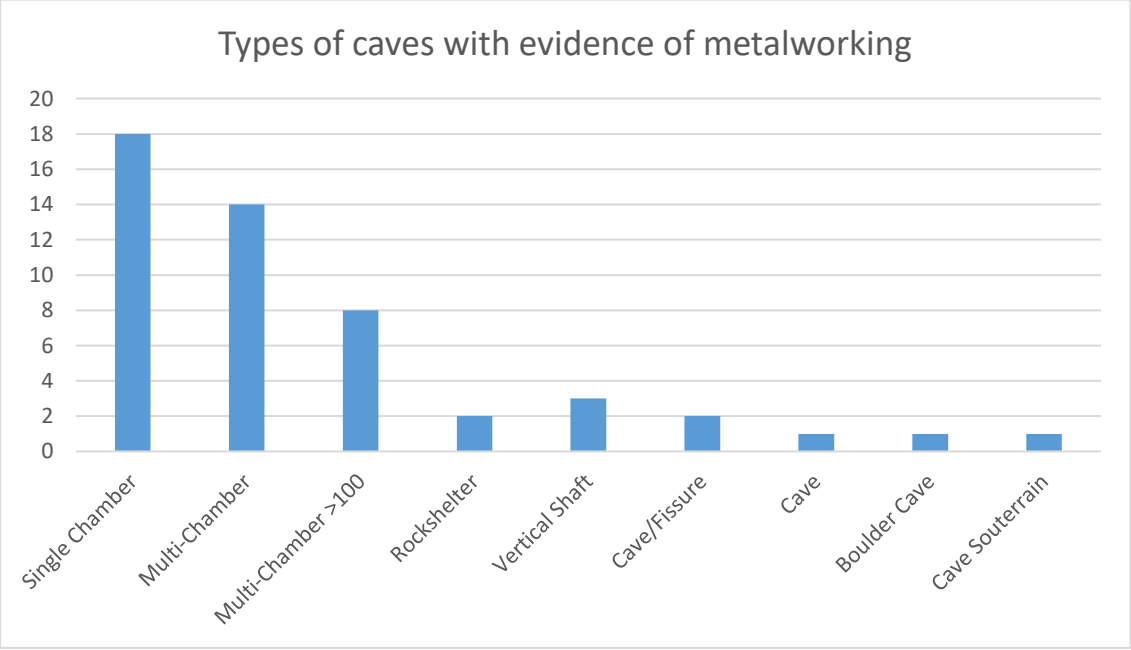


Figure 6-9: Types of caves used for metalworking. The majority of caves used were single chambered sites, which is unsurprising given the ubiquity of this cave type

This may be explained by the morphological nature of rockshelters, which are often exposed on cliff faces that would make them unsuitable sites for metalworking. Three vertical shaft caves also contained material relating to the production of metalwork. Whilst lead slag

recovered from a mine working in Waterwheel Swallet (**335**), Cheddar could have been washed down from material above the cave entrance, both Dowkerbottom Hole (**8**) and The Dog's Hole's Cave Haverbrack (**86**) contained metalworking debris associated with hearth deposits at the base of their entrance shafts.

Excavations of Dowkerbottom Hole towards the end of the 19th century, uncovered a rich array of Late Iron Age and Roman Iron Age material associated with a vertical passage in the limestone pavement overlooking the entrance to Littondale, North Yorkshire. Amongst the finds were quantities of lead slag, bronze openwork, bindings and sheet fragments at the base of the entrance. Similarly, at The Dog Holes Cave (**87**), lead and iron slag, bindings and sheets were recovered from the base of the entrance associated with a hearth deposit of 1st-2nd century AD date. Whilst working in such an environment would be well ventilated and protected from wind, in order to access these sites, users would have to climb down the vertical entrances of both caves. Furthermore, in wet weather the cave would be damp not only increasing the difficult of the climb down but also hampering the fire at the base of the shaft. Such experiences contrast significantly to horizontal caves and are associated with contrasting sensescapes. For example, vertical shafts are lighter than horizontal caves but restrict human perception of the outside world in different ways than single and multi-chambered caves with horizontal entrances.

6.2.2.9 Conclusion: evidence of metalworking in caves

From the discussion above it's clear that a range of caves were used for metalworking and were also associated with a sequence of metaphors - including a relationship to transitional zones and water. The focus of metalworking at cave entranceways and cave interiors may have reinforced the magical and dangerous nature of smithing. Therefore, using caves may have helped to control and intensify the experience and perception of metalworking.

6.2.3 Evidence of bone working in caves

The longevity and non-diagnostic nature of bone-work deposits during the 1st millennia, has meant that bone working has received less attention in comparison to metal artefacts (Tuohy 1999: 1). As a result, there has been little study of the wider social significance of bone-work in past societies. Certainly, bone-work not only introduces a number of related metaphors to metalworking but also associations to wider perceptions of the natural world. Understanding the materiality and processes of bone working in caves, such as the exploitation of wild fauna, can highlight how caves may have been used as sites of animal processing and how cavescapes and their users may have become bound to the animal world.

6.2.3.1 Overall distribution and frequency of bone objects in caves

One hundred and twenty-six caves contained bone artefacts dating to the 1st millennia. Figure 6.10 outlines the groups and frequency of bone-work deposits noted during the study. It demonstrates that worked bone and bone tools occur in a significant portion of caves and can be considered part of wider evidence of craftworking in cavescapes (discussed below), although the presence of multi-functional objects such as pins, needles and points does skew the data.

By considering the distribution of assemblage types found within caves a number of interesting trends become apparent. Aside from miscellaneous finds, which include Roman Iron Age gaming pieces and bone points and needles, objects such as spindle whorls, weaving combs and worked bone may indicate specific processes of manufacturing occurring in cave sites (Figure 6.11). Furthermore, the presence of bone toggles, cheekpieces and harness rods demonstrates a specific pattern of Iron Age deposition of horse gear in caves, which continued into the Roman Iron Age highlighted by the presence of metal horse harness pieces.

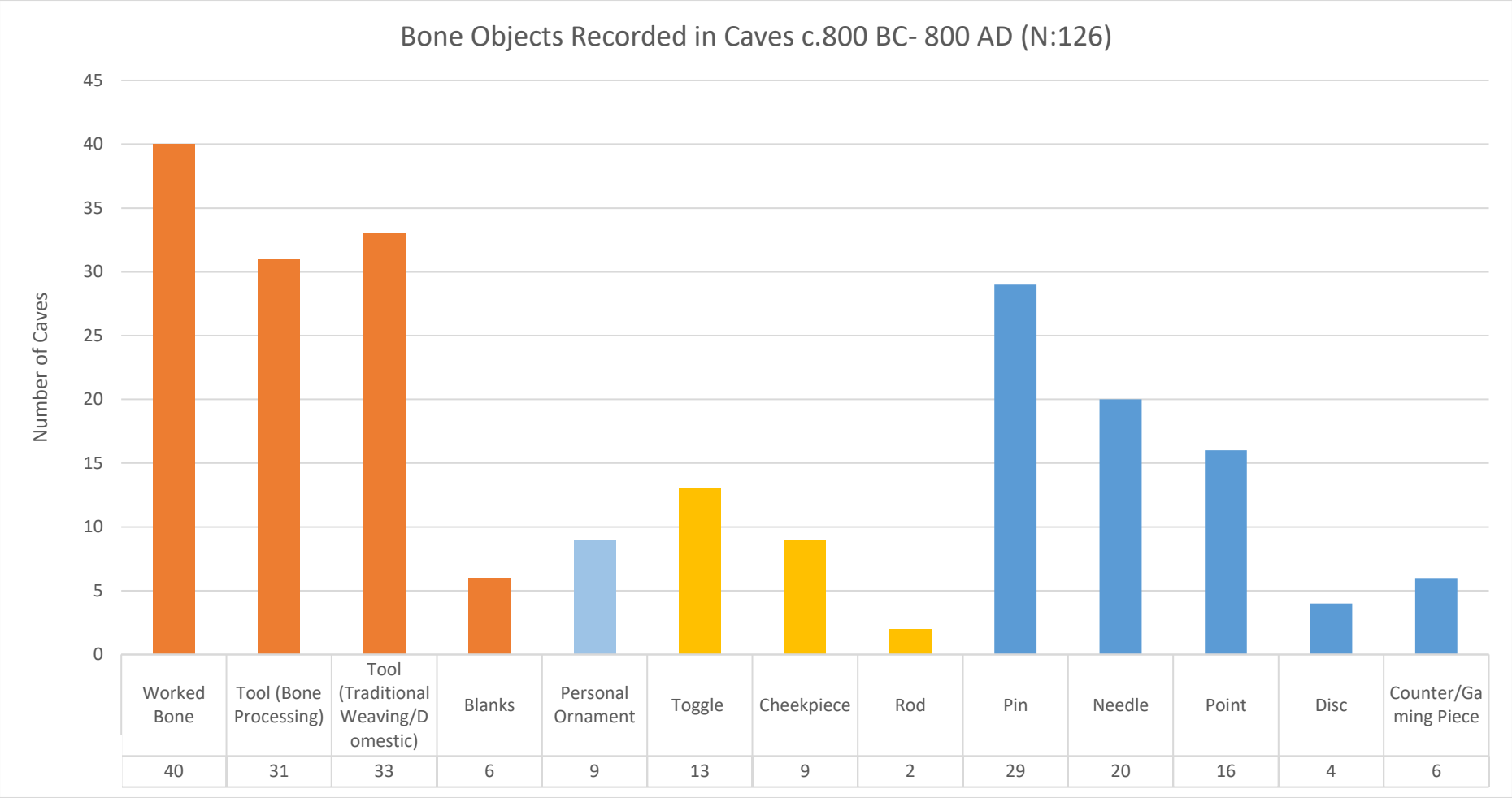


Figure 6-10: Outlining of the types of bone working deposits recorded in 126 caves. These are divided based on type.

Processing & Manufacturing

Animal Paraphernalia

Multi-Functional Artefacts

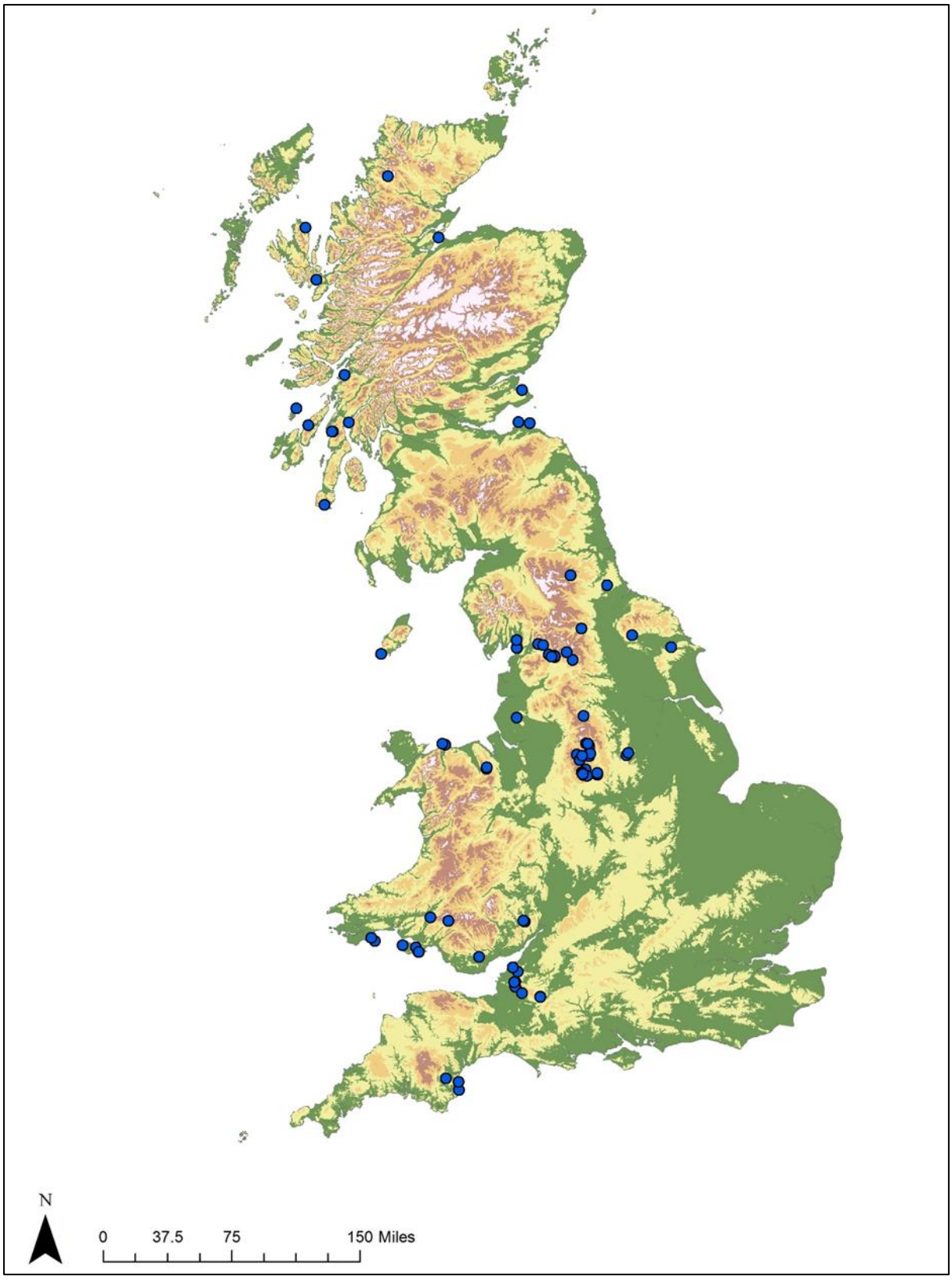


Figure 6-11: Location of caves with artefacts of bone and evidence of bone working. Each dot represents an individual cave (N: 126)

6.2.3.2 Dating bone objects found in caves

As discussed in Chapter 3, the lack of diagnostic bone-work makes dating bone artefacts difficult. Where possible bone-work was dated based on the presence of period specific material (i.e. weaving combs, pins, needles, counters) and on localised sequences of cave deposition (Figure 6.12). For example, finds of bone material in the caves of Settle, North Yorkshire (see Chapter 3 and 5), indicate patterns of contemporary deposition within cave contexts of bone toggles, and spindlewhorls, as well as copper alloy fibula and limestone loom weights (see below).

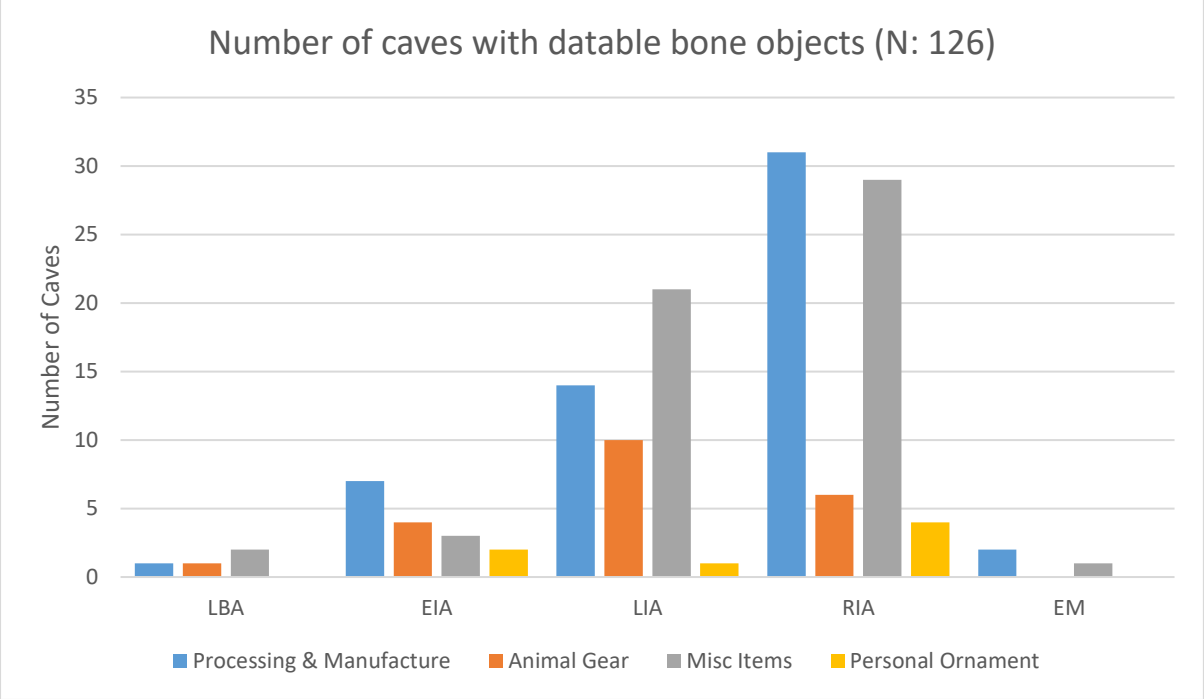


Figure 6-12: Number of caves with diagnostic bone objects. Multi-functional items such as pins, needles, spoons and gaming pieces were considered 'Misc. Items' (N: 126)

Only those bone artefacts that could be dated were included in the current study of craftwork deposition. Given the undiagnostic nature of many of the bone objects, dating of bonework relied on their association to other types of material, such as metalwork (See Chapter 3 and below). This may therefore account for the limited bonework assemblage dating to the Early Iron Age and Early Medieval period.

6.2.3.3 Evidence of bone and antler manufacture in caves

Objects representing processes of bone and antler working are recorded in a significant portion of caves that contained bone artefacts (58 of 126 caves). Evidence of all stages of bone working is recorded in caves, including the processing of animal bone through to finds of object blanks. Furthermore, finds of tools including chisels, awls and gouges, reinforces the possibility that caves were used by specialist bone-workers (see below).

Re-analysis of the excavation of Victoria Cave has identified 147 bone artefacts (Dearne 1998: 90-110) representing phases of bone and antler manufacture during the Late Iron Age and Roman Iron Age. These included evidence of the production of so-called bone spoon-fibula (King 1970: 48-50; Dearne 1998: 110; Eckardt 2014: 134-147), which were also recorded in at least four other caves within a 5-mile radius of Settle and may be evidence that weaving practices were associated with caves (see below).

Elements of bone and antler working are also noted in similar cave contexts across the Peak and Mendip caves. During his excavation of Wookey Hole, Balch (1911: 583) identified a sequence of bone objects that included Iron Age and Roman Iron Age bone tools, worked bone and antler (Branigan et al. 1991a: 148-149; Bryant 2011:140-141). Further excavations of a Late Iron Age and Roman structure immediately outside the entrance also recovered bone and metal objects associated with manufacturing (Somerset 24440). Elsewhere in Somerset, worked antler and bone has been recorded in a number of Iron Age cave contexts, including Rowberrow Cavern (**71**) and Soldier's Hole (**165**). Caves in the Peak District have also produced finds of bone manufacture, which include worked antler and bone found in later prehistoric and Roman Iron Age contexts at Thor's Cave (**51**) and Harborough Cave (**36**).

Evidence suggests that use of caves for craftworking was regionally and potentially chronologically diverse (see Chapter 3). In Scotland, sites such as Ellary Boulder Cave (**144**) and St Columba's Cave (**143**) have produced evidence of bone and antler manufacturing belonging to contexts of Iron Age and Early Medieval date. Considered together, such evidence suggests that some caves functioned as sites for bone craftworking, which combined with elements of textile manufacture and smelting, indicates that some caves were used as part of craftworking practices (see below).

6.2.3.4 Location of bone working in caves

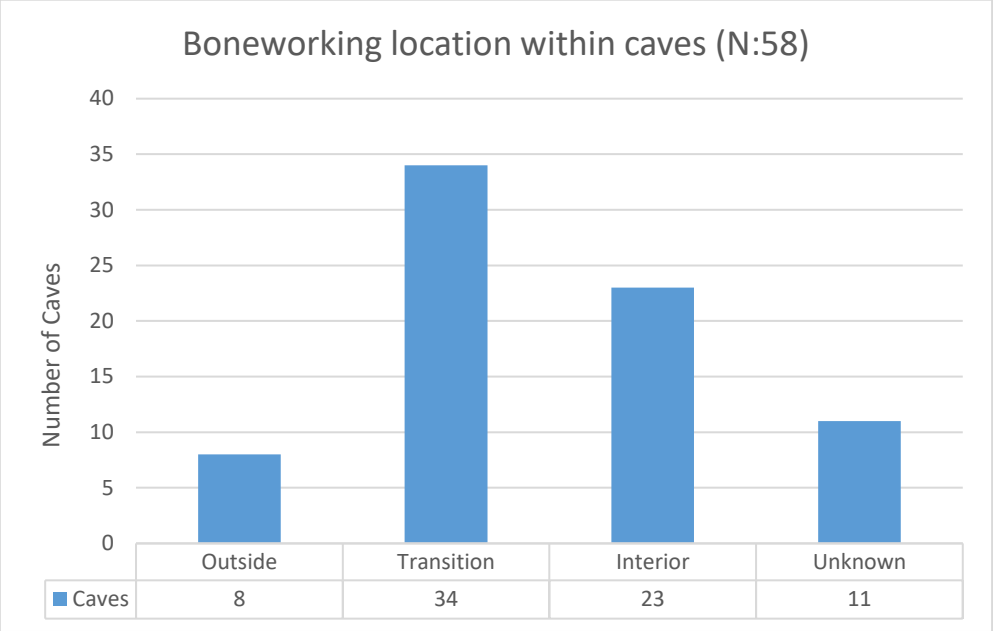


Figure 6-13: Location of bone working evidence in caves, 11 caves contained deposits of unknown location (58 of 126 with bone artefacts)

Similar to evidence of the location of smithing activity in caves, bone working seems to have focused in transitional spaces within caves (Figure 6.13). For example, finds of worked bone, a series of pins and a disc associated with Iron Age pottery were recorded at the entrance to Rowberrow Cavern, Somerset (**71**), whilst worked bone was also recorded from Gough's New Cave in Mendip (**62**). Finds of bone working in transitional contexts could therefore indicate that metalworking and bone working may have been part of similar processes of cave-use, perhaps as part of itinerant movement in the landscape. The focus on entrance passages in caves for bone working highlights a functional concern for working in a light and sheltered environment, whilst it would have also provided viewsheds out into the landscape (see chapter 5 and below). In this respect, the working of bone and antler can be compared to similar distributions of material representing hunting and gathering of animal bone found in early prehistoric cave assemblages. Studies of finds of processed and unprocessed bone tools dating to the Mesolithic from caves and rockshelters in Norway (Bergsvik et al. 2012) and Greenland (Pasda 2004) have argued that these sites were used as part of seasonal hunting strategies tied to the migration of wild animals. Such research has also demonstrated that groups chose caves based on their available viewsheds and their sheltered location, which were used to process animal bone and function as localised camps.

Evidence of similar activity in assemblages dating to the 1st millennia may therefore highlight the use of some caves as shelter for groups hunting wild animals, which will be discussed further below. Along with evidence of processed bone and antler, certain caves may also have been used by specialist bone-workers, which is demonstrated through finds of object blanks and tools as well as being sites used for the symbolic deposition of animal bone (see Chapter 7).

6.2.4 Textile working and caves

Alongside evidence of the processing of bone in caves, and the deposition of complete bone artefacts, finds of weaving paraphernalia may indicate that textile working may have also been closely related to cavescapes, either through the deposition of symbolic artefacts or directly through the act of weaving or spinning (Figure 6.14). Overall analysis of artefacts including objects of metal, pottery, stone, as well as bone, demonstrates that forty-six caves contained material relating to domestic craft activities.

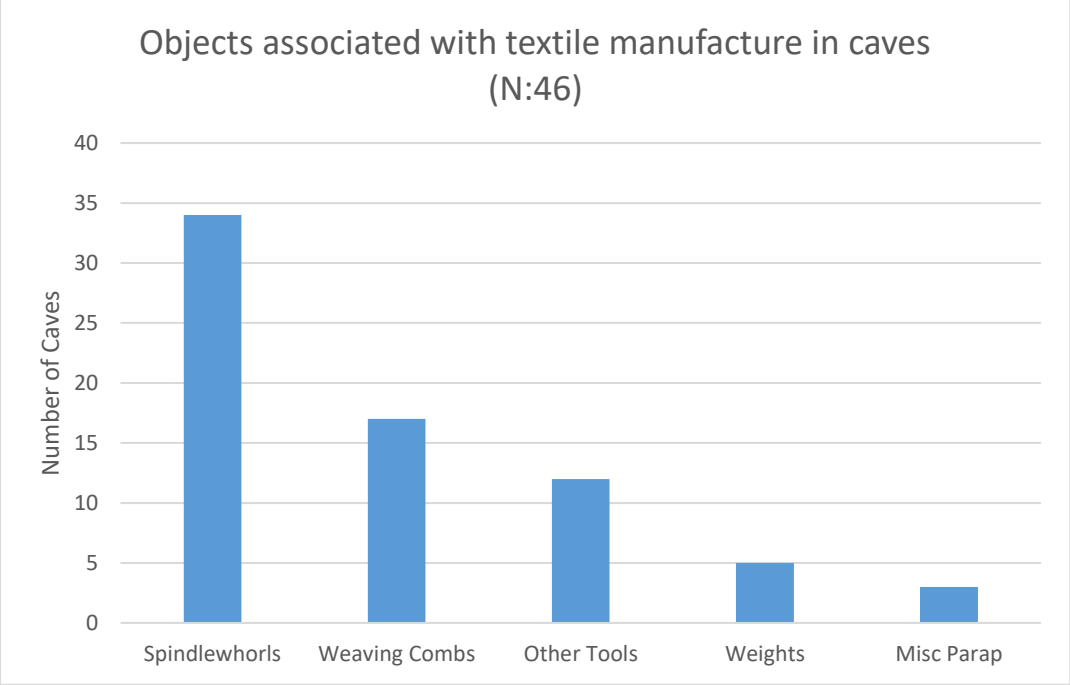


Figure 6-14: Number of caves with artefacts associated with textile manufacturing processes in caves (N: 46)

Finds of artefacts such as weaving combs, triangular weaving tablets and bone-spoon fibula, do present evidence of an association between cavescapes and textile working. Whilst isolated finds, spindlewhorls may represent accidental loss rather than being an indicator of textile manufacture associated with caves and loom weights may suggest that textile working was taking place.

6.2.4.1 Antler & bone combs found in caves

In total forty-five combs were reported from nineteen caves across the British Isle of Prehistoric, Roman or Early Medieval date (Figure 6.15). Previous work on combs has attempted to establish their chronology (Hodder et al. 1977; Sellwood 1984), function and distribution (Tuohy 1999; 2004). Tuohy (1999) provides the only current complete synthesis of bone and antler combs across the British Isles, in which she considers their use in preparation of pattern braids and wool or combing human hair (Tuohy 1999: 57-58; Chittock 2014: 316). More recently, analysis of the Glastonbury & Meare Lake assemblage (Bullied et al. 1911) has focused on the symbolic decoration of weaving combs and their display on the human body (Chittock 2014).

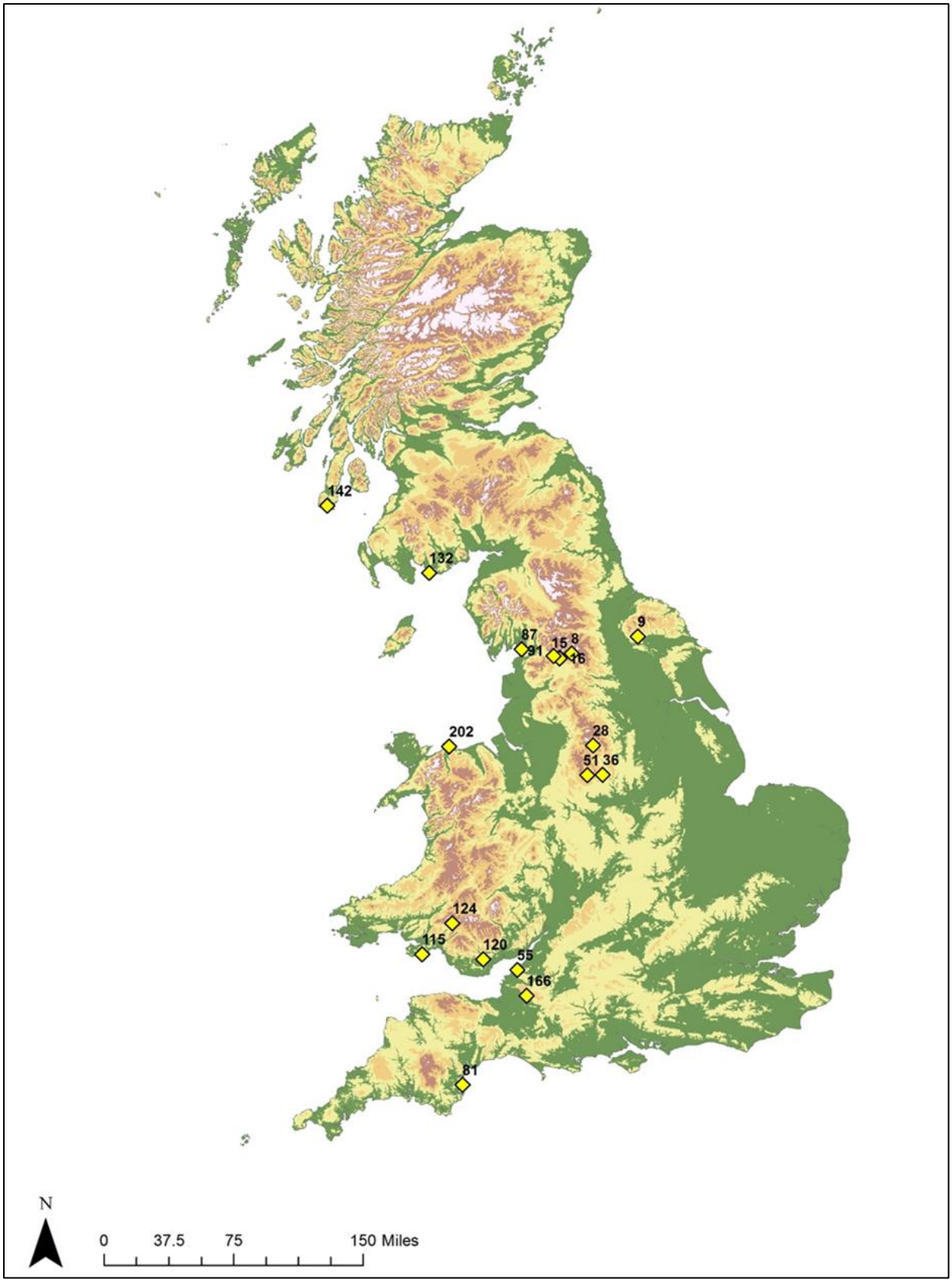


Figure 6-15: Location of caves with weaving combs, each dot represents a single cave which contained one or more weaving combs (N: 19)

Of the forty-five examples recorded in caves, single ended weaving combs are by far the more numerous, with thirty-two recorded in seventeen caves. Ten combs are composite forms, including nine double-sided composites of Late Roman or Early Medieval date, found in Dowkerbottom Hole (**8**), Victoria Cave (**15**), Minchin Hole (**115**), Ogof-Yr-Esgryn (**124**), Keil Cave (**142**) and Wookey Hole (**166**). Typological studies on composite forms of combs suggest these may have been used as fine hair combs, rather than weaving, and have been displayed on the body (MacGregor 1985: 83).

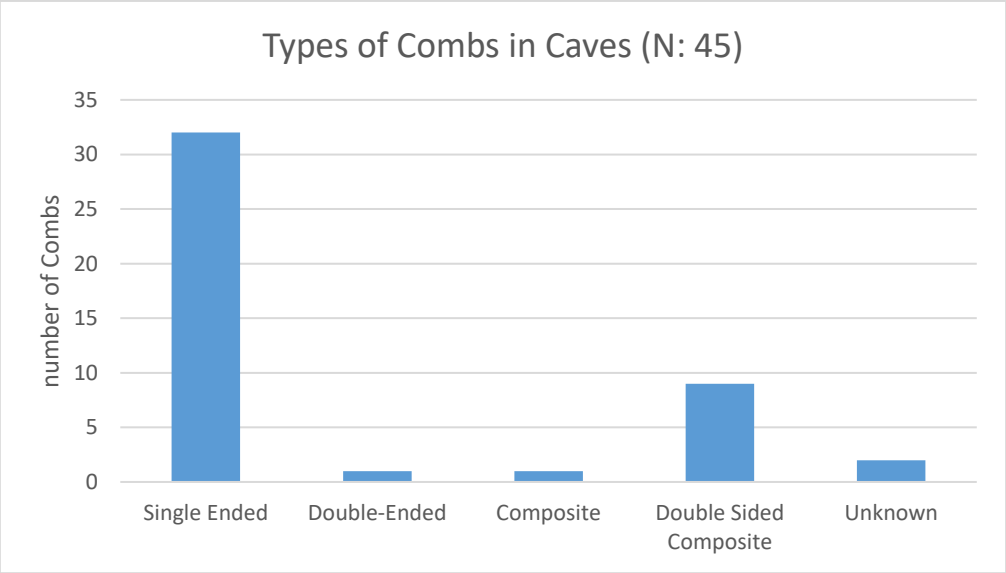
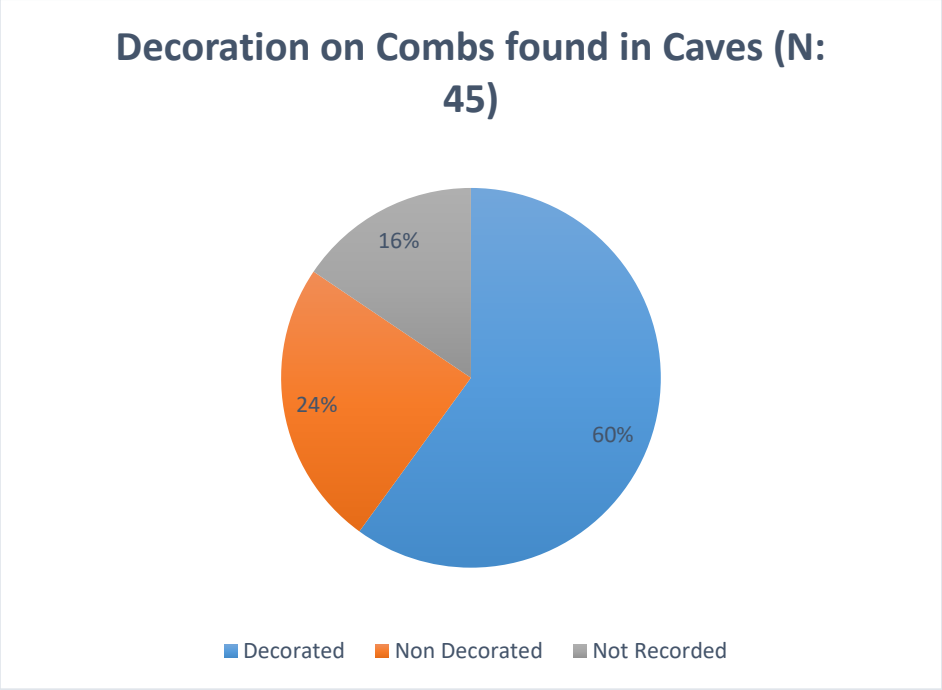


Figure 6-16: Types of combs recorded in caves, based on the form of combs discussed by Macgregor (1985) and Tuohy (1999). Composite and double-sided composite are thought to be human hair combs.

Decorated single ended weaving combs are also recorded in caves and are paralleled by similar finds of weaving combs in settlement contexts (Tuohy 1999: 76; Figure 6.16, 6.17). One Late Iron Age comb found in Kent's Cavern (**81**) had an iron rivet drilled into the butt of the comb, suggesting that it may have hung from a belt (Tuohy 1999: 15). Whilst further perforated single ended combs were found in Merlin's Cave (**57**) and Wookey Hole (**166**).

Of the combs found in caves, 60 % (27 of 45 combs) contained elements of decoration, which can be compared to similar finds from contemporary settlement sites in the south of England (Figure 6.17). For example, of the eighty combs recorded at Glastonbury Lake Village, fifty-four were decorated. This may suggest that the bias towards finds of decorated combs is representative of a larger process of selection rather than being limited to caves.



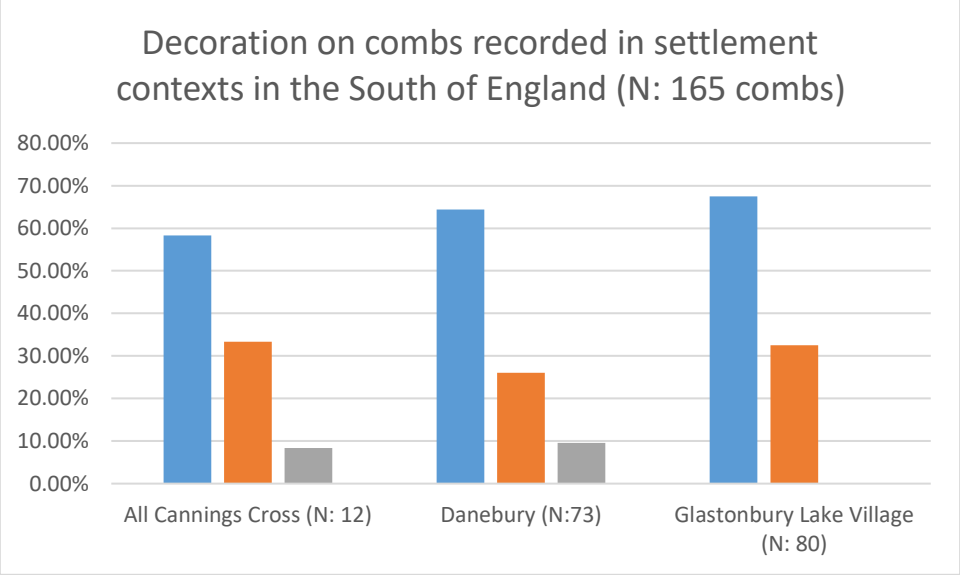


Figure 6-17: Above- Percentage of decorated and non-decorated combs found in caves. Below- percentage of combs with decoration found in settlement sites of Iron Age date in the south of England (after Tuohy 1999)

Combs recorded in caves by Tuohy (1999) identified wear of the teeth and butt of single ended combs found in Wookey Hole (**166**), Kent's Cavern (**81**), Dog Holes (**87**) and Ogof-Yr-Esgyrn (**124**), suggesting that these were used before deposition. Such objects would have had a biographical history, which was tied to the lifeways of its user and the material it transformed (Armit 2013). Decoration on these objects may have therefore reinforced the combs aesthetic agency and the symbolism attached to its deposition (Chittock 2014). Either through using weaving combs in caves or by depositing these items in caves, cavescapes may have become

symbolically associated with an object's life history, which in turn would have intertwined meanings attached to weaving and personal identity to wider acts of cave-use and the cavescape itself.

6.2.4.2 Weaving tablets

Two examples of bone weaving tablets have also been recorded with combs in Keil Cave (**142**) in Argyll and Bute and Wookey Hole (**166**), Cheddar (Figure 6.18). Examples of bone weaving tablets are unparalleled in Scotland- with the only known find being a bone blank from Harbour Broch, Keiss (Ritchie 1968:107). Only one other weaving tablet is recorded in a non-Roman context, in Wookey Hole Cave and thought to date to the Late Iron Age (Ritchie 1968:107; Cunliffe 2005: 485, figure 18.1). Triangular tablets do occur more frequently during the Roman period with parallel finds recorded from Roman Corbridge (Ritchie 1968: 105). A triangular tablet is recorded at Winchester in phase 2.3 dated to the mid-3rd-mid 4th centuries AD (Cool 2011: 18) but has also been noted in a drain deposit dating to 160-260 AD at Caerleon (Cool 2011: 17) demonstrating the longevity of these forms.

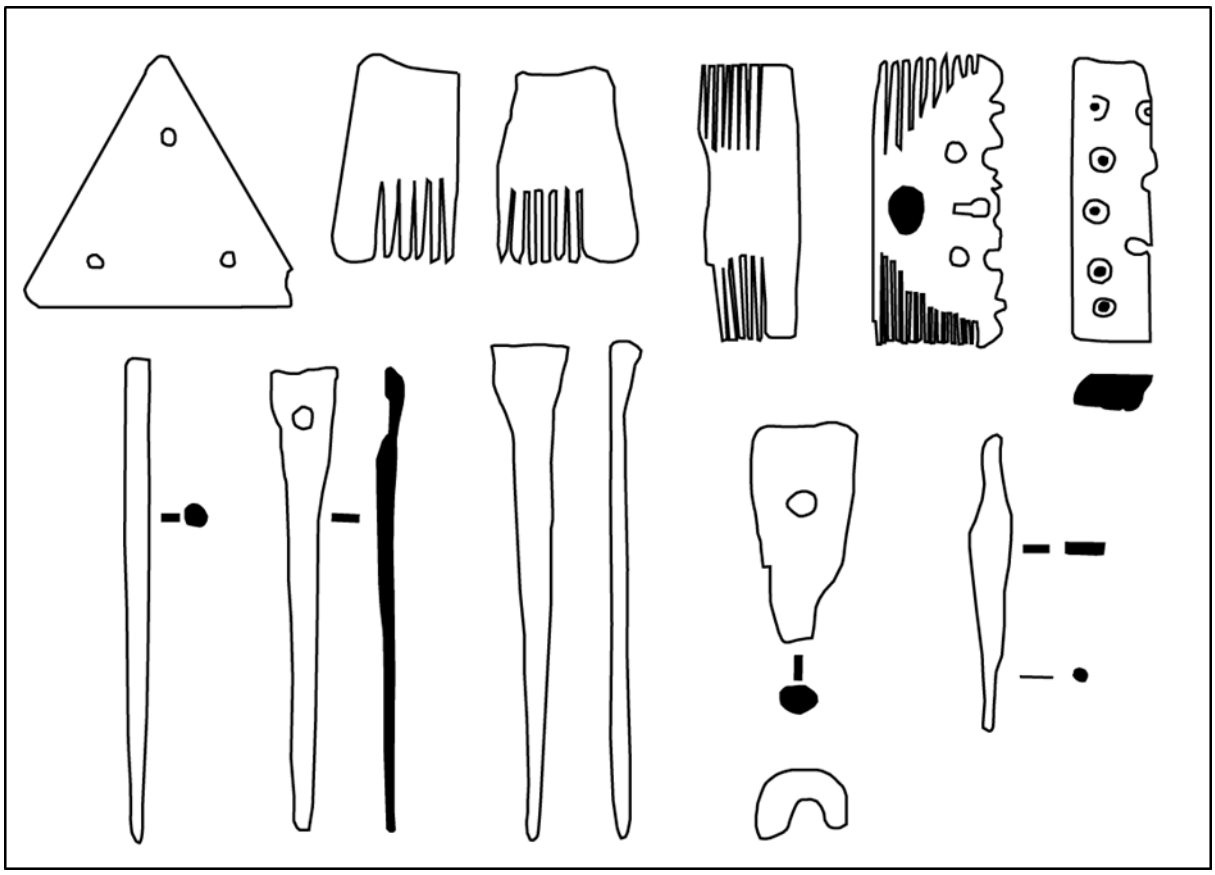


Figure 6-18: Bone-work recovered during excavations of Keil Cave (142), Kintyre- including a bone weaving tablet and 3 double-sided composite combs c.200 AD--500 AD (After Ritchie 1967: 106)

6.2.4.3 Bone Spoon-Fibula

Spoon-fibula are decorated bone spoons with a central perforation in the bowl that are regionally restricted to Northern Britain during the first few centuries AD (Eckardt 2014:144; Figure 6.19). Originally thought to be used as clothing fasteners (Dawkins 1874: 90; Raistrick 1939: 148), a range of functions have been suggested by authors, including as a hair adornment (Dearne et al. 1998: 97), as ritual items (Cool 2004) and as a spinning tool (King 1970: 48-50; Eckardt 2014: 144-145). In his discussion of bone spoon-fibula, King (1970: 48-50; also see Figure 6.19) has suggested that wear in the central perforation in the bowl was likely as a result of passing strands of wool through the bowl rather than human hair. In their analysis of the twenty-two combs found in Victoria Cave (**15**), Dearne et al. (1998: 97) rejected King's interpretation based on the highly decorative nature of the spoons, instead favouring a ritual function (Eckardt 2014: 145).

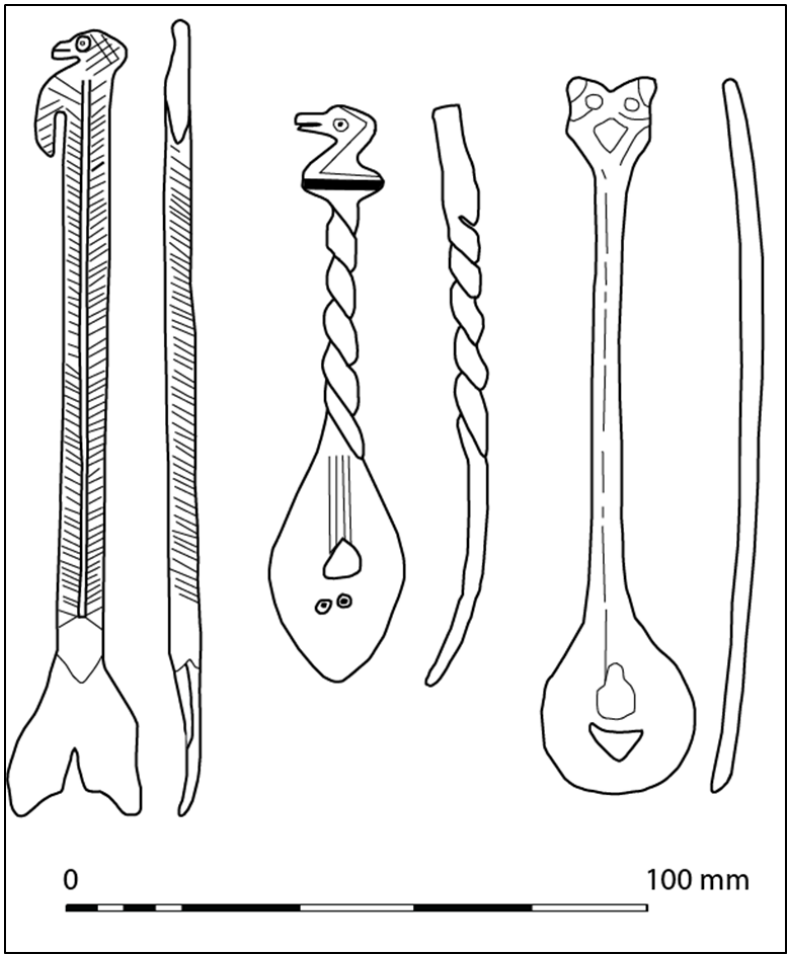


Figure 6-19: Spoon-fibula found in caves. From left: Zoomorphic herringbone design from Dowkerbottom Cave (8); zoomorphic design with twisted shaft from Victoria Cave (15); shaft with central perforation at tip from Dowkerbottom Cave (8) (After Eckardt 2014: 137)

However, as we have seen, a range of spinning objects were decorated, albeit not to the degree seen by spoon-fibula and therefore a spinning function for spoon-fibula cannot be dismissed out of hand. Furthermore, a range of spoon-fibulae are also decorated with zoomorphic designs- including birds and sea creatures- that may have been symbolically related to caves (see below).

The terminal of one fibula is in the form of a spider (Dearne et al. 1997: 93-94; Figure 6.20). Spiders, given their abilities to spin intricate geometric webs, are often connected to weaving practices (Weigle 1982; Isbister 2001). Examples of this can be seen in the mythology of the Navajo of South-West America, where celestial beings known as Spider-Woman and Spider-Man, taught the Navajo to make a loom and to weave (Duncan 2014; Reichard 1934; Wetherill 1991: 39).

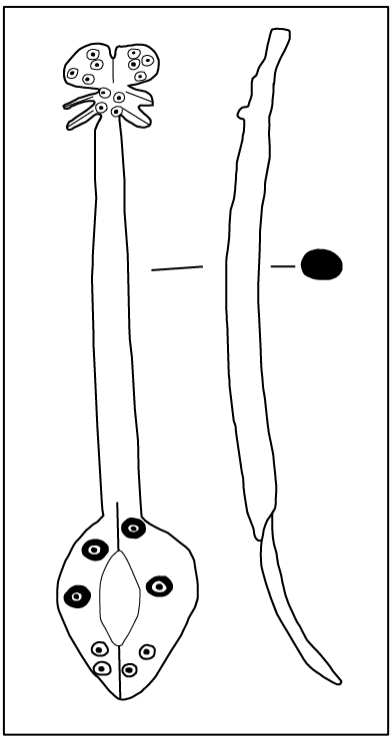


Figure 6-20: Spoon-fibula: Example of the zoomorphic 'spider' headed spoon from Victoria Cave (15) (After Dearne et al. 1998: 93)

In Classical Antiquity, spiders are also often symbolic of spinning and weaving. For example, in the tale of the spinner Arachne, recorded by Ovid in his Metamorphoses 6. 1 – 148, who was transformed into a spider by the goddess Athena, weaving is said to be taught by spiders in Lydia (Harries 1990; Håland 2004).

The metaphors associated with the spider imagery is compelling (see below), given that spoon-fibula are also found with other objects associated with textile working, including weaving combs and bone tools. Spiders are also commonly found in caves and are often seen by cave-

using cultures, such as the Maya, as creatures of the underworld (see Chapter 2). The unique zoomorphic spider spoon-fibula found in Victoria Cave may therefore be symbolic of a world-view associated with caves (see below), as well as representing wider weaving functions associated with the spoon-fibula, similar to that highlighted by King (1970: 48-50; Figure 6.21). Such fibula may therefore have been both a symbolic personal adornment, like weaving combs and used as a specialist tool, associated with spinning.

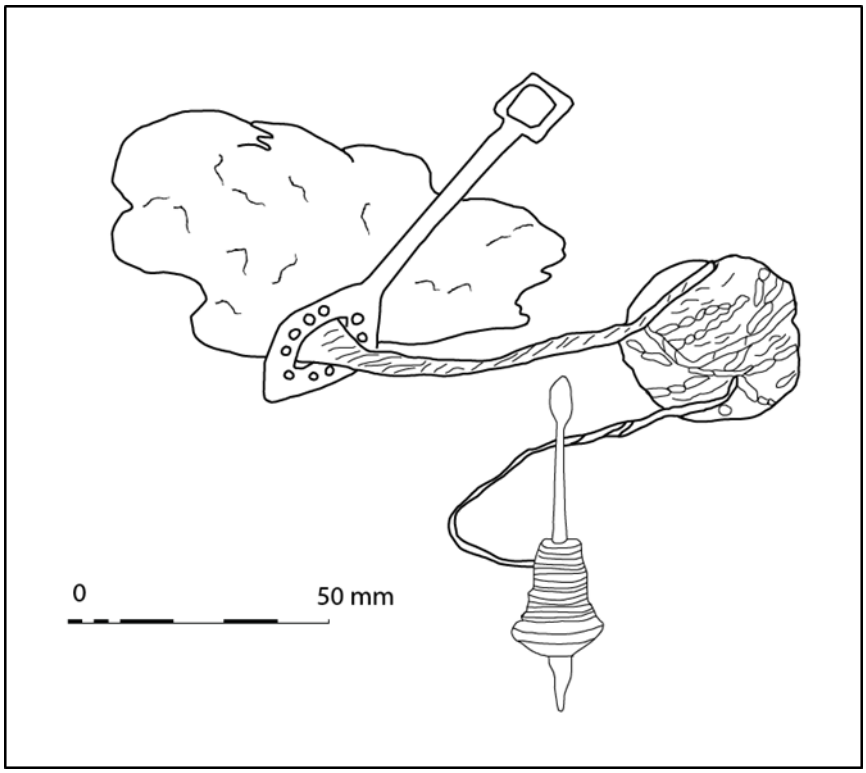


Figure 6-21: Bone Spoon-Fibula: Use of fibula as spinning implements as proposed by King (1970: 48-50). Wool would be passed through the central perforation in preparation for spinning. (After King 1970: 49)

6.2.4.4 Distribution & context

Bone spoon-fibula are almost entirely restricted to seven caves around Settle, North Yorkshire (Figure 6.22, 6.23). As I have explored in Chapter 5, the movement through valleys and the transition between familiar and unfamiliar landscapes, influenced the concentration of contemporary activity during the 1st and 2nd centuries AD in caves around valley interfaces.

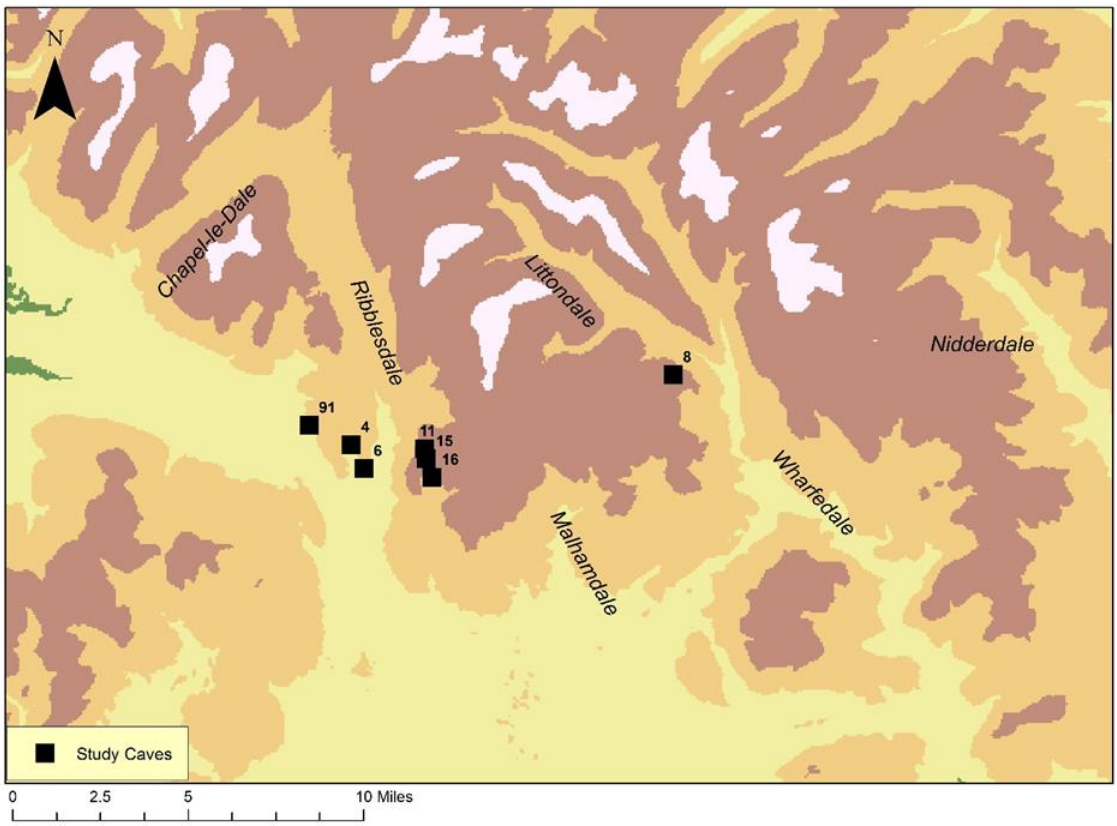


*Figure 6-22: Location of spoon-brooch fibula: each square represents an individual cave where at least one spoon-fibula has been recorded. The landscape and morphological context of these caves have been explored previously in Chapter 5, where I have argued they were tied to entry and exit of valleys (**4** Kinsey Cave; **6** Greater Kelcoe Cave; **8** Dowkerbottom Hole; 11 Jubilee Cave; **15** Victoria Cave; **16** Attermire Cave; **91** Sewell's Cave)*

Borness Cave (**132**) located on the southern coast of Dumfries and Galloway, is the only cave outside of the Settle caves to have produced possible spoon-fibulae. The five examples found during excavation in the late 20th century, were also associated with bone and metalworking, although given poor excavation and recording it is not clear how such evidence relates to cave-use in Settle.

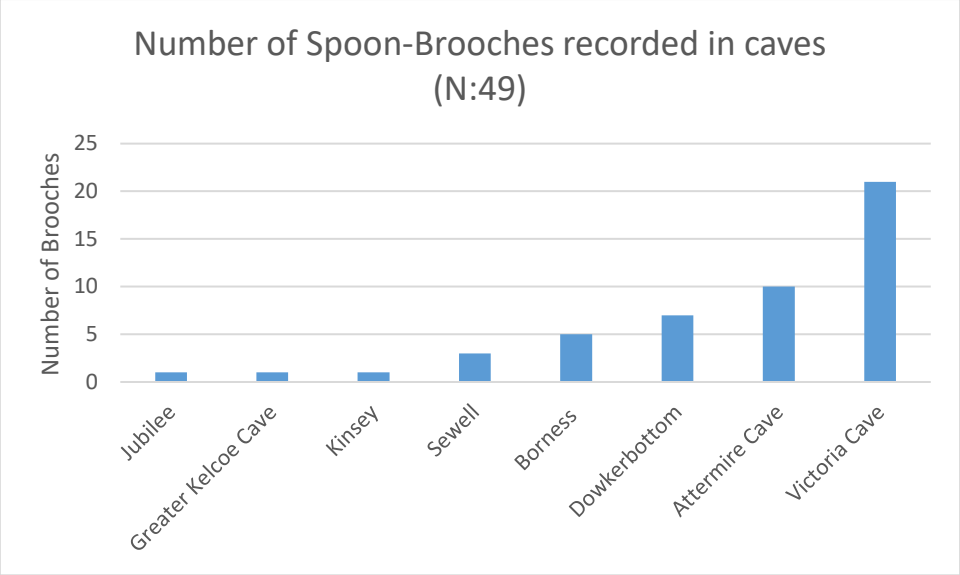


Figure 6-23: Bone Spoon-Fibulae: Number of fibulae recorded in each cave (N: 49). The high concentration of brooches in Victoria (15) and Attermire (16) Cave can be considered part of wider landscapes of cave-use focused on Attermire Scar (discussed in Chapter 5)

Finds of four spoon-brooch blanks, alongside bone debitage and tools in Victoria Cave (**15**) also suggests that the spoons were being made in the cave (Dearne et al. 1998: 94). This evidence, alongside parallel finds of spoon brooches in Attermire Cave (**16**) and Jubilee Cave (**11**) on the same scar face, demonstrates a possible connection between the landscape and spoon-fibulae deposition and manufacture (see below). This relationship with caves has also been noted by Eckardt (2014: 14; Figure 6.24) who has identified a bias towards deposition of spoon-fibulae in caves across the western Pennines.

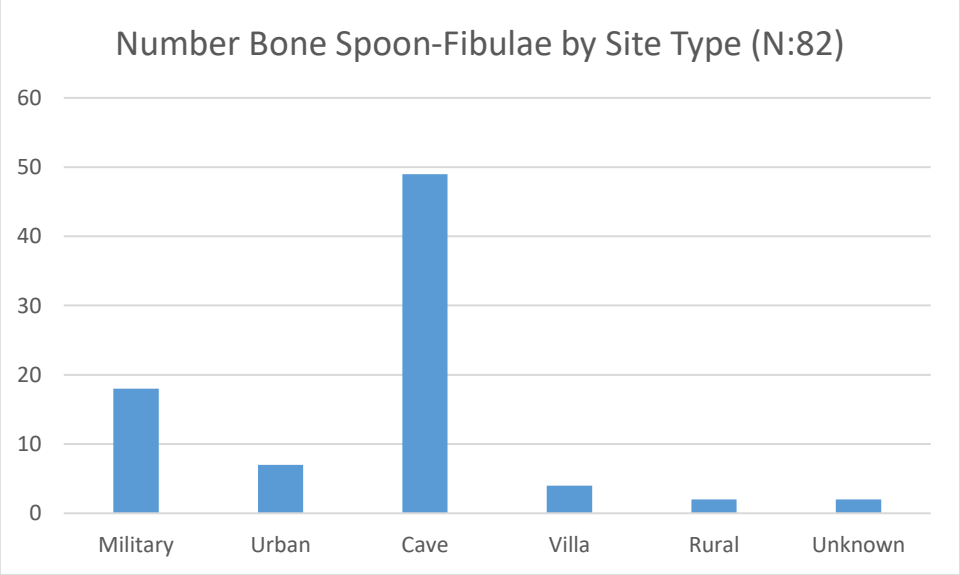


Figure 6-24: Bone Spoon-Fibulae: Number of spoon-fibulae found in different contexts throughout northern Britain. (After Eckardt 2014: 148)

In the study, she also considers spoon-fibulae to be symbolic of regional identity. The unique form and appearance of these spoon-fibulae as well as their focused regional distribution in the North Pennines, led Eckardt (ibid.) to argue that the creation, use and deposition of these artefacts were tied to projections of social identity.

Considering such a distribution, in relation to the evidence of weaving comb deposition in caves, supports the view that caves were associated with patterns of craftworking, either through the creation of bone-fibula, the deposition of symbolically charged objects (see below) or through processes of textile working. The zoomorphic imagery associated with objects also suggests a close relation to the natural world, caves, and supports a view that bone-spoons may have entwined a number of social metaphors (see below).

6.2.4.5 Spindlewhorls and Loom Weights

Whilst weaving combs, the two weaving tablets and the spoon-brooches present evidence for an association of textile working and cavescapes, other finds such as spindle whorls and loom weights may also be indicative of domestic craftworking taking place in caves. Unlike objects such as weaving tablets and bone spoon-fibula, spindle whorls are ubiquitous finds on sites and likely represent inter-site domestic weaving and spinning (Ryder 1993; Tuohy 2004: 98-99). However, like weaving combs and spoons, spindle whorls are tactile social objects, which could have also been decorated and used as personal adornments.

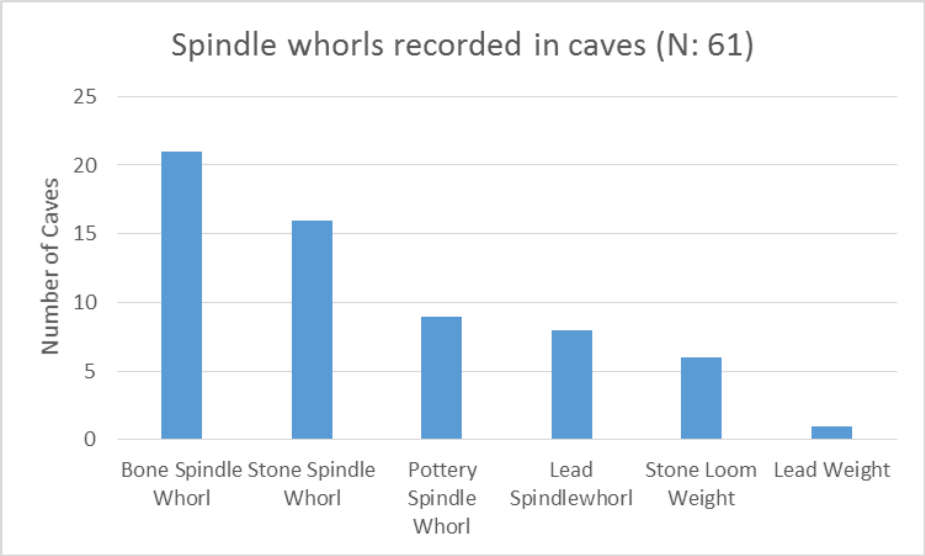


Figure 6-25: Number of spindle whorls and weights recorded in 34 caves. The majority of which are likely to be of Iron Age and Roman Iron Age date (N: 61)

In total thirty-four caves (out of 46 that contained weaving paraphernalia) contained spindle whorls and so-called loom weights (Figure 6.25). Given the frequency of spindle whorls, they have received little focused attention, although must be considered part of the wider textile assemblages outlined above. Spindle whorls, such as those recorded in the well-studied assemblages at Danebury (Sellwood 1984) and the Glastonbury Lake Villages (Tuohy 2004) have been noted across the sites, which has been used to suggest domestic craft production (Tuohy 2004: 98-99). Finds in caves could therefore suggest that domestic spinning of wool was taking place inside caves or were deposited in caves as an object tied to the individual identity.

6.2.5 Evidence of craftworking in caves

The discussion above has focused on the different types of artefacts found within caves and how this may reveal how these sites were related to processes of metal, bone and textile working. However, as we explored in chapter 1, processes of erosion and the quality and nature of excavations have negatively impacted the reliability of the data by damaging surviving archaeological contexts. Therefore, in many instances, it is difficult to determine whether finds of craftworking paraphernalia represent accidental loss, intentional deposition, limited domestic activities or the use of caves as workshops. Furthermore, the deliberate deposition of material during late prehistory, including tools and moulds, within votive contexts also presents significant issues in identifying evidence of in situ craftworking in caves.

It is therefore necessary to explore the different types of evidence available. There is good evidence of craftworking taking place within some caves, namely reported finds of furnaces with metalworking debris and the association of caves with outdoor craftworking enclosures. There are also several examples of caves that contain assemblages of material, which likely represent the use of chambers for metal and bone working.

6.2.5.1 Craftworking assemblages and structured deposits

Analysis of craftworking in the majority of caves relies upon discussion of artefactual assemblages. In total, as discussed above, fifty-three caves have produced finds that are associated with processes of metalworking, such as crucibles, ore, moulds and tools. Similarly, excavation of fifty-eight caves recorded evidence of processing and manufacturing of bone, including finds of worked animal bone, debitage, and object blanks.

In many cases it is unclear whether these assemblages represent accidental and intentional deposition or processes of craftworking. Of all caves containing objects associated with bone

and metal working fifty-six of them produced only one or two stray finds, which complicates interpretation. Several studies have also identified metal tools, crucibles and moulds as part of votive deposits. Work by the likes of Bradley (2010) in the Late Bronze Age and Hingley (2006) and Giles (2007) in the Late Iron Age and Roman Iron Age have shown that craftworking paraphernalia was often included as part of metalwork hoards associated with water and settlement boundaries. For example, iron pins, hooks, hammers and rods have been recorded within votive pits, which also contained other artefacts, including spears, horse harnesses and brooches, associated with the rampart of the hillfort at Breedon Hill (Hingley 2006: 242). Similarly, at Fiskerton a range of metal fittings, two hammers, an iron saw, three woodworking planes and an anvil were also found within the river with eleven spears and five swords (Field et al. 2003: 60-79).

Such evidence suggests that in some cases finds of iron and bronze tools may have been part of votive deposits found within caves (see chapter 3). At Read's Cavern, Somerset (**54**), excavations of a secondary deposit of ash within the main chamber produced fragments of slag, a Late Iron Age brooch and ceramics (Marcucci et al. 2011: 176). Similarly, slag, ore, iron tools and sheets were also found within a mixed deposit of Roman Iron Age material in the vertical shaft at Ashberry Windypit, North Yorkshire (**9**).

The extensive metal and bone assemblages reported in caves, such as Poole's Cavern (**25**), Victoria Cave (**15**) and Wookey Hole (**166**) may however demonstrate that caves were used for craftworking, as well as for the intentional deposition of objects. As discussed above these caves have produced significant amounts of material relating to all processes of bone and metal working. Large collections of Roman Iron Age brooches in various stages of manufacture have also been found in Poole's Cavern and Victoria Cave, which suggests that these sites may have been used as workshops. Importantly, similar brooch assemblages and metalworking debris, are also recorded in a further twelve caves in Derbyshire and Yorkshire, most notably at Thirst House Cave, Deep Dale (**26**). At least thirty-nine brooches dating to the late 1st and early 2nd century AD were recovered from the cave's entrance passage and primary chamber along with bronze sheets, bindings and slag (Branigan et al. 1991c). Whilst the social implications of this will be explored below, such finds demonstrate that several caves could have been used for the deposition and production of brooches.

6.2.5.2 Furnaces and in situ craftworking

Despite the issues in distinguishing between deposition and craftworking, reliable evidence of iron and bronze working in caves is demonstrated through identified stone or bowl furnaces. In total five caves contained furnaces associated with metalworking debris, which can be dated to the 1st millennia (Table 6.2). Most notably, at Constantine's Cave, Fife (**138**), a stone furnace ten centimetres thick and thirty-eight centimetres in diameter, was found below a natural cleft in the ceiling within the cave's main chamber. Sherds belonging to a large Roman amphora and significant quantities of iron slag and baked clay suggest that the furnace was used for iron working during the Roman Iron Age (Wace et al. 1915: 239).

Table 6-2: Furnaces identified in caves (N:5).

Cave	Furnace date	Furnace description
Rowberrow Cavern, Mendip (**71**)	IA	Furnace made of fused stone was located within the caves entrance and produced finds of iron slag and Iron Age pottery (Taylor 1925: 194-196).
Constantine's Cave, Fife (**138**)	RIA	Stone furnace located below a hole in the cave roof towards the rear of the cave's main chamber. Sherds of a Roman Iron Age amphora and significant quantities of iron slag were found with the furnace, which measured 10 cm thick and 38 cm in diameter (Wace et al. 1915: 239).
St Columba's Cave, Kintyre (**143**)	IA & RIA	A furnace bottom was found within the cave's chamber with slag and Iron Age and Roman Iron Age material (Campbell 1978).
Ellary Boulder Cave, Kintyre (**144**)	IA & RIA	A furnace bottom within a stone lined hearth was found in the cave chamber along with significant quantities of iron slag and Iron Age and Roman Iron Age material (Tolan-Smith 2001: 157).
Rubh'an Dunain, Skye (**160**)	RIA	A smelting bowl furnace was recorded by Scott (1934: 205) within the cave's

		entrance, along with 1st millennium AD ceramics, iron slag and glass.

Similar evidence of iron smelting taking place in stone lined furnaces has also been recorded in Ellary Boulder Cave (**144**) and St Columba's Cave (**143**) Kintyre, both of which were found with significant amounts of slag and Iron Age and Roman Iron Age ceramics. Excavations of Rubh'an Dunain, Skye (**160**) also recorded a bowl furnace with Roman Iron Age pottery, iron slag, baked clay and glass.

6.2.5.3 Caves and craftworking enclosures

Furnaces have also been recorded in enclosures outside Victoria Cave, Settle (**15**) and Wookey Hole, Cheddar (**166**), which demonstrate that iron and lead smelting took place within close proximity to caves (see Chapter 5). Excavation of these recovered a range of metalworking tools, iron and galena slag, along with Roman Iron Age pottery. Metalworking debris and tools, dating to the late 1st millennium BC, as well as boneworking debitage associated with a hearth, was also recorded from the enclosure above Uamh ard Achadh (**154**). Contemporary craftworking, as well as the deposition of complete artefacts and human remains, also appear to have taken place inside Victoria Cave, Wookey Hole and Uamh ard Achadh. Extensive assemblages of material have been recovered from inside all three caves, including galena and iron slag, boneworking debitage and metal and bone tools.

6.2.5.4 Connecting craftworking and caves

This section has discussed the evidence available as to the proliferation of craftworking in caves. In many caves it is unclear whether finds of craftworking paraphernalia represent deposition or working taking place within caves. This is especially true for metalworking, where studies have demonstrated that objects connected to iron and bronze working are often found in late prehistoric hoards, a number of which have been identified in caves. Nevertheless, it is possible that certain caves were used for both the manufacture and deposition of material, demonstrated by the complex bone and metalworking assemblages encountered at sites such as Wookey Hole and Victoria Cave. Importantly, such sites were also associated with outdoor enclosures and furnaces used for the smelting of bronze, iron and lead. Furnaces, associated with slag, also represent firm evidence of craftworking taking place within some caves. Despite the issues outlined above, finds of bone and metal working material in caves represent a significant social and conceptual link between caves and the creation of objects, which included both acts of votive deposition and the use of these sites for craftworking.

6.2.6 Caves and itinerant craftworking

From the evidence discussed above it is clear that a number of caves were used for both metal and bone working. Furthermore, the symbolic deposition of objects associated with spinning and weaving may indicate that caves were used by weavers or were at least linked to the symbolism of weaving (see below). However, given the range of material recorded in caves, it is unlikely the scale and nature of craftworking was homogenous. We have seen this through the discussion of the types of caves used for metalworking, which included multi-chambered caves and vertical shafts. Certainly, isolated finds of worked bone may not represent a consistency in the forms of bone working taking place in caves. Rather, such evidence can be compared to the hunting of wild animals and the preparation of bone by groups of hunters. Nevertheless, the evidence of the production of objects such as spoon-fibulae does point towards the use of some caves by specialist bone workers.

In Chapter 5, I suggested that cave-use might have been associated with processes of human movement, focused on topographic features that acted as mnemonics in the landscape. Evidence from caves in North Yorkshire, which were located on the boundaries between individual valleys, also included evidence of metal and bone working. As discussed above, sites such as Victoria (**15**) and Attermire Caves (**16**), which may have been used by smiths, were close to Attermire Camp, an enclosure that produced finds of smelted ore. Similar to activity in North Yorkshire, craftworking outside of caves is also recorded at Wookey Hole (**166**), Cheddar and Uamh Ard Achadh (**154**), Skye (see Chapter 4).

As such, these processes could have been closely connected to other aspects of activity in caves including the deposition of personal objects, human and animal remains (see Chapter 7). In their discussion of the significance of bronze and bone working taking place in the aboveground enclosure associated with Uamh Ardh Achadh, Birch et al. (2009: 114-115) suggested that these activities were connected to seasonal ritual use of the cave. Similar activity recorded at other caves in the British Isles, may also suggest seasonal use of certain caves, demonstrated by finds of young animals (discussed in Chapter 7).

It is possible that craftworking in a number of caves might have been seasonally itinerant and associated with other activities. The use of caves by itinerant craft workers has previously been discussion by Branigan (1997), who argued that caves were used as shelter by craftsmen on their way to rural fairs. Certainly, a number of authors (Budd et al. 1991; Cunliffe 2005: 48; Tuohy 1999: 54) have stressed the existence of itinerant sections of society including ritual

practitioners, craft workers and warriors. The seasonal nature of craft workers it also highlighted by the seasonal availability of raw materials such as antler and beeswax (Giles 2007b: 104).

As we have seen, craftworking in caves was likely motivated by a range of different reasons, which could also include the movement of itinerant craft specialists in the landscape. However, evidence of metal and bone working in complex cave environments, associated with evidence of contemporary deposition, may demonstrate that caves were chosen by craft workers because of their morphology and landscape location. These caves, such as those associated with water or located on the edge of transitional landscapes, may have been symbolically associated with communal practices that were also intertwined with perceptions of craftworking.

6.3 Craftworking & cavescape metaphors

The rest of the chapter will explore the potential symbolical association between craftworking, deposition and caves, by exploring a number of different themes associated with cosmology and identity. Whilst, a number of these themes have been already been touched upon, namely, water, seasonal cosmology and transition, in order to develop these further, it is necessary to situate these within wider contextual frameworks. Furthermore, through analysis of patterns of artefact deposition and the materiality of craftworking I will explore the relationship of craft workers and the symbolic characteristics of cavescapes and consequently the natural world.

6.3.1 Weaving cosmology & cave-use

Given recent arguments for the blurred distinction of domestic and ritual practices across the British Isles during the 1st millennia, it is likely that everyday domestic items such as spindle whorls would have been imbued with a sequence of social metaphors. Like patterns of ironwork deposits, spindle whorls and weaving combs are also noted in votive structural deposits and may therefore share similar themes (see below).

Finds of weaving paraphernalia in caves may not directly indicate that textile working was taking place in caves, but does highlight a relationship between processes of textile working and activity within caves. Certainly, decorated and tactile social objects such as weaving combs, spindle whorls and spoon fibula acted as objects of social display as well as functional tools (Chittock 2014: 317-318; Giles 2009; Joy 2009, 2011). Creating and placing such items in caves suggest that use was bound to wider metaphors, through either the materiality of the object or social perceptions of deposition.

One of these associations may be seen as the deposition of weaving paraphernalia. Ethnographic studies of textile working by indigenous communities, suggest that weaving is often considered part of the creation and maintenance of the cosmos (Cowen 1995; Kehoe 2000; Prechtel et al. 1988). This relationship of weaving and astronomical order is seen in a range of Amerindian cave-using cultures, including the Maya of South-Central America and the Navajo. For the Maya, weaving was symbolic of the maintenance and order of the cosmos, as well as being connected to processes of renewal, death and the underworld (Prechtel et al. 1988: 131).

During the Roman period, weaving also had cosmological significance and was intimately connected to the Parcae (or the Three Fates). The Parcae were spinners of the thread of life (Eckardt 2014: 314) and would often be consulted for fortune-telling. Interestingly, excavation of Roman Iron Age temples has recovered finds of weaving combs, spindle whorls and other debitage suggesting that textile tools were often used as votive offerings alongside metalwork (see below).

The connection between weaving and divination in the Roman world can be tentatively compared to cave-using cultures in America. Symbolic associations with cave animals such as the spider (see above) and the wider metaphysical nature of weaving means it is often connected to processes of rebirth, fertility and regeneration: similar to those metaphors proposed by Giles (2007) for Iron Age ironworking.

For the Maya, weaving is seen as a 'medium of world-view', closely associated with childbirth, pregnancy and young female sexuality (Karslake 1987: 386; Prechtel et al. 1988: 123; Miller et al. 1993: 62). The Goddess, Xochiquetzal often depicted holding a loom or in the act of weaving, was patron of textile working, as well as child-birth and pregnancy (Miller et al. 1993: 190). Spinning and weaving wool and cloth was therefore symbolic, used to represent blood and used in purification rituals (see Chapter 7).

As I will explore in Chapter 7, evidence of the deposition of neonatal and pre-natal children, young animals and artefacts reflect the possibility that caves were associated with themes of regeneration and fertility. The deposition of weaving paraphernalia in caves may be related to such themes, as well as being part of a wider perception of caves as thresholds.

6.3.2 Materiality & crafting in caves

This relationship between cosmology and weaving equipment can be further seen in the materiality of the objects, which highlight similar metaphors related to cave-use. The importance of understanding the material agency of objects has been a recent focus of artefacts studies (Barrett et al. 2003; Hafner 2013; Ingold 2007). This section will focus on the material nature of craftworking evidence in caves, in order to raise a number of key themes that could be related to cave-use and craftworking, including the perception of the natural world and social identity.

6.3.2.1 Weaving magic & magic animals

Given the discussion of the cosmological nature of weaving above it is possible that weaving and the production of pattern braids were seen as magical processes (Fitzpatrick 1997; Megaw et al. 1989: 406; Tuohy 1999: 58). More recent discussion on the materiality of objects by Maxwell (2013a) has stressed the significance of the cosmological value of the making and using of everyday objects. Through, an analysis of the artefacts at Broxmouth Hillfort, she also argued that use of artefacts made from animal remains were closely connected to the creation of identity, which was tied to the symbolic perception of animals (Maxwell 2013b).

One of the ways this relationship between cosmology can be seen is the selection and use of red deer antler and weaving processes (Fitzpatrick 1997). To a number of cultures around the world deer antler is symbolic of rejuvenation and fertility, a relationship which is also found during the Roman period (see below). Out of the 571 combs recorded by Tuohy (1999: 24) in southern Britain, 537 were made of antler, twenty-eight of bone and six of whalebone. Similar biases have also been noted on the inter-site level, with excavated sites such as the Glastonbury Lake Villages and Danebury (Sellwood 1984) demonstrating a preference for using antler when making weaving combs.

The preference for the use of antler has led a number of authors to propose that deer held a special significance during the Iron Age. Across Atlantic Scotland, deer are considered to have been a vital part of island economies with high proportions of red deer bone being recorded in Iron Age sites (Gilmour et al. 1998; Henderson 2007: 42; Mulville et al. 2005: table 17). In their discussion of the faunal assemblage at Dun Vulan, Muville and Thoms (2005: 241-243) have argued that deer were symbolically important for Iron Age communities, suggesting that their absence from structured deposits highlights that the animal was treated differently (Henderson 2007: 42).

Deer remains are recorded in faunal assemblages in 1st millennia sites, although never in significant numbers compared to domesticate remains (Tuohy 1999: 12; Morris et al. 2011: 44-46; Madgwick et al. 2013: 111). Nevertheless, deer antler continued to be used for a number of artefacts, suggesting that interaction with the animal occurred, likely part of hunting strategies away from settlements (Mulville et al. 2005: 243).

Finds of worked antler found in caves, including split antler and tines, may indicate a seasonal use of caves linked to processes of gathering antler. Worked deer antler has been recorded in twenty-six caves (of 126 caves with bone working), alongside artefacts of antler including combs and cheek pieces (see below; see Chapter 3 for dating discussion).

Two species of deer are native in the British Isles- red (*Cervus Elaphus*) and roe (*Capreolus Caprelous*). Fallow deer (*Dama Dama*) were also introduced during the Late Iron Age or Roman Iron Age, with a breeding herd being identified at Fishborne Villa (Miller et al. 2015); although no known remains have been identified in caves. Both species of deer shed antler at alternate times of the year- red deer shed in March to May and is in prime condition during winter, whereas roe deer shed in October to November and is in good condition during summer. Therefore, antler should have been available all year round, depending on the environment and could have been taken from the animal in prime condition through butchery or collected during shedding.

Whilst finds of antler in caves, may indicate seasonal hunting or antler working in caves, they may also have reinforced the symbolic nature of cave-use. Deer antler and bone are reported in a number of ritual deposits in Roman Iron Age wells (Alvey 1967; Cool et al. 2013; Hingley 2006: 214; King 2005; Morris 2011; Osborne 2013: 75-78). They are also noted in high proportions on temple sites (see King 2005: 347) such as Lamyatt Beacon, Somerset (Leech 1986), Elm's Farm, Essex (Johnstone et al. 2002: 37), Lowburry Hill (Fulford et al. 1994; King 2005: 357) and Hayling Island (King 2005: 329-333), as well as in burial contexts (Black 1986), suggesting that antler as a material had an important symbolic role.

During the Early Medieval period, a continuing symbolic association with deer may be seen in art. Pictish art of the late 1st millennium AD often incorporated imagery of deer (see Hicks 1993), including on cave walls. Depictions of deer are found in four caves in Scotland: Kinkell Cave (**139**), King's Cave (**152**), Michael's Cave (**281**) and Constantine's Cave (**138**) and are associated with a corpus of Pictish artwork dating between the 7th and 9th centuries AD.

Symbolic representations of deer on cave walls and the deposition of antler and butchered deer remains suggests a relationship between the deer and caves, which can be considered part of a wider potential cosmology related to deer and other wild animals (see below). At least during the Roman period, powdered deer antler was also, according to Pliny the Elder, considered a medical treatment in the Roman period as a cure for epilepsy, dysentery and ulcers (Osborne 2013: 48).

Given that deer antler is shed and grows back yearly, the animal is also often seen as a symbol of rejuvenation and healing (Hedeager 2011: 80-91; see Chapter 7). As I have argued above, weaving was also related to processes of renewal and regeneration and may therefore be tied to the choice of antler for weaving combs. Furthermore, the seasonal nature of deer hunting may have also played a significant role in the perception and working of the material, which would have become associated with cave-use. Ethnographic parallels, discussed by Tuohy (1999: 12), have indicated that antler were often stored in pits of water in order to keep fresh, which along with finds within ritual wells, suggests a relationship with underground water and antler deposition (see Chapter 7 for discussion on emulated underground spaces & water).

6.3.2.2 Finds of worked boar tusks

This relationship of wild fauna, caves and bone working is also seen through finds of worked wild boar (*Sus Scrofa*) tusks in five caves (of 53 with bone working) across England and Wales. Examples of worked tusk were identified from Late Bronze Age and Iron Age deposits from Soldier's Hole (**165**), Harborough Cave (**36**), Heathery Burn (**3**) and Culver Hole (**111**). Excavations of Read's Cavern (**54**), Somerset also recovered a toggle made of a boar tusk from the Iron Age deposit inside the inner chamber (Marcucci et al. 2011: 176; Figure 6.26).

Perforated tusks are recorded in early prehistoric contexts, such as Beaker burials (Darvill 2010: 171-172) and may therefore have been intrusive in later cave deposits. Nevertheless, boar's tusks have been found in contexts belonging to the Late Bronze Age and Iron Age. Examples have been recorded in Late Bronze Age hoards across Britain and Ireland, including from St Andrews, Fife, which included socketed knives and amber beads (Eogan 1974: 79). One perforated boar tusk and a split boar tusk were also found in Kilgrennary Cave associated with Late Bronze Age metalwork (Dowd 2002: 86).

In Iron Age contexts, a perforated boar tusk, similar to the example from Harborough Cave (**36**), was found at the hillfort of Breedon-On-The-Hill with a bone weaving comb, antler

objects and a penannular brooch (Challis et al. 1975: 7). Excavations of a small sub-rectangular structure at Glastonbury, also recovered two perforated boar tusks, associated with spindle whorls, bronze tweezers and infant human remains (Morris 1988: 62). Boar tusks have also been noted in Iron Age funerary contexts including examples from burials associated with the 'Arras Culture' in Eastern Yorkshire (Giles 2013: 239).

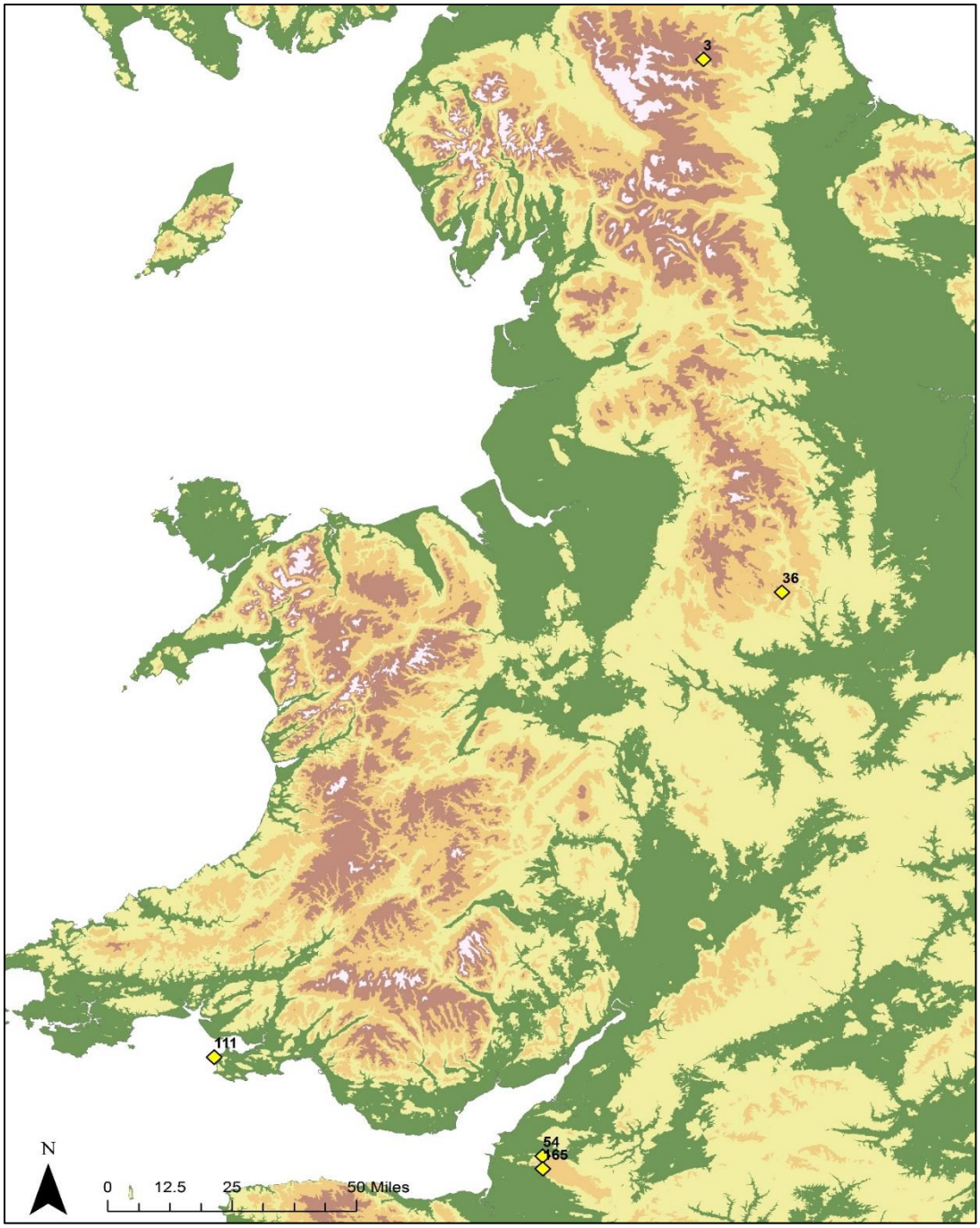


Figure 6-26: Location of caves with worked boar tusk (either pierced, cut or split). Each dot represents an individual cave with at least one dated find (N: 5)

Like deer, symbolic figurines of boar and pig are found in Late Iron Age and Early Roman Iron Age contexts (Figure 6.27). Stylised wild boars with tusks are not uncommon on sites across Iron Age Europe and have been found on a number of mediums including helmets, toggles and votive figurines (Aldhouse-Green 2002: 152-153; Hedeager 2012: 89-90). One example of a copper-alloy pig or boar, of squat build and prominent spine may have been found in a cave near Rhossili, Gower (Jope 2000: 162). Despite work by Foster (1977), who provides the only

catalogue of wild boar figurines of Iron Age and Roman date, a focused assessment of boar figurines and wild boar remains in faunal assemblages is still needed. In their database of Celtic Art, Gwilt et al. (2010) list sixty-seven copper-alloy zoomorphic figurines and mounts (out of 94 figurines), of which twenty-six are identified as boars or pigs. They were found in range of contexts including within hoards (3 examples), burial (1 example), settlements (6 examples) and a temple complex (1 example).

Figure 6-27: Example of a Late Iron Age boar votive copper alloy figurine, found at Great Sturton Lincolnshire. Three examples have found on the western edge of the Lincolnshire Wolds (Lee 2013)

Given this votive association of pigs and wild boar it is possible that wild boar held a symbolic role for many communities during the Iron Age. The use of caves for the processing of wild boar tusk or the deposition of boar remains is suggestive of this cosmological association. Wild boar continued to have a prominent symbolic role during the latter half of the 1st millennium AD. Like deer, they are represented in Pictish artwork (Alcock 1988: 1, 15-16; Samson 1992: 40-45), as well as used as decorative elements in material culture (Hicks 1993: 71-72). Finds of boar tusk in Early Medieval graves has been used to identify 'Cunning Women' or ritual practitioners in Anglo-Saxon England (Geake 2003: 263-264). Boar tusks, along with dog/wolf teeth, beads, an Iron Age pin and Roman Iron Age brooches and coins were found in a female grave at Wheatley in Oxfordshire (Grave number 27; Geake 2003: 263). Cosmologically, boars are symbolic of a warrior philosophy in Norse mythology but are also associated with fertility and acted as a shamanistic familiar (Headeager 2011: 89).

Whilst finds of boar tusk in caves may represent the hunting or gathering of boar during the Iron Age (Giles 2013: 62), the broader symbolic significance of the animal during the 1st millennia may suggest that some of this material may have been intentionally deposited in

caves. Crucially, these finds may also indicate a symbolic link between caves and animals, which may also be seen through finds of processed antler, as well as through elements of zoomorphic representation in art found in caves.

6.3.2.3 Other zoomorphic representations in caves

Spoon-Fibulae

Finds of zoomorphic and anthropomorphic artefacts within caves may also indicate a cosmological significance of animals and caves. As discussed above, the deposition and creation of spoon-fibulae incorporate a number of zoomorphic designs. The association of spiders and weaving, and the wider context of deposition of weaving tools, suggests that caves and weaving may have been bound to similar metaphors as metalworking (see below). Importantly, a number of spoon-fibulae also represent a number of other animals that can be related to patterns of artefact distribution in caves during the Roman Iron Age.

In Victoria Cave (**15**), a spoon fibula had an extended head that was identified as a bird, possibly a duck (Dearne et al. 1997: 92). A further example of a bird head with a stylised projecting wing was also recorded in Branigan and Dearne's catalogue (1991a: 114) almost certainly from a cave near Settle. A spoon brooch from Dowkerbottom Cave (**8)** was also decorated with a bird's head that was identified as a cock (ibid.).

Medical or Toiletry Instruments

Interestingly, zoomorphic imagery of birds can be seen in Roman Iron Age metalwork- notably on so-called toilet or medical instruments. Recent work by Morrison (2013) has attempted to argue for a medical use of many of the bronze spoons and spatulas, which were often decorated with depictions of birds. Drawing on parallel accounts from the Roman world, she suggests that birds were often related to healing and purification (Morrison 2013: 228-229). Crucially, twenty-six of these instruments have also been found in fourteen caves (Figure 6.28).

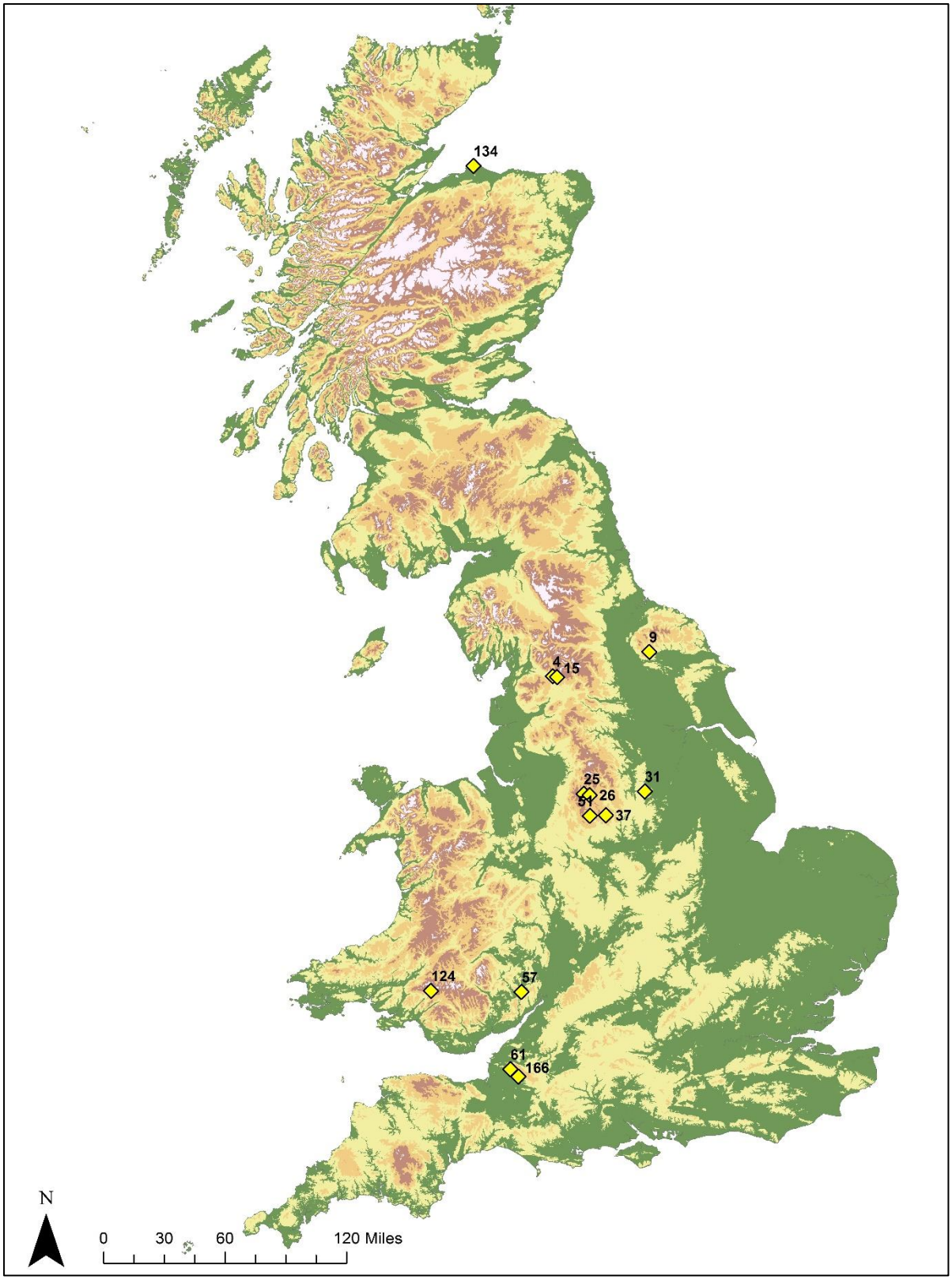


Figure 6-28: Location of 'toiletry' instruments in caves. 26 artefacts are recorded in 14 caves (9 Tweezers; 7 'ear' scoops; 6 'nail cleaners' 2 cochlear; 1 phalera; 1 spatula)

Bird bones are also recorded in faunal assemblages in many caves across the British Isles, none of which can be directly dated given the lack of detailed study. There are, however, two examples of worked bird bone recorded in caves, including a worked crane ulna found in Iron Age levels at Wookey (**166**), thought to have been used as a weaving tool (Balch 1911: 583), and a goose-wing pin of Roman Iron Age date also found in Old Woman's Hole, Mendip (**229**).

Recent work, by the likes of Morris (2011) and Serjeantson and Morris (2011) has highlighted the potential symbolic importance of birds for later prehistoric and Roman societies. For example, in their study of the structured deposition of animal remains across England, Serjeantson and Morris (2011) identified a possible bias in the selection of corvid remains placed in votive deposits. For the authors, this selection may reflect a potential symbolic significance of crows and ravens during the 1st millennia, who may have acted as shamanic familiars (Serjeantson and Morris 2011: 105). A similar argument has also been proposed by Durham and Fulford (2013: 96), who suggest that eagle bones and feathers may have been deposited as a form of sympathetic magic.

Birds, as creatures that mediate between the earth and sky, are often attributed with special significance. Crucially, it is worth remembering that bird remains are recorded in many of the cave deposits including ravens, hawks and sea birds, although are undated given the recovery bias and could represent intentional deposition of bird remains. One rockshelter, however, presents a further compelling example of the interaction between birds and people during the Roman Iron Age. At Ossum's Eyrie (**217**) a bird eyrie within a rockshelter on the top of Ossum cliffs, a 3rd century AD blue enamelled knee fibula and knife were found with a hearth deposit in a complex sequence containing over 10,000 bird bones (Branigan et al. 1991a: 70). The association of such finds and the hard-to-reach nature of the rockshelter, which requires a rope to access, indicates an association of human use and the natural use of the rockshelter as a bird's nest.

Given the wider context of birds within the world-views of communities, many birds may have been seen as symbolically important. Rather than representing stylistic design, the presence of zoomorphic images of birds on medical instruments and spoon-fibulae may suggest a link between design and metaphors of healing and rejuvenation associated with caves reinforced by the transitional nature of birds as negotiators between the sky and earth (see Chapter 7).

6.3.2.4 Bears & wolves

There is evidence that caves were used by wolves and bears during the 1st millennia. Dates taken from samples of brown bear bones (*Ursus arctos*) have been identified during the Late Bronze Age (969- 776 cal BC) from Bear Cave (**265**), Allt Nan Uamh and to the Late Roman/Early Medieval period from Fairy Cave (**7**), Grassington (Lord et al. 2013: 19).

There are morphological difficulties in identifying wolves in the archaeological record as wolves and large done bones cannot often be distinguished. However, wolf dens can be identified by large numbers of canid remains and bones with evidence of predation. Notably, activity in the wolf den at Rawthey Cave (**22**) was likely concurrent with the Roman Iron Age and Early Medieval activity, which included the deposition of a human skull and roe deer antler points. At Moking Hurth (**2**), an identified wolf skull was also identified in upper layers of the faunal assemblage, thought to date to the early 1st millennium BC (Simms 1974: 36). Other finds of 'large dog' in cave assemblages may also be wolves including in Northern Pennine contexts in Roman Iron Age levels at Dowkerbottom Hole (Denny 1859: 50) and in Ashberry Windypit (Hayes 1987: 38).

Both wolf and bear inhabited the landscape of the 1st millennia, with brown bear extinction in Britain thought to date to the late 1st millennium AD (Hall 2008: 187). Historically, wolves are thought to have become extinct during the 17th-18th centuries, although wolf bounties continued to be posted in the East Riding of Yorkshire into the early 19th century (Hetherington et al. 2006: 4). Caves offer the ideal habitat for both bears and wolfs to den and therefore any discussion of cave-use by upland communities must take into account relational cohesion with these animals (see Chapter 7). The symbolic importance of these animals must therefore have also been significant in encounters with them.

6.3.2.5 Zoomorphology in cave art

As I have discussed in Chapter 5, Christian artwork in caves was likely part of the use of caves by Celtic Christian hermits and a close connection to the sea and nature. Pictish art, however, is another medium, which supports a complex perception of the animal world. Within caves, art includes a mixture of esoteric and geomorphic designs as well as stylised and naturalistic animals. One of the key aspects of artwork, however, is never discussed in terms of the Early Medieval art in Scotland: its experience. Studies of early prehistoric cave-art often focus on the perception and sensescape related to artwork, which must also have relevance for studies

of Early Medieval artwork in caves (see Chapter 7). The choice of designs on cave walls could also be seen as evidence of a symbolic relationship between the designs and caves.

Out of the twenty-one caves across Scotland that contain Early Medieval artwork, six included forms of animals. Concentrations of Pictish artwork in caves are found along the coast of Fife, Eastern Scotland, including the Wemyss Caves (Doo Cave **282**; Michael's Cave **281**; Court Cave **279**; Sliding Cave **130**; Jonathans Cave **129**) and Caipilie (Constantine's Cave **138**; Kinkell Cave **139**) and may indicate contemporary periods of cave-use across the Firth of Forth.

Piecemeal recording of the archaeological deposits within caves has resulted in an incomplete record of art in the caves. Nevertheless, the artwork recorded, usually found on transitional spaces such as entranceways and chamber transitions (see below & Chapter 7), could suggest that artwork was symbolically associated with caves. Zoomorphic representations in the caves along the coast of Fife, include quadruped animals, possibly identified as dog/wolf (Cave **129**), deer (Caves **281**; **279**; **129**), the so-called 'Pictish beast' (Caves **279**; **282**) and birds (Caves **129**; **279**; **282**). Snakes (Caves **130**; **282)** are also recorded in the King's Cave (**152**), Jura, which included a unique corpus of anthropomorphic images as well as deer, fish and a horse with rider (Fisher 2001: 90). Pictish symbols, including fish, were also recorded within the entrance of Sculptor's Cave (**134**), Covesea.

6.3.3 Animals, caves & craftworking identity

Animal imagery and finds of processed and non-processed wild animal remains highlights that caves may have been bound to cosmologies of the natural world. Consequently, by using these places, users, such as craft workers, may have become intertwined with symbolic perceptions attached to animals.

Evidence of this may be seen through the itinerant nature of craftworking during the 1st millennia. By moving through the landscape and between communities, craft workers may have shared worlds inhabited by wild animals. Furthermore, these animals may have also linked to similar metaphors attached to craftworking because of their transient nature and ability to move between cosmological thresholds.

Wolves are often seen as spirit guides capable of travelling great distances, whilst bears are often seen as 'half-human', capable, through hibernation, to journey between this world and the spiritual realm (Hedeager 2011: 91-92). Birds too move between different worlds: either as shamanic familiars or between the earth and sky. By using caves, craft workers may have

become associated with this transitional symbology and also with the animals themselves. This is seen not only through the use of zoomorphic imagery in caves but also by weaving and its associated cosmology, where bird's feathers may have been entwined within pattern braids (Tuohy 1999: 23).

For agricultural communities of the 1st millennia, animals such as boars, deer and wolves were not only symbolic but also viewed with suspicion as 'despoilers of crops and animals' (Giles 2013: 62). Like craftworking, these animals were dangerous and unpredictable, capable of destroying crops and livestock as well as attacking people and, if used as a shamanic familiar, would have been associated with magic and esoteric knowledge. It is important to note however, that the perception of cave-using animals may not have been wholly negative. Cross-culturally, animals such as bears and wolves are often attributed with positive magic and as we have seen above often have been seen to act as spiritual guides or guardians.

This association between cave-use and wild animals has been studied in terms of Palaeolithic activity recorded in caves. In his study of early prehistoric cave-use in the Czech Republic, Skinner (2012) highlighted the significant of interaction with animals through relational cohesion. In this he argued that relationships were not only formed through the intentional perception and interaction with animals but also through active avoidance, the materiality of their remains and the ways identities were expressed through art (Skinner 2012: 130). Given the archaeological evidence of the use of caves by bears during the 1st millennia, this also raises the possibility that communities were also engaging in relational cohesion with wild animals that used caves (Skinner 2012). By using caves, users would have needed knowledge of lifeways of bears and wolves, either to actively avoid these animals or to drive them away from caves. This may suggest that both bears and wolves were part of the overall perception of caves in the world-views of cave-using communities. This role of wild animals and cave cosmology has been discussed through the interpretation of early prehistoric art. At sites such as Lascaux, scholars have noted a so-called symbolic order to the arrangement of art, including the seasonal representation of animal hides through summer-spring-autumn (Lawson 2012: 238). As such, it has been argued that the choice of animals and where they were situated within the cave represented a cosmographical order of animals (Lawson 2012: 239). Central to this perception of cave art was the role of experiencing cave sensescapes. For example, work by Azéma et al. (2012) has highlighted how Palaeolithic artists sought to represent the movement of animals, by the use of ancillary lines in Chauvet Cave. Under the right flickering light, the images would

have been seen to become animated, suggesting that the cavescape experience was fundamental in the perception and presentation of this art.

Consequently, it has been argued that caves used for art may have been seen as places of negotiation between wild animals and Palaeolithic communities (Lawson 2012: 238). Such research demonstrates the potential importance of cavescapes and the symbolic perception of wild animals. Similar processes may also have influenced the perception of caves during the 1st millennia. The location of some sites, on the edge of dense settlement patterns and the transformative nature of cave experience may have been related to symbolic perception of wild animals. Consequently, certain caves may have acted as a key link between worlds inhabited by animals and human communities.

6.3.4 Identity creation & boundaries

Caves may therefore have acted as mnemonics of the wild nature of crafting and craft workers, thereby becoming bound to broader perceptions of itinerant craft workers. Yet as we have also seen a number of these themes such as transition, healing and rejuvenation represent a complex association with cavescapes, which was part of multiple uses of cave environments (see Chapter 3). One such aspect of wider uses of caves can be seen through the deposition of artefacts linked to identity, including brooches and iron keys. From this, it can be demonstrated that craftworking was linked to patterns of regional identity and the wider cosmological importance of boundaries and thresholds.

6.3.4.1 Brooches & cave identity

In their study of Roman Iron Age use of caves, Branigan and Dearne (1992: 8) noted the significant number of brooches and personal adornments recovered in caves often represent unparalleled distributions of material. Furthermore, as discussed above a number of caves were likely used to create brooches during the Roman Iron Age.

Whilst I have discussed the chronology and form of brooches found in caves in Chapter 3, it is worth highlighting the chronological and typological forms of fibula found in cavescapes, in order to understand the role of regional identity in cave-use. In total, 271 brooches were recorded in forty-eight caves (of a total of 275 sites). From these eight are Iron Age in date, whilst finds of Colchester derivative brooches (12 from 9 caves), Nauheim (2 from 2 caves) and Aucissa fibulae (6 from 6 caves) may indicate continuing Late Iron Age cave-use (see Chapter 3). A further thirteen brooches from nine caves are considered Early Medieval in date.

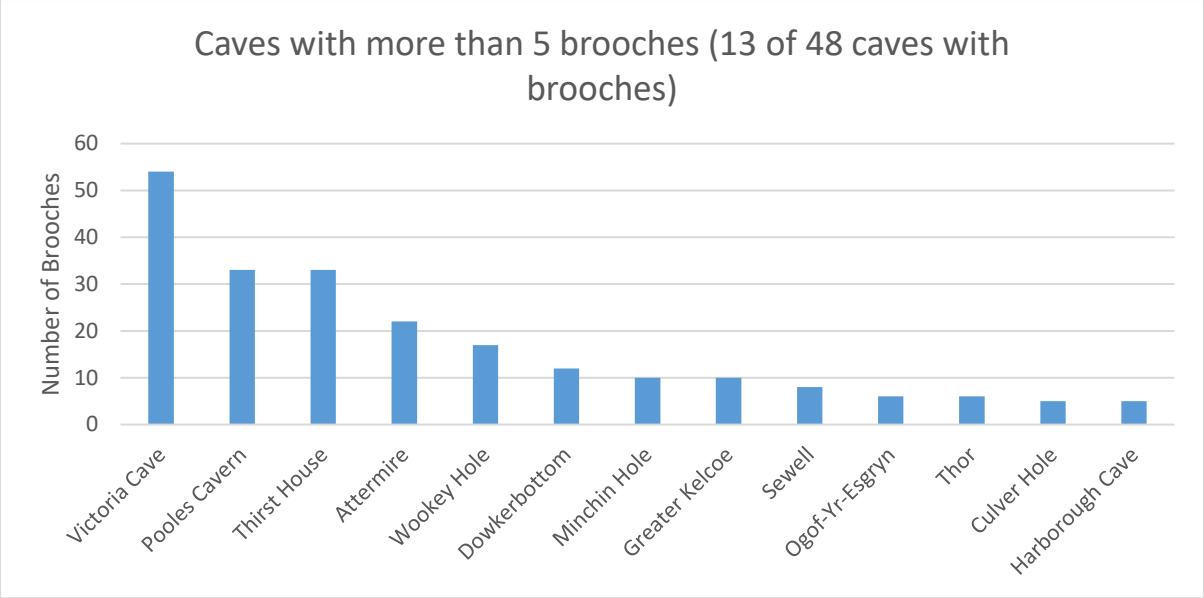


Figure 6-29: Caves with more than 5 brooches recorded inside. Thirteen caves of 48 caves with brooches contain more than 5 complete examples, the majority of which are Roman Iron Age in date (see Chapter 3 for dating and distribution)

The majority of brooches recorded in caves (230 from 38 caves) date to the Roman Iron Age with significant numbers of brooches recorded in single cave contexts, which clearly represent intense periods of deposition (Figure 6.29). Furthermore, a number of unique brooch forms are restricted to caves or found in contexts beyond normal patterns of distribution.

6.3.4.2 Examples of workshop distribution of brooches

Examples of fibulae recorded alongside the spoon brooch fibulae and Giggleswick type toggles discussed above in caves across Southern Cravendale share similar unique designs. Trumpet brooches found in both Attermire (**16**) and Victoria Caves (**15**) share an unusual axis bar construction suggesting that they were sourced from the same workshop (Branigan et al. 1991a: 109; Dearne et al. 1998: 59-60). Evidence of brooches sourced from the same workshops are also seen in the distribution of so-called S-shaped fibulae, which are restricted to the Settle caves and thought to have been the forerunner to the Dragonesque style brooch (Mackreth 2011: 186-189; Dearne et al. 1998:59-60).

In the Peak District, designs also suggest a single source for brooch production. Polden Hill derivative fibulae from both Ravencliffe Cave (**29**) and Thor's Fissure Cavern (**50**) are almost a unique design of proto-dolphin fibulae (Branigan et al. 1991a:64-65). Finds of Trumpet brooches, including Collingwood Type Ri from Old Woman's House Cave (**291**) and Thor's Cave (**51**) and Collingwood Rii from Reynard's Cave (**219**) and Harborough Cave (**36**) also share design features, suggesting that they were sourced from the same workshop.

6.3.4.3 Brooches 'out of context'

Finds of brooches away from standardised distributions of the form also hint at symbolic function behind the deposition in caves. Finds of a Frankish-type Caterpillar brooch and a Late-Roman crossbow type brooch in Victoria Cave (**15**) are rare examples of brooches in the north of England (Dearne et al. 1998: 65; Mackreth 2011:204). Furthermore, the presence of a rectangular plate brooch, of 1st-2nd century AD date, (Dearne et al. 1998: 64; Mackreth 2011: 154-156) is interesting given that the form is typically restricted to southern England (Dearne et al. 1998: 95). A Hod-Hill type fibula, dating between c.43-65 AD, found in Pin Hole Cave (**178**), Creswell Crags is also a rare find in northern England (Branigan et al. 1991a: 17).

As discussed in Chapter 3, regional distributions of brooch types found in caves also raise interesting contrasts in the forms of material culture found in caves. In Scotland only three caves contained brooches, two of which are imports dating to the Roman Iron Age. Surprisingly, compared to the distribution of brooches in caves in Region 2: The Peak District and the Midlands (20 of 55 caves with metalwork), Region 3: Northern England (11 of 45 caves with metalwork) and Region 7: Wales (8 of 26 caves), only six caves in Region 1: Southern England (of 66 caves) produced brooches.

The deposition of brooches of similar type on a regional scale indicates a regional focus of cave-use, which I have already discussed in terms of the landscape context of caves across Argyll and Bute and the caves of Southern Cravendale (Chapter 5). Furthermore, as discussed in Chapter 3, this interconnected nature is also highlighted by connecting pieces of pottery in both Settle Caves, the Peak District and the Mendip Hills and indicates that localised patterns of caves were bound to wider perceptions of cavescapes. Rather than being isolated, craftworking was situated within broader context of cave-use and perception as was the deposition of regional specific material such as brooches. However, finds of rare brooch types in caves also reveals that these caves were also connected with extensive patterns of movement across the landscape.

In terms of the role of craftworking and social identity, the use of caves for the creation, use and final deposition of objects suggests that certain sites may have been fundamentally bound to the life cycles of artefacts, including so-called spoon-brooches and metal brooches. If, as I have argued in Chapter 5, some caves were also used as places to maintain social ties through the deposition of symbolic artefacts in boundaries in the landscape, then craftworking evidence

in caves may also be considered part of such processes. This is demonstrated through the creation and deposition of regionally specific material in caves.

6.3.4.4 Keys & Boundaries

One final artefact related to patterns of cave-use and craftworking are finds of bronze and iron keys of Roman Iron Age date (Table 6.3). Despite often being treated as functional items, keys and locks are also socially significant and as a result are bound to a number of metaphors. Studies (Kozloff 1993) have noted that keys are often esoteric symbols. As metaphors, they are tied to processes of memory including remembering, for example as keepsakes, or as forgetting- by sealing away and restricting access. If we accept that the deposition of objects and craftworking debris in caves was part of an intentional process, then keys may have acted as more than just domestic debris thrown into caves.

Table 6-3: Finds of Roman Iron Age keys and their location within caves. A number of keys are associated with transitional spaces within caves, either chamber boundaries, water or cave entrances. (N: 7)

Cave	**Object Type**	**Location**
Ashberry Windypit (**9**)	Key (C/A)	Entrance shaft
Victoria Cave (**15**)	Key (Fe)	Interior- rear chamber
Poole's Cavern (**25**)	Key (Fe)	Chamber off entrance passage near water pool
Merlin's Cave (**57**)	Key (Fe)	Entrance passage
Sewell's Cave (**91**)	Lock (Fe)	Rockshelter overhang
Minchin Hole (**115**)	Key Handle (Fe)	Entrance passage- hearth deposit
Ogof-yr-Esgyrn (**124**)	Key (Fe)	Interior chamber- near stream way
	Key Handle (Fe)	Interior
Wookey Hole (**166**)	Latch (Fe)	Inside
	Key (Fe)	Inside

Types of keys included both incomplete and complete forms, as well finds of key handles in the entrance to Minchin Hole (**115**) and Ogof-yr-Esgryn (**124**) and a latch from Wookey Hole

(**166**) and a lock mechanism associated with a Roman metalwork deposit in Sewell's Cave (**91**). In Ogof-yr-Esgryn, both an iron key and key handle were recovered during excavations of the interior of the multi-chambered cave, close to the Afon Llynfell associated with a wider array of material, including human and animal remains and other types of metalwork. Similarly, both a latch and key were recovered from Chamber 2 of Wookey Hole, that also associated with other archaeological material and the River Axe and an iron key was recovered near the pool and metalworking debitage from Poole's Cavern (**25**). This association of keys and water within caves, is interesting, given the potential importance of water as a physical and cosmological boundary and as a place for the dead (Parker Pearson 2003). Elsewhere keys were also recorded in entrance passages to caves. A copper alloy key was recovered 4.5m down the vertical entrance to Ashberry Windypit (**9**), North Yorkshire, whilst iron keys were found in the entrances to Minchin Hole (**115**), Gower and Merlin's Cave (**57**), Gloucestershire.

6.4 Crafting in Transition: boundaries & containment

The deposition of keys and its relationship to boundaries and transition can be paralleled to the location of craftworking in caves and other landscape contexts, including storage pits and settlement boundaries (Giles 2007b). As discussed in the nature of craftworking in caves, finds of debris and tools are often associated with transitional spaces within caves, including entrance passages, chamber boundaries and cave mouths.

6.4.1 Crafting & transformation

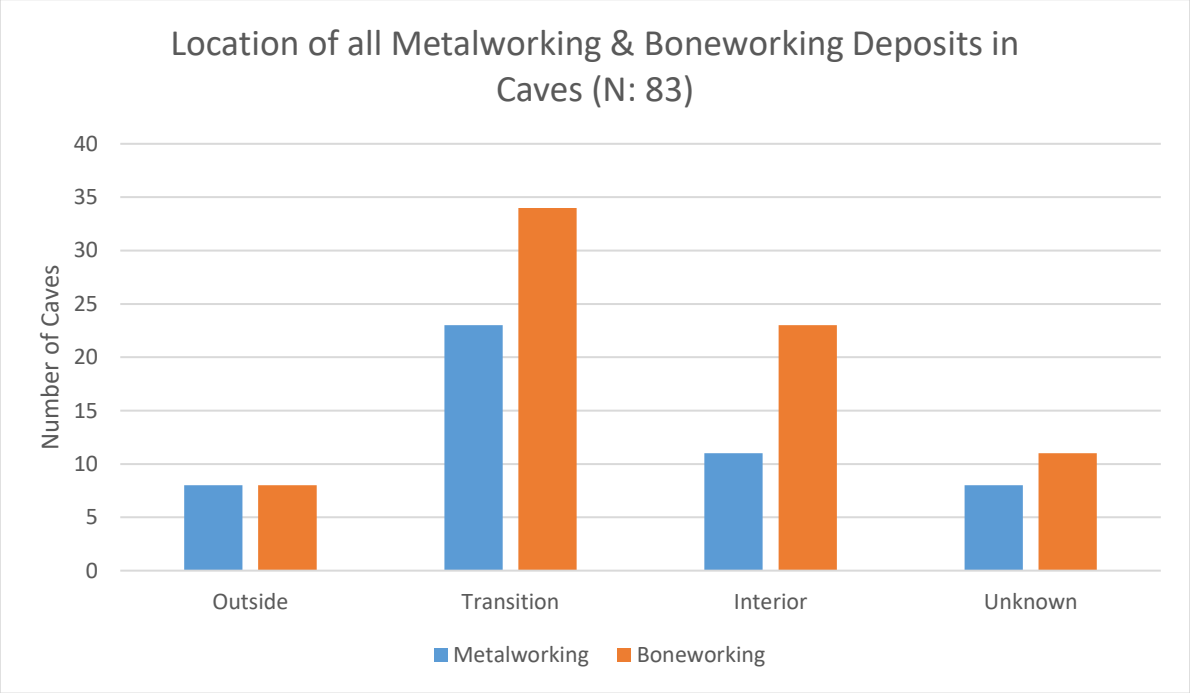


Figure 6-30: Location of metalworking and bone working deposits- sorted by number of cave per location of deposit, given the scale of deposition at sites such as Wookey Hole (N:83)

This bias towards the use of transitional areas in caves for craftworking can be seen when considering all the available evidence for craftworking in caves (Figure 6.30). From this, it appears that, in many caves, bone and metal working debris and artefacts were found primarily inside the cave, in entranceways and passages. This distribution may partly reflect practical concerns of craft workers, who chose to work in areas which received the greatest amount of light and good airflow (Branigan et al. 1992: 9-12). However, there is also evidence that interior spaces of certain caves were also used for craftworking, which may suggest broader motivations behind using some caves for crafting.

As well as serving as an ideal space for craftworking, transitional spaces may have also been symbolic. This can be seen not only through the intensive use of entrances but also through the modification of cave mouths (Table 6.4). Revetment holes, found at the entrances to Read's Cavern (**54**), Somerset and Bat House Cave, Derbyshire (**288**) may have been used to support timber frames, that blocked entry to the caves. In Scotland, stairs and walls were recorded at the entrances of St Columba's (**143**) and St Cormac's (**150**) caves, whilst a stairwell constructed in a vertical sink hole, served as the entrance to High Pasture's Cave (**154**). A complex structural sequence was also recorded within the entrance to Torr's Cave (**136**), which included stone stairs, a wall and a potential blockhouse. The construction of walls, stairs and doorways in caves would have altered the overall experience of cave-use by changing how users entered cavescapes. By restricting and possibly controlling access to caves, doorways and stairways, may have served to enhance the experience, and significance, of the transition between over-ground and underground (see Chapter 7).

Table 6-4 Evidence of blocking of cave chambers and cave passages during the Iron Age, Roman Iron Age and Early Medieval Periods (N:11)

Cave	**Blocking Type**
Victoria Cave (**15**)	Rear chamber possibly blocked by large boulders.
Carsington Pasture Cave (**27**)	Entrance passage possibly sealed.
Fox Hole Cave (**35**)	Cave mouth blocked using limestone packing stones.
Harborough Cave (**36**)	Excavator suggested that the entrance was enlarged- no direct evidence.
Read's Cavern (**54**)	Possible door at cave mouth.
Charterhouse Warren (**59**)	Vertical entrance deliberately infilled using non-local stone during the Bronze Age.
Raven Scar Cave (**106**)	Closed by blocking stones during the Neolithic.
Torr's Cave (**136**)	Complex series of structures associated with cave entrance, including a block house, wall and stairs.
St. Columba's Cave (**143**)	Cave entrance blocked by a wall and stairs.
St Cormac's Cave (**150**)	Cave entrance blocked by a wall and stairs.
Uamh An Ard Achadh (**154**)	A stairway was built in a natural sinkhole and blocked using debris and boulders in the Late Iron Age.
Bat House Cave (**288**)	Possible door at cave mouth.

By sealing caves, communities may have attempted to contain the dangerous spiritual forces which were created by craft workers and through wider acts of negotiation with the underground (see Chapter 7), such as the deposition of personal items and human remains. This evidence, alongside finds of keys in caves with craftworking evidence and the location of tools and debris within caves, indicates a focus on thresholds, which may be considered part of wider cosmological associations with transition during the 1st millennia.

6.4.2 Sensing transformation: cavescapes and transient experiences

By using caves, users had access to esoteric knowledge of a cave's location and its cavescape (see Chapter 5), which would have also been intensified by the sensory experience offered by caves. As I have discussed in Chapter 2, a number of authors have highlighted the importance of the sensory nature of caves. Skeates (2008: 209; 2012) considers the 'kinesthesis' – the movement and action of the human body, alongside extra-sensory perception, (Skeates 2008: 214) as a vital part of cave-use (see Chapter 7). Therefore, using caves, often require users to act in different ways, as part of unique sensescapes, which contrast to the outside world (Bjerck 2012:60; Clack 2009: 339; Tilley 1994: 73; Skeates 2008: 214; Whitehouse 2001).

Within the caves, these experiences also change sounds, smells and vision, which vary in different areas of the cave. Entrances and passages, still within reach of daylight and outside sensescapes, act as a mediator between the outside world and the underground. Moving deeper into caves, results in heightened sensory perception, which transforms everyday sounds and movement. Craftworking, potentially perceived as a transformative and elemental 'magic', is also a medium of transformation and creation, which must have been related to boundaries and transitional spaces within caves. This focus on cave entrances therefore may indicate a concern for the movement between the outside and inside worlds and could be considered part of wider elements of cosmology, that may apply to acts of deposition as well as craftworking.

6.4.3 Craftworking and wild boundaries

The discussion above has highlighted the similarities between cave experience and the transformative nature of craftworking. Further parallels can also be drawn between the metaphorical nature of craftworking as a dangerous and transformative act and wild animals, who used caves. As we have seen, animals such as deer, boar, wolf and bear, may have been perceived to have had the ability to move across cosmological thresholds. By using caves and depositing materials belonging to these animals, the perceived supernatural abilities may have imbued activities taking place in caves, including craftworking. This may also be seen in the association of craftworking debitage and water, which has often been thought to act as a threshold to the world of the dead (discussed in Chapter 7). Entering and working in such environments may therefore have been cosmologically significant, which allowed craft workers to move between physical and metaphysical boundaries.

6.5 Conclusion: crafting identities

This chapter has explored the nature of craftworking in cavescapes and the metaphorical significance this may have had on the perception and role of craft-working and craft workers.

Through using caves and sharing landscapes with wild animals, craft workers may have become symbolically linked to creatures such as wolves, bears, boars, birds and deer and also cavescapes. By focusing on the transitional nature of caves and considering such material alongside patterns of deposition in boundary spaces, it has been argued that craftworking in caves may have been symbolically significant.

Caves, which offered unique sensescapes, must have intensified such experiences. Rather than being used as mercurial places, craftworking in caves was symbolically linked to the nature of the underground. By creating objects in caves, craft workers were also forging regional identities, binding such processes within caves, which is also demonstrated by the deposition of personal objects such as brooches. Using caves, for the creation and final deposition of objects suggests that these sites may have been integral to the life histories of objects, as well as the lifeways of those that visited and used caves for craftworking. As a result, caves acted as mnemonics of regional identity and as a focus for metaphorical expression.

Chapter 7 Cave Cosmologies: Understanding archaeological interactions with cavescapes during the 1st millennia BC and AD

7.1 Introduction

This chapter will discuss the ways in which caves and subterranean spaces in general, may have been situated within broader cosmologies. By exploring the deposition of human and animal remains in caves, the discussion below will explore how caves may have been part of funerary worlds attached to other natural places, such as rivers. Furthermore, through a discussion of the architecture of manmade subterranean places, it will be argued that such sites attempted to emulate cavescape experiences, demonstrating the broader significance of caves for many communities during the 1st millennia.

7.2 An overview of human remains in caves

The following discussion will be based on data that is illustrated in detail in Appendix 3. It is necessary from the outset, to outline the limitations of the material. As discussed in Chapter 1, much of it derives from antiquarian excavation of caves during the 19th and early 20th centuries, which did not often focus on osteological or stratigraphic analysis of remains. It is also important to note however, that some of the material, including disarticulated fragments, may have come from contexts disturbed by animals or water. As such, analysis will only focus on those caves that contained human remains that were radiocarbon dated or associated with diagnostic material.

7.2.1 Chronology

Human remains have been recorded in forty-three caves across Britain. Of these, radiocarbon samples were available for thirty-five individuals from twenty-one caves (Table 7.1). Despite there being such a low number of scientific dates available for human remains in caves, these dates at least demonstrate that caves continued to be used for the treatment of the dead throughout the 1st millennia. Considering this data with human remains found in contexts that contained diagnostic material does, however, suggest fluctuations in the amount of caves being used for the treatment of the dead (Figure 7.1).

Table 7-1 Radiocarbon dates available for human bones found in caves (35 samples from 21 caves)

Cave	Region	Lab code	Sample	Context	Determination (BP)	Calibrated date (2 sigma)
Late Bronze Age						
Gough's New Cave (**62**)	1	OxA-1202	Human bone	Cave earth from entrance	2850±60	1210-853 cal BC
Sculptor's Cave (**134**)	6	GU-15969	Mandible	Cave earth from western entrance	2845±35	1120-920 cal BC
		GU-15971	Mandible	Cave earth from eastern entrance	2845±35	1120-920 cal BC
Iron Age						
Carsington Pasture Cave (**27**)	2	OxA-9806	Distal femur	Floor of second chamber	2435±55	757-405 cal BC
Langwith Cave (**38**)	2	OxA-2232	Skull fragment	Cave earth from entrance to second chamber	2330±60	746-204 cal BC
Dead Man's Cave (**285**)	3	Reported in Lord et al. 2013: 245	Femur	Cave earth from entrance		511-376 cal BC
Mother Grundy's Parlour (**31**)	2	OxA-1832	Skull fragment	Dawkins' collection from inside cave	2210±80	403-54 cal BC
MacArthur's Cave (**131**)	5	OxA-4485	Humerus	Layer of black from rear of cave	2170±55	380-50 cal BC
		OxA-4486	Distal femur	Upper shell midden from rear of cave	2365±55	800-200 cal BC
		OxA-4487	Talus	Lower shell midden from rear of cave	2460±55	770-400 cal BC
		OxA-4488	Patella	Lower shell midden from rear of cave	2295±60	520-170 cal BC
Tyning's Great Swallet (**339**)	1	OxA-15350	Human bone	Depth of 30m in vertical shaft	2254±29	395-208 cal BC
North End Pot (**10**)	3	HAR-8056	Skull fragment	Upper deposit from vertical shaft	2260	310 -130 cal BC
Charterhouse Warren Swallet (**59**)	1	SRR-3450	Human humerus	Slope in chamber below entrance	2145±65	360-5 cal BC
Roman Iron Age						
Fishmonger's Swallet (**42**)	1	Beta-150613	Human bone	Base of vertical shaft	1940	88 cal BC-230 cal AD
		Wk-8222	Human bone	Base of vertical shaft	1990	169 cal BC-129 cal AD
Robin Hood's Cave (**30**)	2	OxA-736	Mandible	Cave earth from south-western entrance	2020 ±80	352 cal BC-204 cal AD
		OxA-6581	Mandible	Cave earth from south-western entrance	1785±50	126-383 cal AD
Rawthey Cave (**22**)	3	OxA-7450	Human bone	Cave earth from horizontal chamber	1865±40	62-210 cal AD

Uphill Quarry Caves (2) (**73**)	1	OxA-4022	Distal femur	Cave earth from entrance	1710±60	138-427 cal AD
Three Holes Cave (**78**)	1	OxA-3210	Mandible	Ash layer from outside entrance	1540±80	208-395 cal AD
The Dog Hole Cave (**284**)	3	OxA-14173	Humerus	Cave earth from horizontal chamber	1746±27	235-381 cal AD
		OxA-15994	Human bone	Cave earth from horizontal chamber	1734±30	240-386 cal AD
Sculptor's Cave (**134**)	6	GU-15964	Axis vertebra	Collection, likely from western entrance	1795±35	130-340 cal AD
		GU-15965	Axis vertebra	Collection, likely from western entrance	1735±35	230-400 cal AD
		GU-15966	Axis vertebra	Collection, likely from western entrance	1835±35	80-250 cal AD
		GU-15967	Axis vertebra	Collection, likely from western entrance	1740±35	220-400 cal AD
		GU-15968	Axis vertebra	Spoil heap	1780±35	130-340 cal AD
		GU-15972	Thoracic vertebra	Test pit in western entrance	770±35	140-380 cal AD
		UBA-6930	Axis vertebra	Collection, likely from western entrance	1738±33	230-400 cal AD
Daylight Rock (**127**)	7	OxA-7685	Human bone	Cave earth inside cave	1635±40	333-539 cal AD
Early Medieval Period						
Badger Hole (**75**)	1	OxA-680	Skull fragment	Cave earth from inside cave	1380±70	436-601 cal AD
Lesser Garth Cave (**120**)	7	UBA 10640	Human bone	Inhumation inside cave	1572	425-544 cal AD
		UBA 10641	Human bone	Inhumation inside cave	1435	572-655 cal AD
Culzean Cove Main System (**252**)	5	WK-14017	Cervical vertebra	Floor of second chamber	1149±42	777-985 cal AD
Jonathan's Cave (**129**)	4	GU-2038	Human bone	Burial outside entrance	980±80	892-1220 cal AD

Similar to overall instances of cave-use during the 1st millennia, the deposition of human remains in caves appears to increase from the Late Bronze Age (17 individuals from 3 caves) during the Iron Age (58 individuals from 19 caves). Despite the number of caves being used for the treatment of the dead remaining at similar levels during the Roman Iron Age, the overall recorded number of individuals recorded in caves more than doubles, with 124 individuals being recorded in eighteen caves (Figure 7.1).

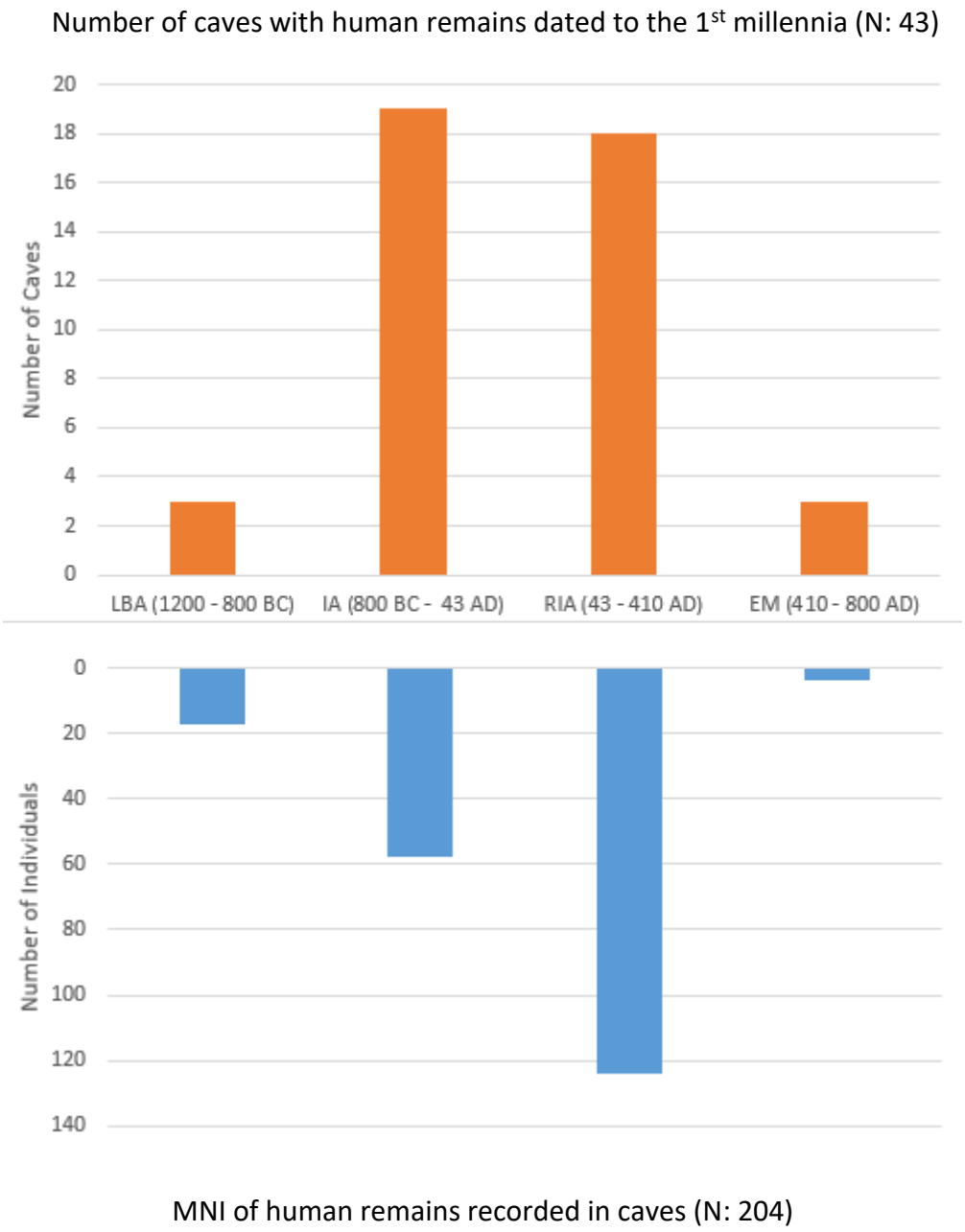


Figure 7-1: Caves with period specific human remains. The chart above details the number of caves with human remains by period, whilst the chart below represents the corresponding total MNI of each period. The comparative nature of human deposition during the Iron Age and Roman Iron Age, suggests a continuity of use of some mortuary spaces.

Such an increase may be explained by recorded instances of the deposition of high numbers of individuals dating to the Roman Iron Age. This includes finds of twenty-one individuals from the fourth chamber at Wookey Hole, Cheddar (**166)** and forty individuals from Ogof-yr-Esgyrn, Brecon (**124**). During the Early Medieval period, four individuals were recorded from three caves, which appears to suggest a decline in the use of caves for the treatment of the dead.

7.2.2 Geographic distribution

Strong regional concentrations of the deposition of human remains in caves occur in the Mendip Hills (Region 1), the Peak District (Region 2) and southern Cravendale (Region 3). Rather than demonstrating a specific geographical bias, this likely reflects an association with other forms of cave-use, which were predominately found in areas that contain high numbers of natural caves. Human remains were also recorded in a number of coastal Scottish caves (Regions 4, 5 and 6), as well as in Wales and Torbryan, Devon (Figure 7.2).

There does not appear to be any significant regional variation in the chronology of human remains deposition in caves (Figure 7.3). Human remains dating to the Late Bronze Age were only found in caves in southern England (Region 1), northern England (Region 3) and northern Scotland (Region 6). There were no firmly dated human remains found in caves dating to the Iron Age in Wales and northern Scotland. Rather than being demonstrative of specific human approaches towards caves, this is likely a result of a lack of diagnostic material found in Wales and Scotland (see Chapter 3). Human remains dating to the Early Medieval period were recorded in southern England (Region 1), western Scotland (Region 5) and Wales (Region 7).

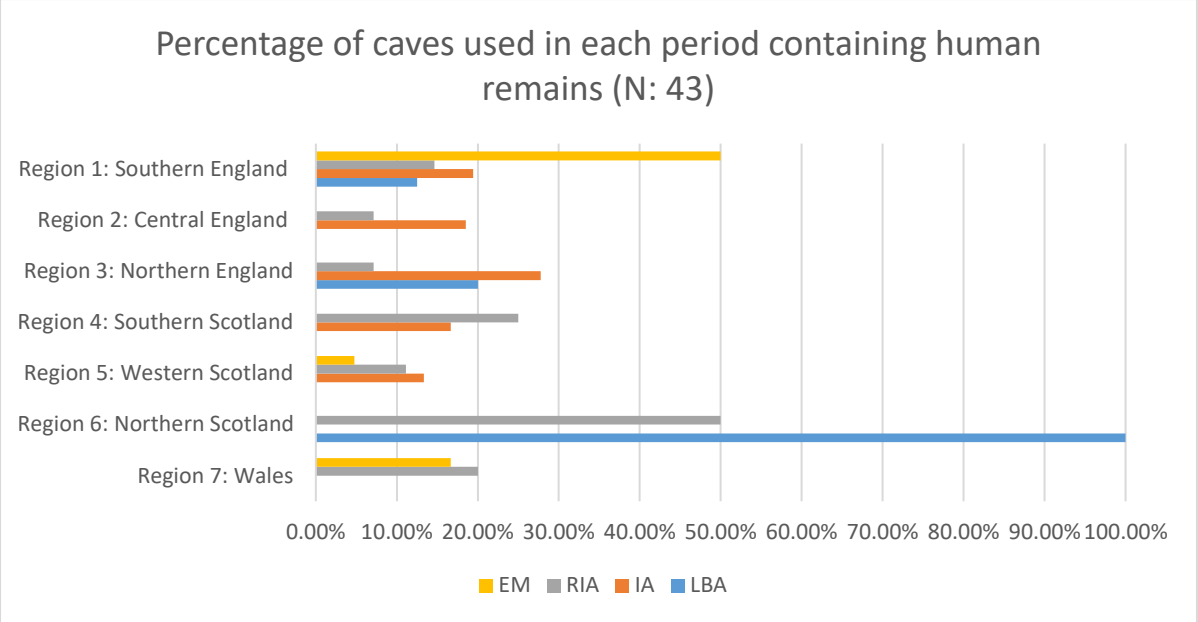


Figure 7-2 Percentage of caves used during each period that contained human remains (N:43)

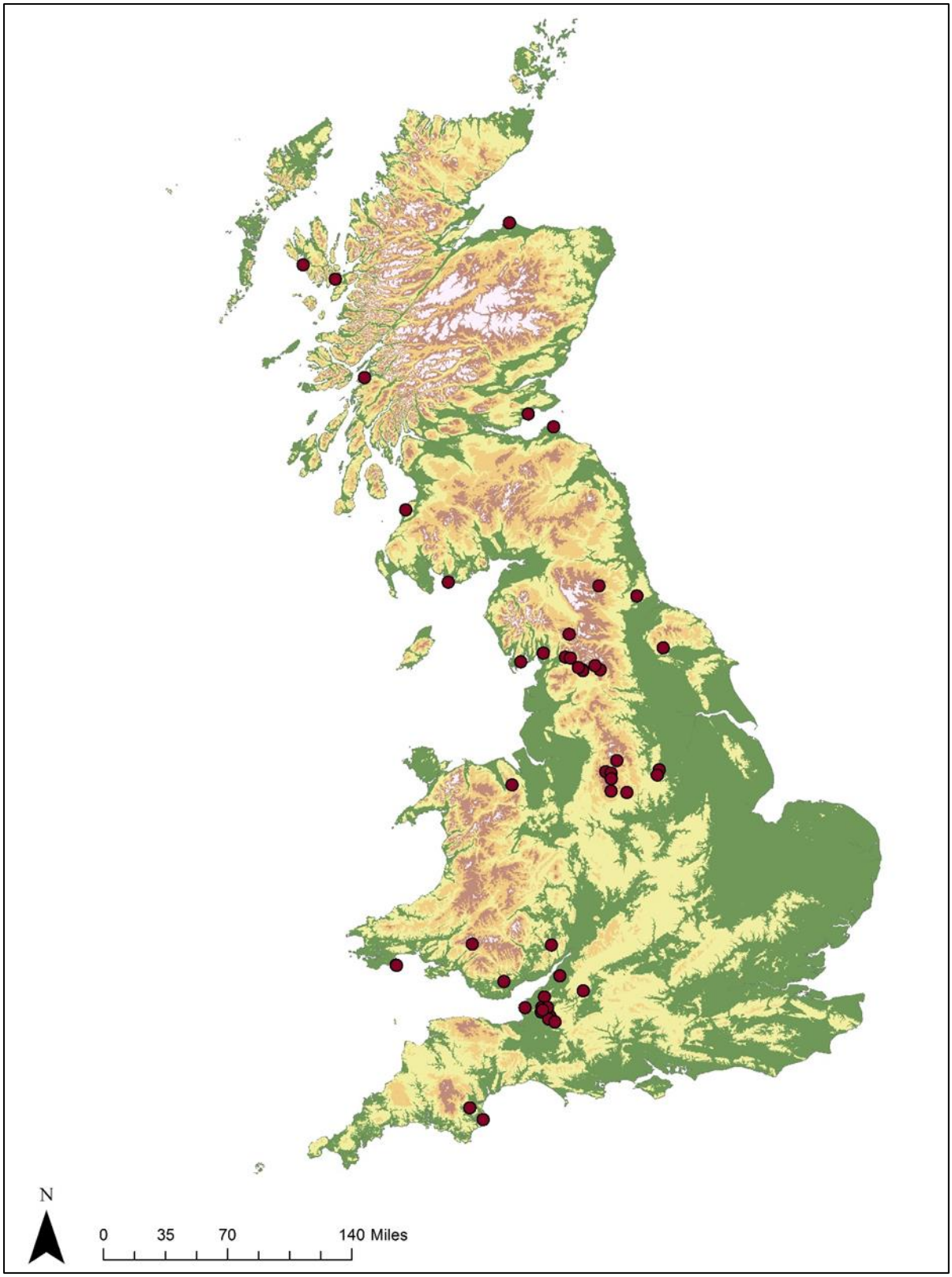


Figure 7-3: Caves with human remains that can be dated to the period of study. Each dot represents a cave with at least one identified individual (N: 43).

7.2.3 Nature of remains recorded in caves

7.2.3.1 Articulated remains

Articulated remains of complete or near complete skeletons were found in eighteen caves (Figure 7.4, 7.5). Of these, the majority dated to the Iron Age (7 caves) and Roman Iron Age (8 caves). One of the most well-known instances of deposition was recorded at Uamh an Ard Achadh on Skye (**154**). The articulated remains of a middle-aged female were found on top of a deposit used to seal the artificial stairway dug into the cave, sometime during the late 1st millennium BC (Birch et al. 2009). Fragments of neonatal and peri-natal human bone were also found associated with the female, as well as being recorded in hearths inside the cave (ibid.). In their discussion of the human-use of the cave, Birch et al. (2005) have argued that the deposit was part of a ritual abandonment of the site between the 3rd or 2nd century BC.

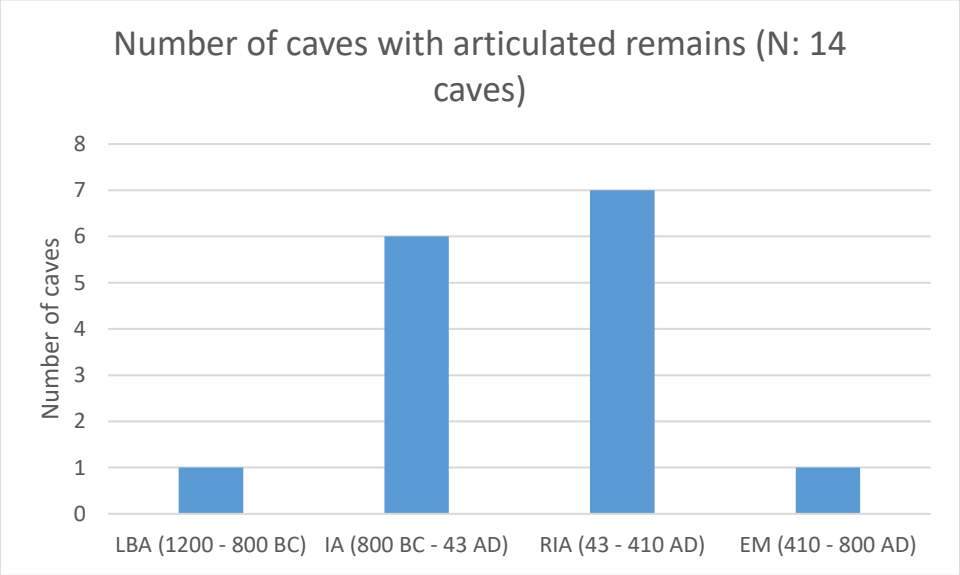


Figure 7-4: Number of caves, which contained articulated bone

Similar to the example from Uamh an Ard Achadh (**154**), articulated remains of a middle-aged female were also recovered from the second chamber of Carsington Pasture Cave (**27**) in Derbyshire. Radiocarbon dating suggests that the individual, who was also associated with two partial and two complete neonate burials, was buried at some point between 757 and 405 cal BC (OxA-9806).

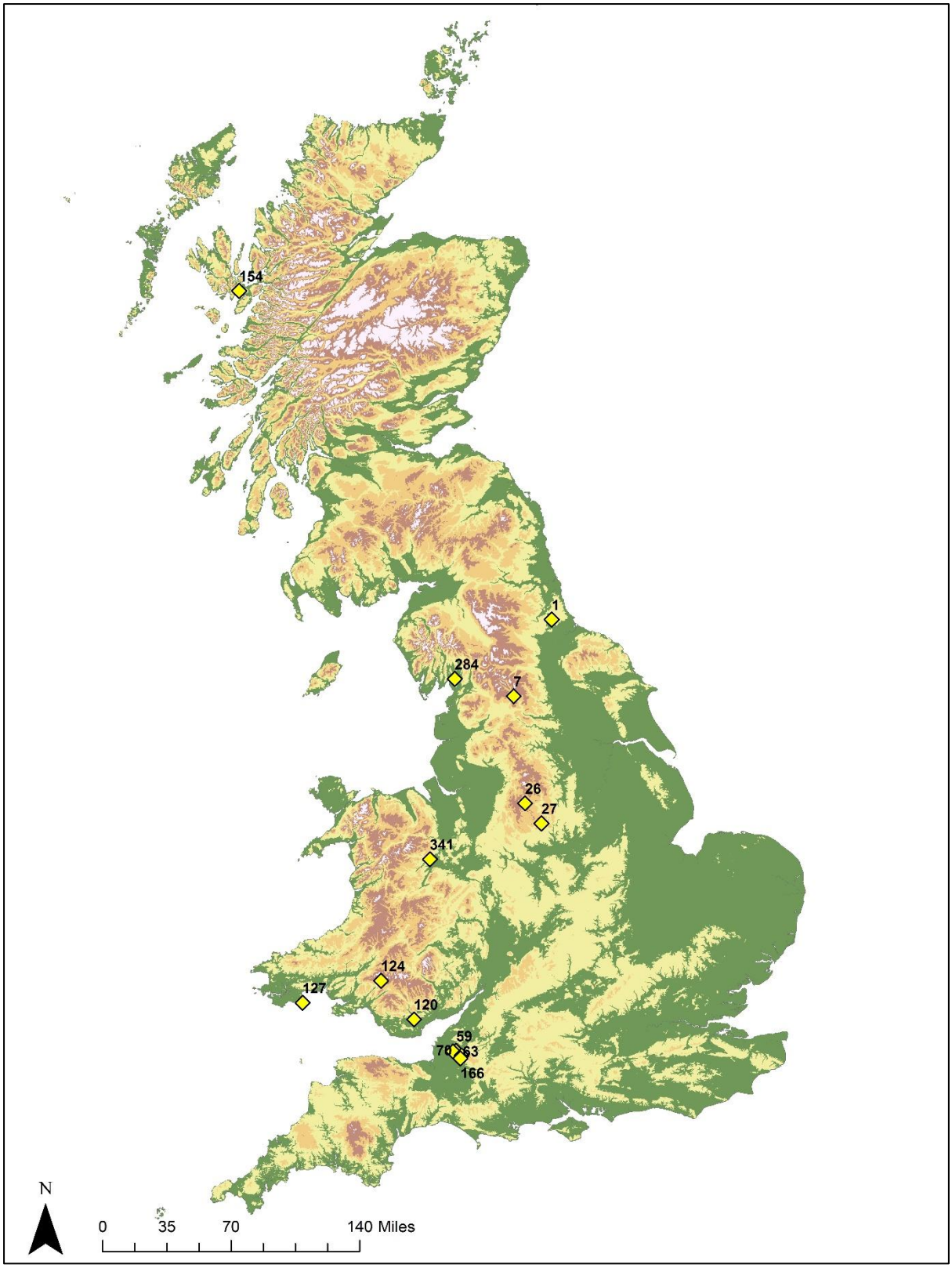


Figure 7-5: Caves with articulated remains that can be dated to the period of study. Each dot represents a cave with at least one identified individual (N: 18)

Articulated bone dating to the Roman Iron Age was recorded in eight caves. Of these, one of the most notable instances of deposition was recorded in the fourth chamber at Wookey Hole, Cheddar (**166**). Excavation of the chamber, which was located on the other side of the River Axe, identified the remains of twenty-one individuals buried with artefacts dating to the 3rd and 4th centuries AD (Hawkes et al. 1978). In their report, Hawkes et al. (1978: 50-51) suggested the chamber may have acted as a cemetery, in use toward the end of the Roman Iron Age. Without the use of AMS dating however, the chronology of burial in chamber four is unclear and it is unknown whether the remains were deposited during single, or multiple, events.

There are similar issues with the chronology of a comparable assemblage of articulated and disarticulated remains discovered within Ogof-yr-Esgyrn, Brecon (**124**). Excavation of the central chamber, uncovered the remains of forty individuals, including neonates, twenty-two children and fourteen adults, close to the Afon Llynfell, which were reportedly found with coins minted during the reign of Trajan and metalwork dating to the late 1st and early 2nd centuries AD (Branigan et al. 1991a: 177). Interpreting this apparent depositional event is hindered by the lack of radiocarbon dating and osteological analysis. Nevertheless, the composition of the material and its association with active subterranean waters can be compared to the deposition of human remains in a number of other caves across Britain, including Wookey Hole (see below).

Single inhumations dating to the Roman Iron Age have also been identified in caves. Excavation of Charterhouse Warren Farm Swallet (**59**), a vertical shaft cave located on a bare limestone plateau in the Mendip Hills, found the articulated skeleton of a middle-aged male in a side passage, six metres below the entrance. Associated with the remains were sherds of Samian Ware, dating to the 1st century AD, and Roman-type hobnails. Similarly, in Wales, single inhumations dating to the Roman Iron Age, have been recorded in a further three caves: Ogof-yr-Ychen (**125**) and Daylight Rock (**127**) both on Caldey Island and Llanymynech Cave, Powys (**341**).

Only one cave appears to have been used for the internment of articulated skeletons during the Early Medieval period. Excavation of Lesser Garth Cave (**120**), a single chambered cave near Radyr, recovered the remains of seven individuals. The articulated remains of five individuals were found in a natural crevice alongside the western wall of the cave (Hussey 1966: 18), whilst a group of undated remains were located in a shaft directly west of the crevice (Hussey 1966: 20). Radiocarbon analysis of the group of remains found in the crevice appears to indicate

multiple periods of burial, including the inhumation of two individuals during the 6th century AD (UBA 10640; UBA 10641; Table 7.1). Finds of a bronze ring-pin of Irish type and pottery similar to that found at Dinas Powys, dating between the 6th to 8th centuries AD, further confirm Early Medieval cave-use that may have been contemporary to the burials (Hussey 1966: 29).

7.2.4 Disarticulated and fragmented remains

Finds of disarticulated or fragmented human bone were more common than articulated material in caves. Similar to finds of articulated bones, disarticulated remains are recorded in a number of contexts, most frequently during the Iron Age (13 caves) and the Roman Iron Age (13 caves) (Figure 7.6). Although some of this material may have derived from disturbed articulated skeletons, finds of isolated fragments of human bone in many caves may reflect the purposeful deposition of disarticulated remains (Figure 7.7).

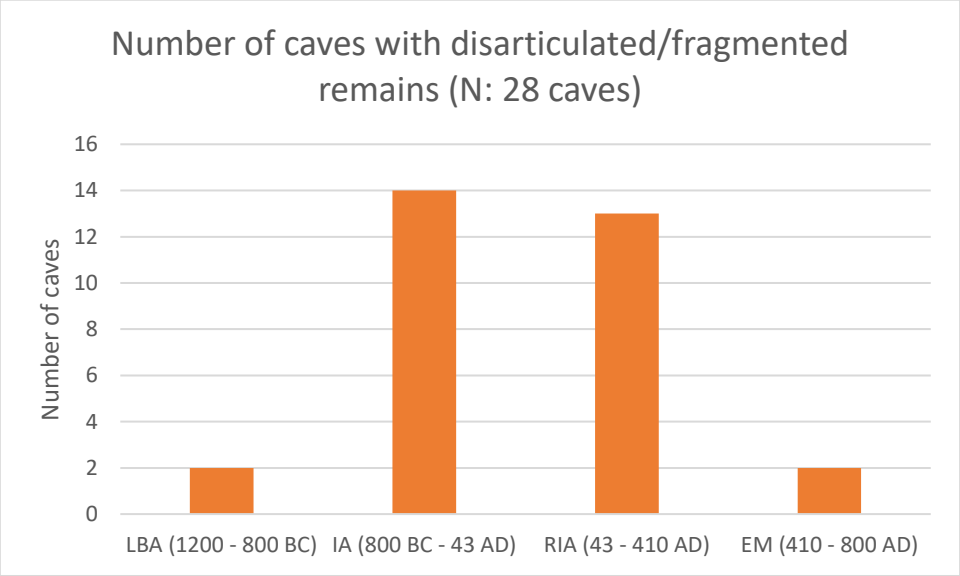


Figure 7-6 Number of caves in each period, which contained disarticulated remains (N:28)

7.2.4.1 Midden deposits

For example, in Read's Cavern (**54**), a multi-chambered cave in Somerset, excavation of a charcoal rich layer at the base of a closed swallet hole within the cave's chamber produced animal bone, Late Iron Age pottery, a bronze brooch and thirteen fragments of human bone and teeth belonging to four individuals (Tratman 1924: 125). In their discussion of the excavated deposit, Marcucci et al. (2011:174) suggest that the charcoal layer may represent a secondary dump of midden material, rather than evidence of in-situ burning.

A similar interpretation may also be relevant for finds of disarticulated remains that were recovered from Backwell Cavern (**53**), also in Somerset. In the excavation report, Tratman et al. (1939: 62) noted that fragments of non-burnt human bone, belonging to eighteen

individuals, were found throughout the cave within a charcoal matrix, which contained pieces of Late Iron Age pottery.

7.2.4.2 Complete and disarticulated cranial fragments

Finds of small numbers of disarticulated material may however indicate that disarticulated human remains were deposited in caves. Complete, or near complete, skulls were reported from three caves. Within Langwith Cave, Derbyshire (**38**), a single chambered cave located above the Doe Lea Valley, a cranium belonging to an old aged male and indeterminate number of bones of a child, were found inside the entrance to the inner cave chamber (Mullins 1913: 133-135). A radiocarbon sample taken from the adult's cranium suggests that these remains were deposited sometime between 746 and 204 cal BC (OxA-2232). In his report, Mullins (1913: 133) suggests that that the frontal area of the cranium was damaged and that the "roof, sides and the base were complete". It is possible that a whole skull was deposited within the cave rather than broken fragments. Similarly, a complete cranium, belonging to a child, was also reportedly found by William Boyd Dawkins in Mother Grundy's Parlour (**31**), a single chambered cave, part of the Creswell Crags group of caves. Radiocarbon analysis of the skull suggests that deposition occurred sometime between 403 and 54 cal BC (OxA-1832).

Complete, or partial skulls were also recovered from the central chamber of Wookey Cave, Cheddar (**166**). In total, nineteen skulls have been found in subterranean waters in the cave. Although none have been scientifically dated, in his excavation of the cave, Balch (1913: 10) reported finding a group of three crania submerged in the River Axe with Samian Ware dating to the late 1st or 2nd century AD.

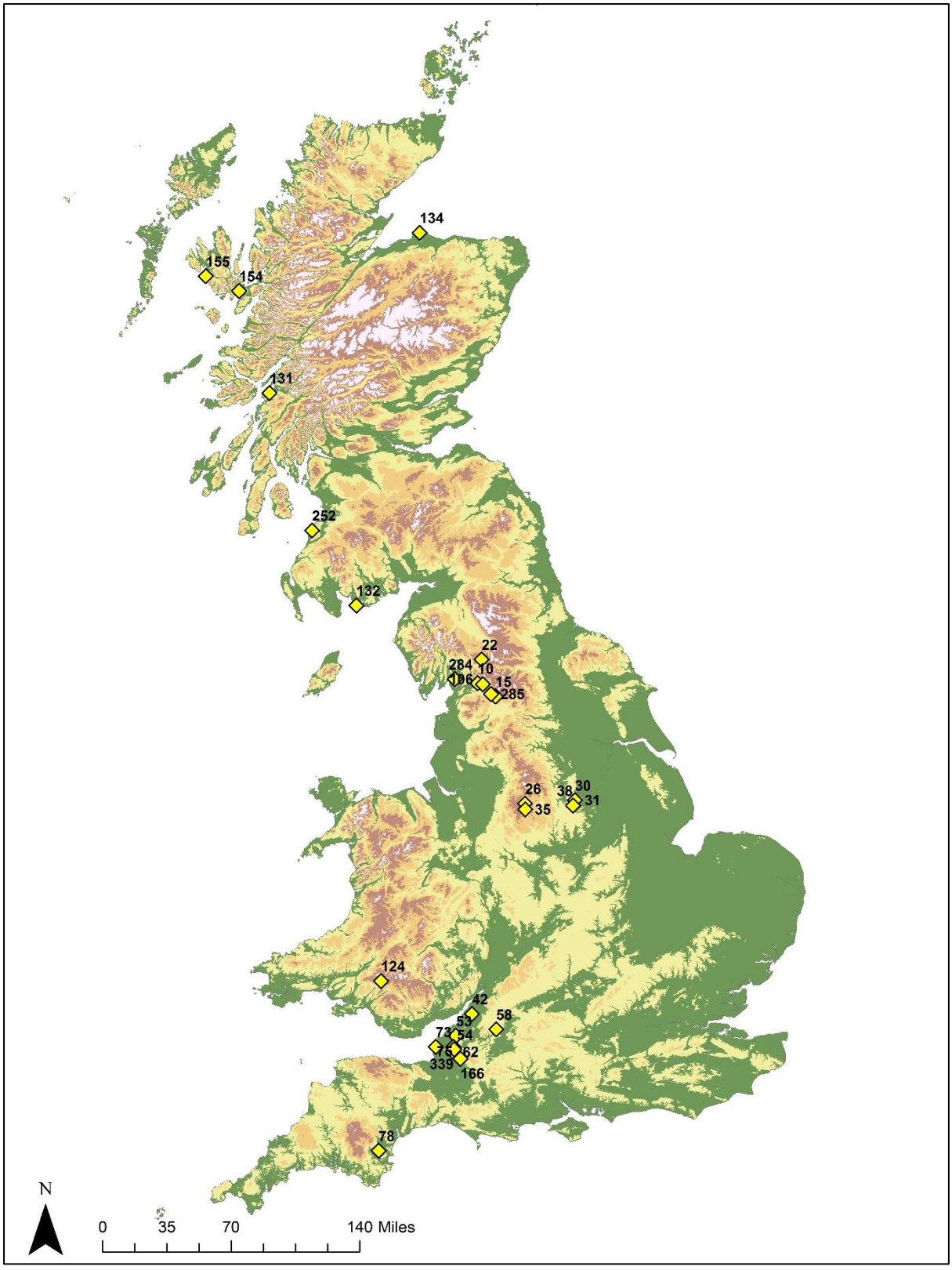


Figure 7-7: Caves, which contained disarticulated remains that could be dated to the period of study. Each dot represents a single cave (N: 28)

The most remarkable finds of near complete crania, have been recorded from the western entrance to Sculptor's Cave (**131**), near Covesea, Scotland. Several lower jaw fragments and frontals, belonging to four children aged between 1-7 years were radiocarbon dated between c.1100 and 900 cal BC (Armit et al. 2011). Analysis of post-mortem cut-marks on one of the skulls indicate that the head may have defleshed, before being deposited in the cave. In their discussion of the Late Bronze Age assemblage, Armit el al. (2011: 261-263) have suggested that such finds may demonstrate a special significance of human skulls for certain communities during later prehistory (also see Armit 2012).

Pieces of crania and mandible fragments have also been recorded in a further four caves that may support the use of certain caves for the deposition of disarticulated material. Small bones of a child and a skull fragment belonging to a young adult, also appear to have been deposited during the Late Iron Age in North End Pot, Ingleborough (**10**) (Gilks et al 1993: 57). Similarly, at Tyning's Great Swallet, Mendip (**339**), ten cranial fragments were found in the entrance shaft. One of these, located at the depth of thirty metres below the surface, was radiocarbon dated to 395-208 cal BC, suggesting that remains were similarly deposited towards the end of the 1st millennium BC (Mullan et al. 2004).

Caves also appeared to have served as places for the deposition of fragments of cranial material during the Roman Iron Age. At Three Holes Cave, Torbryan (**78**), a mandible radiocarbon dated to 208-395 cal AD (OxA-3210) was found in a layer of ash outside the cave mouth. Fragments of human skull also appear to have been deposited in the entrance to Robin Hood's Cave (**30**), a multi-chambered cave in Creswell Crags. Two radiocarbon samples obtained from a lower jaw belonging to a young adult male found in the south-western entrance, appear to place deposition sometime during the 1st or 2nd century AD (OxA-736; OxA-6581; Table 7.1).

Whilst care must be taken in over emphasising the significance of finds of cranial fragments in caves, the evidence discussed above does suggest that disarticulated fragments of skull may have been deliberately selected and placed into caves. Similarly, finds of disarticulated and fragmentary bone in midden deposits may also demonstrate secondary deposition of material, which purposefully intermixed human material with other artefacts (see below). Overall, finds of disarticulated remains in caves may therefore represent votive use of caves, however it is it clear that in certain cases such material may also have derived from disturbed articulated burials.

7.2.5 Modified bone

Modified human bones were recorded in ten caves (Figure 7.8). This included instances of deliberate working of bone and cremation. Cases were excluded where material could be firmly dated. For example, during his excavation of St Baldred's Cave, East Lothian (**133)**, Sligo (1857: 356) found a large number of disarticulated human remains, many of which were described as being 'smashed', from a rich charcoal layer, which also contained sherds of a crude reddish pot and a bone handle. This layer was spread throughout the cave but human remains were thought have to been concentrated around a raised stone near the entrance, which Sligo (1857: 354) considered as an Iron Age 'altar'.

One of the most interesting examples is the disarticulation of a female from Carsington Pasture Cave (**27**) that suggests that remains may have been removed from caves. As discussed above, the individual, who dated to the Early Iron Age, was associated with four articulated neonatal skeletons. Analysis suggests that a sharp bladed implement was used to remove the bones below both knee joints (Chamberlain 2001). Treatment of the skeleton can be compared to the skeleton of a middle aged female found in the closing deposit at Uamh an Ard Achadh (**154**), also discussed above. The female, who was found lying face down, had been placed in the cave with force that smashed the front portions of her skull (Birch et al 2005).

Finds of culturally smashed human bone have also been recorded at the entrances to three caves in Cravendale, North Yorkshire. A femur, found in scree outside Dead Man's Cave, Feizor (**285**) has been radiocarbon dated to 511-376 cal BC, suggesting that the disarticulated bone was deposited during the middle of the Iron Age (Lord et al. 2013: 245). In their discussion of the use of caves in the Yorkshire Dales, Lord et al. (2013: 245-246) report further finds of broken human bones in similar contexts outside Victoria Cave, Settle (**15**) and Raven Scar Cave, Giggleswick (**106**). The close proximity of these sites and the comparable nature of modification of these remains is interesting and may indicate contemporary, or near contemporary acts of deposition (see Chapter 5).

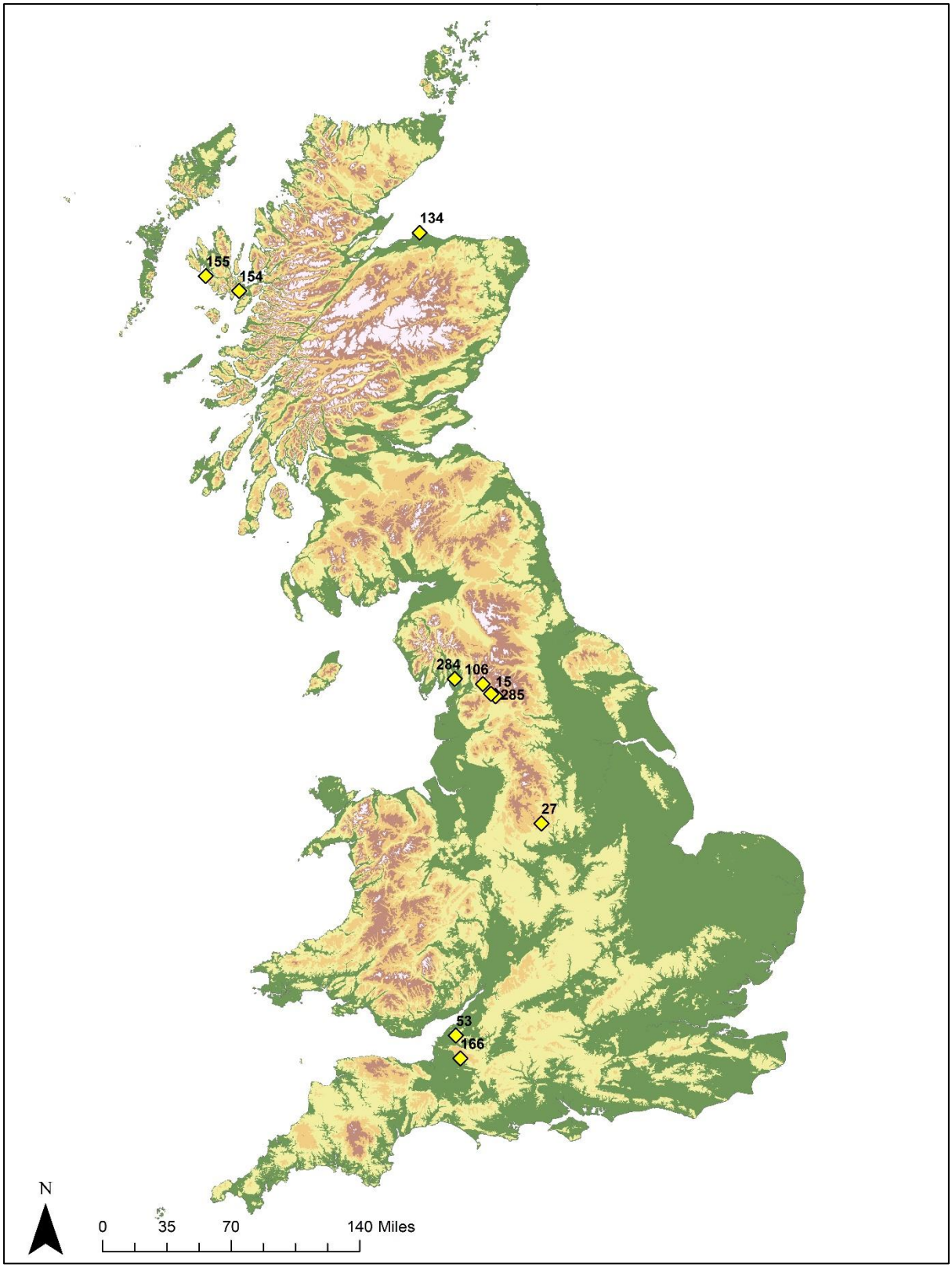


Figure 7-8: Caves that contained modified human bone dating the period of study. Each dot represents a single cave (N: 10)

There is limited evidence of culturally modified skulls being found in caves during the Roman Iron Age in Atlantic Scotland. In Uamh An Eich Bhric (**155**), an inaccessible rockshelter on the base of sea cliffs on Skye, a cranial fragment with a single perforation was found within a midden (Wildgoose et al. 2010). Perforated cranium have also been recorded from a number of sites in Atlantic Scotland, including an example with a single perforation from Cnip in Lewis (Armit et al. 2007: 125).

At Sculptor's Cave, Covesea (**134**) two groups of human remains also indicate the deliberate modification of human remains. A cranial frontal from one of the four children found in the dating to the Late Bronze Age, presented signs of post-mortem modification that may represent defleshing (Armit et al. 2011: 274). The Roman Iron Age group, consisting of five adults and two young adults (Armit et al. 2011: 259), comprised of seven cut-marked vertebrae (Armit el al. 2011: 272-4). Radiocarbon dates obtained from these, suggests that deposition occurred sometime during the 2nd and 4th centuries AD (ibid.). An unusual assemblage of Roman metalwork, coins and Samian ware vessels were also found in the cave and were likely deposited around the same time as the human remains (Benton 1931: 209; Shepherd et al. 1995: 1195). Analysis of the cut-marks on the vertebrae has shown that these were created peri-mortem by a sharp bladed instrument that may have sought to decapitate the individual (Armit et al. 2011).

Peri-mortem injuries belonging to individuals deposited in caves during the Roman Iron Age have also been recorded at The Dog Hole Cave, Haverbrack (**284**) in North Yorkshire (see Table 7.1). Human remains, included articulated bones, were found in the cave's vertical entrance and horizontal passage. In total, twenty-three individuals were found in the cave aged between six and fifty years old (Bland 1994). Cut-marks, made by a sharp strong blade, were recorded on two rib bones that would have likely pierced the heart (ibid.). Whilst it is tempting to suggest that these cut-marks may represent a ritual killing of an individual, similar to that seen at Sculptor's Cave (**134**), there is little information available on the context of these remains. Furthermore, interpretation of this event is hindered because of the disarticulated nature of the remains and the lack of overall osteological analysis of the other bones.

7.2.5.1 Cremation

Only one instance of cremated remains has been recorded in association with a cave. During his excavation of a rectangular cist, twelve metres from the entrance of Thirst House Cave, Derbyshire (**26**), Ward (1897) reported finding cremated bone within a Roman vessel. It is likely that the cremation was a secondary deposit within the cist, which can be compared to other examples of Roman material being placed into Bronze Age cists in central England (Marsden 1994; Thomas 2007).

7.2.6 Demography

7.2.6.1 Minimum number of individuals buried in caves

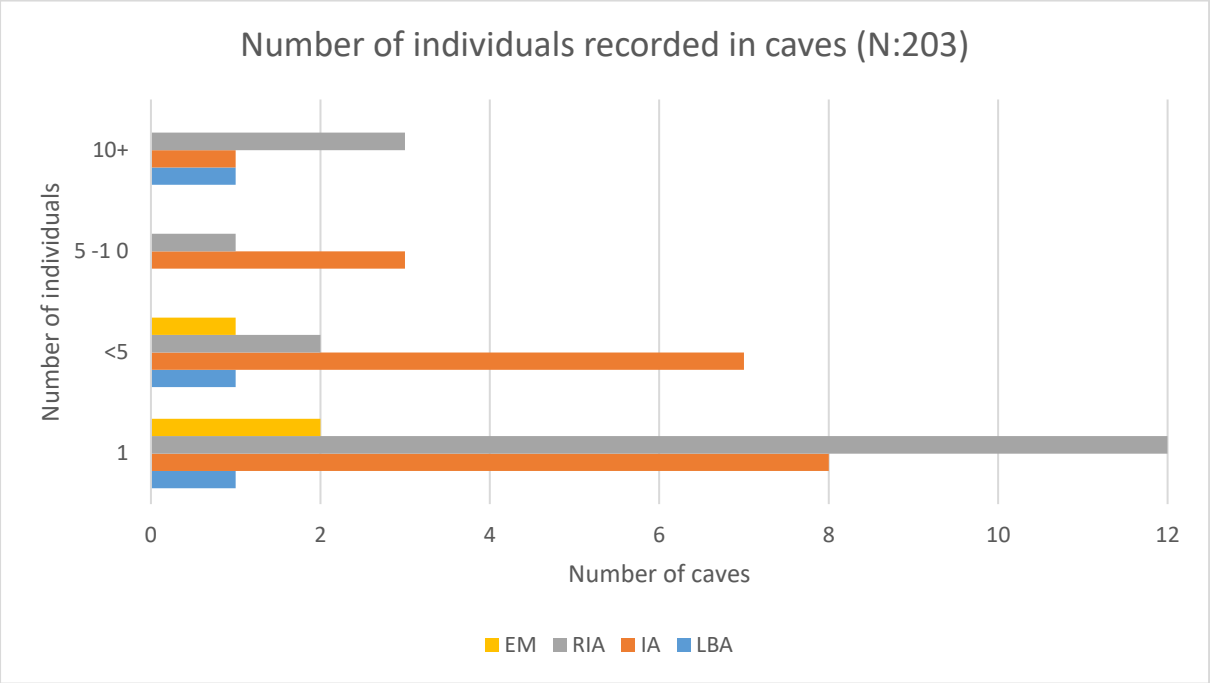


Figure 7-9: Number of individuals recorded in each cave arranged by period (N: 203 individuals). The majority of caves contain the remains of one individual

Overall, from the published data, it appears that the majority of caves were used for the interment of small numbers of individuals (Figure 7.9). In this respect, the mortuary use of caves appears to reflect practices of deposition seen elsewhere during late prehistory, such as in domestic contexts, where disarticulated human remains are commonly found. Although the majority of human remains occur as small elements, five caves contained remains of more than ten individuals, suggesting that these may relate to more specific rites. During the Late Bronze Age, the disarticulated remains of eleven individuals were deposited in a small single chambered cave at Bishop Middleham, County Durham (**1**), whilst the remains of eighteen individuals were deposited in Backwell Cave (**53**) during the mid-1st millennium BC. The remains of at least sixty-five individuals have also been recovered from multiple excavations

of Wookey Hole (**166**) belonging to the Iron Age and Roman Iron Age, including twenty-eight inhumations from the fourth chamber (see below). A further two caves, used during the Roman Iron Age, contained more than ten individuals: The Dog Hole Cave (**284**) (N:24) and Ogof-yr-Esgyrn (**124**) (N:40). Such evidence may reflect the periodic use of certain caves for mortuary deposition by communities, suggesting that these sites may have played a fundamental role in the treatment of the dead.

Recent studies have begun to recognise the temporal and geographical variety of burial rites during late prehistory, connected to a diverse range of motivations (e.g. Madgwick 2008; Sharples 2010). This includes the disposal of the dead in rivers and within settlements, as well as practices of excarnation, deliberate disarticulation and articulated burial (see below). It is therefore likely that mortuary use of caves were part of this broad continuum of diverse practices rather than reflecting a specific funerary role.

The situation with the discovery of human remains in caves during the Early Medieval period is somewhat different. Only four individuals dating to the late 1st millennium AD have been recorded in three caves. Such a low number of individuals is likely partly the result of a lack of radiocarbon dated remains. Considering that the majority of human remains in this period occur in cemetery contexts as articulated burials, it may also suggest that mortuary use of caves in this period was non-normative, as caves were unlikely to have been used for regular funerary practice. It is important to emphasise however, that despite there being more common rites in the Early Medieval period compared to preceding periods, several authors have also noted a variety of other contemporary mortuary treatments, including the deposition of remains in boundaries (Maldonando 2011: 43). For example, work by Reynolds (2009) has identified a variety of practice attached to so-called social deviants, including deliberate disarticulation and isolated burial in places such as crossroads and prominent hills. Whilst the mortuary use of caves during the Early Medieval period was therefore irregular in comparison to the use of cemeteries, use of cavescapes for burial may have been related to contemporary practices of deposition occurring elsewhere, which may have been tied to single events, such as accidents, acts of interpersonal violence or the burial of so-called deviants.

7.2.6.2 Age of Individuals buried in caves

Given the nature of cave archaeology in the British Isles and the fragmentary record of human remains recorded in caves, the gender and age of many of the individuals recorded as part of this study could not be ascertained. Overall, it is clear that both adults and children were

deposited in caves throughout the Late Bronze Age, Iron Age and Roman Iron Age (Figure 7.10). From the currently limited evidence of deposition during the Early Medieval period, only adults appear to be represented.

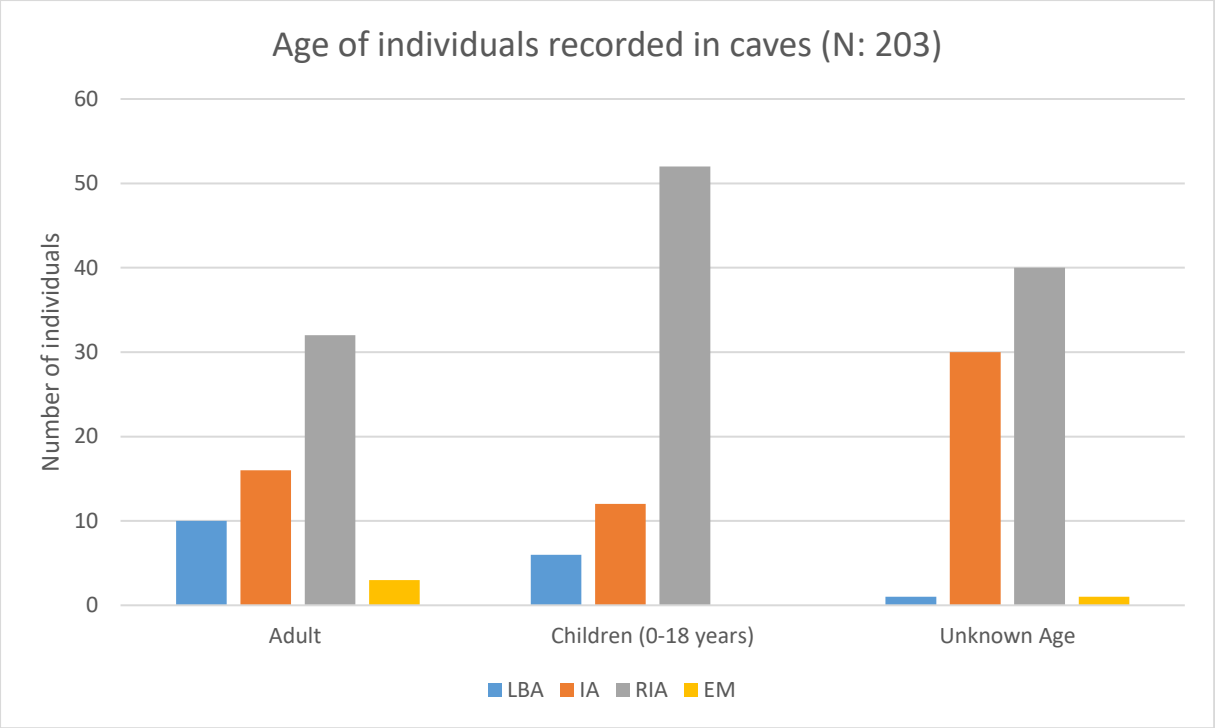


Figure 7-10: Chronology and age of individuals recorded in caves. Unknown ages are a product of piecemeal investigation and incomplete assemblage records

7.2.6.3 Non-Adults deposited in caves

The remains of seventy non-adults, those aged between 0-18 years of age, were recorded in thirteen caves (of a total of 43 caves with human remains). At High Pastures Cave (**154**), two neonates and one perinatal infant were recorded in Late Iron Age deposits focused on the modified stairwell (Birch et al. 2006). The remains were also associated with extensive deposits of young animals, including neonatal and perinatal sheep/goat and cows (Birch et al. 2005). Remains of young infants were also associated with an Early Iron Age adult fibula within the central chamber of Carsington Pasture Cave (**27**), as well as in Roman Iron Age contexts at Wookey Hole (**166**) and Ogof-Yr-Esgryn (**124**) (Figure 7.11).

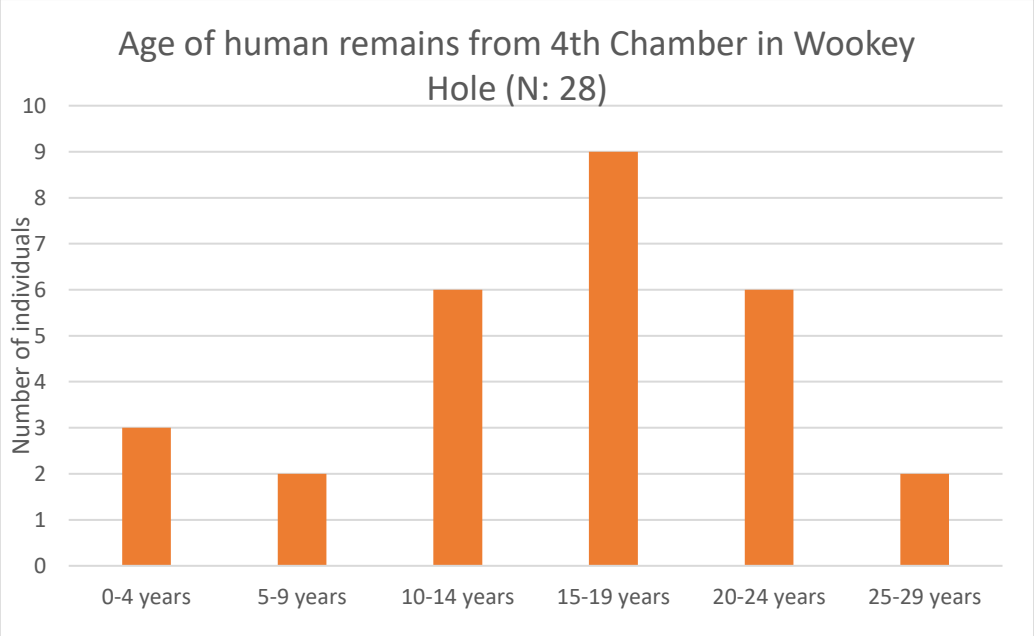


Figure 7-11: Age of 28 individuals recovered from excavations of 3 deposits of human bone recovered as part of excavation of the so-called ' 4th century AD cemetery in Chamber 4 (Hawkes et al. 1978)

The highest number of non-adults were recorded in Wookey Hole (**166**) and Ogof-Yr-Esgryn (**124**), dating to the Roman Iron Age. As discussed in Chapter 5, both caves were part of a focus of ritual deposition associated with underground water and multi-karstic environments. Excavations of the fourth chamber in Wookey Hole, which lies on the northern bank of the River Axe, contained three discrete deposits of human remains with associated artefacts that dated to the 4th century AD (Hawkes et. al 1978). Of the twenty-eight individuals recorded in the cave, twenty-one were children aged between 0-18 years and three were neonatal infants (Figure 7.12).

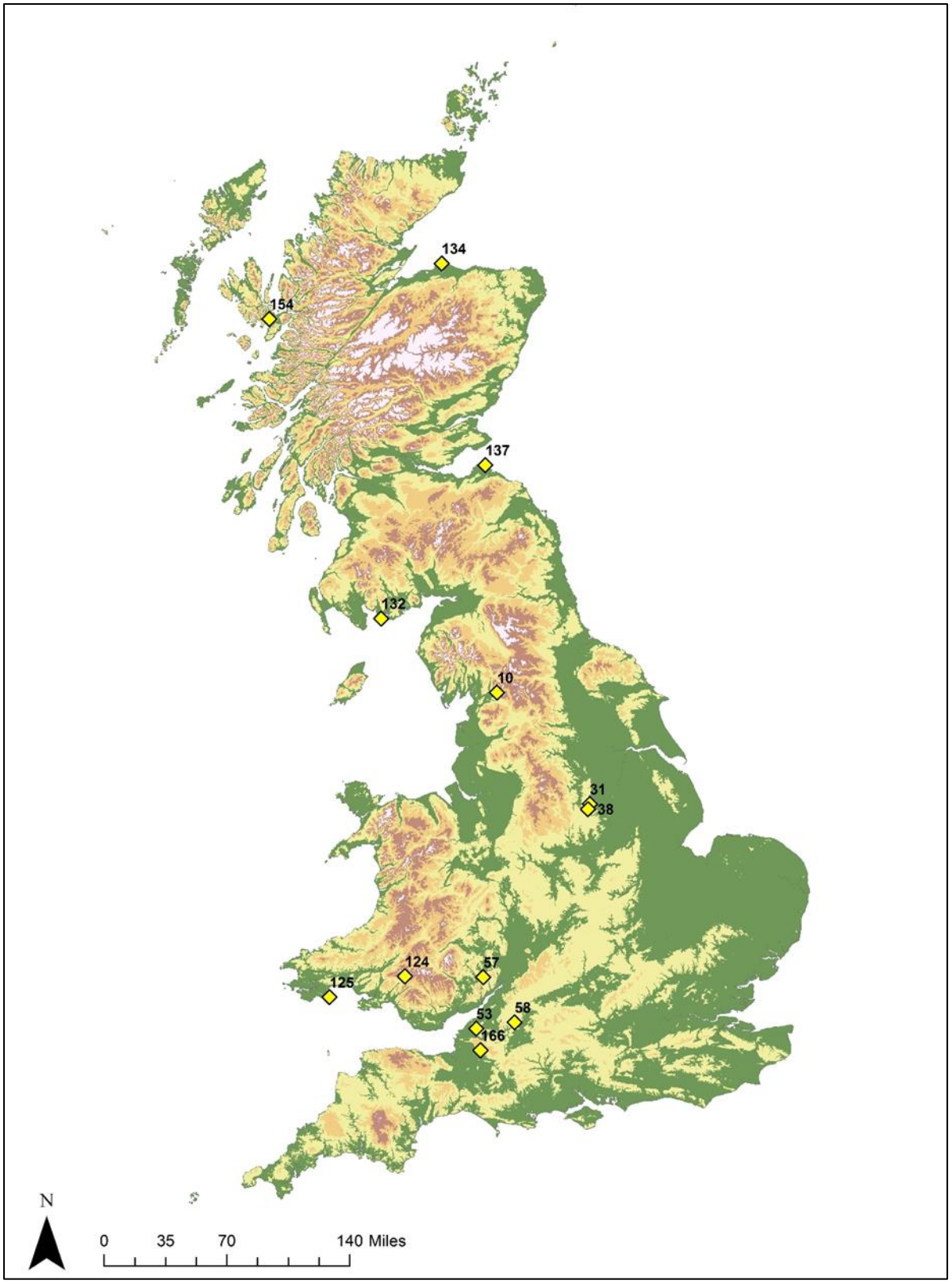


Figure 7-12: Location of caves with dated non-adult human remains. Each dot represents an individual cave with its associated Cave ID (N: 13)

7.2.7 Types of caves used for the deposition of the dead

In Chapter 4, I explored the influence cave morphology may have had on the use of caves and suggest that more morphologically complex caves, such as those with multiple chambers and complex entrances, offer a more intense cave experience, characterised by darker and more challenging environments. This experience, therefore, may have been fundamental to the motivation behind cave-use. Through this, it was suggested that more extensive and complex caves, including those with active water such as Wookey Hole (**166**), Ogof-yr-Esgryn (**124**) and Poole's Cavern (**25**), served as focus for extensive deposition and craftworking.

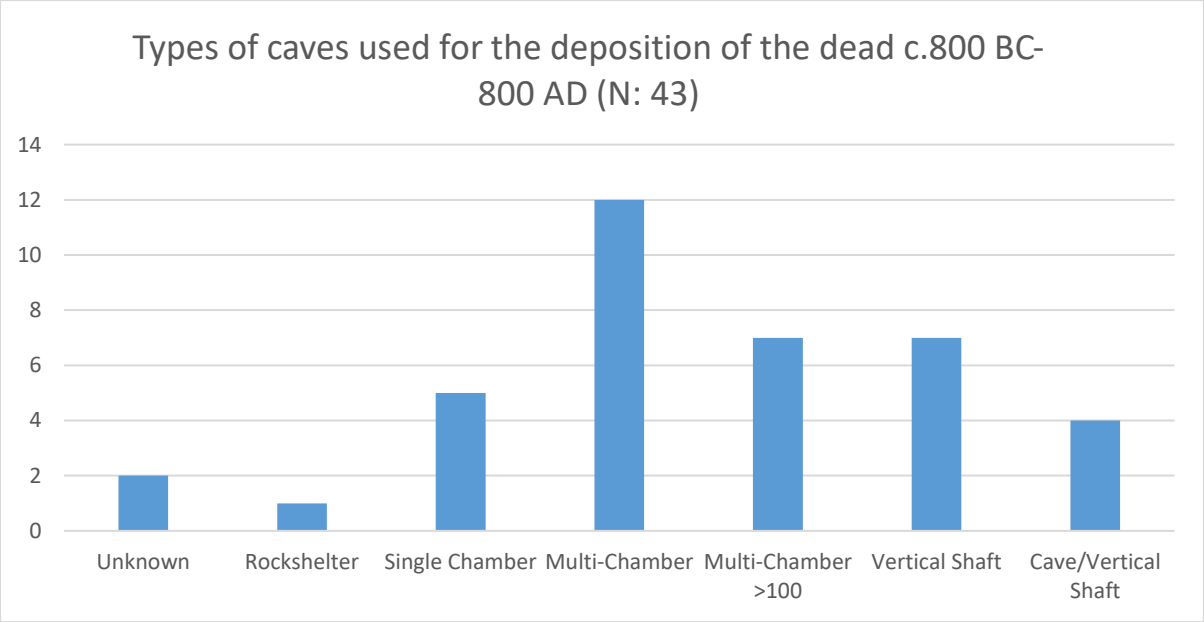


Figure 7-13: The types of caves used for the deposition of human remains, throughout the study period. Each cave has at least one identified individual dating to 800 BC-800 AD.

By considering the morphologies of caves that contained human remains, it is clear that more complex caves were chosen for the deposition of the dead when compared to rockshelters and small single chambered caves (Figure 7.13). This bias is also further reflected when considering the overall MNI counts associated with each type of cave (Figure 7.14). Extensive karstic caves contained the highest MNI, with a total of eighty-five individuals (34 % of total MNI) recorded in seven caves.

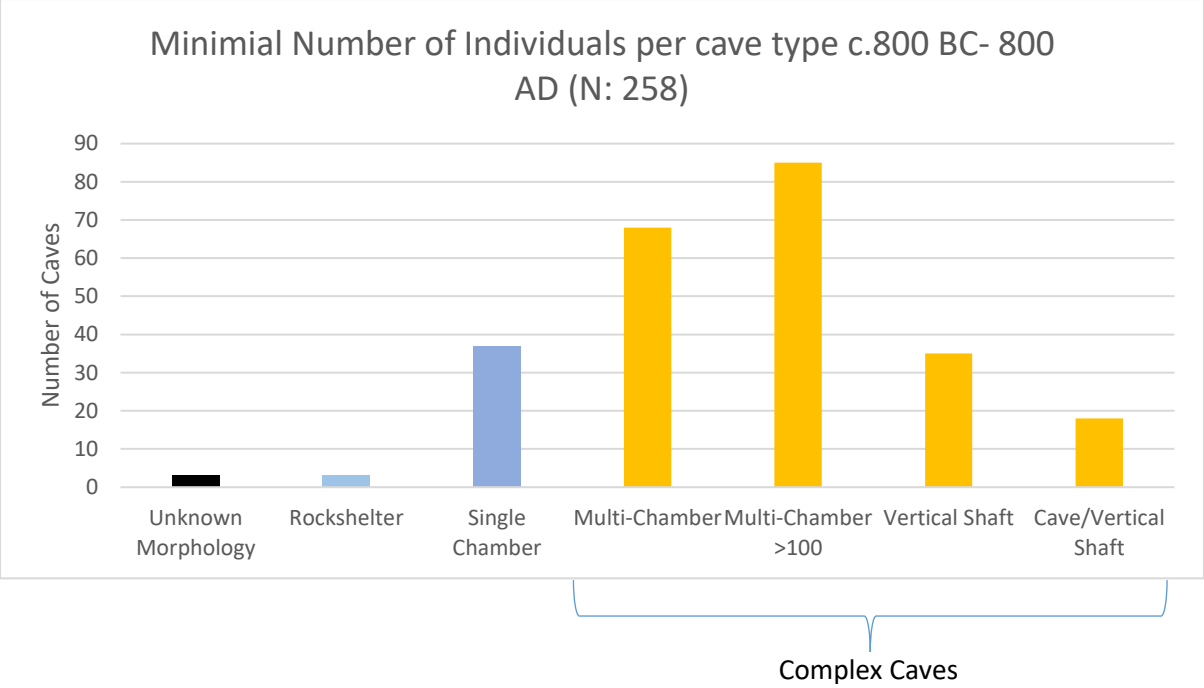


Figure 7-14: MNI of human remains recorded in different cave types, suggesting that more complex caves served as a foci for the deposition of multiple individuals.

Such high numbers of individuals recorded in multi-karst caves suggests that complex sites served as a focus for the deposition of the dead. Furthermore, as was explored in Chapter 4, Ogof-yr- Esgryn (**124**), Uamh Ard Achadh (**154**) and Wookey Hole (**166**) contain underground rivers that were also associated with the deposition of artefacts and human remains (see below).

Like multi-chambered caves, vertical passage caves also present experiences associated with negotiation of vertical inclines and heightened sensory perception that would have contrasted to aboveground experiences. Seven vertical passage caves, were used for the deposition of human remains (N: 35), alongside a further six caves with both horizontal and vertical shafts (total MNI of 18). Using vertical passage caves as places to deposit human remains, highlights the importance of cave morphology in the selection and treatment of the dead. The visual and kinetic experiences offered by negotiating vertical shafts also contrasts to those offered by horizontal cavescapes. Alongside being intentionally deposited within caves, artefacts and human remains could have been thrown into the shaft from the entrance (see Chapter 4).

7.2.8 Human remains and cave waters

As we have seen a number of karst caves with active and still waters appear to have been the focus for extensive activity during the Iron Age and Roman Iron Age. Not only does this include the use of these caves for craftworking and deposition of extensive artefact assemblages, but also for the treatment of the dead. In total, five extensive karst caves produced the remains of eighty individuals (31% of total MNI) within proximity of cave waters.

The most remarkable instance of the deposition of human remains within or near water was recorded in contexts associated with the River Axe in Wookey Hole (**166**). At least sixteen partial and complete crania, along with 1st century AD ceramics, were recovered from the river as it passes through the Great Chamber (Balch 1911: 575). Human remains were also found by Balch (1911: 585) during his excavation of the Great Chamber, which as well as the River Axe, contains a series of stalactite still water pools.

Wookey Hole contains the only known record of human remains deposited within water in caves, however human bone has been recorded in other sites within proximity to sources of cave water. For example, at Ogof-yr-Esgryn (**124**), the remains of thirty-six individuals and Roman Iron Age artefacts were found within the main chamber near to the subterranean stream of the Afon Llynfell. Similarly, the articulated remains belonging to four individuals were also found underneath a rock overhang near the underground flow of the River Wye outside the Roman Chamber at Poole's Cavern (**25**) (see Chapter 4).

It is important to recognise that whilst there is limited direct evidence of the use of cave waters for the treatment of the dead, using chambers associated with water does demonstrate a possible relationship between the deposition of human remains and underground river sensescapes. This is best illustrated at the extensive multi-chambered cave Uamh Ard Achadh on Skye (**154**), where disarticulated and articulated remains were found at the base of the stairwell, which leads into a chamber above an underground river. Consequently, when inside the stairwell, which was constructed in the 1st millennium BC (discussed above), users can experience the river by hearing the sound of rushing water.

A similar argument can also be made for the use of coastal caves, where users are often confronted by sensory experiences attached to the sea, including the sound of waves. Sites such as MacArthur's Cave and Sculptor's Cave (both discussed above) are located directly on the coastline with entrances orientated out towards the sea. Using such caves for the deposition of human remains may therefore indicate a link between caves, the dead and water.

7.3 Discussion

The discussion above has outlined evidence of a range of treatments occurring in caves throughout the 1st millennia. This complicates possible interpretations and suggests that, rather than being uniform, practices in caves were chronologically and regionally diverse. However, because of this diversity, comparisons can be drawn between practices occurring in caves and other contexts. This may suggest that, rather than being a unique medium of deposition, caves were likely part of more complex funerary worlds.

7.3.1 Shared contexts? Human remains in caves, rivers and domestic contexts

Since the publication of Whimster's (1991) survey of burial practices during the Iron Age and early Roman Iron Age, there has been little understanding of the overall treatment of the dead by societies in the 1st millennia. Instead, recent studies have often emphasised the regional character of mortuary practice (Armit et al. 2013: 73; Redfern 2008: 281; Maldonado 2011: 48), highlighting its diverse and fluid nature (Armit et al. 2013: 86; Redfern 2008: 281; Tracey 2012: 367). It is therefore unsurprising that material found in caves reflects such a diversity in treatment and suggests that communal and individual agency may have been an important motivation behind deposition (Armit et al. 2013; Armit 2012; Crummy 2010; Maldonado 2011: 43; Schulting et al. 2013; Tracey 2012: 375). Nevertheless, analysis of material found in caves does indicate a bias in the deposition of predominately disarticulated bones, including partial and complete skulls.

Disarticulated bone, including partial and complete skulls have been recovered from a number of contexts, including settlements and watery places. Biases in the deposition of disarticulated material has, for example, been noted in recent studies of Atlantic roundhouses in Scotland (Armit et al. 2007: 128-130), as well as from aquatic contexts such as the River Thames (Bradley et al. 1988; Schulting et al. 2013), Flag Fen (Stevens 2008: 244-245) and Fiskerton (Parker Pearson 2003).

In his discussion of the apparent interest in human heads in Atlantic Scotland, Armit (2012) has argued that skulls may have been selected for specific treatment because of their cosmological significance. In Atlantic Scotland, a number of human remains, such as the notable example from Howe (Armit et al. 2007: 118), appear to suggest the curation and possible veneration of heads over a period of time before final deposition. Finds of fragments of crania and mandibles, rather than being a result in excavation bias, may reflect similar

processes occurring in caves. This may be further supported by the close connection of water and karst caves, a number of which were used for the treatment of the dead.

Whilst there appears to be comparable processes of deposition occurring in rivers and settlements, such evidence can also be used to explore the possible motivations behind deposition in some caves. In his discussion of the evidence of decapitation of seven individuals at Sculptor's Cave (**134**), Armit et al. (2011: 258) have argued that the remains belonged to a group of outsiders, perhaps associated with finds of Roman Iron Age artefacts. Through this, he suggests that these may have been captives who were led to the cave and then beheaded (ibid.).

Whilst it is beyond the scope of this thesis to explore the nature of violence in past societies, evidence of a cut marked human rib from The Dog Holes Cave, Haverbrack (**284**), may also have belonged to an individual who was deliberately killed, in what may have been a votive act. The precision of cut-mark, which was present on two ribs, may have pierced the individual's heart suggesting that this was not likely an act of interpersonal violence.

In their discussion of the significance of votive deposition in water, Schulting and Bradley (2013: 52-62) suggest that the remains, may belong to so-called deviants, such as suicides or those killed prematurely. A similar argument has also been proposed for individuals who were deposited in bogs during the Iron Age and Roman Iron Age (Giles 2009; Schulting et al. 2013: 68). Many of the individuals were disfigured and were killed by precise blows, suggesting that they were bound, drugged or willing to be killed (Giles 2009: 87-89).

A number of authors have argued that human remains found in watery contexts demonstrate the belief that bogs and rivers may have acted as boundaries to supernatural underworlds (Giles 2009; Schulting et al. 2013: 68). As fertile and dangerous places, bogs may have acted as a focus for votive deposition aimed at communicating with, or returning individuals to the underworld(s). Furthermore, as was explored in Chapter 2, it has also been argued that rivers, as animate entities in the landscape, also acted as physical and spiritual boundaries (Field et al. 2003).

It is not too farfetched to suggest that such a belief extended to caves and that acts of deposition may have been aimed at negotiating with perceived underworlds. Indeed, this interpretation is further supported by ethnography and archaeological data from Central America that were explored in Chapter 2. For many communities, caves have acted as animate thresholds and

were often associated with the deposition of disarticulated and articulated human remains. Nevertheless, the comparative nature of material recorded in caves and other contexts during the 1st millennia indicates that caves were part of a nuanced funerary world rather than being a distinct form of mortuary space. Equally, a number of factors, including the context of an individual's death, their social status or the symbolic nature and perception of different types of cavescapes, may have motivated selection of caves for the deposition of the dead.

7.4 Animal remains in caves

7.4.1 Demography & distribution

Datable assemblages of animal bone were reported in forty-seven caves (Figure 7.15). It is important to note that, given the difficulties of dating animal bone assemblages in caves, that there are likely more caves containing relevant material (see Chapter 2). Furthermore, there has been no comparative study of animal remains found in caves during the 1st millennia. The discussion outlined below is therefore based on published data, much of which was recorded in antiquarian accounts (Figure 7.16).

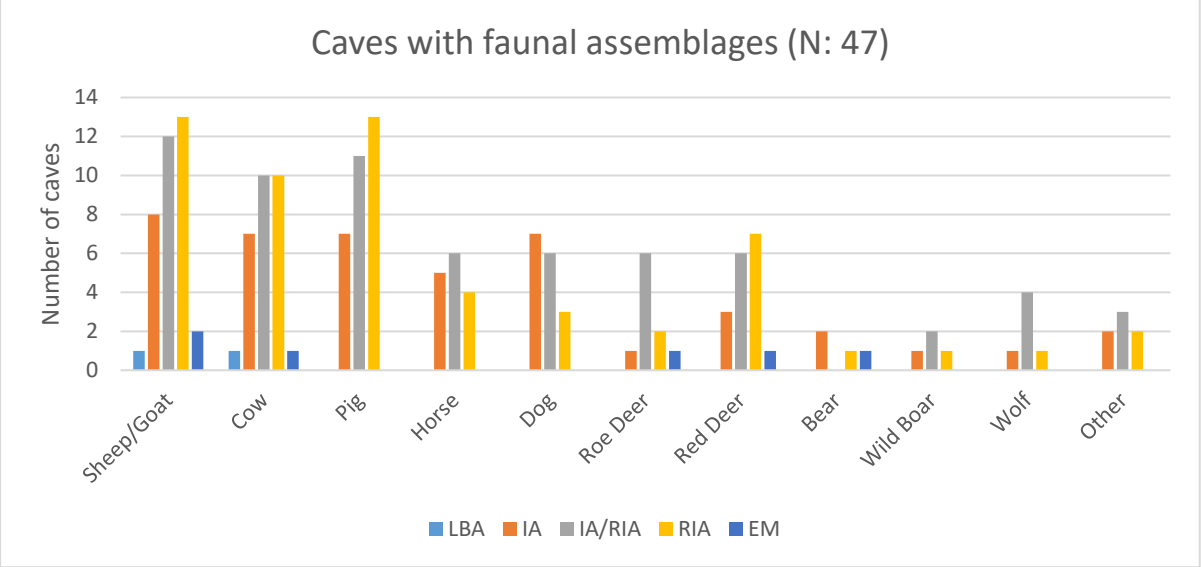


Figure 7-15: Distribution of faunal assemblages in caves (N: 48). The other category includes shell (N:3), domestic fowl (N:2), seal (N:1) and walrus (N:1)

7.4.1.1 Domestic animals in caves

Much of the material recorded in caves were from domestic animals, predominately sheep/goat (N: 36 caves), cow (N: 30 caves) and pig (N: 32 caves). Bones belonging to horses were also found in fifteen caves, whilst bones thought to be of domestic dog were also noted in seventeen caves. Such a distribution of material, may indicate the use of caves for domestic activities. Care must be taken, however, in over interpreting such finds. Animals grazing near caves may have wondered into caves and become trapped or fallen into vertical pot holes. Equally, caves

were also used by carnivores, including wolves and bears, and so material may reflect animal kills rather than human-use.

Cut-marks and evidence of butchery has been identified in assemblages found in sixteen caves that may confirm that some caves were used for domestic activities. In their excavation of Symond's Yat East Rockshelter (**319**) and Coldwell Cave (**321**), both located on cliffs overlooking the River Wye near Symond's Yat, Barton (1994, 1995) uncovered charred cut-marked animal bones that were found associated with hearths. Similar evidence, has also been recorded during the Iron Age at sites including Saye's Hole, Mendip (**164**), where material was recovered from compact deposits of charcoal and Late Iron Age metalwork and pottery (Colcutt et al. 1987: 114).

Whilst such evidence may indicate the temporary use of caves as shelters, finds of butchered remains and articulated animal skeletons also highlight possible ritual use of caves, for feasts and the deposition of fleshed remains. For example, at Read's Cavern, Mendip (**54**) a faunal assemblage, comprised predominately of rib bones belonging to domesticates, were reported from the midden that contained fragments of human bone dating to the Late Iron Age (see above). Rather than representing butchering taking place inside the cave, animal bone was likely part of a secondary deposit of material that was focused on a now collapsed swallet hole (Marcucci et al. 2011: 174).

Finds of articulated animal skeletons may also demonstrate intentional deposition of remains in caves. Excavation of Charterhouse Warren Farm Swallet, Mendip (**59**), uncovered an articulated skeleton of a dog in the upper cave chamber, below the entrance shaft. The size of the dog and its location between Late Bronze Age and Roman Iron Age material has led the excavators to suggest that these remains were deposited sometime during the Iron Age (Audsley 1988: 236). Similarly, a femur belonging to an articulated skeleton of a dog, buried outside Sculptor's Cave (**131**) was radiocarbon dated to 400-210 cal BC (GU-15949).

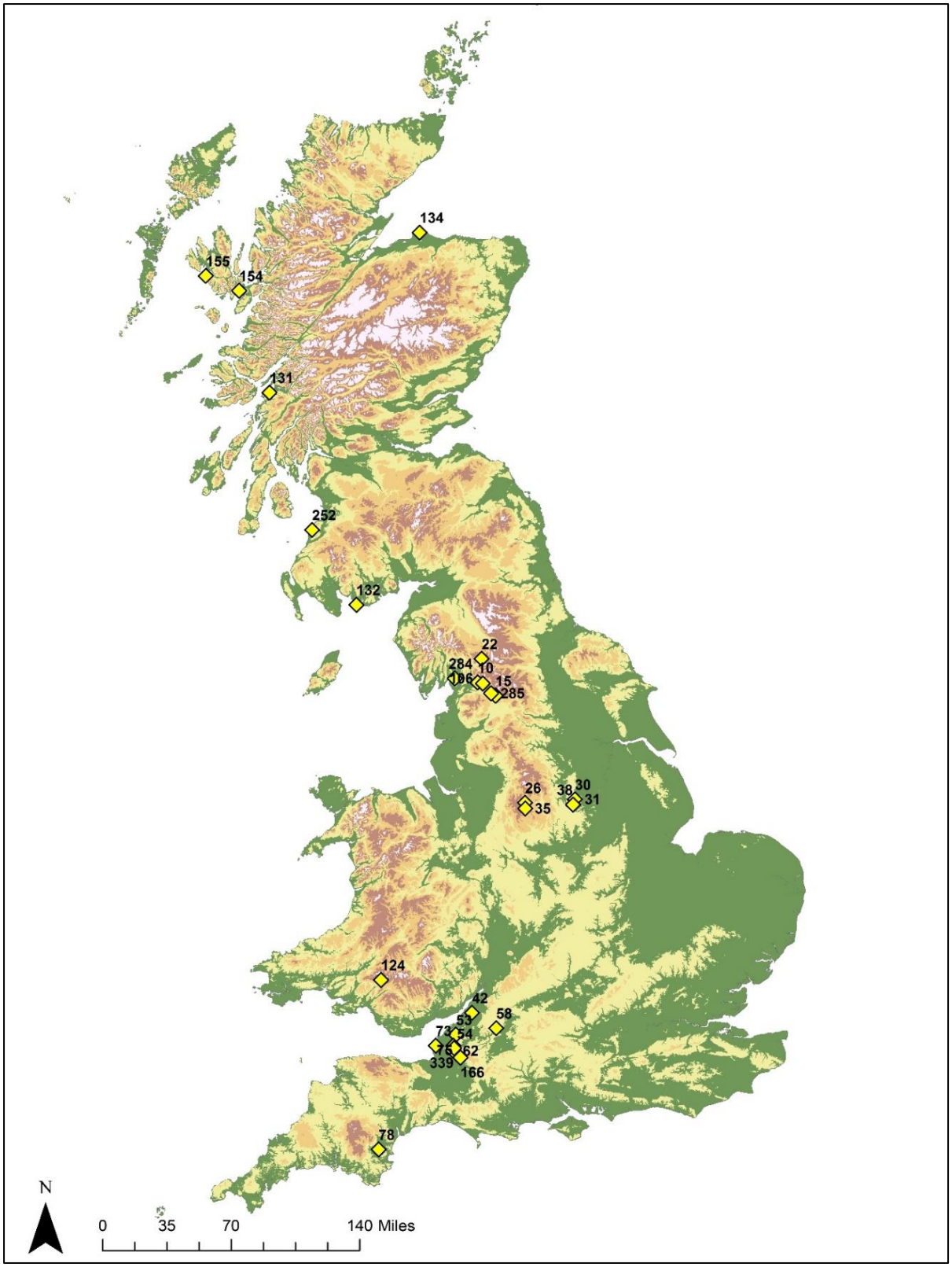


Figure 7-16: Caves that contained datable faunal assemblages. Each dot represents a single cave.

At The Dog Hole Cave, Haverbrack (**284**), excavation recovered the remains of at least fifty dogs and five possible wolves (Bland 1994). As discussed above, within the vertical shaft and the chamber below the entrance, Roman Iron Age artefacts were found with the remains of twenty-three individuals. Such a high number of domestic dog bones likely suggests that the remains were purposefully deposited in the cave, perhaps as part of cave-use during the Roman Iron Age.

Articulated remains belonging to a cow were also found at the base of the stone stairway that was dug into Uamh an Ard Achadh, Skye (Birch et al. 2006). Furthermore, analysis of soil deposits in the stairwell recorded high levels of phosphates that may indicate that significant quantities of blood entered the cave. It is therefore likely that the animals were slaughtered in the aboveground enclosure near to the stone stairway (ibid.). The ritual nature of this deposit is further supported by finds of neonatal pig and sheep, along with the human remains that has been discussed above.

In total, neonatal or immature animal remains have been recorded in five caves (Table 7.2). Similar evidence to that seen at Uamh an Ard Achadh of the deposition of young and neonatal animals, is also seen in the nearby rockshelter of Uamh an Eich Bhric (**155**) on Skye with evidence of the butchering of immature calves sometime during the 1st century AD (Birch et al. 2009). Neonatal cattle and sheep/goat bones are also recorded in Late Bronze Age deposits from the entrance passages from Sculptor's Cave (**132**) associated with non-adult skulls (Shepherd et al. 1995: 1194). Piglets recorded from the Roman Iron Age deposits within Ogof-yr-Esgryn, Brecon (**124**) and Victoria Cave, Settle (**15**) also demonstrate a similar association of young animals and human remains (Mason 1978: 7).

Table 7-2: Immature animals found in caves (N: 5 of 48 with human remains)

Cave	Date	Assemblage Context
Sculptor's Cave, Covesea	LBA	Remains of neonate cattle & sheep/goat from primary Late Bronze Age deposit at entrance
Uamh an Ard Achadh, Isle of Skye	LIA	Neonate and young pig and sheep/goat deposited in central stairwell, which contained hearth deposits and human infant remains/ Closing deposit of young pig.
Victoria Cave, Settle	RIA	Young pig remains found in Roman Iron Age deposits in cave
Ogof-Yr-Esgryn, Brecon	RIA	Neonatal pig found in central deposit with human remains
Uamh An Eich Bhric, Isle of Skye	LIA-RIA	Neonatal and young cattle remains in midden deposit towards rear of rockshelter with drilled human crania

7.4.1.2 Wild animals

The remains of wild fauna have also been identified in datable faunal assemblages in twenty-five caves. This includes red (N: 17 caves) and roe deer (N:9 caves), bear (N: 3 caves), wolf (N: 8 caves) and boar (N: 3 caves). The possible ritual association of these animals and caves has been explored in Chapter 6, where I argued that finds of worked wild animal bone, including antler and wild boar tusk, may have been linked to metaphors of regrowth and transience. Importantly, finds of wild animal remains in caves may also reflect temporary uses of caves by hunters and also demonstrate the use of caves by wolves and bears during the 1st millennia.

7.4.3 Discussion

It is clear that currently, there is a limited datable assemblage of animal remains in caves. However, the discussion above has highlighted the possibility that some caves were used as places of temporary shelter, for both humans and animals. A number of caves, however, may have also been used for the votive deposition of animal remains that also contained bones belonging to humans. These deposits may reflect an intermixing of animal and human remains that were tied to similar motivations behind deposition.

7.4.3.1 Fertility and cosmology: human and animal remains in caves

Despite the non-homogenous nature of burial practice during the 1st millennia (see above), burials do appear to indicate reciprocal belief systems, embodying concepts of fertility, death and regeneration (e.g. Brück 2006; Cunliffe 1992; Mulville et al. 2003; Williams 2004). Previous research has noted the intermixing of both human and animal remains within Iron

Age and Roman Iron Age ritual deposits (Armit 2012: 9). For example, in his study on the ritual deposits of animal remains, Morris (2011:12-15) noted that fragmentary human remains often occurred with animal remains in storage pits, including birds and domestic animals (Chadwick 2007; Serjeantson et al. 2010).

Similarities can be drawn between deposits in settlements and human remains found intermixed in midden deposits, such as in both Backwell (**53**) and Read's (**54**) Caverns in the Mendip Hills, as well as finds of young children and animals in caves. Studies by the likes of Giles (2012: 19-24), have suggested that young children and animals may have lacked individual identity and, as such, were separate from the social household. For Giles (2009: 89), the deposition of stillborn and infant remains may therefore have been a significant communal act that was symbolic of renewal and fertility. Such concepts can be compared to possible associations of human, animal and agricultural fertility that may have been attached to craftworking and processes of weaving occurring in caves during the 1st millennia (see Chapter 6).

By depositing the remains of deceased children and young animals in caves, it is possible that these sites became bound to metaphors of fertility and rejuvenation. Furthermore, the seasonal slaughter of young animals, such as piglets and sheep/goats, may have been part of ritual feasts focused on the Spring (Vernal) and Winter solstices (Rowley Conway Pers. Coms.).

Deposition of young animals and humans can be compared to similar practices occurring in caves in Central and Northern America, outlined in the ethnographic discussion as part of Chapter 2. For many of these communities, the deposition of young children in caves may have been motivated by concerns to aid the transition of the deceased to the underworld.

Crucially, one of the ways in which communities may have also helped this transition was through the deposition of symbolic animal guardians that accompanied the dead to the underworld. Similar concepts have also been discussed in terms of the treatment of children in Roman Britain. In her study of the relationship of votive bear figurines and the burial of children during the Roman Iron Age, Crummy (2010: 37) suggested that bears acted as guardians aiding the deceased children's passage to the underworld. The position of the bear, as a transitional creature between worlds, supports the perception of the animal as a powerful symbol of the underworld in the Roman world.

A similar argument may also be demonstrated through the ritual burial of animals such as dogs, corvids and birds of prey in Iron Age and Roman Iron Age deposits (Morris 2011; Serjeantson

et al. 2011). Burials of dogs, similar to those recorded in caves, occur in settlement boundaries and other non-domestic contexts. For example, at Mine Howe, Orkney, a burial of a dog, dating to the Iron Age was found within a pit, associated with the enclosure around the ritual well and stairway (Downes et al. 2003: 15-16), which also included neonatal human remains.

Dogs are well represented in faunal records belonging to the 1st millennia and likely played a key role in communities as herding animals, but also as guardians. As guard-dogs, they may have also guarded communal thresholds such as entranceways and boundaries. Dogs have also been reported in settlement entranceways and also in ditches and boundaries (Morris 2011). For example, at Hallaton, Leicestershire, a large complex ritual site, the burials of at least three dogs were recorded at the entrance to a series of ditches, which also served as a focus of ritual depositional activity primarily during the 1st centuries BC and AD (Score 2011). In this respect, dogs appear to have been intentionally deposited on settlement thresholds perhaps to act as spiritual guardians. Therefore, it is possible that dogs deposited inside caves may have also served as guardians, accompanying the dead to the underworld or controlling the possible supernatural forces associated with some cavescapes.

7.5 Ancestral underworlds? Multi-period deposition of human remains in caves

The discussion above has introduced the complex funerary use of caves throughout the 1st millennia and has compared the nature of both animal and human remains to those found elsewhere to suggest that caves may have been closley associated to other votive practices. Deposition predominately focused in natural and manmade boundaries, may been associated with a belief that these places not only functioned as physical thresholds but also as doorways to possible supernatural otherworlds (Schulting et al. 2013: 68).

As discussed in Chapter 2, studies have often emphasised the ancestral nature of these underworlds during the 1st millennia citing evidence of re-use of prehistoric sites and artefacts and long term deposition (Gosden et al. 1998; Semple 2013; Score 2011). Caves too, are often used over multiple periods and as such, the perception of antecedent remains was often a significant part of human experiences of cavescape environments. Consequently, the perception of antecedent remains may have influenced the human use of caves during the 1st millennia and may have also been connected to conceptions of re-use and ancestral memory.

7.5.1 Periodic use of cavescapes as mortuary spaces during the 1st millennia

One of the ways this relationship can be explored is through a discussion of the re-use of caves as mortuary spaces throughout the 1st millennia. Of the forty-three caves that contained

remains, seven presented evidence of the possible periodic deposition of human remains (Table 7.3). Evidence of the deposition of significant numbers of individuals at sites such as in the vertical shaft of The Dog Hole Cave (**284**), North Yorkshire and the complex multi-chambered caves of Ogof-yr-Esgryn (**124**) and Wookey Hole (**166**), may imply that a number of caves continued to serve as a focus for mortuary deposition (see Chapter 5).

There is also, however, evidence that a number of caves were re-used as mortuary spaces during the 1st millennia. One of the most notable examples of this has been demonstrated by Armit et al's (2007, 2011) reanalysis of Benton's excavation of Sculptor's Cave, Covesea (**132**) that suggested two distinct phases of deposition occurred in the Late Bronze Age and Roman Iron Age. Similar evidence of the re-use of caves as mortuary spaces during the Iron Age and again in the Roman Iron Age was also noted at Merlin's Cave (**57**), Charterhouse Warren Farm Swallet (**59**) and Wookey Hole (**166**).

Alongside evidence of re-use of caves for burial during the 1st millennia, many caves also acted as mortuary spaces earlier in prehistory. In total, six caves contained human remains that dated to both the 1st millennia and either the Neolithic and Early Bronze Age (Caves: 27, 30, 31, 35 and 106).

This possible association of mortuary practices is perhaps best demonstrated by the burial of a middle-aged female inside Carsington Pasture Cave (**27**) above a deposit containing the disarticulated remains of seven individuals, one of which was radiocarbon dated to the Neolithic (Chamberlain 2001). Iron Age re-use of early prehistoric mortuary caves may also be reflected by radiocarbon dates obtained from three juvenile skulls from Mother Grundy's Parlour, Creswell (**31**) that suggest that the cave was used during the Bronze Age and later towards the end of the 1st millennium BC. Similarly, at Raven Scar Cave, Giggleswick (**106**) the remains of at least twenty individuals found within three cists, were considered to date to the late Neolithic or early Bronze Age (Gilks 1976: 124). A smashed human femur, found outside the cave's entrance, also confirms the re-use of the cave sometime during the Iron Age (Lord et al. 2013: 246).

Table 7-3: Caves with evidence of multi-period human remain deposition during the 1st millennium BC and AD..

Cave	**Cave Type**	**Context**
Rawthey Cave (**22**)	Vertical Shaft	Three individuals were recovered from the vertical shaft. One of which was radiocarbon dated to the Bronze Age, whilst an adult female was also dated to the Roman Iron Age.
Merlin's Cave (**57**)	Single Chamber	Human remains were found in both Iron Age and Roman Iron Age contexts.
Charterhouse Warren Farm Swallet (**59**)	Vertical Shaft	Human remains were found above Late Bronze Age material but below a single inhumation of early Roman Iron Age date and were identified as Iron Age in date.
Ogof-yr-Esgryn (**124**)	Multi-Chamber>100m	At least 30 individuals were recorded within the central chamber of the cave, alongside artefacts dating to the 1st and 2nd centuries AD.
MacArthur's Cave (**133**)	Cave/Vertical Shaft	Radiocarbon dating of the remains of four individuals may indicate the periodic deposition of human remains during the Late Iron Age.
Sculptor's Cave (**134**)	Multi-Chamber	Two distinct phases of the deposition of human remains were recorded at the entrance dating to the Late Bronze Age and Roman Iron Age.
Wookey Hole (**166**)	Multi-Chamber>100m	Two inhumations appear to date to the Iron Age, whilst at least two human skulls found in the River Axe are considered to date to the late 1st or 2nd century AD. The fourth chamber, also appears to have been used as a cemetery later during the 3rd and 4th centuries AD
The Dog Hole Cave (**284**)	Vertical Shaft	Radiocarbon dating of human remains from the vertical shaft indicate a sequence of burials dating to the Roman Iron Age and Early Medieval period.

7.5.2 Contextualising mortuary re-use of caves

This association between antecedent human remains may imply that activity in certain caves may have been in part motivated by the presence of antecedent remains. This re-use of mortuary spaces can be compared to activity recorded in upstanding monuments, such as barrows and chambered cairns. For example, at Cossington, Leicestershire, activity focused around three Bronze Age barrows, including the construction of a Late Iron Age roundhouse and the deposition of complete vessels in close proximity to the monuments (Thomas 2007: 51). During the Roman Iron Age, pottery continued to be deposited in pits associated with the barrows, whilst in the 6th and 7th centuries AD, a settlement and cemetery were established in close proximity to the barrow (Thomas 2007: 51-55).

Drawing on such examples, work by the likes of Semple (1998, 2013), Driscoll (1998); Longden (2003) on Early Medieval perceptions of prehistoric monuments and Gosden and Lock (1998) on the Iron Age history of re-use, have argued that antecedent places were often considered to be powerful supernatural places in the landscape. Human remains found in these contexts may been thought to have belonged to the supernatural ancestors, whose identity was reworked and integrated within communal genealogies (Gosden et al. 1998: 8).

Further evidence of the re-use of early prehistoric burial cairns can also be seen during the Iron Age in Scotland. Brochs, including those at Quanterness and Howe on Orkney, constructed above chambered cairns, incorporated elements of these within their superstructure (Hingley 1996: 234-238). What makes this interaction more compelling is the subterranean nature of these sites and the cave-like experiences they generate (see below). As we discussed in Chapter 2, caves in Central and Northern America have often been used to communicate with ancestral spirits, through acts of votive deposition. This apparent re-use of early prehistoric mortuary monuments during the 1st millennia could indicate that caves were also perceived in similar ways and were consequently bound to ancestral cosmologies.

7.6 Filling the hole: simulating underworlds

Acts of deposition in caves may therefore have been linked to similar motivations behind votive deposits found in rivers and settlements. One of the possible interpretations of this is a belief that caves acted as thresholds to ancestral underworlds and were therefore supernaturally powerful places in the landscape. This may be further supported by the construction of souterrains and wells that may have sought to emulate underground experiences. The following section will explore how such structures may have intentionally mirrored cavescapes. It will

discuss the use of deep pits and enclosure ditches, which may have sought to incorporate chthonic elements simulating rivers as well as caves.

7.6.1 Fogous & souterrains: form and cave morphology

Both souterrains and fogous are man-made subterranean structures comprising of passageways and a single circular chamber entered through a narrow entranceway or stairwell. Restricted to southwest Britain, fogous, which is Cornish for cave, are thought to have been constructed during the Iron Age and Roman Iron Age, although only a handful have been excavated and even less have produced diagnostic material (Cooke 1993; MacLean 1992; Rose 2001). Nevertheless, at least twenty-five sites are recorded in the HER records for Cornwall and were predominately found west of Penzance (Figure 7.17; see Appendix 4).

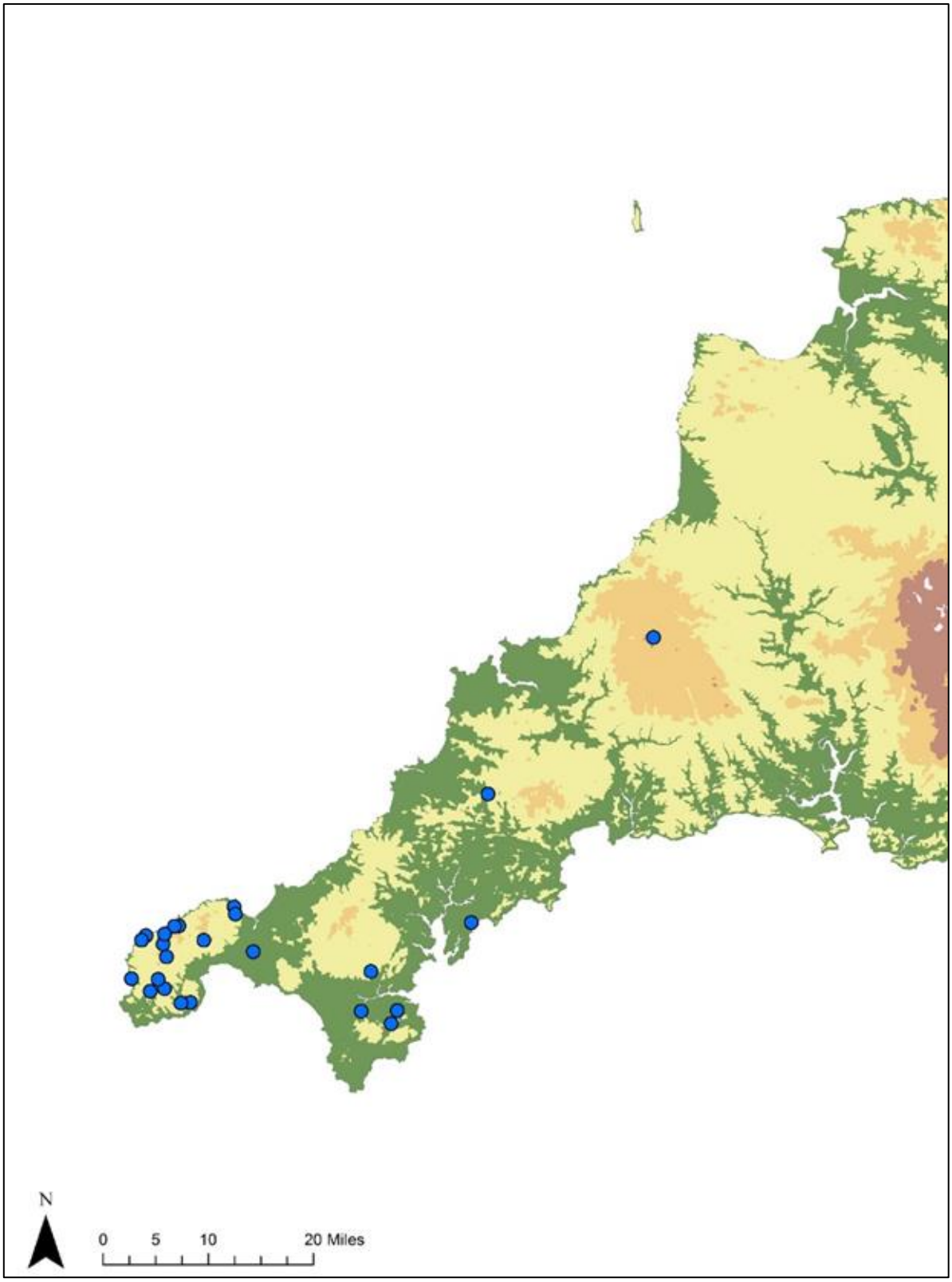


Figure 7-17: Distribution of fogous across Cornwall (N:25). Each dot represents an individual fogou. No site contained more than one fogou

Halliggye Fogou (Figure 7.18), one of the most complete examples, is characterised by a twenty-metre-wide stone-lined underground chamber connected to a twenty-eight-metre-long curvilinear passage branching westwards, which culminated in a small side chamber and creep (Startin 1982). The site, which was located inside a ditched enclosure, appears to have been constructed during the Iron Age and continued to be used periodically up until the middle of the 1st millennium AD (ibid.).

The fogou has a number of elements that reflect cavescape architecture. The site is accessed through a low creep, a restricted vertical crawl space, on the northern side of the fogou. Furthermore, the incorporation of the creep and the long curved passage are suggestive of kinetic and sensory experiences associated with natural cavescapes. The use of creeps, forcing individuals to crawl into a dark narrow space are also found naturally in many British caves such as Thirst House Cave (**26**), Derbyshire, which was used to access a lower chamber to the rear of the cave. The long curved passage with altering height and width also mirror cave passages in their form and experience of darkness and constriction.

The use of creeps and narrow entrance ways, like the one at Halligyye, occur in a further five surviving fogous, suggesting the deliberate use of such technique to enforce restrictions on bodily movement and transition. Furthermore, fogous appear to combine elements of cave experience through the manipulation of light in aboveground passages. Sections of passageways in fogous such as that at Pixie's Hall (SW7280002) appear to have been unroofed. To those inside the darker roofed sections of passageways, unroofed areas would provide a dazzling shaft of light, reminiscent of light produced by open fissures in cave roofs. The combination of creeps, the disorientating nature of design and the manipulation of light are similar to natural cavescape experiences.

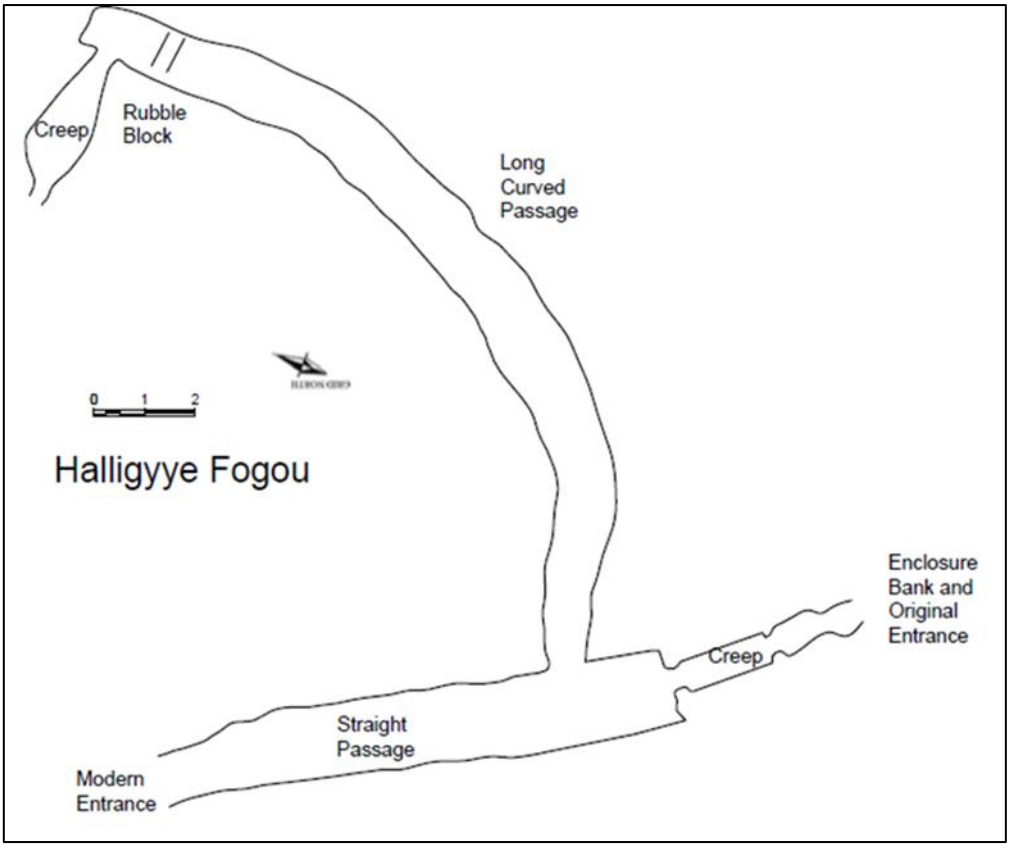


Figure 7-18: Plan of Halligyye Fogou showing the location of both the modern and ancient entrance and the different architectural devices used that to emulate cave-like underground kinetic and sensory experience (After Startin 1981: 219)

Souterrains also present complex cave-like sensescapes by using similar architectural devices to those found in fogous. As part of the current research, 667 souterrains were identified through published surveys and associated HER records (Figure 7.19). Like fogous, souterrains are made of a single, usually corbelled passage, which leads to a sub-circular or rectangular subterranean chamber. Chronological studies of souterrains (Armit 1999; Miket 2002; Wainwright 1953, 1963) have suggested that they were constructed during the Iron Age and Roman Iron Age, although a number of regionally focused studies have suggested an intensity of construction in the 2nd and 3rd centuries AD (Armit 1999). As a result, past studies have often conflicted on the exact use of souterrains. Given their foci on low-lying agricultural land, as well as on fertile machair in the west, souterrains are often associated with agricultural practices, as either storehouses or ritual structures (Armit 1999; Clinton 1997; Miket 2002).

Like fogous, souterrains employ a number of architectural devices that may simulate cave experiences. Within their construction, they incorporate a number of techniques including narrow doorways and passageways, that employ uneven corbelling to alter the kinetic sensations of movement. Visually, the rocky and uneven appearance of corbelling, also appears

to emulate characteristics of natural cave walls through its uneven and rocky surface, which is further emphasised when wet.

The focus on bodily transition in souterrains, as well as fogous, can also be seen through the narrow entranceways that marked the threshold from light to darkness. This transition is also further accentuated by movement between the narrow corbelled passageway to the large sub-circular chamber, which again mimics the transition of cave entrance passages and larger chambers. Excavation of sites such as Rennibister on Orkney (Figure 7.20), have also shown that the central chamber also incorporated niches within the walls. These placed at random intervals on the periphery of the main chamber would have been the darkest areas of the souterrain, similar in appearance to peripheral cave passages.

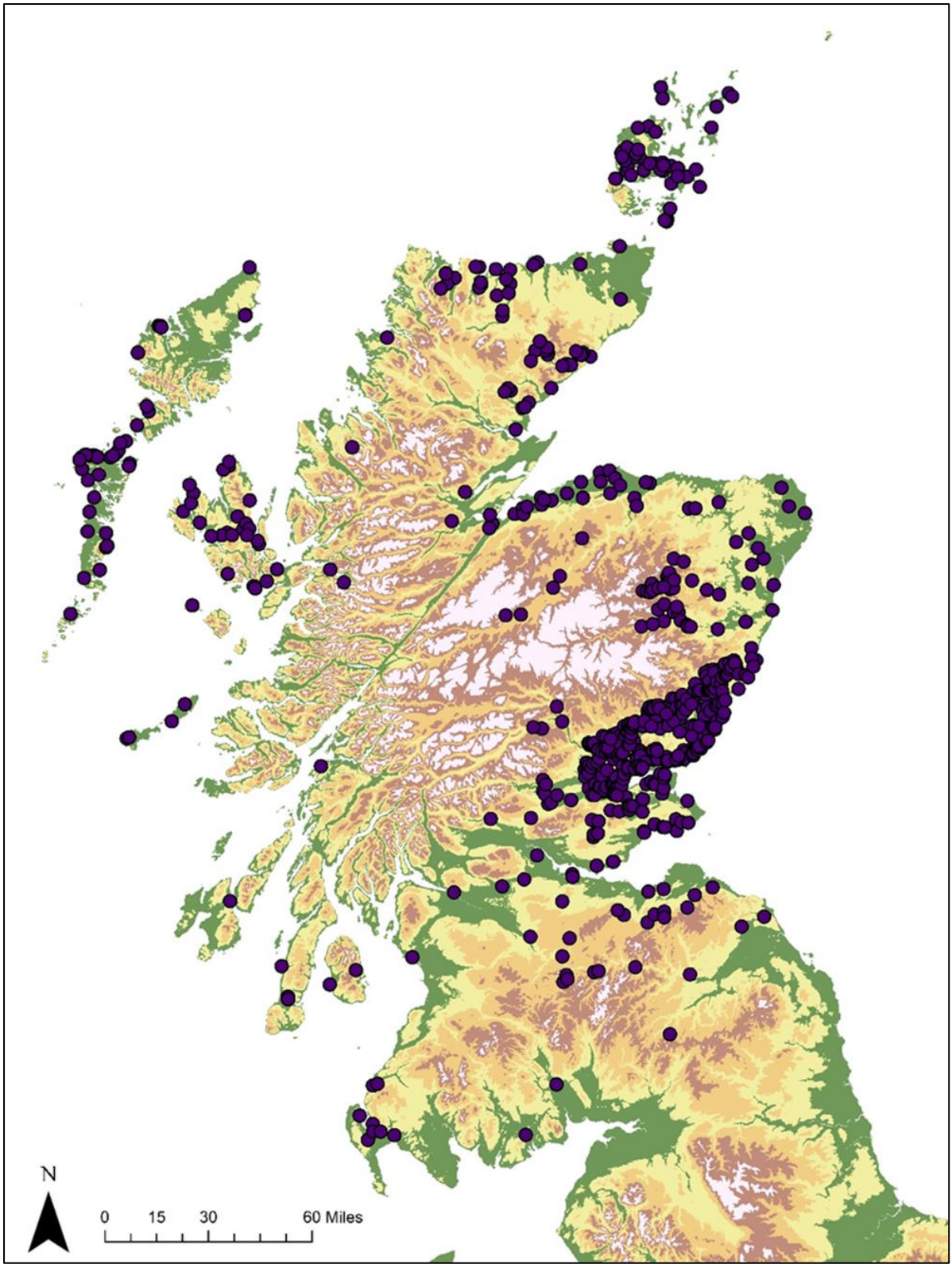


Figure 7-19: Distribution of souterrains across Scotland (N: 667). The majority are associated with the rich low-lying agricultural land around the Firth of Forth, which is thought to have been a response to the Antonine occupation in the area (see Armit 1991)

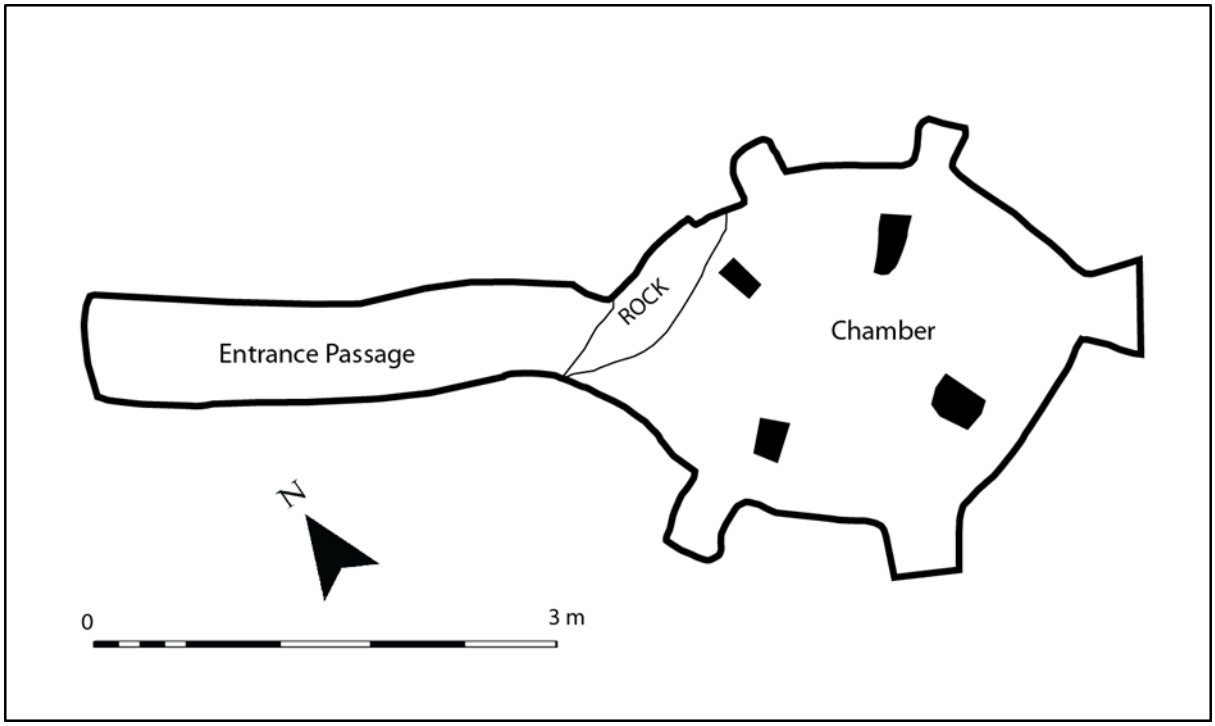


Figure 7-20: Plan of the excavated souterrain at Rennibister, Orkney. The souterrain is accessed through a narrow corbelled entrance that unevenly curves. The central chamber incorporates 6 niches randomly spaced inside the walls (RCAHMS 1928)

This close association between caves and souterrains is further demonstrated through the combination of natural caves and souterrain architecture. As I have outlined in the discussion of cave morphology in Chapter 4, three caves were identified as 'cave-souterrains' (Cnoc An Aoil **262**; Uamh nan Ramh **272**; Ardeer **275**). These were located on the western coast of Scotland and incorporated a corbelled lined passageway that lead into natural cave chamber. At Cnoc Aoil (262), Isle of Lewis, this was achieved through the placing of stone lintels over a natural gulley that led into a cave chamber in the cliff face (Curtis et al. 1998). Further south, the souterrain at Ardeer, North Ayrshire (Figure 7.21) was made of twelve to thirteen-metre-long corbelled passage, which was roofed with capstones that lead into cave chamber (Hunter 1973). Within the entrance, excavation of a hearth found iron slag animal bones and re-used Roman glass dating to the 2nd century AD, suggesting activity at the site was perhaps contemporary to souterrain construction elsewhere (ibid.).

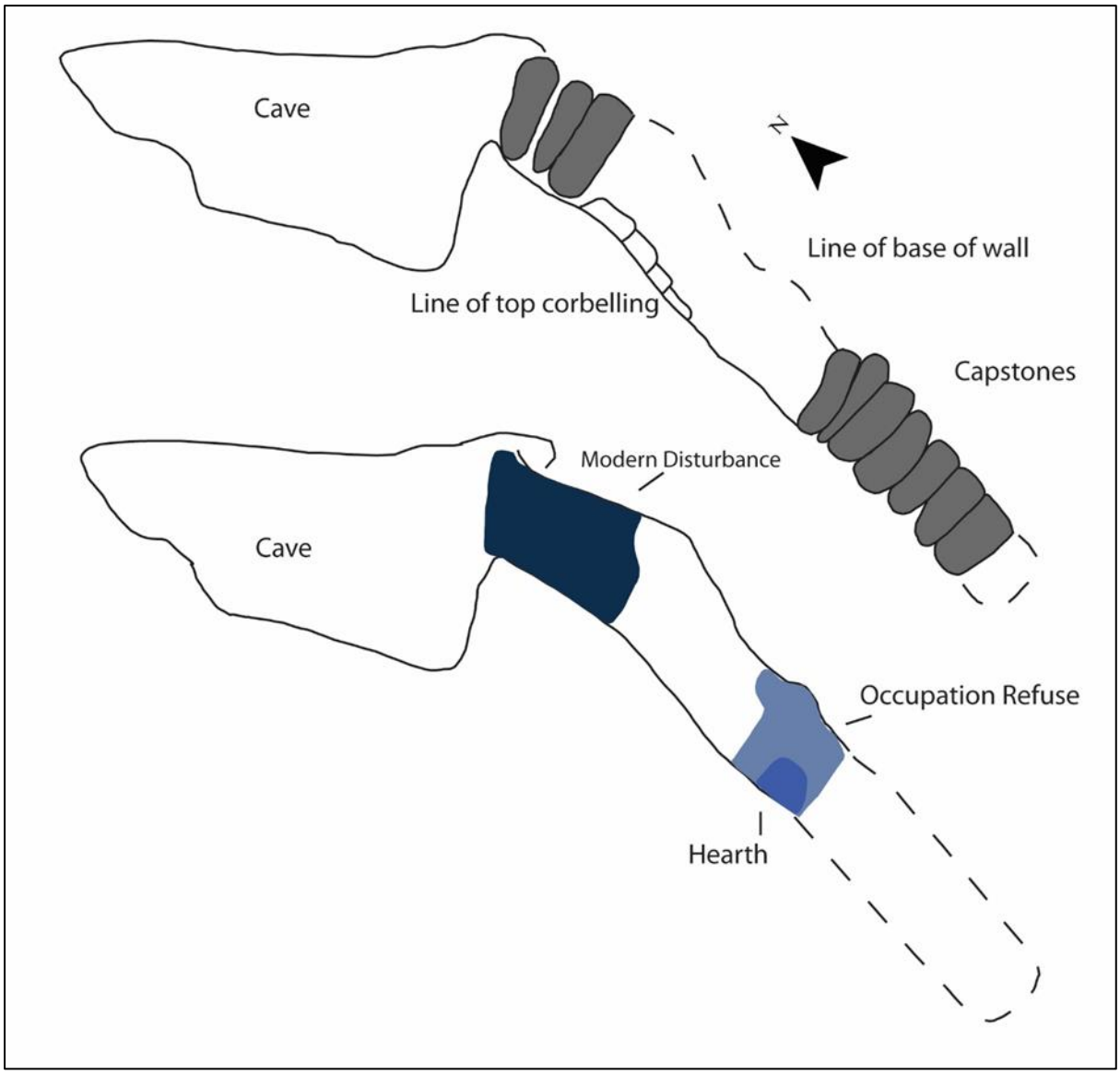


Figure 7-21: Plan of the cave-souterrain at Ardeer. The site demonstrates a clear association with caves and man-made subterranean structures (After Hunter 1973)

7.6.2 The American Kiva

The nature of cave-souterrains and the overall evidence of the emulation of cavescapes through the unique forms of both fogous and souterrains could indicate a possible relationship between subterranean use and cave experience. Interestingly, a similar form of underground structure is also found in North America called the Kiva, which played a role in the interaction with the underworld through emulating caves (Palka 2014: 110). The kiva, found primarily in the central USA, is an underground or aboveground circular structure made of a subterranean room underneath a house or independent structure. Studies have suggested that these sites were of religious significance to Pueblo society, from c.1300-1500 AD (Crown et al. 2003: 518-519).

The independent kivas, which could be as large as 22.5 metres in diameter (Lightfoot 2008: 227, 242), were roofed and accessed by a ladder, which led down into the wide subterranean chamber. Inside, the kiva had a central fire pit and also incorporated a number of niches (Figure 7.22). Recent studies of these niches in the Rio Grande valley, Colorado, suggest that they played a fundamental role in ritual activity that took place inside and were intended to mirror natural caves worlds (Schaafsma 2009: 664; Palka 2014: 110). These niches, orientated towards the abodes of rain-giving entities and the homes of the dead- west and sometimes north, were the focus of reciprocal metaphors of fertility (Schaafsma 2009: 666). Crucially, by emulating caves, kiva niches also acted as conduits to the underworld, whilst the kiva itself physically embodied, both the vertical and cosmological principles associated with the emergence and descent into the lower supernatural worlds (Schaafsma 2009: 664; Palka 2014: 110; Figure 7.22).

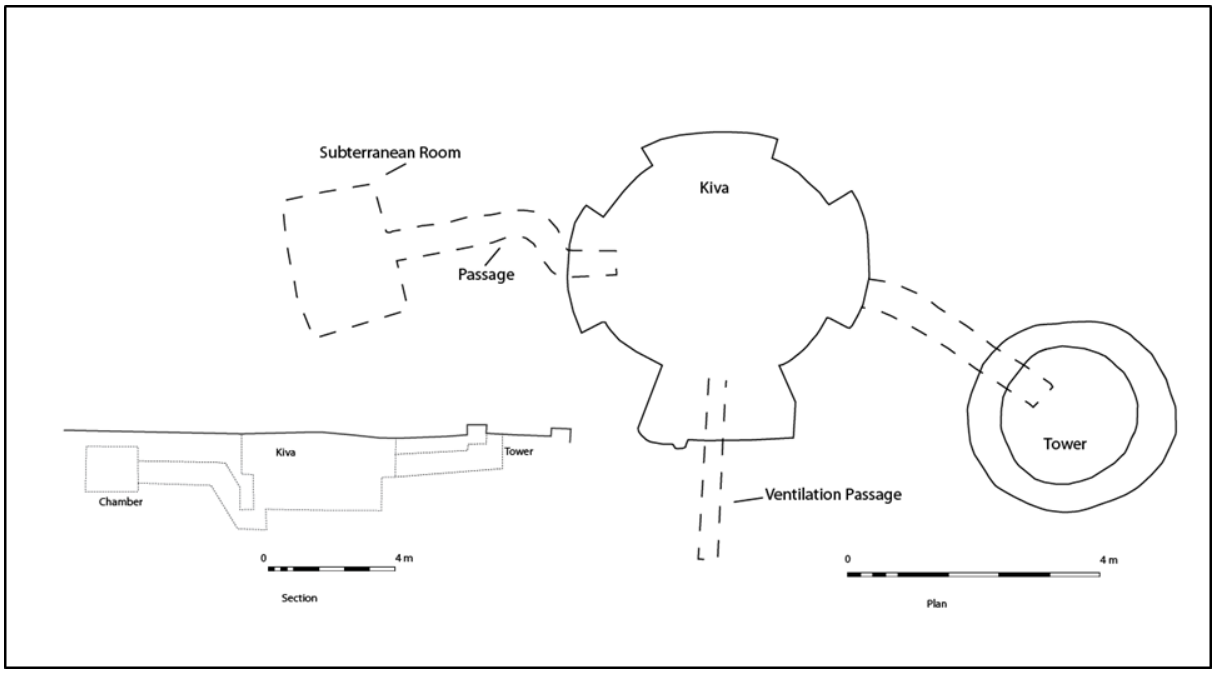


Figure 7-22: Plan of a Pueblo III kiva at Ismay, Yucca House, southwestern Colorado linked to further subterranean rooms and passages (After Luebben 1982: 66)

This relationship between subterranean structures and cosmologies attached to caves is compelling and could help to shed light on one of the aspects that motivated the construction of souterrains and fogous. Furthermore, geomorphological analysis of deposits found within the kiva at Fourmile Run, Arizona suggests that a complex sequence of orchestrated ritual activity took place during and after the closing of the site (Van Keuren et al. 2013: 622-624).

This ritual decommissioning of subterranean structures can also be paralleled during acts of demolition at souterrains (Armit 1999), as well as the closing of the stairwell at Uamh Ard Achadh (**154**). Drawing on the work of Wainwright (1953), Armit (1999) has argued that souterrains in Fife were deliberately closed by orchestrated acts, which included the careful removal of the entrance orthostats and intense burning. Similarly, the closure of Uamh Ard Achadh included the filling of the stairway with rubble and the deposition of neonatal animal and human remains, along with a middle aged female (Birch et al. 2009).

After closure, evidence suggests that both fogous and souterrains continued to be periodically visited. At Halligyye fogou, post-Roman pottery has been recorded in the enclosure surrounding the fogou, whilst Roman pottery was also present in the infilling deposits at Penhale fogou (Rose 2001: 43).

7.6.3 Emulated cavescapes and natural caves

Comparing the distribution of souterrains and fogous to evidence of activity recorded in caves may also suggest an association between underground cave-like experiences and simulated structures. In areas of high densities of fogous and souterrains such as East Fife and Cornwall there is limited evidence of possible contemporary cave-use (Figure 7.23). There are, however, natural caves in these regions, which may have acted as reference for those that sought to emulate cavescapes.

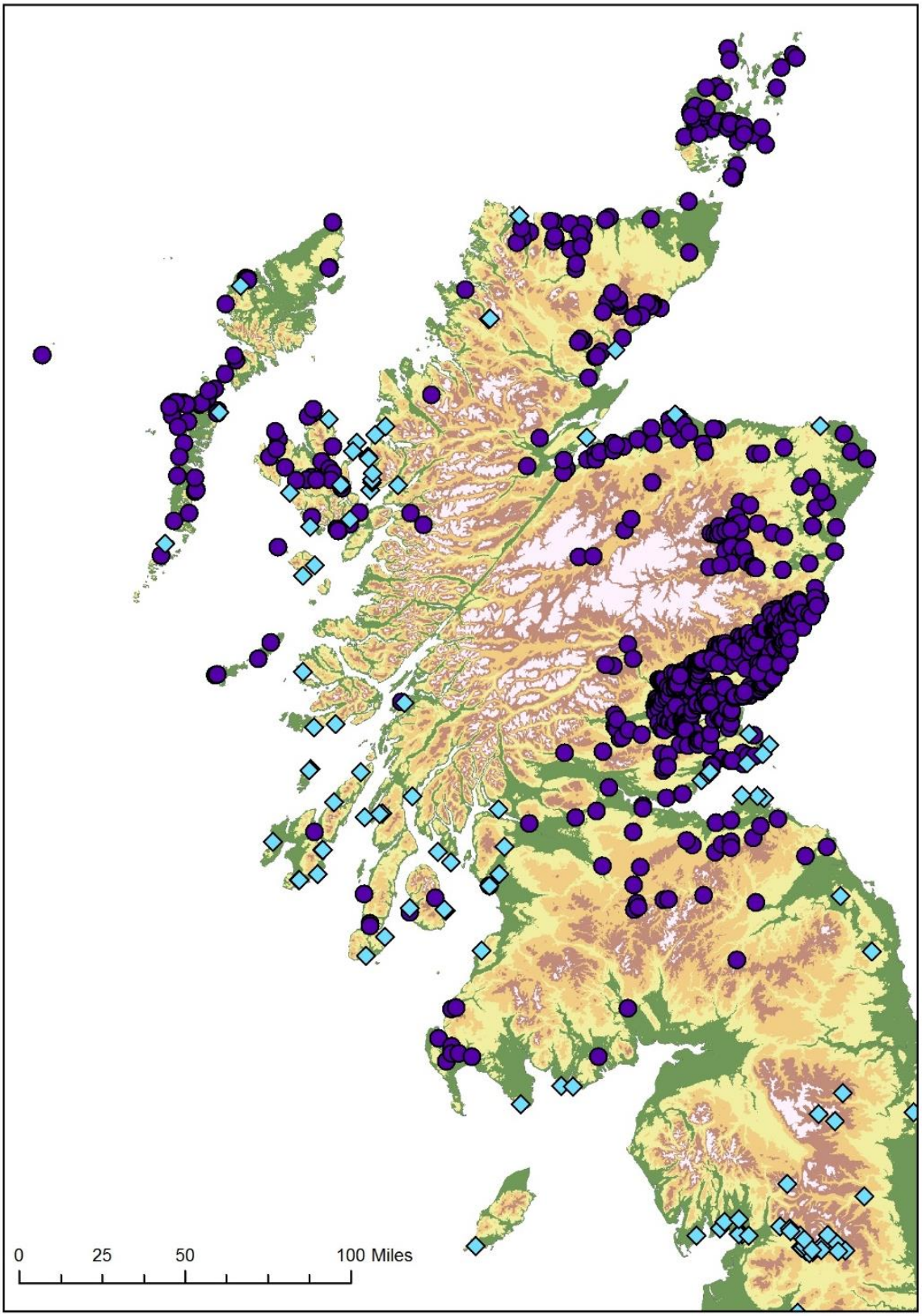


Figure 7-23: Distribution of caves with evidence of activity (Turquoise diamond) and souterrains (Purple Circle).

7.6.4 Summary

Given the evidence discussed above, both souterrains and fogous may have been constructed to emulate the kinetic and sensory experiences associated with cavescapes. As a result, they may also have been tied to similar cosmologies, including perhaps, the belief that certain caves served as portals to the underworld. Being located near agricultural land, these sites could have been tied to concerns of fertility and the fecundity of rain, which is further echoed by the archaeological and ethnographic use of subterranean kivas in central and southern USA. As thresholds, such sites may have been seen as supernaturally powerful spaces, which would have required carefully orchestrated rituals to close. This may also explain why such sites continued to receive attention after abandonment, because of their apparent supernatural danger (Cooke 1993).

7.6.5 Pits, ditches & wells

A number of other man-made structures may have also been associated with the perception of natural underground spaces. Large storage pits and wells commonly found on hillfort and settlement sites across southern Britain (Cunliffe 1992; Redfern 2008: 281; Tracey 2012: 367). Pits, such as those at Danebury hillfort, contained structured deposits of human and animal remains, craftworking debris and artefacts, similar to those recorded in caves (see Chapter 6; Figure 7.24).

Interpretations have often stressed the votive nature of these deposits that may have been tied to a belief in chthonic deities, responsible for agricultural fertility (Cunliffe 1992). It is also clear, however, that the use of these pits were much more nuanced, and were used for the storage of waste and food (Hill 1995; Pitts 2005). Nevertheless, the construction and use of some deep pits may also serve as evidence for the cosmological significance of underground space. Pits are similar in form to vertical passage caves, such as potholes or swallets that also served as a focus for structured deposition. Pits, especially during the night, would have appeared to be bottomless and similar to vertical caves found on limestone plateaus. This experience may also extend to rampart ditches and field boundaries that would also appear as endless spaces going underground.

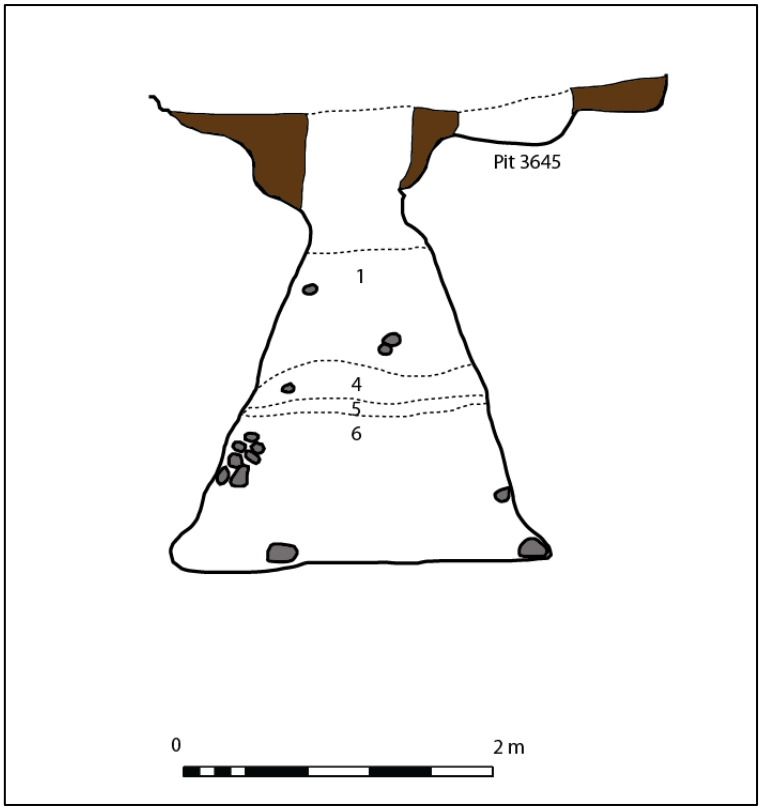


Figure 7-24: Example of a storage pit at Danebury. Pit 1115, contained a sequence of structured deposits within a 4m deep pit (After Cunliffe 2013)

7.4.6 Artificial waterscapes

Fundamentally, pits and ditches were also closely related to the collection of water and may have therefore emulated waterscapes. Linear alignments of pits recorded in Iron Age landscapes of southern Britain are thought to represent permeable boundaries demarcating areas of land (Rylatt et al. 2007; Wigley 2007). When filled with water in periods of wet weather, these pits may have also created artificial riverscapes, when viewed from distance.

This relationship of pits and water is hardly surprising given the wider associations of water and ritual deposition (see above). However, a number of these artificial waterscapes, namely so-called ritual wells and Early Medieval holy wells incorporated a number of cave-like experiences. In northern Scotland, manmade underground cisterns, identified as wells, have been found underneath a number of complex Atlantic roundhouses. Whilst their exact function is unknown, many like the well at Gurness (Figure 7.25), are clearly subterranean in nature and use a number of similar architecture devices to those found in brochs and constructed into a number of caves.

One of the most enigmatic well type features of the Scottish Iron Age was recorded at Mine Howe near Gurness on Orkney (Downess et al. 2003). The structure, constructed inside a

natural mound, enclosed by an earth bank is comprised of a 6.1-metre-long curving stairwell, which leads to a rectangular cistern filled with water. The uneven and tight stairs, along with the lack of light, would have made accessing the cistern a challenging and unusual experience. In this respect, it is possible that the experiences generated by Mine Howe were comparable to kinetic sensescapes associated with karst caves. This relationship may be further supported by evidence of metalworking taking place at the site, along with the deposition of the remains of young children and animals, and a burial of a dog (Downes et al. 2003: 15-16). The similarities between the types of deposits and subterranean nature of these sites is compelling and may suggest that construction at Mine Howe sought, like souterrains and fogous, to emulate cave morphology (Figure 7.25).

7.4.7 Water & cave experience

Whilst it has been argued that the votive use of some caves were associated with similar practices occurring in rivers and other watery spaces, there are however a number of fundamental differences between the nature of aboveground and some subterranean waters. Unlike the unpredictable nature of natural waterscapes, water in the cistern of Mine Howe would have been free from current and highly reflective. The characteristics of the water in Mine Howe, and indeed other broch wells, can be paralleled by pools of water that are found in caves, which are still, transparent and also reflective.

Work by Strang (2004: 62) has highlighted the importance of the transmutable and mesmerising qualities of water in the construction of water-based cosmology, suggesting that:

"people have an intense and intimate relationship with water and the sensory experiences engender powerful affective responses and imaginative associations"

Bodily immersion in water offers a compelling sensual experience and almost returns individuals to prenatal conditions (Strang 2004: 55, 100-101). The sound and visual elements of water have also been associated with a meditative trans-state and is often integral to cosmological schemes (Palka 2014: 111-112; Reinhard 1985: 314; Strang 2004: 129). As we have seen from the discussion in Chapter 2, underwater experience is often indistinguishable from underground experience in ethnographic cosmography (Bassie-Sweet 1991: 80; Schaafsma 2009: 682). Both offer intense sensory experiences and transform everyday physical and sensory movement. Water is often seen as an ancestral substance and creates a sense of belonging through its association with physical and metaphorical boundaries (Frazer 1996: 86; Strang 2005: 110).Caves that contain water are often imbued with cosmological significance

as a result of the combination of sensescapes associated with both water and caves (Whitehouse 2001). Through the construction of pits, wells and cisterns communities may have intentionally sought to combine and emulate both cave- and waterscapes, which closely linked through cosmological schemes.

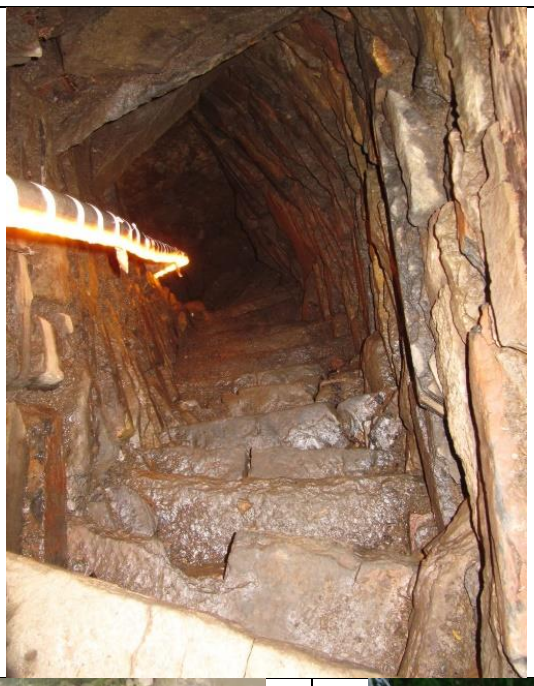


Figure 7-25: Examples of artificial cave waterscapes, demonstrating the cave-like nature of wells during the 1st millennia BC and AD. Top - Mine Howe Stairway (Courtesy of T. Crowther); bottom left- Gurness broch well (Courtesy of T. Crowther); bottom right- Holy well Pilleth, Powys (Author's photo).

Experiences attached to both water and caves are inherently unpredictable, challenging and dangerous. The darkness and instability of cave passageways makes moving through these spaces a challenging and an intense experience, which can be paralleled to the dangers of hidden currents and tidal forces found in watery places. Water in caves is equally as dangerous, and often fills entire karst systems in a matter of hours and still claims lives today. The nature of water has often led to the creation of cosmologies that attempt to define its unpredictability. For example, water is often seen as a source of life and also death and as a result is often imbued with animist qualities (Masani 1918: 87; Strang 2004: 129). Such associations were also transferred to cavescape experiences. In Mesoamerica, water was thought to originate inside mountains, which was released through caves (Palka 2014: 111-11; Reinhard 1985: 314). As a result, the underworld deities associated with caves were often related to metaphors of agricultural fertility and rain-giving but also death, destruction and disease (Lucero et al. 2015: 165). Water was also closely connected to the use of negative magic including sorcery and soul extraction (Lucero et al. 2015: 165) and by the belief of spirits and demons that haunt bodies of water and the sea (Masani 1918: 76-84).

Still-water found in cave pools, pits and cisterns may therefore have been seen as a symbolic beneficial and dangerous agent. Given the close relationship of brochs and seaways the containment and maintenance of still-water within a cistern may have been an attempt to control unpredictable elements such as underwater currents and wind through sympathetic magic (Lucero et al. 2015: 165). Furthermore, this concern for the control of water may have also extended to the use of wells in agrarian communities, who sought to control the chaotic nature of rain and water bodies (Glowacki et al. 2003: 448).

7.4.8 Reflection, mirrors & divination

In the discussion of the use of water as a medium for the votive deposition of the dead, we have also seen that, because of its visual properties, still water may have also acted as a portal to the underworld(s). Giles (2009:87) has argued that the deposition of human remains in bogs may have been associated with still-pools with reflective surfaces. Bogs are often associated with seasonal abundance and are therefore attributed with a degree of identity and intimacy (Giles 2009: 87; Schulting et al. 2013: 68), parallel to caves and other water bodies.

These metaphorical associations of water may also have been transferred to the use of mirror surfaces (Giles et al. 2007). Interestingly, two mirrors dating to the late 1st or early 2nd century AD, have been found in two caves that also contained water. In Spider Cave (**97**), located on

Sugar Loaf Hill, opposite the sequence of caves on Attermire Scar, Settle, a 1st century AD mirror handle was found close to a pool of water at the rear of the cave (Figure 7.26). Similarly, the bronze mirror handle noted in the rich Roman Iron Age assemblage in Poole's Cavern (**25**) was also found associated with a karst pool within a niche off the Roman Chamber that was also near the subterranean waters of the River Wye.

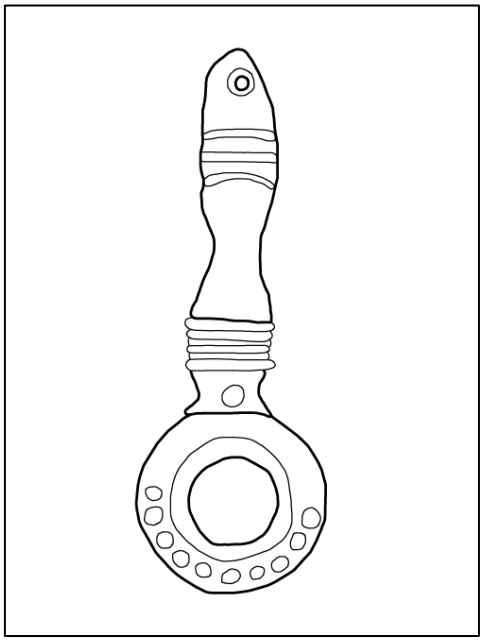


Figure 7-26: Mirror Handle recovered from Spider Cave, dating to the late 1st or early 2nd century AD (After King 1970: 411)

Mirrors and reflective surfaces are often used in acts of divination (Giles et al. 2007). Excavations of Mesoamerican caves used by the Maya during the classical period have found pyrite mirrors, which were powerful symbolic tools used in divination associated with lineage and fertility rites (Chládek 2011: 39). Deities that inhabited caves were also associated with divination including *Chaak Chell* (Chládek 2011: 29) and the so-called Spider Woman who was also closely associated with weaving. In Chapter 6, I suggested that weaving practices in caves may have been associated with metaphors of divination and feminine fertility demonstrated by the Three Fates (Eckardt 2014: 314). Interestingly, caves are also often perceived as spaces closely connected to the dreamscapes, which are often used in divination practices (Monaghan 1995: 187; Brightman 2002: 84). Dreams were often used as symbols to understand the past as well as to communicate with supernatural spirit entities (Brightman 2002: 84).This relationship with caves and dreams is further demonstrated by the symbolic perception of bears that often hibernate in caves.

Symbolically, bears are often perceived as half human, given the similarity of bear prints and human footprints (Hedeager 2011: 91-92). A bears' capability to hibernate was also seen as an ability that allowed the animal to exist between world, often through a dream state (Cushing 1977: 151). In northwest Siberia, bears were said to retire to a secluded place to "dream a neck-cracking, true dream" (Cushing 1977: 151). In the Classical World, bears were also closely associated with metaphors tied to cavescapes. As a creature that existed in the margins, bears were associated with rebirth, resurrection and guardianship (Crummy 2010: 76; Hedeager 2011: 92) but were also, like caves, unpredictable and dangerous (Crummy 2010: 58).

The close relationship of bears and their use of cavescapes is intriguing given the archaeological evidence of the use of caves bears and wolves during the Iron Age and Roman Iron Age (see Chapter 6). The deposition of mirrors associated with pools inside caves is also interesting, given the similarities in cosmologies attached to water and caves. As powerful supernatural artefacts, mirrors may have been seen as a tool to communicate with an underworld and as such, were as dangerous as certain waters and caves. Placing them near or in water in caves may have ensured that the power returned to the underworld or was bound to the cave as an act focused on containing unpredictable spiritual forces, further symbolised by characteristics of cave and water (Giles et al. 2007; Giles 2009: 87).

7.4.9 Holy wells & caves

In his journey across the Western Isles of Scotland in the 18th century, Martin noted the tradition of collecting and visiting wells for beneficial powers of healing and divination (Martin 1934). Amongst the most potent water was that sourced from still-water pools within caves which was used in the healing of a variety of aliments (Beith 1995: 131-132). Such a perception may have been reinforced by the emotive experience associated with obtaining water from cavescapes and is also paralleled by wider ethnographic examples of the collection of water from cavescapes. Across Mesoamerica, water collected from caves is considered *zuhuy ha'* (pure or virgin water) and is used for healing and in geopious rituals associated with a worship of the earth as a living entity (Bassie-Sweet 1991: 83; Brady et al. 2006: 471; Chládek 2011: 29; see Chapter 2).

Across Europe too, during the Medieval and Post-Medieval period, water has also been closely related to both beneficial and negative connotations through the visitation of holy wells and springs. Crucially, many of the holy wells constructed during the Medieval period incorporate elements suggestive of cavescape experience which may have played a fundamental part in the

experience of holy wells. As places of healing, many wells acted as the "eye of the earth" and were considered sentient (Strang 2004: 89; Foley 2011: 470).

There are at least 5,000 holy wells in Britain with a further 3,000 being recorded in Ireland (Strang 2004: 80; O'Sullivan et al. 2006: 35). Many of these were associated with healing specific ailments, as well as practices of divination (Strang 2004: 89). A number, such as Child's Well in Oxford, were linked to aspects of fertility and said to have the "virtue of making barren women to bring forth" (Masani 1918: 67). In the Post-Medieval period, pins were often thrown into wells to grant wishes but were also used as vessels for casting away diseases in practices of imitative magic (Masani 1918: 117; Jones 1992: 96-107; O'Sullivan et al. 2006: 36; Strang 2004: 89). Many wells and springs were, however, also associated with negative practices, including cursing (Jones 1992: 96), whilst many were also imbued with supernatural properties and haunted by ghosts, witches and fairies (Jones 1992: 124-134).

In this sense, it can be argued that wells mirrored wider aspects of water cosmology that may have included karst caves. Like other forms of man-made underground features, holy wells incorporated a number of subterranean aspects that mirrored cavescapes. Many, were accessed by stairwells and were covered in capstones that may have simulated the darkness of underground environments. This emulation may further be supported by reports of a number of wells that were used inside caves, including a cave on Uchtrie Macken near Portpatrick (Dalyell 1835: 80) and St Molio's Cave, Bute (Black 1884: 173). Receiving the healing power of the well often also required full body submersion in cold water at the base of a subterranean alcove, combining emotive sensescapes of both water and caves.

7.6 Conclusion: complex cave cosmologies?

Evidence of a range of mortuary practices in caves, demonstrates that these sites were likely part of broader practices, including those taking place in watery contexts. Complex caves, such as those containing active waters, served as a focus for the deposition of multiple individuals, as well as extensive artefactual assemblages during the Iron Age and Roman Iron Age. These sites, along with rivers and pools, may have been perceived as portals to the underworld(s) and connected to a range of shared metaphors. Finds of young animals and young children may also point towards concerns of human and animal fertility and rejuvenation. The re-use of some early prehistoric mortuary caves may also highlight the ancestral nature of the underworld. Therefore, deposition in caves may have sought to communicate with these ancestors, as well as ensuring that so-called deviants transitioned to the otherworld.

The construction of artificial underground spaces demonstrates the wider importance of caves in many cosmologies during the 1st millennia. Architectural devices, such as creeps, corbelling and restrictive passageways, may have served to emulate the morphology of caves. The use of storage pits, deep ditches and wells further reflect the continuing interaction with underground spaces.

Chapter 8 Conclusion

By taking a broad chronological approach it has been possible to explore the use of caves across Britain over the long durée. Consequently, this thesis has demonstrated that caves continued to serve as significant locales in the landscapes of the 1st millennia. Overall, 275 caves were identified through a diverse assemblage of material culture, which indicate highly nuanced approaches to a range of different types of caves. Importantly, such assemblages demonstrate that cave-use was intimately related, through the deposition of human remains, metalwork and craftworking debris, to activities taking place in contemporary sites, including settlements and other natural places. As such, caves, and other subterranean spaces, cannot be divorced and marginalised in landscape studies. Rather, as we have seen, human-use of these sites demonstrate the importance of natural features in the formation of worldviews and possibly cosmologies throughout the 1st millennia. The following discussion will outline some of the major implications of the current study and a number of potential insights into the archaeology of the 1st millennia in general.

8.1 Geography and chronology of cave-use

One of the main aspects this study has demonstrated is the important place of caves in certain landscapes. In Britain, accessible caves are confined to areas of limestone karst and exposed coastal shelves. Therefore, cave-use during the 1st millennia was predominantly focused in upland areas and along coastlines with concentrations of activity, identified in the Mendip Hills, the Peak District and Southern Craven, North Yorkshire. This indicates that caves were essential components of land-use in these regions during the 1st millennia.

Despite evidence for widespread use of caves, as demonstrated in Chapter 3, accurately dating such activity was restricted by limitations in archaeological data. The lack of diagnostic Iron Age artefact typologies in northern and central England, for example, has limited the visibility of cave-use during the 1st millennium BC. Consequently, the significant increase in Late Iron Age and early Roman Iron Age activity in caves may partly be because of the introduction of more robust material culture. This reinforces the need to integrate caves within regional chronologies and highlights the potential of systematic dating campaigns using C14 evidence, demonstrated by Iron Age radiocarbon dates obtained during Scotland's First Settlers Project.

In spite of these problems, the thesis has indicated that there is evidence of regional variation in the chronology of cave-use. Whilst the introduction of Roman material culture has implications for interpreting earlier Iron Age use of sites, it also demonstrates that cave-use

was part of broader social processes. The increased deposition of metalwork in caves during 1st and early 2nd centuries AD can be compared to similar practices recorded in settlement boundaries. As we explored in Chapter 3, this indicates that use of caves in areas such as Southern Craven may have been motivated by reactions to social pressures created by greater contact with the Roman world.

A similar interpretation can be proposed for regional variations in cave-use during the Early Medieval period. In contrast to the apparent decline in activity in caves in England, activity in caves appears to increase across Scotland in the second half of the 1st millennium AD. This rise can be explained by the use of caves as hermitages by Celtic Christian communities and the appearance of Pictish art of cave walls. In England, the decline in activity was likely the result of changing worldviews that led to the fearing of natural places as locales imbued with supernatural properties. This suggests that the difference in cave-use between England and Scotland was the result of broader cosmological changes brought about by the introduction of Celtic and Roman Christianity.

Evidence of the regional and chronological variations of cave-use demonstrate that activity in caves was influenced by broader social changes, including Romanisation and the introduction of Christianity. Crucially, this implies that caves cannot be discussed in isolation and that activity in caves must be considered alongside evidence from other contemporary archaeological sites.

8.2 Morphology and cave experience

As we explored in Chapter 2, ethnographic and archaeological accounts of cave-use often emphasise the importance of cave sensescapes in motivating human-use. As such, it becomes clear that caves, and natural places in general, are active agents with their own life histories, capable of influencing, and being influenced by, other agents. Significantly, cave formation processes have led to a wide variety of cave morphologies and associated sensescapes that demonstrate the need for holistic approaches, which combine understandings of deposition with the experience of cave-use.

Across Britain, there are a number of different types of caves located in a range of landscape contexts. Analysis of cave-use took into account this diversity by establishing a classification system, based on the morphology of cavescapes. Through this, it was demonstrated that cave environments significantly influenced human-use. For example, finds of human remains were predominantly recorded in vertical shafts and multi-chambered caves. Rich artefactual

assemblages, indicating periods of votive deposition, were also noted in extensive karst caves, including those that contained water. In contrast, rockshelters and small single chambered caves were typically associated with midden deposits and limited artefactual assemblages, suggesting that these sites may have been used periodically for shelter. Such evidence reveals how communities had specific approaches towards different types of caves, with morphology playing an important role in the selection and use of caves throughout the 1st millennia.

Alongside cave morphology, the position of caves also played a significant role in motivating cave-use. Analysis of cave locations in Chapter 5 identified the contemporary use of multiple caves, often on the edge of settled landscapes. The preference for using caves near areas of transition, such as between valleys and on the interface of land and sea, suggests that the use of these places may have been connected to broader concepts of the landscape. Valley interfaces and coastlines may have been symbolically significant as places of mediation between familiar and unfamiliar worlds. Consequently, the concentration of cave-use in these regions may have been bound to wider attachments to place and physical movement in the landscape.

8.3 Social significance of caves

Throughout the 1st millennia caves were integral places within the lifeways of upland and coastal communities. This is seen not only through the use of different types of caves and their landscape contexts, but also through exploring how caves may have situated within broader cosmologies.

One of the ways in which this can be seen is through the association of cave-use and deposition in watery contexts, demonstrated by the deposition of material in underground waters, such as in Culver Hole, south Wales and Wookey Hole, Mendip. Given the nature of karst, water and caves are closely connected. In the past, this relationship may have led to the blurring of the distinction between underground and underwater. Consequently, deposition in caves and rivers may have served similar purposes and were likely connected to the same metaphors. This is demonstrated by the deposition of human remains and objects, such as metalwork, which may highlight the belief that some caves served as entryways to the underworld(s).

The cosmological importance of caves can also be extended to the use of subterranean boundaries, wells, storage pits and fogous and souterrains (discussed in Chapter 7). This suggests that, like water, the underground was a fundamental part of many communities' worldviews. The intentional simulation of cave environments through the construction of wells

and souterrains also appear to emphasise the cosmological importance of subterranean sensescapes. Rather than being a disconnected and marginal process, cave-use, therefore, may have been an integral part of many cosmologies throughout the 1st millennia.

8.4 Further Work

By taking a holistic approach towards cave-use, which sought to understand the relationship between morphology, landscape and human-use, this study has shown that by integrating caves within studies of archaeological landscapes, we can gain a better appreciation of communities' attitudes to the world around them. This thesis has thus laid the groundwork for broader contextual analyses of cave-use and morphology, relevant for any study of landscapes that may contain caves. The following discussion will outline a number of key areas that would benefit from being developed further, including the need to situate British cave-use within its European context, a broader study of artificial subterranean spaces and a better understanding of the symbolic role of animals in the worldviews of 1st millennia communities.

8.4.1 Contextualising cave-use in European landscapes

Recent perspectives have emphasised the need to contextualise Britain within European archaeological frameworks (e.g. Bradley et al. 2016; Moore and Armada 2011). Recognising the importance of Atlantic seaways as avenues of communication, these studies have argued that in order to assess whether patterns of activity and belief systems were restricted to certain areas, Britain cannot be studied in isolation. Therefore, one of the important avenues for further inquiry is to extend the scope of this study to include cave-use across Northern Europe. Currently, research has often focused on individual site assemblages or certain regional concentrations of activity, namely across Spain (Cerrillo Cuenca et al. 2002; Cerrillo Cuenca et al. 2014; Cruz et al. 2014), as well as in France (Vidal et al. 2000). However, these studies have tended not to approach the morphological and landscape context of cave-use, which, as this thesis has demonstrated, play a significant role in motivating the selection and use of certain caves. One of the key implications of this study has been that similar cave types were used in similar ways, it is important to determine whether this is true in other areas of Europe and to what extent this might represent shared cosmologies. This must also be explored through an analysis of the relationship between caves, other natural places and contemporary archaeological sites. As we have seen, some caves appear to have been attached to broader concepts of landscape, as well as being directly associated with settlements. By incorporating material from Europe, it will be possible to explore the extent in which cave-use was

regionalised. As a result, it may be possible to determine whether the use of caves reflected broader attitudes towards caves across Europe, and subterranean spaces in general.

8.4.2 Underground experiences, natural places and wells

Another important area to develop is understanding the wider nature of underground experiences during the 1st millennia. This thesis has demonstrated that certain aspects of activity were connected to other places that shared similar types of underground and underwater experience. However, more research is needed to better understand how these places may have sought to emulate underground experiences and how they related to archaeological landscapes. A cross-comparative study of morphology and location of underground space, such as souterrains across Scotland, Cornwall and Brittany, could for example, allow for the integration of architectural devices and their sensescapes, which then can be compared to caves.

8.4.3 Wild places & animal worlds

In my discussion of craftworking in cavescapes I explored the potential symbolic nature of animals that either used caves or whose remains were deposited during human-use. From this, I highlighted evidence for the existence of wolves and bears within the landscapes of the 1st millennia, and the possible significance this may have had in the social perception of craftworking identity. Whilst other research has highlighted this through studies of animal remains and artistic representations (Serjeantson et al. 2011; Morris 2011) there has been little focused study on the exploitation of non-domestic animals during the 1st millennia. Despite this, excavations of brochs in Atlantic Scotland, for example, have often produced extensive deposits of wild animal remains, including birds and mammals that suggest that communities continually engaged with these animals. By collating evidence of the exploitation of wild animals, and comparing to data recorded in caves, a study could explore the relational cohesion between communities and animals and their possible cosmological significance.

This study has highlighted the potential of cave-use in providing key insights into the society and landscapes of the 1st millennia. By contextualising material within contemporary archaeological frameworks it has been demonstrated that, rather than being marginalised, caves were often important parts of upland and coastal lifeways. Throughout the 1st millennia, cave-use was highly nuanced with different caves being used for different purposes. Instead of being backdrops to human activity, this suggests that caves were active participants in human negotiations of use. Whilst, smaller and morphologically less complex caves were often chosen

for limited term occupation, extensive karst caves were often sites of significant votive deposition. Like bodies of water, these caves may have been cosmologically significant and attached to a number of metaphors as places of communication with supernatural underworlds. Similar attitudes may therefore have extended to the use of simulated underground spaces, which sought to intentionally simulate cavescape experiences.

Appendix 1: Data Structure

On the DVD are two files- an MS Access database of caves and a shapefile of caves for use in Arc GIS:

- Caves.accdb
    - A Microsoft Access database of caves, including information on cave morphology, location and associated finds
- Caves.shp
    - An ArcGis shapefile of cave all of the caves in the database, created in ARCGIS 10.1, including information on cave location and cave morphology.

MS Access Database

1. **Data Structure**

The Microsoft Access database was created using Microsoft Access 2007 and will not be compatible for use in earlier versions. The relational database is made of 6 tables. The General table is the primary table, which relates to the Cave table which contains information of morphology and the Cave_Use table, which includes data on associated finds:

1) General

a. Includes information including CaveID (Primary Key), cave name, National grid reference, general date of activity, whether the cave has evidence of multi-periods of activity and when the cave was excavated

2) Cave_Use

a. Includes data of find type and date, and where possible find location. FindID acts as the table's Primary Key and relates to three other tables:

3) Human

a. Includes data of human remains found in caves, including MNI counts, sex and age

4) Artefact

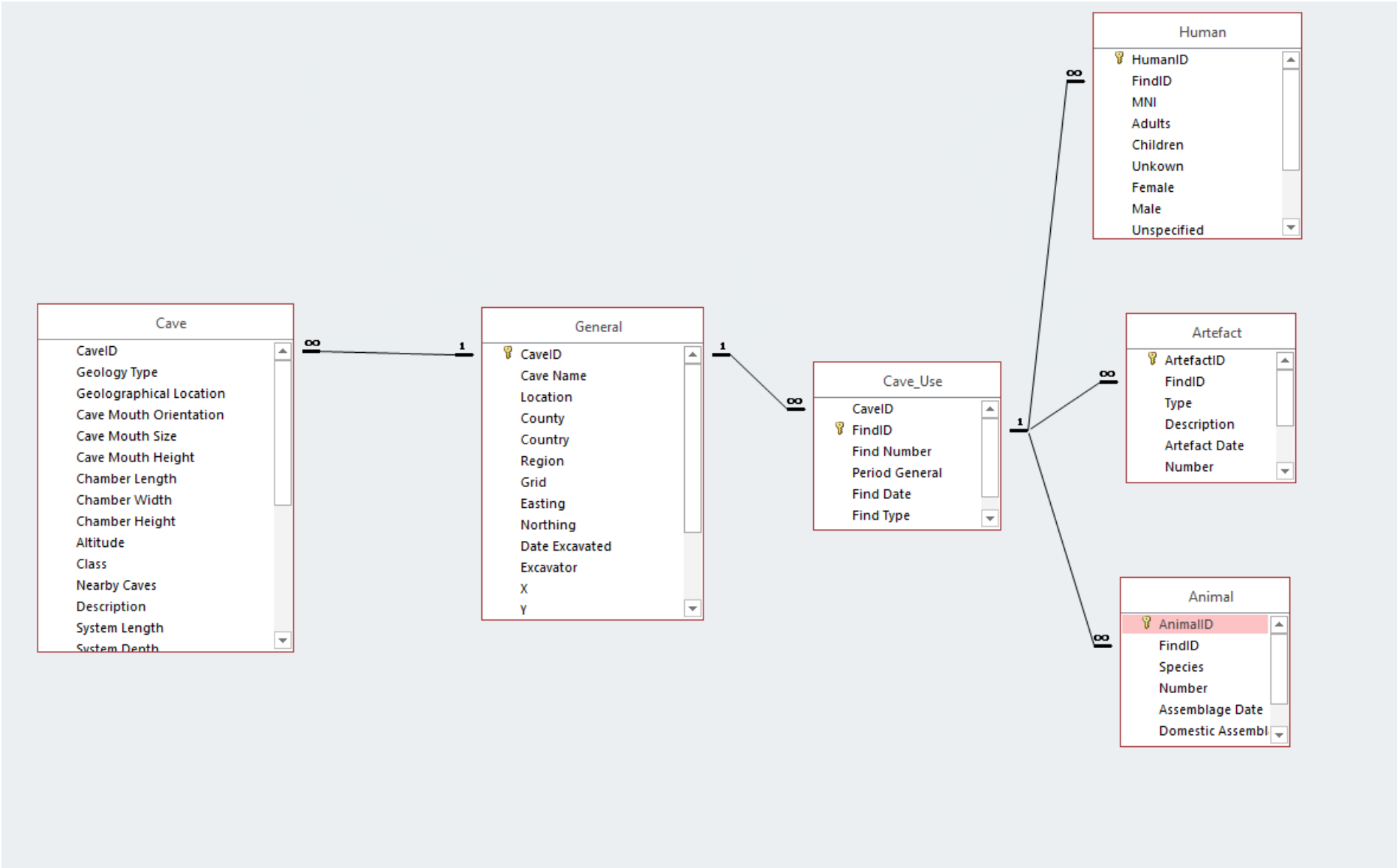
a. Includes further detailed information on artefacts found in the cave, including date and description

5) Animal

a. Includes data on the animal remains reocred in caves, including NMI counts, species and date

6) Cave

a. Associated with the General Table, the Cave table includes data on cave morphology, including cave type, dimensions, location, altitude and cave mouth orientation


Human
HumanID
FindID
MNI
Adults
Children
Unkown
Female
Male
Unspecified
Cave
CaveID
Geology Type
Geolographical Location
Cave Mouth Orientation
Cave Mouth Size
Cave Mouth Height
Chamber Length
Chamber Width
Chamber Height
Altitude
Class
Nearby Caves
Description
System Length
System Depth
General
CaveID
Cave Name
Location
County
Country
Region
Grid
Easting
Northing
Date Excavated
Excavator
X
Y
Cave_Use
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GIS Shapefile

The GIS shapefile was created by exporting the General Table from the Access database. As such, the file contains information of the caves name, general date and location.

Sources of Data

As outlined in Chapter 2, data was gathered through searches of relevant HER records, grey literature and by referencing cave databases. Below are the principal sources of data that were consulted. In Volume 2, references are outlined for each cave.

1. **HERS consulted**

England

- Bath and North East Somerset HER
- Buckinghamshire HER
- Cheshire Historic Environment Record
- Cornwall and Scilly HER
- Derbyshire HER
- Devon & Dartmoor HER
- Durham Historic Environment Record
- Gloucestershire County Council: Historic Environment Record
- Herefordshire SMR
- Lake District National Park HER
- Leicestershire and Rutland HER
- Northumberland Historic Environment Record
- North Yorkshire HER
- Shropshire HER
- Somerset HER

- South Yorkshire HER
- Staffordshire HER
- West Yorkshire Archaeology Advisory Service
- Yorkshire Dales National Park Authority

Wales

- Clwyd-Powys HER
- Dyfed HER
- Glamorgan-Gwent HER
- Gwynedd HER

Scotland

- Canmore (RCAHMS)
- Western Isles SMR

2. Cave databases

England

- Mendip Cave Registry
- Northern Caves volumes 1-3 (Brook et al. 1988; Brook et al. 1991; Brook 1994)
- The Concise Caves of Devon (Oldham et al. 1991)
- The Caves of Cornwall (Oldham 2014),

Wales

- Cambrian Cave Registry
- Welsh Caves Registry: Aberystwyth Caving Club

Scotland

- The Remaining Caves of Scotland (Oldham 2006)
- The Caves of South Western Scotland (Oldham 2005)
- The Caves of Northern Britain (Oldham 1975)
- The Caves of Kintyre and Mid-Argyll (Oldham 2004a)
- The New Caves of Scotland (Oldham 2004b)

General

- Gazetteer of Caves, Fissures and Rock Shelters in Britain Containing Human Remains (Chamberlain et al. 2015)

LiDAR Data

LiDAR data was obtained from Landmap (2014) at 1m resolution for the area around Settle and included grids: SD 76, SD 77, SD 85, SD 86, SD 87. These were used in order to create accurate surface models, in order to perform viewshed and access analysis of Attermire Scar. Other data for digital surface models was obtained using EDINA Digimap Ordnance Survey data.

OS MasterMap Topography Layer [GML geospatial data], Coverage: Argyll and Bute, Updated Jan 2009, Ordnance Survey, GB. Using: EDINA Digimap Ordnance Survey Service. http://edina.ac.uk/digimap.[Accessed 13-14 August 2013]

OS Terrain 50 [ASC geospatial data], Scale: 1: 50,000 Using: EDINA Digimap Service, http://edina.ac.uk/digimap.[Accessed 15 August 2013].

Landmap; The GeoInformation Group. 2014. 1m resolution LiDAR- derived Digital Terrain/Surface Models (DTMs/DSMs) for cities of England and Scotland. NERC Earth Observation Data Centre:
http://catalogue.ceda.ac.uk/uuid/acfa8955414aef710105ef640802b9aa
[Accessed 13 August 2013]

Appendix 2: Regional viewsheds

Appendix 2, stored on the DVD, presents the results of the regional access and viewshed analyses performed on caves in Argyll and Bute and Southern Cravendale. The location of caves in relation to nearby contemporary settlement is also presented.

Appendix 3: Human remains in caves

Stored on the DVD is a table, which outlines the caves that were identified as containing human remains. The table includes information of deposit location and general date of the assemblage.

Appendix 4: Fogous and Souterrains

Chapter 7 discussed the possible emulation of cavescape experiences through a discussion of the architecture of man-made subterranean features. Stored in the DVD, Appendix 4 contains two excel spreadsheets which record the location and morphology of fogous and souterrains.

1. Souterrains
    a. Details the location and morphology of 667 souterrains- data was obtained through searches of CANMORE and the Western Isles SMR record.
2. Fogous
    a. Details the location and morphology of 25 fogous recorded in the Cornwall and Scilly SMR.

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Riddles in the Dark?

The human use of caves during the 1st millennia BC and AD across the British Isles

2 volumes

Volume 2: Caves Catalogue

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Thesis submitted for degree of PhD

Department of Archaeology

Durham University

2016

Region 1: Southern England

In Region 1: Southern England there were **67** caves containing material dating to c.800 BC-800 AD. Many of these caves are located in areas of highly soluble limestone in the Mendip Hills and the Torbyan, Devon. As such, caves are part of active water drainage networks and consist of a range of different types of morphologies, including vertical swallets and multi-chambered karst caves.

42	Fishmonger's Swallet		**164**	Saye's Hole
53	Backwell Cave		**165**	Soldier's Hole
54	Read's Cavern		**166**	Wookey Hole
55	Tickenham Rock Shelter		**167**	Cooper's Hole
56	King Arthur's Cave		**187**	Hay Wood Rock Shelter
57	Merlin's Cave		**188**	Hope Wood Hole
58	Guy's Rift		**191**	Picken's Hole
59	Charthouse Warren Farm Swallet		**193**	Tornewton Cave
60	Chelm's Combe Shelter		**224**	Callow Limewater Cave
61	Long Hole		**225**	Pride Evans' Hole
62	Gough's New Cave		**227**	Dinder Wood Rockshelter
63	Sun Hole		**228**	Scragg's Hole
64	Bone Hole		**229**	White Woman's Hole
65	Totty Pot		**316**	King Arthur's Hall Cave
66	Hangstone Hill Cave		**318**	Little Doward Mine
67	Bracelet Cave		**319**	Symond's Yat East Rockshelter
68	Little Cave		**320**	Royston Cave
69	Tom Tivey's Hole		**321**	Coldwell Cave 1
70	St Cuthbert's Swallet		**322**	Taylor's Wood Cave
71	Rowberrow Cavern		**323**	Worle Cave
72	Browne's Hole		**324**	Fairy Cave
73	Uphill Quarry Caves (2)		**325**	Gough's Old Cave
74	Hyena Den		**326**	Anstey's Cave
75	Badger Hole		**327**	Sennan Cove Cave
76	Ash Hole		**328**	Pixies' Hole
77	Broken Cavern		**329**	Cheston Combe
78	Three Holes Cave		**330**	Purn Hill Cave
79	Spratling Court Farm		**331**	Whitcombe's Hole
80	Weycock Hill		**334**	Uphill Quarry Caves (10)
81	Kent's Cavern		**335**	Waterwheel Swallet
94	Madawg Shelter		**336**	Slocker Hole
162	Great Oone's Hole		**337**	Swildon's Hole
163	Pig's Hole		**339**	Tyning's Great Swallet
			348	Cavall's Cave

Name: Fishmonger's Swallet	**ID:** 42	**HER:** 1344063
Bibliography: Hardwick 1997; Hardwick et al. 2001; Marcucci et al. 2011		
Excavation Date: 1994-2001	**Type:** Vertical Passage	**Altitude (m):** 92
Cave Description: The cave is a vertical shaft and is characteristic of a number of swallets found in the exposed limestone pavements in the Mendip Hills and North Yorkshire.		
Excavation/Assemblage Discussion: The site was excavated as part of the Time Team TV programme, which uncovered deposits of Iron Age and Roman Iron Age pottery, human and animal bone. Original interpretation of the site was thought to be natural accumulation on the cavern floor from rubbish deposits above the entrance, although this has been recently questioned (Marcucci et al. 2011: 181- 182). In their discussion of the use of the vertical swallet at Read's Cavern (**54**), Marcucci et al. (2011:182), suggest that finds at the base of Fishmonger's Swallet may have been part of ritual use of swallet holes in the Mendip Hills. **Human Remains**: At least 4 individuals were recovered from the shaft, with samples of human bone from two individuals indicating that these were deposited sometime during the Late Iron Age or Early Roman Iron Age. A skull, belonging to a young adult female in her late teens, was smashed at the back and a human femur was split to extract marrow.		
Chronology: Deposits of archaeological material, including human remains, pottery and metalwork, were reported from the vertical entrance shaft to the caves, which can be compared to regional swallet use during the late 1st millennium BC and early 1st millennium AD.		
Radiocarbon Dates: Beta-150613 Human remains, 1940 BP **88 cal BC- 230 cal AD** Wk-8222 Human remains, 1990 BP **169 cal BC- 129 cal AD**		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 100 BC- 100 AD	

Name: Backwell Cave	**ID:** 53	**HER:** 194850
Bibliography: Brangian et al. 1991a: 118; Tratman et al. 1938		
Excavation Date: 1936-1937	**Type:** Single Chamber	**Altitude (m):** 90
Cave Description: The cave, orientated to the west, was formed along a spar vein in a limestone recess on a quarry face. The northern wall of the cave continues outside the cave to form a low cliff which receives the afternoon sun and is in turn the driest part of the cave. The cave mouth is c.1.2 metres wide with the chamber being c.2.3 metres deep, with a maximum width of c.1.6 metres at the centre.		
Excavation/Assemblage Discussion: Excavations focused on 3 areas of the cave- an old quarry spoil help, a disturbed deposit of bone and the cave floor. ***Spoil Heap***: Fragments of human bone along with Roman pottery- a black vessel dating to the 1st century AD- were found on the spoil heap (Tratman et al. 1938: 60). ***Bone Deposit:*** Excavation of the bone deposit, uncovered a deposit 1.2 metres below the modern cave floor and c.0.2 metres deep, which was thought to extend throughout the entire cave. It contained a mixture of animal and human bone and charcoal (Tratman et al. 1938: 60). ***Cave Floor:*** A large pit, found on the northern side of the cave, yielded a concentration of human bone, which was identified as Tratman et al. (1938: 60-61) as a badger hole. A further small depression in the north-eastern corner of the cave contained fragments of a human skull, scapula, vertebra and a phalanx; a small fragment of Iron Age pottery was also recorded (Tratman et al. 1938: 61). **Human Remains**: The remains of at least 18 individuals were recorded by the excavators, some of these bones were reported to have 'ancient cut marks' (Tratman et al. 1938: 62). One of the skulls recovered from the cave had a healed depressed fracture in the left front-parietal area (ibid.). Analysis of the jaws recorded the presence of a number of conditions including a dentigerous cyst in the jaw of a child, horizontal hypoplasia on the teeth of two children (ibid.). **Stonework**: A limestone conical shaped spindle whorl was found on the old spoil heap, thought to be Roman in date (Tratman et al. 1938: 64). **Pottery**: A spindle whorl was made of a flat disc of Roman pottery (Tratman et al. 1938: 64). A vessel of black pottery was also assigned to the first century AD and an indeterminate number of sherds were thought to have been 2nd-1st century BC in date (Tratman et al. 1938: 64). **Animal Remains**: A limited animal bone assemblage was recorded by the excavators with sheep and ox dominating the distribution. Other bones include dog, horse, pig and red deer (Tratman el al. 1938: 69). **Bonework**: A single worked bone point made of a metatarsal of a sheep/goat was regarded as Iron Age in date (Brangian et al. 1991a: 118; Tratman et al. 1938: 63).		
Chronology: Sherds of 2-1st century BC and 1st century AD pottery indicates that activity in the cave likely took place during the Late Iron Age. Other finds, including the bonework, human remains and animal bones may be of similar date.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** c.100 BC-100 AD	

Name: Read's Cavern	**ID:** 54	**HER:** 194407
Bibliography: Langford 1922, 1923; Marcucci et al. 2011		
Excavation Date:1919-1931; 2010	**Type:** Multi-Chamber>100	**Altitude (m):** 151
Cave Description: Read's Cavern is a complex karst system at Burrington Combe, Somerset. It is approximately 1.2 miles in length, made of a steep passage leading to a large chamber and a series of passages.		
Excavation/Assemblage Discussion: Excavations between 1919-1931 focused on surface collection and the excavation of the trench to test the depth of the Iron Age deposit within the central cave chamber. This uncovered a series of intact deposits near the entrance of the cave. The stratigraphy was made of: 1) Flowstone deposit- 0.02 metres deep, 2) Black mud ,3) Cave floor The apparent prehistoric entrance to the cave, now collapsed, was excavated in 1929. From these, a possible doorway and stairwell were identified leading into the main chamber. Excavations within this chamber, uncovered a deposit of black material with charcoal and a reddish brown layer over a deposit of tightly packed boulders. Langford (1923) considered this to be a blacksmithing workshop. Re-excavation of the cave's central chamber focused on the charcoal rich deposit (Marcucci et al. 2011) and found no evidence of in-situ burning. A hearth made of a large flat stone indicated by the previous excavation was questioned by the excavators in 2010. The charcoal rich deposit was therefore considered a secondary deposit of midden-like material during the mid-1st millennium BC (Marcucci et al. 2011: 174). **Human Remains**: 13 fragments of human bone from 4 individuals were found within the charcoal rich deposits and the gravelly clay near the prehistoric entrance. Evidence of butchery was recorded on one human fibula. During the 2010 excavations, two human teeth were also recovered from the charcoal deposit. It is possible that the human remains were deposited into a swallet like aperture above which later found its way down into the cave after the entrance had collapsed (Marcucci et al. 2011: 177). **Animal Remains**: 128 pieces of animal bone were recovered in 2010 including sheep/goat, pig, dog, goat, ox and horse (Marcucci et al. 2011: 175). Along with these were also roe and red deer, wild boar, badger, hare, fox, wild cat, field mouse, rat, bat, pigeon and other bird bones. Only a small number of bones had cut-marks, the majority being rib bones suggesting butchery. Toe bones also comprised much of the animal bone assemblage suggesting to the excavators that the majority of animal bone was a secondary deposit, rather than a site of butchery (Marcucci et al. 2011: 176). **Bonework**: A worked bone toggle of wild boar tusk was found by the 2010 excavators (Marcucci et al. 2011: 176). **Pottery:** 23 fragments of pottery were recovered with a further 100 being recorded during the 1920s excavation (Marcucci et al. 2011: 177). These were identified as similar to Glastonbury Ware and was primarily recovered in the charcoal rich deposit. **Metalwork**: An early La Tene brooch, dating between 450-20 BC was found within the charcoal rich deposit (Marcucci et al. 2011: 177).		
Chronology: Finds from the cave indicate a late 1st millennium BC use of the cave, demonstrated through Glastonbury Ware and the early La Tene brooch recorded in the charcoal rich deposit.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 200 BC- 43 AD	

Name: Tickenham Rock Shelter	**ID:** 55	**HER**: 195559
Bibliography: Branigan et al. 1991a: 144; Savory 1924; Pullan 1981		
Excavation Date: 1924; 1979-1980	**Type:** Rockshelter	**Altitude (m):** 76
Cave Description: The rockshelter, orientated to the south, is 6 metres wide and 5 metres long.		
Excavation/Assemblage Discussion: **Pottery:** Excavations in 1979-80 uncovered a collection of 30 Roman Iron Age sherds thought to date between the 3rd-4th centuries AD. Iron Age pottery was recovered in the 1924 excavations characterised by coarse sherds with faint incised lines (Savory 1924: 175). **Human Remains:** At least 3 individuals were recorded comprising of 2 adults and one child, which were found 0.2 metres below the modern cave surface (Savory 1924: 174). These were represented by two halves of lower jaws and an ulna. **Bonework**: A small comb was found which were similar to a number found at Wookey Hole (Savory 1924: 175) and further considered Iron Age by Branigan and Dearne (1991a: 144).		
Chronology: Material of 3rd-4th century AD date indicates Roman Iron Age use of the rockshelter, whilst the comb and a sherd of Iron Age pottery suggest limited use of during the late 1st millennium BC.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 43 AD; 200-300 AD	

Name: King Arthur's Cave	**ID:** 56	**HER**: 109668
Bibliography: ApSimon 1992, 1994a, 1994b; Branigan 1991a: 157; Taylor 1928		
Excavation Date: 1870-1871; 1926-1927;1952; 1994-1997	**Type:** Multi-Chamber	**Altitude (m):** 123
Cave Description: King Arthur's Cave is located on a large platform with two entrances, orientated towards the north-west, leading to two chambers, which are separated by an outcrop of stone. The second chamber is accessed from the outside via a small entrance 0.5 metres wide and via a passage connected to the entrance to the first chamber.		
Excavation/Assemblage Discussion: Excavation in 1926-1927 focused on the old spoil heap, the platform outside the cave and the cave itself. The platform contained a humic layer between 0.23-0.46 metres deep that contained Roman, Iron Age, Bronze Age and Neolithic material 1.83 metres from the cave entrance (Taylor 1925: 65). In the passage, Roman material was also identified in a mixed deposit. **Pottery:** A few sherds of Roman pottery were recorded in the cave, including a fragmentary spindle-whorl made of Samian ware and a number of third century sherds (Branigan 1991a: 157). Iron Age pottery was also recorded by the excavator (Taylor 1928: 65) and in the SMR (Gloucestershire 7140). Revisions of the pottery count include 5 Iron Age sherds and 32 vessels dating mostly to the 3rd-4th century AD (ApSimon 1992: 224). **Animal Remains**: Within the mixed spoil heap remains of sheep/goat, pig, deer, ox, brown bear, badger, hedgehog and river mussel were recorded (ApSimon 1992: 224). **Human Remains**: Human bone was recorded in the spoil heap, which later provided a Neolithic radiocarbon date. A few fragments of human skull were found in the passageway (ApSimon 1992:230).		
Chronology: Material recovered from the cave suggests that activity may date to the Iron Age and Roman Iron Age between the 3rd and 4th centuries AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 43 AD; 200-300 AD	

Name: Merlin's Cave	**ID:** 57	**HER**: 109615
Bibliography: Barton 1996; Branigan et al. 1991a:167-169; Hewer 1926a, 1926b; Philips 1935		
Excavation Date: 1924-1929;1996	**Type:** Single Chamber	**Altitude (m):** 68
Cave Description: The cave, located on a limestone cliff above the Wye, is orientated towards the south-west. Its entrance is c.3.0 metres wide and leads to a passage that descends into a lower chamber with an alcove off to the east. A smaller chamber and two rockshelter flank the cave on the east, which produced no archaeological finds.		
Excavation/Assemblage Discussion: Excavation of the cave between 1924-1929 focused on the entrance to the cave and the alcove off the main entrance passage. Within the alcove Iron Age and Roman Iron Age material was found associated with a hearth deposit. Hewer (1926b: 220) considered these to be late 1st millennia BC in date**.** In 1996 test pitting focused on sediment near the west wall close to the entrance, which recovered fragments of undated human crania (Barton 1996: 269). **Human Remains**: A number of small bones, teeth of both adults and children were recorded within the cave (Hewer 1926b: 216) with fragments of a human skull being found towards the rear of the cave, embedded in stalactite (Hewer 1926a: 148). In total, five adults and a child were recovered and were considered to date to the Iron Age or Roman (Philips 1935: 14). Fragments of human crania were recovered from sediment on the west wall near the entrance (Barton 1996: 269). **Bonework**: A small assemblage of worked bone was recovered from the cave, which were compared to examples found at Wookey Hole (**166**), Heathery Burn (**3**) and Glastonbury Lake Village (Hewer 1926b: 216-217). The assemblage included a bone point and pin of Iron Age date made of sheep/goat bone (Hewer 1926b:216), two Late Bronze Age bone spatula (Hewer 1926b: 217) and a bone peg (Hewer 1926b: 220). A number of rough bone pins and a diamond shaped bone button were also found in the lower chamber (Philips 1935: 13). A weaving comb was also recorded (Philips 1935: 20) along with two spindle whorls and a gaming piece (Philips 1935: 20). A number of other bone points were also found along with a perforated canine of a dog, thought to be Palaeolithic in date. **Metalwork**: A corpus of Iron Age and Roman Iron Age metalwork was found. Iron Age metalwork included a bronze slide for a bridle and razor, which were thought to date to the 1st century BC (Branigan et al. 1991a: 169). The majority of metal artefacts however were dated to the Roman Iron Age. Within the lower chamber, a pair of bronze tweezers, finger ring, and pins were found along with an iron pennannular brooch and a Roman block key. A roll of lead, an oblong piece of lead and a lump of oxidised lead were also found suggesting that lead smelting may have taken place inside the cave (Branigan et al. 1991a:168; Philips 1935: 23; Tratman 1966). **Pottery:** Finds of pottery included a Bronze Age beaker (Hewer 1926b: 218), Iron Age pottery (Hewer 1926a: 150) and Roman Iron Age black-burnished ware and imitation samian ware (Philips 1935: 12-13, 30). Pottery was recorded in both the lower chamber and alcove associated with the hearth. **Beads**: Two amber beads were also found inside the cave (Hewer 1926b: 218). **Stonework**: A stone hone, a haematite polisher and a sandstone spindle whorl were reported to have been found in the cave (Hewer 1926a: 150). A kimmeridge shale bracelet was also found near the entrance to the alcove (Philips 1935: 21). **Glass:** Fragments of Roman glass were reportedly found in the cave (Branigan et al. 1992: 168). **Coin**: Roman coins include a coin of Tetricus (271-274 AD) or Victorinus (269-271 AD) and a coin of Constantine the Great (306-337 AD) (Hewer 1924: 151). A barbarous coin (330-337 AD) was also found along with a forgery plated denarius of Vespasian 71-72 AD date (Philips 1935: 24).		
Chronology: Artefacts found during excavation of the cave indicate that the site was used during the Iron Age and Roman Iron Age. Diagnostics forms of Iron Age pottery and a bronze bridal slide and		

razor suggest that this may date to the late 1st millennia BC, which may also suggest a continuity of use through into the 1st century AD, evidenced by the forged denarius of Vespasian. Further finds of Black-Burnished pottery, Imitation Samian Ware and coinage indicate a 3rd-4th century AD use of the cave.
Radiocarbon Dates:
Suggested Broad Date: IA; RIA | **Suggested Date Range:** 800 BC-100 AD; 200-410 AD

Name: Guy's Rift	**ID:** 58	**HER:** 208486
Bibliography: Buxton 1926; Hewer 1926c, 1927		
Excavation Date: 1924	**Type:** Multi-Chamber	**Altitude (m):** 112
Cave Description: The cave consists of a 22.86 metre horizontal rift accessible from both north and south in a limestone cliff at the top of a steep slope. The rift is entered by a 3.6 metre climb from ground level. The southern end of the rift has been quarried away so it is unknown whether the entrance was larger.		
Excavation/Assemblage Discussion: Excavation of the cave in 1924 uncovered the following stratigraphic sequence within the rift: 1) C0.6 metre of 'dark earth' with modern debris (Hewer 1927: 230) 2) C.0.3 metre containing archaeological remains of charcoal, burnt bones, pottery and human remains 3) Barren clay soil **Human Remains:** 4 adults and 3 children were found within the cave (Hewer 1927: 231). The children were aged between 4-11 years old. These were found 7.9 metres into the northern side of the rift at a narrowing of the junction where "no daylight penetrates beyond this point" (Hewer 1927: 231). The skull fragments of the child were found lying below an oblique flat stone laying across the passage. **Pottery**: Pottery and burnt bone were recorded for 6 metres into the cave. Two fragments fitted together made of a coarse pot with a thick paste with a slightly curved rim (Hewer 1927: 232). Rim fragments of two other vessels were found without decoration with incurved rim and a slight lip along the inner side. The other has a horizontal incised line below the rim, similar to ceramics found at Fifield Bavant, Wiltshire thought to be Early Iron Age in date (Hewer 1927: 233). **Animal Bone**: Rib bones belonging to a cow were cut by distally by a sharp blade were found with some charred by fire and the long bones split longitudinally, suggesting butchery took place within the cave (Hewer 1927: 233). Wild boar and sheep were also plentiful in the 'occupation layer' (Hewer 1927: 233). Several jaws of dog were also found with wild mammals including badger, weasel, vole, mice, shrews, rats and otters.		
Chronology: Finds of pottery similar to that dated to the Early Iron Age at Fifield Bavant suggests that activity within the cave can be date to the first part of the 1st millennium BC. However, it is not clear whether this pottery was contemporary to the burial of 8 individuals.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800-400 BC	

Name: Charterhouse Warren Farm Swallet	**ID:** 59	**HER:** 194741
Bibliography: Audsley 1988; Branigan et al. 1991a: 123-124; Everton 1975; Levitan et al. 1989		
Excavation Date: 1972-1976; 1983-1986	**Type:** Vertical Passage	**Altitude (m):** 242
Cave Description: The limestone swallet is accessed by a vertical rift in an old limestone quarry. Six metres from the entrance there is a horizontal passage, where a single human inhumation was found. At the base of the shaft there is a small crawl which opens to another vertical rift that leads to the Bone Chamber and Mitchell's Chamber. The rest of the cave is attached to an extensive karst system.		
Excavation/Assemblage Discussion: Excavation of the cave system identified a series of two deposits of non-local stone, which were thought to represent the deliberate infilling of the shaft during Bronze Age, which was reopened during the Iron Age. Excavations between 1972 and1976 focused on the entrance shaft. Finds of animal bone in the Bone Chamber and Mitchell's Chamber were thought to have been deposited through human action because of the condition of the bones. Dating of the deposits within the entrance shaft relied upon radiocarbon sampling of auroch bone dating to the Bronze Age found at a depth of 11 metres. From this it was suggested that there was a hiatus between the Bronze Age and Iron Age use of the cave (Levitan et al. 1989: 212). **Human Remains**: An inhumation of a middle aged male was found in a side passage, 6 metres below the entrance. Associated with the remains were sherds of 1st century AD Samian Ware and hobnails, which led the excavators to suggest that burial took place sometime during the late 1st century AD (Audsley 1988: 176). In the upper fill of the entrance shaft, fragmented remains of at least 28 individuals were also discovered the majority of which were dated to the Bronze Age. Below the entrance a human humerus found in Mitchell's Chamber was also radiocarbon dated between 375-41 cal BC (SRR-3450), suggesting Iron Age use of the system. **Animal Remains:** A fragment of horn-core and an auroch skull were found 11 metres down the entrance shaft (Everton 1975: 76). On the horn corn there were 5 transverse, incised cuts on the external surface. Two cuts were distal and contiguous, whilst the other 3 were parallel in nature. Two Bos primigenius skulls were found, both mature, whilst a bos longifrons was also found. The excavators suggested that the auroch had fallen into the rift and that hunters may have cut the horn off as a trophy, given that there was no evidence of butchery or ante-mortem injury (Everton 1975: 79). An articulated dog skeleton was found in the upper cave, below the entrance shaft and thought to be deliberately deposited sometime after the Iron Age given the large size of the animal (Audsley 1988: 236).		
Chronology: Radiocarbon sequences suggests that the shaft served as a focus of the deposition of human and animal remains during the Bronze Age beginning in c.3100-2500 BC, which was later infilled between c.2500-2150 BC (Levitan et al. 1989: 392). A human humerus found in Mitchell's Chamber indicates that the cave was reopened sometime during the Late Iron Age, whilst finds of Roman Samian Ware and hobnails with an inhumation buried off the entrance shaft, indicates activity taking place during the 1st century AD (Levitan et al. 1989: 393).		
Radiocarbon Dates: SRR-3450 Human Humerus from Mitchell's Chamber 2145±65 **375-41 cal BC**		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 0-100 AD	

Name: Chelm's Combe Cave	**ID:** 60	**HER:** 194566
Bibliography: Anon 1931; Balch 1926; Brangian et al. 1991a: 135; Harrison 1976, 1989		
Excavation Date: 1925-1926	**Type:** Single Chamber	**Altitude (m):** 111
Cave Description: Chelm's Combe Cave is a rockshelter orientated south/southwest, now partially quarried found on the side of Chelm's Comb Quarry.		
Excavation/Assemblage Discussion: **Pottery**: Roman pottery is recorded by Brangian and Dearne (1991a: 135) with dark ware and sherds of dark grey pot. **Coins**: Coinage including those belonging to Theodora (305-306 AD), Constantine the Great (306-337 AD), Constans (337-350 AD) and Constantine II (350-361 AD) (Brangian et al. 1991a: 135) **Metalwork**: An Auccisa brooch was found thought to date pre c.70 AD (Branigan et al. 1991a: 135).		
Chronology: Finds from the cave suggest multiple phases of use at the cave, indicated by finds of an early 1st century AD Auccisa brooch and coins of 3rd-4th century AD date.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 0-100 AD; 200-410 AD	

Name: Slitter & Long Hole Cave	**ID:** 61	**HER:** 194590
Bibliography: Branigan et al. 1991a: 130-131; Tratman 1966		
Excavation Date:1887-1888; 1911; 1960; 1977	**Type:** Multi-Chamber	**Altitude (m):** 95
Cave Description: The Slitter is a scree slope leading to Long Hole Cave, 46 metres above the valley floor. The cave lies above Gough's Cave (**325**) and is part of a higher level system of underground drainage. The cave mouth is approximately 6 metres high and 3 metres wide, which leads to a central chamber. An opening in the cave floor to the right of the entrance leads down into Gough's Old Cave (**62**).		
Excavation/Assemblage Discussion: **Metalwork**: Late prehistoric metalwork found in the cave includes a double-looped Bronze Age palstave and an Iron Age brooch (Tratman 1966: 42). An Iron Age brooch was recovered from the cave. Branigan and Dearne's catalogue (1991a: 131) includes a rich corpus of Roman material that was found in the cave and within the debris of the scree slope. Finds included 2 finger rings and 3 bracelets found in the cave, whilst 7 Late Roman bracelets, 2 fasteners, decorative chain link, necklace fastener, small terret ring, pin shaft, tweezers, 31 sheet and bar fragments and 2 small hooks were found in the Slitter. **Pottery**: A minimum of 36 vessels were found in the cave and on the scree slope (Tratman 1966: 42). This included a range of ollae, a fragment of Mortarium, Congresbury Ware and a Black-Burnished bowl (Branigan et al. 1991a: 131). **Coins**: At least 375 coins were found in the cave belonging to the reigns of 28 Emperors (Branigan et al. 1991a: 131). The majority of coins dated to the 4th century and are thought to have been part of a hoard (ibid.). **Stonework**: An upper stone of a rotary quern was found on the Slitter (Branigan et al. 1991a: 131).		
Chronology: Evidence of cave-use at Long Hole is demonstrated by finds of Iron Age and Roman Iron age artefacts, which included an Iron Age brooch of uncertain form and date, along with metalwork that included late 4th century material.		
Radiocarbon Dates:		
Suggested Broad Date: IA;RIA	**Suggested Date Range:** 1000 BC- 43 AD; 100-410 AD	

Name: Gough's Cave	**ID:** 62	**HER:** 194593
Bibliography: Beasley 1987; Beck 1965; Branigan et al. 1991a: 128- 129; Donovan 1955; Jacobi 1985; Parry 1929a; Parry 1929b; Tratman 1961; Tratman 1975		
Excavation Date:1890-1898**;**1903,1927,1928-1931,1954-8,1968	**Type:** Multi-Chamber>100	**Altitude (m):** 84
Cave Description: The cave entrance is orientated northwest, leading to a main passage between 5 and 9 metres wide and 200 metres long, ending in two large chambers. After heavy periods of rain, the cave becomes a resurgence with water sloping downwards from the entrance for some 50 metres before draining to passages further below.		
Excavation/Assemblage Discussion: The complex sequence of excavations has been summed by recent work by Donovan (2006). Iron Age finds were recorded in layers 7, 8 and 9, confused with Palaeolithic materials by Parry in the Creswellian Cave Earth. This was used to suggest a long period of cave-use rather than isolated use of the cave mouth (Donovan 2006: 31), however issues of inconsistent stratigraphy recorded during the 1920 excavations mean that the exact depth and dating of stratigraphy is impossible. **Animal Remains**: A maxilla of wild boar found in the cave earth provided a radiocarbon date of 135-410 cal AD (OxA 815). **Human Remains**: The remains of so-called 'Cheddar Man' were found in the cave underneath a layer of stalagmite and thought to be Palaeolithic in date, although a number of stratigraphic issues have been raised (Tratman 1975). Other human bones found in the cave, showed signs of modification and are of unclear date (Oakley 1955; Tratman 1975: 14-15). However, a human bone recovered from the cave entrance did provide a radiocarbon date of 1210-853 cal BC (OxA-1202). **Pottery**: Iron Age pottery was recorded in layers 8 and 9, above layers containing Roman Iron Age pottery (Parry 1929a: 105; Tratman 1975: 13). Glastonbury Ware was found in the upper cave layer along with Roman Iron Age pottery (Donovan 2006: 31). Roman Iron Age pottery included Black Burnished and grey wares and ollae (Branigan et al. 1991a: 24). **Bead**: A bead with three bosses of incised circles was recorded (Brangian et al. 1991a: 135). **Coinage:** Coins belonging to Constantine II (Gloria Romanum) (337-340 AD), Valentinan (364-375 AD) and 2 coins of Valens (364-375 AD) were found in the cave- indicating a date range of 337-378 AD (Branigan et al. 1991a: 129). **Metalwork**: A bronze toe ring was regarded as Iron Age in date (Parry 1929b). **Bonework**: Worked fragments of bone and red deer antler were also thought to be Iron Age or Roman in date (Jacobi 1985: 108) **Stonework**: Three whetstones, 7 spindle whorls and 2 spindle whorl blanks were also found (Branigan et a. 1991a: 129).		
Chronology: A radiocarbon dated human bone from the cave entrance indicates activity during the Late Iron Age, whilst a maxilla of a wild boar and coins recovered from the cave earth/breccia at the entrance also suggested Roman Iron Age activity between during the 4th century AD.		
Radiocarbon Dates: OxA-815 Maxilla of *Sus Scrofa*, from cave breccia 1740±60 BP **135-410 cal AD** OxA-1202 Human Bone, from cave entrance 2850±60 BP **1210-853 cal BC**		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 1200 BC- 410 AD	

Name: Sun Hole	**ID:** 63	**HER**: 194596
Bibliography: Barker et al. 1971; Branigan et al. 1991a: 134; Collcut et al. 1981; Henderson et al. 1928; Tratman 1955		
Excavation Date: 1927-1928; 1951-1953; 1968	**Type:** Single Chamber	**Altitude (m):** 83
Cave Description: The cave is located directly above the Slitter (**61**), accessed by climbing a sheer cliff and scree slope. The cave is located 45 metres above the present road with an entrance 4 metres wide with the cave itself being 24 metres in length. The cave is formed of a single passage orientated towards the south.		
Excavation/Assemblage Discussion: Tratman's excavations between 1951 and 1953 focused on the entrance of the cave and inner passage where most of the Roman material was recorded. Stratigraphy recorded included: 1) Humic layer made of stones 0-0.3 metres deep, located on the platform outside the cave mouth 2) Dark earth and stony layer 0.3-0.6 metres in depth 3) A 'hearth' made of burnt wood ash that spread from a compact area across the platform, 0.22-0.3 metres thick spreading into the cave for a distance 3.7 metres **Pottery**: Iron Age pottery was represented by six vessels similar to those found at Glastonbury and Mere Lake Village, Read's Cavern (**54**) and Wookey Hole (**166**) (Tratman 1955: 88). A number of sherds were also thought to be Late Bronze Age or Early Iron Age in date- one similar to a black red pottery recorded at All Canning's Cross (ibid.). Pottery recorded from the hearth layer had affinities to Neolithic/Bronze Age types. Eight vessels, including Black Burnished and Upchurch Ware found above the hearth layer date to the Roman Iron Age (Branigan et al. 1991a: 134), **Coinage**: Roman coins of Contans (337-350 AD), Tetricus I (271-274 AD), a forgery of Tetricus I and a Crescentic fragment were recovered (Branigan et al. 1991a: 134). **Stonework**: A shale bracelet fragment was recorded by Branigan et al. (1991a:134). **Human Remains**: Possible burials were located on the eastern wall of the cave with some coming from the hearth and upper layers of the cave (Tratman 1955: 87). These included two adults and two children.		
Chronology: Finds from Sun Hole indicate both Iron Age and Roman Iron Age activity within the cave. Pottery including sherds dated to the Early Iron Age as well as to the Late Iron Age, suggest periodic use of the cave during the 1st millennium BC. Sherds of Upchurch Ware, could also indicate a 3rd-4th century AD use of the cave.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 900 BC- 43 AD; 100-410 AD	

Name: Bone Hole	**ID:** 64	**HER:** 194636
Bibliography: Cox 1976; Pengelly 1870		
Excavation Date: 1850s;1924;1967	**Type:** Single Chamber	**Altitude (m):** 171
Cave Description: The south facing cave is made of a steep descent into a thin fissure leading to a 50-metre-long chamber.		
Excavation/Assemblage Discussion: The cave was subject to piecemeal excavations and there is little information on the material found. **Pottery:** An almost complete pot, thought to date to the Late Iron Age, was found with burn marks (Cox 1976). **Human Remains**: A number of human remains were reported to have come from the site, below the entrance slope with one skull apparently having its cap removed (Cox 1976). It is unclear what date these remains are.		
Chronology: A complete pot indicates that activity within the cave occurred sometime during the Late Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 400 BC- 43 AD	

Name: Hangstone Hill Cave	**ID:** 66	**HER**: 195588
Bibliography: Branigan et al. 1991a:150		
Excavation Date:1892-1893	**Type:** Single Chamber	**Altitude (m):** 145
Cave Description: The cave is a narrow fissure 3 metres high and 1 metre wide, being 7 metres in length.		
Excavation/Assemblage Discussion: Wolf and sheep bones were recorded in excavations in 1892/3, along with some Roman pottery above levels of cave bear bones. Branigan et al. (1991a:150) suggest that further finds of a sword, pottery, and fibula may have also been found in the cave, although this cannot be confirmed.		
Chronology: The material found in the cave is unknown and can only be tentatively to the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:**43-410 AD	

Name: Bracelet Cave	**ID:** 67	**HER:** 197104
Bibliography: Brangian et al. 1991a: 150; Haldane 1969; Mason 1972a, 1972b		
Excavation Date: 1955	**Type:** Multi-Chamber	**Altitude (m)**: 145
Cave Description: The cave is c.3.66 metres deep and is close to, and often confused with Hay Wood Hole, which is a separate cave as recorded in the HER records. The cave has a large entrance passage with two high level entrances at the rear. A hole in the floor, c.3.7 metres deep leads to two small chambers connected by a narrow squeeze (Balch 1911: 45).		
Excavation/Assemblage Discussion: **Pottery:** Pottery dating to the 1st or 2nd century AD was found with the remains of at least 9 individuals within the cave (Somerset 24334) **Metalwork:** A Mid to Late Bronze Age trumpet ended gold bracelet was found outside the cave, 0.15 metres from the entrance, 0.6 metres below the surface (Somerset 24334). The bracelet was found in 1955 (Haldane 1969: 99). The finder stated that the gold bracelet was found in the cave mouth, in good condition and belongs to a group to a restricted group of bracelets similar to that found in the Portfield Hoard (Haldane 1969: 101). **Human Remains**: Fragmentary human remains were recorded inside the rockshelter belonging to at least 9 individuals, associated with Roman Iron Age pottery of 1st-2nd century AD date (Somerset 24334). Branigan et al. (1991a: 150) suggest that these are likely Bronze Age in date. Although it must be noted that confusion with Hay Wood Cave nearby, which was unrecorded by Branigan and Dearne, suggests that the burial maybe date to the Roman Iron Age.		
Chronology: A find of a trumpet ended gold bracelet stylistically similar to those recorded in the Portfield Hoard suggests that the cave was in use sometime between 1000-800 BC. Further finds of 1st-2nd century AD Roman pottery also suggests that the cave was used in the early 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: LBA;RIA	**Suggested Date Range:**1000-800 BC; 43-200 AD	

Name: Little Cave	**ID:** 68	**HER:** 1159392
Bibliography: Branigan et al. 1991a: 139; Branigan et al. 1992: 104		
Excavation Date:1907-1922;1950	**Type:** Rockshelter	**Altitude (m):** 52
Cave Description: The small rockshelter is located on the right side of Ebbor Gorge		
Excavation/Assemblage Discussion: A human burial , thought to belong to the Neolithic was recorded along with 4 sherds of Roman Iron Age pottery.		
Chronology: Four sherds of unknown type and date were considered to date to the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Tom Tivey's Hole	**ID:** 69	**HER:** 202928
Bibliography: Branigan et al. 1991a: 145; Barret 1966a, 1966b, 1967		
Excavation Date: 1958-1961	**Type:** Rockshelter	**Altitude (m):** 172
Cave Description: The rockshelter orientated towards the West is 4 metres wide and 2.5 metres high with the shelter being 4.5 metres long.		
Excavation/Assemblage Discussion: Five stratigraphic layers were recorded by the excavators: 1) A layer of humic matter with fragments of limestone that contained modern and medieval material down to a depth of 0.16 metres 2) A layer of friable silt-loam including a sherd of Iron Age pottery, Roman Iron Age pottery, charcoal and a gold band (Barrett 1965: 13). A Bronze Age arrow head was also found at the interface between layer 2 and 3. Human bones were also recorded in the layer. 3) A disturbed layer with a mix of material and clay was found along with Neolithic material and most of the human bone found in the cave (Barrett 1965: 14). 4) Pale yellow soil with little evidence of archaeological activity 5) Sterile layer of angular limestone fragments **Human Remains**: Fragments of human bone were recorded from layer two, beyond the cover of the rockshelter roof. These are of unknown date. **Metalwork**: A Bronze Age gold band was recorded from layer 2 (Barrett: 1965: 16). **Pottery**: Branigan and Dearne (1991a: 145) consider the Roman Iron Age pottery to date to the 2nd to 4th centuries AD. A sherd of South-Ester type mug was considered Late Iron Age or early Roman in date, whilst a two-handled jug similar to that found at East Grimstead was considered to date to the 1st century AD (Barrett 1965: 18). **Animal Remains:** Animal bone recorded in the upper layers, containing Bronze Age, Iron Age and Roman Iron Age artefacts, included horse, sheep, pig, dog, cat, weasel, fox (Barrett 1965: 23).		
Chronology: Dating evidence from artefacts recovered from the cave suggest that the site was used in the Bronze Age, Iron Age and Roman Iron Age. Finds of Iron Age pottery indicate that the cave may have been used during the late 1st millennium BC. Sherds belonging to East Grimstead Ware also indicates a possible 1st century AD use of the cave. Sherds of New Forest Ware may also suggest further use sometime between 100 and 300 AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 100 BC-410 AD	

Name: Saint Cuthbert's Swallet	**ID:** 70	**HER:** 1165176
Bibliography: Balch et al. 1911: 567; Stenner 1968		
Excavation Date:1908	**Type:** Vertical Passage	**Altitude (m):** 234
Cave Description: Saint Cuthbert's Swallet is known to be one of the most extensive and complex cave systems across Mendip. Archaeological finds were reported from a lead works that broke through into the swallet in 1908		
Excavation/Assemblage Discussion: At the base of the lead working swallet in 1908 a skeleton of a female 5.18 metres below the surface, was discovered with four glass beads of apparent Late Iron Age date. **Human Remains**: The skeleton was female with reported "plaited tresses of hair intact" (Balch et al. 1911: 567). **Glass**: Four glass bead were found with the skeleton, identified as similar to those recorded in the 'Celtic' deposit found in Wookey Hole (**166**) (ibid).		
Chronology: Dating of the burial at the base of the swallet can only be based on finds of so-called Iron Age beads. However, given evidence elsewhere of Late Iron Age use of vertical caves for burial, a late 1st millennium BC date is possible.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 200 BC- 43 AD	

Name: Rowberrow Cavern	**ID:** 71	**HER:** 194283
Bibliography: Branigan et al. 1991a: 140-141; Taylor 1921, 1922, 1923, 1924, 1925		
Excavation Date: 1920-1926	**Type:** Single Chamber	**Altitude (m):** 175

Cave Description: The cave has a 6.5-metre-wide entrance protected by an extensive platform, leads to a large single chamber. Importantly, the cave is near to Read's Cavern (**54**), which contained similar deposits of pottery and midden-like material.

Excavation/Assemblage Discussion: Excavations by Herbert Taylor begun with a trial trench across the floor of the cave which uncovered pottery, charred animal remains at a depth of 0.6m. This deposit of 'black earth' extended towards the rear of the cave (Herbert 1921:83). The stratigraphy recorded by Taylor is outlined below:

1) Humic layer 0.07-metre-thick, present only near the cave mouth (Taylor 1923: 40)
2) Clay layer 0.7-1.2 metres thick, thought to have been washed from the hillside and disturbed by burrowing animals (Taylor 1923: 40).
3) An occupation level with a "grey hearth" with quantities of Roman Iron Age coins and pottery (Taylor 1923: 40). This hearth was found 1.2 metres from the entrance along the eastern wall of the cave. Traces of slag were also found associated with the hearth although in smaller quantities than the black band (Taylor 1923: 42)
4) Black band layer 0.15-0.17 metres thick, sloping towards the southwestern side of the cave. This black band was thicker in the inner chamber and likely represents a midden dump (Taylor 1925: 197).
5) Layer of clay and stones similar to layer 2, separating a black band layer from the horizontal floor at a maximum thickness of 0.3 metres although it was not present in the southwest of the cave.

Excavations in 1921 uncovered a sequence of material 3 metres into the cave at a depth of 2.4 metres (Taylor 1922:130). Taylor interpreted the amount of flint found in upper layers as "extensive use of flint implements by the peasantry in Roman times" (Taylor 1925: 209). For Taylor, the black band representing the "reducing iron ore and keeping animals in a portion of the living-site" (ibid.).

Pottery: Fragments of pottery were found in layers 2 and 3 (Taylor 1921: 85). Taylor lists 8 varieties of pottery, 3 characteristically Iron Age in form, whilst 5 dated to the Roman Iron Age. The majority of the Iron Age types, made of grey or black ware, are similar to material found at Read's Cavern (**54**) with 80 percent of the fragments being recovered in the black band layer (Taylor 1922: 131). One vessel was identified as a crucible for metalworking, corresponding to the slag recovered in the black band. Twenty Roman Iron Age vessels dating between 1st and 4th centuries AD were also recorded (Branigan et al. 1991a: 141).

Coinage: A copy of a coin of Tetricus (268 AD) was found on top of the black layer, along with other "British interpretations" (Taylor 1921: 85). Imitation coins included a coin of Tetricus I, Tetricus II and Valerianus I with the word Hilaritas on the reverse, (Taylor 1922: 131). Half a coin of Tetricus II and a bronze copy of Tetricus I was also recorded (Taylor 1923: 46). Other coins included two of Tetricus I, one of Victorinus and one of Tetricus II dating to 268-273 AD.

Bonework: Pieces of worked bone were found in the black band layer, identified as Iron Age and Roman in date (Branigan et al. 1991a: 141; Taylor 1921: 84). These included a bone pin and 5 needles and a disc (Taylor 1923: 45).

Animal Remains: Animals found in layers 2,3 and 4 included roe and red deer, sheep/goat, horse, pig, fowl, badger, polecat, dog, fox, weasel and shrew (Taylor 1921: 86).

Human Remains: Fragments of a right parietal bone and a human molar tooth were found, later excavations uncovered a canine tooth (Taylor 1923: 44). Another molar was also found lower down, thought to be Palaeolithic (Taylor 1924: 122).

Metalwork: Pieces of slag and smelted iron were found in the black band layer (Taylor 1922: 132). Two fragments of galena were also discovered (Taylor 1922: 46). Fragments of cooper or bronze were found in the Roman Iron Age horizon along with a fragment of lead in a ridged strap found belonging to the black band layer (Taylor 1925: 193). Part of an iron currency bar was found in this layer (Taylor 1925: 196). Cut into the black band layer was a shallow pit, at the entrance to the cave, filled with slag, fused stone and Iron Age and was thought to have been a furnace or ash pit that was originally identified as a furnace or ash pit. (Taylor 1925: 194-196). An iron arrow head was found thought to be medieval in date (Taylor 1922: 46).

Bead: A pale blue rectangular bead was found in the black band layer (Taylor 1923: 46).

Chronology: Artefacts from the cave suggest that the cave was used multiple times during the Iron Age and Roman Iron Age. Finds of Roman Iron Age date can be dated between the 1st-4th centuries AD, including coins of 3rd century AD belonging to Tetricus and Valerianus and Victorinus.	
Radiocarbon Dates:	
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 300 BC- 410 AD

Name: Browne's Hole	**ID:** 72	**HER:** 200187
Bibliography: Branigan et al. 1991a: 121; Browne 1953; Browne et al. 2002; Platten 1949		
Excavation Date: 1947-1950	**Type:** Multi-Chamber>100	**Altitude (m):** 177
Cave Description: Browne's Hole is a complex karst network, 275 metres long, connected by small phreatic tubes, located on the right bank of a valley. The entrance orientated towards the southwest, is accessed by a large archway, which was cleared in 1946 (Balch 1911: 47). The entrance is approximately 15 metres wide leading to a passage, which slopes down to a series of chambers with a second passage to a northern entrance.		
Excavation/Assemblage Discussion: The cave was excavated by L.M Browne between 1947 and 1950 with a considerable quantity of alluvium being removed from the entrance and main passage (Somerset 24956). Archaeological material was found in the entrance and inner chamber of the cave (Branigan et al. 1991a: 121). **Pottery**: A single late Iron Age sherd was reported amongst finds of 2-3rd century AD pottery including sherds of Oxfordshire Ware and 4 sherds of a Grey Ware Olla (Branigan et al.1991a: 121) **Human Remains**: Fragmentary human remains were recorded in the entrance and main passage of the cave, which were of unclear date (Browne 1953). **Coinage**: A coin belonging to the reign of Antoninus Pious (148-149 AD) and Trier mint of a coin of Constantine the Great (306-337 AD) were found towards the entrance to the cave (Branigan et al. 1991a: 121). **Metalwork**: An iron ring was also found by the excavators, although this cannot be dated (Browne 1953). **Stonework**: A notched fragment of green stone was noted by Branigan and Dearne (1991a: 121), of unknown date.		
Chronology: Finds from Browne's Hole indicate that the cave was likely used sometime during the Late Iron Age, evidenced by the find of a single Late Iron Age sherd. The cave was also use during the 2nd-3rd centuries AD, which is demonstrated by finds of Oxfordshire Ware and coins of Antoninus Pious and Constantine the Great.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 300 BC- 43 AD; 100-300 AD	

Name: Uphill Quarry Caves (**2**)	**ID:** 73	**HER:** 192504
Bibliography: Branigan et al. 1991a: 146; Harrison 1977; Wilson et al. 1901		
Excavation Date: 1826	**Type:** Single Chamber	**Altitude (m):** 15
Cave Description: A series of 13 caves were discovered during limestone quarrying in Uphill, Somerset. Archaeological finds were reported from Uphill cave 2, below Uphill cave 1, which could be accessed by a fissure in the roof of cave 2. The cave was 12 metres long, between 2.5 to 6 metres wide and had a maximum height of 3 metres, orientated towards the south.		
Excavation/Assemblage Discussion: Excavation of a deposit that had sealed the cave produced a piece of Roman pottery and a coin of the Emperor Julian (Harrison 1977: 236). On excavating material blocking the entrance a pot was found containing 129 Roman coins. **Pottery:** A pot contained Roman coins was found at the entrance to the cave. **Coinage:** The coins recorded including coins belonging to Valentinian (364-375 AD) and Gratian **(**375-383 AD**).** **Human Remains:** A human distal femur recovered from the cave entrance, provided a radiocarbon date ranging from 138 to 427 cal AD.		
Chronology: The radiocarbon date obtained from a human distal femur from the cave, indicates that the site was used between 138-427 cal AD. It is unclear whether the burial was contemporary to the deposition of coins minted in the regions of Valentinian (364-375 AD) and Gratian **(**375-383 AD**).**		
Radiocarbon Dates: OxA-4022 Human Distal Femur 1710±60 **138-427 cal AD**		
Suggested Broad Date: RIA	**Suggested Date Range:** 140-410 AD	

Name: Hyena Den Cave	**ID:** 74	**HER:** 197056
Bibliography: Campbell et al. 1971; Dawkins 1861; Jacobi et al. 1993		
Excavation Date: 1852; 1859-1862; 1877-??; 1966-1970	**Type:** Multi-Chamber	**Altitude (m):** 62
Cave Description: The form of the original cave entrance is unknown due to work by W.S. Hodgkinson & Co. Mill company that discovered the cave in 1852. The current entrance is 2.5 metres high and 15 metres wide. The cave itself is 46 metres long, made of a large open chamber leading to a second chamber towards the rear and a number of extending passageways.		
Excavation/Assemblage Discussion: The cave was periodically excavated during the 19th century and was opened as a show cave until being closed in the 1930s. Excavations by Campbell et al. (1971) recorded disturbed sediments which may have been distributed by water action (Campbell et al. 1971). **Human Remains**: Human remains were reported to have been found during the digging of a canal at the cave entrance (Campbell et al. 1971: 247). **Coins**: From canal work outside the cave several hundred Roman coins were discovered in a broken pot and distributed amongst the workers (Campbell et al. 1971: 247).		
Chronology: Canal works uncovered human remains and Roman Iron Age coinage, although there is no further information available.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Badger Hole	**ID:** 75	**HER:** 197049
Bibliography: Ashworth 1954; Balch 1939, 1941, 1942; Branigan et al. 1991a: 119-120; McBurney 1959, 1961		
Excavation Date: 1938; 1958	**Type:** Cave/Vertical	**Altitude (m):** 73
Cave Description: The cave is located 20 metres above the valley floor and above the Hyena Den (**74**). The cave entrance, orientated west, is 10 metres wide and 3 metres high with two short passages leading into a chamber 6 metres high that leads to a fissure.		
Excavation/Assemblage Discussion: **Pottery**: A ceramic assemblage dating to the Roman Iron Age, included sherds of Central Gaulish Samian Ware, form 32 bowl; New Forest ware, two black-burnished flanged bowls and imitation olla (Branigan et al. 1991: 120). First century fabrics, including fine and grey wares of Gatcombe type (c.50-70 AD) also indicate earlier use of the cave. **Coinage**: A coin of the 3rd century was recorded (Branigan et al. 1991a: 120). **Metalwork**: A T-shaped fibula was recorded from the cave thought to be late first to second century in date (Branigan et al. 1991a: 120). **Stonework**: A whetstone was found made of igneous rock (Branigan et al. 1991a: 120). **Human Remains**: A cranial fragment taken from the cave provided a radiocarbon date of 436-601 cal AD (OxA-680).		
Chronology: Finds from Badger Hole suggest use during the 1st-3rd centuries AD. The presence of a bead rimmed jar, similar to that found at the Early Roman Iron Age villa at Gatcombe, may also suggest an early 1st century AD use of the cave. A radiocarbon date obtained from a fragment of human skull, also demonstrates possible Early Medieval cave-use.		
Radiocarbon Dates: OxA-680 Human cranial fragment 1380±70 **436-601 cal AD**		
Suggested Broad Date: RIA; EM	**Suggested Date Range:**100 BC- 600 AD	

Name: Ash Hole Cave	**ID:** 76	**HER:** 447503
Bibliography: ApSimon 1968: 21–30; Branigan et al. 1991a: 117		
Excavation Date: 1839;1965-1967	**Type:** Multi-Chamber	**Altitude (m):** 30
Cave Description: The cave is located amongst a series of limestone sea caves along a rock projection known as Berry Head. The main chamber of the cave is 40 metres long and 22-metre-wide with the entrance chamber being 10 metres wide and 20 metres long. The cave entrance is 1.5 metres high and is orientated towards the north. The cave has a maximum height of 5.5m.		
Excavation/Assemblage Discussion: The cave was visited by MacEnery and further examined by Rev. H.F Lyte who recorded the presence of large fragments of pottery thought to by Bronze Age cinerary urns and a small bone handle of a bronze implement on the surface (Pengelly 1870). Excavations after finds of pottery and a Roman coin by visitors to the cave uncovered over 2,000 sherds of pottery, mostly Bronze Age in date (ApSimon 1968: 21). **Human Remains:** "Several human skulls" were found in the cave and considered Roman Iron Age in date by ApSimon (1968: 28), although there is nothing to support this. **Pottery:** Within the corpus of Bronze Age pottery, ApSimon (1968: 26) records the presence of pottery similar to Iron Age wares found at Kestor and Foale's Arrishes. Roman Iron Age pottery was also recorded in the early excavation (Branigan et al. 1991a: 117). **Coinage**: Visitors to the cave found a coin of Claudius (41-51 AD) (Branigan et al. 1991a: 117).		
Chronology: Coarse pottery, similar to that found during excavations at Kestor and Foale's Arrishes may indicate that the cave was used during the Early Iron Age. Finds of unspecified Roman Iron Age pottery and a coin dating to the reign of Claudius (41-51 AD) may also suggest that the cave was used during the 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800-400 BC; 43-410 AD	

Name: Broken Cavern	**ID:** 77	**HER:** 1165451
Bibliography: Chamberlain 1996: 950-953		
Excavation Date: 1865-1880;1990-1992	**Type:** Cave	**Altitude (m):** 84
Cave Description: Broken Cavern is a small coastal cave in Devon, near to Ash Hole (**76**).		
Excavation/Assemblage Discussion: Roman Iron Age remains were thought to have been recovered from the cave		
Chronology: The unscientific manner of excavations at Broken Cavern has meant that much of the material that was found is now lost or undated. Unspecified Roman Iron Age artefacts were found in the cave.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Three Holes Cave	**ID:** 78	**HER**: 446258
Bibliography: Lowe 1915; Roberts 1996; Rosenfeld 1961; Rosenfeld 1964; Walker et al. 1967		
Excavation Date: 1800s;1955-1959;1961	**Type:** Cave	**Altitude (m):** 82

Cave Description: Three Holes Cave is located on a cliff, 4.57 metres off the valley floor with its entrance orientated towards the northeast.

Excavation/Assemblage Discussion: The caves were originally excavated by J.L Widger in the 19th century, who interpreted the finds as a religious deposit. At the cave mouth a 1.2-1.5-metre-deep deposit of ash was recorded (Rosenfield 1964: 3). Excavations in 1955-1959 focused on the talus south of the original trench outside the cave, whilst in 1961 northern sections of the talus were excavated in order to obtain C14 dates (Rosenfield 1964: 5). Stratigraphy from the talus is as follows:

1) Modern soil from hill slope
2) Deposit of colluvial rendzina containing Roman Iron Age material, medieval pottery, bone and flint flakes
3) Stony deposit, including organic matter with large angular fragments of limestone indicating roof collapse. Fauna found including dog, pig and sheep/goat and roe deer, along with a human 5th metatarsal. Late Bronze Age, Dartmoor Ware was recorded in two sherds along with flints.
4) Brown crumbly soil, with some charcoal and organic matter, including Bronze Age and potential Late Iron Age decorated sherd along with sheep, pig and ox.
5) Black ash layer, included evidence of a number of heaths and slabs of limestone including one of crystalline stalagmite that was intentionally placed during microlithic occupation. Flint and bone of deer, pig and ox along with sheep/goat were recovered. Small fragments of pottery. Mussel, cowrie and periwinkle were also recorded in the cave.
6) Grey ash layer along with small fragments of pottery and a flint industry similar to 5.

Stonework: Three fragments of whetstones were found in layers 4 and 6.

Pottery: Pottery found in the talus outside the cave, including Late Bronze Age Dartmoor ware and a sherd of Rinyo-Clacton type (Rosenfield 1964: 17).

Human Remains: Fragments of human remains were obtained from a layer of ash outside the cave mouth. A human mandible recovered from this layer, provided a radiocarbon date of 208-395 cal AD (OxA-3210).

Chronology: There is evidence of activity in the cave dating to the Late Bronze Age and Roman Iron Age. The cave may have also been used during the Late Iron Age, which may be seen through the find of a decorated sherd. During the Roman Iron Age, the cave appears to have been used between the late 1st –4th centuries AD.

Radiocarbon Dates:

OxA-3210 Human mandible, E237 1540±80 BP	**208-395 cal AD**

Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD

Name: Spratling Court Farm	**ID:** 79	**HER:**
Bibliography: Baker 2011		
Excavation Date: 1996	**Type:** Manmade	**Altitude (m):** 42
Cave Description: Spratling Court Farm is an altered chalk chamber at the base of the cliff. The site was discovered by quarrying and is accessed by a vertical shaft which leads to a small passage and chamber. The shaft is 1.5m wide and is 3m deep.		
Excavation/Assemblage Discussion: Excavation of the cave in 1996, uncovered a series of sump deposits within the cave, which contained chalk rock and animal bone. One of these, a cow femur, was taken for radiocarbon dating, whilst 4 OSL dates were also taken from within the cave. Consequently, based on these dates the cave was considered to have been constructed during the 2nd century AD. Associated with the cave, was a large pit, which was considered to be a chalk quarry dug during the late 1st millennium BC.		
Chronology: Radiocarbon dating suggests that the cave dated to the late 2nd century AD, whilst the associated pit was dated to the 2nd century BC and therefore predates the cave by 300 years. The association between the pit constructed in the Late Iron Age and the cave is unknown.		
Radiocarbon Dates:		
Beta 201974 cow femur, cave		**30-336 cal AD**
Beta 201975 horse radius and ulna, pit		**152 cal BC-209 cal AD**
WK23660 vertebrate, pit		**349 cal BC- 4 cal AD**
WK23659 vertebrate, pit		**88 cal BC- 70 cal AD**
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 200-0 BC; 150-200 AD	

Name: Weycock Hill	**ID:** 80	**HER:** 248109
Bibliography: Cotton 1957		
Excavation Date:1909	**Type:** Cave	**Altitude (m):** 46
Cave Description: A plough reportedly broke into an old excavation uncovering a hole 0.76 metres wide and c.2.74 metres deep leading to a series of caverns.		
Excavation/Assemblage Discussion Roman remains were reported from the cave and the landscape around it including a series of villas and stray finds.		
Chronology: A possible cave, or well, was found whilst ploughing in a field 500 metres from a Roman temple.		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 43-410 AD	

Name: Kent's Cavern	**ID:** 81	**HER:** 447612
Bibliography: Anon 1926; Beynon et al. 1929; Branigan et al. 1991a:138; Campbell & Sampson 1971; Cook et al. 1998; Dowie 1928; Duckworth 1913; Campbell & Sampson 1971; Kennard 1945; Ogilvie et al. 1938; Pearce 1974; Pierpoint 1984; Schulting et al. 2012; Silvester 1986; Smith 1940; Straw 1997; Straw 1996; Warren et al. 1994		
Excavation Date: 1825-1829; 1865-1880; 1920	**Type:** Multi-Chamber>100	**Altitude (m):** 68
Cave Description: The cave has two entranceways and is 934.1 metres in total length with varying heights between 49.9 and 68.7 metres. The two entrances are 15 metres apart and are now enlarged to allow access for visitors. The northern entrance faces east, whilst the southern entrance orientates towards the northeast. Both entrances lead into a central chamber, which connects to a further 11 chambers. The cave is located south-west of Antsey's Cove, which is visible only from the sea.		
Excavation/Assemblage Discussion: The cave has a long history of excavation with the earliest beginning as early as 1571 (Proctor 1989: 422). The majority of prehistoric and Roman artefacts were recovered in a black mould layer that spread from the entrances and into the Vestibule, Sloping Chamber, Great Chamber and Lecture Hall at the east end of the cave with mould up to 0.3 metres in thickness (Silvester 1986: 9). Prehistoric finds were found throughout the long history of excavations with early work by MacEnery (1825-1829) recovered pottery, a bone comb and several bone pins (Silvester 1986: 10). The black mould layer has been recorded in a range of sites across the UK and thought by Silvester (1986: 20) to represent sequences of occupation in caves and evidence of processes of food production and manufacturing process (*ibid*). The cave was considered to have been occupied during the 1st millennium BC used by groups in the region as a refuge or as part of a pastoral regime (Silvester 1986: 24). **Pottery**: 1100 sherds are held in the Torquay museum with varying dates from the third millennium BC into the 1st millennium AD. In total 397 sherds of Late Bronze Age and Iron Age pottery was recovered and 417 Late Iron Age with 4 Roman sherds and 78 considered Medieval in date (Silvester 1986: 12). Pottery dating to the first part of the 1st millennium BC consisted predominately of coarse undecorated sherds and broad rims, which may have belonged to large jars with some round bodied pots and upturned rims. This pottery was dated with reference to material found at Dainton, 8km to the west (Silvester 1986: 13). A number of carinated sherds were also discovered. La Tene decorated wares make up a large percentage of the pottery at the cave with 35% likely dating to this period (Silvester 1986: 13). Silvester suggested a minimum of 21 vessels. Fourteen of these sherds were examined petrologically with the fabric of three vessels containing igneous, suggesting that these may have been made in Cornwall. All three had curvilinear decoration with one having a small iron pin through the upper decorated rib (Silvester 1986: 14). Two sherds were from Group 1 grits thought to be from Cornwall. One rim sherd was also traced to volcanic rocks from south Devon (Silvester 1986: 14) The corpus of Roman Iron Age pottery (Branigan et al. 1991a:138; Silvester 1986: 16) include 45 sherds with 35 being of diagnostic forms. These include 4 flanged bowl, two South-Devon cooking pot rims and a pre-Flavian samian sherd from a south Gaulish Dr.29, two amphora fragments one Italian Ware and the other likely pre-Flavian (Branigan et al. 1992: 16). Excluding the pre-Flavian material, much of the pottery suggests a late 3rd century into the 4th century AD date, which is supported by finds of 2 coins dating to the late 4th century. **Coins**: A third AE of Valentinian I (364-375 AD) and an AE of Valens (364-378 AD) were reportedly found in the cave (Branigan et al. 1992: 16). **Stonework:** Artefacts made of stone included a piece of saddle quern re-used a polishing stone thought to be Bronze or Iron Age in date (Silvester 1986: 16), a rounded disc of slate was found thought to have functioned as a lid for a Bronze Age cinerary urn. A small stone ring was also found during excavations (Silvester 1986: 16-17). In total, 21 spindle whorls were recovered. Seven were made of fine-grained sedimentary rock, with the remaining being made of slate and shale with a		

variety of decoration from incised ray patterns and concentric grooves (Silvester 1986: 17). Many of these whorls were considered to be Late Iron Age in date, because of their association with pottery assemblages elsewhere in the region (Silvester 1986: 17). Two objects of Kimmeridge shale were also found- a spindle whorl and armlet thought to be products of the Purbeck-based industry found in Dorset, Somerset and Hampshire (Silvester 196: 17). Fragments of Kimmerdige shale armlets have been found along the Cornish coast in Cist burials and therefore were likely worked on a large scale and may have therefore been made in the cave, although it could also be Roman in date. A whetstone was also found (Silvester 1986:30).

Amber: 6 pieces of amber were discovered, 5 beads and a rounded lump and were considered to date to the Bronze Age or Iron Age (Silvester: 1986: 18).

Bonework: Five bone combs were found dating to the late 1st millennium BC. A rib-knife was also found and considered Late Bronze Age/ Early Iron Age in date given parallels to similar objects found at All Caning's Cross and Eldon's Seat (Silvester 1986: 19). Other objects of Iron Age date included a polished piece of bound found with a needle, twos awls and a socketed handle (Silvester 1986: 19).

Metalwork: Metal objects of Late Bronze Age include four socketed tools- two axes, a knife and a gouge (Silvester 1986: 19). Along with these were at least five copper ingots and a piece of copper ore (Silvester 1986: 19). One of the socketed axes and a copper ingot came from the Great Chamber, whilst another axe came from the Vestibule or Lecture Hall. The gouge was an isolated find in the Cave of Rodentia and were described by Silvester as "losses during the occupation of the cave" (Silvester 1986: 19). A bronze bracelet made of rivets at irregular intervals was also found, which was similar to bracelets found in North-Eastern France and Minnis Bay in Kent and thought to date to the early 1st millennium BC. Further finds of metal included 4 bronze rings, a curved pin of Early Iron Age date and a La Tene II bow form brooch similar to a small group of brooches centred on Glastonbury dating to the late first century BC and early 1st century AD (Silvester 1986: 20, 35). A Roman Iron Age bronze bowl spoon with an incised groove (Silvester 1986: 20).

Human Remains: Human remains were found in the entrance and into the Passage of Urns (Silvester 1986: 16, 21). Possible cremations were also found in the black matter which contained Bronze Age coarse pottery and human teeth in the Charcoal Chamber (Silvester 1986: 21).

Chronology: The artefacts found in the cave suggest that the site was in use periodically between the Late Bronze Age and Roman Iron Age. This is demonstrated by finds of pottery and metalwork which can be compared to dated assemblages at other excavated settlement belonging to the Early and Late Iron Age. Further finds of 1st century AD Samian Ware and amphorae may indicate a continuity of use from the Late Iron Age. Later use of the cave is also demonstrated by 3rd-4th century pottery and coinage.

Radiocarbon Dates:

Suggested Broad Date: LBA; IA; RIA	**Suggested Date Range:**1200 BC- 410 AD

Name: Madawg Rockshelter	**ID:** 94	**HER:** 1043814
Bibliography: Barton 1997: 99-108		
Excavation Date: 1960;1994	**Type:** Rockshelter	**Altitude (m):** 29
Cave Description: Madawg Rockshelter is a large western facing site, approximately 15 metres wide and 7 metres long leading to a vertical rift towards the rear.		
Excavation/Assemblage Discussion: Roman Iron Age pottery was recorded from the cave from the 1960 excavations. **Coinage:** A coin minted in the reign of Carausias (286-293 AD) was found in the rockshelter		
Chronology: Roman Iron Age material found in the cave can only be dated by a find of a coin of Carausias.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 285-330 AD	

Name: Great Onn's Hole	**ID:** 162	**HER:** 194599
Bibliography: Davies 1926; Dobson 1931		
Excavation Date:	**Type:** Multi-Chamber>100	**Altitude (m):** 121
Cave Description: There are no complete records although a cave, found above the Cheddar road, used in World War II contained Iron Age potsherds, bone spindle whorls, bronze and iron buckles and a flint knife.		
Excavation/Assemblage Discussion:		
Chronology: Finds of pottery and bone spindle whorls may indicate that the cave was used during the Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 800 BC- 43 AD	

Name: Pig's Hole	**ID:** 163	**HER:**
Bibliography: Bryant 2011:141-142		
Excavation Date: 1930	**Type:** Rockshelter	**Altitude (m):** 133
Cave Description: Pig's Hole is a large overhang located on the northern side of Cheddar Gorge.		
Excavation/Assemblage Discussion: Iron Age pottery was reported to have found during excavation of the cave.		
Chronology: The cave was possibly used during the Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 800 BC- 43 AD	

Name: Saye's Hole	**ID:** 164	**HER:** 1011916
Bibliography: Colcutt et al. 1987; Somerset HER 10253		
Excavation Date: 1986-87	**Type:** Multi-Chamber	**Altitude (m):** 28
Cave Description: Saye's Hole is a multi-chambered cave located at the base of Cheddar Gorge. The entrance, which is orientated to the north leads to a large chamber and oblique rift. The cave was used as a Tea Room in the early 20th century (Colcutt et al. 1987: 105).		
Excavation/Assemblage Discussion: Archaeological finds were reported from the entrance to the cave, which uncovered two levels of Late Iron Age material (Colcutt et al. 1987: 105). **Pottery**: Fifty-four sherds were found in two distinct contexts. All but one sherd was made of a calcite-tempered fabric of Glastonbury type (Colcutt et al. 1987: 111). In total, three vessels were identified belonging to a necked bowl, a bead-rim bowl and a thin-walled vessel, all of which have parallels to Late Iron Age Glastonbury type material (Colcutt et al. 1987:111). **Metalwork**: Finds included: a copper alloy rod and stud, two pieces of metal slag, an iron sheet, rod and nail (Colcutt et al. 1987: 113). **Animal Remains**: Butchered bones belonging to domestic animals were found in the cave's entrance (Colcutt et al. 1987: 114). Horse and dog bones were also found in the two Iron Age levels (ibid.).		
Chronology: Colcutt et al. (1987: 114-115) considered the two deposits to date to the Late Iron Age and was characterised by finds of pottery and metalwork		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 350 BC- 43 AD	

Name: Soldier's Hole	**ID:** 165	**HER:** 194602
Bibliography: Ambers et al. 1985; Anon 1928; Balch 1930; Branigan et al. 1991a: 133; Parry 1929a		
Excavation Date: 1926-1929	**Type:** Single Chamber	**Altitude (m):** 87
Cave Description: Soldier's Hole is a shallow cave located on the southern side of Cheddar Gorge, above Cooper's Hole (**167**), with an entrance 5.8 metres wide. The cave comprises of a chamber and side passage and is a total of 8.2 metres in length with a maximum width of c.8.5 metres. The cave is accessed by a traverse of c.27 metres along a cliff face, requiring the use of a rope (Anon 1929: 36).		
Excavation/Assemblage Discussion: **Pottery**: Pottery considered Iron Age date, similar to material recovered at Wookey Hole (**166**) and Glastonbury Lake Village (Anon 1928: 37) was found in floor debris at a depth of c.0.3 metres. These included fragments of decorated curvilinear pottery and thick flat-topped rims with corded decoration (Anon 1928: 37). Roman Iron Age pottery was also reported from the cave (Somerset 10393). **Stonework**: Round pebbles, of unknown use, "like those found at Wookey Hole" were recorded, one sandstone and one made of conglomerate and three smaller pebbles (Anon 1928: 38). A burnt clay spindle whorl was also recovered (ibid.). **Bonework**: Two bone discs with central perforations, a bone needle, 3 pieces of worked antler and a boar's tusk were found in the cave (Anon 1928: 38).		
Chronology: The material recorded in the cave suggests activity took place during the Iron Age and Roman Iron Age. Evidence from finds of pottery may indicate a use during the Late Iron Age, sometime between c.300-0 BC.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 410 AD	

Name: Wookey Hole Cave	**ID:** 166	**HER:** 197048
Bibliography: Ashworth 1954; Balch 1928, 1939; Balch et al. 1911; Branigan et al. 1991a: 148-149; Hawkes 1950; Hawkes et al. 1979; Jacobi et al. 1993		
Excavation Date: 1859-74;1904-14;1946-49;1972	**Type:** Multi-Chamber>100	**Altitude:** 70

Cave Description: Wookey Hole is a complex limestone cave, some 3 miles long, serving as an outflow from the River Axe. The main cave system is made of four chambers with active water flow and stalagmite formation. During excavations in 1954-7 at Hole Ground, outside Wookey hole, the foundations of a 1st century BC hut were uncovered, with a later Roman foundation dating from the 1st century to the late 4 century AD. The hut was surrounded by a bank and ditch, which produced Iron Age pottery of 1st century BC date. The Roman structure was identified through substantial wall foundations and dated through finds of sherds and coins. Associated with this structure were seven complete or part skeletons and finds of bone, iron and bone. Hearths with semi-melted lead and iron ore were also uncovered, which can be compared to evidence of metalworking at the entrance to Wookey Hole (Somerset 24440).

Excavation/Assemblage Discussion: Excavations by Balch (1911) uncovered a sequence of deposits from the entrance thought to extend for a distance of 27m with only c.9m receiving day light. Other fragments recorded from this extend were considered. Fragments of pottery were also recorded from the bottom of 'Hells Ladder' some c.45 metres from the entrance (Balch 1911: 567). Balch also noted that the main passage form the chamber naturally allow smoke to leave up through upper passages and also a constant temperature away from the entrance (Balch 1911: 568). Extensive amounts of charcoal ash were recorded by Balch from the entrance chamber (Balch 1911: 571). Later excavation within the fourth chamber, located across the River Axe stream way, uncovered a cemetery dating to the 3rd-4th centuries AD (Hawkes et al. 1979).

Human Remains: A human jaw, fragments of skull and a femur were found with fragments of pottery, recorded laying in a small passage immediately adjacent east of the entrance, laying 1.8m down the passage. A human skeleton was also recorded in the western fissure with Iron Age pottery, an iron dagger and a bronze pommel (Balch 1911: 575). Two interments were found in the first great chamber with fragments at every level strewn across the Great Chamber floor (Balch 1911: 585). At least 28 individuals were present in the cave dating from 6 months to 35 years of age (Branigan et al. 1991: 149). Excavation of the 4th chamber in Wookey Hole, which is located across the River Axe stream way, also produced the remains of at least 21 individuals dating to the 3rd or 4th centuries AD (Hawkes et al. 1979).

Stonework: A pair of beehive querns were found in the entrance to the main chamber made of conglomerate material of Old Red Sandstone of Pen Hill or of North Hill type (Balch 1911: 573, 581). Kimmeridge shale objects found in the cave included a whorl and two fragments of a shale cup (Balch 1911: 581). An oolite 'lamp' was also found under the east wall c.6m from the entrance (*ibid*). Whetstones made of micaceous schist thought to come from Cornwall whilst a number of loom weights were also found from Ebbor grits, with a number of hammer stones also being recovered. A mortarium stone was also made from stalagmite from the cave (Balch 1911: 585).

Pottery: Balch (1911: 573) records the presence of a number of complete urns associated with "several coins". Roman pottery listed by Branigan et al. (1991: 49) include Oxfordshire Ware c.345 AD, New Forest Ware, c.270-375 AD and c.44-300 AD Black-Burnished dishes. Sherds of Samian Ware of Central Gaul 18/31, 37, 38, and 46 with stamps, Congresbury Ware is also reported along with flagons, mortaria and spindle whorls (*ibid*). Crucibles were also found in both Iron Age and Roman Iron Age levels.

Metalwork: A large metalwork assemblage was recovered from the cave dating to the Late Bronze Age, Iron Age and Roman Iron Age. Fragments of iron nails, haematite and dagger were considered Iron Age in date, as were 3 currency bars, a spear point and lumps of smelted iron, galena and tin

(Balch 1911: 575-577). A bronze ring, a La Tene II and III brooch and a silver ear ring may also date to the Iron Age. Roman material included an iron key and latch, two iron penannular brooches, a balance and twisted wire link, a Polden Hill type dating to the late 1st century AD along with an early Dolphin brooch c.50-80 AD was also recorded (Branigan et al 1991a: 149). Two lead spindle whorls were also found, one of which can be paralleled to finds from Thor's Cave (**51**), Derbyshire (Balch 1911: 580).

Bonework: A large array of boneworking tools were recovered by Balch (1911: 576), including bone combs, awls, worked antler, decorated bone spoon and a horse shoe. In total there were 5 types of comb and a number of bone cheek pieces which were used as bridles (Balch 1911: 582-583). A bone triangular tablet with incised points, similar to an object found in Keil Cave, Argyll (**142**) was also found and considered Iron Age in date. Evidence of bone working was found with the sawn antler pints of a red deer and a number of polish bones in the process of production. A crane ulna was also used likely for weaving with a round hole half an inch cut into the end (Balch 1911: 583).

Animal Bone: Animal bone was recorded throughout the cave, as part of a disturbed multi-period assemblage. Species included domestic pig, sheep/goat, cow and horse, wolf, wild boar and a number of bird species (Balch 1911: 583).

Coinage: 120 coins from Vespasian to the late 4th century were recorded by Branigan and Dearne (1991a: 149) were recorded in the entrance passage. A silver ear-ring was associated with a crushed skull found in Iron Age levels along with a silver coins a denarius of Marcia, 124 BC in date (Balch 1911: 78).

Glass: Fragments of Roman glass were found in Balch's excavations. A Late Iron Age bead, similar to those recovered from the burial at the base of St Cuthbert's Hole (70) also in Mendip.

Chronology: From the array of finds recorded in the cave, activity likely occurred throughout the 1st millennium BC and AD. Finds of Late Iron Age bonework and pottery, as well as a silver coin of Marcia c. 124 BC may indicate late 1st millennium BC use of the cave. Roman activity in the cave also appears to have occurred throughout the 1st-4th centuries AD

Radiocarbon Dates:

Suggested Broad Date: LBA; IA; RIA	**Suggested Date Range:** 1200 BC- 410 AD

Name: Cooper's Hole	**ID:** 167	**HER:** 194578
Bibliography: Bellamy et al. 1998; Parry 1933		
Excavation Date: 1931-1932;1959-1962; 1998	**Type:** Multi-Chamber	**Altitude (m):** 42
Cave Description: The cave, orientated towards the northeast, now borders a carpark. The entrance, with is c.6 metres wide, leads to a large open chamber with two passages- one to the south and south-east.		
Excavation/Assemblage Discussion: The cave was excavated in 1931-1932 with artefacts being found in scree underlying c.1.21m of clay. Beds of charcoal were also found, possibly relating to lead smelting (Balch 1911: 55). **Pottery:** Early Iron Age pottery was found in the charcoal deposit at the entrance and sherds of unspecified pottery were found in the carpark outside the cave with a female skeleton (Somerset 10395). **Human Remains:** A female skeleton was found in the carpark and may have been Iron Age in date (Somerset 10395).		
Chronology: Finds of pottery dating to the Early Iron Age in beds of charcoal at the entrance, suggest that the cave may have been in use between 700-450 BC.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 750- 450 BC	

Name: Hay Wood Cave	**ID:** 187	**HER:** 192543
Bibliography: Branigan et al. 1991a: 137; Everton et al. 1972		
Excavation Date: 1957-1971	**Type:** Single Chamber	**Altitude (m):** 87
Cave Description: The limestone cave is located on the north-facing of a steep hillside, with an entrance c.3 metres in width, leading to a narrow rear tunnel.		
Excavation/Assemblage Discussion: Excavations began in 1957 and continued until 1971. Focus was made on the entrance and overhang along with the first c.2.5 metres of the cave tunnel. A stratigraphic sequence can be summed as: Layer 1: Humic layer of dark brown loam 25-30 cm thick Layer 2: light brown loam, containing Roman Iron Age and Iron Age pot sherds covering the cave entrance, with a maximum depth of 1.06 metres Layer 3: Angular Rounded stones, intermixed with lighter brown clay. This extend from the tunnel filling the rift, this may not have been natural in formation. The stone pile contained human and animal bones and flint. Iron Age pottery at the base of the pile and in a badger run that ran beneath the pile. Layer 4: A layer of reddish sand ran beneath 3, although the matrix interface was "not clearly defined" (Everton et al. 1972: 11) **Pottery:** 58 sherds, representing 5 different fabric types were considered Iron Age in date. A further 98 sherds were thought to date to the late 3rd-4th century AD, with the majority being Black-Burnished Ware (Everton et al. 1972: 13). Of these, the majority were located in the cave entrance with 4 sherds being recovered in the cave tunnel with human and animal bone. **Human Remains**: In total 560 fragments of human bone, representing an MNI of 21 individuals, came from the cave, including 7 human skulls (Everton et al. 1972: 14). Of the skulls 4 were identified as male, 3 as females, 1 as juvenile and 1 unknown. Some of these skulls were apparently placed between slabs, and another on a sloping ledge of rock on the eastern wall of the cave (*ibid*). According to the report, there were two main groups of burials in the rift separated by large stones in the centre of layer 3. They were dated to the Iron Age period associated with sherds of pottery. One skull had an ante-mortem injury or early post-mortem depressed fracture on the right parietal region		

(Everton et al. 1972: 24), one lumbar vertebra had signs of osteitis, a compression injury on a thoracic vertebra, Harris lines on one long bone (juvenile stress, malnutrition or trauma. Ritual mutilation of the teeth was recorded on 4 teeth from 3 males and one uncertain from a female. **Animal Bone**: The majority of animal bone belonged sheep/goat, along with bone of ox, pig and dog, with some evidence of wolf.
Chronology: From the material found in the cave, the site was used sometime during the 1st millennium BC and during the Roman Iron Age between the late 3rd-4th centuries AD. The human remains found in the cave were associated with fragments of Iron Age pottery and may therefore date to the 1st millennium BC.
Radiocarbon Dates:

Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 43 AD; 100- 410 AD

Name: Hope Wood Hole	**ID:** 188	**HER**: 197107
Bibliography: Mason 1952		
Excavation Date: 1950-1951	**Type:** Single Chamber	**Altitude (m):** 58
Cave Description: The cave is a small rift located above Cook's Hill Wood, which is often confused with Bracelet Cave.		
Excavation/Assemblage Discussion: The cave was excavated by the Bristol Folk House Archaeological Club and the Westminster Speleological Society (Mason 1952). A crouched burial was found along with fragments of cinerary urn. Above this were animal bones along with Roman Iron Age pottery. **Pottery:** Fragments of cinerary urn belonging to the Middle Bronze Age, along with Deverel-Rimbury type cinerary urn were found on similar levels to the inhumation. Above the levels a fragment of Roman Iron Age olla was found (Somerset 24335; Mason 1952: 187). **Metalwork:** An iron axe handle was recorded although now all traces are lost (Mason 1952: 187). **Human Remains**: A crouched inhumation of an adult was recorded in the cave "just below the entrance" (Mason 1952: 186) and was thought to belong to the Iron Age or Roman based on the assumption that the typical Bronze Age mortuary practice was cremation. It was therefore suggested that the individual was buried in a cleft that already contained the cinerary urns that later saw Roman use (Somerset 24335).		
Chronology: Whilst the majority of material found at Hope Wood Hole belongs to the Bronze Age, finds of a Roman Iron Age olla may indicate use of the cave sometime during the early 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Picken's Hole	**ID:** 191	**HER:** 192395
Bibliography: Houston n.d.; Tratman 1964		
Excavation Date: 1945-1947; 1961-1967; 1980	**Type:** Multi-Chamber	**Altitude (m):** 77
Cave Description: The cave, accessed by a 1.5m high entrance, is located on limestone ridge.		
Excavation/Assemblage Discussion: Excavations of the cave uncovered a sequence of Pleistocene deposits along with 2 human teeth dating to the Neolithic. Tratman recorded the presence of a number of small Roman Iron Age sherds, excavations in 1961 also noted disturbance by badgers. (Tratman 1964: 2). **Pottery**: Small sherds of Roman Iron Age pottery along with "recent" looking human remains were found throughout the cave (Tratman 1964: 6).		
Chronology: Fragments of Roman Iron Age pottery indicate use of the site during the early 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Tornewton Cave	**ID:** 193	**HER:** 116372
Bibliography: Sutcliffe et al. 1962		
Excavation Date: 1870; 1936-39;1944-1960	**Type:** Multi-Chamber	**Altitude (m):** 77
Cave Description: Tornewton Cave is part of a sequence of caves located in the Torbryan, Devon. The cave is accessed by three entranceways. One entrance is 2.5 metres high and 1.6 metres wide and extends to a 5 metre passageway before a 6 metre vertical drop.		
Excavation/Assemblage Discussion: The majority of finds in the cave were Pleistocene in date, however Sutcliffe et al.1962, suggested a coin of Constantine the Great (306-337 AD) was found in the cave by James Lyon Widger in 1870.		
Chronology: The find of a coin belonging to the reign of Constantine the Great may suggest that the cave was used sometime during the 4th century AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 300-410 AD	

Name: Pride Evan's Hole	**ID:** 225	**HER:** 194605
Bibliography: Branigan et al. 1991a: 132; Tratman 1938		
Excavation Date: 1926; 1964-1965	**Type:** Single Chamber	**Altitude (m):** 60
Cave Description: The cave, located 15m up the cliff face is accessed by a large entrance that leads to a single chamber, orientated toward the southeast. The cave was occupied in the 19th century and modified by Pride Evans a Welsh gamekeeper at Cheddar Pond from 1810 (Balch 1911: 125).		
Excavation/Assemblage Discussion: A hoard of Roman coins was reported to have been found in the caves (Tratman 1938) although Balch investigated the caves and found no evidence of the coins. **Coinage**: 47 Roman coins were recorded from the cave from a small recess above the floor level dating between 267 and 275 AD.		
Chronology: If Roman coins were found in the cave, these could suggest a period of use during the late 3rd or early 4th centuries AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 267-330 AD	

Name: Dinder Wood Shelter	**ID:** 227	**HER:** 196837
Bibliography: Balch 1933a, 1933b; Branigan et al. 1991a: 136; Thorne 1962		
Excavation Date: 1933	**Type:** Rockshelter	**Altitude (m):** 158
Cave Description: The rockshelter is located at the base of Dinder Ravine.		
Excavation/Assemblage Discussion: A layer of 0.3-metre-thick charcoal and ash was excavation from the cave containing Roman and Iron Age material. **Metalwork**: Fragments of slag were recovered from the Iron Age/Roman layer of charcoal and ash (Balch1933a: lxiii) **Pottery**: Branigan and Dearne (199a1: 136) identified Iron Age and Roman Iron Age sherds including, olla sherds, imitation black-burnished ware and 12 local grey ware sherds. **Animal Bone**: Red deer, roe deer, wolf, dog, sheep, pig, goat, rabbit, horse and ox were recovered in the charcoal layer. (Balch 1933a: lxiv). **Human Remains**: A small group of foetal human bones were recovered from the layers containing Iron Age and Roman Iron Age pottery (Balch 1933: lxiv).		
Chronology: From the material recovered in excavations of Dinder Wood Shelter, activity in the cave likely occurred during the 1st millennium BC and between the 2-4th centuries AD. This is demonstrated through the diagnostic corpus of Roman Iron Age pottery, including imitation Black-Burnished Ware.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 43 AD; 100-300 AD	

Name: Scragg's Hole	**ID:** 228	**HER:** 1588246
Bibliography: Branigan et al. 1991a: 142		
Excavation Date: 1943-1945; 1948-1949; 1951-1953; 1961-1962	**Type:** Single Chamber	**Altitude (m):** 117
Cave Description: The cave is accessed by a south facing entrance, 6 metres wide that leads to a single chamber.		
Excavation/Assemblage Discussion: A Roman Iron Age deposit was excavated located 1.2 metres below the surface (Balch 1911: 142). **Pottery**: Roman pottery is recorded by Branigan and Dearne (1991a: 142). **Animal Bone:** Sheep bone associated with hearth and pottery deposit (Branigan et al. 1991a: 142). **Glass**: Associated with hearth and pottery deposit (Branigan et al. 1991a: 142). **Coinage**: A coin of Magentius (350-353 AD) was found associated with a hearth (Branigan et al. 1991a: 142).		
Chronology: The only diagnostic artefact found during the excavation of Scragg's Hole, was a coin of Magentius minted between 350 and 353 AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 350-410 AD	

Name: White Woman's Hole	**ID:** 229	**HER:** 202949
Bibliography: Barret 1971; Barret et al. 1972 ; Branigan et al. 1991a: 147; Stanton 1951		
Excavation Date: 1965	**Type:** Single Chamber	**Altitude (m):** 177
Cave Description: The 18 metre long cave is comprised of a single passage accessed by a north western facing entrance, 2.5 metres wide.		
Excavation/Assemblage Discussion: Excavations commencing in 1965 focused on the entrance of the cave and part of the inner passage, where a section of disturbed material was recorded. Fragments of 11th century and 17th-18th century pottery was found below the Roman Iron Age material suggesting that the deposits had been disturbed by animal burrowing (Barret et al. 1972: 63). **Pottery**: A sherd of Glastonbury Ware dating to the Iron Age, together with a bone pin were found 1.5 metres within the cave (Barret et al. 1972: 64). Roman Iron Age pottery included Black – Burnished Ware with lattice incised decoration dating to 3rd-4th century AD (Barret et al. 1972: 67). **Coinage**: A hoard of 70 counterfeit antoniniani, further coins and counterfeit coins were found 4 metres within the cave towards the western wall. The excavators also noted a conglomeration of counterfeit coins, and debris underneath a small overhang at the entrance (Barret et al. 1972: 63). Dating evidence comes from a fel temp repatio copy of a c.355-30 AD coin suggest periods of activity between 355 and 395 AD. **Metalwork**: An iron ring-terminal considered late 4th or 5th century AD in date was found and thought to be similar in date to a coin of Theodosia (Barret et al. 1972: 67). Bronze droplets were also found in the cave. **Bonework**: A worked radial wing-bone of a goose or swan was found and thought to be Iron Age in date (Barret et al. 1972: 67). **Stonework**: A polished convex disc of dolerite was found and thought to be a touchstone to test the quality of metals with similar examples found at Charthouse-upon-Mendip (Barret et al. 1972:68).		
Chronology: Cave use can be dated by finds of coins and counterfeit coins, which date to the late 4th century AD. A single sherd of Late Iron Age pottery and bone pin, may also point towards activity taking place during the late 1st millennium BC.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 400 BC- 43 AD; 350-450 AD	

Name: King Arthur's Hall Cave	**ID:** 316	**HER**: 1043786
Bibliography: Apsimon 1994; Barton 1994		
Excavation Date: 1994	**Type:** Single Chamber	**Altitude (m):** 257
Cave Description: The cave is located in the south eastern corner beneath the ramparts of Little Doward hillfort (Barton 1994: 70). The cave entrance, orientated east, is 0.6 metres wide leading to a small chamber, 4 metres long and 1.5 metres wide.		
Excavation/Assemblage Discussion: Excavation of the cave in the 18th century, recovered a metal spear and human skeleton (Barton 1994: 71). In 1994, a test pit was dug in the chamber and recovered animal bones but no further artefacts.		
Chronology: Given the close proximity of the cave to the ramparts of Little Doward hillfort, it is possible that the inhumation was Iron Age in date. Although, without better dating evidence, this is only tentative.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 800 BC- 43 AD	

Name: Symond's Yat East Rockshelter	**ID:** 319	**HER:** 109639
Bibliography: Barton 1994		
Excavation Date: 1994	**Type:** Rockshelter	**Altitude (m):** 41
Cave Description: The rockshelter, orientated towards the north, is 6 metres wide and 4 metres long. The site is identified as a rockshelter although there is a small inaccessible chamber found towards the rear.		
Excavation/Assemblage Discussion: Test pits were dug at the entrance and the platform edge towards the eastern wall. Late Prehistoric pottery was found in the top layer of black soil at the entrance (Barton 1994: 65-66).		
Chronology: Finds of crude Iron Age pottery may suggest a period of use during the 1st millennium BC, which is supported by fragmentary evidence elsewhere.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 800 BC- 43 AD	

Name: Coldwell Cave 1	**ID:** 321	**HER:** 1043896
Bibliography: Barton 1995		
Excavation Date: 1995	**Type:** Cave	**Altitude (m):** 132
Cave Description: The cave is located 50 metres above the River Wye and has a western orientated entrance and platform.		
Excavation/Assemblage Discussion: Large sherds of pottery associated with charcoal and cut marked animal bone were recorded in the cave during test pitting in 1995 (Barton 1995: 158).		
Chronology: The excavators considered the activity to be Iron Age in date, likely contemporary to activity at nearby Symond's Yat East (**319**).		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 800 BC- 43 AD	

Name: Taylor's Wood Cave	**ID:** 322	**HER:** 1157076
Bibliography: Branigan et al. 1991a: 143; Richards et al. 1992		
Excavation Date:1867	**Type:** Single Chamber	**Altitude (m):** 38
Cave Description: The small cave is located 140 metres away from a Roman villa and Iron Age hillfort. The cave is made of a 5 metre long chamber.		
Excavation/Assemblage Discussion: Remains of four individuals were removed from the cave in 1867 and assumed by Branigan and Dearne (1991a: 143) to be contemporary with nearby occupation of the villa and the nearby hilltop settlement. Crucially, however such remains could date to the Iron Age occupation of the area, although without artefacts a formative date is impossible.		
Chronology: The burial of four individuals could be contemporary to Iron Age or Roman activity within the vicinity of the cave, although this is tentative.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA	**Suggested Date Range:** 800 BC- 410 AD	

Name: Worle Cave	**ID:** 323	**HER**: 192696
Bibliography: Branigan et al. 1991a: 151		
Excavation Date:1960	**Type:** Rockshelter	**Altitude (m):** 64
Cave Description: Worle Cave is a rockshelter, now destroyed by quarrying, that was 2 metres in length orientated towards the southwest.		
Excavation/Assemblage Discussion: Excavation of the cave in advance of quarry works in 1960 uncovered stray finds, including a single Iron Age rim sherd belonging to a pre-conquest open mouth jar and fragments of Roman Iron Age pottery of unknown date (North Somerset 00190; Branigan et al. 1991: 151).		
Chronology: Stray finds of a pre-conquest jar and Roman Iron Age pottery indicate that the cave was in use during the early 1st century AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 0-50 AD	

Name: Fairy Cave	**ID:** 324	**HER:** Somerset 24957
Bibliography: Bryant 2011: 142; Somerset 24957		
Excavation Date: 1888	**Type:** Multi-Chamber	**Altitude:** 179
Cave Description: The cave located at the base of a cliff which was damaged by quarrying, is made of a series of chambers.		
Excavation/Assemblage Discussion: Iron Age pot sherds were thought to have been found at the entrance to the cave (Bryant 2011: 142)		
Chronology: Sherds of pottery found at the cave entrance may indicate Iron Age use of the cave.		
Suggested Broad Date: IA	**Suggested Date Range:** 800 BC- 43 AD	

Name: Gough's Old Cave	**ID:** 325	**HER:** 1157275
Bibliography: Branigan et al. 1991a: 127; Burleigh 1986; Boon 1957; Farrant 1991; Harrison 1989; Irwin 1985, 1986; Irwin et al. 1994; Tratman 1961		
Excavation Date: 1600s (?);1860s; 1877-1889	**Type:** Multi-Chamber	**Altitude (m):** 95
Cave Description: The cave was originally known as the Great Stalactite Cavern and is located 50 metres west of Gough's Cave (**62**). Early records suggest its use by "strolling beggars" (Irwin 1986: 251) in the 17th to 18th centuries. The cave was then adapted as a show cave and restaurant in 1934, which resulted in the modification of the cave entrance and chamber. Before construction, the cave was accessed by a gentle slope from the valley floor (Tratman 1960: 7). The current entrance, which is orientated towards the west, is 1-metre-wide and opens into a large chamber. To the east of the chamber, a passage leads to a smaller second chamber and the current show cave. This passage would have been blocked by stalagmite flow before the beginning of the Iron Age (Tratman 1960: 17). In the floor of the main chamber, a pot hole connects the cave to Long Hole Cave (**61**).		
Excavation/Assemblage Discussion: Excavation of the cave between 1877 and 1889, uncovered a sequence in the main chamber, including two hearths associated with Iron Age pottery (Tratman 1960:11). Iron Age and Roman material came from layers 1, 3 and 4 which were at a depth of 0.3 metres. The calcareous layer preceding the Iron Age layers were thought to represent a climatic change to wetter conditions into the Late Bronze Age (Tratman 1960: 15). Much of the material from the Roman and Iron Age periods, however, was recorded in the top soil, disturbed by burrowing animals (Parry 1930: 50). **Coins**: Two coins, which were thought to have been stray finds Long Hole Cave, were found in an upper layer of compact stones. -a Gloria Romanaum and a Securitas Republicae minted during the reign of Valentinian I (367-375 AD). **Pottery**. Rim sherds similar to those found at Ham Hill and Wookey Hole (**166**) and considered early 1st century AD in date, were found associated with a hearth and pottery spindle whorls (Tratman		

1960: 12). Pottery was also found with a second hearth, including coarse calcite gritted ware and pottery with an everted rim with fingertip ware (ibid.). A beaded rim was thought to have been late 1st century BC in date, whilst a small carinated pot and two lug handles were considered to date to the 3rd-2nd centuries BC. Roman Iron Age material included, Black Burnished Ware (Tratman 1960: 12; Branigan et al. 1991a: 127).

Stonework: Associated with the first hearth, were five upper saddle quern stones, which were similar to those found at both Wookey Hole (**166**) and Read's Cavern (**54**) (Tratman 1960: 13). Two pieces of flint were found in layers containing the Iron Age pottery sequence and thought to represent flint use into the Iron Age), although it is possible that such material is intrusive from lower layers (ibid.).

Bonework: A bone point and needle were found associated with Iron Age pottery and 3 further bone counters were discovered with the second hearth and considered Roman Iron Age in date (Branigan et al. 1991a: 127). Further finds of an antler cheek piece and spindle whorl were also considered to date to the Iron Age (Branigan et al. 1991: 127; Parry 1930: 53-54).

Metalwork: A zoomorphic headed pin in the form of a horse was found, along with an iron hook, stud and bracelet (Branigan et al. 1991a: 127).

Stonework: A stone spindle whorl was recorded from the cave of unknown date (Parry 1930: 54).

Chronology: Artefacts found within the cave suggest use during the late 1st millennium BC and early 1st millennium AD. Finds of a carinated pot, considered to date between the 3rd-2nd centuries BC, as well as a beaded rimmed vessel of late 1st century BC date, indicate a late 1st millennium BC use of the cave. This appears to continue into the early 1st century AD, demonstrated further by finds of Late Iron Age pottery. Roman Iron Age use is also further testified by the presence of Black Burnished Ware pottery and a zoomorphic headed pin.

Radiocarbon Dates:

Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 410 AD

Name: Anstey's Cave	**ID:** 326	**HER:** 447609
Bibliography: Branigan et al. 1991a: 116		
Excavation Date:1825	**Type:** Cave	**Altitude (m):** 15

Cave Description: Trace of the cave is now lost but was believed to have been located above Anstey's Cove.

Excavation/Assemblage Discussion:

Roman Coins: A Roman coin of Antoninus Pius (86-161 AD) was found in the cave in 1825, whilst in 1891 a coin of Trajan (98-117 AD) was also found (Branigan et al. 1991a: 166).

Metalwork: A brass of a dagger sheath along with conical pieces was found in the cave, although this is of unknown date (Branigan et al. 1991a: 166).

Chronology: Finds of coins of late 1st century and early 2nd century AD may indicate that the cave was in use sometime during the Early Roman Iron Age.

Radiocarbon Dates:

Suggested Broad Date: RIA	**Suggested Date Range:** 50-150 AD

Name: Pixies' Hole	**ID:** 328	**HER:** 446676
Bibliography: Pengelly 1873; Shaw 1949; Roberts 1996		
Excavation Date: 1823; 1947-1948; 1976-1978	**Type:** Multi-Chamber>100	**Altitude (m):** 47
Cave Description: The cave is located 27 metres above the valley floor and is made of a series of passages and chambers within a wide rift system. The cave entrance is a natural arch, which leads to a complex karst system that is approximately 265 metres in length.		
Excavation/Assemblage Discussion: A Roman brooch may have been discovered by Pengelly, although it is unclear where this was found, or what type this was (Roberts 1996). **Pottery:** Fragments of pottery were recorded from the cave likened to those found at Kent's Cavern (**81**) and could date to the Iron Age or Roman Iron Age (Pengelly 1873: 53).		
Chronology: Evidence of activity in Pixie's Hole can only be tentatively dated to the Roman Iron Age, given the unclear nature of the types of pottery and brooch.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-400 AD	

Name: Whitcombe's Hole	**ID:** 331	**HER:** 194282
Bibliography: Branigan et al. 1991a: 151; Dawkins 1865; Simmonds 2011		
Excavation Date: 1864;2011-2013	**Type:** Single Chamber	**Altitude (m):** 169
Cave Description: The cave is located 41 metres above the valley floor and is made of a single tunnel. The cave entrance, orientated towards the northeast, is 3 metres wide.		
Excavation/Assemblage Discussion: Excavations in 1864 uncovered a rich 'earth' (Dawkins 1865: 169) of charcoal containing animal bones. In the lower section of the cave, fragments of pottery and metal were reported. More recent excavations of the cave focused on sections towards the entrance, which produced no further finds (Simmons 2011). **Pottery**: A coarse urn and black ware vessel were found during excavation in 1864, which were considered to date to the Iron Age (Branigan et al. 1991a: 151). **Metalwork**: An angle iron was thought to have been a coffin attachment belonging to the Roman Iron Age (Dawkins 1865: 169).		
Chronology: The limited finds from the cave, suggest at least two phases of use occurring sometime in the Iron Age and Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 410 AD	

Name: Uphill Quarry Caves (**3**)	**ID:** 332	**HER:** 192504
Bibliography: Harrison 1977		
Excavation Date: 1863	**Type:** Single Chamber	**Altitude (m):** 15
Cave Description: A series of 13 caves were discovered during quarrying at the limestone Uphill Quarry. Uphill Quarry Cave 3, found in 1863, was orientated towards the south and was 12 metres long and had an entrance 2 metres wide and 2.5 metres high.		
Excavation/Assemblage Discussion: Excavation of the cave uncovered a series of deposits, including a layer of stagmitic breccia rich in animal remains and a layer of earth and sand (Harrison 1977: 237). **Human Remains**: The remains of at least 6 individuals were found in the cave of unknown date (Harrison 1977: 237). **Pottery**: A single sherd of "rude unbaked pottery" was found in the cave (Harrison 1977: 238).		
Chronology: Archaeological activity in the cave is unlikely to date to the 1st millennia BC and AD. The cave was included in the catalogue because of its proximity to Uphill Quarry Caves (2), which contained human remains of Roman Iron Age date.		
Radiocarbon Dates:		
Suggested Broad Date: UN	**Suggested Date Range:**	

Name: Uphill Quarry Caves (**6**)	**ID:** 333	**HER:** 192504
Bibliography:		
Excavation Date: 1881	**Type:** Cave	**Altitude (m):** 15
Cave Description: A series of 13 caves were discovered during quarrying at the limestone Uphill Quarry. Uphill Quarry Cave 6 was found in 1881 found close by Uphill 7 and 8.		
Excavation/Assemblage Discussion: **Human Remains**: Charcoal and a human skull were found underneath on broken stalagmite floor (Harrison :239)		
Chronology: Archaeological activity in the cave is unlikely to date to the 1st millennia BC and AD. The cave was included in the catalogue because of its proximity to Uphill Quarry Caves (2), which contained human remains of Roman Iron Age date.		
Radiocarbon Dates:		
Suggested Broad Date: UN	**Suggested Date Range:**	

Name: Uphill Quarry Caves (**10**)	**ID:** 334	**HER:** 192504
Bibliography: Harrison 1977: 241		
Excavation Date: 1899	**Type:** Cave	**Altitude (m):** 15
Cave Description: A series of 13 caves were discovered during quarrying at the limestone Uphill Quarry. Uphill Quarry Cave 10 was excavated in 1899.		
Excavation/Assemblage Discussion: **Pottery**: A piece of black Roman pottery was found in the cave (Harrison 1977: 241). **Stonework**: Pot-boilers and hammerstones were also found in the cave of unknown date (Harrison 1977: 241).		
Chronology: Roman Iron Age finds, may suggest that activity in Uphill Quarry Caves (10) was contemporary to the burial in Uphill Quarry Caves (2).		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Waterwheel Swallet	**ID:** 335	**HER:** 197444
Bibliography: Stanton 1987		
Excavation Date:1977-1980	**Type:** Vertical Passage	**Altitude (m):** 240
Cave Description: The vertical shaft cave is 240 metres long and made of a series of 9 chambers connected by passageways. The cave was extensively excavated during lead working in the early 20th century.		
Excavation/Assemblage Discussion: Evidence of human-use of the cave came from deposits of mud tailings containing slag and pottery from Roman to modern periods. It is possible that such material entered the cave through water action or activity elsewhere in the cave. The excavators consider that the first mining activity at the set occurred during the Iron Age or Roman Iron Age (Stanton 1987: 10).		
Chronology: Finds of Iron Age and Roma Iron Age lead working material may indicate lead working taking place within or close by to the swallet.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 410 AD	

Name: Slocker Hole	**ID:** 336	**HER:** 200184
Bibliography: Balch 1911: 120; Branigan et al. 1991a: 150		
Excavation Date:1947	**Type:** Vertical Shaft	**Altitude (m):** 181
Cave Description: Slocker Hole, is part of a series of caves found near Stoke Lane Quarry and were reported by Branigan and Dearne (1991a: 150) to have been destroyed, although a number of the caves still exist and have been surveyed. The cave is a swallet with a series of large chambers. The cave is made of a number of large decorated chambers and stream ways with flooding in lower sections, which is constant in poor weather.		
Excavation/Assemblage Discussion: Balch reports that human and animal remains were reported by Browne in the cave along with charcoal (Balch 1911: 120). **Pottery**: A complete Samian form 38 bowl was found in the area but cannot be categorically linked from the cave (Branigan et al. 1991a: 150).		
Chronology: If the bowl originated from the cave, it could suggest that the cave was used during the late 1st or early 2nd century AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-150 AD	

Name: Swildon's Hole	**ID:** 337	**HER:** 197728
Bibliography: Branigan et al. 1991a: 150; Fledermausfanger 1962		
Excavation Date:	**Type:** Vertical Shaft	**Altitude (m):** 238
Cave Description: The cave is a swallet connected to a 9-mile-long karst system.		
Excavation/Assemblage Discussion: Material of Roman Iron Age date were found included a pot and half a saddle quern (Fledermausfanger 1962). In their discussion of Roman Iron Age cave-use Branigan and Dearne (1991a: 150) argued that the material was likely carried into the cave by water, rather than by intentional deposition. However the material is interesting giving action seen elsewhere at swallets across the British Isles.		
Chronology: Given evidence of vertical shaft use elsewhere in Mendip, it is possible that the cave was intentionally used sometime during the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Tyning's Great Swallet	**ID:** 339	**HER:** None
Bibliography: Mullan et al. 2004		
Excavation Date: 2004 (non-archaeological)	**Type:** Vertical Passage	**Altitude (m):** 256
Cave Description: The vertical shaft cave is accessed by a horizontal entrance that is 3 metres high, leading to a vertical shaft that is 40 metres deep.		
Excavation/Assemblage Discussion: Archaeological material from the cave was recovered between depths of 10 to 30 metres, which was similar in form to the entrance shaft at Charterhouse Warren Farm Swallet (**49**) (Mullan et al. 2004: 135). The material found in the cave, was consider intrusive rather than intentionally deposited (ibid.). **Human Remains**: At least 10 skull fragments were found in the cave, along with a number of other human bones (Mullan et. al. 2004: 135). One of these bones, located at a depth of 30 metres below the entrance, was radiocarbon dated to the Iron Age (Mullan et al. 2004: 149). **Animal Remains**: A large quantity of animal remains were found including domestic cattle, one of which was radiocarbon dated to the Bronze Age, a pig, sheep, horse, red deer and a canid (Mullan et al. 2004: 137).		
Chronology: Given evidence of the wider mortuary use of swallet holes in Mendips, such as at Read's Cavern (**54**), it is likely that human remains were intentionally deposited during the Late Iron Age in the entrance shaft of Tyning's Great Swallet, rather than being washed down by rain.		
Radiocarbon Dates: OxA-15350. Human bone 2254±29 **395-208 cal BC**		
Suggested Broad Date: IA	**Suggested Date Range:** 390-200 BC	

Name: Cavall's Cave	**ID:** 348	**HER:** 1043802
Bibliography: Barton 1993		
Excavation Date: 1992	**Type:** Single Cave	**Altitude (m):** 161
Cave Description: Cavall's Cave is a single chambered cave, located on the top of a cliff. Its entrance is 4.5 metres wide and is orientated towards the south.		
Excavation/Assemblage Discussion: Re-excavation of the site in 1993 uncovered two distinct archaeological horizons (Barton 1993: 339-341) separated by 10-15 cm. The upper horizon contained animal remains and Roman Iron Age material including: **Pottery:** A number of large sherds of Roman Severn Valley Ware. Bronze Age pottery was also reported from levels below the Roman material (Barton 1993: 339-341). **Coinage**: A coin of Faustina II struck between 145-152 AD (Barton 1993: 339-341) **Bonework:** Part of a bone spatula was recovered with the pottery (Barton 1993: 339-341)		
Chronology: Artefacts found in the cave, suggest that the site was used during the 2-3rd centuries AD, this is demonstrated through both finds of Severn Valley Ware and a coin of Faustina II, minted between 145 and 152 AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 145-250 AD	

Region 2: Central England

In Region 2, which encompasses Central England, including the limestones of the Peak District and Creswell Crags, 56 caves were identified as being used at some time during the period of study. These included a range of different types of caves, include rockshelters, complex multi-chambered caves and active riverine systems.

25	Poole's Cavern	**161**	Dead Man's Cave
26	Thirst House Cave	**177**	Old Hannah's Hole
27	Carsington Pasture Cave	**178**	Pin Hole Cave
28	Cave Dale Cave No.20	**181**	Sycamore Cave
29	Ravencliffe Cave	**217**	Ossum's Eyrie Cave
30	Robin Hood's Cave	**218**	Pymm's Parlour
31	Mother Grundy's Parlour	**219**	Reynard's Cave
32	Demon's Dale Cave	**220**	Upper Cales Dale Cave
33	Dowel Cave	**287**	Edgar's Cave
34	Fissure Cave	**288**	Bat House Cave
35	Fox Hole Cave	**289**	Church Hole Cave
36	Harborough Cave	**290**	Deep Dale Cave
37	Rain's Cave	**291**	Old Woman's House
38	Langwith Cave	**293**	Ashwood Dale Cave
39	Whaley Rock Shelter No.1	**294**	Etches Cave
40	Whaley Rock Shelter No.2	**295**	Thurse House Cave
41	Ash Tree Cave	**296**	Guy's Cave
43	Frank I'th' Rocks Cave	**306**	Robin Hood's Stride
44	Ossum's Crag Cave	**308**	Unknown
45	Darfar Ridge Cave	**309**	Churn Hole
46	Seven Ways Cave	**310**	Churn Hole Rockshelter
47	Cheshire Wood Cave	**311**	Rowter Rocks
48	Wetton Mill Rock Shelter	**312**	Wetton Hill Cave
49	Elder Bush Cave	**313**	Carlswark Cavern
50	Thor's Fissure Cavern	**314**	Scarthen Nick
51	Thor's Cave	**315**	Reynard's Kitchen Cave
52	St Bertram's Cave	**347**	Scarcliffe Shelter 2

Name: Poole's Cavern	**ID:** 25	**HER:** 306181
Bibliography: Bramwell et al. 1983; Branigan et al. 1983; Branigan et al. 1991a: 43-50; Smithson et al. 1991		
Excavation Date: 1854-1875;1981-1984	**Type:** Multi-Chamber>100	**Altitude (m):** 369

Cave Description: Poole's Cavern is a complex karst cave serving as an outflow for the River Wye. The current show cave is 244 metres long and the cave's entrance, orientated towards the north, is 3 metres wide. This leads to a curved passage that joins a large 30-metre-high passage, which is contains the subterranean waters of the River Wye. To the north of this chamber, an alcove leads to 50-metre-long chamber named the 'Roman Chamber'. Associated with this are a number of alcoves, including rock pools and stalagmitic formations.

Excavation/Assemblage Discussion: The Roman Chamber, entrance and entrance passage have been excavated a number of times. Beginning in 1981, excavations focused on the Roman Chamber, which uncovered a range of material belonging to the Roman Iron Age, included a hearth within the central chamber (Branigan et al. 1983: 69). Bronze finds were also concentrated around a rock pool in one of the alcoves found adjacent to the Roman Chamber (ibid.).

Pottery: Finds of pottery include 97 vessels of Roman Iron Age date. Of these, 37 vessels were identified as Derbyshire Ware, 16 as Black-Burnished Ware, 26 as Grey South Yorkshire Ware, 4 as beakers from the Lower Nene Valle, 3 Imitation Samian vessels, a Spanish amphorae dating to the 1st century AD (Branigan et al. 1991a: 43-44). Along with these a fragment of mortaria was discovered and 9 pieces of Central Gaulish Samian Ware and a crucible fragment (Smithson et al. 1991: 49). The majority of this pottery was thought to date to the late 1st and 2nd centuries AD, similar to the metalwork finds. Iron Age pottery was also found in the cave, including a number of sherds of Belgic influenced pottery dating to the 1st century BC and early 1st century AD (Branigan et al. 1991a: 44).

Coinage: 12 coins were found during excavation of the Roman Chamber. These included a Claudius Aes – 41-45 AD mint, Denarius of Vitellus, 69 AD mint, Domitian 88-89 AD mint, Trajan 114-115 AD mint, Hadrian 117 AD mint, Hadrian 119-138 AD mint, Antoninus Pius, 140-144 AD mint, Antoninus Pius, 14-155 AD mint (Branigan et al. 1991a: 49). Four silver cross pennies dating to the reign of Henry V (1412-1422 AD) were also found in the upper layers of cave earth (Smithson et al. 1991: 52).

Metalwork: Excavation of the Roman Chamber uncovered a large corpus of metalwork, the majority of which dated to the late 1st and 2nd centuries AD. These included a number of Dolphin brooches dating between c.75-160 AD, a Colchester derivative fibula, which dates between c.80-150 AD, two Knee broches and a Trumpet brooch considered 2nd century AD in date. Along with complete fibulae a number of unfinished brooches, moulds and springs were also found (Branigan et al. 1983: 57). These unfinished brooches were thought to date between 70 and 120 AD and could indicate that bronze working took place in the cave sometime in the late 1st or 2nd centuries AD. A fragment of Aucissa brooch was also found in the cave along with a Fowler D1 brooch, which may indicate an early 1st century AD use of the cave.

Human Remains: Excavation of the main chamber recovered the remains of four individuals buried underneath a rock overhang (Smithson et al. 1991). Seven human skulls were also reported to have been found outside the cave, during excavations in the 19th century (Marsden 1994: 95).

Boneworking: A limited assemblage of worked bone was reported from the Roman Chamber, which included a number of counters, a knife handle and a number of worked antler points (Smithson et al. 1991: 43).

Glass Beads: A melon bead in opaque turquoise and a tear phial in clear glass with flat foot was recovered from the Roman Chamber (Branigan et al. 1991a: 50).

Stonework: Haematite polishers, a jet finger ring and a kimmeridge shale needle were also found in the Roman Chamber (Branigan et al. 1991a: 50).

Animal Bone: A small animal bone assemblage was also reported from the Roman Chamber, which included sheep/goat, cow, pig, red deer, horse, fish and domestic fowl (Smithson et al. 1991: 43).

Chronology: Dating activity in Poole's Cavern is helped by the extensive diagnostic corpus of metalwork and pottery, the majority of which date to the late 1st century AD and 2nd century AD. However, there is also limited evidence of activity taking place in the Late Iron Age, demonstrated by finds of Belgic influence pottery and possible by finds of an Aucissa brooch and Fowler D1 fibulae. The date of human remains found in the caves is unknown.

Radiocarbon Dates:

Suggested Broad Date: IA; RIA	**Suggested Date Range:** 200 BC- 300 AD

Name: Thirst House Cave	**ID:** 26	**HER:** 306079

Bibliography: Branigan et al. 1991a: 58-59; Branigan et al. 1991b; Cox 1890, 1891; Fitzpatrick 1891; Palmer et al. 1923; Salt 1897, 1899; Ward 1894, 1895, 1897

Excavation Date: 1884-1890; 1923	**Type:** Multi-Chamber	**Altitude (m):** 292

Cave Description: Thirst House cave is a multi-chambered cave with a southwestern facing entrance way, 8 metres wide and 5 metres high. The cave is located on a cleft of limestone in the Deepdale valley at the base of an escarpment. The cave is made of a sloping chamber 27.43 metres long with a maximum height of 3.66 metres, and a maximum width of 7.6 metres. This leads down into a lower chamber, accessed by a low creep, 21.95 metres in length, 3 metres wide and 1.8 metres high. Within the main chamber, a small fissure, which was 9.14 metres deep was found in the floor of the cave and connected to an active stream way.

Excavation/Assemblage Discussion: The cave was excavated towards the end of the 19th century with the small finds being reappraised by Branigan et al. (1991b). The so-called Roman Iron Age layers were recorded as being c.61cm thick in places and was spread across the cave and cave mouth. Ward (1897) suggested the cave was inhabited by miners in the 18th and 19th centuries, which may have damaged the stratigraphy of the cave. The cave was re-excavated in 1923 by the UBSS although no further finds were recorded. Most have the finds were recorded from a series of dark earth, although a number have a known provenance (Branigan et al. 1991a: 85).

Metalwork: A large assemblage of metalwork was reported from the cave, recovered from a depth of 61 cm from both cave chambers. Of the brooches, the earliest is a Neuheim derivative fibula, which was found outside the cave entrance, dating to the first part of the 1st century AD. Two of the trumpet brooches, similar in style to those found at Poole's Cavern (**25**) were also found, along with a similar toilet set (Branigan et al. 1991b). A number of lead spindle whorls, similar in design to those found in a number of Settle Caves (see Region 3) were also reported to have been found in the cave (Ward 1894).

Pottery: Iron Age pottery was reported to have been found in the rear of the first chamber in dark earth below Roman Iron Age finds (Branigan et al. 1991b). Pottery belonging to the Roman Iron Age, included Derbyshire Ware, an Ampulla Globular Flask, and a Nene Valley incised vessel (Branigan et al. 1991a: 58). Along with these, a single sherd of Form 36 Samian Ware was also reported along with four sherds of Mancetter-Harsthill vessel dating to the 3rd-4th centuries AD (ibid.).

Coins: Two coins belonging to the reign of Victorinus minted in 260 Ad and 268 AD were found within the cave (Branigan et al. 1991a: 58-59).

Stonework: A possible stalagmite hammer stone thought to date to the Bronze Age was also found in the cave (Ward 1897).

Human Remains: Below the cave, on the valley floor, 4 inhumations were discovered associated with an enclosure (Ward 1897). At a depth of 1.23 metres a skeleton with its head orientated towards the east was found associated with a bronze armlet, a bronze pin and a bronze split ring. The skeleton was thought to have been placed into an uncovered cist enclosure. A further cremation was recorded within the enclosure in a pottery vessel of Roman Iron Age date. Further north of the cist a layer of charcoal and juvenile teeth were discovered (Salt 1897). A further burial was found 9 metres from the entrance of the cave, 2.5 metres from the other burials in the enclosure, located on the cave talus. The burial was and enclosed on a cist formed by piling rocks. Associated with the skeleton was an iron spearhead. The date of these inhumations are unclear, although one cremation belonged to the Roman Iron Age, which could have been related to activity taken place in the cave.

Bonework: A limited bonework assemblage was also reported during excavations, which included an Iron Age spindle whorl and pin found at the cave entranceway (Branigan et al. 1991a: 58-59).

Chronology: The large corpus of material has been summarised by Branigan and Dearne (1991b) who note the concentration of metalwork and evidence of craftworking at the entrance. The nature of the metalwork has clear parallels to other Roman Iron Age cave assemblages in the region, including Poole's Cavern (**25**). The diagnostic metalwork recovered at the cave also points at a similar date of late 1st and 2nd century AD activity. Later activity in the cave may also be demonstrated by sherds of Mancetter-Hartshill Ware which date to the 3rd-4th centuries AD and the 3rd century AD coins minted during the reign of Victorinus. Late Iron Age activity at the entrance of the cave, may also be seen through the find of a Neuheim derivative fibulae along with a bone spindle whorl and pin.

Radiocarbon Dates:

Suggested Broad Date: IA; RIA	**Suggested Date Range:** c.800-50 BC; 43-350 AD

Name: Carsington Pasture Cave	**ID:** 27	**HER:** 1203216
Bibliography: Chamberlain 2001		
Excavation Date: 1998-1999	**Type:** Multi-Chamber	**Altitude (m):** 301

Cave Description: The limestone cave is located on a promontory ridge, running alongside a limestone escarpment. The entrance is oriented north, although a second artificial entrance, thought to have been created during mining is found 6 metres to the south. The cave is made of three chambers; the second one being discovered in 1998 by Pegasus Caving Club. This chamber is 10 metres long and 4 metres wide and has stalactite straws.

Excavation/Assemblage Discussion: Exploration of the cave by Pegasus Caving Club broke into the cave by digging in the floor of the main entrance chamber. This chamber contained the remains of 20 individuals, dominated by cranial fragments with neonatal to adult bones also being present.

Human Remains: At least 20 individuals were recorded from the cave. Two samples were taken for dating that supplied an Early Iron Age date from the floor of the second chamber, whilst cut-marked bones found between the second and third chamber were dated to the Neolithic. The cut-marked Iron Age femur was one of two suggesting that deliberated disarticulation of the body at the knee joints. In the central chamber all of the neonate bones were clustered in the centre of the chamber representing at least 7 individuals, 3 children aged between 2-12 years, an adolescent and 9 adults. Smaller bones were absent from the record, thus thought to be de-fleshed elsewhere. At least two of the neonates were at least partial skeletons and two complete burials also occurred in the cave. Some of the human bones have evidence of carnivore gnawing.

Further material was also found within the cave including Roman Iron Age coins, pottery and a number of pieces of split animal bones.

Chronology: Radiocarbon dating evidence of the human remains found in Chamber 2, indicate that the deposition of human remains took place during the Early Iron Age. Furthermore, finds of Roman Iron Age artefacts, by Time Team, also appear to indicate a later use of the cave.

Radiocarbon Dates:	
OxA-9806 Human Bone on Chamber 2 Surface 2435±55	**757-405 cal BC**
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 760-400 BC; 43-410 AD

Name: Cave Dale Cave 2	**ID:** 28	**HER:** 309623
Bibliography: Pennington 1875; Preston 1961		
Excavation Date: 1870	**Type:** Single Chamber	**Altitude (m):** 272
Cave Description: The small cave is located below Peveril Castle and is part of a series of 15 caves in Cave Dale. The cave is 2.5 metres wide, 0.5 metres high and 4.5 metres in length and orientated south (Pennington 1875: 238).		
Excavation/Assemblage Discussion: The cave is accessed by a low creep, which leads into a small chamber. Excavation of this uncovered a stratigraphic sequence, which included a black humic layer and yellow sand lying above a thick layer of stalagmite (Pennington 1875 53). **Pottery**: Crude pottery was recorded in the upper layers along with charcoal of unknown date (Pennington 1875 53). **Bonework**: Two worked antlers and a bone comb were recorded by Pennington (1875: 53-54). **Metalwork**: A bronze axe and an iron spike were recorded in the upper layers of the cave, which contained zinc (Preston 1961:162). **Animal Bones**: A series of animal bones were recorded in the cave including sheep/goat, fox, badger, dog, cat, fox, hare, duck, red deer and ox (Preston 1961:162). **Human Bones:** Human bone and teeth were recorded in layers above and below the stalagmite (Pennington 1875: 53). **Stonework**: A piece of jet was also recorded in the cave (Pennington 1875: 240).		
Chronology: Finds from Cave Dale Cave 2 may have related to broader patterns of activity that took place in caves in Cave Dale dating to the Iron Age. However, given the non-diagnostic nature of these artefacts, such a date is tentative.		
Radiocarbon Dates:		
Suggested Broad Date: IA (?)	**Suggested Date Range:** 800 BC- 43 AD	

Name: Ravencliffe Cave	**ID:** 29	**HER:** 309125
Bibliography: Branigan et al. 1991a: 52-53; Branigan et al. 1992: 70; Challis et al. 1975: 33; Smith 1912; Storrs Fox 1929; Storrs Fox et al. 1910		
Excavation Date: 1906;1927-1929	**Type:** Single Chamber	**Altitude (m):** 304
Cave Description: Ravencliffe Cave is located on a limestone crag and is accessed by a southwestern facing entrance, which leads into a single central chamber with a number of ancillary passageways.		
Excavation/Assemblage Discussion: Excavations in the cave uncovered a sequence of deposits that including a layer of dark soil, a thin light brown layer, and a layer of compact angular stones. Later excavation focused partly on the terrace outside the cave, uncovering a sequence of collapsing stones. This was used to suggest that later prehistoric occupants removed layers of deposits from the cave and dumped it into a rear passage (Storrs Fox et al. 1910). **Pottery**: Coarse heavily gritted Late Bronze Age pottery was recorded from Ravencliffe (Challis et al. 1975: 33). An Early Iron Age, angular type jar was also found within the cave (Challis et al. 1975: 57). Derbyshire Ware found in the cave indicates further Roman Iron Age use between the 2nd and 3rd centuries AD (Branigan et al. 1991a: 70). **Metalwork:** Towards the rear of the cave a gold ellipse and bronze awl were found and considered Iron Age in date. A penannular and Dolphin brooch were also found within the cave dating to the 1st century AD (Branigan et al. 1991a: 70; Smith 1912: 55). This may suggest a period of activity contemporary to that at nearby Thirst House Cave (**26**). **Glass**: Sherds of Roman glass were found in the cave and glass beads. One glass bead maybe Saxon in date (Branigan et al. 1991a: 70). **Bonework** A bone ring and awl were found under a rock overhang (Excavator's B) to the right of the entrance in the main chamber (Storrs Fox et al. 1910: 149-151). A bone toggle was also part of the assemblage recorded from the cave and compared to similar examples recorded in Harborough Cave (**36**), which dated to the Iron Age (Storrs Fox et al. 1910: 150). A perforated antler and cheek piece were also found in the cave and considered Iron Age in date (Challis at al. 1975: 57). **Human Bones**: Human bones were reported in the centre of the cave and towards the rear with 400 in total being recovered from the cave with some infant remains. Eighteen fragments of skull were found along with 7 mandibles (Storrs-Fox et al. 1910:143-146). **Animal Bone**: In the layer that contained the Roman Iron Age metalwork, sheep/goat, cow and pig were found (Storrs Fox et al. 1910: 146).		
Chronology: Whilst the date of the human remains found is unclear, dating evidence from diagnostic metalwork found within the cave suggests use sometime during the 1st or early 2nd centuries AD. Earlier Late Iron Age use may also be attested by finds of a bone toggle and bronze awl. A glass bead may also demonstrate Early Medieval activity in the cave.		
Radiocarbon Dates:		
Suggested Broad Date: LBA; IA; RIA	**Suggested Date Range:** 1200-400 BC; 43-410 AD	

Name: Robin Hood's Cave	**ID:** 30	**HER:** 891376
Bibliography: Branigan et al. 1991a: 69; Branigan et al. 1992: 81; Dawkins 1877; Jenkinson 1978, 1984; Mello 1875		
Excavation Date:1876; 1888; 1969	**Type:** Multi-Chamber	**Altitude (m):** 85
Cave Description: Robin Hood's Cave is part of a series of caves in Creswell Gorge. The cave is the largest of the group with 4 entrances and 2 large chambers, which are connected by a series of passageways.		
Excavation/Assemblage Discussion: A series of excavations occurred during the latter half of the 19th century with a season in the 1960s uncovering a total of 1040 artefacts. The assemblage comprises mostly of flint, bonework and animal and human bone. **Human Bone**: 35 fragments of human bone were recorded from excavations in the cave (Jenkinson 1978). A small cranial fragment and fibula were found in the rear chamber of the cave, possible associated with Palaeolithic artefacts. A further radius and humerus along with a mandible were also found in Laing's excavation, thought to represent a Palaeolithic burial. Excavation by Campbell in 1969 uncovered four skeletal fragments in the talus associated with western entrance and talus. A frontal was found in situ at the entrance of the cave with a number of other fragments were recovered the 19th century spoil heap. The skull was thought to belong to a young adult male whose head had been severed. These fragments provided a radiocarbon date belonging the Late Iron Age or early Roman Iron Age. **Metalwork**: A damaged headstud brooch was found in Robin Hood's Cave, 50-200 AD. (Branigan et al. 1991a: 69).		
Chronology: The successive methods of excavation, methodology and research aims has impacted preservation of taphonomy and survivability of material. However, a sequence of radiocarbon dates presents a sequence of use focused around the Western Entrance in the Neolithic and Bronze Age, whilst use during the Iron Age and Roman period is identified by a human mandible.		
Radiocarbon Dates: OxA-736 Human Mandible from South-West Entrance 2020 ±80 **352 cal BC- 204 cal AD** OxA-6581 Second part of Human Mandible from South West-Entrance 1785±50 **126-383 cal AD**		
Suggested Broad Date: IA(?); RIA	**Suggested Date Range:** 200 BC- 400 AD	

Name: Mother Grundy's Parlour	**ID:** 31	**HER:** 890943
Bibliography: Armstrong 1924; Branigan et al. 1991a: 19-20; Dawkins 1879; Jenkinson 1977		
Excavation Date: 1877; 1924; 1964; 1974	**Type:** Single Chamber	**Altitude (m):** 84
Cave Description: Mother Grundy's Parlour is part of a series of limestone caves in Creswell Gorge. The cave is located on a small limestone outcrop in the south eastern part of the gorge. The cave is made of a chamber and a passageway with an entranceway 8 metres wide that is orientated south.		
Excavation/Assemblage Discussion: **Human Remains**: The cave contained skeletal fragments that were thought to date to the Upper Palaeolithic with a juvenile cranium and mandible found in a small recess in the cave wall. Further juvenile bones were recorded by Dawkins in the red sandy cave earth that spread across the cave. The exact provenance of the human remains radiocarbon dates is unknown being recovered from the Dawkins collection. **Pottery**: Several sherds of Roman and Iron Age pottery were recorded by Armstrong (1924: 164) **Metalwork**: A Headstud fibula found in the cave was dated by Branigan and Dearne (1991a: 20) to the second century AD. A nail cleaner of Crummy type 1b, of bronze was also found dating to the Mid-Late first century AD (ibid.). **Coinage**: A coin was reported from the cave (Jenkinson 1977: 44).		
Chronology: Three radiocarbon dates were obtained from the Dawkins collections and thought to be those of the child bones recovered from Mother Grundy's Parlour. Despite the unknown provenance of the remains, similar dates for Robin Hoods Cave would likely confirm activity in the cave during the Iron Age.		
Radiocarbon Dates: OxA-1832 Juvenile Cranium from collection 2210±80 **403-54 cal BC**		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 400 BC- 150 AD	

Name: Demon's Dale Cave	**ID:** 32	**HER:** 13555
Bibliography: Challis et al. 1975: 37; Gill et al. 1991; Marsden 1994		
Excavation Date: 1932	**Type:** Rockshelter	**Altitude (m):** 203
Cave Description: The cave is a large rockshelter, 5 metres deep and 1.5 metres high.		
Excavation/Assemblage Discussion: **Pottery**: Finger decorated pottery, considered to date to the Early Iron Age, was found in the cave (Challis et al. 1975: 37). **Metalwork**: An Aucissa type brooch was recovered from the area though to date to the mid-1st century AD (Challis et al. 1975: 37). **Human Remains**: The cave also contained a number of burials thought to date to the Early Bronze Age (Marsden 1994: 97).		
Chronology: Finger decorated Early Iron Age pottery may demonstrate use of the cave during the first part of the 1st millennium BC. An Aucissa brooch found in the cave may also demonstrate use during the 1st century AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800- 400 BC; 43-100 AD	

Name: Dowel Cave	**ID:** 33	**HER:** 305840
Bibliography: Bramwell 1959; Branigan et al. 1991a: 23		
Excavation Date:1958-59	**Type:** Multi-Chamber	**Altitude (m):** 313
Cave Description: The cave is located at the lower end of Dowel Date with an entrance 3.3 metres high and 0.8 metres wide, orientated towards the south. A passageway, descends from the cave entrance for 7 metres before narrowing and becoming impassable.		
Excavation/Assemblage Discussion: Excavation of the cave uncovered early prehistoric remains along with Neolithic burials associated with Peterborough Ware. Above the burial layer were fragments of Early Iron Age pottery that were similar to those found at deposits at Breedon on the Hill and a fragment of coarse Roman Iron Age pottery. Across the cave two sections of transverse walling were present, blocking access to the rear and the remains of a human child. The cave stratigraphy was comprised of 3 layers: Layer A, closest to the surface, made of black mould. Layer B, a brown clay loam: 0.5m thick, which contained Roman Iron Age pottery and animal bone. Layer C, an upper calcareous layer, which produced Iron Age pottery. **Human Bone**: At least 10 inhumations, including 3 infants, an adolescent and 5 adults were recovered from the cave, associated with a possible cist. These were considered Neolithic or Bronze Age in date (Bramwell 1959: 104). **Pottery:** Iron Age pottery was recovered from a thin calcareous layer that marked the end of seasonal flooding in the cave, along with a crucible fragment (Ford 1977: 274) above this a layer of brown clay loam also contained a fragment of coarse Roman Iron Age pottery (Bramwell 1959: 102). **Bonework**: A bone spindle whorl was found with Roman Iron Age pottery (Branigan et al. 1991a: 23).		
Chronology: Finds of both Iron Age and Roman Iron Age pottery indicate that the cave was used during the 1st millennia BC and AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800-400 BC; 43-410 AD	

Name: Fissure Cave	**ID:** 34	**HER:** 7601
Bibliography: Branigan et al. 1991a: 27;Gilks 1990; Pill 1963		
Excavation Date:1961-1963	**Type:** Single Chamber	**Altitude (m):** 289
Cave Description: Fissure Cave is located 27 metres northwest of New Cave (**307**). The entrance is 0.46 metres wide and 1.22 metres high with the cave itself being 15.24 metres long, although only 4.27 metres is easily accessible (Gilks: 1990: 6).		
Excavation/Assemblage Discussion: The majority of finds came from the cave entrance. Stratigraphy was recorded as follows: Layer 1: Black humic layer, 1.07m thick, Layer 2: made of brown humic material and angular limestone blocks, 0.84m thick- Roman Iron Age material came from this layer, Layer 3: made of yellow clay and limestone gravel 0.23m thick. From this layer came a number of human remains and Neolithic and Early Bronze Age material. **Pottery**: Alongside finds of Neolithic and Bronze Age material, Iron Age pottery and fragments of 3rd and 4th century AD pottery were found at the cave entrance (Pill 1963: 7). **Coins**: Coins of Valentinian (364-375 AD), Valens (364-378 AD) and house of Valentinian (364-378 AD) were found in the cave entrance, likely contemporary to the Roman Iron Age pottery (Branigan et al. 1991a: 27). **Metalwork:** A lead object, thought to be a dagger pommel, was recovered from the cave entrance (Pill 1963: 8). **Bonework**: Cut-marked bones and a bone point was recorded in the cave entrance (Pill 1963: 6). **Human Remains**: Human remains found across the cave represent 3 individuals including a newly born child, a child aged less than 1 year and an adult (Gilks 1990: 18). **Animal Bone:** Animal bones were found throughout the cave (Pill 1963: 8).		
Chronology: Finds of 4th century coinage and pottery indicate that the cave may have been used sometime during the Late Roman Iron Age. Finds of Iron Age pottery from the entrance may also suggest that the cave was used during the 1st millennium BC.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 43 AD: 300-410 AD	

Name: Fox Hole Cave	**ID:** 35	**HER:** 305822
Bibliography: Branigan et al. 1991a: 28-29; Bramwell 1971; Jackson et al. 1951		
Excavation Date: 1928-29**;**1961-1981	**Type:** Multi-Chamber	**Altitude (m):** 400
Cave Description: The cave is located below the summit of High Wheeldon is accessed by a north western facing entrance, which leads to 3 chambers connected by a series of passageways. In total, the cave is approximately 45 metres in length.		
Excavation/Assemblage Discussion: Excavations between 1928 and 1929 focused on the entrance to the cave, which produced Neolithic and Roman Iron Age material. Later excavations between 1961 and 1981 focused on the entrance chamber, main passage and first chamber. Within the first chamber a deposit 2 metres thick was recorded, lower levels contained worked antler objects of Palaeolithic and Mesolithic date, which was separated by a breccia horizon to a Neolithic layer, with a number of human bones and a stone axe. Above this was a supposed cobbled occupation floor, which contained Grooved, Peterborough Ware and Beaker pottery. The entrance was thought to have originally been block by three large limestone packing stones similar to long barrows. (Bramwell 1971: 3). The main passage contained a sequence of material: Layer A: a 30.48cm thick layer of dark brown silt that contained 'Roman debris', Layer B: a floor of cobbles with Neolithic material. **Features:** Pollen analysis of a feature found in the first chamber indicates that it may have a storage pit dating to the Middle to Late Bronze Age (Bramwell 1971: 3). **Human Remains**: Two fragments of human jaw were found in surface deposits associated with Roman Iron Age pottery at the entrance to the cave. Other human remains were considered Early Neolithic or Early Bronze Age in date (Bramwell 1971: 12). **Pottery:** Roman Iron Age pottery was found at the entrance to the cave, including a Form 32. Samian sherd and pieces of Derbyshire Ware (Bramwell 1971: 16). **Metalwork**: A bronze wire armlet was found in the cave, which is comparable to a more elaborate example found at the nearby Thirst House Cave (**26**). Fragments of iron slag were also found at the cave entrance (Branigan et al. 1991a: 28-29).		
Chronology: Roman Iron Age pottery, a bronze wire armlet and fragments of slag indicate activity at the cave entrance during the 1st to 3rd centuries AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 50- 300 AD	

Name: Harborough Cave	**ID:** 36	**HER:** 310774
Bibliography: Armstrong 1923; Branigan et al. 1991a: 32-34		
Excavation Date: 1907; 1922	**Type:** Single Chamber	**Altitude (m):** 345
Cave Description: Harborough Cave is located on a limestone outcrop with an entrance facing south. The cave was thought to have been a collapsed natural pot hole with a horizontal entrance. The site itself is 9 metres long and 7 metres wide and has a maximum height of 4 metres. Armstrong (1923: 413) suggests that the cave entrance had been enlarged during the Iron Age, although no direct evidence supports this. The current entrance is 1.23 metres wide and 2.13 metres high. The cave is close to an Iron Age settlement at Harborough Rocks (Makepeace 1990)		
Excavation/Assemblage Discussion: The cave was excavated twice, uncovering a sequence of material dating to the Palaeolithic, Bronze Age, Iron Age and Roman Iron Age. In 1907, excavations uncovered two distinct layers. The upper layer was characterised by a layer of burnt material that included 4 bronze brooches, charcoal and bone work. Armstrong proposed that the cave was modified with an artificial layer being created with loose stones which in places was reported to have been c.0.61m thick. **Metalwork:** Iron Age metalwork, included a coral-mounted bronze brooch which dates to the 3rd-2nd century BC, two iron spear heads and a bronze ring-headed pin (Brailsford 1957: 55). Objects belonging to the Roman Iron Age included a series of late 1st and early 2nd century AD brooches, fragments of thin bronze plate and pieces of iron slag (Armstrong 1923: 413). Roman hobnails were also found in the cave. **Pottery:** Sherds of Iron Age and Roman Iron Age pottery were found 1.52 metres from the cave entrance, apparently associated with the slab paving. Iron Age pottery included a barrel Middle La Tene style Grey ware and coarse domestic pottery, possibly dating to the 1st century BC (Challis et al. 1972: 75). **Coins:** Two coins of Trajan (98-117 AD) were found in the cave (Branigan et al. 1991a: 32-34). **Bonework:** Excavations in 1907 uncovered an assemblage of bone needles, awls, spindle whorls and a weaving comb that were thought to belong to the Iron Age (Brailsford 1957:55; Challis et al. 1975: 21). A bone antler toggle was also found near that cave and a perforated boar's tusk, which was similar to one found at Breedon-on-the-Hill and Heathery Burn Cave (**3**) (Challis et al. 1975: 22). A rectangular bone object with circular lines- likely a dice, was also found in 3.2 metres within the cave. **Human Remains**: Human remains belonging to two individuals were found in 'every area examined' within the cave (Armstrong 1923: 413), although these were of unknown date. **Stonework**: A number of 'pot boilers', whetstones and hammer stones were found in the cave. In the layer associated with Iron Age and Roman material a small piece of perforated red sandstone was uncovered, which may have been used to create bone pins (Armstrong 1923: 410). Two pieces of worked Millstone Grit and a Kimmeridge shale bracelet were also found and considered to be Roman Iron Age in date. **Glass**: A cylindrical glass bead made of dark blue glass and a globular blue glass bead were also thought to have come from the cave (Branigan et al. 1991a: 32-34).		
Chronology: Material found in Harborough Cave, indicates periods of use during the 1st millennium BC, which is demonstrated by finds of Early Iron Age pottery, bonework and a coral-mounted brooch. Finds of Roman Iron Age pottery and two coins of Trajan also suggests that the cave was in use at some time during the late 1st century or early 2nd century AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 300 AD	

Name: Rain's Cave	**ID:** 37	**HER:** 310768
Bibliography: Brailsford 1957; Branigan et al. 1991: 68; Ward 1889, 1892, 1893		
Excavation Date: 1888-1892	**Type:** Multi-Chamber	**Altitude (m):** 326
Cave Description: Rain's Cave is a multi-chambered cave located on Longcliffe Ridge. Its small, 0.6-metre-wide entrance is orientated towards the southeast and leads to two chambers. The main chamber, named Great Cave, is 4.89 metres wide and c.7.01 metres long, with a sloping passage way leading to a smaller secondary chamber, named Little Cave.		
Excavation/Assemblage Discussion: The cave was excavated between 1888 and 1892 and focused in the main chamber and entranceway. Unfortunately, the use of explosives on December 26th 1888 to remove a number of limestone blocks likely damaging any of the entrance stratigraphy. Towards the rear of the cave a sequence of charcoal, crude pottery and fragments of iron were recorded that could be slag, these were associated with the passageway to the southern chamber, c.6.1 metres from the entrance. **Pottery**: Alongside Bronze Age and Neolithic sherds, Iron Age pottery and two fragments of Derbyshire Ware were found in the cave (Marsden 1994: 95). **Spindle-Whorl**: A black shale spindle-whorl was found with lathe marks on one side, found reportedly in the northern part of the cave (Branigan et al. 1991a: 68). **Metalwork**: An iron instrument, c.61cm in length with a curved scoop on one end with a curved ring at the other. This was interpreted as a plough scoop (Branigan et al. 1991a: 68) **Human Remains**: An MNI of 6 individuals were recorded at the cave, with human remains comprising mainly of skulls with small fragments apparently absent. Although the excavator considers these to have been still in the cave. One skull was apparently charred (Brailsford 1957: 54). **Animal Remains**: Fauna recorded in the cave included ox sheep/goat, horse, pig red deer, roe deer, wolf, dog, fox and badger. Given the nature of blasting in the cave none of the animal bones can be dated.		
Chronology: Given the use of explosive to excavate the caves, both the human and animal remains cannot be dated, nor can the shale spindle whorl or iron hook. Fragments of both Iron Age and Roman Iron Age pottery, may however indicate activity taking place sometime during the 1st millennia BC and AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 43 AD; 100-300 AD	

Name: Langwith Cave	**ID:** 38	**HER:** 318159
Bibliography: Chamberlain 1996; Garrod 1927; Mullins 1913		
Excavation Date: 1903-1912; 1927	**Type:** Multi-Chamber	**Altitude (m):** 98
Cave Description: The cave is located on the base of a low limestone escarpment on the north side of a valley on the summit of a hill. The cave is made of a large chamber with reached by a sloping entrance and a series of passages. The entrance itself is orientated towards the south. The main chamber is 3.96 metres long and 4.27 metres wide, with a maximum height of 0.6 metres.		
Excavation/Assemblage Discussion: The cave was excavated a number of times between 1903 and 1912 and again in 1927. Excavations uncovered a sequence of black loam across the entire cave, approximately 50cm thick, which was followed by a deposit of flowstone in the north western portion of the cave. Limestone scree, covered the surface of the main cave chamber, below which was a black loam layer of c.30cm thickness. A red sandy layer, characteristic of Creswellian Caves, was found below this, where the majority of artefacts were reported, which dated to the Upper Palaeolithic. **Human Remains**: Bones belonging to two individuals, an old aged male and child, were found in the cave chamber. A radiocarbon sample of the adult male's calvaria indicated that the remains date to the mid-1st millennium BC. The adult male fragment of skull was reported to have been found in the inner chamber associated with an apparent arch, although it is unclear whether this was natural or purposefully deposited.		
Chronology: The radiocarbon date returned from the remains of an adult male, indicate that human remains were deposited within Langwith Cave sometime between 746-204 cal BC. This can be compared with similar radiocarbon dates of human remains found in other Creswell caves.		
Radiocarbon Dates: OxA-2232 Adult male calvaria 2330±60 **746-204 cal BC**		
Suggested Broad Date: IA	**Suggested Date Range:** 700-200 BC	

Name: Whaley Rockshelter 1	**ID:** 39	**HER:** 943193
Bibliography: Jenkinson 1978; Radley 1967		
Excavation Date:1937	**Type:** Rockshelter	**Altitude (m):** 103
Cave Description: The rockshelter, with views out towards the south-west is part of a system of small shelters along a limestone outcrop that overlooks the village of Walley. The rockshelter is 6.1metres wide, 2.13 high and 3.05 metres long.		
Excavation/Assemblage Discussion: Excavation of the rockshelter uncovered a sequence of successive sandy layers that were on top of a humic layer. In the centre of the rockshelter was a small cremated deposit- 10.16cm thick. A number of finds were recorded from the rockshelter including a number of Mesolithic blades in lower deposits. Roman Iron Age pottery was recorded just below the surface **Human Remains**: Four human teeth and a phalanx were found in the east end of the rockshelter **Pottery**: Two sherds of Roman Iron Age pottery were found in the cave, belonging to a dark ware vase and a sandy grey jar/bowl. **Animal Remains**: A single oyster shell was found with the pottery; although it is unclear whether this intrusive from lower deposits.		
Chronology: From the corpus of material it is likely that the rockshelter saw intermittent use throughout early prehistory. Use of the cave during the Roman Iron Age was likely contemporary to the nearby settlement and activity at Whaley Rockshelter 2 (**40**).		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 42-410 AD	

Name: Whaley Rockshelter 2	**ID:** 40	**HER:** 943193
Bibliography: Branigan et al. 1991a: 69; Jenkinson 1978; Radley 1967		
Excavation Date:1938; 1945-48;1966	**Type:** Rockshelter	**Altitude (m):** 103
Cave Description: The rockshelter is part of a system of small shelters along a limestone outcrop with views across the southwest. The rockshelter is 3.96 long, 1.83 metres wide and 3.05 metres high.		
Excavation/Assemblage Discussion: Excavations of the rockshelter and the surrounding areas uncovered artefacts dating to the Roman Iron Age. **Stonework**: A large corpus of flint was recovered from Mesolithic and Neolithic levels, along with an Early Bronze Age axe. A number of pot boilers were recovered from upper layers, which also contained Roman Iron Age pottery, glass and bonework. **Pottery**: Peterborough ware and a Bronze Age cinerary urn were found in levels below the Roman Iron Age horizon. In total 220 sherds of Roman pottery were found in the top talus. Grey-black ware formed the majority of the corpus with 110 plain sherds, 4 lattice decorated and 31 rusticated. One rim was identified as Gillam 226-227, dating to the mid-3rd century AD. A later grey sandy bowl with a rouletted flange was also found though to date between the 3rd-4th centuries AD. Eight sherds of Derbyshire Ware were found including a burnished rim of Hardianic-Antonianian date. 72 sherds belonging to Cantelly and Dales Wares were also found. One single fragment of Central Gaul Samian ware, and a creamy-white Hartshill type mortarium were also found (Branigan et al. 1991a: 69). Possible fragments of Iron Age pottery were also found in the cave, although these are now lost (Jenkinson 1978: 42). **Glass**: A fragment of a ring of Roman glass was found in the upper layer of the rockshelter (Branigan et al. 1991: 69). **Bonework**: An antler pick was found associated with the Roman Iron Age pottery (Branigan et al. 1991: 69). **Animal Bone**: Associated with the pottery corpus were pig, cow and sheep/goat bones along with red and roe deer, wolf and fox.		
Chronology: A fragment of human skull recovered from the rockshelter provided a radiocarbon date belonging to the Early Bronze Age. Later use, may have also occurred during the 1st millennium BC, with possible Iron Age pottery being recorded in the cave. Roman Iron Age use of the rockshelter, is attested by finds of an extensive pottery corpus dating to the 1st to 4th centuries AD. Associated with the rockshelter, there is also a small enclosure some 91 metres to the east. Excavation of this, produced a similar corpus of Roman Iron Age pottery, which included sherds of. Dales and Cantley Wares, an Oxfordshire orange-coasted carinated bowl and a Samian Dragendorf Form 31 bowl.		
Radiocarbon Dates:		
Suggested Broad Date: IA (?); RIA	**Suggested Date Range:** 800 BC- 42 AD; 50-300 AD	

Name: Ash Tree Cave	**ID:** 41	**HER:** 318369
Bibliography: Armstrong 1956;Branigan et al. 1991a: 7; Dudley 1993 ;Marsden 1994: 98		
Excavation Date: 1938-1960	**Type:** Cave/Vertical	**Altitude:** 130
Cave Description: Ash Tree Cave is a small single chambered cave, connected to a small rockshelter. The cave is c.6.1 metres long, terminating with a fissure (Armstrong 1956: 58).		
Excavation/Assemblage Discussion: The cave was excavated sporadically until 1960 with the majority of the excavations remaining unpublished. Finds were found mainly on the platform outside the cave and from rubble towards the rear of the chamber. **Pottery**: Six different fabrics of Roman Iron Age pottery and a possible Iron Age pottery were found in the upper layers of the cave (Branigan et al. 1991a: 7). **Human Remains**: A collection of human remains, assumed to be Neolithic in date (Armstrong 1956:57) were found in the central chamber. A cist was also recorded in the rear chamber contained two individuals, located beneath an overhang enclosed by a semi-circular arrangement of limestone (Armstrong 1956: 57). A later cremation was also recorded in a scooped hole in the cave chamber (Marsden 1994: 98).		
Chronology: A radiocarbon sample of human distal left tibia belonging to a juvenile suggested that the cave was used during the Bronze Age. Later use of the cave is attested by finds of Iron Age and Roman Iron Age pottery.		
Radiocarbon Dates:		
Suggested Broad Date: IA(?); RIA	**Suggested Date Range:** 800 BC- 43 AD; 43-410 AD	

Name: Frankith Rocks Cave	**ID:** 43	**HER:** 308017
Bibliography: Branigan et al. 1991a: 30-31; Ford 1977; Lee et al. 1925		
Excavation Date: 1925	**Type:** Multi-Chamber	**Altitude (m):** 221
Cave Description: The limestone cave is located above the River Dore on a sheltered platform. The caves entrance, which orientates south, is 0.6 metres wide, which leads to a passageway c.26 metres long.		
Excavation/Assemblage Discussion: The cave was excavated using a series of test pits in the cave entrance, platform and passage way. A sequence of deposits were recorded with a layer of human activity found associated with a black band of charcoal and layer of cemented breccia 0.5 metres deep. **Human Bones*:*** At least 10 individuals were found in the cave, associated with the limestone breccia layers. One adult female, one adult male, and 8 children (Lee et al. 1925: 252). **Metalwork:** A 4th century AD brooch was found 13 metres within the cave and another fibula of La Tene III style was also found dating to the Late Iron Age or Early Roman Iron Age. Associated with these were 2 bronze pins and a chain. A decorated bronze penannular brooch was also found 14 metres from the cave entrance. An iron hook and lumps of iron slag were also found towards the rear of the cave. **Pottery**: Roman Iron Age pottery was found in the cave, which included two fragments of 4th century Samian Ware (Branigan et al. 1991a: 30-31). **Glass Beads:** At least 10 glass beads were found in the cave. These included a cylindrical black glass bead and thought to be Anglo-Saxon or Late Roman Iron Age in date. Two annular blue glass beads, 6 opaque green cylindrical beads and a rectilinear deep blue glass bead, of Iron Age date were also found (Ford 1977: 274).		

Bonework: An antler cheek piece was found 12 metres within the cave, along with an antler knife, 3 pieces of worked antler and bone pin and needle (Branigan et al. 1991a: 30-31). **Roman Coins**: 12 Roman coins were identified from the cave minted during the reigns of Valentinian I (364-375 AD), Valens (364-378 AD), Gratian (367-383 AD) (Branigan et al. 1991a: 30-31). **Animal Bone**: Within the black band layer, where the majority of finds were reported from, was a small animal bone assemblage. This included, sheep/goat, fallow deer, pig, horse, dog and badger.
Chronology: Evidence of use at Frankith Rocks Cave is demonstrated by finds of a Late Iron Age La Tene III style brooch and glass bead and Roman Iron Age artefacts dating to the 3-4th centuries AD.
Radiocarbon Dates:
Suggested Broad Date: IA; RIA — **Suggested Date Range:** 200 BC- 100 AD; 300-700 AD

Name: Ossum's Cave	**ID:** 44	**HER:** 305557
Bibliography: Branigan et al. 1991a: 39-40; Branigan et al. 1992: 88; Bramwell 1954, 1955, 1956, 1987; Jacobi 1987		
Excavation Date:1954-1956	**Type:** Single Chamber	**Altitude (m):** 255
Cave Description: Ossum's Cave is located at the base of a limestone rock face in the Manifold Valley, Staffordshire. The cave entrance is 2 metres wide and 3 metres high and connects to a 9 metres long passage that slopes downwards.		
Excavation/Assemblage Discussion: The cave was excavated by the Peakland Archaeological Society after reports of finds by the Orpheus Caving Club. Excavation focused on the talus outside the cave and 4.6 metres into the cave. At the entrance Roman Iron Age material was found in black mould, including animal bone and pottery. **Animal Bone:** Animal remains found outside the cave including horse, cow, sheep/goat, red deer, pig, fox, dog, badger and cat (Davenport 1994: 5). A cut marked bovine-tibia was radiocarbon dates to 352 cal BC- 132 cal AD, suggesting either Iron Age or Roman Iron Age activity at the entrance. **Pottery:** Derbyshire Ware and Black-Burnished Ware were found at the entrance to the cave (Branigan et al. 1991a: 88). **Stonework**: Whetstones were reported by Branigan and Dearne (1991a: 88)		
Chronology: The radiocarbon date obtained from a cut-marked bovine right tibia at the cave entrance indicates activity may have taken place during the Iron Age. However, finds of Derbyshire and Black-Burnished Ware indicate Roman Iron Age activity dating to the 1st-3rd centuries AD.		
Radiocarbon Dates: OxA-629 Cut-marked bovine right tibia, C excavation area VI 2030±80 **352 BC- 132 AD**		
Suggested Broad Date: IA(?); RIA	**Suggested Date Range:** 400 BC- 410 AD	

Name: Darfur Ridge Cave	**ID:** 45	**HER:** 305575
Bibliography: Branigan et al. 1991a: 21; Nicholson 1966; Thomas et al. 1962		
Excavation Date: 1960-1961	**Type:** Multi-Chamber	**Altitude (m):** 200
Cave Description: Darfur Ridge Cave is a narrow cave located on Ecton Hill.		
Excavation/Assemblage Discussion: Excavations within the cave focused on the outer platform recovered artefacts of Roman Iron Age date. **Pottery:** Four sherds of Roman Iron Age pottery, considered to be 4th century AD in date were found during excavations (Branigan et al. 1991a: 21). **Metalwork:** An iron knife was found in the cave, which was thought to potentially date to the Roman Iron Age (Branigan et al. 1991a: 21). **Animal Bone**: An assemblage including pig, horse, sheep/goat, bear, dog, ox, deer, cat, merlin and grouse were found in the cave, although the date of this assemblage is uncertain (Branigan et al. 1991a: 21).		
Chronology: Finds of sherds belonging to the 4th century AD, suggest activity in the cave during the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 300-410 AD	

Name: Seven Ways Cave	**ID:** 46	**HER:** 305635
Bibliography: Branigan et al. 1991a: 56-57; Bramwell 1952, 1954a		
Excavation Date: 1948-1954	**Type:** Multi-Chamber	**Altitude (m):** 276
Cave Description: Seven Ways Cave is made of a series of 7 short passages and is close to Elderbush Cave (**49**).		
Excavation/Assemblage Discussion: **Pottery:** Roman Iron Age pottery was found in the cave, along with 14 coarse sherds thought to belong to a crucible (Branigan et al. 1991a: 56). **Glass**: A small translucent annular glass bead with looped zig-zag decoration was found in the cave and identified as Guido class 9A (Branigan et al. 1991a: 56). **Metalwork**: A bronze needle and finger ring were found in the cave, along with a fragment of iron (Branigan et al. 1991a: 56). **Human Remains**: The remains of 4 individuals were found in the cave and cannot be dated (Bramwell 1954a: 4).		
Chronology: Sherds of pottery and a Guido class 9A bead indicate that the cave was likely used at some point during the 1st millennium BC. However, Guido class 9a beads may also be Anglo-Saxon in date, which may therefore indicate Early Medieval activity within Seven Ways Cave.		
Radiocarbon Dates:		
Suggested Broad Date: IA(?); RIA; EM (?)	**Suggested Date Range:** 800 BC- 43 AD; 43-410 AD; 410 AD-800 AD	

Name: Cheshire Wood Cave	**ID:** 47	**HER:** 308415
Bibliography: Branigan et al. 1991a: 11; Branigan et al. 1992: 82		
Excavation Date: 1959	**Type:** Single Chamber	**Altitude (m):** 248
Cave Description: Cheshire Wood Cave is a small single chambered cave with an active stream way leading to a pool at the cave entrance.		
Excavation/Assemblage Discussion: The cave was excavated by Keel University Extra Mural Archaeology classes. Layers of material was recovered including a layer of clay deposit above the cave floor made from flood deposits from the stream. An occupation layer containing teeth and jaws of two adults and two children associated with Windmill Hill type Neolithic pottery were found below this clay deposit. A second floor was found that contained Iron Age and Roman Iron Age hearth deposits, c.0.10-0.14 metres deep. **Pottery**: In the hearth layer, Iron Age pottery similar to those found at Thor's Cave (**51**) and Roman Iron Age pottery (Emery 1962: 33). Branigan and Dearne (1992: 82) noted that the Iron Age and Roman layers were difficult to differentiate although a sequence of hearths may suggest Iron Age use. **Metalwork**: An iron object was found in the layer that may be a hinge, thought to either Roman or Iron Age in date (Emery 1962: 35).		
Chronology: Finds of pottery indicate Iron Age and Roman Iron Age activity within the cave associated with hearth deposits.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:**800 BC- 43 AD; 200-410 AD	

Name: Wetton Mill Rockshelter	**ID:** 48	**HER:** 305584
Bibliography: Branigan et al. 1991a: 67; Kelly 1976; Ryder et al. 1971; Trent and Peak Archaeological Trust 1993		
Excavation Date:1970s	**Type:** Rockshelter	**Altitude (m):** 194
Cave Description: The rockshelter located on a western facing crag, is 8 metres wide, 3 metres high and 4.5 metres deep.		
Excavation/Assemblage Discussion: Excavation of the cave uncovered a sequence of layers with artefacts dating to the Mesolithic to Medieval periods. The upper layers were made of a dark humic material, which were followed by a dark brown silty sand which contained Medieval pottery. Roman Iron Age material was recovered from the southern part of the rockshelter. **Pottery**: Sherds of Neolithic and Bronze Age corded beaker ware were recorded along with human remains. Fragments of Iron Age pottery were also reported, including a base angle form made of a post Bronze Age fabric (Branigan et al. 1991: 67; Kelly 1976: 67). Roman Iron Age pottery included Derbyshire ware, dating between 100 and 300 AD (Branigan et al. 1991a: 67). **Coin**: Two coins were found in the cave- an Antoninianus of Gallienus (260-268 AD) and a counterfeit coin though to originate from a mint in Staffordshire dating c.275 AD (Kelly 1976: 60). **Human Remains**: Remains of an adult and 3 children were recorded in the cave, thought to be Bronze Age or Neolithic in date. **Metalwork**: A range of fragments of metal were identified towards the front part of the shelter, including a number of small lumps of slag from copper or copper alloy working (Kelly 1976: 57) **Stonework** Pot boilers and two sandstone querns were recorded in the excavation report although they are of uncertain date		

Animal Remains: Layer 2, from which relevant material was recorded included bones of sheep/goat, pig, ox, roe deer, red deer, wild cat, pine marten, badger, wild ox, red fox, water vole and rabbit.	
Chronology: Finds of Iron Age pottery indicate limited activity within the cave during the 1st millennium BC. The primary period of activity appears to have taken place during the Roman Iron Age between the 1st and 3rd centuries AD. Similar material was also recorded at a nearby Roman site at Borough Fields, which produced similar fragments of slag and Derbyshire Ware **(**Kelly 1976: 5).	
Radiocarbon Dates:	
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 42 AD; 100-410 AD

Name: Elderbush Cave	**ID**: 49	**HER:** 305632
Bibliography: Bramwell 1964; Branigan et al. 1991a: 24-26		
Excavation Date: 1932-1952	**Type:** Multi-Chamber	**Altitude (m):** 263
Cave Description: Elderbush Cave is a complex multi-chambered cave connected by 5 water worn channels. A talus platform extends from the entrance, which orientates northwest and is 1.23 metres wide. The cave itself is made of two chambers some 2.29 metres long with a tunnel running from the south end of the cave for 4.52 metres before emerging as a secondary entrance in the hillside.		
Excavation/Assemblage Discussion: Excavations within the cave took place between 1932 and 1952 and recorded a complex series of layers throughout the cave. From the main chamber, a series of deposits extended across the sloping floor. The majority of finds came from a layer of limestone gravel. **Pottery**: In front of the cave overhang, a series of hearth deposits were found with sherds of coarse Early Iron Age pottery and Derbyshire Ware and a flat-bottomed bowl of Antonine Ware (Branigan et al. 1991a: 26). A sherd of Samian Form 32 and Black-Burnished bowl, found in the cave joined with sherds found in nearby Thor's Fissure Cave (**50**) (Branigan et al. 1991a: 26). **Metalwork**: Outside the cave, a bronze fibula of early 3rd century AD date and a bronze ferrule were found with a number of iron nails (Bramwell 1964: 57). An iron knife, dated to the 1st century BC or early 1st century AD and a re-used silver child's finger ring were also found outside the cave (Branigan et al. 1991a: 25). Fragments of iron slag were also found outside the cave (Bramwell 1964: 54-56). **Bonework**: Two horse cheek pieces, similar to those found at Ravencliffe Cave (**29**) and Thor's Cave (**51**) were found outside the cave and were associated hearth deposits. These are considered Late Iron Age or Early Roman Iron Age in date (Bramwell 1964: 54-56). Further finds of bone, include two worked pieces of antler (Challis et al. 1975: 4). **Human Bone**: 'Small' human bones were apparently associated with the hearth level along with teeth. It is unclear what date these bones are, however they could be Iron Age or Roman Iron Age in date. A piece of human mandible was also found towards the rear of the cave (Branigan et al. 1991a: 24-26). **Stonework**: Objects of stone included a hone of sandstone or gritstone, pot boilers, a piece of volcanic ash, 2 haematite ore pebble and a haematite rubber (Branigan et al. 1991: 26). **Animal Bone**: Associated with the hearths outside the cave were bones of pig, roe deer, sheep/goat and cow (Bramwell 1964: 54-56).		
Chronology: Finds of Iron Age material in the cave, included Early Iron Age pottery as well as Late Iron Age antler cheek pieces. This could indicate sporadic use of the cave during the 1st millennium BC. Later the cave appears to have been used at some point during the 1st-3rd centuries AD, demonstrated by a bronze 3rd century AD fibula and pottery.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 80 BC- 42 AD; 100- 410 AD	

Name: Thor's Fissure Cavern	**ID:** 50	**HER:** 932133
Bibliography: Bramwell 1950; Branigan et al. 1991a: 64-65; Wilson 1937, 1934		
Excavation Date: 1927-1933	**Type:** Single Chamber	**Altitude (m):** 252
Cave Description: The cave is directly associated with Thor's Cave (**51**) with an entrance orientated towards the southwest.		
Excavation/Assemblage Discussion: **Pottery**: Possible coarse Iron Age pottery were reported by Challis and Harding (1975: 2). Roman Iron Age pottery, included sherds of Black-Burnished ware, a 1st century AD ribbed vessel and Derbyshire Ware (Branigan et al. 1991a: 64). A sherd of Black-Burnished bowl, fitted with a sherd from Elderbush Cave (**49**) (ibid.). **Metalwork**: A plate-headed fibula of 1st century AD was found, similar to those recorded at Thirst House Cave (**26**) Iron nails and a wire lozenge sectioned ring were also found within the cave (Branigan et al. 1991a: 64). **Bonework**: Within the cave a bone toggle, point, awl and handle were found and considered to be Iron Age in date (Challis et al. 1975: 2). **Stonework**: A stone hone, considered to be Iron Age in date, was also found in the cave (Challis et al. 1975: 2). **Human Remains**: Human remains of 4 adults and 2 children are undated but regarded as post-Neolithic in date.		
Chronology: Finds of possible Iron Age pottery and bonework may indicate that the cave was used sometime during the 1st millennium BC. Activity during the 1st century AD is also confirmed by the presence of a plate-headed fibula and by a ribbed vessel. Further finds of Derbyshire Ware and Black-Burnished bowl may also indicate that the cave was used between the 2nd and 4th centuries AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 300 AD	

Name: Thor's Cave	**ID:** 51	**HER:** 305629
Bibliography: Branigan et al. 1991a: 60-63; Brown 1864; Carrington 1866		
Excavation Date: 1864-1865	**Type:** Multi-Chamber	**Altitude (m):** 252
Cave Description: Thor's Cave is located above the Manifold Valley on a limestone outcrop. Its entrance, orientated towards the north, is 6.1 metres wide and 9.1 metres high. A secondary, smaller entrance is located on the western side of the cave (Gill et al. 1991:175). The cave itself is made of a large chamber with two massive limestone pillars. Two fissures run from the main chamber dividing the cave into two passages (Carrington et al. 1866: 210).		
Excavation/Assemblage Discussion: In his report Carrington (1866: 204) suggested that the site had already been excavated a number of times by people looking for extinct animal remains. Excavation of the cave in 1864-1865 focused on the entrance and main chamber. At the northern entrance, pottery and worked animal bone were found with a layer of charcoal, which may have been a midden (Carrington 1866: 205). A bed of charcoal, which produced potsherds and animal bone was also found associated with one of the limestone pillars within the main chamber (Carrington 1866: 206). Near the second pillar was a human skeleton without the head and lower arms. The three layers of charcoal were interpreted as layers of Iron Age and Roman Iron Age occupation by Branigan and Dearne (1991a: 60), which focused in the entrance passage and eastern passage. **Pottery**: Pottery found in the cave, included pieces of Samian Ware and possible Black-Burnished Ware (Branigan et al. 1991a: 61). **Bead:** An annular green glass bead was found in the cave, of unknown date (Branigan et al. 1991a: 61). **Coin**: A single coin of Hadrian (117-138 AD) was found in the cave (Branigan et al. 1991a: 60). **Bonework**: An Iron Age weaving bone comb, similar to one found at Harborough Cave (**36**) was found in the cave (Branigan et al. 1991a: 61). Other objects of bone included a further fragment of weaving comb, worked antler and 6 antler cheek pieces, which may date to the Late Iron Age (Challis et al. 1975: 4). A bone pin was also found in the cave, which may be Late Iron Age or Early Roman Iron Age in date (Branigan et al. 1991a: 63). **Stonework**: Objects of stone found in the cave entrance, included a whetstone, a quern stone fragment, a perforated sandstone disc and a green stone hone (Carrington et al.1866: 204-207). **Human Remains**: A crouched human burial was found near the second limestone pillar within the chamber associated with a perforated bone tool (Carrington et al. 1866: 205). The date of this burial is unclear but could belong to the Roman Iron Age. **Metalwork**: An extensive corpus of metal artefacts was found within Thor's Cave dating to the Iron Age, Roman Iron Age and Early Medieval period. Metal artefacts considered Iron Age in date, included a bronze armlet and an iron currency bar. Objects of Iron Age or Roman Iron Age date included a lead spindle whorl, 2 diamond shaped spearheads, a hook and mason's pick, an adze and two knives (Branigan et al. 1991a: 61; Carrington et al.1866: 208). Roman Iron Age metalwork included brooches dating to the late 1st and early 2nd century AD. This included a Colchester derivative fibula similar to those found at Thirst House Cave (**26**) dating to 50-70 AD and a trumpet fibula identical to those found at Frankith Rocks Cave (**43**) and considered to date to the early 2nd century AD. An iron cleaver, two ring headed-pins and two annular brooches were also considered Early Medieval in date (Branigan et al. 1991a: 61).		
Chronology: Activity in Thor's Cave, associated with both the entrance and large main chamber, appears to have occurred through the 1st millennia BC and AD. This is demonstrated by finds of Iron Age, Roman Iron Age and Early Medieval metalwork, as well as Iron Age bonework and Roman Iron Age pottery and coinage. Given the similarity of metalwork finds to those recorded at other		

caves in the Peak District, it is likely that that activity during the 1st to 3rd centuries AD was contemporary across a number of caves	
Radiocarbon Dates:	
Suggested Broad Date: IA; RIA; EM	**Suggested Date Range:** 800 BC-800 AD

Name: St Bertram's Cave	**ID:** 52	**HER:** 308197
Bibliography: Branigan et al. 1991a: 9-10; Davenport 1994**;** Jackson 1938; Wilson 1926, 1934		
Excavation Date: 1830-1908;1924	**Type:** Multi-Chamber	**Altitude (m):** 176
Cave Description: The cave is located 3 metres above the valley floor on Beeston Tor. It is accessed by two entrances that lead to a series of phreatic passages.		
Excavation/Assemblage Discussion: Sporadic excavation of the cave during the 19th and early 20th centuries, uncovered a hoard of Early Medieval metalwork and coinage from within the central cave chamber. **Pottery**: Finds of pottery from the cave include Grey Belgic wares dating to the early 1st century AD, a Samian Central Gaulish Form 27, bowl and sherds of Derbyshire Ware (Branigan et al. 1991a: 9-10). **Glass**: A light blue and green melon bead was found with the cave and considered Iron Age or Roman Iron Age in date (Branigan et al. 1991a: 9-10) **Bonework**: A bone knife handle, similar to an example dating to the Iron Age from Thirst House Cave (**26**) was found (Branigan et al. 1991:10). **Human Remains**: The remains of one individual of unknown date was found in the cave (Davenport 1994: 4). **Metalwork:** Associated with a hoard of 49 silver pennies were a number of silver brooches and gold rings of 9th century AD were found and considered contemporary to the coin hoard (Davenport 1994: 4). **Coinage:** At least 49 silver pennies dating to the late 9th century AD were found in the cave chamber with a leather fragment, which was thought to be a bag holding the coins (Davenport 1994: 4).		
Chronology: Whilst the majority of artefacts indicate that the cave was used during the late 9th century AD, artefacts including Belgic style fine wares and a bone knife indicate that the cave was also used during the early 1st millennium AD and possibly during the 1st millennium BC.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA; EM	**Suggested Date Range:** 800 BC- 150 AD; 700-800 AD	

Name: Dead Man's Cave	**ID:** 161	**HER:** 318685
Bibliography: Branigan et al. 1991a: 22; Jenkinson 1978		
Excavation Date: 1967-1970	**Type:** Single Chamber	**Altitude (m):** 95
Cave Description: Dead Man's Cave is a single chambered cave located in Anston Stone Gorge, South Yorkshire. The cave's entrance, orientated towards the south, is 2.5 metres wide and 1.5 metres high, leading to a rectangular chamber, which is approximately 6 metres long.		
Excavation/Assemblage Discussion: The cave was excavated a number of times between 1967 and 1970, which recorded a disturbed stratigraphy. At the entrance, pollen analysis of sections indicated Iron Age and Roman Iron Age levels from Units VI, VII and VIII (Jenkinson 1978: 117): **Unit VI:** Limestone rubble, made of angular limestone fragments that thickened towards the cave entrance **Unit VII**: Brown brecciated sand, 0.07m thick at the cave entrance and 0.03m toward the cave rear **Unit VIII**: Brown silty sand 0.155m thick loose and containing humic and modern fire debris **Pottery:** Late Roman Iron Age pottery was found from Unit VIII and included Huntcliffe and Swanpool Wares, dating to the 4th century AD (Jenkinson 1978: 117-118). Coarse sherds, found in Unit VII, may also have been Iron Age in date (ibid.). **Animal Bone**: Animal bone recorded from Units IV-VIII included red fox, badger and hare, sheep/goat, cow and pig		
Chronology: Whilst non diagnostic coarse pottery found at the entrance to the cave, may suggest Iron Age activity, confirmed Late Roman Iron Age activity is seen through finds of Huntcliffe and Swanpool Wares, which date to the 4th century AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA(?);RIA	**Suggested Date Range:** 800 BC-43 AD; 300-410 AD	

Name: Old Hannah's Cave	**ID:** 177	**HER:** 305570
Bibliography: Cooper 1977; Branigan et al. 1991a: 68; Wardle 1899		
Excavation Date: 1896	**Type:** Single Chamber	**Altitude (m):** 232
Cave Description: Old Hannah's Cave is a small single chambered cave located at the base of hill in the Manifold Valley. The cave's entrance leads to a narrow crawl, which is 1.8 metres long and a chamber, 7.3 metres in length and 1.4 metres in maximum width.		
Excavation/Assemblage Discussion: Excavations in the cave recorded in the 19th century recorded: **Human Remains**: Within the cave, at a depth of 0.45 metres, the remains of 5 individuals were discovered belonging to 4 adults and 1 child. **Pottery**: A coarse vessel was recorded in the cave and originally thought to be Roman Iron Age in date, although the date of this is unclear.		
Chronology: Both the human remains and pottery vessel cannot be given a firm date, although the excavators suggested that the pottery may belong to the Roman Iron Age		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 43-410 AD	

Name: Pin Hole Cave	**ID:** 178	**HER:** 939054
Bibliography: Branigan et al. 1991a: 17; Dawkins 1877; Jenkinson 1978; Mello 1875;		
Excavation Date: 1874; 1925-32; 1974	**Type:** Multi-Chamber	**Altitude (m):** 80
Cave Description: Pin Hole Cave, located in Creswell Gorge, is comprised of a narrow 31-metre-long passage, which ends in a small chamber. The cave entrance orientates to the south and is 4 metres wide.		
Excavation/Assemblage Discussion: Early excavation focused on the entrance to the cave with successive excavations progressing inside the cave. A large assemblage of Mousterian and Palaeolithic material was recovered, suggesting that the cave saw periodic human activity. Sediment is known to wash down from a hole in the cave roof from the limestone outcrop above, which is thought to account for some of the sediment build-up within the cave. **Human Remains:** At least 6 fragments of human bone were found in the cave, which represented 4 individuals- 2 adults and 2 juveniles. These were found 13-20m from the entrance and thought to be Palaeolithic in date given the association with Palaeolithic lithics. **Metalwork**: Branigan et al. (1991a: 71) record that a single bronze brooch was found in the cave, thought to have been washed down from a settlement from above. It is Hod Hill type brooch rare to be found in the region c. 40-65 AD. This is unlikely a stray find however, given wider evidence of activity in caves in Creswell during the Late Iron Age and Roman Iron Age.		
Chronology: Chronologically, radiocarbon dates help to define the confused stratigraphic stages showing intrusive use during the Neolithic and Bronze Age. This may help support that the Roman artefact may have been deposited within the cave, rather than being from a settlement above the cave. This however is unlikely given the presence of early type brooches at Church Hole Cave.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-100 AD	

Name: Sycamore Cave	**ID:** 181	**HER:** 1174824
Bibliography: Davenport 1994; Houdmont 1989, 1991		
Excavation Date: 1985-1990	**Type:** Single Chamber	**Altitude (m):** 333
Cave Description: Sycamore Cave is located on a limestone rock face near Ecton, Staffordshire		
Excavation/Assemblage Discussion: Excavations, conducted by the Peakland Archaeological Society, occurred between 1985 and 1990. Immediately near the cave, metal-detectorists found a bronze axe, Roman coins, a silver penny of King John and a broken bronze strap end (SMR 1174824). A further 12 Roman coins were recovered in a field below the cave along with globular pieces of lead. Charcoal was recorded throughout the cave although a certain horizon couldn't be found to accurately date the use of the (Houdmont 1989: 17). **Animal Bone:** Animal bones, found in layers considered to have been Iron Age in date, included cut-marked domesticate bones, red deer antler, roe deer, horse and brown bear (Davenport 1994: 6-7). **Human Remains** The remains of two infants were recorded in the cave of unknown date. **Pottery:** A possible Iron Age vessel was recorded at the rear of the cave, associated with the cut-marked animal remains, quartzite pot boilers and a small cow. **Metalwork**: Along with the silver coins (Davenport 1994) were a number of globular beads of lead associated with a fragment of Roman pottery. A globular bead of lead was also recorded in the cave (Houdmont 1991: 7). Another piece of lead was identified as a spindle whorl, lumps of iron were also recorded in the cave (*ibid*).		

Stonework: A fragment of quern stone was found along with heated hearth stones (Houdmont 1989: 17).	
Chronology: Finds of a possible Iron Age vessel and Roman Iron Age pottery and pieces of worked lead, may indicate activity within the cave during the 1st millennia BC and AD. This may also be confirmed by wider parallels in metalworking evidence found in caves dating to the 1st and 2nd centuries AD.	
Radiocarbon Dates:	
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 43 AD; 43-200 AD

Name: Ossum's Eyrie Cave	**ID:** 217	**HER:** 305581
Bibliography: Bramwell 1956b, 1957; Branigan et al. 1991a: 41-42; Branigan et al. 1992: 70		
Excavation Date: 1956-1958	**Type:** Rockshelter	**Altitude (m):** 267
Cave Description: The rockshelter is located on the Ossum Cliffs and 6 metres above Ossum's Cave (**44**). The site, which is only accessible through a steep rock climb, is 2 metres high and 1 metre high.		
Excavation/Assemblage Discussion: **Metalwork**: Objects of metal found in the cave, included a blue enamelled Knee brooch, dating to the 2nd-3rd centuries AD and a knife of Late Iron Age or Early Roman Iron Age date (Branigan et al. 1991a: 70). **Bonework:** A decorated bone pin and further fragments of worked bone were recorded in the cave. **Animal Bone:** Animal remains associated with the metalwork, included red and fallow deer, sheep/goat, pig, hare and crow. The cave was used as a bird's eyrie and contained10, 000 bones from 4200 mammals and 40 individual species of bird (Bramwell 1957). **Glass:** A sherd of glass was recovered from the cave and considered Roman in date (Branigan et al. 1992: 70).		
Chronology: Objects found in the Eyrie likely date the 2nd or 3rd centuries AD and demonstrate activity within the cave during the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 100-300 AD	

Name: Pymm's Parlour	**ID:** 218	**HER:** 1188361
Bibliography: Branigan et al. 1991: 51; Nevell 1993		
Excavation Date:	**Type:** Rockshelter	**Altitude (m):**139
Cave Description: This cave is wrongly attributed to Derbyshire in Branigan's catalogue. A rock shelter is recorded in the national NMR Excavation Index (SMR 8243.1.0) as a site SJ9966093970 having the same corpus of material recorded.		
Excavation/Assemblage Discussion: **Coinage:** An unknown number of coins were reported to have been found from the cave that included a coin of Postamus (260-296 AD) and a number of other 'fourth century coins' (Branigan et al. 1991a: 51). **Metalwork :**A bronze plate was reported to have been found from the cave (Nevell 1993)		
Chronology: Activity in Pymm's Parlour may have dated to the 3rd century AD, demonstrated by possible finds of coins minted during the reign of Postamus (260-269 AD).		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 260-350 AD	

Name: Reynard's Cave	**ID:** 219	**HER:** 308409
Bibliography: Branigan et al. 1991a: 54-55; Kelly 1960		
Excavation Date: 1959	**Type:** Single Chamber	**Altitude (m):** 168
Cave Description: The cave is situated above the River Dove on a small platform on a limestone rock face. The cave entrance, orientated west, is 4.87 metres wide and 3.05 metres high. The cave runs horizontally into the rock with a maximum height of 1.23 metres. It is made of a single chamber that is 6.71 metres in length and 2.73 metres in width.		
Excavation/Assemblage Discussion: Limited excavation in 1959 focused on the left hand side of the cave entrance and 5.18 metres within the cave. The trenches dug into the cave produced little remains and were not fully excavated. A sequence of layers was recorded which reached a total depth of 1.83 metres: 1) Layer of dark grey loamy soil containing charcoal and post-medieval pottery 2) Layer of lightly packed mid-grey loamy soil with pieces of limestone 3) Layer of rock, fragments of charcoal, bones and metalwork 4) Tightly packed fawn coloured soil- with some bird bone, large chunks of limestone and stalactites 5) Layer of dark brown clay **Pottery**: Coarse pottery made of an orange coloured fabric was recovered from the cave. This was part of a decorated rim of a bucket or barrel shaped pot and thought to be Late Bronze Age or Early Iron Age in date (Challis et al. 1975: 52). A small sherd with a roughly-scored rim was also considered Early Iron Age in date (ibid.). Roman Iron Age pottery was also recorded outside the cave, which included Castor Ware, dating to the 4th century AD, and Derbyshire Ware (Branigan et al. 1991a: 54-55). **Metalwork**: A Collingwood Type R bronze fibula was found at the cave entrance dating to the mid-2nd century AD. An ox-goad was also found made of iron with traces of wood. Fragments of iron, lead, a cast piece of bronze and 6 iron nails were also recorded from the cave and are likely Iron Age/Roman in date given parallels to caves elsewhere in the region. **Bonework:** Four fragments of bonework were found including a bone pin, a bone point and 2 further fragments of worked bone.		
Chronology: Activity in Reynard's Cave is likely Iron Age and Roman Iron Age in date. Finds of Early Iron Age pottery and Roman Iron Age material dating to the 2nd, 3rd and 4th centuries demonstrate this as does the cave's proximity to Reynard's Kitchen Cave (**315**), which contained Late Iron Age metalwork and coinage.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 400-100 BC; 100-410 AD	

Name: Upper Cales Dale Cave	**ID:** 220	**HER:** 308462
Bibliography: Branigan et al. 1991a: 66		
Excavation Date: 1897	**Type:** Single Chamber	**Altitude (m):** 242
Cave Description: Upper Cales Dale Cave is a cave on the west side of Lathkill Dale that is thought to also be Churn Hole, although 2 separate SMR records exist. Branigan and Dearne (1991a) list the cave with Iron Age and Roman Iron Age pottery. The cave entrance is described as being 1.5 metres high and 2 metres wide.		
Excavation/Assemblage Discussion: **Pottery**: Iron Age and Roman Iron Age sherds were recorded from the cave (Branigan et al. 1991a: 66).		
Chronology: Activity in the cave is demonstrated by the presence of Iron Age and Roman Iron Age pottery.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 410 AD	

Name: Edgar's Cave	**ID:** 287	**HER:** 69101
Bibliography: Newstead 1928; Williams 1922		
Excavation Date:1923; 1927	**Type:** Single Chamber	**Altitude (m):** 11
Cave Description: Edgar's Cave is a small cave located on an east face of a Roman quarry. Two small holes were cut into the rock face either side of the cave. The site is orientated towards the east and is thought to have been used as a Mithraeum.		
Excavation/Assemblage Discussion: A trench was dug outside the cave entrance in 1923. At a depth of c.48cm a roof pavement was uncovered made of blocks of sandstone. Associated with this rubble were 7 pieces of Roman coarse ware intermixed with 17th century wares and charcoal. Below this layer was a deposit of soft sandstone and clay with 15 pot sherds of Roman pottery and a piece of roofing tile. **Pottery**: Two pieces of Roman roof tile was recovered from the cave, along with 22 pieces of pottery including fumed grey ware and 2 fragments of Samian Ware Form 37, one of which was decorated with a figure of a female. Fragments of mortaria were also recovered in higher levels of the trench. A single sherd of amphorae was also found (Newstead 1928). **Metalwork**: An iron lynch pin was found in lower layers of the trench (Newstead 1928). **Minerva Figure**: The Minerva figure is 1.5 metres high. Another statue of Minerva was reported to have been found in Handbridge close to the cave (Williams 1922).		
Chronology: The site may have been used as a place of cult worship to Mithras sometime after 150 AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:**c.150-410 AD	

Name: Bat House Cave	**ID:** 288	**HER:** 314023
Bibliography: Branigan et al 1991a: 8; Haverfield 1905		
Excavation Date: 1884	**Type:** Multi-Chamber	**Altitude (m):** 173
Cave Description: Bat House Cave is a multi-chambered cave with an entrance that is 0.61 metres wide and 9.1 metres high. This leads to a large chamber, 6.1 metres in length and a further chamber and a number of smaller fissures.		
Excavation/Assemblage Discussion: Two vertical grooves 1.27 metres from the floor, are positioned both sides of the entranceway and were 11.43cm wide and 10.16cm deep. The excavators considered these to belong to support timbers which were used to block the cave entrance. Excavation in 1884 reached an approximate depth of 2 metres. Finds were reported towards the bottom of the cave floor. **Metalwork**: A trumpet fibula of type Ri, dating to the 2nd century AD, was found along with an iron and bronze pin and haematite polisher, which was considered Iron Age in date (Branigan et al. 1991a: 8). **Pottery**: A number of sherds of Upchurch Ware, dating to 3rd-4th centuries AD and coarse sherds of possible Iron Age date were found in the cave (Branigan et al. 1991a: 8).		
Chronology: Bronze trumpet brooches are recorded in a number of cave deposits across northern England, including Dowkerbottom Cave (**8**), Sewell's Cave (**91**) and Attermire Cave (**16**). Typically trumpet brooches date between the 1st and 2nd centuries AD, suggesting that the cave was may have been used between the 1st and 2nd centuries AD. However, finds of possible Iron Age material, including coarse sherds and a haematite polisher, may also indicate that the cave was also used during the 1st millennium BC.		
Radiocarbon Dates:		
Suggested Broad Date: IA (?); RIA	**Suggested Date Range:** 800 BC- 43 AD; 100-300 AD	

Name: Church Hole Cave	**ID:** 289	**HER:** 942643
Bibliography: Branigan et al. 1991a: 15-16; Branigan et al. 1992: 84; Dawkins et al. 1879; Dawkins 1876; Jenkinson 1978; Mello 1875		
Excavation Date: 1875	**Type:** Multi-Chamber	**Altitude (m):** 91
Cave Description: Church Hole Cave is part of a series of caves located at the base of Creswell Gorge. Its entrance is orientated towards the northwest and is 1 metre wide. This leads to a series of smaller chambers and passages, c.34 metres long.		
Excavation/Assemblage Discussion: Excavations at Church Hole Cave recorded a confused stratigraphy with surface levels made of organic silts and humic material. Within the outer chamber pockets of black earth were associated with isolated disturbed areas including local Iron Age pottery, Roman wares and historic pottery. Outside the cave entrance within the talus, human remains were found associated with a Roman brooch. **Pottery**: Pottery recorded from the surface levels within the cave included Derbyshire Ware, Samian and later glazed wares. A small crucible base was also found with slag residue of pewter/brass on the inner surface. Local Iron Age pottery was also recorded from the cave (Jenkinson 1978: 48). **Metalwork**: An Early Colchester derivative fibula dating between c.50-100 AD, was recovered with human remains at the entrance to the cave (Branigan et al. 1991a: 84). A bronze penannular brooch was also found 13m within the cave (Jenkinson 1978: 48). **Bonework**: An ivory counter, likely Iron Age in date was found near the bronze penannular brooch within the cave (Branigan et al. 1992: 16) **Human Remains:** A number of human remains were found in Church Hole Cave from the talus outside the cave that were reported to have been associated with the Colchester brooch (Jenkinson 1978: 48). It is not clear whether the brooch was an intrusive find or was contemporary to the deposition of human remains.		
Chronology: Finds of coarse Iron Age pottery indicate that Church Hole Cave was used sometime during the 1st millennium BC. Activity also occurred within the cave during the 1st to 3rd centuries AD, which is demonstrated by metalwork finds and pottery.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800 BC- 43 AD; 100-410 AD	

Name: Deep Dale Cave	**ID:** 290	**HER:**306082
Bibliography: Cox 1981		
Excavation Date: 1884-1890	**Type:** Single Chamber	**Altitude (m):** 311
Cave Description: A number of sources consider Deep Dale Cave to be the same as Thirst House Cave (**26**). However, there is a second cave opposite Thirst House Cave. Both caves were likely excavated during the same time, with Cox (1891: 195) suggesting that Salt explored the cave during his excavation of Thirst House. The cave's entrance is 10 metres wide and 5 metres high, leading to a 20-metre-long chamber.		
Excavation/Assemblage Discussion: Excavations of two caves in the Deep Dale valley uncovered a sequence of artefacts that hint at Roman Iron Age material. The only material that can be attributed to Deep Dale Cave, rather that Thirst House Cave (**26**), is fragments of Derbyshire Ware, dating to the 1st to 3rd centuries AD.		
Chronology: Finds of Derbyshire Ware, may indicate that activity in Deep Dale Cave was contemporary to that at Thirst House Cave during the 1st to 3rd centuries AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-200 AD	

Name: Old Woman's House Cave	**ID:** 291	**HER:** 309131
Bibliography: Brailsford 1957; Branigan et al. 1991a: 36-38; Ford et al. 1979; Fox 1911		
Excavation Date: 1909	**Type:** Multi-Chamber	**Altitude (m):** 220
Cave Description: Old Woman's House is a cave nestled in a mass of broken rock at the base of a limestone cliff. The small cave entrance is orientated west, which leads to two chambers 7.6 metres long with a maximum of 3.05 metres. The cave is near a large enclosure, thought to be Iron Age in date (Fox 1911: 121).		
Excavation/Assemblage Discussion: Excavations began in the inner chamber uncovering a shallow sequence of apparent Iron Age activity. The inner chamber was then backfilled by debris made from a trench dug inside the main chamber. At the depth of 0.7 metres, a layer of charcoal was found that contained the majority of artefacts. **Pottery:** Early Iron Age pottery, comparable to sherds found in local Iron Age sites, were found within the main chamber (Brailsford 1957: 56). Further finds of barrel- shaped vessels, similar to those found at Harborough Cave (**36**) were also recovered and thought to date to the 1st century BC (Challis et al. 1975: 75). This pottery was recorded in similar levels the glass bead located in the inner chamber (Fox 1911:117) **Glass Beads**: A glass bead was found at in the shallow soil of the western end of the inner chamber (Fox 1911: 117). **Metalwork**: Two iron knives, a hook with a rear ring, 4 broken nails and 6 complete nails with large heads (Fox 1911:121) were found in the cave and considered Iron Age in date. Four bronze brooches were also found in the charcoal layer (Fox 1911: 122). Two of these were penannular forms, whilst one was a gilded Polden Hill type brooch thought to date between c.70-90 AD and the other was a trumpet brooch, likely dating between 100 and 150 AD (Branigan et al. 1991a: 37). **Stonework**: A whetstone and 3 sandstone spindle whorls were found in the floor (Fox 1911: 121). An incomplete spindle whorl was also found (ibid.). **Bonework**: Four bone artefacts were found in the charcoal layer. These included a worked antler tine, a javelin point and a bone rod. A bone pin with spherical head was also found (Fox 1911: 122). **Animal Bone:** Two shells from fresh-water mussel were found along with horse, pig, ox, sheep/goat and deer were noted in the charcoal layer (Fox 1911: 122). **Coin**: A bronze coin of Constantine the Great (272- 337 AD) was found at the entrance of the cave.		
Chronology: Fox (1911:125) considered that Late Iron Age and Early Roman use continued in the cave and demonstrated an extension of Roman influence into the 'difficult to subjugate' mountainous areas. Finds of Early and Late Iron Age material, indicates at least two periods of use of the cave during the 1st millennium BC, whilst finds dating to the 1st-4th centuries AD, indicate periodic use of the cave during the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800-400 BC; 200 BC- 300 AD	

Name: Swallow Tor Cave	**ID:** 292	**HER:** 305881
Bibliography: Turner 1899		
Excavation Date:1896	**Type:** Single Chamber	**Altitude (m):** 331
Cave Description: The cave is located on a limestone outcrop with an entrance 2.43 metres wide and 1.37 metres high. The cave itself is 3.66 metres long and 3.05 metres wide.		
Excavation/Assemblage Discussion: Micah Salt was reported to have dug the floor of a cave located above Swallow Brook. Two trenches were dug one across a talus outside the cave, the other inside. Charcoal was recorded in both these trenches. **Metalwork**: A small fragment of corroded iron was found at a depth of c.0.46 metres (Turner 1899: 76) **Animal Bone**: Numerous bones of domestic animals were recorded from the excavation in the cave, coming from 'all layers' (Tuner 1899 76).		
Chronology: The fragment of iron could be Iron Age or Roman Iron Age in date, although this cannot be confirmed.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC- 410 AD	

Name: Ashwood Dale Cave	**ID:** 293	**HER:** 306088
Bibliography: Branigan et al. 1991a: 68; Turner 1899		
Excavation Date:1895	**Type:** Single Chamber	**Altitude (m):** 296
Cave Description: A possible cave reported by Turner in his *Ancient Remains of Buxton* (Turner 1899). The cave was said to have been south facing and located above the Midland railway.		
Excavation/Assemblage Discussion: Reported finds from the cave include charcoal, an iron buckle of Roman type, a piece of leather and fragments of iron.		
Chronology: A possible Roman buckle may indicate a Roman Iron Age date for use of the cave, although this cannot be confirmed.		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 43-410 AD	

Name: Etches Cave	**ID:** 294	**HER:** 305908
Bibliography: Pernetta 1966		
Excavation Date:1958-1963	**Type:** Multi-Chamber	**Altitude (m):** 310
Cave Description: Etches Cave is a multi-chambered cave located on the southern rock face in Dowel Dale		
Excavation/Assemblage Discussion: Excavated by the Orpheus Caving Club, the majority of finds were found on the talus dump outside the cave. **Pottery:** A reddish brown ware pot and cinerary ware was recovered from excavations outside the cave and may be considered Middle Bronze Age to Iron Age in date (Challis et al. 1975: 36). **Bonework**: Two worked antler fragments were found in the cave associated with animal bone and charcoal. Both were worked knife handles thought to be of Early Iron Age or Roman Iron Age date.		
Chronology: Finds from Etches Cave, may indicate an Iron Age or Roman Iron Age use of the cave, demonstrated by finds of cinerary ware and two antler knife handles. Without further finds however, it is impossible to confirm the date of activity.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC- 410 AD	

Name: Guy's Cave	**ID:** 296	**HER:** 333387
Bibliography: Pugh 1969:8		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 64
Cave Description: Guy's cave is a small single chambered cave measuring 4 metres wide and 2 metres long and is located 7.5 metres east of a chapel. The cave itself is found on the face of a sandstone cliff known as Guy's Cliff. The chapel is thought to date to the 13th century AD (Warwickshire MWA2233).		
Excavation/Assemblage Discussion: An inscription, in Mercian dialect, on the south wall of the cave facing the entrance is thought to be Early Medieval in date. It reads "Cast out, thou Christ, from thy servant this burden, Guy". A rock-cut doorway in the western wall also leads into a chamber containing two wells (Warwickshire MWA2233).		
Chronology: The Early Christian use of Guy's Cave can be compared to activity in caves in Western Scotland, which dated to the latter half of the 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-800 AD	

Name: Robin Hood's Stride	**ID:** 306	**HER:** 311351
Bibliography: Anon 1941; Bateman 1845, 1848; Branigan et al. 1991a: 69; Colvin 1938; Heathcote 1947; Makepeace 1998		
Excavation Date 1845 (stray find); 1938	**Type:** Rockshelter (s)	**Altitude (m):** 188
Cave Description: Robin Hood's Stride is a large tor of gritstone rocks located on Harthill Moor. Associated with the Tor is a Bronze Age cist and a Roman Iron Age settlement that incorporated a number of rock overhangs and shelters.		
Excavation/Assemblage Discussion: The settlement associated with Robin Hood's Stride, produced finds dating primarily to the 2nd and 3rd centuries AD. In 1845, a bronze coin of Tetricus (271-274 AD) and sherds of pottery were found in a rock cavity on the Tor. Excavations in 1938 at Robin Hood's Stride uncovered a sequence of Derbyshire Ware, spindle whorls and parts of a quern associated with platforms that incorporated a number of rockshelters. **Pottery:** Whilst it is unclear of the location of all finds an array of Derbyshire Ware, Black-Burnished Ware, Huntcliffe ware, colour –coated ware and mortaria were found that suggests occupation took place through the 2nd and 3rd centuries AD. **Coinage**: Coins of Trajan and Gordian (238-248 AD) were found, which along with the coin of Tetricus (271-274 AD) suggests occupation through the 2nd and 3rd centuries, which corresponds with the date of the pottery corpus.		
Chronology: The settlement on Robin Hood's Stride appears to have dated to the 2nd and 3rd centuries AD, which is demonstrated by finds of coins of Tetricus and Gordian and pottery.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 100-300 AD	

Name: New Cave	**ID:** 307	**HER:** 305578
Bibliography: Gilks 1990; Pill 1963		
Excavation Date: 1872;1961-1963	**Type:** Single Chamber	**Altitude (m):** 299
Cave Description: New Cave is part of a series of caves in Hartle Dale valley. The entrance is 1.8 metres high and 1.8 metres wide, which rapidly diminishes to a crawl 15.24 metres long.		
Excavation/Assemblage Discussion: The cave in Hartle Dale was excavated by Rooke Pennington and Boyd Dawkins in 1872 (Bradwell 1912: 1), Excavation focused on the cave floor where a faunal assemblage was recorded along with two pieces of decorated prehistoric pottery. The site was re-excavated by Pill between 1961-1963, who recorded two distinct layers of stratigraphy: **Layer 1**: Entrance and passage of the cave made of black humus with finds of collared urn and animal bone **Layer 2**: Made of yellow clay and pebbles, contained fossilised animal bone **Pottery**: Fifteen sherds of a collared urn were found and considered Mid to Late Bronze Age in date		
Chronology: Activity in New Cave, may date to the Mid to Late Bronze Age.		
Radiocarbon Dates:		
Suggested Broad Date: LBA (?)	**Suggested Date Range:** 1500- 800 BC	

Name: Unknown	**ID:** 308	**HER:**
Bibliography: Anon 1928a		
Excavation Date:	**Type:** Cave	**Altitude (m):** UN
Cave Description: Nine Roman coins were reported to have been found by rock climbers in a cave in Drydale. The location of the cave is unknown.		
Excavation/Assemblage Discussion: The nine coins included those minted to the reigns of Faustina senior (138-161 AD), Marcus Aurelius (139-180 AD), Diocletian (284-305 AD), Galerius (293-311 AD), Licinius (308-324 AD) and Dalmatius (335-337 AD)		
Chronology: Coins deposited in the cave suggest two periods of activity during the 2nd century AD and the 4th century AD		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 100-350 AD	

Name: Churn Hole Cave	**ID:** 309	**HER:** 309270
Bibliography: Branigan et al. 1991a: 12		
Excavation Date: 1898	**Type:** Multi-Chamber	**Altitude (m):** 332
Cave Description: The cave entrance is 3.05 metres wide and 2.74 metres high with the cave being 7.62 metres deep.		
Excavation/Assemblage Discussion: Finds were found in the talus in front of the cave, including a medieval pottery and iron shears. **Metalwork**: Medieval shears and Staffordshire Ware was recorded in the talus in front of the cave at a depth of c.15cm down. A bronze coiled pin, considered Iron Age or Roman was also found (Branigan et al. 1991a: 12; Derbyshire 3805) **Pottery**: Roman wheel-turned pottery was recorded c.0.45m down along with burnt bones of deer, pig and sheep (Derbyshire 3805).		
Chronology: Evidence of Iron Age or Roman Iron Age activity is demonstrated by finds of a bronze coiled pin and sherds of supposed wheel-turned pottery. Given the unclear nature of the cave's location and the finds, activity can only be tentatively dated to the 1st millennia BC or AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC- 410 AD	

Name: Churn Hole Rockshelter	**ID:** 310	**HER:** 309270
Bibliography:		
Excavation Date: 1898	**Type:** Rockshelter	**Altitude (m):** 332
Cave Description: Churn Hole Rockshelter is located next to Churn Hole Cave (**309**). It is 6.4 metres in width, 2.43 metres high and 3.04 metres deep.		
Excavation/Assemblage Discussion: In front of the talus in front of the rockshelter excavations uncovered a sequence of animal bone and a fragment of metal, 0.45 metres below the surface (Turner 1899: 81).		
Chronology: Given its proximity to Churn Hole Cave (**309**) where apparent Iron Age or Roman Iron Age artefacts were discovered, it is possible that the rockshelter was also used during the 1st millennia BC or AD. However, such activity can only be tentatively dated.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:**	

Name: Rowter Rocks Caves	**ID:** 311	**HER:** 641237
Bibliography: Derbyshire 1608		
Excavation Date:	**Type:** Cave	**Altitude (m):** UN
Cave Description: An unknown cave on Rowter Rocks was reported to have contained Roman Iron Age pottery.		
Excavation/Assemblage Discussion: Bronze Age and Roman Iron Age pottery was recorded outside caves on the western side of the rocks. (Derbyshire 1608)		
Chronology: Possible Roman Iron Age activity in a cave on Rowter Rocks is demonstrated through finds outside the caves of pottery, of unknown type and date.		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 43-410 AD	

Name: Wetton Hill Cave	**ID:** 312	**HER:**
Bibliography: Trent and Peak Archaeological Trust 1993		
Excavation Date: 1992	**Type:** Cave	**Altitude (m):** 200
Cave Description: During the Manifold Valley cave survey, a cave was identified in the valley, which contained Roman Iron Age pottery.		
Excavation/Assemblage Discussion: Roman Iron Age pottery was reported from a cave in the Manifold Valley.		
Chronology: Possible Roman Iron Age activity in the cave is demonstrated through finds of Roman Iron Age pottery of unknown form and date.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 800 BC- 43 AD	

Name: Carlswark Cavern	**ID:** 313	**HER:** 311896
Bibliography: Branigan et al. 1992: 68		
Excavation Date:	**Type:** Multi-Chamber>100	**Altitude (m):** 172
Cave Description: An extensive cave system at the base of a limestone cliff.		
Excavation/Assemblage Discussion: Two silver armlets were found near the cave in 1867, although Branigan et al. (1992: 68) do not attribute them to the cave itself given the unclear circumstances behind the finds.		
Chronology: Carlswark Cavern was included in the database because of evidence of similar metalwork finds, dating to the Roman Iron Age, found in caves across Derbyshire. However, is unclear whether the two silver armlets were found within the cave and can therefore only tentatively suggest activity taking place at Carlswark Cavern during the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 43-410 AD	

Name: Scarthen Nick	**ID:** 314	**HER:**
Bibliography: Page 1905: 57		
Excavation Date:	**Type:** Cave	**Altitude (m):** 148
Cave Description: A fissure on Scarthen Nick was reported to have contained Roman Iron Age finds.		
Excavation/Assemblage Discussion: Sixty small Roman coins, of unknown date, and a human skeleton were found in a fissure in a rock face on Scarthen Nick.		
Chronology: Possible Roman Iron Age activity may have taken place within a rock fissure, although the finds are now lost and are of unknown date.		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 43-410 AD	

Name: Reynard's Kitchen Cave	**ID:** 315	**HER:** (Derbyshire) 14385
Bibliography: Derbyshire 14385		
Excavation Date:	**Type:** Cave	**Altitude (m):** 168
Cave Description: Smaller cave to the left of Reynard's Cave (**219**)		
Excavation/Assemblage Discussion: **Coinage:** A climber found 26 coins including early Roman republican coins and a number of Late Iron Corieltavi coins. **Metalwork**: An Aucissa brooch was also recovered from the cave		
Chronology: Finds of both Late Iron Age coinage, Early Roman Republican coins and a bronze Aucissa type brooch indicate Late Iron Age activity within the cave, likely during the 1st century AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 100 BC- 100 AD	

Name: Thurse House Cave	**ID:** 295	**HER:** 305358
Bibliography:		
Excavation Date: 1686	**Type:** Cave	**Altitude (m):** 190
Cave Description: Site is recorded in the SMR as a cave with possible Roman remains found in the Peak stone rocks now destroyed by quarrying.		
Excavation/Assemblage Discussion:		
Chronology: An unknown amount of artefacts supposedly dating to the Roman Iron Age were found in a cave during quarrying.		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 43-410 AD	

Name: Scarcliffe Rockshelter 2	**ID:** 347	**HER:** 1176066
Bibliography:		
Excavation Date: 1950s	**Type:** Rockshelter	**Altitude (m):** 135
Cave Description: Cave excavated by Armstrong and Court in the 1950s with unpublished results		
Excavation/Assemblage Discussion: Roman occupation is thought to have been recorded in the presence of a number of pot sherds.		
Chronology:		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 43-410 AD	

Region 3: Northern England

In Region 3, 45 caves were identified as being used during the 1st millennia BC and AD. The majority of these were located on the exposed limestone uplands of the Yorkshire Dales and Morecambe. A significant concentration of cave-use appears to have taken place during Late Iron Age and Roman Iron Age in Southern Cravendale, where activity is focused on the valley interfaces around Settle. There also a number of similarities in the date and type of material found in these caves, including evidence of metalworking and boneworking.

1	Bishop Middleham	88	Badger Hole
2	Moking Hurth	91	Sewell's Cave
3	Heathery Burn Cave	96	Scoska Cave
4	Kinsey Cave	97	Spider Cave
5	Lesser Kelcoe Cave	103	King Alfred's Cave
6	Greater Kelcoe Cave	106	Raven Scar Cave
7	Fairy Hole	107	Antoft's Windypit
8	Dowkerbottom Cave	168	Cave Ha
9	Ashberry Windypit	172	Perwick Cave
10	North End Pot	221	Brides Chair Cave
11	Jubilee Cave	223	Tom Taylor's Chamber
12	Chapel Cave	257	Cromwell's Cave
15	Victoria Cave	269	Jack Scar Cave
16	Attermire Cave	270	Calf Hole Cave
17	Cave Near Stainforth	271	Langscar Cave
18	Lady Algitha's Cave	284	The Dog Hole Cave
19	Bonfire Scar Cave	285	Dead Man's Cave
21	Kirkhead Cave	286	Wegber Limestone Quarry
22	Rawthey Cave	297	Fern Cave
23	Merlewood Cave	298	Wet Cave
24	Fairy Hole	299	Doe Pot Cave
87	Dog Holes Cave	300	Comb's Scar Cave
88	Badger Hole		

Name: Bishop Middleham	**ID:** 1	**HER:** 1447993
Bibliography: Raistrick 1933; Whimster 1981: 408		
Excavation Date: 1932	**Type:** Cave/Shaft	**Altitude (m):** 130
Cave Description: The single chambered limestone cave was discovered during quarrying in Bishop Middleham, County Durham. The cave's entrance orientated towards the East, was approximately 1.5m wide, which led to a chamber 6.4m long. Toward the rear of the cave is a fissure opening to the surface.		
Excavation/Assemblage Discussion: The cave was excavated during quarrying and the majority of artefacts were found towards the rear at the base of the open hole in the roof. **Human Remains:** 11 individuals were found at the rear of the fissure with 3 crouched inhumations beneath flat stone slabs. Two of these were orientated towards the east (Whimster 1981: 408). **Bonework**: A bone point of Grimthorpe type was recovered from the cave (Raistrick 1933:121). **Metalwork:** Raistrick found a small bronze rectangle made of two thin plates fixed by 3 rivets with the burials at the rear of the fissure (Raistrick 1933:121). **Pottery:** Sherds belonging to Late Bronze Age cinerary urns and Iron Age pottery were recovered from the cave. These were compared to sherds of smooth coarse pottery found at a number of Early Iron Age sites across the Pennines (Whimster 1981:408).		
Chronology: Whilst the burial of 11 individuals towards the rear of the cave cannot be dated, finds of Late Bronze Age and Early Iron Age pottery indicate that the site may have been used at least during the early 1st millennium BC		
Radiocarbon Dates:		
Suggested Broad Date: LBA; IA	**Suggested Date Range:** 1200- 400 BC	

Name: Moking Hurth	**ID:** 2	**HER:** 1188662
Bibliography: Backhouse 1898; Coggins 1986; Simms 1974		
Excavation Date: 1880;1967-71	**Type:** Multi-Chamber	**Altitude (m):** 473
Cave Description: Teesdale Cave or Moking Hurth is part of an extensive limestone system associated with Langdon Beck.		
Excavation/Assemblage Discussion: Excavation of the cave uncovered a sequence of animal bone and pollen. **Animal Remains**: Included in the assemblage was wild pig and deer. It is likely that such an assemblage collated overtime although analysis of the pollen assemblage contained oats and was described as a 'a typical Zone VIII assemblage' likely Iron Age in date. A wolf crania was discovered associated with this assemblage.		
Chronology: Certainly the bone assemblage recorded at Moking Hurth correlates with other radiocarbon samples from caves of bears inhabiting caves. However, the date of the animal assemblage is tentative without more dating methods.		
Radiocarbon Dates:		
Suggested Broad Date: IA(?)	**Suggested Date Range:** 800 BC- 43 AD	

Name: Heathery Burn Cave	**ID:** 3	**HER:** 18077
Bibliography: Blake 1862; Britton et al. 1968; Britton 1971; Elliott 1862; Elliott 1895; Greenwell 1894; Harding et al. 1986; Harrison 1980; Hawkes et al. 1957; Mackie 1863; Pearce 1971		
Excavation Date:1843;1859-72	**Type:** Multi-Chamber>100	**Altitude (m):** 256
Cave Description: Heathery Burn Cave is a limestone cave with an entrance orientated towards the North-West. The site is 150 metres in total length and is made of a series of interconnecting passages and chambers.		
Excavation/Assemblage Discussion: The cave was excavated a number of times during the 19th century. Finds were recorded throughout the cave, which included human remains, pottery and an extensive corpus of bronze metalwork. During his excavation, Greenwell (1894) attempted to record the location of finds, which has been discussed by Britton (1971). **Pottery:** Late Bronze Age and Early Iron Age pottery was found in the cave **Metalwork:** A large corpus of bronze objects was found in the cave which included, a bronze cauldron, 3 rings, 6 bronze discs, 8 armlets, a broken sword, an axe mould, 4 gouges, 2 knifes, a razor, a tong and a chisel. A gold penannular ornament and bracelet were also found in the cave (Greenwell 1894: 50-57). **Bonework:** A perforated boar's tusk was found in the cave along with bone pins and 3 spindle whorls (Greenwell 1894: 51). **Earlier Finds**: Possible early finds of Roman origin may have been found in the cave in the 18th century. A sleeve of mail armour and a key were said to have been found in the cave.		
Chronology: The large corpus of material recovered from Heathery Burn Cave is exceptional, especially given the general spread of material throughout the cave. Generally, the range of material is considered to be Late Bronze Age in date.		
Radiocarbon Dates:		
Suggested Broad Date: LBA	**Suggested Date Range:** 1000-700 BC	

Name: Kinsey Cave	**ID:** 4	**HER:** 45644
Bibliography: Jackson et al. 1932; Jackson 1953; Branigan et al. 1991a: 94-95; Branigan et al. 1992: 97		
Excavation Date: 1925-1932	**Type:** Single Chamber	**Altitude (m):** 300
Cave Description: Kinsey Cave is located on Giggleswick Scar and is approximately 38 metres long and 12 metres wide. Its entrance is orientated towards the south.		
Excavation/Assemblage Discussion: From intermittent excavations between 1925 and 1932 a range of finds were recovered including Upper Palaeolithic flint and Bronze Age artefacts. Roman Iron Age artefacts were found in the entrance include bone and metal artefacts and pottery (Jackson 1953: 182; Branigan et al. 1992: 91). **Pottery**: Pottery found in the cave included a Samian sherd stamped- DAGOD_NC from Rheinzabern and thought to date to the mid-3rd century AD. A spindle whorl made of a Samian sherd was also found at the entrance to the cave (Branigan et al. 1991a: 94-95). **Metalwork**: Metal artefacts found within the cave, included an enamelled disc brooch of Hull Type 25B, a toilet spoon, a penannular brooch and lead spindle whorl, which were considered to date to the 2nd century AD (Branigan et al. 1992: 94). A lorica segmentata buckle was also found at the entrance to the cave. This type of buckle, associated with the military, was in use from the invasion of Britain and into the 2nd century AD (Webster 1998: 123-125). The appearance of buckle types in Yorkshire and the north of Britain however, may obviously be later with deposits such as the Corbridge Hoard testifying for a late 1st to 2nd century AD date (Manning 1972: 225). It is likely then		

that such buckles arrived in the area from the late 1st century AD becoming more common as the military presence grew in the north into the 2nd century AD. **Bonework**: A spindle whorl of stag antler decorated with crossed lines and a spoon brooch were found in the cave and considered late 1st or 2nd century AD in date. A bone Giggleswick type toggle was found in the cave. These are recorded in a number of caves in the region and are thought to date to the Late Iron Age or Early Roman Iron Age (Branigan et al. 1991a: 94-95). **Stonework**: A number of stone spindle whorls were found along with a ball of limestone with haematite inclusions (Branigan et al. 1992: 95).
Chronology: From the material recovered in the cave, it is likely that activity within the cave took place during the late 1st or early 2nd century AD. Whilst the Giggleswick type toggle may suggest Late Iron Age use of the cave, considered alongside metalworking finds it is likely that the toggle was also Roman Iron Age in date. However, the possibility does remain of Late Iron Age activity in the cave, given evidence seen elsewhere in the nearby Kelcoe Caves (**5 & 6**).
Radiocarbon Dates:

Suggested Broad Date: IA(?); RIA	**Suggested Date Range:** c.250 BC-250 AD; c.100-250 AD

Name: Lesser Kelcoe Cave	**ID:** 5	**HER:** 1184411
Bibliography: Smith 1865; Simpson 1950; Branigan et al. 1992: 92-94; Gilks 2005		
Excavation Date: 1928-1932	**Type:** Single Chamber	**Altitude (m):** 180
Cave Description: Lesser Kelcoe Cave is located on the base of Giggleswick Scar. Its entrance is orientated towards the southeast and is 6.2 metres high and 2.5 metres wide. The cave itself is 14 metres long and is formed of a single chamber. A number of narrow fissures extend out of the northern wall of the cave with a small stream, which forms a pool before running into a sink. The cave is located directly north of Greater Kelcoe Cave (**6**).		
Excavation/Assemblage Discussion: Excavation of the interior of the cave between 1928 and 1932 uncovered artefacts dating to the Neolithic, Iron Age and Roman Iron Age. **Pottery:** During excavation a number of sherds of supposed Roman Iron Age pottery were found, although these are now lost (Branigan et al. 1992: 94). **Stonework**: A conical stone loom weight of Iron Age date was also found in the cave (NMR SD 86 SW 118)		
Chronology: From the evidence available it would appear that Lesser Kelcoe Cave was in use during the Iron Age and possibly during the Roman Iron Age. This activity could have therefore been contemporary to activity in Greater Kelcoe Cave (**6**), which is located directly north of the site.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA(?)	**Suggested Date Range:** c.800 BC- c.400 AD	

Name: Greater Kelcoe Cave	**ID:** 6	**HER:** 45731
Bibliography: Branigan et al. 1991a: 90-91; Simpson 1950		
Excavation Date:	**Type:** Multi-Chamber	**Altitude (m):** 168
Cave Description: Greater Kelcoe Cave is located on a small limestone scar, South of Lesser Kelcoe Cave (5). Its entrance, orientated towards the southwest, is 2m wide, which leads to a large fissure.		
Excavation/Assemblage Discussion: Excavations focused on the entrance to the cave and immediately inside. An artefact assemblage, dating from the Neolithic to Roman Iron Age, was found including coinage, metal and bonework and pottery. **Pottery**: Two spindle whorls made from Roman Iron Age were found, along with Late Period Imitation Samian Ware dating between 250 and 400 AD. **Coinage**: A copy of an AE of Claudius was found along with a 5 coins dating to the reign of Vespasian, including a Sestertius c.71 AD in date. A coin of Gallienus and an Antoninus of Carausius were also recorded from the cave. **Metalwork**: An iron spearhead and an iron chain and handle were reported to have come from the cave and are currently in Skipton Museum (MYD3811). The spearhead is crude in form and is similar to a small spear found at Fiskerton and may therefore be Iron Age in date (Field et al. 2003: 57). Roman Iron Age metalwork found in the cave, includes Dragonseque brooches similar to those found in nearby caves, including Victoria Cave (**15**) (King 1970: 415) and at Attermire Cave (**16**) (Jackson 1954: 181; King 1970: 415). Other metalwork included, a copper alloy trumpet headed 'Alcester' type fibula dating to the mid-2nd century AD, 3 penannular brooches, a rectangular plate of bronze and an open work mount of military type (Branigan et al. 1991a: 90-91). A lead spindle whorl was also found in the cave with a raised star pattern and perforations, with iron tongs, two handles, a chain and a penannular brooch (NMR SD 86 SW 2). A Neuheim derivative fibula was also found in the cave, dating to the 1st century AD (Branigan et al. 1991a: 90-91). **Bonework**: Bonework included a number of toggles along with a Type 5 crummy pin, dating to the mid-3rd century AD and a plano-convex spindle whorl (MYD3811). **Stonework**: Two spindle whorls of sandstone and one of limestone were found in the cave and considered Iron Age in date (Branigan et al. 1991a: 90-91).		
Chronology: Iron Age activity in the cave may be demonstrated by finds of a limestone loom weight. Many of the finds however date to the 1st and 2nd century AD, and could therefore of similar date to activity in other caves along Giggleswick Scar. It is likely that a second period of use was seen in the Late Roman period given the presence of Imitation Samian Ware.		
Radiocarbon Dates:		
Suggested Broad Date: IA(?); RIA	**Suggested Date Range:** c. 800 BC-200 AD	

Name: Fairy Hole	**ID:** 7	**HER:** 48432
Bibliography: Raistrick 1939: 128; Lord et al. 2013: 19		
Excavation Date: 1930s; 2012	**Type:** Cave/Shaft	**Altitude (m):** 199
Cave Description: Fairy Hole, also known as Cove Hole, is located on the face of Cove Scar, located above Grassington, North Yorkshire. The cave is made of a single passage that leads to a rear entrance at the top of the scar. The cave is approached by a small slope of limestone and is also accessible from the top of the limestone scar The front entrance, orientated towards the south, is 1.2 metres wide and 2.74 metres tall. The rear entrance is smaller and is 1-metre-wide and 2 metres high. The cave itself is 9 metres long and 2 metres wide.		
Excavation/Assemblage Discussion: The cave was excavated by Raistrick in the 1930s, when he discovered an inhumation within the cave chamber. Re-excavation of the spoil heap in 2012, found half an Iron Age vessel along with human bone (Lord et al. 2013: 19). A bear fibula recovered nearby, also provided a radiocarbon date around 500 AD (ibid.).		
Chronology: Iron Age sherds found outside the cave may suggest that the cave was in use at some point during the 1st millennium BC. It is unclear whether the inhumation also dates to this period. A radiocarbon dated bear femur found near the cave also indicates that it may have been used as a bear den during the Early Medieval period.		
Radiocarbon Dates: Reported in Lord et al. 2013: 19 Bear fibula **c.500 AD**		
Suggested Broad Date: IA	**Suggested Date Range:** c.800 BC-c.43 AD	

Name: Dowkerbottom Cave	**ID:** 8	**HER:** 46593
Bibliography: Farrer 1857; Denny 1859; Farrer et al. 1865; Poulton 1881;Branigan et al. 1991a: 81-86; Branigan et al. 1992: 94-95		
Excavation Date:1850s;1863	**Type:** Vertical Passage	**Altitude (m):** 381
Cave Description: Dowkerbottom Cave is a vertical passage cave located on a limestone plateau in Littondale. The cave is accessed by a steep shaft described as an "oblong chasm in the surface, overhung with ivy and fern" (Denny 1859: 48). This shaft then separates into two chambers with further passages running both east and west. This entranceway is thought to have been created by the collapse of the cave ceiling and was used to access the cave during the Iron Age and Roman Iron Age (Poulton 1881: 357).		
Excavation/Assemblage Discussion: The cave was subject to early antiquarian excavations throughout the 20th century. The earliest recorded investigations focused around the two chambers associated with the cave entrance (Farrer 1857; Denny 1859; Farrer et al. 1865) uncovering a stratigraphic sequence comprised of loam followed by a charcoal ashy lay, clay and then stalagmite. Denny (1859:49) suggests that most of the finds came from this ashy charcoal layer, which was focused around chambers either side of the entrances. In the passage running from the first western chamber, underneath 60cm of ashy deposits a bronze fibula was found along with 3 skeletons laid in a 30cm of clay. Further underneath this was a layer of stalagmite that covered deposits of animal bone including those belonging to wolf, goat and deer (Denny 1859:50). A burial of a child was also recovered underneath a layer of stalagmite (Farrer et al 1865: 420). Later excavations by Poulton (1881) focused on one of the secondary chambers, recording a similar range of material. Reports of finds from the excavations are disparate. Denny (1859:50-60) does outline a host of artefacts recovered by the excavator from a number of caves including metalwork, glass and amber beads and animal remains. Poulton (1881) however has a clear account of the material recovered in the cave, although a complete corpus is now lost. **Pottery**: Samian Ware Form 31 was found in the cave and a number of other decorated sherds (Denny 1859: 52). **Metalwork:** Notable finds include a Colchester brooch, similar to one recorded at Poole's Cavern (25), Buxton, of late first century to early second century date (Branigan et al. 1991a: 83). Further		

finds include 3 trumpet brooches and a Head-Stud fibula dating to the late 1st and 2 centuries AD (*ibid*). Three Dragonesque fibula found in the cave were thought to date to the mid to late fourth century AD (Branigan et al. 1991: 84). Other metalwork from the cave include a lead ingot, bronze and iron rings and a spearhead (King 1970:414).

Coins: A number of coins were found, including those belonging to the reign of Trajan and Antoninus Pius. A coin of Antoninus Pius thought to be struck in commemorate conquest of Britain c.131 AD was found by Farrer (et.al 1865: 414-418). A bronze coin of Trajan was a forgery (c.98AD) (Denny 1859: 60).

Bonework: Bone pins and needles were discovered along with spindle-whorls and two bone combs (Denny 1859: 73) - A double-sided composite comb and a single long handled comb. A further comb was also recovered by Poulton (1881: 418) and a bridle cheek piece that can be considered Iron Age in date (Branigan et al. 1991a: 86). Fourteen spoon brooches were also found in the cave (Branigan et al. 1991a: 85).

Glass: Glass beads, and a Roman Iron Age glass bangle of type 3F coloured ice-green with white pot-hooks was found in the cave (Branigan et al. 1991a: 86).

Stonework: A conical limestone loom weight was also found (Raistrick 1939: 133). Along with an Intaglio, a jet armlet, whetstones, pot boilers, a baked shale fragment, an amber ring and worked sandstone slab.

Animal Remains: Red deer, boar, ox, sheep, goat, horse and dog were found associated with the charcoal layer where many of the finds were found.

Human Remains: Human remains recorded in the cave were given an assumed Iron Age date (Raistrick 1939: 128), although considered Neolithic by Branigan and Dearne (1991a: 96).

Chronology: The large array of finds indicates multiple periods of use throughout the Neolithic to Roman Iron Age. Compared to Roman Iron Age activity, there is limited evidence of use during the 1st millennium BC. A long handled bone comb may date to the Iron Age (Raistrick 1939: 133), whilst a limestone conical loom weight is similar to finds from the Kelcoe Caves (**5 & 6**).

Branigan and Dearne (1992: 94-96) suggest that activity in the cave occurred throughout the Roman Iron Age. From the range of metalwork and coins found an Early Roman Iron Age use of the cave can be ascribed from the bronze of Trajan (c.98 AD) and Antoninus Pius (c.131 AD) and the 1st century Dragonesque brooch. Indeed, similar examples have been found in caves in the region, namely those on Giggleswick Scar- Kinsey Cave (**4**) and Greater Kelcoe Cave (**6**). Such an early Roman date is also confirmed by the Head-Stud brooch (Painter et al. 1970: 165).

This material would suggest activity in the cave through a period c.50-150 AD; similar dates are seen in other caves in the region. However, later cave use is attested in the double-sided composite comb found by Deny (1859:72), which has parallels to examples of Late Roman to Early Anglo-Saxon examples such as that found at Dun Cuier on Barra (MacGregor 1980: Fig. 81). Interestingly, a similar comb was found at Victoria Cave (**15**).

Radiocarbon Dates:

Suggested Broad Date: IA; RIA	**Suggested Date Range:**c.800 BC- 43 AD; c.50-500 AD

Name: Ashberry Windypit	**ID:** 9	**HER:** 57064
Bibliography: Branigan et al. 1991a: 115;Hayes et al. 1963; Hayes 1963; Cooper et al. 1982; Pierpoint 1984; Hayes 1987		
Excavation Date: 1950s	**Type:** Vertical Passage	**Altitude (m):** 160

Cave Description: Ashberry Windypit is part of a series of 8 vertical limestone fissures in Duncombe Park, North Yorkshire. There are 2 vertical shafts at Ashberry Windypit, located c.0.81 miles from Slip Gill Windypit (**169**), forming a total of 8 chambers. The fissures are approximately 23.2 m deep with narrow passageways connecting the chambers. The Windypits get their name from a phenomenon of warm or cold air rising from the fissure and interacting with the outside air. In Winter, steam rises in puffs or jets from the caves.

Excavation/Assemblage Discussion: Investigations into the Windypits on the Duncombe estate have been sporadic. Excavations during the 1950s and 60s identified archaeological activity in four of the Windypits, the other 3 being Buckland's Windypit (**108**), Antofts Windypit (**107**) and Snip Gill (**169**). Excavation of Ashberry Windpit found evidence of human-use dating from the Neolithic into the Roman Iron Age. The majority of deposits found in the cave were Bronze Age in date, which included a number of sherds of corded bell-beakers; a macehead and a flint assemblage. Human remains, possibly belonging to the Late Neolithic or Bronze Age were also discovered in Chamber D (Hayes et al. 1963: 22; Hayes 1987: 37). Branigan and Dearne (1991a: 115) have suggested that Roman Iron Age deposits found in the cave were rubbish slumps from elsewhere- although no sites have been recorded near the cave and given examples throughout the country, purposeful deposition of material is extremely likely. The majority of Iron Age and Roman Iron Age finds were found in Chamber C, which is connected to one of the vertical entrance shafts.

Pottery: A number of fragments Iron Age pottery were recovered from levels around the second blocked exit hole and were thought to have been dumped into the fissure or have been associated with a hearth (Hayes 1987: 38). These sherds were made of a calcite gritted fabric and were found with other grey ware fragments. Analysis of this pottery by Hayes (1987: 50-53) suggested that the assemblage was Late Iron Age and Roman in date, with examples of soapy buff grey ware coming from Costa Beck, Great Ayton Moor and Roxbury Moor, whilst the calcinated sherds are similar to those recorded at Stanwick. In Chamber B, the nearest the main entrance of the fissure, fragments of Roman pottery were a recorded including Samian Ware, a loop-handled jug and a colour-coated rim (Hayes et al. 1963: 25; Hayes 1987: 38). A Late Roman flanged dish c.300-400 AD in date along with 2 roof tiles were also found in the deposit layers in the second entrance (Hayes 1987: 38).

Metalwork: A number of pieces of metalwork found in the cave can be dated to the Roman Iron Age. A trumpet brooch dating between c.100-200 AD was found on a rock ledge 3.05 metres below the entrance (Hayes 1963: 25). A twisted wire bracelet, fragments of bronze and a lump of polished iron ore were also recovered from levels in Chamber C (Hayes 1963: 361). A Bronze key, thought to be Roman Iron Age in date, was also found in Chamber B near the entrance, found alongside fragments of pottery and a bone spoon similar to that recorded in Chamber C (Hayes 1987: 38). A bronze phalera of a Celtic head on a plate was also recovered from deposits formed in the second blocked entrance to the fissure (Hayes 1987: 53).

Glass: Two glass bangles were recovered from Chamber C. The first example was a double-grooved bangle made of blue glass with insets of yellow enamel. The second was a pitted white stone bangle possibly made of travertine or tufa (Hayes 1963: 360). These bangles were thought to be 1st or 2nd century AD in date (Hayes 1987: 56).

Bonework: From similar levels as the metalwork and bangles was a small bonework assemblage that include a number of bone spoons thought to be Roman or Iron Age in date found in Chambers B and C (Hayes 1963: 360). A bone weaving comb was also found in the deposits in the second entrance to the fissure (Hayes 1987: 38) and considered Iron Age in date.

Animal Bone: Mixed within the deposits of Chamber C were a number of animal bones, including those of a large dog or wolf (Hayes et al. 1963: 25; Hayes 1987: 38).	
Chronology: Finds of both Iron Age and Roman Iron Age material within the chambers of the cave, suggest that the site was used sometime during the 1st millennia BC and AD. Finds of Late Iron Age pottery and a bone weaving comb could suggest that activity in the cave preceded the use of the cave during the Roman Iron Age in the late 1st century AD or 2nd century AD.	
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 300 BC- 400 AD

Name: North End Pot	**ID:** 10	**HER:** 1188667
Bibliography: Gilkes et al. 1993; Lord et al. 2013		
Excavation Date: 1985-1986;1988	**Type:** Vertical Passage	**Altitude (m):** 387
Cave Description: North End Pot is a limestone shaft on North End Scar.		
Excavation/Assemblage Discussion: Excavation in the upper shaft of North End Pot uncovered a mixture of human and animal bones. A fragment of young adult skull was radiocarbon dated to the Iron Age, whilst an antler macehead, found 11 metres down the shaft, was dated to the Late Neolithic (c.3400-2300 BC). **Human Remains:** The remains of two individuals were discovered in the top layers of the entrance. A skull of a young adult, was radiocarbon dated to the Middle to Late Iron Age (Lord et al. 2013: 247; Gilkes et al. 1993: 57). Bones of a child were also recovered at a similar depth and could therefore have been deposited at a similar date. **Animal Remains:** From layers associated with the human remains were also remains of horse and dog (Lord et al. 2013: 247).		
Chronology: From the limited material found in the cave it is clear that activity occurred during the Neolithic as well as during the Middle to Late Iron Age with at least 1 individual being deposited within the cave. Within this layer was also bones of a child along with animal bone that may have been contemporary.		
Radiocarbon Dates: **HAR-8056** Top of shaft, Young adult human skull 2260 BP **310 -130 cal BC**		
Suggested Broad Date: IA	**Suggested Date Range:** c.310-100 BC	

Name: Jubilee Cave	**ID:** 11	**HER:** 45645
Bibliography: Branigan et al. 1991a: 88; Challis et al. 1975: 62; King 1970: 416; Raistrick 1939: 128		
Excavation Date: 1935-1938	**Type:** Multi-Chamber	**Altitude (m):** 414
Cave Description: Jubilee Cave is a cave located within a limestone depression on the eastern end of Attermire Scar. The cave entrance is orientated southwest and is around 2 metres wide and 4 metres high. A small rockshelter to the east is also connected to the inner cave. Inside there are two chambers with the larger being approximately 10 metres in length with a smaller opening leading to a passageway with a possible collapsed entrance. On the eastern side of this chamber is a tunnel extending downwards for at least seven metres.		
Excavation/Assemblage Discussion: The cave was excavated in the early 20th century by Raistrick, who uncovering human remains, Neolithic Peterborough type pottery and a metalwork assemblage. **Pottery**: Roman Iron pottery was represented by a calcite-gritted squat jar and fragments of a pottery fabric spindle whorl and one complete spindle whorl made from a Samian sherd (Branigan et al. 1991a:88). **Human Remains**: Approximately 10 individuals were recovered from Jubilee Cave and were found disarticulated within the descending tunnel or were "tucked" under overhangs (Raistrick 1939: 128; Challis et al. 1975: 62). **Coin**: A coin of Crispus (310 AD) was found within the cave (King 1970: 416). **Metalwork**: A fragment of twisted U-shaped bindings, found in the cave, similar to those found at Victoria Cave (**15**) are thought to belong to the Roman Iron Age. Raistrick (1939: 141) also records the presence of a "hunting spear" which he attributes to the Iron Age. **Bonework**: A wolf-tooth necklace is thought to be pre-Roman in date (NMR SD 86 NW 5). **Other Artefacts**: A conical loom weight was also recovered from the cave and considered Iron Age in date (Raistrick 1939: 133).		
Chronology: Use in the cave appears to stretch a long chronological period, although the nature of such use is unclear. Unfortunately, the excavations have not been fully published however the human remains found at the cave were thought to date to the 1st millennium BC demonstrated by finds of a conical loom weight, which can be compared to similar Iron Age examples found in caves in Southern Cravendale. The Roman Iron Age metalworking assemblage and the coin of Crispus suggest that the cave was also in use between the 1st-4th centuries AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** c.800 BC- 400 AD.	

Name: Chapel Cave	**ID:** 12	**HER:** 1203303
Bibliography: Lord et al. 2013: 246		
Excavation Date: 1990s	**Type:** Multi-Chamber	**Altitude (m):** 401
Cave Description: Chapel cave is a single chambered cave, located on a small limestone outcrop overlooking Malham Tarn. The cave entrance, orientated towards the east, leads to a chamber, 10 metres long. There are two small passages extending from the left hand corner of the main chamber.		
Excavation/Assemblage Discussion: Sample of charcoal taken from the entrance to Chapel Cave was radiocarbon dated to the Iron Age (Lord 2013: 246).		
Chronology: The cave is near a number of Iron Age and Roman sites including a Roman marching camp and mine workings.		
Radiocarbon Dates: Reported in Lord et al.2013: 246 'Iron Age'		
Suggested Broad Date: IA	**Suggested Date Range:** 800 BC- 43 AD	

Name: Victoria Cave	**ID:** 15	**HER:** 45646
Bibliography: Denny 1859; Dawkins 1872; Swanton 1969; Dearne et al. 1998		
Excavation Date: 1838-1868; 1870-1878; 1977-1978; 1996	**Type:** Multi-Chamber>100	**Altitude (m):** 409
Cave Description: Victoria Cave, is a large cave located on Attermire Scar, Settle. The large cave entrance, heavily damaged by blasting, is orientated towards the South West and leads to 2 large passageways, the first of which was accessible by a small 4-metre-wide opening on the talus. The cave is approached from an ascent of talus sheltered by a small spur to the West.		

Excavation/Assemblage Discussion: Victoria Cave is perhaps the most well-known of the caves around Settle and is famous for its extensive Ice Age fauna and also the well-studied Roman Iron Age metalworking assemblage found primarily at the entrance to the cave. Extensive clearances, some involving dynamite, have drastically altered the appearance of the cave. The original form of the cave has been reconstructed by Dearne et al. (1998). Dearne has also presented a catalogue of finds from the cave, occurring outside and also within the chambers of the cave.

Pottery: Three fragments of Prehistoric pottery are recorded in the excavation collection. One was identified as Early Bronze Age in form, whilst the other fragments are similar to those recorded at Mam Tor and Castle Hill dating between c.1000-500 BC (Dearne et al. 1998: 44).

Coinage: At least 34 Roman coins were recovered from Victoria Cave. The oldest of which is a Republic Denarius minted in 83 BC. Other notable coins include a single coin of Vitellus 69 AD, three coins of Trajan 103-117 AD and a single coin dating to the reign of Marcus Aurelius 171-2 AD (Dearne et al. 1998: 45). Generally, the dates of the coins range from 83 BC- 346 AD (Dearne et al. 1998: 46).

Metalwork: At least 58 brooches were found in Victoria Cave, dating throughout the Roman Iron Age. These included, an unenamelled trumpet brooch with hinged pin similar to two examples found at Sewell's Cave (**91**) and one from Attermire Cave (**16**) (Dearne et al. 1998: 53). Such examples are thought to be in use between c.75- 1.75 AD (ibid.). Another trumpet brooch, missing a rear pin, was also thought to have originated from the same workshop as another found at Sewell's Cave (**91**). There are also a number of Dragonesque brooches in the collection that again are similar to examples found at Dowkerbottom (**8**) and Attermire Caves (**16**). Of other interest was also a Late or Post-Roman crossbow brooch and caterpillar brooch that may have been found during excavation (Dearne et al. 1998: 77). In all there are 16 bow brooches, 20 plate, Dragonesque and wire ones and twelve penannular type brooches. Typologically the assemblage suggests a period of deposition during the Late 1st century and 2nd Century AD up into the Post-Roman period.

Along with the brooches are also a number of copper alloy rings and beads. Typologically, a copper alloy ring with an intaglio inset was dated to similar examples found at Hodd Hill, which date to the late first and early second centuries AD (Dearne et al. 1998: 67). Other finds include a collection of toiletry instruments and a number of studs, which were thought to date to a similar period. At the cave entrance, a fragment of seal box was also found, which dated to the late 2nd or 3rd centuries AD. A number of pieces also seem to indicate the presence of military metalwork with a number of rosette studs and plate fragments (Dearne et al.1998: 68). Twisted pieces of U-shaped bindings similar to those recorded at Attermire (**16)** and the Jubilee Cave (**11**) were also recovered. A number of iron objects are also present that make up a small portion of the metalwork assemblage, including nails, rings and fragments of iron slag.

Bonework: A range of bone artefacts were found in the cave. Artefacts that date to the Iron Age or Roman Iron Age include: 2 Giggleswick type toggles, tools, hooks and spindle whorls. Two bone armlets, pins, spoon-fibulae, a weaving comb, an antler bead and an elephant ivory pommel were considered Roman Iron Age in date (Dearne et al. 1998: 90-110). A comb found outside the cave was also considered Early Medieval in date (Dearne et al. 1998: 109).

Human Remains: Smashed human bone found in the scree at the entrance to Victoria Cave- and were thought to date to the Iron Age (Lord et al. 2013: 246). **Stonework:** Roman Iron Age stone objects found in the cave included a number of shale armlets and beads, a spindle whorl, touchstones and a cosmetic palette (Dearne et al. 1999: 112-118). A Norse runic tablet was also rumoured to have been found in the cave and may date to the late 1st millennium AD (Dearne et al. 1998: 135-138; Swanton 1969).
Chronology: Finds from Victoria Cave can be used to suggest that the cave was used in the Iron Age and Roman Iron Age. This can be seen through finds of Iron Age pottery and bonework. The Roman Iron Age metalworking assemblage also suggests that the cave was used throughout the Roman Iron Age and into the Post-Roman period. However, the majority of finds support an intensive period of use between the late 1st and 2nd centuries AD, which can be compared to other similar cave assemblages found in caves across Southern Cravendale.
Radiocarbon Dates:

Suggested Broad Date: IA;RIA;EM	**Suggested Date Range:** 800 BC- 410 AD; 700-900 AD

Name: Attermire Cave	**ID:** 16	**HER:** 45760
Bibliography: Branigan et al. 1991a: 72-74; Cuttriss 1897; King 1970;Beswick et al. 1990; HER: MYD3822		
Excavation Date: 1870;1920s;1930-31	**Type:** Multi-Chamber>100	**Altitude (m):** 371
Cave Description: Attermire Cave is a large, complex karst cave, made of a series of passages and chambers. The entrance is located on the face of Attermire Scar, reached by ascending a scree slope. It leads to 11 metres before forking and continuing for another 40 metres before reaching a low crawl for 6 metres, which then opens up into the large 'pool chamber'.		
Excavation/Assemblage Discussion: The cave was apparently cleared for occupation during the Jacobite Rebellion in 1745 (Cuttriss 1897). It was excavated at least 3 times, from the 1870s before more intensive and systematic work was carried out between 1930 and 31 by the Pig Yard Club in Settle. These uncovered a metalworking assemblage, which was similar to that found in Victoria Cave (**15**). **Metalwork**: King (1970) and Branigan and Dearne (1991a: 72-74) supply the only record of metalwork found in the cave. In total 28 brooches were found in the cave, which included types that could be dated to the late 1st and 2nd centuries AD. Both an unusual S-shaped type fibula and an unenamelled twisted wire brooch were considered forerunners to the Dragonesque type fibula and were dated to the late 1st century AD (King 1970: 411). Other brooches included a bronze and silver trumpet and complete Dragonesque fibulae that were similar to types found in Victoria Cave, dating to the 2nd century AD. Parts of a dismantled chariot, made of gilded silver and enamelled bronze were also found in the entrance passage to the cave, which was thought to date the Late Iron Age or Early Roman period (King 1970: 414). A Gilded Crossbow brooch found in the entrance may also date to the late 4th century AD. **Coins:** Coins found in the entrance passage to the cave, included those minted during the reigns of Domitian (81-96 AD), Marcus Aurelius (161-180 AD), Tetricus (270-273 AD), Crispus (310 AD) (King 1970: 416). A silver coin of Eadberht (737-766 AD) and a styca of Aethered II (978-1019 AD) were also found in the cave (Branigan et al. 1991a: 72-74). **Human Remains:** Human remains have also been found at Attermire Cave, along with a range of animal bone, which remain undated. **Bonework**: A bone spindle whorl and weaving comb and antler cheek piece were considered Iron Age in date. Whilst a Gigglewick type toggle may date to either the Iron Age or Roman Iron Age. A		

dice, bone needle and spoon brooches have been dated to the Roman Iron Age (Branigan et al. 1991a: 72-74). **Stonework**: An amber bead of possible Iron Age or Roman date was recorded from the cave (Branigan et al. 1991a: 72-74).
Chronology: In his analysis of Roman metalwork from Yorkshire, King (1970) suggests that much of the metalwork recovered from Attermire Cave dates to the 1st and 2nd centuries AD. This can be supported by the presence of similar artefacts at caves in the area. This includes finds of early experimental forms of Dragonesque fibula from Victoria and Sewells Cave, along with Trumpet penannular brooches. It is likely, that the cave was also used during the Iron Age, which is demonstrated by finds of a weaving comb and antler cheek piece. Coins belonging to the reign of Tetricus and Crispus and the Gilded Crossbow type brooch also suggests that the cave was used during the 4th century AD.
Radiocarbon Dates:
Suggested Broad Date: IA;RIA | **Suggested Date Range:** c.50-400 AD; 700-900 AD

Name: Cave Near Stainforth	**ID:** 17	**HER:**
Bibliography: Raistrick 1939	**Type**: Cave	**Altitude (m):**
Excavation Date:		
Cave Description: In his discussion of the settlement of Cravendale, Raistrick (1939: 130) noted that he found iron knives in a cave near Stainforth. The cave could not be located.		
Excavation/Assemblage Discussion: Raistrick suggested that the iron knives may have dated to the Roman Iron Age.		
Chronology:		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 43-410 AD	

Name: Bonfire Scar Cave	**ID:** 19	**HER:** 38136
Bibliography: Atkinson 1926		
Excavation Date: 1925	**Type:** Single Chamber	**Altitude (m):** 72
Cave Description: The cave is located on the base of a limestone bluff and measures 2.43 metres long and 1.52 metres wide.		
Excavation/Assemblage Discussion: Excavation of the cave removed most of the cave earth from the interior although a complete description of the cave stratigraphy has not published. Finds from the cave include a range of flint, human and animal bone and fragments of iron. **Metalwork**: A small iron nail, of uncertain date, was discovered during excavation of the cave interior (Atkinson 1926: 113). **Human Bone**: An uncertain number of human bones belonging to at least 6 individuals were found within the cave, of unknown date (Atkinson 1926:114). **Pottery**: A single fragment of pottery was recorded from the cave and considered Bronze Age or Iron Age in date (Atkinson 1926: 116).		
Chronology: Given the lack of diagnostic material from the cave it is impossible to define a date of use at Bonfire Scar Cave, although the deposition of at least 6 individuals may suggest use of the cave during the Neolithic or Bronze Age. The cave was included in the database because of the reported find of a pottery sherd that may date to the Bronze Age or Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: IA (?)	**Suggested Date Range:** 800 BC- 43 AD	

Name: Kirkhead Cave	**ID:** 21	**HER:** 39548
Bibliography: Bolton et al. 1864; Branigan et al. 1991a: 96-97; Gale et al. 1984; Gale et al. 1990		
Excavation Date:1853;1968-1971	**Type:** Single Chamber	**Altitude (m):** 26
Cave Description: The cave is accessed by a small entrance, 0.9 metres high, which leads to a large phreatic chamber, c.13 metres long and 7 metres wide.		
Excavation/Assemblage Discussion: The cave was excavated during the mid-19th century and was re-examined in 1968. Excavations to a depth of 2.43 metres uncovered a number of finds from the Bronze Age and Roman Iron Age. Lower levels contained Palaeolithic material and animal bone. **Metalwork**: A range of metalwork was recovered from the cave, including a portion of an iron axe, a trefoil fibula and a knife blade that were found at the surface of the deposits. Below this included a bronze green enamelled pin, 3 bronze rings, a bronze broad-axe, a small bronze tube, a bronze axe, spearhead. **Coin**: A coin of Domitian minted in 84 AD was found in the cave (Branigan et al. 1991a: 96-97). **Amber Bead**: Two amber beads were recorded below the Roman Iron Age deposit (Gale et al. 1990: 44). **Pottery**: A single piece of unbaked pottery was recorded in the upper layers of the cave earth and thought to date to Middle Bronze Age to Early Iron Age (Challis et al. 1975: 34).		
Chronology: Whilst a single fragment of unbaked pottery may indicate Early Iron Age activity in the cave, metalwork finds and a coin of Domitian suggest that the site was in use during the 1st-3rd centuries AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA(?); RIA	**Suggested Date Range:** 800- 400 BC: 80-150 AD	

Name: Rawthey Cave	**ID:** 22	**HER:** 1089007
Bibliography: Chamberlain et al. 1997		
Excavation Date:	**Type:** Vertical Passage	**Altitude (m):** 257
Cave Description: Rawthey Cave is a limestone cave system accessed by a vertical shaft, into a chamber known as the Wolf Den.		
Excavation/Assemblage Discussion: Human and animal bone was recovered in deposits in the dry chambers of the cave. **Human Bone**: Part of a human skull was radiocarbon dated to 1520-1395 cal BC whilst another skull, belonging to an adult female, was dated to 62-210 cal AD (OxA-7450). **Animal Bone:** A large proportion of bones belonged to wolf along with red deer, roe deer, sheep, pig, cattle and dog. Footprints were also recorded in the cave floor, thought to belong to those of wolves.		
Chronology: The footprints found in the cave were thought to belong to the Bronze Age. However, the radiocarbon sample taken from human bone found in the cave chamber also suggests that the site was in use during the late 1st or 2nd centuries AD.		
Radiocarbon Dates: OxA-7449 roe deer bone 605±40 **1292-1410 cal AD** OxA-7450 human bone 1865±40 **62-210 cal AD** OxA-7451, roe deer bone 815±40 **1155-1279 cal AD** AA-22519, human bone 3167±55 **1605-1286 cal BC**		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-300 AD	

Name: Merlewood Cave	**ID:** 23	**HER:** 41522
Bibliography: Branigan et al. 1991a: 99; Cowper 1982; Cowper 1892; Jackson 1910b; Metcalf 1960		
Excavation Date:1892	**Type:** Multi-Chamber	**Altitude (m):** 27
Cave Description: Merlewood Cave is a single chambered cave, located on a limestone cliff face. The entrance, which is orientated towards the southeast, is 2 metres wide and 3 metres high. The main chamber is 2.13 metres wide and 4.89 metres long, which leads to a small winding passage.		
Excavation/Assemblage Discussion: Excavation in the cave did not reach the cave floor, although the majority of finds came from a matrix of loose soil mixed with charcoal. **Glass:** Fragments of Roman glass were found in the cave (Branigan et al. 1991a: 99). **Pottery:** Pottery recorded from the cave included fragments of red and black pottery and one fragment of glazed Samian Ware (Branigan et al. 1991a: 99). **Coins:** Seven Northumbrian stycas of Eanred (808-840 AD), Ethelred and Archbishop Vigmund (851 AD) were found in the cave (Metcalf 1960). **Metalwork**: A fragment of corroded iron fibula was found in the cave. **Human Bone:** An unknown number of human remains were discovered during excavation.		
Chronology: Given the material recorded in the cave it is likely that the cave was in use during the Roman Iron Age, although due to the poor records an exact date cannot be given. The site was re-used later in the 1st millennium AD, which is demonstrated by coins dating to the 9th century AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA; EM	**Suggested Date Range:**c.100-900 AD	

Name: Fairy Hole Cave	**ID:** 24	**HER:** 41547
Bibliography: Branigan et al 1991a: 87; Branigan et al. 1992: 94; Jackson 1910 PRN514 - MLA514		
Excavation Date: 1910	**Type:** Cave/Shaft	**Altitude (m):** 76
Cave Description: Fairy Hole is a single chambered cave located below a limestone trace on the eastern side of Warton Crag. The cave is accessed by a horizontal entrance, facing southeast, which is 1.22 metres high and 0.61 metres wide. The entrance leads to a chamber 7.62 metres long, 1.52 metres high and 2.45 metres at its widest extent.		
Excavation/Assemblage Discussion: Excavation of the cave floor uncovered charred wood, animal bone split open to extract marrow and two human jawbones along with an iron pin and worked flint. **Human Bone**: Lower jaws of 2 individuals were found including a number of other fragments which had been encrusted in stalagmite. **Metalwork**: An iron needle was also recovered from the cave, thought to be used for sewing skins. **Stonework** A single fragment of haematite was also found. **Pottery** Two fragments of Samian DR 18, dated to the 1st century AD were recovered along with 2 fragments of a globular black-fumed vessel. **Animal Bone**: Split animal bone of sheep, ox and pig.		
Chronology: Pottery finds from the cave, along with its association with 2 other caves in the region, suggest that Fairy Hole Cave was in use during the late 1st or 2nd century AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 50-200 AD	

Name: Dog Holes Cave	**ID:** 87	**HER:** 41539
Bibliography: Branigan et al 1992: 76-78; Jackson 1909, 1910, 1912; Penney 1983		
Excavation Date:1909-1912	**Type:** Vertical Passage	**Altitude (m):** 53

Cave Description: The limestone cave is located on the west of Warton Crag on a sloping limestone pavement. The entrance to the cave is a vertical shaft with a rectangular entrance 2.43 by 2.13 metres, which leads down into a 3.96-metre-deep shaft. At the base of the shaft, two passageways extend north and southwest. The southwest passage slopes for 6.10 metres before entering a chamber named the 'Swirl Hole'. From this, a passage runs into 3 more chambers named 'West Fissure'. 'Bone Chamber' and 'Upper Chamber' with a total length of 21.34 metres. The northern passage runs for 13.72 metres with a low roof leading to a fissure 4.89 metres long running to the east.

Excavation/Assemblage Discussion: The cave was excavated by JW Jackson between 1909-1912, who recovered a range of material from the Bone Chamber and the entrance shaft. At the base of the entrance shaft a hearth was found with 1st century AD pottery and a large amount of animal bone.

Pottery: A fragment of Samian Ware dating to the 1st century AD, was found at the base of the entrance shaft (Jackson 1910: 69). A Black-burnished ware rim with lattice decoration along with 3 further fabrics were also found (Branigan et al 1992: 77).

Stonework: A hammer stone was found made of a limestone boulder at the Swirl Hole in Dog Holes (Jackson 1910: 69). A number of whetstones were also found including one of sandstone and a shale or canal coal.

Metalwork: A bronze balance (*trutina*) was found in the cave with two pans decorated with a dot and circle design. This was thought to date to the 4th or 5th century AD. A further bronze enamelled intaglio brooch dating to the 2nd or early 3rd century AD A bronze scabbard-binding, similar to an example recorded at Dowkerbotom (**8**) was also found in the cave (Branigan et al. 1992: 72). A bronze binding and triangular loop fastener was also found considered to be late first- early second century in date. A copper alloy pendant was also found which held blue and red enamels towards the middle. A strip of lead with nail hole was also recorded with a number of iron artefacts. A pruning hook, broken ring of Manning type 1D along with another example. Nails and a javelin head, an edge binding from a chest and some further fragments of iron sheet. A Late Roman bronze ring, penannular brooch and bracelet were also found in the cave. Iron objects recovered from the cave include 2 broken Roman nails, a bridle bit, a blade of a Roman knife and a curved iron sickle. A short bar of iron with a loop at one end was also found. Lumps of iron slag taken from the entrance shaft were thought to date to the 1st century AD.

Bonework A number of antler tines and bone points were recovered from the cave, 3 bone pins, a bone piercer and a weaving comb could be Iron Age in date.

Human Remains: A number of fragmented human remains were found in the shaft and the North Passage and are thought to be of Late Neolithic date. A number of human bones were broken. One apparently with a clean oblique fracture, ready for marrow extraction (Jackson 1910: 74). At least 15 individuals are present in the cave and were found with Beaker type pottery.

Animal Remains: A large number of animal bones were recovered from a multi-period assemblage; including wolf bones from North Passage, sheep/goat, cow, red deer, fallow deer ad roe deer.

Chronology: An Iron Age weaving comb, found in the base of the vertical shaft, suggests that the site was in use sometime during the 1st millennium BC. Given the presence of 1st century material, the weaving comb could also be early 1st century AD in date. Other finds also suggest that the site was in use during the 4th or 5th centuries AD.

Radiocarbon Dates:

Suggested Broad Date: IA; RIA	**Suggested Date Range:** 0-500 AD

Name: Badger Hole	**ID:** 88	**HER:** 41540
Bibliography: Jackson 1909, 1910, 1912; Penney 1983		
Excavation Date: 1909-1912	**Type:** Rockshelter	**Altitude (m):** 22
Cave Description: Badger Hole is 274 metres southwest of Dog Holes Cave (**87**) located on a cliff face overlooking Morecambe Bay. The entrance, orientated towards the southwest, is 2.44 metres wide and 0.93 metres high. The cave itself is a made of a single chamber, which is 3.66 metres long.		
Excavation/Assemblage Discussion: A 3m deep trench was excavated outside the cave, which produced no archaeological material. Inside a possible midden was identified and a layer of burnt charcoal was found with butchered animal bone. **Animal Bone**: Sheep/goat and cow bone were recovered associated with the burnt charcoal layer, with metacarpals split for marrow extraction. **Bonework**: A bone handle with circular perforations at the base was found associated with the charcoal layer; along with a worked antler tine.		
Chronology: Jackson considered the cave contemporary to activity at nearby Fairy Hole Cave (**24**) and Dog Holes Cave (**87**), suggesting the charcoal and midden deposit was likely Iron Age or Roman Iron Age in date. Given the lack of diagnostic finds, however, this is only tentative.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 0-500 AD	

Name: Sewell's Cave	**ID:** 91	**HER:** 44764
Bibliography: Branigan et al. 1991a: 100-102; King 1970; Raistrick 1936		
Excavation Date: 1932-1933	**Type:** Rockshelter	**Altitude (m):** 203
Cave Description: Sewell's Cave is located on Common Scar along the same limestone formations as Kinsey Cave (**4**). It is a rockshelter, approached by ascending a scree slope with views across the south. The chamber is approximately 12.19 metres long and 4 metres deep.		
Excavation/Assemblage Discussion: Sewell's Cave was excavated by the Pig Yard Club between 1932 and 33, who removed large amounts of fallen rock debris at the front of the cave. The cave floor was made of glacial clay debris with a clay soil above that contained animal bone and artefacts. Raistrick suggests that there were 2 stratigraphic layers of human occupation: 1) The top layer contained Roman Iron Age material including metalwork and pottery 2) The lower layer made of a thin bed of talus on top of the glacial boulder clay with Mesolithic and Neolithic evidence included flint and Peterborough Ware. Human bone was also recovered from this layer that was thought by Raistrick to have been intrusive but pre-Roman in nature (Raistrick 1936: 193). **Metalwork**: Three Trumpet brooches, a Head Stud brooch, a bronze wire brooch and 2 penannular type brooches were found in the cave (Raistrick 1936: 195; King 1970: 414). A bronze gladius, another fragment of gladius and a javelin head were also found along with a number of fragments of bronze plate (Raistrick 1936: 195). Iron objects found in the cave included 3 knives, a slide-lock key, a bowl, and a possible catapult bolt head (Branigan et al. 1991a:102; Raistrick 1936: 199). A lead penannular ring was also recorded. **Coin**: One coin was found dating to the reign of Galienus (255-258 AD) (Raistrick 1936: 195). **Bonework**: A bonework assemblage included a bone rod thought to be part of a harness of possible Iron Age date, 2 toggles considered to date to the 3rd-4th century AD, two spoon brooches, a comb bar with dot and circle motifs, a broken spoon stem and a perforated disc (Raistrick 1936: 195). A bone chisel was also recorded and thought to have been used for leather or sheet bronze working (Branigan et al. 1991a: 102).		

Pottery: Samian and coarse ware vessels were found in the cave. The fragments of Samian included decoration with a man standing identical to one found at Wroxeter (Raistrick 1936: 201). Fragments of mortarium were also found, include 1 stamped piece. A reeded rim of a carinated bowl was also recovered. Later Roman examples include a light carinated bowl of Lincolnshire type 3rd-4th century AD in date (Raistrick 1936: 202). A pierced conical disc was also recorded similar to one found at Jubilee Cave (Branigan et al. 1991a: 102).

Human Remains: The remains of 6 individuals were found in the cave including 4 adults and 2 children. These were considered Pre- Roman in date and could have disturbed lower Neolithic levels of occupation (Raistrick 1936: 193).

Stonework: A fragment of lignite bracelet was found with ornamented grooves and moulding (Raistrick 1936: 199). Two sandstone spindle whorls were also found.

Chronology: Raistrick (1936: 196) attributes the Roman use of the cave to the middle of the second century AD, which is confirmed by Branigan and Dearne (1991a: 91). Dearne and Lord (1998: 53) suggests that the 2 of the Trumpet brooches are identical to brooches found at Attermire (**16**) and at Victoria (**15**) Caves. Much of the collection is similar in nature to Roman Iron Age evidence from other caves in the region suggest a 1st and 2nd century AD use of the cave. This date can be supported from the late 1st to early 2nd century AD pottery such as the mortaria and calinated vessel (Raistrick 1936: 202) along with the metalwork evidence suggesting a period of use c.50-175 AD. Interestingly there is also an element of later Roman use of the cave, seen through the Lincolnshire ware (Raistrick 1936: 193) but also the bone comb which has similar decoration to that found at Dowkerbottom (**8**), which dates to the 4th or 5 century AD.

Radiocarbon Dates:

Suggested Broad Date: IA; RIA	**Suggested Date Range:** 50-400 AD

Name: Scoska Cave	**ID:** 96	**HER:** 47160
Bibliography: Hill 1907		
Excavation Date: Stray find	**Type:** Multi-Chamber>100	**Altitude (m):** 343

Cave Description: Scoska Cave is a long limestone cave accessed by a cave entrance on the side of a steep rocky slope. The entrance faces northeast and is 2.1 metres high and 4.6 metres wide. In wet weather a stream flows out of the cave entrance and cascades down the cliff. The cave itself is made of a series of passageways.

Excavation/Assemblage Discussion: Pot-holers are responsible for finds of a female skeleton and a Roman coin.

Human Bones: A disarticulated adult skeleton was found at the base of a passage some 220 metres from the cave entrance. The skull, which was partly encrusted in stalagmite, had a small shaped hole above the right mastoid, which may indicate blunt trauma or be a result of water action

Coin: A Roman bronze coin of c.270 AD was discovered in the cave whilst pot-holing or at the scree associated with the cave entrance.

Chronology: Whilst the human remains cannot be dated, a find of a Roman bronze coin outside the entrance does however indicate that activity may have occurred within the cave during the 3rd century AD.

Radiocarbon Dates:

Suggested Broad Date: IA	**Suggested Date Range:** 270-350 AD

Name: Spider Cave	**ID:** 97	**HER:** 45789
Bibliography: Branigan et al. 1991a: 103; King 1970		
Excavation Date:	**Type:** Multi-Chamber	**Altitude (m):** 411
Cave Description: Spider Cave has an entrance orientated towards the southeast and is 2.4 metres wide with the cave being 15.24 metres long with a long linear chamber connecting to a rear chamber via a short passageway.		
Excavation/Assemblage Discussion: Cavers discovered a mirror handle within the rear chamber of the cave, found near a water pool. **Mirror Handle:** An early Roman cast mirror handle made of a cylindrical bar decorated with 2 groups of sloping bands, with a decorated ring was found in the cave (King 1970: 411). The mirror handle was compared by King to similar one coming from Ingleton dating to the mid of the 1st century AD. Nevertheless, references on artistic style and parallels to metalwork deposition in caves such as Attermire (**16**) and Victoria Caves (**15**) the mirror handle is likely dates between c.50 and 150 AD.		
Chronology: The mirror handle may have been deposited within the cave during the late 1st or 2nd century AD and therefore at a similar time to activity in other Settle caves.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 50-150 AD	

Name: King Alfrid's Cave	**ID:** 103	**HER:** 62649
Bibliography: Branigan et al. 1991a: 93; Lamplough et al. 1959		
Excavation Date: 1950	**Type:** Single Chamber	**Altitude (m):** 88
Cave Description: The cave is located on an outcrop of limestone on the west side of Netherby Dale. Before excavation the cave, the cave entrance was 3.4 metres wide, which led to a chamber 4.3 metres in length.		
Excavation/Assemblage Discussion: The cave was excavated in 1950-1, which uncovered a number of artefacts including Neolithic human remains and limited evidence of Roman activity. Towards the rear of the cave, at a depth of 0.46 metres, there was a 0.3 metre deposit of charcoal and burnt stones. Four sherds of Crambeck Ware, dating to the 4th century AD, were found within this deposit. Handmade pottery and flint were found on a floor of compact soil beneath this layer. Further below there was a 0.3-metre-deep deposit of loose soil with a number of human bones resting on the rocky floor of the cave. Human remains were also found on the platform outside the cave. **Pottery**: Four sherds of Crambeck type pottery, dating to the 4th century AD, were discovered along with 2 sherds of Neolithic pottery. (Branigan et al. 1991a: 94). Above the Neolithic layer, two sherds of pitted greyware were found and thought to be Late Bronze Age or Early Iron Age in date (Lamplough et al. 1959). **Human Bone**; An MNI of at least 7 people was recorded by the excavators. At least 1 male and female were present, with 1 older adult, 4 adults, a juvenile and an infant. The nature of the human remains suggests that they may have been deposited overtime with the cave being sealed, likely during the Neolithic or Bronze Age (Lamplough et al. 1959). **Animal Bone**: Within the same layer that contained the Roman pottery bones belonging to the follow animals were found: horse, pig, sheep/goat, cat, badger, voles (Branigan et al. 1991a: 93).		
Chronology: Finds of pitted greyware in the cave may indicate either Late Bronze Age or Early Iron Age use of the cave. Sherds of Crambeck type pottery also suggest use at least during the 3rd century AD.		
Radiocarbon Dates:		
Suggested Broad Date: LBA/IA; RIA	**Suggested Date Range:** c.1200-400 BC;.100-400 AD	

Name: Raven Scar Cave	**ID:** 106	**HER:** 44921
Bibliography: Gilks 1976, 1985		
Excavation Date: 1973-1983	**Type:** Multi-Chamber	**Altitude (m):** 320
Cave Description: The north-westerly facing limestone cave is located on a steep face of Raven Scar. Prior to excavation the cave entrance was little more than a small hole, c.0.5 metres wide and high. This entrance opened to a chamber 9 metres high, 2.8 metres wide and c. 4 metres long. Connected to this chamber was a passage leading to another chamber 1.4-metre-wide and c.14 metre long. From this passage system a fast flowing stream issued during periods of heavy rain normally during Winter to Spring. This stream often floods large sections of the cave.		
Excavation/Assemblage Discussion: The cave was excavated after its discovery, between 1973 and 1983. Excavation focused on clearing the entrance and inner chamber. The entrance was blocked by two large limestone boulders, which were used to seal the cave during the Late Neolithic or Early Bronze Age (Gilks 1976: 96). Similar evidence of sealing mortuary caves has also been noted at sites such as Fox Hole and Dowell Cave (ibid.). Excavation of the deposits within the first inner chamber uncovered a primary layer of clay that comprised of human bone and pottery characteristic of both the Late Neolithic and Early Bronze Age. A number of hearths were found in the inner chamber with one being underneath one of the blocking stones. In total, the cave contained 3 cists constructed of limestone slabs. Two of these were constructed near the entrance, whilst the other was built in a passage towards the rear of the cave (Gilks 1985: 124). **Human Remains**: The cave contained the remains of at least 20 individuals, found within the 3 slab cists, which Gilk's considered to have been Late Neolithic or Early Bronze Age in date. Some smashed human bone, found at the cave entrance may relate to Iron Age activity at the site (Lord et al. 2013: 246) given parallels to other remains radiocarbon date from North End Pot (**10**) **Bonework**: A bone spindle-whorl was found in the cave and considered to date to the Iron Age (NMR SD 77 NW 15).		
Chronology: The primary phase of cave-use appears to have occurred sometime during the Neolithic or Early Bronze Age. The cave was then partially sealed by two large limestone boulders and was accessible by a small hole and was in use during the Early Modern period, which was demonstrated by a clay pipe found on the surface of the inner chamber (Gilks 1976: 97). Therefore, the cave may not have been fully sealed and the entrance may have been the focus of later use. This is demonstrated by finds of an Iron Age spindle whorl and possibly by smashed human remains, similar to those recorded at Victoria Cave (**15**) and North End Pot (**10**). Such a parallel is only tentative, however, and cannot be used to confirm the use of the cave during the Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** c.800 BC- 400 AD (?)	

Name: Antoft's Windypit	**ID:** 107	**HER:** 57256
Bibliography: Hayes et al. 1963; Hayes 1963; Cooper et al. 1982; Pierpoint 1984; Hayes 1987		
Excavation Date: 1955-57	**Type:** Vertical Passage	**Altitude (m):** 118
Cave Description: Antoft's Windypit is part of a series of 8 major vertical limestone fissures in Duncombe Park. A phenomenon of warm or cold air rising from the fissure and interacting with the outside air has giving the fissures their name. In winter steam rises in puffs or jets from the holes, whilst during the summer cold air blasts from the cave. Antoft's Windypit lies c.500 metres west of Buckland's Windypit (**108**) and is approximately 30.48 metres deep and characterised by an almost vertical decline from the entrance that leads to a series of chambers.		
Excavation/Assemblage Discussion: Antoft's Windypit excavated during 1955-57 is best known for its Bronze Age remains including a number of human burials and a large beaker assemblage, which is characteristic of the other windypits (Hayes et al. 1963: 22). Within Chamber 3, c.24 metres down, mixed with human and animal bone was a corded-bone beaker along with a number of other beaker type sherds suggesting burial during the Late Neolithic/Early Bronze Age. A radiocarbon date was obtained from the top of this chamber of approximately c.1750 cal BC from a hearth (Hayes 1963: 364). Off from Chamber 3 there is a smaller chamber with further Bronze Age pottery and a mixture of animal bone including cow, pig and a badger skull (Hayes 1987: 36). **Pottery:** Sherds of Iron Age/Roman Pottery (NMR SE 58 SE 30) were reported to have been found in the cave with thick buff ware made of limestone grit being recorded in Chamber 2 along with a thick fine jar.		
Chronology: Human use of Antoft's Windypit appears to have occurred during the Neolithic and Bronze Age. This cave was included in the catalogue due to its form and proximity to Ashberry Windypit (**9**) that was likely in use during the Iron Age and Roman period.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA	**Suggested Date Range:** 800 BC- 410 AD	

Name: Cave Ha	**ID:** 168	**HER:** 590089
Bibliography: Hughes 1874		
Excavation Date: 1873	**Type:** Rockshelter	**Altitude (m):** 229
Cave Description: Cave Ha is a rockshelter located above a limestone talus slope. The cave is 10.7 metres high, 12.2 metres deep and 15.2 metres wide. In the roof of the rockshelter there is a small swallet hole, which was thought to have been created by water action.		
Excavation/Assemblage Discussion: Excavations from the cave uncovered a number of disturbed cave deposits. From the modern floor was a deposit made of plant matter mixed with charcoal, which contained a number of artefacts, including a stone bead, flint and Roman Iron Age pottery. A range of animal bone was also present in the deposits including, bare, ox, sheep/goat, hare and dog,		
Chronology: Finds of Roman Iron Age pottery within the rockshelter may suggest activity in the cave dating to the early 1st millennium AD. This is supported by wider Roman Iron Age use of caves across Southern Cravendale, as well as by the Kelcoe Caves that lies on the same scar face.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Perwick Cave	**ID:** 172	**HER:** 30084
Bibliography: Chiverrell 1999; Garrad 1976		
Excavation Date: 1969-70;1975-6	**Type:** Single Chamber	**Altitude (m):** 2
Cave Description: Perwick Cave is located on the exposed face of a slate headland on a small beach. The cave mouth, orientated north, is c.3 metres wide, which leads to a chamber c.18 metres long with a maximum width of 3.5 metres.		
Excavation/Assemblage Discussion: Excavation of the cave uncovered a midden deposit comprised of limpet shells, bird, mammal bones and wood ash. This was sealed under slate slabs that were thought to have fallen from the cave roof. **Human Bone** Human remains from one adult were discovered within the midden **Bonework**: Worked bone points were recovered with the adult, including a worked deer antler likely an awl. There is also a double pointed rib and an ox rib has a knife cut along with a bone point. **Animal Bone**: Animal bone within the midden included a range of bird species and mammals, including sheep/goat, pigs, cattle and pony. A grey top shell (Monodonta lineata), which is not native to the region, was found in tideline debris on the edge of the cave mouth. This species of shellfish lives in warmer water, with a modern habitat range from Dublin to Anglesey.		
Chronology: As evidenced elsewhere across the British Isles, midden deposits from caves have a deep chronological depth that at least occurred during the Late Iron Age within the cave. The bonework and animal bone is possibly associated with the midden.		
Radiocarbon Dates: Carbonised wood, midden, 1880±150 BP		**532-350 cal BC**
Suggested Broad Date: IA	**Suggested Date Range:** 530-350 BC	

Name: Brides Chair Cave	**ID:** 221	**HER:** 1188370
Bibliography: Harrison 1974: 35; Branigan et al. 1991a: 75		
Excavation Date: 1974	**Type:** Single Chamber	**Altitude (m):** 60
Cave Description: Brides Chair Cave is a western orientated cave on a cliff face in Warton crag.		
Excavation/Assemblage Discussion: Excavations in 1974 uncovered pottery sherds dating to the Late Bronze Age and Roman period (Harrison 1974: 35; Branigan et al. 1991a: 92). Iron Age material is also recorded in the cave, although there is no mention of the nature of the finds. **Pottery**: Sherds of grey brown olla and a base of coarse ware were found in the cave (Branigan et al. 1991a:75). **Metalwork**: An iron strap was found in the cave (Harrison 1974: 35). **Bonework**: Four fragment of split bone were found in the cave of unknown date (Harrison 1974: 35).		
Chronology: According to the excavator, Late Bronze Age and Roman Iron Age pottery was found in the cave. Iron Age finds were also reported, however the nature of these are unclear. Because of this, activity in the cave can only be confirmed to have occurred sometime during the Late Bronze Age and Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: LBA; IA(?); RIA	**Suggested Date Range:** 800 BC-400 AD	

Name: Lady Algitha's Cave	**ID:** 222	**HER:** 48854
Bibliography: Horne 1886; Raistrick 1939:124; Branigan et al. 1991a: 98; MNY15679		
Excavation Date: 1885	**Type:** Single Chamber	**Altitude (m):** 265
Cave Description: The cave located west of Leyburn Shawl, on a limestone terrace. The entrance is 1.28 metres wide and 1.2 metres high, leading into a chamber 2.13 metres high.		
Excavation/Assemblage Discussion: The excavation of the cave after its discovery around 1885 cleared layers of deposits within the cave, uncovering a large animal bone assemblage along with remnants of a charcoal hearth, Samian Ware, a jaw of a young adult and worked stone and bone (Raistrick 1939: 124). A cave is also included in Branigan and Dearne (1991a: 96) gazetteer near Leyburn Shawl that has coarse ware and fine ware sherds along with a whetstone and miscellaneous bone finds. It is likely that the cave described in the catalogue is the one cited by Raistrick. **Pottery**: Samian Ware and coarse pottery were found in the cave (Raistrick 1939:124). **Bonework**: Spilt and worked animal bone was recorded in the cave (Raistrick 1939:124). **Stonework**: Grain rubbers and pot boilers were found in the cave (Branigan et al. 1991: 98).		
Chronology: The cave saw use during the Roman Iron Age, which is evidenced through the reported Samian Ware. However, without a detailed account of the stratigraphy it is difficult to relate the Samian Ware to other material found within the cave. Given parallels to nearby caves, it is possible that the cave saw use during the Early Roman period c.50-200 AD, although without further chronological indicators a confirmed date is impossible.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** c.50-450 AD	

Name: Tom Taylor's Chamber	**ID:** 223	**HER:** 48637
Bibliography: Branigan et al. 1991a: 104		
Excavation Date:1868;1960	**Type:** Multi-Chamber>100	**Altitude (m):** 193
Cave Description: Tom Taylor's Chamber is a multi-chamber cave running along sit a vertical passage cave.		
Excavation/Assemblage Discussion: A hoard of Roman coins and a bone fibula were found in the cave. **Coins:** Thirty-five silver and 4 bronze coins were found in the cave dating from Nero to Hadrian (54-138 AD). A piece of Brigantian holed lead money was also recorded. **Bone Fibula:** A bone fibula thought to date to the 1st/2nd century was found in an upper passage of the cave.		
Chronology: The cave appears to have been used between the late 1st and 2nd centuries AD. The bone fibula may have been deposited at a different time to the hoard of coins.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 50-150 AD	

Name: Cromwell's Cave	**ID:** 257	**HER:** (Staffordshire) PRN189-MLA189
Bibliography: PRN189-MLA189		
Excavation Date: 1953	**Type:** Cave	**Altitude (m):** 124
Cave Description:		
Excavation/Assemblage Discussion: The cave is a reported find spot for a Roman coin of Commodus (180-192 AD)		
Chronology: Given the amount of Roman material found in caves across the North-West, it is likely that more Roman artefacts maybe found in the Cromwell's Cave. The suggested date range for cave-use is likely sometime between or after 180-200 AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 180-200 AD	

Name: Jack Scar Cave	**ID:** 269	**HER:** 17681
Bibliography: Coggins 1986: 33; Jones 1977		
Excavation Date: 1970s	**Type:** Multi-Chamber	**Altitude (m):** 313
Cave Description: The limestone cave is located on the east bank of the Hudeshope Beck where a small 1 metre high hole, 3 metres above the level of the beck and orientated northwest, allows access to a small linear cave system, which is 68.6 metre long.		
Excavation/Assemblage Discussion: A bronze spearhead was found in the cave comparable to Late Bronze Age examples found in Heathery Burn Cave (**3**). **Metalwork:** Part of the wooden shaft of the bronze leaf shaped spearhead (Bowes Museum No.2/2) provided a radiocarbon date of c.960-790 BC and c.1140-400 BC to 2 standard deviations (Coggins 1986: 33).		
Chronology: Late Bronze Age or Early Iron Age activity in the cave is demonstrated by the radiocarbon date obtained from the wood shaft of the bronze leaf-shaped spearhead.		
Radiocarbon Dates: OxA-121 Wooden shaft handle 2670±120 **1124-430 cal BC**		
Suggested Broad Date: LBA; IA	**Suggested Date Range:** 1110-400 BC	

Name: Calf Hole Cave (Height Cave)	**ID:** 270	**HER:** 46939
Bibliography: Tiddeman et al. 1894; Raistrick 1939:122		
Excavation Date: 1893	**Type:** Rockshelter	**Altitude (m):** 332
Cave Description: Calf Hole Cave is included in the Raistrick's (1939: 122) discussion on Iron Age settlement sites in West Yorkshire. It is a large rock shelter, 4.57-metre-deep with a small narrow passage leading off from the northern end of the shelter. The cave is located on a western facing limestone knoll on a natural rock shelf. The cave's mouth is divided in two by a natural pillar with views towards the west.		
Excavation/Assemblage Discussion: The cave was originally excavated in 1893 by a team supervised by Reverend E. Jones, who recovered a large collection of animal bones along with flint and a worked antler. Raistrick (1939: 122) reports charcoal and crude pottery was found at the mouth of the cave thought to date to the Iron Age.		
Chronology: From the fragmentary record of the finds found in the cave, only a tentative Iron Age date of use can be given to the cave.		
Radiocarbon Dates:		
Suggested Broad Date: IA (?)	**Suggested Date Range:** 800 BC- 43 AD	

Name: Langscar Cave	**ID:** 271	**HER:** 45577
Bibliography: SD 86 NE 5		
Excavation Date: 1953	**Type:** Rockshelter	**Altitude (m):** 442
Cave Description: The rockshelter is located on a limestone scar south of Malham Tarn, approximately 1-mile south of Chapel Cave (**11**). The site is located on height of 442 m with a height of 2.5 metres with a width of 5 metres and a length of 12 metres. The cave is adjacent to a known Iron Age settlement (SD 86 NE 6)		
Excavation/Assemblage Discussion: The cave was excavated by the Pig Yard Club, who found fragments of Iron Age pottery and a number of flakes of flint.		
Chronology: As only a record of the Iron Age pottery remains the cave can only tentatively be given an Iron Age date.		
Radiocarbon Dates:		
Suggested Broad Date: IA (?)	**Suggested Date Range:** 800 BC-43 AD	

Name: The Dog Hole Cave	**ID:** 284	**HER:** 41641
Bibliography: Benson et al. 1963; Bland 1994; Branigan et al. 1991a: 79-80; Jackson 1914		
Excavation Date: 1912;1953;2003	**Type:** Vertical Passage	**Altitude (m):** 67
Cave Description: The Dog Hole Cave, or Fairy Cave, lies on the south-west slope of Haverbrack Bank on an exposed limestone pavement. The cave entrance measures 1.82 metres wide and 1.22 metres high and leads into a vertical shaft that is partly blocked by 4 limestone lintels. The deep shaft is 4.5 metres deep before leading into a lateral cavern, which is 9.14 metres long.		
Excavation/Assemblage Discussion: In his excavation of the cave, Jackson identified a number of layers of activity, which he identified as zones: **Zone C**: On top of the loose soil towards the southern end of the cavern were a large number of red deer antler with evidence of human modification. Associated with this were 3 well preserved dog skulls. **Zone B**: Beneath Zone C were finer washed down material including the remains of dog, sheep and pig **Zone C**: Underlying Zone B was a limestone mixture including human and cow remains and a limited assemblage of sheep, pig and horse. **Animal Bone:** Animal bone found in the cave including ox, pig, sheep/goat and horse. A large number of dog bones were found, representing at least 50 dogs and 5 possible wolves. A number of cockle shells were found. An ox and a dog femur and tibia were also stained with bronze. The excavators suggested that this was down to proximity to human remains. A number of the animal bones displayed evidence of cut-marks. **Human Remains:** At least 23 individuals were found in the cave and were aged between 6- over 50 years old. As with a number of animal bones, human bones also exhibited signs of bronze staining from wearing leg bangles and finger rings. Two ribs, likely from 2 individuals, showed evidence of cut-mark from a sharp, strong blade that would have likely pierced the heart. These were thought to have been calculated injuries rather than from battle. Two radiocarbon samples were taken from human bone, which produced dates belonging to the Roman Iron Age. **Metalwork**: A large corpus of metalwork was recovered from the cave, mostly from material found associated with the northern end of the cave and entrance shaft. This included an iron penannular brooch and an iron axe-head which were heavily oxidised. The axe-head was rusted to a fragment of limestone and part of a left metatarsal of a sheep or roe deer. A bronze finger-ring, 5 bronze bracelets		

and a bronze penannular armlet were also recorded from the cave. A number of large iron studs were also found in the cave.

Beads: In total, 36 glass beads were found in Dog Holes Cave, which included one made of opaque blue glass, a small translucent, blue-green glass and a yellow segmented glass that may have been coated with gold. Eight and a half Whitby jet beads were also found at the base of the entrance shaft. These beads were considered to date between the 5th-9th centuries AD (Branigan et al. 1991a: 79-80).

Pottery: Three distinct forms of pottery were recorded from the cave, thought to represent Medieval use of the cave up to the 16th century AD.

Stonework: A whetstone was found associated with the human remains found in the northerly section of the cave. A further whetstone was also found along with a possible sandstone net-sinker, and a fragment of worked Blue Coniston Slate.

Chronology: The excavators suggested the cave was used between the 1st century and 9th centuries AD based on the Roman Iron Age material. Certainly this may suggest that the human remains were deposited over a period of centuries, confirmed by the radiocarbon dated human bone. Use of the cave likely continued through into the Early Medieval period, evidenced by the radiocarbon dated animal bone.

Radiocarbon Dates:

OxA-13593 Worked red deer antler, top of deposit	1110±27	**888-996 cal AD**
OxA-13594 Worked red deer antler, top of deposit	1091±27	**892-1013 cal AD**
OxA-14173 Human humerus, collection	1746±27	**235-381 cal AD**
OxA-14174 Bos Taurus, collection	1211±26	**715-890 cal AD**
OxA-15994 Human Bone,	1734±30	**240-386 cal AD**
OxA-15995, Canis familiaris	1890±30	**56-217 cal AD**

Suggested Broad Date: RIA; EM | **Suggested Date Range:**

Name: Dead Man's Cave	**ID:** 285	**HER:** 45636
Bibliography: Lord et al. 2013: 245		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 332

Cave Description: Dead Man's Cave is a single chamber cave, located on a small exposed limestone face on Dead Man's Hill near Feizor.

Excavation/Assemblage Discussion:
Culturally smashed human femur dating to 511-376 cal BC (Lord et al. 2013: 245).

Chronology: A radiocarbon date obtained from a smash femur indicates that the cave was used during the middle of the 1st millennium BC. Similar instances of culturally smashed human remains have been noted in caves in Southern Cravendale, including Victoria Cave (**15**) and North End Pot (**11**).

Radiocarbon Dates: Human femur **511-376 cal BC**

Suggested Broad Date: IA | **Suggested Date Range:** 510-370 BC

Name: Fissure at Wegber Limestone Quarry	**ID:** 286	**HER:** 43066
Bibliography: Penney 1975		
Excavation Date: 1884	**Type:** Vertical Passage	**Altitude (m):** 27
Cave Description: A fissure was reported to have been found in the floor of Wegber Limestone quarry during expansion works. Artefacts were found in a small chamber 5.2 metres below the surface.		
Excavation/Assemblage Discussion: In 1884 finds from the cave were displayed at a Lancashire and Cheshire Society meeting. These included a number of hammer stones, a stone quern and an unspecified number of bronze and iron artefacts According to the report, these were found 5.2 metres below the surface of the quarry. **Metalwork**: An iron axe-head was reported from the cave, along with an Early Bronze Age flat axe (Coles' type BA), a broken Middle Bronze Age dirk (c.1400-1200 BC), a Later Bronze Age socketed axe and a socketed spearhead.		
Chronology: Similar arrays of metalwork were recorded at Heathery Burn Cave (**3**) and Moking Hurth (**2**). Whilst it is possible that such an array of finds suggests multiple periods of deposition, it could also be a single phase of deposition with antiquated material. Whilst it is possible that deposition occurred in one single phase, the types of material found suggest deposition over time.		
Radiocarbon Dates:		
Suggested Broad Date: LBA	**Suggested Date Range:** 1400-600 BC	

Name: Fern Cave	**ID:** 297	**HER:** MYD41641
Bibliography:		
Excavation Date:1938	**Type:** Cave	**Altitude (m):** 320
Cave Description:		
Excavation/Assemblage Discussion: A small Roman Iron Age copper alloy fitting was reported from the cave		
Chronology: Similar finds have been recorded from a number of different caves across Southern Cravendale and suggest periods of Roman Iron Age cave-use.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Wet Cave	**ID:** 298	**HER:** MYD54647
Bibliography:		
Excavation Date: 1870	**Type:** Single Chamber	**Altitude (m):** 373
Cave Description: Cave located off the path next to Victoria Cave made of a single passage.		
Excavation/Assemblage Discussion: A well preserved glass melon bead dated to the Roman Iron Age was discovered in the cave in 2003.		
Chronology: Activity within Wet Cave is likely contemporary to activity that occurred during the Roman Iron Age along Attermire Scar.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Doe Pot Cave	**ID:** 299	**HER:** MYD56066
Bibliography: Lord 2008; Oxford Archaeology North 2008		
Excavation Date:	**Type:** Vertical Passage	**Altitude (m):** 490
Cave Description: Pot hole with mammal bones		
Excavation/Assemblage Discussion: A copper alloy harness fitting and a Roman Iron Age bowl were found by cavers.		
Chronology: Evidence of Roman Iron Age activity in Doe Pot, can be compared to similar finds found in a number of caves across Southern Cravendale dating to the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Combs Scar Cave	**ID:** 300	**HER:** MYD58033
Bibliography:		
Excavation Date: 1870; 1950	**Type:** Cave	**Altitude (m):** 340
Cave Description: Cave located at the base of Combs Scar		
Excavation/Assemblage Discussion: An Anglo-Saxon copper alloy tag fastener was found in 1950		
Chronology: An Anglo-Saxon copper alloy tag fastener found in the cave, suggests that the cave was used during the latter half of the 1st millennium AD. This is an unusual find, given the lack of wider evidence of cave-use during the Early Medieval period in this region. However, finds of Early Medieval Stycas in Attermire Cave (**16**) and a so-called Viking rune tablet in Victoria Cave (**15**) may point towards limited use of caves during the Early Medieval period.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 410-800 AD	

Region 4: Southern Scotland and Northumberland

Twenty caves contained deposits dating to the relevant period, with a number of caves clustered along the sandstone cliffs of the Wemyss coastlines where artefact and radiocarbon data support a long duration of Iron Age and Early Medieval association with the caves. Use is also recorded further south along the coastline of East Lothian and across the Western coast of Dumfries and Galloway. Two caves from Northumberland (83 & 84) were also recorded in the database based on location to a hillfort and Bronze Age antecedent use.

83	Corby Crags	**153**	St Ninian's Cave
84	Goatscrag	**157**	Hanging Rocks 1
129	Jonathan's Cave	**276**	Hanging Rocks 2
130	Sliding Cave	**277**	Chapel Cave
132	Borness Cave	**278**	St Monan's Cell
133	St Baldred's Cave	**279**	Court Cave
136	Torr's Cave	**280**	St Serf's Cave
137	The Yellow Man	**281**	Michael's Cave
138	Constantine's Cave	**282**	Doo Cave
139	Kinkell Cave	**283**	Well Cave

Name: Corby Crags	**ID:** 83	**HER:** 6667
Bibliography: Beckensall 1976; Smith 1990		
Excavation Date: 1975	**Type:** Rockshelter	**Altitude (m):** 230
Cave Description: Corby Crags is a sandstone rockshelter located on a hill slope with views across the west. It measures 7.3 metres by 2.35 metres.		
Excavation/Assemblage Discussion: Excavations by Beckensall (1976) of the rockshelter uncovered artefacts daring to the Mesolithic and Bronze Age. **Stonework**: Identified as Early Bronze in date and found 600m northwest of the rockshelter. This supports an Early Bronze Age date. **Pottery**: Pottery recovered suggests a Bronze Age cremation. **Rock-Art**: Possible cup marks were identified on a standing stone at the entrance to the rockshelter.		
Chronology: Use at Corby Crags likely occurred sporadically into the Bronze Age where the site was used for a cremation. Interestingly, there is a possible Iron Age enclosure below the rockshelter above a small waterfall.		
Radiocarbon Dates:		
Suggested Broad Date: BA	**Suggested Date Range:**2300-1200 BC	

Name: Goatscrag	**ID:** 84	**HER:** 3625
Bibliography: Burgess 1972; Van Hoek et al. 1988		
Excavation Date: 1967-69	**Type:** Rockshelter	**Altitude (m):** 167
Cave Description: Goatscrag is a rockshelter oriented south located on a prominent outcrop of sandstone.		
Excavation/Assemblage Discussion: Excavations in the cave uncovered a sequence of Mesolithic flints and a series of Early Bronze Age cremations including two in Enlarged Food Vessels. **Artwork:** Along with the Early Bronze Age material, a number of rock-cut animal figures are found on the rockshelter's walls. At eye level, there're are four carvings, which were thought to have been made by a pointed stone. All 4 are thought to represent quadruped animals and are arranged with 3 in a single line with a lone figure above.		
Chronology: Archaeological use at Goatscrag was likely focused during the Early Bronze Age. The date of the artwork however never properly dated. Originally the excavators (van Hoek et al. 1988: 34) suggested that the artwork dated between the 1st century BC and the 4th century AD, because they were found 1 metre above Early Bronze Age material. A number of caves do contain animal art dating to the Early Medieval period across Scotland. However, the Northumbrian examples still remain undated. Interestingly, the cave is also located northwest of an Iron Age hillfort at Roughting Linn. A number of caves were investigated around a waterfall and produced no evidence of archaeological activity.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 2300-1200 BC; 200 BC- 800 AD (?)	

Name: Jonathan's Cave	**ID:** 129	**HER:** 53979
Bibliography: Gibson et al. 2007; Guttmann 2002; MacKie 1986		
Excavation Date: 1980	**Type:** Single Chamber	**Altitude (m):** 6
Cave Description: Jonathan's Cave is located on the sandstone cliffs of East Wemyss with two entrances separated by a sandstone column. The larger cave mouth is oriented eastwards and is 15 metres wide and 5 metres high. The cave itself is c.20 metres long and is 15 metres wide at its greatest extent.		
Excavation/Assemblage Discussion: In 1980 trenches were dug by Mackie (1986) outside the cave entrance. These uncovered a midden, which was sealed by a sandy deposit, which contained an Iron Age jet whorl and a Norse bone pin (Gibson et al. 2007: 92). Radiocarbon samples taken from the midden and sandy layer indicated Iron Age and Medieval activity. Two adult burials, a male and female, were found outside the cave. The male burial was orientated towards the west with arms followed across his chest. The female was also buried with head facing west and was 5 metres to the north of the adult. **Stonework:** Two pieces of jet armlet and a single jet bead, were found in the compacted floor layer above the midden. **Bonework:** A number of bone awls along with a Norse pin were recovered. **Animal Bone:** Fragments of animal bone were recovered from the midden sequence outside the cave that included red deer. One of these provided a radiocarbon date of 410-202 cal BC. **Artwork:** A large corpus of Pictish artwork is recorded on the cave walls including 5 birds, an elephant symbol, a double disc symbol, rectangle, a swan, a trident and some ogham inscription.		
Chronology: The radiocarbon dates from Jonathan's Cave support a series of occupations from the late 1st millennium BC into the late 1st millennium AD, which may also be seen through the presence of the Pictish artwork and Ogham inscriptions.		
Radiocarbon Dates: GU-2138 Midden Layer, Animal Bone 2280±50 BP **410-202 cal BC** GU-1369 Sandy Layer, Charcoal 955±70 BP **905-1241 cal AD** GU-2038 Human Bone, Outside Burial 980±80 BP **892-1220 cal AD**		
Suggested Broad Date: IA; EM	**Suggested Date Range:** 410-200 BC; 700-1000 AD	

Name: Sliding Cave	**ID:** 130	**HER:** 53978
Bibliography: CANMORE 53978; Gibson 2004		
Excavation Date: 2004	**Type:** Single Chamber	**Altitude (m):** 12
Cave Description: The sandstone cave is part of a wider set of caves along the cliff along the northern shore of the Firth of Forth. Sliding Cave is characterised by a sloping floor level and is orientated towards the east.		
Excavation/Assemblage Discussion: Upper layers contained post-medieval pottery sealing a deposit above a layer of sandstone rubble, which also covered Pictish symbols (Gibson et al. 2007: 95). Below this, an in wash deposit sealed a floor surface made of charcoal rich soil, containing animal bone, charred hulled barley grains, hazelnut and a number of weed seeds. From this a radiocarbon sample of a charred barley grain provided a date of 244-388 cal AD. **Cave Art:** The cave wall has a number of inscribed Pictish symbols including 2 rectangles and a double disc symbol. Two serpents were also recorded on the cave wall during excavation in 2004 thought to be a Class 1 example dating from the 7th century AD.		
Chronology: The radiocarbon date concurs with activity elsewhere along the East Wemyss coastline. The presence of hulled barley was used to suggest that the cave was used as a place of storage and final processing of barley which occurred during the early 1st millennium AD (Gibson et al. 2007: 97). However, the barley grain could have also been carried into the cave by natural processes rather than being part of an intentional deposit. Nevertheless, later use of the cave is seen in the presence of Pictish artwork dating between 600-900 AD		
Radiocarbon Dates: NZA-20755 Barley grain, 904 floor deposit 1726±30 **244-388 cal AD**		
Suggested Broad Date: RIA(?); EM	**Suggested Date Range:** 200-400 AD;600-900 AD	

Name: Borness Cave	**ID:** 132	**HER:** 63989
Bibliography: Clarke 1876, 1878; Corrie et al. 1875		
Excavation Date:1872-1878	**Type:** Multi-Chamber	**Altitude (m):** 7
Cave Description: The sandstone cave is located on a small bay on the coast at the foot of a series of sea cliffs. The cave is accessed by climbing the side of a ravine with its mouth facing southwest. The cave measured c.12 metres long with a cave mouth c.6.4 metres wide and c.7 metres high. The main chamber contains a number of rare cale-spar stalagmites. According to the excavator a hillfort is located 100 yards on a small headland.		
Excavation/Assemblage Discussion: The cave was systematically excavated and artefacts assigned to a number of layers. Efforts focused on clearing the cave earth from the primary cave chamber and the removal of the band of stalagmite hardened at the entrance. The majority of artefacts were recorded from layer A, B, C in the cave chamber. **Stonework:** A small array of worked stones including perforated elongated stones that may have been used as loom weights. In all there were 10 worked stones, including a stone ring and a possible whetstone. **Bonework:** A large array of worked bone was contained in the cave deposits. Four needles were found made of split bone, 14 pins, 6 'pegs', two combs, 4 awls and a bone spoon found in the upper layer. A further 5 possible spoons were recovered, similar in style to those recorded at the Settle Caves in Yorkshire. A bone toggle was also found, noted to be similar to those found at Victoria Cave. Further bone artefacts including a fragment of a long comb found under a stalagmite, a possible whistle and two decorated pieces. Twelve worked antler tines were also found. **Pottery:** A fragment of Roman Samian ware was also found.		

Metalwork: A number of pieces of metalwork were recorded from the cave including a Dragonesque brooch, an enamelled brooch and a Roman harness mounting. Iron slag was also recorded by the excavator. **Glass Armlet:** A glass armlet made of blue translucent glass with 3 lines of blue spiral ornamentation was recorded from the cave and identified as Kirkbride-Jones' type 2, thought to date to the late 1st or 2nd century AD. A number of other fragments of opaque white and green glass were also noted in the cave chamber. **Human Bone**: Fragments of human bone were recorded from different sections of the cave. Two fragments of a young child's skull from solid stalagmite and in the breccia were found towards the front of the cave. Two human bones were also found in layer C close to the wall of the cave, one a child's femur and the other an adult humerus with evidence of dog gnawing Another fragment of child skull was found c.1.3m beneath the cave floor. **Animal Bone**: Cow and red deer were present through all layers in the cave, along with a small amount of sheep/goat. Pig is absent from layer A, but is plentiful in B and C. A single horse molar was found on layer A. A range of birds were also recorded at the cave with only a few species being represented in layers B and C.
Chronology: Borness Cave appears to have been used during the Roman Iron Age during the 1st and 2nd centuries AD. Finds of spoon brooches and Dragonesque fibula, similar to those found at Victoria Cave, is interesting given the distance between the two caves.
Radiocarbon Dates:

Suggested Broad Date: RIA	**Suggested Date Range:** 43-200 AD

Name: St Baldred's Cave	**ID:** 133	**HER:** 57870
Bibliography: Layard 1934; Sligo 1857		
Excavation Date: 1831; 1905	**Type:** Single Chamber	**Altitude (m):** 35
Cave Description: The sandstone cave is located on the base of a cliff orientated east. The cave mouth is c.7 metres in width and c.4.5 metres high, which leads to a chamber 6.1 metres in length.		
Excavation/Assemblage Discussion: The cave was excavated twice, recovering a number of human bones and artefacts. A stone pavement covered the cave floor, which was underneath a 0.6-metre-deep deposit of charcoal and bone (Sligo 1857: 354). A raised pear-shaped rock was found at the entrance, which was raised on an artificial platform. The stone has a dark stain and evidence of fire damage (Sligo 1857: 356). **Human Remains**: A large number of human remains were found in the charcoal rich layers and associated with the stone. This included remains of two children. **Animal Bone:** Horse remains were recorded in the cave along with dog, pig and sheep/goat **Pottery:** A number of fragments of red earthenware were recovered. Sligo (1857: 358) notes that similar pottery was found 300 yards to the south on a projecting rock. **Bonework**: A bone handle was reported to have been found.		
Chronology: A firm Iron Age date cannot be suggested for the site based on the reported finds from the excavation. Elsewhere in the region the rockshelter under The Yellow Man (**137**) and the two caves on the Hanging Rocks (**157 & 276**) present evidence of use during the early 1st millennium AD based on the deposition of Roman type artefacts.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC- 410 AD	

Name: Torr's Cave	**ID:** 136	**HER:** 63984
Bibliography: Morris 1937		
Excavation Date: 1934-1937	**Type:** Multi-Chamber	**Altitude (m):** 4
Cave Description: Torr's Cave is located on the eastern shore of Kirkcudbright at the base of a cliff and level with the current storm beach. The cave was made of 3 chambers connected by passages with an entrance c.1.5 metres wide and orientated to the southwest. In total, the cave was 18 metres in length with a maximum height of 3 metres. The cave has seen modification due to use during the Early Modern period with a door way and stone lintel placed at the entrance way with an associated structures including a blockhouse and stairway entrance to the cave.		
Excavation/Assemblage Discussion: Excavation of the cave uncovered a sequence of deposits associated with the cave entrance and structural complex that included a number of blockhouses and a stairwell. In all 9 occupation layers were identified with pottery suggesting a number of the modifications were 18th century in date. The excavator suggests however that the lower structures relate to 'Iron Age' occupation layers within the cave that contained a number of artefacts (Morris 1937: 417). These layers extended from the entrance and at least 6 metres within the second chamber. These were reported to have been above the earliest structures of the site along with the wall of the blockhouse. The stratigraphy described by Morris (1937) however is difficult to interpret, limited analysis of the structural sequence. **Bonework**: An assemblage of worked bone was recorded including points, scrapers, a fish hook, bone pins and a bone toggle. **Pottery**: Associated with the bonework were two fragments of Samian Ware. **Glass**: Fragments of Roman glass, along with a blue melon bead were recovered from the inner cave passage. **Metalwork:** A number of iron fragments of weapons were recovered along with some nails. **Animal Bone**: Sheep, pig, horse, red deer, fox, wild cat and several birds were recovered from the two suggested Iron Age contexts. **Human Bone**: A human tibia with evidence of being worked was found in the structural packing at the entrance.		
Chronology: The cave has a long chronological history with a series of structural modifications that cannot be firmly dated because of its unclear relationship to the stratigraphy of the inner cave chamber. Roman Iron Age activity is recorded within the entrance of the cave and likely within the chamber given the finds of Samian Ware that is common in a number of caves further north in Argyll and Bute.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 100-500 AD	

Name: The Yellow Man	**ID:** 137	**HER:** 56634
Bibliography: Close-Brooks 1977; Richardson 1907		
Excavation Date:	**Type:** Rockshelter	**Altitude (m):** 7
Cave Description: The rockshelter is located beneath a large projecting rock on a bank of a raised beach.		
Excavation/Assemblage Discussion: As a result of rain a number of artefacts and human remains were washed out of the cave from disturbed sand blown deposits. Towards the western end of the site, a Roman bronze pin was found in a midden deposit. **Human Remains:** A human skull and a number of bones were uncovered from the soil that had been washed out of the rockshelter. From the midden layer a jaw of a small child was also recorded. **Bronze Pin**: The bronze pin has been identified as an ibex-headed pin (Close-Brooks 1977: 226), often dated to the early 1st millennium AD. The find has been dated by Close-Brooks (1977: 226) to around the 5th century AD based on the find of a Fowler Class F zoomorphic brooch found later in a nearby pool.		
Chronology: It is clear that the rockshelter was in use during the early 1st millennium AD, likely sometime during the 4th century AD, as evidenced by the bronze pin. The midden however was likely in use before the deposition of the pin and may hint at early use during the first centuries AD or into the late 1st millennium BC. Indeed, the presence of 2nd century material in caves along the Fife coast may also support this. The human remains reported from the cave may be related to the material with the child's jaw being reported to have been found in the midden.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:**c.100-500 AD	

Name: Constantine's Cave	**ID:** 138	**HER:** 35369
Bibliography: Wace et al. 1915; Tylecote 1962; Curle 1932; Dobson 1997; Oxley 2005		
Excavation Date: 1914	**Type:** Single Chamber	**Altitude (m):** 12
Cave Description: Constantine's Cave is located on the face of a sandstone crag on the shore of Fife Ness, orientated northeast. The cave is 7.3 metres long and accessed by a cave mouth 3.5 metres wide and 4 metres high.		
Excavation/Assemblage Discussion: Excavations in 1914, identified the use of the cave as a chapel with significant modifications made to the entrance. On the eastern side of the entrance a shallow post-hole was identified with black earth containing animal bone and limpet shells. Associated with cave floor was also a thick deposit of black earth with bone, shell and pottery. 1) Modern Layer- 15cm deep with modern metallurgy 2) A thick black layer c.0.40cm deep with a clay pipe and bowl, at similar level to the post hole found outside the cave 3) Below the above layer, an extensive layer of black earth containing shell, bones and potsherds. This layer varied from a thickness of 76 cm at the cave entrance to 15cm towards the middle of the cave. **Pottery** A number of red surfaced Roman Iron Age sherds were recovered from the occupation layer associated with a furnace (Wace et al. 1915: 239). Sherds belonging to large Roman amphorae were also found. Two jars were stamped on the handles with one PMSA and the other VD. **Animal Bone**: A small assemblage of animal bone was found relating to the furnace layers including red deer, sheep, horse, rabbit and whale. **Stonework**: An elongated whetstone was found in the cave. **Metalworking Debris:** Towards the rear of the cave an abundance of iron slag was recorded along with a possible furnace (Wace et al. 1915: 241). The furnace was made of stone and was 8 cm deep,		

10 cm thick and 38cm in diameter. Elements of curved baked clay were thought to have formed an associated mechanism to help manage the draft. The furnace itself was located underneath a natural cleft in the cave ceiling allowing for ventilation.

Glass: A fragment of Roman glass was recorded associated with the amphorae sherds.

Artwork: A number of incised crosses occurred in the cave along with a number of animal representations similar to those found in the Wemyss Caves (Caves: **129, 130, 279, 281, 282, 283**).

Bonework: A number of broken and worked Roe Deer points were also found.

Chronology: Constantine's Cave appears to have been used through the 1st millennium AD. During the Roman Iron Age, the cave may have been used for metalworking in conjunction with deposition of Roman material that likely arrived in the region from the late first century AD. The cave was later used during the Early Medieval period, which is demonstrated by both Pictish and Christian artwork.

Radiocarbon Dates:

Suggested Broad Date: RIA; EM	**Suggested Date Range:**c.100-1000 AD

Name: Kinkell Cave	**ID:** 139	**HER:** 34328
Bibliography: Wace et al. 1915		
Excavation Date: 1913	**Type:** Single Chamber	**Altitude (m):** 17

Cave Description: The sandstone cave, which is orientated towards the northeast, is made of a single chamber 4.6 metres wide and 24.4 metres long.

Excavation/Assemblage Discussion: A short season of excavation in the cave focused on the internal chamber from the eastern side of the mouth. A single trench was excavated, 3.66 metres from the cave entrance, which uncovered two stratigraphic layers:

1) A thick black burnt layer along with sparse animal bone and shell was uncovered from a depth of 0.92 metres.
2) Approximately 0.45 metres below layer 1, was another layer of black organic material that covered a limestone floor. On top of this was a slab of red sandstone, not native to the cave, decorated with a Christian cross. Animal bone and shells were plentiful in this layer. 3 sherds of Roman Iron Age pottery were also discovered in this layer along with a handle of a bronze jug and iron nails.

Pottery: Three sherds of pottery were recovered from the lower occupation layers on top of the sandstone slabs. Two of those were described as being made of a "thin reddish" fabric (Wace et al. 1915: 236), whilst a third sherd of *terra sigillate* was also uncovered, a bowl base with a small M potter's mark inscribed below.

Metalwork: Associated with the Roman Iron Age pottery found within the cave were also a number of iron nails and a bronze handle of a jug.

Cross Slab: An usual slab of Old Red Sandstone, not native to the area, was uncovered above the secondary layer of black organic material. Inscribed onto the slab was a human figure, full faced, that was thought to represent a monk or hermit (Wace et al. 1915: 236). A small cross was inscribed to the left hand of the character and to the right 4 more incised crosses were present; one of which was a St Andrew's cross. The excavators note the similar design of the crosses to those on the walls.

Christian Art: A number of crosses were found on the wall of the cave- one being a "holdfast" (Wace et al. 1915: 236). Along with this is also an inscribed animal on the roof of the cave, which may have been a red deer.

Animal Remains: periwinkles, whelks, limpets were found within the layer that contained Roman Iron Age material. A number of animal species were also found in the layer including, red deer, cow, sheep/goat, pig, dog/wolf and wild boar. **Worked Bone**: Along with the animal bone assemblage was also a worked roe deer bone.
Chronology: From the nature of the deposits in the cave, a similar chronological history can be assigned to those nearby with use likely occurring during the early 1st millennium AD, evidenced by the presence of Roman material and with further use during the late 1st millennium AD, during a similar period of use of other caves with Christian artwork.
Radiocarbon Dates:
Suggested Broad Date: RIA; EM | **Suggested Date Range:**c.100-1000 AD

Name: St Ninian's Cave	**ID:** 153	**HER:** 63133
Bibliography: Radford 1957		
Excavation Date: 1884; 1950	**Type:** Single Chamber	**Altitude (m):** 2
Cave Description: The cave is located in a natural cleft in a rock face. It is made of a single chamber, 15 metres wide and 20 metres long and is orientated towards the east.		
Excavation/Assemblage Discussion: Excavations of the cave recorded modern levels of occupation that had disturbed earlier deposits. A number of Christian crosses were recorded on the western wall, suggesting that the cave was used during the late 1st millennium AD. **Christian Art**: A corpus of Christian crosses were thought to represent an early period of use from the 8th century onwards. Continuing Medieval use of the cave was recorded through the presence of an Anglian rune stone used as a headstone. **Human Remains**: In 1884 a human skeleton was reported to have been removed from the entrance to the cave.		
Chronology: The use of caves as a hermitage is well attested across the Western coast with evidence of early Christian use through the presence of inscribed crosses. It is apparent that St Ninian's Cave still held significance through into the Medieval and Modern periods, however, the cave was also in use during the late 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:**500-1100 AD	

Name: Hanging Rocks 1	**ID:** 157	**HER:** 55027
Bibliography: Cree 1909; Kilbride-Jones 1938		
Excavation Date:1908	**Type:** Single Chamber	**Altitude (m):** 15
Cave Description: Two caves are located on cliffs on the East Lothian coastline. Hanging Rocks 1 is found 3 metres south of Hanging Rocks 2 (**276**). The cave mouth was closed by a dry stone wall built across the entrance and measures c.9.14 metres in width and is oriented east. The cave itself is 14 metres long and 7.62 metres wide and was extensively modified during the early Modern Period.		
Excavation/Assemblage Discussion: Excavation of both caves uncovered a sequence of hearths and material dating to Iron Age and Roman Iron Age. Within the first cave a deposit c.0.3-metre-deep contained a number of hearths, including a large central hearth 3 metres in diameter and c.7.3 metres from the entrance. **Metalwork:** A small assemblage of metalwork was recovered from the cave including an iron knife and a socketed spearhead **Stonework:** From the deposit a whetstone and the lower half of a rotary quern were recovered. The rotary quern was recovered on top of the built central hearth and measured 40cm in diameter (Cree 1909: 250). **Bonework:** A red deer pick was recovered along with a spindle whorl made of deer antler, a bone button and a bone pin. **Glass:** Two glass armlets were recovered. One was made of white opaque glass and the other fashioned from green worn glass with a blue and white 'cable ornament' (Cree 1909: 254). Similar glass bangles, made of re-used Roman glass, with white and blue have been found at Borness Cave (**132**) and have been identified as Stevenson Type 2 bangles (Stevenson 1956: 218). **Pottery:** A fragment of Samian ware was recovered along with a neck of a 2nd century AD coarse Roman jug. **Animal Bone**: Large quantities of animal bone were recorded from the cave that included cow, sheep/goat, pig, and dog.		
Chronology: Fragments of Samian Ware have been recovered from a number of caves in the region supporting a date of cave use from the 2nd century Ad. This is further supported by the presence of glass bangles that occur across Scotland at Borness Cave and further north in the caves of the Western Isles.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 100-500 AD	

Name: Hanging Rocks 2	**ID:** 276	**HER:** 55027
Bibliography: Cree 1909		
Excavation Date:1908	**Type:** Single Chamber	**Altitude (m):** 15
Cave Description: Two caves are located on cliffs near the East Lothian coastline each with similar levels of evidence overlooking a small bay. The cave is 3 metres north of Hanging Rocks 1 (**157**). The cave's entrance, which is orientated towards the northwest, leads to a chamber c.13.72 metres in length and c.7 metres wide.		
Excavation/Assemblage Discussion: Excavation of the cave uncovered a hearth and apparent occupation layer made of a thick black layer, which was 0.3 metres deep. This was followed by a layer of stones that was thickest towards the centre of the cave (Cree 1909: 259). A hearth was found in the centre of the cave, at a depth of 0.45 metres. All the finds from the cave were recorded from the deposit overlaying the hearth and from the immediate surroundings. **Stonework**: A whetstone was recovered from the cave. **Metalwork:** A bronze ring pin made of six short transverse bars was found in the cave. **Bonework**: Two deer horn picks were recovered from the cave along with a number of worked deer tines and a ring of deer horn. A few unworked tines were also recovered from the cave. **Pottery:** Fragments of a 2nd century AD coarse fumed Roman bowl were also found in the cave. **Human Bone**: A single human radius was found by Cree whilst removing rocks from the mouth of the cave (Cree 1909: 258).		
Chronology: The material recovered from the cave was likely deposited at a similar time from the cave 3m to the north, although the bronze ring pin may suggest a later for the deposition.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 100-500 AD	

Name: Chapel Cave	**ID:** 277	**HER:** 61044
Bibliography: Murray 1961		
Excavation Date:1831	**Type:** Single Chamber	**Altitude (m):** 1
Cave Description: Chapel Cave is part of a series of caves on the Caipilie coastline. The cave is a sea cave, with an entrance 12.2 metres wide with an entranceway orientated towards the southeast. It is made of a single chamber, which was blocked by a doorway. The cave is reported to have been used by St Adrian who settled in the area in the 9th century AD.		
Excavation/Assemblage Discussion: The cave was surveyed in 1831 where a number of crosses were recorded. The area outside the cave had been modified with a rock-cut cell, which was later used as a pigeon house and as a buyer for animals. **Artwork**; A corpus of early Christian Latin and Greek crosses were recorded on the wall of Chapel cave including a Z-rod shape. A small overhang to the east of the cave also contains an arch symbol. **Human Remains**: A human burial was reported to have been found outside the cave.		
Chronology: A number of caves have been used as hermitages across Scotland and the artwork present in the cave suggests early Christian use.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-1000 AD	

Name: St Monan's Cell	**ID:** 278	**HER:** 34197
Bibliography: Guttmann 2002: 114		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 11
Cave Description: The small cave is located in the face of a perpendicular rock and is 45m of the parish church. The cave is made of a small chamber, orientated towards the south, and is 1 metre deep. The site was thought to have been used as a cell by St Monance who died in 572 AD.		
Excavation/Assemblage Discussion:		
Chronology: Christian use is well attested in a number of coastal caves across Scotland from a period beginning between 500-1000 AD based on epigraphic evidence from Argyll.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-1000 AD	

Name: Court Cave	**ID:** 279	**HER:** 53973
Bibliography: Gibson 2004; Gibson et al. 2007; Ritchie et al. 1993		
Excavation Date:	**Type:** Cave	**Altitude (m):** 4
Cave Description: Court Cave is located on the Wemyss coastline, at the base of a sandstone cliff. It has two large entranceways and two passageways thought to lead deep into the cliffs. The entrances of Court Cave are orientated towards the east.		
Excavation/Assemblage Discussion: The cave has never been excavated although a number of Pictish symbols are recorded on the cave walls. **Artwork**: An array of Pictish symbols are recorded in the cave including 2 double disc symbols, a rectangle, a depiction of a man holding a club and 2 triangles.		
Chronology: One of 6 caves that make up the Wemyss Cave system that were likely in use during the 1st millennium BC into the 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-1000 AD	

Name: St Serf's Cave	**ID:** 280	**HER:** 53994
Bibliography:		
Excavation Date:	**Type:** Cave	**Altitude (m):** 13
Cave Description: A large cave, orientated towards the south, was thought to have been used as a retreat by St Serf and has been modified with three chambers containing rock cut seats and an ashlar door built sometime during the use of the cave as a place of worship.		
Excavation/Assemblage Discussion:		
Chronology: Documentary evidence claims that St Serf sought refuge in Dysart during 500 AD or 700 AD. Although such evidence is indeed limited, parallels to caves throughout Scotland suggest that caves were used in the latter half of the 1st millennium AD as retreats.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-1000 AD	

Name: Michael's Cave	**ID:** 281	**HER:** 53954
Bibliography: Gibson 2004; Gibson et al. 2007; Ritchie et al. 1993		
Excavation Date: 1929	**Type:** Cave	**Altitude (m):** 21
Cave Description: Michael's Cave was opened in 1929 to install new boilers for Michael Colliery. The cave is now filled in and sealed with concrete. The entrance is orientated southeast.		
Excavation/Assemblage Discussion: Whilst excavating the cave a number of finds were reported from the inner chamber, including Medieval pottery, a stone spindle whorl and 3 stone pounders. **Stone:** A bronze age cup and ring marked stone was found in the cave in 1929 (Mackie 1986: 74). **Artwork**: A number of Pictish symbols were reported to have been found in the cave with one reported to represent an elk being hunted by a man.		
Chronology: If the cave did contain Pictish symbols then it is likely that activity was contemporary with the other nearby caves during the late 1st millennium AD. Interestingly the bronze age cup and ring stone suggests an antecedent use of the caves in the area.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-1000 AD	

Name: Doo Cave	**ID:** 282	**HER:** 53977
Bibliography: Gibson 2004; Gibson et al. 2007; Ritchie et al. 1993		
Excavation Date:	**Type:** Cave	**Altitude (m):** 9
Cave Description: The sandstone Wemyss cave gets its name from the use of the cave as a dovecot during the Medieval period. Only the entrance way now survives and is orientated southeast.		
Excavation/Assemblage Discussion: **Artwork**: An array of Pictish symbols were recorded in the cave. These include a flower symbol, elephant symbol, 2 crosses, a serpent and a bird symbol.		
Chronology: Ichnographically the cave contained similar symbols to that offered in nearby caves across Wemyss including Well Cave (**283**) and Jonathan's Cave (**129**). Use in the cave was likely contemporary with nearby caves during the latter half of the 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-1000 AD	

Name: Well Cave	**ID:** 283	**HER:** 53953
Bibliography: Gibson 2004; Gibson et al. 2007; Ritchie et al. 1993		
Excavation Date: 1980;2004	**Type:** Cave	**Altitude (m):** 7
Cave Description: Well Cave derives its name from the nearby Macduff's Castle that used the cave as a well up until the early 20th century the cave acted as a focal point for a New Year's procession. The cave mouth is orientated towards the east.		
Excavation/Assemblage Discussion: Two trenches were opened outside Well Cave uncovering a sequence of midden material similar to that found at the nearby Jonathan's Cave (129) (Gibson et al. 2007: 92). In 2004, excavation of eroding deposits recorded outside Well Cave, uncovered a sequence of activity including a midden layer overlaying ard-marked soils. From the interface between the plough soil and midden a radiocarbon sample was taken, which provided a mid-1st millennium BC date. Also found within the cave were Medieval artefacts. **Artwork**: An extensive corpus of Pictish carvings survive in the cave although a number have been damaged by re-cutting. Nevertheless an array of double discs, fishes, birds and animals including a horse survive.		
Chronology: The radiocarbon result obtained outside the cave above the ard marked soil presents evidence of agriculture occurring around the caves during the Early Iron Age. Evidence for agriculture is also further seen at Sliding Cave (**130**) where burnt seeds presented an early 1st millennium AD date suggesting a continuity of agriculture that likely continued at Well Cave. However, the Roundwood twig may have been deposited naturally rather than being evidence of human-use. Nevertheless, the cave was used in the Early Medieval period, demonstrated by the corpus of Pictish carvings on the cave walls.		
Radiocarbon Dates: NZA-25540 charred roundwood twig, from 705 midden interface 2443±30 BP **752-409 cal BC**		
Suggested Broad Date: IA(?); EM	**Suggested Date Range:**800 BC- 1000 AD	

Region 5: Western Scotland

In Region 5, the Western Coast of Scotland, **52** caves were identified as containing material dating from c.800 BC- 900 AD. The catalogue includes caves with evidence of Early Medieval activity due to the relationship of Early Christian Art and the antecedent Iron Age landscape. One Cave, MacArthur's Head ICP 110 (254) was included with a Medieval radiocarbon date, due to its proximity to MacArthur's Head ICP 109 (253). Each cave is individually discussed in terms of assemblage characteristics and suggested chronology.

131	MacArthur Cave		**240**	Allt na Criche
135	Uamh an Duin		**241**	Camusteel Bay 2
142	Keil Cave		**242**	Loch A Sguirr
143	St Columba's Cave		**243**	Sand Rockshelter
144	Ellary Boulder Cave		**244**	Allt na Uamha
145	The Tinker's Cave		**245**	Meall na Hairdie
147	Scoor Cave		**246**	Uamh Úr
148	Nun's Cave		**247**	Kilchoman
149	St Ciaran's Cave		**248**	Meikle Cloak Cave
150	St Cormac's Cave		**249**	Inchmarnok Site 9
151	St Molaise's Cave		**250**	Inchmarnok Site 16
152	King's Cave		**251**	Kilnaughton Bay 2
154	Uamh An Ard Achadh		**252**	Culzean Cove Main System
155	Uamh An Eich Bhric		**253**	MacArthur's Head ICP 109
156	Allt Dubhaig		**254**	MacArthur's Head ICP 110
158	Uamh Na Mine		**255**	North Carraig Fhadda ICP 7
159	Ardmore Point		**256**	Dunagoil Cave
160	Rubh' An Dunain		**258**	Ceeves Cove
210	An Corran Rockshelter		**259**	Uamh Breidairton
233	Smugglers' Cave		**260**	Bagh Na H-Uamha
234	Crowlin 1		**261**	Papadil
235	Uamh Righ		**262**	Cnoc An Aoil
236	Church Cave		**263**	Loch Gille-Ghoid
237	Toscaig 2		**272**	Uamh nan Ramh
238	Toscaig 9		**274**	Uamh Phort Luinge Mhic-Ruaridh
239	Creag na Uamh		**275**	Ardeer

Name: MacArthur Cave	**ID:**131	**HER:** 23066
Bibliography: Anderson 1895; Turner 1895; Saville et al. 1994		
Excavation Date: 1895	**Type:** Cave/Shaft	**Altitude (m):** 25

Cave Description: The cave is located on a bend in the cliff towards an old beach terrace. The cave is part of a local group of 4 other caves (Turner 1895: 410). Before excavation the cave mouth, orientated north, was blocked by debris from the cliff face. Several recesses were present in the cave, which were filled with black earth. One of which was thought to be a shaft leading to the surface that had been subsequently blocked by vegetation and rock fall. The cave was thought to be 7.62 metres in length and 6.09 metres in breadth (Anderson 1895: 213). There was a possible artificial arrangement to a number of "fallen blocks", although Anderson wasn't convinced of the nature of the blocks (Anderson 1896: 214), narrowing the cave mouth to 2.13 metres. The east side of the cave was encrusted with stalactites and calcareous drops that had come from the roof (Anderson 1895: 215).

Excavation/Assemblage Discussion: Excavation revealed a stratigraphic sequence (Anderson 1895: 215) outlined below:

1) *Black earth layer*: Containing small vertebrates (bats, rodents, birds), towards the back of the cave and under a projecting part of the roof on the east side a human skull was found. Another skull was found in the same area almost on top of layer 2. Further north of this were a "good many other bones of a human skeleton" (Anderson 1895: 216) along with two lower jaws.
2) *Shell layer*: 0.69 to 0.91-metre-deep bed of shells extending the entire length of the cave along with mixes of ash, charcoal and bone. This shell layer was thought to be a "refuse-heap" as a "result of a lengthened occupation" (ibid.). The shell layer was mixed with marine and terrestrial animal bone, some burnt, along with burnt charcoal. The shells were thought to be from local marine sources.
3) *Gravel bed*: Fine gravel of small water-rolled stones interspersed with dumps of shells around 0.45 metres into this layer. The layer continued around 1.22 metres to the bottom of the cave floor, which Anderson believed to be a total depth of 1.89 metres.

From Anderson's stratigraphy it is likely that the shell layer represented a madden layer that contained most of the stone and bonework that was recovered during excavation, although Anderson was not clear on the location of many of the finds. Most of the human remains however were recovered from the black earth layer above the midden and towards the back of the cave underneath the internal overhang.

Human Remains: Remains belonged to: 4 adults: 2 females (26-45), 1 young male (18-25) and 1 male of unknown age (Saville et al. 1994: 719). A congenital weakness was found on the body of a thoracic vertebra and an abnormal femur-head, thought to be related to the presence of a tumour found on the two male skeletons (*ibid*).

Chronology: Anderson suggests that the cave deposits are Mesolithic in date based on the presence of flint and hammerstones that have corresponding typologies (Anderson 1895: 215). However, a review of the Obanian human remains by Saville et al. (1994) included a number of radiocarbon dates on 4 human remains recorded in different layers of the cave. All bones were dated within the 1st millennium BC (see below). Such evidence would suggest that the cave deposits have suffered disturbance perhaps due to burrowing activity and as such cannot be treated as distinct chronological layers. Therefore, any animal bones or associated artefacts cannot be dated. The only datable Iron Age activity in the cave can be ascribed to the fragmented human remains found in the cave from 4 separate individuals. From Anderson's (1895) report it is clear that other bones were recovered from the cave and maybe further evidence of burial related to the Iron Age. The human bones that have been dated, however, suggest a series of burials during a period between c.800BC-100 AD. Radiocarbon probabilities do suggest a mid to late date within this range however, from around 500-0 BC.

Radiocarbon Dates:

OxA-4485 in black earth, right humerus	2170±55 BP	**380-50 cal BC**
OxA-4486 in upper shell bed, left distal femur	2365±55 BP	**800-200 cal BC**
OxA-4487 in lower shell bed, left talus	2460±55 BP	**770-400 cal BC**
OxA-4488 in lower shell bed, right patella	2295±60 BP	**520-170 cal BC**
Suggested Broad Date: IA	**Suggested Date Range:** 800 BC- 100 AD	

Name: Uamh an Duin	**ID:** 135	**HER:** 9707
Bibliography: Young 1958; PSAS 1978; Branigan et al. 1998 ; Branigan 1998 ; Branigan et al. 1995 ; Branigan et al. 2000		
Excavation Date:1998	**Type:** Rockshelter	**Altitude (m):** 13

Cave Description: The rockshelter, located below Dun Scurrival, is 16 metres long and orientated south on the edge of a cliff face. There is a large platform outside the cave, which measures 8 by 13 metres.

Excavation/Assemblage Discussion: Prior to excavation a number of animal bones were recovered from the cave along with a human skull (Branigan et al. 2000: 224). Test excavations outside the cave on the wide platform in order to investigate Mesolithic activity in the region. A trench was dug 5x1 metres in size, which revealed a stratigraphic sequence (Branigan et al. 2000: 225-227):

1) Context 2: Silty black hill wash with sherds dating from the medieval period and earlier and flint pebbles, a saddle quern was also visible in this layer, although this was shown to be embedded in context 3 below (Branigan et al. 2000: 225).
2) Context 3: Dark sandy soil with fragments of handmade pottery and flint and quartz flakes which overlaid contexts 4 and 6 that was characterised by sandy soil within which there was a stone paved hearth (context 11) found towards the northern part of the trench and towards the cave (ibid.). Context 6, which had no stratigraphic association with the hearth also produce animal bone and pottery. Below Context 6, context 10 made of a soft sandy loam also produced 27 sherds, animal bone and flecks of charcoal (Branigan 2000: 226).

Pottery: 127 sherds of a range of fabrics were recorded that have parallels with Iron Age wares recorded at Dun Mor Vaul and Iron Age sites on South Uist (Branigan 2000: 227). Out of the 139 sherds of pottery, 5 fabrics were identified, from which 2 were dated to the Middle Iron Age (Branigan et al. 2000: 227). Two simple rounded rims were thought to belong to 'Dunagoil Ware' and a whole-mouth jar of Mackie's (1974: 159) Clettraval pottery along with the thicker coarse sherds also similar to the Dunagoil type found in the lower levels.

Stonework: From Contexts 4 and 6 ,17 pebbles showing signs of heat stress, interpreted as pot boilers (Branigan 2000: 227), were recovered along with a saddle quern found in context 6. Flint was also recorded in context 6, along with a quartzite skaill knife commonly found during the Neolithic or Early Bronze Age (Branigan 2000: 228).

Animal Bone: 54 fragments of animal bone were recovered from the site with the majority occurring in context 6. The identified species include cattle, sheep/goat, pig and rabbit.

Chronology: From the artefacts found through the limited excavation it is clear that context 6, where most of the finds were found, has suffered some disturbance- most likely from burrowing from rabbits given the presence of the species in the faunal assemblage. Therefore, care must be taken in interpreting the age of the hearth that had no direct association to contexts with Iron Age pottery. Branigan et al (2000: 230) dated the majority of the use of the site to the 'Middle Iron Age' likely somewhere around c.200 BC- c.200 AD. Indeed, such a date was suggested based on the similarities of the pottery form to those found in the lower levels of Dun Mor Vaul broch, Tiree and parallel materials recovered from excavations from South Uist (*ibid*). The proximity of the cave to settlement on Barra, may however provide a further contextual date for the cave. Dun Scurrival (Young 1964; Topping et al. 1984), directly above the cave, has an unclear history with a number sherds and bone artefacts being recovered in the site. Mackie suggests that the pottery found at the site, known as

'Dun Cuier Ware', is related to later occupation at Dun Cuier perhaps from the 4th or 5th centuries AD (Lane 1991: 122) suggesting the broch was built earlier (Mackie 2007: 1111). It is apparent from local settlement contexts that an extensive period of Iron Age occupation occurred on Barra. Given, however, the unclear date of occupation of Dun Scurrival and the apparent Late Iron Age occupation at Dun Cuier, a formative date cannot be ascribed. From the pottery material present at the site, use would likely have occurred during the Middle Iron Age given the presence of the 2 pottery fabrics. However equally an Earlier Iron Age use could also be ascribed given the broad date of the coarse ware found at Dun Mor Vaul.
Radiocarbon Dates:

Suggested Broad Date: IA/RIA	**Suggested Date Range:** 300 BC- 200AD

Name: Keil Cave	**ID:**142	**HER:** 38301
Bibliography: CANMORE 38301; Ritchie 1968; Robertson 1970; PSAS 1975		
Excavation Date: 1934	**Type:** Single Chamber	**Altitude (m):** 16
Cave Description: Keil Cave is a cave in a series of 9 close to the shore at Keil Point. The cave entrance is 4.6 metres wide and 21.5 metres long and between 5.5 metres and 9 metres in height. Tinkerers and their families are recorded to live in the cave in the census of 1881, which must be taken into account when considering the extent of iron slag debris found throughout the cave.		
Excavation/Assemblage Discussion: The deposit measured 3.05 metres in depth, which was deepest at the mouth of the cave, and consisted of 3 layers (Ritchie 1968:104): 1) A 0.91-metre-deep earth and stone layer 2) 'Occupation horizon' 0.91-metre-thick: consisted of bones and teeth of cow, horse, pig, deer and a possible shell midden. Lumps of iron slag and charcoal found throughout the cave, which may suggest iron smelting (Ritchie 1934:105) 3) Sea gravel with natural boulders **Bonework**: A single-sided comb and 3 double-sided combs were found in the cave. The double-sided may have parallels with wooden ones found in the crannog on Ledaig Moss (Ritchie 1968:105). The longer composite style is identical to one found near Stornoway which is associated with pottery often found in cave sites in Northern Ireland. These have been attributed by Ritchie (1968: 107) to the 3rd or 4th century AD. A bone-weaving tablet was also found, made of a triangular piece of bone with end perforations. This type of tablet is rare in Scotland and was compared to a similar example to one found in Roman Corbridge (Ritchie 1968: 105). In a non-Roman context, the only similar type is similar find recorded in Wookey Hole (**166**), Somerset (Ritchie 1968: 105; Cunliffe 2012: 485, figure 18.1). In Scotland, a triangular bone blank was also found in Harbour Broch, Keiss dating to the 1st-2nd century AD (Ritchie 1968:107). **Metalwork**: A copper alloy brooch of Fowler A2 type was found in the cave and considered 1st-2nd century AD in date (Ritchie 1968: 107). **Pottery:** Roman colour-coated pottery and Imitation Samian was found in the cave, and considered to date to the 4th century AD.		
Chronology: Based on the assemblage Ritchie suggests occupation beginning sometime in the 3rd or 4th century AD and intermittently occupied afterwards perhaps by tinkers or groups of smiths with later parallels in the Antrim cave groups (Ritchie 1968: 108). Disturbance in the 19th century however, could account for a large proportion of the metalworking debris and such an interpretation must be taken with care. Nevertheless, finds of Imitation Samian Ware does suggest use of the cave during the 3rd or 4th centuries AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA(?); RIA	**Suggested Date Range:** 200-400 AD	

Name: St. Columba's Cave	**ID:** 143	**HER:** 39012
Bibliography: CANMORE 39012; Campbell et al. 1964; Campbell 1973, 1975, 1976; Tolan-Smith 2001		
Excavation Date: 19th C;1930; 1959-1975	**Type:** Single Chamber	**Altitude (m):** 9

Cave Description: The sea cave is part of a series of caves and rockshelters found on the shore of Loch Caolisport with views towards the south. The cave mouth is 12 metres wide with an overall length of 14 metres. The cave has been related to the tale of St Columba and is likely linked to a nearby chapel. Indeed, the cave has been used as a Christian shelter with a drystone altar on the eastern side of the inner cave with a number of inscribed crosses. A drystone wall has also been placed towards the back of the cave thought to date to the 19th century (Tolan-Smith 2001:27).

Excavation/Assemblage Discussion: Early excavations in the 19th century uncovered a stone coffin and two shallow graves, containing extended inhumations lying east-west, near the bank outside the cave related to the foundation of a boulder wall. A 13.5-metre-high dump of archaeological material was also made outside the cave following work in 1891 (Tolan-Smith 2001: 29). Excavations by the Mid Argyll Archaeological Society revealed a 2.4-metre-deep deposit including a 19th century midden and evidence of late metalworking. Disturbance from the 19th century has meant that many finds were found in disturbed contexts. Unstratified small finds were found in the spoil heap, including a Viking type bronze balance thought to be 8-9th century AD in date, and a decorated rim sherd of Samian ware (Campbell 1975). Fragmentary burials were also recorded oriented towards the altar within the cave (Campbell 1976). It is possible that some of the iron slag dates to the Viking period being used as backfill for the burials orientated towards the altar which were deposited sometime after the altar (Campbell 1976).

A series of trenches were cut across the cave with Trench B allowing for an examination of the site stratigraphy:

1) Spoil tip
2) Old ground surface
3) Burials
4) Midden deposits, hearths, metalworking debris
5) Midden deposits & hearths
6) Sands, gravels and shingle

From this, it is thought that phase 4 represented early Medieval usage of the site characterised by slag and furnace debris, midden material with later phase 3 representing the religious usage of the site with the human burials. Phase 5 is represented by a series of shellfish deposits and hearths that are thought to represent the prehistoric phase of occupation. Finds from the excavation trench suggest longevity of site usage with beginning in the Neolithic.

Bonework: Objects of bone included 9 needles, 14 pins with a number showing signs of manufacture and possible blanks (Tolan-Smith 2001:64), 3 pin cases and a pin sheath with parallels to examples from Iron Age and Norse sites and 21 fragments of awls and piercers (see discussion in Tolan-Smith 2001:64). Other objects included a spindle-whorl made of red deer antler, identical to one found at the Broch of Burrian dating to the Iron Age-Norse periods (ibid.) and an antler cheek piece also to date to the Iron Age (Campbell et al. 1964: 121). A reappraisal of the bonework material has suggested that a large proportion occurs between the latter part of the 1st millennium BC and the 7-8th centuries AD (Tolan-Smith 2001:68).

Stonework: A fragment of shale box was found in the cave and compared by Tolan-Smith (2001:58) to a shale box found in a monastic workshop on the nearby Isle of Bute. The monastery was destroyed in a Viking raid in 798 AD and so if the St Columba's Cave example came from the workshops it must date between the 7th and 8th centuries AD.

Pottery: A Samian sherd (DR18/31) along with 255 sherds of coarse pottery were found in the cave and split into 3 groups based on the form of fabric. The Samian Ware sherd is part of a small group of isolated finds of Samian pottery in Mid-Argyll, the majority of which are thought to date to the 2nd or 3rd centuries AD (Craw 1930: 115; Ritchie 1974: 102; Royal Commission on the Ancient and Historical Monuments of Scotland 1988: 156). Other fabrics from the cave included Dunagoil Ware, characterised by a rough handmade grey fabric with substantial inclusion, which has a complicated chronology. Whilst the pottery has been reported in Early Iron Age levels at site such as Dun Vulan (Parker-Pearson et al. 1999; MacKie 2007: 1114 ff) and also at nearby Cladh Hallan (Mackie 2007: 1132ff), a number of authors (e.g. Topping 1987; Lane 1990; MacSween 2003b) have outlined the issues with the longevity of a number of fabrics that often complicate the creation of pottery typology.

Metalwork: Excavations in the cave recorded large amounts of slag debris that was originally thought to belong to the Viking period being used as a backfill for the Early Medieval burials. Nevertheless, evidence from Ellary Boulder Cave (**144**) some 1.2 miles away, presents convincing evidence that a degree of metalworking occurred during the Iron Age. It is therefore possible that an amount of slag recovered from St Columba's Cave may be from Iron Age activity in the cave.

Artwork: Above the stone cut altar there are two simple incised crosses along with a possible pit marked cross (Fisher 2001: 151). The site sits within a broader tradition of Christian usage of subterranean places, summed up in the chronological discussion of Scoor's Cave (**147**) thought to date between c500-900 AD.

Chronology: From the disparate data available it is clear that the cave has suffered a large amount of disturbance throughout its history that makes analysis of the cave's chronology difficult. From the artefacts deposited within the cave it is likely that the Iron Age activity occurred between the mid to late first millennium BC and into the early 1st millennium AD. This is based on the presence of pottery, contemporary sites and comparisons to nearby Ellary Boulder Cave (**144**). Use continued in the cave into the Early Christian period seen with the presence of inscribed crosses.

Radiocarbon Dates:

Suggested Broad Date: IA; RIA; EM	**Suggested Date Range:** 500 BC-900 AD

Name: Ellary Boulder Cave	**ID:** 144	**HER:** 39032
Bibliography: CANMORE 39032;Campbell et al. 1964, 124; Smith 1989, 1991; Tolan-Smith 2001		
Excavation Date: 1961;1987-91	**Type:** Boulder	**Altitude (m):** 7

Cave Description: The cave, made of fallen boulders measures 6.5 by 4.0 metres. Erosion has affected the main chamber of the cave, although excavations revealed intact deposits in the western part of the cave (Smith 1989). The site was accessible through an eastern entrance with a western entrance blocked during early prehistory (Tolan-Smith 2001: 73). The eastern entrance is roughly 2 metres high and 1.5 metres wide.

Excavation/Assemblage Discussion: Prior to excavation 2 Mesolithic micro-flints were recorded in the cave in 1961 (Campbell et al. 1964: 124), which prompted a series of test pitting in the same year. Excavations between 1987 and 1991 revealed deposits 1.1 metres deep with a range of artefacts from the Mesolithic to Medieval period:

1) Layer of middle age and post medieval activity (Smith 1989)
2) Iron Age pottery related with slag and a 'furnace bloom' along with a later find of a stone-lined fireplace with a charcoal deposit radiocarbon dated to the Iron Age (Smith 1991)
3) Prehistoric pottery, quartz and flint and pitchstone from Arran thought to be Neolithic/Late Mesolithic (Smith 1989)

From this a series of phases were suggested that including a phase of Iron Age occupation and metalworking in Tolan-Smith's 'phase b' (2001: 88) in between a medieval midden (c) and an earlier prehistoric layer (a). Relevant finds are discussed below most coming from the better preserved western area of the cave. Much of the Iron Age and Roman Iron Age material was recovered in context 25 in the western part of the cave, which was identified as the primary occupation layer. This deposit however, contained a range of material from the Mesolithic to Medieval period with 2 wheel-made sherds being recorded in the context, along with a number of shells thought to have been intrusive from context 21 (Tolan-Smith 2001: 136). The primary sealed Iron Age contexts that can account for a direct period of activity within the site are the stone-lined hearth and its floor (context 32). Above the stone-lined hearth was a wood charcoal deposit (context 33), which provided a radiocarbon date of 2100±50 BP for a sequence of burning. The hearth was built within a pit (context 35) that was backfilled with pottery similar to that found at St Columba's Cave, dated to end of the first millennium BC and thus supportive of the radiocarbon date. Further associated with the hearth was context 31, an area of trampled ground that had a direct contextual relationship with the Iron Age contexts.

Context 25 that sat above context 31, the trampled ground, however cannot be given an Iron Age date given the truncated array of finds attributed to the context, including a large amount of slag. This slag was also recovered west of the entrance and west of the hearth which led to the investigators suggesting that the stone hearth (context 32) formed the basis of a bowl type furnace (Tolan-Smith 2001: 137). Context 25 did not contain much in the way of metalwork other than slag, apart from 2 fragments of a copper alloy pin thought to be a 'hand pin' datable to the 6th-7th centuries AD (ibid.). Throughout context 25 were also ceramic material thought to be waste material from pottery manufacture along with a collection of sherds thought to be parallel to body sherds found at St Columba's Cave (**143**) attributed to similar wares found at Dun Mor Vaul.

Context 25 must pre-date the Medieval shell midden, which was established through 2 radiocarbon dates from shells recorded in context 21 above context 25. Nevertheless, the presence of wheel-turned pottery and intrusive shells may suggest that at least the upper layers were subject to disturbance. Importantly the excavators noted a gap of only 0.07m between the Iron Age hearth and the shell midden suggesting a short period of time before the cave was reused (Tolan-Smith 2001:85).

Pottery: A large proportion of pottery consists of thick coarse vessels coming from context 25 attributed to Phase b (Tolan-Smith 2001: 95), similar in form to pottery recorded at St Columba's

Cave (143) thought to be between c.800 BC-200 AD in date. Fragments of fired clay are also recorded in contexts assigned to Iron Age Phase b.

Metalwork: Slag was recorded in most contexts during excavation, although a large proportion of material (85%) was found in context 25 dating to Phase b. This slag was associated with a hearth or furnace that may indicate metalworking took place inside the cave during the 1st millennia BC and AD. Periods of metalworking may also have been contemporary with the find of a copper –alloy 'hand pin' dated to the 6th-7th centuries AD.

Glass: Half a globular bead of amber glass was found in the cave. This was identified as a damaged Guido's Group 7 type bead found in the southern Britain. The bead is a common example dating from the 1st century BC to the 6th century AD (Tolan-Smith 2001: 96; Heald et al. 2009: 3). A number of other beads do occur however in cave contexts in the region. A similar bead of Guido's Group 7 was recorded at the Sand's Rockshelter (**243**) and at Uamh an Ard Achadh (**154**), where a number of examples were deposited at the end of the stairwell. The examples from Uamh an Ard Achadh (**154**) are interesting given the potential use of the site during the Middle Iron Age, whilst the date of the Iron Age activity at Sand's Rockshelter is more unclear. It is therefore possible that the example found in Ellary Boulder Cave, dated to the end of the 1st millennium BC or the beginning of the 1st millennium AD.

Bonework: A small bonework assemblage was recorded at the site with the only piece of diagnostic material being a small globular bone bead thought to date between the Iron Age and Roman Iron Age (Tolan-Smith 2001: 108). Other bonework including a bone pin and bone needle thought to date from the late first millennium AD.

Stonework: A fragment of shale armlet with fine horizontal striations is thought to be Iron Age or Roman in date (Tolan-Smith 2001:111).

Animal Bone: From contexts attributed to phase B: cattle, sheep/goat, pig are evident. Other fauna recorded are red deer, vole, frog/toad and rabbit (Tolan-Smith 2001:118).

Chronology: The excavators suggested that the site was likely to have been in periodic use from the mid to late first millennium BC up till the late first millennium AD evidenced by the presence of Early Medieval metalwork. Iron Age use of the cave is recorded in the pottery used as backfill for the pit along with pottery in the disturbed Context 25. It is therefore likely that use occurred before the construction of the hearth complex and thus pre-dating the radiocarbon date. Nevertheless, a general date of use of the cave may have been between c.500 BC- 100 AD, which can be related to the pottery and bead dates in the region. Antecedent usage of the cave is recorded in the earlier prehistoric midden and later use is seen in the Early Medieval metalwork and later Medieval midden suggesting a broad chronological use of the cave.

Radiocarbon Dates:

GU-2660 Stone lined hearth charcoal	2100±50 BP	**360 cal BC- 20 cal AD**

Suggested Broad Date: IA; RIA; EM	**Suggested Date Range:** c.500 BC- 800 AD

Name: The Tinkler's Cave	**ID:** 145	**HER:** 39406
Bibliography: CANMORE 39406; Campbell et al. 1964; Smith 1987; Tolan-Smith 2001		
Excavation Date:1986	**Type:** Single Chamber	**Altitude (m):** 36
Cave Description: Tinkler's Cave is a small cave facing south, located on a low raised-beach cliff (Campbell et al. 1964:7). The site was blown up in the 19th century to prevent poachers from using the cave, although the site is still accessible. The cave was approximately 5 metres deep with a 4 metre wide entrance.		
Excavation/Assemblage Discussion: The cave is characterised by deposits of shell midden material preserved towards the rear. Iron Age material has been attributed to phase 2 of the site: **Pottery:** Small body sherd of coarse pottery was recorded diagnostic to other types found in the region thought to date to the mid first millennium BC to early first millennium AD (Tolan-Smith 2001: 153-155). **Bonework:** A fine bone pin made from a long bone shaft of either red deer or cattle was found in the cave. **Stonework:** A utilised elongated pebble was found in a context thought to date to the Iron Age (Tolan-Smith 2001: 154). A midden may also have been accumulating during this period, with the contexts running through to earlier levels, where early Prehistoric radiocarbon dates were obtained from shells. **Animal Bone:** From the midden context 8 a series of animal bones were recorded including sheep/goat, deer, cattle, pig, seal and field vole. Field vole and wood mouse were also recorded in the Iron Age context 22, both of which could be intrusive.		
Chronology: The two contexts, 26 & 22, assigned an Iron Age date by the excavators was done so based on the presence of a single sherd of pottery and the absence of later finds (Tolan-Smith 2001: 154). The coarse pottery, similar to that found at other sites in the region of Iron Age date belonged to context 26, an occupation deposit that along with context 22 was cut by a later drain. Other finds found in these contexts are a fine bone pin and a worked pebble that also have parallels in Iron Age assemblages, although none are diagnostic of any typical period. The middle stages of the midden were also assigned an Iron Age date based on the development of the midden from earlier phases (Tolan-Smith 2001: 155), although no clear stratigraphic relationship is clear. Based on this limited evidence, it is necessary to compare the cave to other sites in the region in order to suggest a chronological range of use. Given the limited amount of data available it is likely that the cave saw temporary periods of use, although the blasting of the cave in the end of the 19th century may have removed a lot of archaeological evidence at the mouth of the cave. Other cave sites such as Ellary Boulder Cave (**144**) and St Columba's Cave (**143**) around 18 miles away from The Tinkler's Cave show evidence of use during the mid-late 1st millennium BC to the late first millennium AD. However, no early Christian art was recorded in the cave, nor were the presence of any datable early Medieval metalwork. The cave did have one isolated body sherd of coarse pottery that occurs in a number of caves in the region from the mid to late first millennium BC to the early centuries AD. However, such pottery may be functional rather than diagnostic (Lane 1991) and care must be taken in using such pottery as a diagnostic for age. However, given the broader network of cave use it is likely that the Tinkler's Cave was used between c.500 BC-300 AD as other caves nearby.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 500 BC-300 AD	

Name: Scoor Cave	**ID:** 147	**HER:** 21977
Bibliography: CANMORE 21977; RCAHMS 1980: 166–7; Fisher 2001: 125		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 35
Cave Description: The cave is located in a bed of vertically-bedded schistose rocks at the head of a narrow inlet on a rock shoreline. The entrance is 4-metre-wide and leads to a cave 15 metres long and with maximum height around 8 metres.		
Excavation/Assemblage Discussion: The cave has no recorded excavation apart from a series of RCAHMS surveys. The cave walls are covered in 60 markings with no known formal pattern. A large proportion are circular depressions similar to cup and ring marks. Other markings are said to resemble a small labyrinth device, a trident and 18 linear incised crosses in various forms. **Artwork**: The crosses on the cave walls closely resemble those found at Nun's Cave (148) that have been attributed to the late 6th to 9th centuries AD (RCAHMS 1980: 166-168). Linear-incised crosses are found throughout western Scotland thought to date between the 7th-9th centuries AD (Fisher 2001: 12). A number of examples found at Scoor's Cave include a motif, derived from encircled Chi-rhos, recorded at 3 other sites in the region, and a similar form at Nun's Cave (**148**) although without the horizontal bifurcate (see Fisher 2001: 29). The encircled cross shape is repeated on a number of incised Pictish cross slab including the cross from Tullich, Aberdeenshire (Henderson 2011: 163) given a general date between the 6th and 7th centuries AD (Henderson 2011: 159) and also found on incised slabs on Iona (Fisher 2001:28). The exact form of the Scoor Cave example is not however repeated elsewhere in the region. The trident symbol has an only parallel with that in the nearby Nun's Cave (**148**), which may be the Greek letter *psi*.		
Chronology: Early Christian crosses are recorded at a number of sites within the region. St Columba's Cave (**143**) has two cut crosses above the stone altar along with a possible pit marked cross (Fisher 2001: 151). Deposits within the cave suggest longevity of use in the Iron Age but also Early Christian usage. At both Smugglers' Cave (**233**; Fisher 2001:29) and St Molaise Cave (**151**; Balfour 1909: 153; Fisher 2001: 29), both on Holy Island, incised crosses are also recorded. Evidence at St Molaise Cave also show a series of incised and sunken crosses, along with a series of Runic inscriptions linked to a Norwegian expedition of 1263 (Fisher 2001: 62-63). Hexafoils are also recorded at St Cormac's Cave (**150**; Fisher 2001: 144) and St Ciaran's Cave (**149**; Fisher 2001: 27). At King's Cave, Jura (152) a series of incised crosses are also accompanied by early depictions of animals and human motifs with parallels to Irish forms. In terms of chronological context however the drawing of crosses on cave walls are likely to be evidence of a series of events rather than of one isolated context. Indeed, the varying forms of crosses and other shapes found in Scoor's Cave plays testament to this. Exact dating of such crosses is impossible however the appearance of such forms, namely the circular incised crosses are thought to show Early Christian activity with the establishment of monasteries in the 7th century AD on Iona and Holy Island. Being located on the coastline, caves offer two possible opportunities for use, which are by no means mutually exclusive: either as places of shelter used by pilgrims/hermits or as places of pilgrimage themselves. St Columba's and St Molaise Cave offer possible examples of the latter, shown through both nomenclature, local folklore and by the presence of altars and stairways whilst Scoor's Cave may offer evidence of the former. Dating of cave use can therefore only be done on a broad scale based on parallel iconographic evidence from examples dating between the 7th-9th centuries AD.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-900 AD	

Name: Nun's Cave	**ID:** 148	**HER:** 22229
Bibliography: Fisher 2001: 124		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 55
Cave Description: This sandstone cave is located on the base of a sea cliff and is accessed through a 20 metre large entrance way. This leads to a single chamber 30 metres long with a maximum height of 5 metres. The smooth west wall has a number of carvings between 0.4 to 1.3 metres above the current floor.		
Excavation/Assemblage Discussion: The cave has not been excavated but has been surveyed (RCAHMS 1980: 159). Carvings on the cave's west wall included a number of crosses which date between the late 6th and 9th centuries AD, similar to those found at Scoor's Cave (**147**). A trident symbol is also located in the cave that is similar in form to a rough Greek *psi* (Ψ).		
Chronology: The iconography found within Nun's Cave has parallels with examples elsewhere within the region notably with that of Scoor's Cave (**147**) with a series of crosses, likely from a series of pilgrim/hermit activities dated between the 7th and 9th centuries (see Scoor's Cave, discussion). The encircled incised cross has parallels with a form found on Iona (see Fisher 2001: 28).		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-900 AD	

Name: St Ciaran's Cave	**ID:** 149	**HER:** 38699
Bibliography: CANMORE 38699;RCAHMS 1971: 145-147; Fisher 2001: 118		
Excavation Date: 1924-5	**Type:** Single Chamber	**Altitude (m):** 97
Cave Description: The cave is located in cliffs above the shoreline and is orientated towards the east. The cave chamber is 40 metres long with a maximum height of 12 metres with a maximum width of 8 metres. Traditionally, the cave is associated with St Ciaran who was the abbot of Clonmacnois (RCAHMS 1971: 145).		
Excavation/Assemblage Discussion: Excavations focused on occupation deposits in the centre of the cave and were never fully published. Within the cave a worked sandstone slab was found with a stone boulder with an incised hexafoil (Fisher 2001: 118). The mouth of the cave was blocked by a wall thought to date post-12th century AD based on the construction design.		
Chronology: St Ciaran's Cave sits within a tradition of early Christian cave use that can be attributed to a period between 500 and 900 AD (see discussion on Scoor's Cave, **147**). Unusually at St Ciaran's Cave there are no formative examples of simple incised crosses that appear throughout the region. Instead the only form of Christian art, and therefore chronological indicator, is a hexafoil shape that is paralleled in an example in St Cormac's Cave (**150**) found on the small isle of Eilean Mór, 58 miles to the North. The cave has a simplistic form of marigold pattern along with a Chi-Rho suggesting an early Christian use of the cave. The example found in St Ciaran's Cave has been likened to marigold patterns found in artwork occurring across the western Atlantic between the 7th-12th centuries AD. Interestingly the T-fret motif has been found on Pictish silverware found on St Ninian's Isle deposited around 800 AD (RCAHMS 1971: 147) suggesting that the artistic work was present in the region in the 9th century AD. In terms of chronology such a design may suggest a phase of use sometime between c.600-900 AD based on parallels. It is likely that the cave may have been in use later than other caves in the region given the absence of simple inscribed crosses.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 600-900 AD	

Name: St Cormac's Cave	**ID:** 150	**HER:** 319784
Bibliography: Campbell et al. 1964: 66; Fisher 2001: 144		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 21
Cave Description: Found on the small island of Eilean Mór, St Cormac's Cave is related to a 10th century AD medieval chapel and a possible early Monastic site associated with the Leinster saint Abbán Moccu Corbmaic (Fisher 2001: 4). The cave is entered through a gully that was enclosed with a drystone wall creating a 'cell' like structure. The cave is also known as Uamh nam Fear, oriented to the northwest (Campbell et al 1964: 66).		
Excavation/Assemblage Discussion: On the eastern side of the cave is a hexafoil pattern with marigold style along with a cross and Chi-rho (Fisher 2001: 144).		
Chronology: The marigold hexafoil pattern is a simplistic form of a similar style recorded in St Ciaran's Cave (**149**) 58 miles south thought to be an early cross dating to the 7th-12th centuries AD. The presence of the Chi-Rho furthers the proposition of an early date being recorded at Scoor's Cave (147) and dated between c.500-900 AD. Given the broader context of the use of caves during the Early Christian period it is likely that St Cormac's Cave falls in a similar pattern of use.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-900 AD	

Name: St Molaise's Cave	**ID:** 151	**HER:** 40079
Bibliography: CANMORE 40079; Balfour 1909; Fisher 2001: 62-64		
Excavation Date:1909	**Type:** Rockshelter	**Altitude (m):** 6
Cave Description: The sandstone rockshelter is located on the base of sea cliffs and measures 12 metres from NNW to SSE with a maximum width of 4 metres. The height of the cave reaches to an extent of 3 metres. The cave was thought to be used by St Molaise related to the nearby monastic site (Fisher 2001:61).		
Excavation/Assemblage Discussion: The site was excavated by Balfour (1909: 154-158) who cleared a number of occupation deposits along with a hearth and a midden recording a number of animal bones of pig, sheep, cattle and deer. The dates of the deposit were uncertain. The cave also saw extensive modification along with a constructed revetment wall and stairs leading down into the cave interior (Fisher 2001: 62). The cave is notable for a series of carvings that can be generally split into 2 groups: 1) Inscribed Crosses: A series of simple crosses, including an early Latin cross, most found on the Northern sloping roof. Some crosses may have been contemporary with the second group of Norse runic inscriptions found in the northern face of the cave 2) Norse Inscriptions: A number of runic inscriptions have been recorded thought to date from Norse expedition in 1263 (Fisher 2001: 62). A series of crosses are related with the group of carvings.		
Chronology: The cave is part of a wider context of inscribed crosses found throughout the region in a number of caves, summed up in the discussion of Scoor's Cave (**147**). Many of the crosses relate to a series of pilgrim activity from 500-900 AD dated on parallels of cave activity and cross forms. A number of crosses are thought to be early at St Molaise's Cave namely the Latin cross which was paralleled by Fisher to a 7th century AD example from Northumberland (Fisher 2001: 13) and do not occur in any other cave contexts. Interestingly the association of a number of inscribed inscriptions to a dated Norse expedition suggests that the cave continued to be used in a Christian context up until at least the end of the 13th century AD.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-1300 AD	

Name: King's Cave	**ID:** 152	**HER:** 39229
Bibliography: Harry 1994, 1995; RCAHMS 1971: 289		
Excavation Date: 1909	**Type:** Single Chamber	**Altitude (m):** 3
Cave Description: King's Cave is part of a series of caves cut into sandstone cliffs facing west with extensive views of the coastline. There are cultivation terraces located 0.5km from the cave and a number of hut circles and cairns. The cave is associated with a number of myths including Robert the Bruce and the Irish hero Fionn. The entrance is 4.5 metres wide and 4 metres high oriented to the west. The site has a maximum width of 13.5 metres and is 36.58 metres in length.		
Excavation/Assemblage Discussion: The cave is well known for the series of carvings found throughout the cave. In recent history, the site has been used as a Christian shrine along with being utilised as a school. Limited excavations in 1909 recovered a stratified midden deposit (RCAHMS 1971: 289). **Artwork:** The carvings found in the cave offer a diverse range of forms including Christian crosses and ogham inscriptions. Other carvings include animal designs of interlaced snakes, horse and a tree of life motif. The inscriptions are found throughout the cave with a focus on the North-West wall. **Metalwork:** A decorated bronze fragment that was thought to date to the Early Medieval Period was apparently found in the cave (RCAHMS 1971: 289).		
Chronology: King's Cave can be compared to a number of other caves which contain Early Christian artwork, outlined in the discussion on the chronology of Scoor's Cave (**147**) dating period between c.500-900 AD. The presence of ogham inscriptions and animal art is unique in the region and suggests an earlier use of the cave compared to others in the region.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-900 AD	

Name: Uamh An Ard Achadh	**ID:** 154	**HER:** 273776
Bibliography: CANMORE 273776; Ashmore 2004: 165; Birch et al. 2004; Birch et al. 2005; Birch et al. 2005; Birch et al. 2006; Birch et al. 2007; Birch et al. 2008; Birch et al. 2009		
Excavation Date: 2004-2010	**Type:** Multi-Chamber>100	**Altitude (m):** 67
Cave Description: The limestone cave, also known as High Pastures Cave, is located in a shallow valley. The cave network is 320 metres long with a series of chambers and entered through a sink hole. The cave is also periodically flooded by an underground river network that enters the cave system and was accessed during the Late Bronze Age and Iron Age by a constructed stairwell.		
Excavation/Assemblage Discussion: Excavations at the site focused on the cave, entrance and the platform outside the cave. Below each area of the excavations are discussed and the finds outlined: Cave: Within the cave a series of deposits of animal bone and periwinkle deposits were recorded along with charred plant remains, predominately domestic seed, and metalworking debris. Most of the finds came from the Bone Passage connected by the artificial stairwell. A range of artefacts were recovered from this passage including a Bronze Age socketed axe, a collection of worked antler pins identified as possible tuning forks for a lyre and animal and human remains. The entrance to the cave was modified including a stone-built pavement and staircase (see below). which was the foci for a number of deposits of glass beads, iron brooches, knives and broken saddle querns. At the foot of these stairs a series of deposits were recording including metal pins, quern stones, glass and amber beads and spindle whorls. Cave Platform: Outside the cave a natural depression was excavating revealing a 1.5-metre-deep Iron Age deposit characterised by a series of hearths and a built stone stairway leading into the cave. The stone stairway was sealed with a burial of a female aged between 30-40 along with the remains of a neonate and a prenate. These were laid on top, with the female face down, on top of the filling that closed the stairway to the cave.		

Excavations from immediately around the entrance recovered metalworking debris, fragments of saddle and rotary querns that showed signs of being deliberately broken along with slag and animal bone. Soil analysis of this area, along with that associated with the stairway suggested amounts of burning along with the presence of high amounts of phosphorus, which may indicate the presence of blood. Indeed, the assemblage associated with this area is dominated by butchered remains, including articulated fragments, of pig, cattle, sheep/goat and red deer.

A burnt mound surrounded the entrance along with a wide enclosure demarcated by post holes. Underneath this mound were a series of pits and post holes and a series of prehistoric ard marks and All-Over Cord beaker ware suggest a Bronze Age antecedent use of the landscape. Within the enclosure a series of hearths contained a number of charred wooden fragments including the bridge of a lyre. Metalworking debris was also recovered from this area including fragments of bronze and iron working.

From the series of excavation an unprecedented amount of material was recovered from the cave that is briefly summed up below:

Pottery: Fragments of Bronze Age pottery were recovered including All-Over Cord ware suggesting an antecedent use of the landscape. Iron Age examples include fragments of coarse vessels from contexts in the 'Bone Passage' (Birch et al. 2005: 37). A number of fragments were decorated using incised corden, similar to other Middle Iron Age type pottery (Birch et al. 2005: 46-48).

Metalwork: Fragments of a number of iron and bronze objects were recovered from the excavations including a number of pins and an iron knife. A socketed adze was also found that is typical of earlier Iron Age assemblages (Birch et al. 2005: 43). Evidence of metalworking was also demonstrated through finds of slag, hammer scale and fragments of magnetite recovered from outside the cave entrance. Along with this were examples of fire-crack stones and worked pumice (Birch et al. 2005: 48-49)

Bonework: A large worked bone assemblage was recovered from the site include antler mounts with pegs and bone points (Birch et al. 2006). Included with these was also an antler beam thought to belong to a tool handle (ibid.). A number of the bone points had indents that suggests their use in weaving and textile production (ibid.). Antler pegs were also found within the cave which were identified as tuning pegs for a lyre (Birch et al. 2007).

Other Small Finds: Other finds recorded at the cave site include glass beads, a number of saddle and rotary quern stones and spindle whorls (Birch et al. 2007; Birch et al. 2008)

Animal Remains: The animal assemblage was dominated by pig and many appear to have been killed at a young age (Birch et al. 2005: 56). A large proportion of the bones show signs of butchery (ibid.).

Human Remains: A number of Iron Age inhumations were associated with the upper stairwell (Birch et al. 2005). These included the remains of a female aged between 30-40 and a number of neonatal and perinatal remains.

Chronology: The well preserved deposits and the extent of excavation of Uamh An Ard Achadh is unique in many respects. The single radiocarbon result to be currently published from the cave suggests an early to mid-Iron Age date that is corroborated with the limited diagnostic nature of the pottery (Birch et al. 2005: 46-48).

Radiocarbon Dates:

SUERC-2435	Animal bone 2195±40 BP	**390-160 cal BC**

Suggested Broad Date: IA	**Suggested Date Range:** 600-100 BC

Name: Uamh An Eich Bhric	**ID:**155	**HER:** 295995
Bibliography: CANMORE 295995; Wildgoose et al. 2007, 2008, 2009, 2010		
Excavation Date: 2007-2010	**Type:** Rockshelter	**Altitude (m):** 110

Cave Description: The volcanic basalt rockshelter, is located at the foot of a cliff, facing west. The shelter measures 30 metres long and is 3 metres high.

Excavation/Assemblage Discussion: Rescue excavations at the site focused on a well stratified midden deposit and a series of hearths with 2 trenches being dug recovering the following material:

Pottery: Pottery fragments were recovered in the associated midden, unusual decorated pottery fragments akin to Neolithic sherds were recovered from a secured Iron Age deposit.

Craftworking: Craft material was recovered from the site including evidence for metalworking in the form of ceramic crucibles, mould fragments, slag, a bronze spatter, bronze plate fragments and a bronze plate. Further evidence for high intensive burning at the site was also seen in a slab lined hearth found in the interior of the shelter with vitrified clay. Fire cracked pebbles were also recorded at the site suggesting areas of burning. Along with these there was also wider evidence of crafting with red deer antler in numerous stages of production. A whetstone was also recorded and the lower fragment of a rotary quern.

Animal Bone: The animal bone assemblage from the site is dominated by cattle, which analysis has shown to be older animals. Pigs are also prominent in the assemblage with a number of sheep/goat also been recorded. Other taxa recorded at the site were red deer, dog and wolf along with fish and shellfish.

Human Bone: A fragment of human crania was recovered with a drilled hole (Wildgoose et al. 2009).

Chronology: Two radiocarbon dates were obtained from the exposed midden where two stratified animal bone, from top and bottom, were taken. Thus a suggested range of dates for the formation of the midden between 50-175 AD and a range for the closure of the midden between 80 and 210 AD. Following excavation further radiocarbon dates were obtained from a number of different sources allowing for a better understanding of the chronology of the site. From the results occupation of the site likely occurred between the 50-250 AD collaborating preliminary results from the midden.

Radiocarbon Dates:

SUERC-14657 Upper Bone Midden, animal bone	1870±35 BP	**80-210 cal AD**
SUERC-16630 Lower Bone Midden, animal bone	1905±35 BP	**50-175 cal AD**
SUERC-23643 Trench 1 (1.29) Corylus sp 1	855±35 BP	**70-240 cal AD**
SUERC-23649 Trench 1 (1.02) Corylus sp	1875±35 BP	**60-240 cal AD**
SUERC-24022 Trench 1 (1.29) Bone	1845±35 BP	**70-250 cal AD**
SUERC-23652 Trench 1 (1.03) Betual sp	1910±35BP	**50-220 cal AD**
SUERC-23644 Trench 2 (2.20) Corylus	1865±35 BP	**70-240 cal AD**
SUERC-23645 Trench 2 (2.20) Corylus	1975±35 BP	**50 cal BC- 230 cal AD**
SUERC-23651 Trench 2 (2.20) Corylus	1890±35 BP	**50-230 cal AD**
SUERC-23650 Trench 2 (2.14) Cattle tibia	1925±35 BP	**40 cal BC- 140 cal AD**

Suggested Broad Date: RIA	**Suggested Date Range:** 50-250 AD

Name: Allt Dubhaig	**ID:** 156	**HER:** 21806

Bibliography: Mithen et al. 2006		
Excavation Date:	**Type:** Cave	**Altitude (m):** 126
Cave Description: The cave is part of a system of 3 caves and is 8.0 metres NW-SE by 6.0 metres and around 2.5 metres high.		
Excavation/Assemblage Discussion: Isolated Iron Age sherds were recorded southeast of the cave entrance on top of a turf mound.		
Chronology: With the only record available being the presence of sherds, only a broad date can be suggested for the use of All Dubhaig cave. Pottery found in other caves, namely the handmade coarse ware known as 'Dunagoil Ware' thought to be in use from the Early Iron Age to the early first millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC-300 AD	

Name: Uamh Na Mine	**ID:** 158	**HER:**38211
Bibliography: CANMORE 38211; Ruffel 1966		
Excavation Date:	**Type:** Cave	**Altitude (m):** 30
Cave Description: This fissure cave is part of a group of 3 caves along a cliff consisting of a chamber with four sub-chambers. At the mouth of the cave , 2 ring marks are present on an isolated boulder (RCAHMS 1984: 62).		
Excavation/Assemblage Discussion: The cave has not been excavated and the only record available is a letter written to the CBA in 1966, which discussed the presence of a midden near the cave entrance and along with a number of worked bones and pottery fragments, an Iron Age spindle whorl was recorded.		
Chronology: Without any further corresponding finds only a broad date can be given to the site.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA (?)	**Suggested Date Range:** 800 BC-600 AD	

Name: Ardmore Point	**ID:** 159	**HER:** 42389
Bibliography: CANMORE 42389; Coles 1958; Royal Commission on the Ancient and Historical Monuments of Scotland 1978: 19		
Excavation Date: 1958	**Type:** Rockshelter	**Altitude (m):** 15
Cave Description: The rockshelter is located above the base of a cliff on the northwest side of the Hill of Ardmore. The cave mouth measures 4.7 metres wide and 2.5 metres high with the cave being 4.5 metres deep.		
Excavation/Assemblage Discussion: The cave was investigated by John Coles in 1958 who noted an occupation deposit around 1.3m deep with carbonised wood and shells. A stone-lined hearth was recorded with a large amount of charcoal (Coles 1958). An Iron Age sherd was recorded by Coles along with a number of deer bones (Coles 1958; RCAHMS 1978: 19).		
Chronology: Pottery fragments have been recorded at a number of cave sites in the region and can only be assigned a broad chronology.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA	**Suggested Date Range:** 800 BC-600 AD	

Name: Rubh' an Dunain	**ID:** 160	**HER:** 11025
Bibliography: CANMORE 11025; Scott 1934		
Excavation Date: 1932	**Type:** Single Chamber	**Altitude (m):** 34
Cave Description: The cave is situated in a vertical rock face, 500 metres east of an Iron Age 'promontory semi-broch' (Mackie 2007:816). The cave is 4.57 metres wide and 2.74 meters deep orientated towards the west. Scott (1934: 200) notes that water often runs into the back of the cave through rock falls during rain. He also identified a group of hut circles at the slope of the cliff suggesting that this was "the hamlet whose successive generations of stone- and iron-workers came up to work in the cave" (Scott 1934: 202).		
Excavation/Assemblage Discussion: Scott's excavation focused on the centre of the opening outside the cave along with the interior. He identified layers within 5 separate areas and outlined an occupation sequence: 1) Use above the sea sand floor with Bronze Age beaker pottery fragments and stone knapping debris lead Scott to suggest that the cave was utilised as a "stone-knappers workshop" (Scott 1934: 201) 2) Above this a smelting furnace and iron slag was recovered along with Early Iron Age pottery along with some pottery thought to date to the first few centuries AD. Most of the slag came from Scott's area IV at the centre front of the cave within the shelter suggesting that most of the iron working occurred within this area (Scott 1934: 205). Some slag showed sign of being used in glass production. 3) Use by "a shepherd or a gipsy" (ibid.) is recorded in fragments of metal artefacts The Iron Age assemblage was thought to comprise: **Pottery**: A range of pottery was recorded by Scott dated between the Neolithic and Iron Age. Approximately 8 pieces of pottery were assigned to the Iron Age based on analysis of previous excavations. The sherds were recovered from areas I and II towards the rear of the cave and from stratas A, B, C. **Wooden Object:** A small charred piece of pine wood was found related to the hearth in areas II and IV cutting from Strata B to C. **Metalwork:** Iron slag was found immediately around the hearth in strata layers B and C and thus thought to be contemporary with the hearth. Some fragments of slag were recorded in upper layers that were thought to be evidence of recent disturbance (Scott 1934: 203).		
Chronology: The chronology of the cave has been discussed by Mackie (2007: 817), who suggests the cave was in use during the Early Iron Age, tentatively linked to occupation at the nearby fort. Mackie (ibid.) suggests such use based on the presence of an Early Iron Age calinated rim sherd that has been dated to the 8th to 6th centuries BC based on finds from Iron Age Orkney. As realised by Scott (1934) the cave has seen some disturbance likely from animal burrowing, some of it antiquated as evidenced in the burrow cut underneath the hearth (Scott 1934: 202). The so-called Early Iron Age pottery recorded at the site was predominately found in stratas B and C. The hearth feature was found to be dug into strata C and thought to be contemporary with layer B. For Scott (1934: 204) the hearth and related quantities of slag allowed him to identify the feature as a furnace paralleled to that found in Constantine's Cave, Fife (**138**, see Region 4). Given the disturbance however the calinated rim sherd associated with the hearth was not recovered from a secure context. Whilst it is therefore possible that ironworking occurred in the cave during the Early Iron Age, the evidence is unclear and can only be suggested based on broader parallels of iron working in caves found on Skye such as at Uamh an Eich Bhric (**155**) and Uamh an Ard Achadh (**154**).		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 800-300 AD.	

Name: An Corran Rockshelter	**ID:** 210	**HER:** 11349
Bibliography: Saville et al. 2012		
Excavation Date: 1993-4	**Type:** Rockshelter	**Altitude (m):** 48

Cave Description: An Corran is a rockshelter located on a basaltic lava flow on a projecting headland off the northern coast of Skye. The cave lies on a ledge facing east only 20 metres away from the sea and near a small freshwater spring to the north. The rockshelter ledge extends around 6 metres from the rock face with a width of 16 metres.

Excavation/Assemblage Discussion: Rescue excavations focused on the centre of the ledge from the cliff face. The stratigraphy of the site contained numerous layers of shell with the possible Iron Age find being found on a beach cobble surface labelled as context 17 (Saville et al. 2012:13) along with this was also an elaborate bone point that was dated to the Iron Age.

Metalwork: The copper alloy pin was recorded on the surface of context 17 that was thought to tentatively represent an occupation surface (Savile et al. 2012: 12). Analysis of the pin (Cowie 2012) suggested parallels to swan's-neck and ring-headed pins found in Early Iron Age contexts in Britain. The pin had seen extensive use with some damage.

Bonework: An elaborate roe deer bone point was found in context 36, below context 17, radiocarbon dated to 336- 78 cal BC (Saville et al. 2012: 80).

Chronology: The 2 indicators of Iron Age use of An Corran Rockshelter are seen in the bronze pin and the bone point. The Bone point has a radiocarbon date of 336-78 cal BC but crucially was recorded in a context below that of the bronze pin. In his analysis of the artefact Cowie (2012) discusses a range of parallels including the deposition of pins at Llanmaes in Glamorgan dating between c. 800-400 BC, which allowed for a Late Bronze Age or Iron Age date to be suggested for the pin form. Indeed, it is thought that the swan's-necked pin formed part of the origin of the sunflower pin recorded in a number of Scottish examples occurring from c.800-700 BC, namely in the East (Eogan 1974, 77f; Harding 2006: 62). Simple swan's-neck pins however are rare in Scottish contexts and the current form of the pin is unique in Scotland (Saville et al. 2012: 80).

The suggested date of the pin somewhere between c.800-400 BC and the later bone point radiocarbon dated to 336-78 cal BC, shows the disrupted nature of the deposits recorded at the site. Therefore, a clear stratigraphic sequence cannot be suggested. Nevertheless, what the 2 dates do present is two potential phases of use of the site, all be it fleeting glimpses of activity. Other artefacts recorded at the site, including the wider collection of bone points may also be Iron Age in date although this cannot be proven given the poor stratigraphic sequence and generic nature of the assemblage.

Putting An Corran in the broader Iron Age world of Skye, does however, help outline a chronological sequence of Iron Age use. A number of caves on the island, namely Rubh' an Dunain (**160**), Uamh An Eich Bhric (**155**) and Uamh An Ard Achadh (**154**), present evidence of Iron Age use. Interestingly, the radiocarbon date from the bone point at An Corran is broadly contemporary with that recorded at Uamh An Ard Achadh indicating a period of use between 400-100 BC. At Uamh An Eich Bhric a later date of use beginning around the turn of the 1st millennium AD is represented in the radiocarbon dates, with a chronological range of c.50-250 AD. At Rubh' an Dunain a calinated rim sherd of 8th to 6th century date was found suggesting use during the Early Iron Age (Mackie 2007: 817). A chronology of c.800-50 BC given the early date of the pin and the later bone point which would fit in well within the broader context of cave use on Skye.

Radiocarbon Dates:

AA-29312	context 36, roe deer bone point	2045±60 BP	**336-78 cal BC**

Suggested Broad Date: IA	**Suggested Date Range:** 800-50 BC

Name: Smugglers' Cave	**ID:** 233	**HER:** 40160
Bibliography: CANMORE 40160; Fisher 2001:65		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 6
Cave Description: The red sandstone cave is located at the base of a cliff and is 60 metres west of the current shoreline. The cave measures 4.8 metres from E-W with a width of 1.4 metres with a reported height of around 1.7 metres.		
Excavation/Assemblage Discussion: On the northern wall there are a number inscribed early Christian crosses.		
Chronology: The simple equal armed form of the crosses is similar to a number of cave contexts discussed in the chronologically summary of Scoor's Cave (**147**) thought to date between 500 and 900 AD. The carvings in Smugglers' Cave may have been part of a similar tradition on Holy Island that occurred in St Molaise Cave that saw a series of inscriptions between 500-1300 AD although no runic text is found to suggest a use of the cave during the Norse period favouring a date of use between 500-900 AD.		
Radiocarbon Dates:		
Suggested Broad Date: EM	**Suggested Date Range:** 500-900 AD	

Name: Crowlin 1	**ID:** 234	**HER:** 138761
Bibliography: Ashmore et al. 2009: 7,8		
Excavation Date: 1999-2000	**Type:** Rockshelter	**Altitude (m):** 6
Cave Description: Crowlin 1, is a rockshelter facing southwest and is located on the shoreline approximately 10 metres away from the sea. The site is 10 metres long and 25 metres wide with a maximum height of 7 metres.		
Excavation/Assemblage Discussion: Crowlin 1 was surveyed during the Scotland's First Settlers project and a number of radiocarbon samples were taken away from a large compact midden (Ashmore et al. 2009: 7, 8).		
Chronology: Radiocarbon samples from the midden suggest a long duration of use beginning in the early first millennium AD.		
Radiocarbon Dates:		
OxA-9251 Spit 11 central lower midden layer birch charcoal 1799±37		**120-340 cal AD**
OxA-9250 Spit 4 central midden layer birch charcoal 1296±39		**650-810 cal AD**
OxA-9252 Spit 6 central midden layer birch charcoal 477±35		**1400-1480 cal AD**
OxA-9253 Spit 5 central midden layer deer bone point 316±39		**1480-1660 cal AD**
Suggested Broad Date: RIA; EM	**Suggested Date Range:** 120-900 AD	

Name: Uamh Righ	**ID:** 235	**HER:** 38281
Bibliography: CANMORE 38281; Mercer 1978		
Excavation Date: 1930s; 1971	**Type:** Multi-Chamber	**Altitude (m):** 9

Cave Description: Uamh Righ is located inland on the North of Loch Tarbert. The cave entrance, orientated towards south, is 4.6 metres wide which leads to a 23 metre long chamber and a number of revetments.

Excavation/Assemblage Discussion: Excavations by Mercer (1978: 48) opened up 45 sq. metre area of the cave extending from the outside into the main chamber. A series of trenches were dug outlining a complex stratigraphy impacted by the movement of the sloping talus, specifically outside the cave in trenches E & F. These trenches revealed unstratified deposits of talus with signs of occupation through layers of charcoal, shell and bone. Further into the cave the occupation deposits were more compact with layers of shell, bone and charcoal suggesting a series of occupation noted in trenches A and B extending into the cave. Signs of talus and rock fall were also recorded in the excavations with trench A reaching the old marine basement level at 0.90 metres whilst the occupation layers in trench B were much deeper at a level of 1.37 metres, dispersed with rock debris (Mercer 1978:48-49). Finds from these deposits equate with a variable amount of movement in the caves with evidence of a long duration of use up until the Modern period.

Stonework: A large lignite arm ring, 9cm in diameter and 6mm thick, was found in two fragments at the base trench A, located at the entrance to the cave. Based on local parallels this was dated by Mercer (1978:54) to the Iron Age.

Pottery: Most of the sherds recovered during excavation were considered Iron Age in date. Twenty-five sherds from trench B and C were thought to come from one pot, further showing the displacement of the talus material in the cave. These sherds were coarse with a grey exterior contrasting with a black to grey inside with green hornblende schist inclusions (Mercer 1970: 54). This form of pottery was compared by Mercer (ibid.) to the "coarser variety of pottery recorded in the lower levels of Dun Mor Vaul. Further to these were 3 sherds of fine medium brown, grey inside pottery. In trench F 7 sherds of smooth pottery were found with incised dashes attributed by Mercer (1970: 55) to the Late Iron Age or Medieval period. The pottery found at the site was analysed by 2 specialists at the time of excavation (Mercer 1978: 54), both of whom suggested an Iron Age date but differed on whether the material was from the Early or Late Iron Age. This coarse ware was likely Mackie's 'Dunagoil Ware' found predominately in the pre broch phases but was also present during the main occupation layers of the broch. Such a pottery form has been recorded at other sites including earlier levels at Dun Vulan (Parker-Pearson et al. 1999; MacKie 2007: 1114-1118) and also at nearby Cladh Hallan (Mackie 2007: 1132-1133) between 700-400 BC. Dunagoil Ware has also been recorded as being found in a pit infill for a hearth in Ellary Boulder Cave (**144**), where a radiocarbon date indicated a date of 360 cal BC- 20 cal AD was obtained. The broad nature of the ware does however necessitate a broader chronology of use throughout the 1st millennium BC into the early 1st millennium AD.

Glass: Two yellow beads were recorded in trenches B & C, which were thought to date to the Iron Age (Mercer 1978: 54). These were identified as yellow annular beads of Guido Class 8 (Ritchie et al. 1981: 219), which can be dated between c.300-100 BC (RCAHMS 1984: 20). Similar yellow annular beads are common on a number of Hebridean sites including Dun Mor Vaul, Tiree in contexts dating between c.200 BC- 300 AD (Mackie 1974: 147ff), Phase 3 at Dun Ardtreck (Topping 1987: 87; Mackie 2007: 826), Dun Cul Bhuirg, Iona (Mackie 2007: 1013) and Dun Troddan on the West Coast of Aberdeenshire (Mackie 2007: 861). Other types of bead do occur in cave contexts, including a damaged Guido Group 7 bead, dating between c.100 BC- 300 AD at Ellary Boulder Cave (**144**) and 2 examples found at Sands Rockshelter (**243**). From the evidence available it would appear that glass beads of similar types were occurring in Inner Hebrides broch deposits from around c.100 BC-400 AD associated with broch deposits.

Bonework: Bone tines and pins were recorded from the excavations, however given the apparent disturbance to the cave earth, these could not be dated. With the pottery, a number of antler tines and unprocessed and worked antler, were found and may possibly date to the Iron Age. **Animal Bone:** From the site a large collection of fauna was recovered including terrestrial mammals, bird and fish. It is difficult however to ascribe a date to such an assemblage although material found with the pottery and lignite arm-ring include wolf, whale, seal and red deer. **Artwork:** On the cave walls there were approximately100-150 Latin crosses (Mercer 1978: 44). These were concentrated in the northeast corner of the cave chamber, above Mercer's trench B. However, these are unlikely to be Early Christian in date, but rather belong to a Franciscan Mission which used the caves on the island during a period of persecution (Mercer 1978: 68).
Chronology: Evidence of Iron Age activity at Uamh Righ is represented in the finds of beads, the lignite arm-ring and the pottery. Such material can be compared to similar finds recorded at possible contemporary sites in the region. Interestingly 5 yellow annular glass beads were found in contemporary contexts of Dun Mor Vaul's Phase 3a in which the lignite arm-ring was recovered (Mackie 2007:1002) as well as small amounts of Dunagoil Ware (Mackie 1997: 168). The material from Uamh Righ is similar to these occupation deposits from the primary broch phase- a period between 100 and 300 AD. However, given the unclear stratigraphy of the cave it is unclear whether use can be defined to a single phase during the Iron Age and as such necessitates a broader chronology of use between 100 BC-400 AD, based on the presence of beads and the lignite arm-rings. It must be noted however that the cave may have been in use during the early 1st millennium BC given the presence of Dunagoil Ware which is found in a number of Early Iron Age contexts (see above).
Radiocarbon Dates:

Suggested Broad Date: IA/RIA	**Suggested Date Range:** 100 BC-400 AD

Name: Church Cave	**ID:** 236	**HER:** 76458
Bibliography: MacSween 2003a; MacSween 2003b; Heald et al. 2009: 3		
Excavation Date: 1999-2000	**Type:** Single Chamber	**Altitude (m):** 40
Cave Description: Church Cave, oriented towards the southeast, is located at the base of a rock cliff, 30 metres from the current shoreline. The cave is 28 metres in length and 17 metres wide with a height of 4 metres. The site was used as a Church in the 18th and 19th century.		
Excavation/Assemblage Discussion: The cave was surveyed as part of the Scotland's First Settlers Project. A **c**opper alloy rivet made of a gunmetal alloy was found in test pit 2 and may date to the Mid to Late Iron Age (Heald et al. 2009: 3). From test pit 2 4 sherds were recorded with 1 sherd coming from the top context of the test pit, whilst 3 sherds along 1 one with a chevron pattern was recorded (MacSween 2003a: 2).		
Chronology: The undiagnostic nature of Hebridean pottery makes it difficult to ascribe a date to the use of Church Cave. However, the incised chevron decoration described by (MacSween 2003a: 2) may be likened to Iron Age examples including forms found at Dun Telve (Mackie 2007: 856). Decorated sherds of 'Vaul Ware' are also decorated with a chevron pattern, beginning from the 7th or 6th centuries BC (Mackie 2007: 1007) at Dun Mor Vaul. The chronology of the pottery is more complex however being recorded in the lower phases and later broch stages and was thought to outlast other forms of pottery at the site (Mackie 1974: 158, 1997: 160-164). Thus being associated with a wide chronology from around c.800 BC-400 AD (Topping 1987: 70; Mackie 1997: 160-164). The gunmetal alloy rivet is possible 1st millennium AD in date, although such rivets cannot be ascribed a specific period. Therefore, from such an assemblage Iron Age activity at Church Cave can only be dated to a general time frame.		
Radiocarbon Dates:		

Suggested Broad Date:	**Suggested Date Range:** 800 BC-600 AD

Name: Toscaig 2	**ID:** 237	**HER:** 192539
Bibliography: Clarke 2003: 1; Wickham-Jones 2003; Ashmore et al. 2009: 5		
Excavation Date: 1999-2000	**Type:** Single Chamber	**Altitude (m):** 8
Cave Description: The cave is located at the base of sea cliffs oriented west, and 25 metres away from the sea. The site is 15 metres deep and 15 metres wide.		
Excavation/Assemblage Discussion: Toscaig cave was surveyed as part of the Scotland's First Settlers Project (Hardy et al. 2009). Test pitting recovered a series of occupation deposits (TP1C2017) from which animal bones and shell were recovered (Ashmore et al. 2009: 5). Test pitting of occupation deposits outside the cave also provided two radiocarbon dates from a laminated occupation layer (TP1C2025). A bevelled pebble and possible whetstone were also recovered from the test pits (Clarke 2003: 1)		
Chronology: From the radiocarbon results it is possible to ascribe a period of activity in the cave during the Early to Middle Iron Age.		
Radiocarbon Dates: AA-50667 TP1C2025 ungulate bone 2095±40 **350 cal BC- 10 cal AD** AA-50668 TP1C2025 deer bone 2055±35 **170 cal BC- 30 cal AD** AA-50669 TP1C2017 hazelnut shell 2195±45 **390-100 cal BC**		
Suggested Broad Date:	**Suggested Date Range:** 400 BC- 30 AD	

Name: Toscaig 9	**ID:** 238	**HER:**157978
Bibliography : Wickham-Jones 2003 ; Ashmore et al. 2009: 7-9		
Excavation Date: 1999-2000	**Type:** Rockshelter	**Altitude (m):** 6
Cave Description: Toscaig 9 is a rockshelter located on the foot of a sea cliff on a slope 15 metres away from the current coastline. The site, orientated towards the west, is 10 metres long, 6 metres wide and has a maximum height of 4 metres.		
Excavation/Assemblage Discussion: Toscaig 9 was surveyed as part of the Scotland's First Settlers project (Hardy et al. 2009). A large midden made of limpets and periwinkles was found and a thick occupation layer of ash with shell (TP1C4113) provided birch charcoal that was used for radiocarbon dating. From a separate context of layered ash and shell (TP1C4112) a cow patella was removed for dating along with a number of burnt hazelnut shells (Ashmore 2009: 7).		
Chronology: Compared to its neighbour, Toscaig 2 (**237**), Toscaig 9 radiocarbon dates such a period of use later in the Early Medieval period with a period of later use in the Medieval period. Care must be taken however in ascribing a date from wood charcoal and a parallel result from the same midden context revealed a later date. It is therefore possible that the occupation layer where the birch charcoal was obtained dates to a later period. What is interesting at Toscaig 9 is the later date of used compared to Toscaig 2 suggesting antecedent usage of the local cave environment.		
Radiocarbon Dates: AA-50674 TP1C4112 hazelnut shell 350±30 **1460-1640 cal AD** AA-50675 TP1C4112 hazelnut shell 325±35 **1480-1660 cal AD** AA-50676 TP1C4112 cow patella 525±35 **1380-1450 cal AD** AA-50677 TP1C4113 birch charcoal 1255±95 **630-990 cal AD** AA-50678 TP1C4113 birch charcoal 885±35 **1030-1240 cal AD**		
Suggested Broad Date: EM (?)	**Suggested Date Range:** 600-1200 AD.	

Name: Creag na Uamha	**ID:** 239	**HER:** 11756
Bibliography : Wickham-Jones 2003 ; Ashmore et al. 2009: 6,7		
Excavation Date: 1999-2000	**Type:** Single Chamber	**Altitude (m):** 5
Cave Description: The sea cave is located on a rocky shore from the coastline, oriented southwest. The cave is 15 metres long, 4.5 metres wide and unroofed until 5 metres into the interior (Ashmore et al. 2009: 5). It is 30 metres away from the current coastline.		
Excavation/Assemblage Discussion: The cave was surveyed as part of the Scotland's First Settlers project uncovering a shell rich midden (TP2C2003) near the eastern side of the cave, a radiocarbon sample was taken (Ashmore et al. 2009: 5). Further samples were obtained from a shell midden behind an enclosure wall (TP1C1002spit8).		
Chronology: From the radiocarbon date available it is possible to assign a period of midden build up to the Early to Middle Iron Age.		
Radiocarbon Dates: AA-50679 TP1C1002spit8 hazel charcoal 625±35 **1290-1410 cal AD** AA-50680 TP1C1002spit8 willow charcoal 620±35 **1290-1410 cal AD** AA-50681 TP2C2003 ungulate rib 2165±45 **370-50 cal BC**		
Suggested Broad Date: IA	**Suggested Date Range:** 400-0 BC	

Name: Allt na Criche	**ID:** 240	**HER:** 192306
Bibliography : Wickham-Jones 2003 ; Ashmore et al. 2009: 6,8		
Excavation Date: 1999-2000	**Type:** Boulder Cave	**Altitude (m):** 50
Cave Description: Allt na Criche is cave made of fallen boulders oriented towards the north on a rocky slope, 150 metres away from the present shoreline. The cave is 4 metres long and 4 metres in maximum width and height.		
Excavation/Assemblage Discussion: The platform located outside a series of sandstone gullies and rockshelters was surveyed as part of the Scotland's First Settlers project (Hardy et al. 2009). A charred hazelnut shell was recovered from a layer of periwinkles (TP2C6823). A test pit in a nearby rockshelter also recovered a charred hazelnut shell underneath a shell midden (TP2C6814) and another shell from the same context gave a later date (Ashmore et al. 2009: 8).		
Chronology: The dates available for Allt na Criche suggest a period of use of the site similar to other caves in the area at Toscaig (**237**), Uamh An Ard Achadh **(154**) and Creag na Uamha (**239**). It is important to note however that the shell layer found on the platform outside the rock shelter (TP2C6823), whist likely to date between c.350 BC- 50 AD, may have suffered from disturbance. However, the earlier date concurs with the result obtained from the midden within the rockshelter.		
Radiocarbon Dates: AA-50685 TP2C6823 hazelnut shell 2060±40 **180 cal BC-30 cal AD** AA-50687 TP2C6814 hazelnut shell 2095±40 **350 cal BC-10 cal AD** AA-50686 TP2C6823 hazelnut shell 325±35 **1470-1640 cal AD**		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 350 BC- 50 AD	

Name: Camusteel Bay 2	**ID:** 241	**HER:** 192542
Bibliography: ; Ashmore et al. 2009: 5,7; Wickham-Jones 2003		
Excavation Date: 1999-2000	**Type:** Rockshelter	**Altitude (m):** 8
Cave Description: The cave, or rockshelter, is located part way up a cliff face oriented south. The site is 3 metres long, 5 metres wide and has a maximum roof height of 2 metres. The site is 8 metres away from the present shoreline.		
Excavation/Assemblage Discussion: The cave was surveyed during the Scotland's First Settler project (Hardy 2009). A shell midden (TP1C7717) was excavated in the western part of the cave containing stratified layers from which 2 pieces of hazelnut shell were taken for radiocarbon dating (Ashmore et al. 2009: 5). Test pitting also took samples from an excavation floor (TP1C7715) including a hazelnut shell and a pig tibia (Ashmore et al. 2009: 7).		
Chronology: Radiocarbon dates from the shell midden (TP1C7717) point to a long duration of midden material building with charcoal suggesting a potential period of use in the cave between 800-200 cal BC. Compared to the other results in the cave, which point to an Early Medieval use of the cave, the result is erroneous. It is possible that the cave saw use during the Early Iron Age or the wood could be old and burnt at a later date.		
Radiocarbon Dates: AA-50688 TP1C7715 hazelnut shell 1205±40 **690-960 cal AD** AA-50689 TP1C7715 pig tibia 1130±35 **780-1000 cal AD** AA-50691 TP1C7717 hazel charcoal 1235±35 **680-890 cal AD** AA-50690 TP1C7717 charcoal 2365±55 **800-200 cal BC**		
Suggested Broad Date: IA; EM	**Suggested Date Range:** 800-200 BC; 680-1000 AD	

Name: Loch A Sguirr	**ID:** 242	**HER:** 158002
Bibliography: MacSween 2003b: 4; Ashmore et al. 2009: 7		
Excavation Date: 1999-2000	**Type:** Rockshelter	**Altitude (m):** 25
Cave Description: The rockshelter is located on a rocky outcrop, cut in a vertical rock face and is 50 metres from the sea, facing west.		
Excavation/Assemblage Discussion: The test pit survey of the rockshelter uncovered a stratified midden towards the back of the cave (Ashmore et al. 2009: 7). Three fragments of pottery were also recovered from the higher levels of the midden (spit 8).		
Chronology: The radiocarbon date from the high levels of the midden coupled with the fragments of Iron Age pottery suggest a mid-Iron Age date for the site. A broader date however must be taken into account because of the old wood effect.		
Radiocarbon Dates: OxA-9254 Spit 6 midden layer birch charcoal 2055±39 **170 cal BC- 50 cal AD**		
Suggested Broad Date: IA	**Suggested Date Range:** 170 BC- 100 AD	

Name: Sand Rockshelter	**ID:** 243	**HER:** 157986
Bibliography: MacSween 2003b: 7; Hardy 2009; Heald et al. 2009		
Excavation Date:1999-2000	**Type:** Rockshelter	**Altitude (m):** 42

Cave Description: Sand Rockshelter is a large rockshelter found on a rocky slope orientated towards the east, 500 metres from the modern shoreline. The site is 10 metres long and 20 metres wide.

Excavation/Assemblage Discussion: Sand Rockshelter was excavated during the Scotland's First Settlers project with 11 test pits focused in and around the cave along with 2 L-shaped trenches focusing on the midden material outside the rockshelter entrance (Hardy 2009: 1). Excavations on the outside platform of the rockshelter revealed a stratigraphic sequence of:

Topsoil and turf: In areas the midden deposit was found to encroach on the topsoil contexts with evidence of animal burrowing particularly in the western half of trench A outside the rockshelter (Hardy 2009: 3).

Shell Midden: From the excavated contexts it is clear that there was an amount of slumping of the midden towards the east. The primary shell midden was thought to date to the Mesolithic period with a range of flint material recovered (Hardy 2009: 4). The midden was thought to date to the Mesolithic period given the amount of flint material recovered. A glass bead was also recovered in the shell midden along with iron slag.

Cracked Stone and Sandy Layer: Overlaying the eastern end of the midden was a sandy layer including cracked stone, which had thought to be exposed to high temperatures (ibid.).

Casting Waste/Slag: Casting waste, in the form of 2 irregular droplets of leaded bronze (Heald et al. 2009:1) and slag was recovered from a number of contexts and areas of the site. The casting waste was found in grids A2B and A1B of trench A (Hardy 2009; Heald et al. 2009: 1), in top soil (context 1/2) and the sandy layer with cracked stone context (context 17), towards the eastern end of the midden. Slag, along with part of a hearth bottom, was recovered from context 29 in a similar region to the bronze working evidence. Further slag was also recovered from B2 from the midden along with from the top soil (Context 1) of B3 of trench B (Hardy 2009). Most of the slag and casting work came from higher spits with a focus between the junctions of trench A and B (Heald et al. 2009: 2).

Glass Beads: Three glass beads were recovered: 1 example from the eastern sloping layer of crack stone and sand from Trench 1 and two more from top soil from grids B2 and B3 from trench B (Hardy 2009: 4)- B2 being on top of the midden whilst B3 extends parallel to the rock overhang of the shelter. All 3 globular beads are translucent blue and are similar to Guido's type 7 (Heald et al. 2009: 2). The form has a date range from c.100 BC- 300 AD and has been found locally at Dun Ardtreck (Mackie 2007: 826; Heald et al. 2009: 2), Dun Beag (Mackie 2007: 830) and also in a similar cave context at Ellary Boulder Cave (**144**). Relying on typologies for such a bead however is difficult given the exotic nature of the find (Topping 1987: 87) and the date of glass beads in settlement contexts has been discussed in the chronological outline for Ellary Boulder Cave (**144**). Generally, such beads can be ascribed a date between c.100 BC-400 AD based on the appearance of beads in primary broch phases.

Pottery: A number of sherds with 10% rock inclusions were recorded during the excavations, coarse pottery was also recovered primarily from areas from trench B from the central midden and parallel to the rock overhang (MacSween 2007: 9).

Chronology: From the limited evidence available of activity in Sand's rockshelter, dating cave-use relies upon the deposit of glass beads. Based on references to other cave deposits and local sites these may been used between c.100 BC-400 AD. It is also possible that the metalworking deposits also dated to this period.

Radiocarbon Dates:

Suggested Broad Date: IA/RIA	**Suggested Date Range:** 100 BC-400 AD

Name: Allt na Uamha	**ID:** 244	**HER:** 11755
Bibliography: MacSween 2003b: 1		
Excavation Date: 2000	**Type:** Boulder Cave	**Altitude (m):** 85
Cave Description: The cave is located on a rocky slope, at the base of a cliff and oriented towards the northwest. It is 3 metres long with a maximum width and height of 3 metres. The cave is formed from a number of fallen boulders		
Excavation/Assemblage Discussion: A series of test pits were dug in the cave as part of the Scotland's First Settlers project (Hardy et al 2009). From the 2 contexts of test pit 1 14 sherds of pottery were recorded that could be Iron Age in date (MacSween 2003b: 1).		
Chronology: The sherds recovered from Allt Na Uamha are typical of Iron Age forms, however, given the hazards of pottery typologies in the region an exact date cannot be ascribed.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA	**Suggested Date Range:** 800 BC-600 AD	

Name: Meall na Hairdie	**ID:** 245	**HER:** 240678
Bibliography: MacSween 2003b: 4f		
Excavation Date: 2002	**Type:** Single Chamber	**Altitude (m):** 2
Cave Description: The sea cave, orientated to the southwest, is located on the foot of old sea cliffs 5 metres from the current shoreline. The site is 8 metres long and 5 metres wide with a roof height of 5 metres. The cave is associated with a number of other caves that were surveyed as part of the Scotland's First Settlers Project (Hardy et al. 2009).		
Excavation/Assemblage Discussion: The site was surveyed using test pitting as part of the search for Mesolithic remains (Hardy et al. 2009). From Test pit 2 a fragment of pottery made of a sandy clay fabric was recorded and thought to be Iron Age in a date. A limpet and periwinkle midden was also found in the site.		
Chronology: Given the nature of Iron Age pottery in the region it is difficult to assign a date to the pottery recovered at Meall Na Hairdie and only possibly Iron Age activity can be suggested.		
Radiocarbon Dates:		
Suggested Broad Date: IA (?)	**Suggested Date Range**: 800 BC- 600 AD	

Name: Uamh Úr	**ID:** 246	**HER:** 37881
Bibliography: Grieve 1880; Grieve 1883; PSAS 1967: 328 ; Dawson et al. 2007: 21		
Excavation Date: 1879	**Type:** Multi-Chamber	**Altitude (m):** 30
Cave Description: Uamh Úr, or the Crystal Spring Cavern, is the northerly cave in a set of 3 caves in the side of a cliff face oriented towards the northeast. The cave entrance is 5.94 metres wide and was described by Grieve (1880: 319) to have been 9.14 metres higher than the cave floor chamber, accessible by a slope of fallen rock. The inner chamber is 29.11 metres long by 15.54 metres wide at its broadest point with a height of 4.72 metres. In the southwest corner of the cave a spring was found surrounded by a "beautiful cistern of stalagmite" (ibid.). The cave also has a further array of chambers measuring to a total length of 70.1 metres with 3 chambers.		
Excavation/Assemblage Discussion: A "cutting" (Grieve 1880: 322) was made at the entrance to the cave to the depth of 83.36 cm, which was characterised by a series of thin layers of charcoal, bones and stone dispersed with a layers of burnt clay. Finds described by Grieve (1880, 1883) include: **Animal Bone:** A large amount of animal bone was recorded at the site which including a mix of cow, horse and sheep along with small numbers of bird, fish and shellfish (Grieve 1880: 323). **Pottery:** A 'complete' pot, ascribed to the Early Iron Age was found from the cave (PSAS 1967: 328; Dawson et al. 2007: 21). **Metalworking**: Possible evidence of iron work was recorded (Dawson et al. 2007: 21).		
Chronology: The pottery recorded from Uamh Úr has been attributed to the Early Iron Age and is the only indicator available for activity at the site.		
Radiocarbon Dates:		
Suggested Broad Date:	**Suggested Date Range:** 800-200 BC	

Name: Kilchoman	**ID:** 247	**HER:** 37453
Bibliography: Whittaker 1956; RCAHMS 1984: 18; Hardy 2002: 19		
Excavation Date: 1954,1956, 2002	**Type:** Single Chamber	**Altitude (m):** 35
Cave Description: The cave entrance measures 4.5 metres wide and 2.5 metres high with the cave being 6.5 metres in length.		
Excavation/Assemblage Discussion: Two trial trenches were dug in the centre and parallel to the cave entrance (Whittaker 1956: 9). From the centre of the cave a layer of ash was reported 70 cm down. A flint arrowhead was found inside the cave. The excavation outside the cave produced more material with fragments of iron at 20 cm depth, along with mineralised bones of predominately sheep/goat 70 cm down. Whittaker (1956: 10) also reported the presence of a slab lined cist with pieces of red fabric pottery with a criss-cross pattern. A number of worked steatite fragments were found underneath the cist. The cave was test pitted which uncovered charcoal and lumps of furnace bottom suggesting evidence of ironworking (Hardy 2002: 18).		
Chronology: A date for the usage of Kilchoman cave cannot be suggest. However, the presence of charcoal and evidence of ironworking recovered from the site is interesting given parallel evidence of metalworking during the Iron Age in other caves in the region.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA/EM (?)	**Suggested Date Range:** 800 BC- 500 AD	

Name: Meikle Cloak Cave	**ID:** 248	**HER:** 178142
Bibliography: Newall 1961		
Excavation Date:	**Type:** Rockshelter	**Altitude (m):** 126
Cave Description: The cave, or rockshelter, is located beneath Cloak Water about 1.2 metres off the ground and reached by a narrow ledge.		
Excavation/Assemblage Discussion: Two quern stones were recovered from the cave, which were found in the south end of the rockshelter that extends from both banks of the waterfall.		
Chronology: With only isolated finds it is difficult to ascribe a chronological context to Meikle Cloak Cave. Activity may have taken place during the Ion Age, however without further information on the quern stones, such a date can only be tentatively suggested.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC-600 AD	

Name: Inchmarnock, Site 9	**ID:** 249	**HER:** 300178
Bibliography: Lowe 2001		
Excavation Date: 2001	**Type:** Rockshelter	**Altitude (m):** 6
Cave Description: The rockshelter, is located on a cliff face above a raised beach, with views across the southwest. The cave is 7.5 metres in width and 5.5 metres deep.		
Excavation/Assemblage Discussion: Trial trenches were excavated at the mouth of the cave, uncovering a series of cultural deposit including shell, bone and a small sample of charred hazel nut shells.		
Chronology: : Radiocarbon results from the excavation suggest a series of activity within the cave during the Iron Age		
Radiocarbon Dates: AA-39966 occupation horizon Hazelnut shell 2110±35 **346-43 cal BC**		
Suggested Broad Date: IA	**Suggested Date Range:** 400-0 BC	

Name: Inchmarnock, Site 16	**ID:** 250	**HER:** 300178
Bibliography: Lowe 2001; Conolly et al. 2002		
Excavation Date: 2002	**Type:** Single Chamber	**Altitude (m):** 6
Cave Description: The small cave is located in a cliff face above the raised beach orientated towards the southwest. The cave mouth is 10 metres wide with the cave approximately 6 metres long with a width of 2 metres.		
Excavation/Assemblage Discussion: Excavation of the cave uncovered Iron Age deposits followed by hearths relating to the Early Medieval period (Conolly et al. 2002).		
Chronology: Radiocarbon results from the excavation suggest a series of activity within the cave from the Iron Age to Early Medieval period.		
Radiocarbon Dates: AA-39967 basal deposit of trench-poss midden Hazelnut shell 2150±35 BP **358-57 cal BC** AA-39968 hearth Charcoal 1245±35BP **680-875 cal AD**		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 400 BC-900 AD	

Name: Kilnaughton Bay 2	**ID:** 251	**HER:** 37639
Bibliography: Hardy 2002		
Excavation Date: 2001	**Type:** Multi-Chamber	**Altitude (m):** 31
Cave Description: The cave entrance is 2.0 metres wide and 1.5 metres high, which leads to 2 chambers that are 4 metres long with a maximum width of 0.5 metres. Drystone walling was erected outside the entrance.		
Excavation/Assemblage Discussion: Two test pits were dug in the cave, located inside the cave mouth uncovering a range of stratigraphy down to 1.45 metres (Hardy 2003: 18). From this a range of occupation floors were identified recovering artefacts from the Medieval to Early Modern periods (ibid.). A number of quern stones were recovered along with later medieval pottery (Hardy 2002).		
Chronology: The radiocarbon date from the limpet shell suggests a period of midden build up in the Early Medieval period that continued periodically into the Early Modern period evidenced through the tobacco pipe remains and late period pottery.		
Radiocarbon Dates: SUERC-3384 limpet shell 1605±45 BP **680-970 cal AD**		
Suggested Broad Date: EM	**Suggested Date Range:** 600-1000 AD	

Name: Culzean Cove Main System	**ID:** 252	**HER:** 214842
Bibliography: Alexander 2004; Ashmore 2004: 171		
Excavation Date: 2004	**Type:** Multi-Chamber	**Altitude (m):** 40
Cave Description: The Culzean Castle Caves are a series of 3 caves located in the cliffs beneath the castle in the cliffs below. The two main caves underneath the main castle are around 51 metres in length and are connected by a small passageway. The smaller cave underneath the castle stables has 2 entrances with a length around 73 metres.		
Excavation/Assemblage Discussion: Four trenches were dug in the caves: Trench A: inside the main entrance uncovering the original floor level 0.6 metres down along with early modern material. Trench B: over a previous trench excavated in the 1960s uncovering a stone culvert along with human and animal remains. Trench C: extended Trench B's examination of the culvert and also recovered human and animal bone. A thoracic vertebra was used for radiocarbon sampling. The construction of the culvert appeared to have disturbed a number of earlier depositions of human remains (Alexander 2004:122). Trench D: focused on the southern side of the second chamber uncovering human remains and a hearth and midden material.		
Chronology: The caves have a long tradition of use, which has led to the disturbance of many of the earlier deposits. The earliest of which is likely to be the interment of a number of individuals during the Early Medieval period.		
Radiocarbon Dates: WK-14017 cave floor human cervical vertebra 1149±42 BP **777-985 cal AD**		
Suggested Broad Date: EM	**Suggested Date Range:** 700-1000 AD	

Name: MacArthur's Head ICP 109	**ID:** 253	**HER:** 271814
Bibliography: Hardy 2003; Ashmore 2004: 160		
Excavation Date: 2001	**Type:** Cave	**Altitude (m):** 10
Cave Description: The cave overlooks the Sound of Islay (Hardy 2003: 32).		
Excavation/Assemblage Discussion: The cave was surveyed as part of the Islay Caves Project (Hardy 2002, 2003). Two test pits were dug into a potential midden found towards the rear of the cave (Hardy 2003:31). Material recovered from the midden including pottery, animal bone, charcoal and shellfish remains (ibid.).		
Chronology: The cave at MacArthur's Head and the midden surveyed inside is likely to have been building up during the Early Medieval period.		
Radiocarbon Dates: SUERC-3381 Large shell midden Limpet shell 1245±40 **676-880 cal AD** SUERC-3382 Large shell midden Limpet shell 1180±40 **744-971 cal AD**		
Suggested Broad Date: EM	**Suggested Date Range:** 600-1000 AD	

Name: MacArthur's Head ICP 110	**ID:** 254	**HER:** 271802
Bibliography: Hardy 2003; Ashmore 2004: 160		
Excavation Date: 2001	**Type:** Cave	**Altitude (m):** 10
Cave Description: The cave looks out towards Jura and has a 1 metre stone wall at the entrance (Hardy 2003: 32).		
Excavation/Assemblage Discussion: The cave was surveyed as part of the Islay Caves Project (Hardy 2002, 2003). Two test pits were dug into the cave uncovering animal bone, leather and pieces of clay pipe (Hardy 2003: 31).		
Chronology: The midden was likely building up during the Medieval period. Interestingly, such a result may suggest that caves continued in use in the area into the 2nd millennium AD.		
Radiocarbon Dates: SUERC-3383 Test pit Limpet shell 665±40 **1271-1397 cal AD**		
Suggested Broad Date: MED	**Suggested Date Range:** 1200-1400 AD	

Name: North Carraig Fhadda ICP 7	**ID:** 255	**HER:** 271802
Bibliography: Hardy 2003; Ashmore 2004: 160		
Excavation Date: 2001	**Type:** Cave	**Altitude (m):** 6
Cave Description:		
Excavation/Assemblage Discussion: Two test pits were dug as part of the Islay Caves Project (Hardy 2002, 2003). Samples were taken of shellfish for radiocarbon dating.		
Chronology: Results from the test pit suggest a period of activity during the Roman Iron Age or Early Medieval period.		
Radiocarbon Dates: SUERC-3385 Test pit Limpet shell 1605±45 **346-560 cal AD**		
Suggested Broad Date: RIA/EM	**Suggested Date Range:** 300-600 AD	

Name: Dunagoil Cave	**ID:** 256	**HER:** 40278
Bibliography: CANMORE 40278; Mann 1915; Marshall 1915; Ritchie 1915; Marshall 1938; Marshall 1963; Harding 2004; Geddes et al. 2010		
Excavation Date: 1913	**Type:** Single Chamber	**Altitude (m):** 70
Cave Description: The cave is located on the northwest end of the ridge of rocks below the vitrified fort. The cave entrance is 4 metres high and 2 metres wide with the cave being 17.5 metres long.		
Excavation/Assemblage Discussion: Excavations in 1913 at the cave uncovered a midden made of bones and shell along with sandstone slabs that were thought to be hearth stones (Marshal 1938:76). Marshall (1915:61) likened the deposits to those at Borness Cave (**132**). A spindle whorl was recovered during the excavations.		
Chronology: Marshall suggested that the cave was used during the Neolithic and the Iron Age, contemporary with the use of the fort.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC- 400 AD	

Name: Ceeves Cove	**ID:** 258	**HER:** 42038
Bibliography: Clarke 1971; Mackie 1971; PSAS 1931: 65; Smith 1889		
Excavation Date: 1883	**Type:** Single Chamber	**Altitude (m):** 71
Cave Description: The limestone cave is located on cliff face, above the River Dusk Glen with 3 separate entrances. The cave is orientated north. Two entrances, difficult to access, are both around c.1.5 metres and are blocked by soil. The western entrance is 'wet' and is 3 metres high and a metre wide.		
Excavation/Assemblage Discussion: Excavations in 1883 found artefacts belonging to the Medieval period, which included an 'emerald' coloured glass bead and a wheel made pottery that was likely Medieval or Post-Medieval in date. A Viking arrowhead was also recovered from the cave (Mackie 1971: 70). **Metalwork:** From unstratified contexts two bronze spiral finger-rings were recovered that were possibly Iron Age in date (Mackie 1971: 69). The ring was described as round bronze wire and was undecorated.		
Chronology: Given the uncertain nature of the deposits within the cave the finds can only be described as possible Iron Age. Bronze spiral finger rings do occur in a range of settlement contexts in the region including Dun Mor Vaul (Mackie 1970) and Dunagoil Fort (Mackie 1971: 69) thought to date to the Early to Mid-Iron Age, suggesting at least a possible Iron Age date. However, spiral finger rings also appear in later Roman contexts such as at Trapain Law and in the Late Iron Age to Early Medieval cist burials in East Lothian (*ibid*).		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA	**Suggested Date Range:** 800 BC-600 AD	

Name: Uamh Breidairton	**ID:** 259	**HER:** 38667
Bibliography: Brabin 1984		
Excavation Date: 1983	**Type:** Cave	**Altitude (m):** 16
Cave Description: The cave has two entrances, facing west and north located on a cliff face overlooking a bay.		
Excavation/Assemblage Discussion: Small scale excavations of the site, removing a cubic foot of earth, uncovered a number of remains including a midden deposit, a Mesolithic flint core, a small piece of folded bronze and an iron nail.		
Chronology: The use of the cave can only be ascribed as tentatively Iron Age, which is suggested based on the presence of a folded bronze sheet found at other sites in region such as Uamh An Ard Achadh (**154**).		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC-600 AD	

Name: Bagh Na H-Uamha	**ID:** 260	**HER:** 22197
Bibliography: CANMORE 22197; RCAHMS 1983:8		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 13
Cave Description: The cave is located 7.5 metres above the shore facing southeast with a diameter of 9 metres.		
Excavation/Assemblage Discussion: Investigation in the cave recorded a midden made of marine shells and animal bones. A hearth was also present in the cave with a 13th century Norse playing-piece made of Narwhal bone along with fragments of Iron Age pottery.		
Chronology: Given finds of Iron Age pottery, the cave may have been used sometime during the 1st millennia BC and AD		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC-600 AD	

Name: Papadil	**ID:** 261	**HER:** 87765
Bibliography : CANMORE 87765 ; Wickham-Jones et al. 1994 ; Wickham-Jones 1994		
Excavation Date: 1993	**Type:** Boulder Cave	**Altitude (m):** 50
Cave Description: The boulder cave is located on a scree slope, 200 metres north of Papadil Loch The cave is made of a number of large boulders, facing south and is around 1 metre high and 2 by 1.5m metres wide.		
Excavation/Assemblage Discussion: A shell midden was investigated within the cave. From this, 5 small sherds of coarse pottery and a fragment of copper alloy vessel (Wickham-Jones et al. 1994). A fragment of a small round bottomed pot with an everted rim and impressed decoration was found on the surface of the midden, which may have been Iron Age or Roman Iron Age in date (Wickham-Jones 1994).		
Chronology: As discussed elsewhere, the nature of Hebridean pottery limits chronological analysis. The form recorded at Papadil may be Iron Age or Roman Iron Age in date, given the author's parallels to impressed decorated recorded at Dun Mor Vaul (Mackie 1974; Wickham-Jones 1994:74). Given the cereal head impressions, the 5 fragments of coarse ware may also relate to types of Dunagoil and Vaul Ware, (Wickham-Jones 1994:73).		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC- 600 AD	

Name: Cnoc An Aoil	**ID:** 262	**HER:** 4043
Bibliography: CNE 92; CANMORE 4043; Curtis et al. 1998		
Excavation Date: 1997	**Type:** Cave Souterrain	**Altitude (m):** 66
Cave Description: The natural rock chamber is located at the head of a gully on the Isle of Lewis.		
Excavation/Assemblage Discussion: Layers of ash were reported to have been found in the chamber. A curved 3-metre-long dry-stone passage covered by massive stone lintels leads into the cave. This may suggest that the site was modified into a souterrian during the Iron Age or Roman Iron Age.		
Chronology: The construction of the possible souterrains may be Iron Age or Roman Iron Age in date. Without diagnostic finds, however, such activity can only be tentatively dated. The site, shares a similar construction to a cave-souterrain constructed at Ardeer (**275**), Argyll, which dates to the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC- 600 AD	

Name: Loch Gille-Ghoid	**ID:** 263	**HER:** 10451
Bibliography: CNE 1280; CANMORE 10451		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 78
Cave Description: The cave is found in a gap between two rocky outcrops above a loch. There are 2 entrances facing north. It is 1.5 metres high, 2 metres wide and 5 metres long.		
Excavation/Assemblage Discussion: The cave floor is characterised by a substantial midden deposits made of ash and shell. Pottery was also reported to have been found in the cave and given a tentative Roman Iron Age date.		
Chronology: Possible finds of Roman Iron Age pottery may indicate activity within Loch Gille-Ghoid.		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 800 BC- 600 AD	

Name: Uamh nan Ramh	**ID:** 272	**HER:** 11479
Bibliography: Miket 1991; Cameron 1997; Miket 2000		
Excavation Date: 1991	**Type:** Cave Souterrain	**Altitude (m):** 27
Cave Description: Uamh nan Ramh, is a souterrain made from a natural fissure covered by a series of stone lintels. The souterrain is c.120 metres long with the entrance facing south. The passage is c. 1.1 metre long and 4.5 metres wide.		
Excavation/Assemblage Discussion: The souterrain was cleared in 1991 with no finds being recovered.		
Chronology: Uamh nan Ramh is similar in form to both Ardeer (**275**) and Cnoc An Aoil (**262**), which are natural caves that were modified into possible souterrains.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Uamh Phort Luinge Mhic-Ruaridh	**ID:** 274	**HER:** 38007
Bibliography: Mitchell 1898; Stevenson 1944		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 10
Cave Description: The cave, reached through a cleft in the rock, is located near a small eastern bay. The entrance some 8.53 metres down the cleft, is oriented east and is c.0.91 metres wide and 3.96 metres high. The cave itself is made of a large chamber that has a maximum width of 2.74 metres, a length of 8.53 metres and a height of 3.96 metres.		
Excavation/Assemblage Discussion: The cave was thought to have been excavated in 1883 and was used as a place to hide contraband whisky and for burning kelp (Mitchell 1898: 36). The main chamber was comprised of a layer of dark soil some 60cm from the original cave floor, containing charcoal, butchered animal bone, marine shells and 200 fragments of pottery. A stone axe and grinder were also found.		
Chronology: The fragments of pottery are thought to be Bronze Age and Early Iron Age in date with a number of grass-tempered wares paralleled to Irish examples and from similar levels from brochs (Stevenson 1944: 123).		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 800-400 BC	

Name: Ardeer	**ID:** 275	**HER:** 41069
Bibliography: Hunter 1973		
Excavation Date: 1973	**Type:** Cave Souterrain	**Altitude (m):** 10
Cave Description: The single chambered cave is 6 metres long, 3 metres wide and 2 metres in height.		
Excavation/Assemblage Discussion: A souterrain made of 13-metre-long corbelled drystone wall and roofed with capstones, leads into the natural cave. The passage is approximately 1.8 metres high and 1.5 metres wide. A sealed deposit included a hearth with iron slag, bones and a fragment of possible Roman glass.		
Chronology: Ardeer souterrain is not unique for the use of a natural cave as an architectural element in Scotland, the presence of iron slag and Roman glass suggests that the site may have been modified during the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:**100-300 AD	

Region 6: Northern Scotland

In Region 6, covering the North of Scotland, there are **9** caves with evidence for activity during the Iron Age to Early Medieval period. While also one of the most well-known caves in the region, Sculptor's Cave (**134**) has one of the broadest chronologies in the region with evidence through the Late Bronze Age into the Pictish Period. A number of caves in the Gheodha Smoo also hint at a long period of use from the Neolithic whilst radiocarbon dating from a bear femur found in the aptly named Bear Cave (**265**), suggests that caves were in use as dens into the Early Iron Age.

134	Sculptor's Cave
140	Smoo Cave
141	Caird's Cave
215	Reindeer Cave
264	Strath Steven Cove
265	Bear Cave
266	Glassknapper's Cave
267	Antler Cave
268	Wet Weather Cave
273	Ceard's Cove

Name: Sculptor's Cave	**ID:** 134	**HER:** 16278
Bibliography: CANMORE 16278; Benton 1931; Shepherd et al. 1995; Armit et al. 2007; Armit et al. 2011		
Excavation Date:1929-30;1979	**Type:** Multi-Chamber	**Altitude (m):** 5

Cave Description: Sculptor's Cave is located 6 miles north of Elgin on the southern shore of the Moray Firth in a small bay at the base of a sea cliff. Its location means that the cave is often cut off during high tide and may not have been accessible until the Bronze Age (Shepherd 1995: 1194). The cave has two parallel entrances, separated by a wall of rock, and faces north with views across to the Caithness hills. These entrances are 11 metres long and 2 metres wide. The cave is approximately 27.4 metres long, 13.5 metres wide and 5.5 metres high with a narrow passage extending into the rear of the cave.

Excavation/Assemblage Discussion: From excavations between 1929 and 1930 a range of material was uncovered beginning from the Ewart Park phase of the Late Bronze Age and ending in the Viking period. Re-excavation of the spoil heap outside the cave was done by Shepherd (1995) and osteological analysis of the human remains by Armit et al. (2007, 2011). New excavations are focused on the spoil heap and the surrounding caves.

Stratigraphy: Benton (1931) recorded three main layers whilst excavating the cave that can broadly be defined as below:

1) A layer extending throughout the entire cave, thought to be an occupation layer, comprised of charcoal, sand and gravel. Within this layer were also a number of hearths and occupation floors with a number of objects from the Late Bronze Age to Viking periods. A larger number of objects dating to the Roman Iron Age were recorded. The Late Bronze Age material was recovered primarily from eastern sections of the cave and towards the rear within this layer. In the western entrance the presence of a piece of ring money suggests a date c.700 BC whilst a similar level can be suggested in the eastern entrance (Shepherd 1995: 1194). Much of the higher layers within this have been used to suggest only sporadic activity within the cave compared to the preceding Bronze Age activity (see Armit et al. 2011).
2) A second layer of clay was recorded with evidence of charcoal and other burnt, which was up to 0. 3 metres deep at the entrances. Within this a series of stake holes were recorded in the west entrance suggesting a possible partition (Armit et al 2011: 255).
3) A layer of sand and clay naturally deposited during waterlogging of the cave sometime before the Bronze Age.

From Benton's excavations a large corpus of Late Bronze Age metalwork, akin to material recovered at Heathery Burn Cave (**3**), was discovered along with remains of Roman Iron Age metalwork and pottery unique to the far north of Scotland.

Bronze Age Metalwork: The catalogue of Bronze Age material recovered by Benson include 4 small penannular rings made of a bronze core and covered in gold (Benson 1931: 182). Such metalwork was dated by Shepherd (1995:1194) to the end of the Bronze Age to the early Iron Age. Similar larger Bronze rings were also recorded in Bronze Age layers. Two penannular bracelets, similar, although not a direct comparison, to examples recorded at Heathery Burn Cave (**3**), were also recovered (Benson 1931: 183).

Animal Remains: Neonatal cattle bones, sheep and goat were recorded in Late Bronze Age levels. Wild boar, pig and hare were also found along with a number of birds including white-tailed sea eagle found in the primary layer in the entrance. Other bird bones include puffin, razorbill and guillemot. Fish bones were also present in the Bronze Age levels. Shepherd (1995: 1194) suggests that the presence of the neonatal bones suggests that animals were killed during calving in Spring.

Roman Iron Age Metalwork: A range of metalwork was recovered that dated between the 2nd and 4th centuries AD including a number of belt buckles, wry-necked pins, toiletry instruments, pins, a bronze strip and a number of coins. The 9 Roman bronze coins found were minted between 337 and 354 AD. With 3 of them being pierced (Benton 1931: 209; Shepherd 1995: 1195). These were concentred in the centre of the cave. The bronze strip was inscribed with SPILV (Wilson et al. 1966: 240).

Roman Iron Age Pottery: A number of Samian ware fragments were recovered with evidence of polishing suggesting re-use. The pottery included fragments of Dragendorf 37 and 32. 'Native pottery' was also recovered by Benton (1931: 205).

Iron Rivet: This was attributed to the Viking period by Benton (1931: 202).

Human Remains: Over 1800 human bones were recovered from the cave (Shepherd 1995: 1194) with several lower jaws of children found in the entrance strata (Armit et al. 2011: 253). Peri-mortem injuries are recorded on 2 of adult mandible fragments and post-mortem modification is seen on frontals of a child and an adult (Armit et al. 2011: 271). Estimated MNI on the bones recovered during the 1929-30 excavation, suggested the presence of 8 adults, 9 younger adults, 9 children and 2 infants coming to a total estimated 28 individuals (Armit et al. 2011: 256).

The location of these remains has been used to suggest that skulls were deliberately removed and placed on display during the Late Bronze Age (Shepherd 1995: 1194). Re-evaluation of the remains through a process of AMS dates has however shown two groups of deposits during the Late Bronze Age and then in Roman Iron Age (Armit et al. 2011: 258ff). The first Bronze Age group is represented by four children aged between c.1-7 years showing no signs of peri-mortem injuries. The frontal of a child's skull however, may suggest de-fleshing during the Late Bronze Age (Armit et al. 2011: 274). The Roman Iron Age group however show signs of peri-mortem injury, concurrent with sharp blows on 7 cut marked vertebrae (Armit el al 2011: 272f). Five of these belonged to adults whilst 2 belong to young adults below 17 years old (ibid.).

Beads: Seven amber beads, two of which were annular were found by Benson (1931: 198). A further number of glass beads were also recorded by Benson including a square cylinder type made of blue glass along with 3 other dark blue square beads. (Benson 1931: 199; Beck et al. 1991). Two other beads are characterised by green glass one in pentagonal form whilst the other an annular bead of green clear glass (Benson 1931: 200) that maybe made of re-used Roman glass (Roberston 1975: 3). 4 other blue beads are also recorded by Benson (ibid.).

Pictish Symbols: Around 15 Pictish symbols were recorded on the outer walls of the cave with none being found within the inner chamber. The repertoire of symbols included a fish, a number of arcs, locks and a Vesica.

Chronology:

Due to the detailed radiocarbon programme for the cave, however, chronological analysis does not solely rely on discussion on the artefact corpus in the cave. From past studies of the artefact corpus recovered from Sculptor's Cave (Benson 1931; Shepherd 1995; Armit et al. 2007; Armit et al. 2011) a hiatus of activity can be seen in the Late Bronze Age and then again during the Roman Iron Age between the second to fourth centuries AD. From AMS dating analysis it is clear that the two periods of activity were not exclusive. Sporadic use of the cave from the Late Bronze Age can be presented by the evidence through to the Pictish period and possibly into the Viking period.

Radiocarbon Dates:

GU-15949 in western entrance, 'dog burial', dog radius	2265±35 BP	**400-210 cal BC**
GU-15950 in eastern entrance, cattle femur	2455±30 BP	**750-410 cal BC**
GU-15951 in eastern entrance, sheep/goat tibia	2580±35 BP	**820-560 cal BC**
GU-15952 in eastern entrance, pig/boar radius	1760±35 BP	**140-340 cal AD**
GU-15953 in eastern entrance, cattle radius	2565±35 BP	**810-550 cal BC**

GU-15954 in eastern entrance, sheep/goat metatarsal	2545±35 BP	**800-540 cal BC**
GU-15955 in eastern entrance, cattle scapula	2790±35 BP	**1020-840 cal BC**
GU-15956 in eastern entrance, sheep/goat vertebra	2810±35 BP	**1050-850 cal BC**
GU-15957 in eastern entrance, sheep/goat long bone	2845±35 BP	**1120-950 cal BC**
GU-15958 in eastern entrance, cattle femur	2895±35 BP	**1250-950 cal BC**
GU-15959 in eastern entrance, sheep/goat femur	2820±35 BP	**1110-900 cal BC**
GU-15960 in eastern entrance, pig/boar tibia	2850±35 BP	**1120-920 cal BC**
GU-15961 in eastern entrance, cattle scapula	2840±40 BP	**1130-900 cal BC**
GU-15962 in eastern entrance, sheep/goat long bone	2830±30 BP	**1110-910 cal BC**
GU-15963 in eastern entrance, goat femur	2855±35 BP	**1130-920 cal BC**
GU-15964 unstratified, cut-marked human axis vertebra	1795±35 BP	**130-340 cal AD**
GU-15965 unstratified, cut-marked human axis vertebra	1735±35 BP	**230-400 cal AD**
GU-15966 unstratified, cut-marked human axis vertebra	1835±35 BP	**80-250 cal AD**
GU-15967 unstratified, cut-marked human axis vertebra	1740±35 BP	**220-400 cal AD**
GU-15968 spoil heap, human adult right tibial shaft	1780±35 BP	**130-340 cal AD**
GU-15969 western entrance, human child mandible	2845±35 BP	**1120-920 cal BC**
GU-15971 eastern entrance, human child mandible	2845±35 BP	**1120-920 cal BC**
GU-15972 western entrance test pit, human thoracic vertebrae	770±35 BP	**140-380 cal AD**
UB-6930 unstratified, cut-marked human axis vertebrae	1738±33 BP	**230-400 cal AD**
Suggested Broad Date: LBA;IA;RIA;EM	**Suggested Date Range:** 1100-800 BC; 400-200 BC; 200-400 AD	

Name: Smoo Cave	**ID:** 140	**HER:** 4953
Bibliography: CANMORE 4953;Keillar 1972; Pollard 1992, 1995; Ashmore 1999; Pollard et al. 2005		
Excavation Date: 1992;1995	**Type:** Multi-Chamber >100	**Altitude (m):** 1
Cave Description: The Cambrisian limestone cave is located on a narrow inlet of the Geodha Smoo. The main cave has an entrance c.25 metres wide and c.50 metres deep with a series of fresh water chambers cut into the natural cracks in the limestone.		
Excavation/Assemblage Discussion: Four caves along the Geodha Smoo were investigated in order to understand the sequence of eroding material (Caves: **140, 266, 267, and 268)**. Smoo Cave was surveyed along with a sampling of an eroding section of a midden at the entrance of the cave. A section of the midden uncovered an archaeological sequence (Pollard et al. 2005:6-7): 1) The midden upper layers: dark rich sandy soil (Context 006a) made mainly of shells deepening towards the northern end of the section. 2) Underneath 006a, a thin layer (Context 027) of charcoal separated a further charcoal-rich midden layer. In the southern end of the section a shallow cut of butchered animal bone was cut into a deposit of dark soil overlain with charcoal Slag was recovered from this layer (Pollard et al. 1995: 22). 3) The lower midden layers: yellow sand (Context 006b; 008), which was thought to have been deposited by wave action and below this was a layer of grey sand said to have been indicative of human activity. 4) In the southern section a hearth lay providing two radiocarbon date (GU-4545). 5) Below the marine sand (008) was a layer of stones thought to belong to an ancient beach surface. Within this were bands of sandy soil and charcoal with butchered bone and worked stone and a possible post hole. 6) A series of laminated sands were found below the beach deposit with upper layers containing butchered animal bone and charcoal. The above sequence was used by the excavators to suggest 5 phases of human activity at the cave entrance (Pollard et al. 2005:7-8).		
Chronology: The single radiocarbon date available from the hearth cut into the midden suggest use during the Norse period, such a date further corresponds with results obtained from the nearby Glassknapper's Cave (**266**). In terms of Iron Age activity the excavators of the midden has suggested that the lower levels, below Nordic activity, may be Iron Age in date (Pollard 1992) perhaps post-dating or contemporary to the structural elements.		
Radiocarbon Dates: GU-4545 in southern midden section (021), birch and hazel charcoal 1120±50 BP **780-1020 cal AD**		
Suggested Broad Date: IA; RIA; EM	**Suggested Date Range:** 800 BC- 800 AD	

Name: Cairds' Cave	**ID:** 141	**HER:** 14369
Bibliography: CANMORE 4953; PSAS 1931: 412; Woodham 1956; Anderson-Whymark 2011		
Excavation Date: 1907-1912; 2010	**Type:** Single Chamber	**Altitude (m):** 6
Cave Description: The cave is located at the base of a cliff and is 14 metres from the current shore. The entrance is 10 metres wide and 4 metres high with the cave being 9.2 metres long. The cave is part of a wider series of 19 caves in the Rosemarkie area.		
Excavation/Assemblage Discussion: Excavations between 1907 and 1912 focused on the inside of the cave uncovering a Mesolithic bone working assemblage and an amber inlayed bone pin thought to date between c.700-900 AD. The cave was re-excavated in 2010 with a focus on the undisturbed north eastern section of the cave. Charcoal found at the base of the stratigraphic sequence yielded a date between c.300-200 BC, whilst a date from the top of the sequence gave a date c.100-200 AD. This sequence was characterised by chunks of limestone, charcoal, animal bone and shell. Excavation of the spoil heap left by the original excavation also provided evidence of Early Medieval activity at the cave.		
Chronology: The radiocarbon results from trench 2 in the north eastern section of the cave uncovered an occupation deposit dating to the Middle Iron Age between c.300 BC- c.200 AD. Later Early Medieval activity in the cave is recorded through the presence of the bone pin. The cave saw further use in the Late Medieval period with the working of large domesticate bones.		
Radiocarbon Dates:		
GU-23932 in second layer in trench 2 (CC001), mammal bone 1745±30 BP		**230-390 cal AD**
GU-23933 in earliest layer in trench 2 (CC02), mammal bone, 2250±30 BP		**390-210 cal BC**
GU-23934 in earliest layer in trench 2 (CC03), pine charcoal 2270±30 BP		**400-210 cal BC**
GU-23935 from Maclean Collection, red deer antler handle 1745±30 BP		**230-390 cal AD**
GU-23936 from Maclean Collection, worked ox leg bone 115±30 BP		**1680-1940 cal AD**
GU-23937 from Maclean Collection, worked antler 1200±30 BP		**710-940 cal AD**
GU-23938 from Maclean Collection, worked ungulate bone 145±30 BP		**1690-1950 cal AD**
Suggested Broad Date: IA; RIA; EM	**Suggested Date Range:** 300 BC- 200 AD; 700-900 AD	

Name: Reindeer Cave	**ID:** 215	**HER:** 4615
Bibliography: CANMORE 4615; Callander et al. 1927; Livingston 1963; Lawson 1982; Saville 2005		
Excavation Date: 1926-7	**Type:** Multi-Chamber	**Altitude (m):** 330
Cave Description: Reindeer Cave is part of a system of 3 caves on a crag of Cambrian limestone, 76.2 metres above the Allt nan Uamh river: Bone Cave, Reindeer Cave and an un-named cave. The entrance to Reindeer Cave is oriented north and is c.5 metres wide, which leads to 2 chambers. The outer chamber is c.10 metres long and c.6metres wide and the inner chamber is 0.3 metres long. The cave is connected to the third un-named cave by a now blocked passage and there may have also been a passage leading to the Bone Cave through the inner chamber.		
Excavation/Assemblage Discussion: The most easterly cave in the group, Bone Cave, was excavated in 1889 and as a result, a series of excavations on the crag were conducted during 1926-27. Remains from the caves were primarily Palaeolithic in date. Reindeer Cave, the second cave recorded by Cree (Callander et al. 1927: 170), was fully excavated in 1926. The sequence from the cave is summed up by Lawson (1982:13-16), with a layer of 'red cave earth' covering layers of gravel, that were interpreted as disturbance from a stream flowing during the Ice Age (Lawson 1982:13). Most of the archaeological remains were found in the cave earth layer in the outer cave. A buried human skull was found in this layer along with a second burial in a narrow fissure at the back of the cave. Within the cave earth were also Ice Age fauna along with bear, wolf and reindeer. **Bonework:** A double ring headed pin made of walrus ivory was found in the cave earth in the outer chamber of the cave. Types of this pin are found in a number of brochs in Atlantic Scotland dating generally between the Roman Iron Age and Early Medieval period. The radiocarbon date obtained from the walrus ivory used as the primary fabric of the pin however, suggests a date that favours the		

Early Medieval period, rather than the Roman Iron Age given the carbon reservoir effect on marine fauna (Barrett et al. 2000; Ascough et al. 2004; Ascough et al. 2006).
Chronology: The finds from Reindeer Cave and other caves along the valley attest to use by local fauna and human activity since the Ice Age. However, radiocarbon dates from Bear Cave (**266**) has shown that bear activity occurred in the valley into the Early Iron Age and thus throws into question the date of some of the fauna recorded in the other caves in the valley. Radiocarbon analysis of a double ring headed pin found in the cave earth of the outer chamber of Reindeer Cave does present an indicator of use during the Early Medieval period
Radiocarbon Dates: OxA-3527 from cave, walrus ivory 1900±80 BP **89 cal BC- 330 cal AD**

Suggested Broad Date: EM	**Suggested Date Range:** 500-800 AD

Name: Strath Steven Cove	**ID:** 264	**HER:** 6558
Bibliography: CANMORE 6558; RCAHMS 1911; Stuart 1870		
Excavation Date:1869	**Type:** Multi-Chamber	**Altitude (m):** 8
Cave Description: The cave is the larger of 2 caves at the southern end of a small bay. It is located 7.62 metres above the base of a cliff, accessible by steps cut into the rock. The cave mouth is 5.49 metres wide leading to a chamber 4.57 metres long, which is connected to another chamber by two wide passageways.		
Excavation/Assemblage Discussion: **Stonework:** Half an amber glass bead was recorded from excavations within the cave, which was similar to examples found at Sculptor's Cave (**134**). Amber beads have also been recorded at cave sites in the Western coast and islands of Scotland including an amber globular bead found in Ellary Boulder Cave (**144**) and Uamh An Ard Achadh (**153**). Examples of amber beads recorded in dated contexts in the region, include beads found in a number of contexts dating between c.100 BC-300 AD at Balloch Hill, Kintyre (Peltenburg 1983: 167; Ritchie 1997: 58)		
Chronology: Without confirmation of the type of bead found however in the cave, there is only tentative evidence of use of the cave during the Iron Age or Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: IA/RIA (?)	**Suggested Date Range:** 800 BC- 410 AD	

Name: Bear Cave	**ID:** 265	**HER:** 4615
Bibliography: Burleigh et al. 1976: 30		
Excavation Date:	**Type:** Cave	**Altitude (m):** 360
Cave Description: The cave is located in the Allt Nan Uamh valley near Bone Cave and Reindeer Cave (**215**).		
Excavation/Assemblage Discussion: **Animal Remains**: A brown bear (*Ursus arctos*) femur was found on the surface of the cave floor, which provided a radiocarbon sample dating to 996-776 cal BC.		
Chronology: The radiocarbon date obtained from the cave suggests activity during the Iron Age, possible in use as a den for a population of bears. This is significant in presenting evidence of bears in the region during the Iron Age and also throws into question the date of the animal remains found in Reindeer Cave (**215**).		
Radiocarbon Dates: BM-724 from cave floor, femur of brown bear 2673±54 BP **969- 776 cal BC**		
Suggested Broad Date:	**Suggested Date Range:**	

Name: Glassknapper's Cave	**ID:** 266	**HER:** 4953
Bibliography: Pollard 1995; Pollard et al. 2005		
Excavation Date:1992;1995	**Type:** Single Chamber	**Altitude (m):** 40
Cave Description: Glassknapper's Cave is located 80 metres north of Smoo Cave (**140**) on the western wall of the Geodha Smoo inlet. The site is immediately south of Antler Cave (**267**). Its entrance, orientated towards the east, is 3 metres wide with the cave being c.6 metres long.		
Excavation/Assemblage Discussion: A possible midden fond outside both Glassknapper's and Antler Cave (**267**) was sampled along with an eroded section of cave earth. A trench was dug inside the cave, which revealed a complex sequence of thin layers of silts, ash, charcoal, animal bone, was deposits and shell. Radiocarbon dates from a column sample of birch and hazel charcoal, may suggest activity in the cave during the late 1st millennium AD. **Stonework**: A piece of quern stone was recovered from the eroding surface of cave earth (Pollard 1992). **Pottery:** Sherds belonging to a bipartite bowl, similar to assemblages recorded in Northern-Isle broch deposits may date to the late 1st millennium BC or early 1st millennium AD. (Pollard et al. 2005: 24). Possible Norse style pottery was also found in the cave.		
Chronology: Radiocarbon dates from the excavated column of material suggests a rapid period of build up during the Early Medieval or Norse periods in the upper layer of the midden. Lower sections of the midden may however date to the 1st millennium BC given the presence of Iron Age pottery.		
Radiocarbon Dates: OxA-8210 top of column, midden, birch/willow round wood charcoal 1030±40 BP **890-1160 cal AD** OxA-8211 middle of column charcoal rich horizon, birch charcoal 1160±35 BP **690-990 cal AD** OxA-8212 base of column, charcoal rich horizon, hazel charcoal 1120±30 BP **780-1010 cal AD**		
Suggested Broad Date: IA/RIA; EM(?)	**Suggested Date Range:** 600-1000 AD	

Name: Antler Cave	**ID:** 267	**HER:** 4953
Bibliography: Pollard 1995; Pollard et al. 2005		
Excavation Date:1992;1995	**Type:** Single Chamber	**Altitude (m):** 40
Cave Description: Antler Cave is located 80 metres north of Smoo Cave (**140**) on the western wall of the Geodha Smoo inlet and is immediately north of Glassknapper's Cave (**266**).The cave entrance, orientated east, is 6 metres wide with the cave being c.7 metres long.		
Excavation/Assemblage Discussion: An upper sequence of thin layers of charcoal and silt, similar to that recorded in the exterior section of Glassknapper's Cave (**266**) was identified by a small slot trench cut back into an exterior midden outside Antler Cave. Underneath these layers was a thick layer of limestone chops and animal bone, which sealed a midden deposits of charcoal and shell within a grey matrix.		
Chronology: A similar structural sequence of the outer exterior midden to that at Glassknapper's Cave (**262**) suggests the cave may have been used during the Norse period. However earlier use during the 1st millennium AD cannot be dismissed given the depth and spread of midden material outside the cave.		
Radiocarbon Dates:		
Suggested Broad Date: RIA/EM (?)	**Suggested Date Range:** 43- 800 AD	

Name: Wet Weather Cave	**ID:** 268	**HER:** 4953
Bibliography: Pollard et al. 2005		
Excavation Date: 1992;1995	**Type:** Rockshelter	**Altitude (m):** 40
Cave Description: The single chambered cave is located on a grassy slope, on the eastern side of the Geodha Smoo and southwest of the entrance to Smoo Cave (**140**). The cave has a height of c.2.5 metres and consists of a deep overhang with a small chamber towards the rear.		
Excavation/Assemblage Discussion: Excavations of the outer chamber uncovered a layer of marine shells with animal bone and a copper-alloy pin, which may be Norse in date. Throughout this layer were also a number of structural features include stake holes and post holes. The north-east section of the trench uncovered a similar midden deposit within a shallow scoop. A number of Late Neolithic pottery sherds were uncovered on the surface.		
Chronology: Wetweather Cave is thought to be significant in presenting evidence of Neolithic use in Northern Scotland (Pollard et al. 2005: 30). Norse activity in the cave is represented in the copper alloy ring (Pollard et al. 2005:30).		
Radiocarbon Dates:		
Suggested Broad Date: EM (?)	**Suggested Date Range:** 410-800 AD	

Name: Ceard's Cove	**ID:** 273	**HER:** 19941
Bibliography: Newall 1969; CANMORE 19941		
Excavation Date: 1968	**Type:** Cave	**Altitude (m):** 50
Cave Description: The cave is located on a raised beach and is orientated towards the north. The entrance is c1.88 metres wide, which leads to a chamber that is c. 7 metres long.		
Excavation/Assemblage Discussion: Excavation of the main floor within the cave uncovered a number of modern layers with decaying wooden boards and iron nails. Below this was a layer of "dark soil" with limpet and whelk shells that may have been a midden. At the entrance a wall was recorded.		
Chronology: Based on the dimension of the wall Newall (1969:1) suggested an Iron Age date, which is unlikely given the amount of modern debris recorded in the cave.		
Radiocarbon Dates:		
Suggested Broad Date: IA(?)	**Suggested Date Range:** 800 BC- 43 AD	

Region 7: Wales

Across Wales, 26 caves contained dated evidence of activity during the 1st millennia BC and AD. Of these, concentrations of use occur in sea caves along the northern and southern coasts, as well as the limestones of the Brecon Beacons and Black Mountains.

110	Big Covert Cave	125	Ogof-yr-Ychen
111	Culver Hole	126	Potter's Cave
112	Hound's Hole	127	Daylight Rock
113	Goat's Hole	128	Upper Kendrick's Cave
114	Spritsail Tor	202	Ogof Pant-y-Wennol
115	Minchin Hole	204	Orchid Cave
116	Bacon Hole	231	B.S. Pothole
119	Nanna's Cave	232	Great Orme's Hole
120	Lesser Garth Cave	340	Pigeon's Cave
121	Little Hoyle	341	Llanymynech Cave
122	Lynx Cave	343	Ogof Morfran
123	Nant-y-Graig Cave 'B'	344	Longberry Bank Cave
124	Ogof-yr-Esgryn	345	Carreg Cennen Cave

Name: Maeshafn Cave	**ID:** 110	**HER:** 157391
Bibliography: Branigan et al. 1991a: 165-166; Brassil et al. 1982; Davies 1950, 1953; Hesketh 1954; Savory 1951, 1952, 1968		
Excavation Date: 1948-1949	**Type:** Single Chamber	**Altitude (m):** 293
Cave Description: The single chambered cave is accessed by an entrance which is 2 metres high and 1.3 metres wide. It is orientated towards the south and leads to a 65 metre long passage ending in a stream sink.		
Excavation/Assemblage: Excavation between 1948 and 1949 focused on the entrance and final chamber. Roman metalwork was found at the entrance and rear chamber of the cave (Branigan et al. 1991a: 165). A Bronze Age barbed and tanged arrow head was also recovered (Clywd/Powys 102320). **Metalwork**: The trumpet brooch found badly corroded at the entrance with plain bow and undecorated moulding was thought to date to the late 1st or 2nd century AD. In the rear of the cave, a Zoomorphic plate brooch of Hull's type 23, with broken spring and dark blue and red enamel, was found. This was in the shape of a fish, which may have had a religious significance (Branigan et al. 1991a: 166). A zoomorphic, penannular brooch in the form of a duck head with tin bossed eyes and beak was also found in the rear chamber and though to date to the late 1st century AD. A badly burned copper alloy ring was also found in the cave. **Coinage:** A Roman coin of unknown date was also recovered from the cave (Clywd/Powys 102320). **Human Remains**: At least 6 individuals were recovered from the cave with no evidence of date, although two were associated with the Roman brooches (Clywd/Powys 102320).		
Chronology: Finds from Maeshafn Cave indicate that the site may have used sometime during the late 1st or 2nd century AD. It is possible that the some of the human remains in the cave may also date to this period, although this is not certain.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 0-300 AD	

Name: Culver Hole	**ID:** 111	**HER:** 305559
Bibliography: Boon 1980; Branigan et al. 1991a: 154-155; David 1923, 1932; Penniman 1932, 1935, 1938; RCAHMW 1976; Savory 1958; Taylor 1935		
Excavation Date: 1861; 1893; 1924; 1931	**Type:** Single Chamber	**Altitude (m):** 16
Cave Description: The cave is located of the base of a cliff and is located 3.7 metres from current shoreline. The cave regular floods at high tide. It is accessed by a narrow entrance, which leads into a chamber 7 metres wide and 9 metres high with two further passages leading 5.2 metres into the cliff. The cave has a total length of 11 metres.		
Excavation/Assemblage Discussion: Branigan and Dearne (1991a:154) report that the majority of Roman finds from the cave came from the base of a sediment layer of a small pool to the left of the entrance. **Pottery**: Pottery found in the cave, included A Late Bronze Age barrel-shaped urn with perforated rims and sherds of Late Iron Age black shell-tempered pottery (RCAHMW 1976: 17; Savory 1958: 746). **Metalwork**: A Late-Celtic style bronze statuette of a naked female figure with hands clasped in front with the back bearing the impression of the weave of cloth was found in on the surface of the cave (Taylor 1935:201-202). Roman Iron Age brooches found in the cave include: a damaged Headstud fibula and two further complete examples, dating to the late 2nd century AD and a penannular brooch of Fowler D5 type. Other metal artefacts found were a bronze strip bracelet, an iron rod and a Holdfast (Branigan et al. 1991a: 155). Further metalwork includes a ring of sheet brass and a brooch of 9th century AD date (RCAHMW 1976: 17). **Human Remains**: The remains of 41 individuals were found in the cave. At least 30 of these were found within contexts containing Wessex-type bi-conical urns dating to the Middle Bronze Age. An uncertain number of human bones were found with a ring-shaped bead of potential Late Iron Age date (Savory 1958: 745). **Coinage**: Coins found in the cave included: sestertius of Hadrian, a denarius of Marcus Aurelius, a coin of Antoninus and a hoard of 11 Constantianian nummi, including two Constantinopolis copies (Branigan et al. 1991a: 155). **Bonework**: A small flat spindle whorl and a boar's tusk were found from the cave, which may have been Iron Age in date (Branigan et al. 1991a: 155). **Glass**: A ring shaped bead of colourless glass with an opaque yellow central core was found in the cave. The bead is considered to have been an import that dated to the first century BC into the 1st century AD (Savory 1958: 745).		
Chronology: From the material found during excavation Culver Hole may have been used during the Late Iron Age and Early Roman Iron Age. Finds of pottery and a ring-shaped bead dating to the 1st century BC and early 1st century AD may indicate earlier activity taking place in the late 1st millennium BC.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 1200-600 BC; 300 BC-300 AD	

Name: Paviland Cave	**ID:** 113	**HER:** 300252
Bibliography: Branigan et al. 1991a: 179; Sollas 1913; Williams 1939		
Excavation Date: 1822;1909-11;1912	**Type:** Single Chamber	**Altitude (m):** 7
Cave Description: Paviland Cave is a single chambered cave, located on a limestone sea cliff. The cave is entered through 7 metre wide and 10 metre high mouth that leads into a single chamber.		
Excavation/Assemblage: One of the caves on the limestone cliffs at Paviland, excavation of the site uncovered a number of Roman Iron Age artefacts. **Pottery**: A pottery of Samian form 18/31 stamped dating to Claudius/Vespasian and a base of form 18/31 was found in the cave (Branigan et al. 1991a: 179). **Coinage**: Two 2nd Aes and a 3rd AE of Carausias and a 2nd AE of Constantine were also found in the cave (Branigan et al. 1991a: 179).		
Chronology: The dating evidence from both the pottery and coinage may indicate two periods of activity in the cave. The first period, evidenced by finds of Samian Ware form 18/31, may suggest a cave-use took place in the late 1st or early second century AD, whilst the coins of Carus indicate that late 3rd century AD activity also took place within the cave.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 0-300 BC	

Name: Spritsail Tor 1	**ID:** 114	**HER:** (Gwent) 00004w
Bibliography: Allen et al. 1944; Branigan et al. 1991a: 180; Davies 1983; Williams 1939		
Excavation Date: 1839; 1849; 1940s	**Type:** Multi Chamber	**Altitude (m):** 11
Cave Description: Spritsail Tor 1, is a multi-chambered cave located on a limestone crag. It is made of 2 chambers with separate entrances connected by a narrow passage on a limestone crag.		
Excavation/Assemblage: The cave has been excavated twice in the 19th century and was surveyed in the 1940s. **Pottery**: Sherds of a cream pottery were found in the cave dating to the 3rd-4th centuries AD (Branigan et al. 1991a: 180).		
Chronology: Finds of cream pottery, may indicate activity in the cave dating to the 3rd-4th centuries AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 200-400 BC	

Name: Minchin Hole	**ID:** 115	**HER:** 305580
Bibliography: Bowen 1973; Branigan et al. 1991a: 170-171; Falconer 1860; Nish-Williams 1946; Savory 1956; Sutcliffe et al. 1973; Sutcliffe 1981		
Excavation Date: 1850;1931;1948-1957;1972-1984	**Type:** Single Chamber	**Altitude (m):** 4
Cave Description: A single chambered cave with a maximum width of 21 metres reducing to 5.5m metres located on the southern coast of Gower. The cave, orientated towards the southwest, is flooded during high tides with an entrance 10 metres high, 5 metres wide and extending 50 metres into the rock. The cave may have been used as an anchorite cell- evidenced in the name of Myncheus.		
Excavation/Assemblage: Finds of Roman Iron and Early Medieval date were found within the vicinity of four hearths in the front part of the cave, (Branigan et al. 1991a: 170). A stratigraphic sequence can be summed below: 1) Inner beach 2m thick of sand and shell thought to be an intertidal beach deposit. 2) Thin white stalagmite deposit. 3) Lower red cave earth of red clay mixed with limestone fragments. 4) A flowstone floor with small bone fragments. 5) Patella beach which is a storm beach containing snails dating to 127 kyr BP. **Pottery**: A total of 750 sherds were found in the cave, belonging to the Iron Age and Roman Iron Age. Roman Iron Age pottery, including 10 vessels of Samian Ware: forms 18/31, 27, 31, 33, 38, Curle 11 and red-slipped ware (Branigan et al. 1991a: 171). Other types of pottery 41 jars, Black-Burnished vessel, Ollae dating to the 1st-2nd centuries AD, flanged bowls and a pie dish. Central Gaulish pottery was also found dating the 3rd-4th centuries AD. **Coinage**: In total 27 Roman Iron Age coins were found minted during the reign of Antoninus Pious to Gratian and generally date to the 3rd-4th centuries AD. Sixteen of these were Radiate coins. Two coins of earlier date were also recording including a Drachm of 41-43 AD date and an AS of 81-96 AD date Later coins of Lothaire I (Holy Roman Emperor 840-855 AD) and Charles the Bold (768-814 AD) and a groat of Edward III were also found (Glamorgan 00304w). **Metalwork**: Metalwork found I the cave included: A copper-alloy Wroxeter type fibula, a knee fibula, a Proto-zoomorphic penannular brooch, four 4th century AD pennannular brooches, a wire broch, a key handle, a bronze bracelet, a bronze Fowler Type D brooch and a bronze ingot. Iron objects included an iron spade binding, chisel, gouge and pre-3rd century AD military arrows and 37 corroded objects. **Bonework**: Bone objects found in the cave were identified as: two complete and one fragmentary Roman Iron Age comb was found in the cave with 8 complete and 1 fragment of a spoon, 3 pins, a counter, 3 spindle whorls and 6 points and needles. **Stonework** Five stone spindle whorls, a spindle whorl blank and an armlet fragments was found. **Animal Bone:** An extensive but undated faunal assemblage was recorded included pig, sheep/goat and cow. **Human Bone**: Small fragments of human bone were found in the cave.		
Chronology: Finds within the cave suggest that the cave was used during the Iron Age, Roman Iron Age and Early Medieval period. The cave appears to have been used sporadically throughout the Roman Iron Age, before being used again during the latter half of the 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA; EM	**Suggested Date Range:** 800 BC- 800 AD	

Name: Bacon Hole	**ID:** 116	**HER:** 305582
Bibliography: Allen et al. 1944; Branigan et al. 1991a: 152; Falconer 1860		
Excavation Date: 1848;1850; 1875;1929; 1943;1954;1974-1984	**Type:** Multi-Chamber	**Altitude (m):** 19
Cave Description: Bacon Hole is a large multi-chambered cave located on a limestone cliff on the Paviland coast. The entrance orientated towards the southwest, is 18 metres wide and 6 metres high and is 41 metres above the base of the cliff. It leads to a large chamber, 20 metres wide, which is connected by an inner recess to a second chamber, which is 7.6 metres long and 3 metres wide. In total the cave is approximately 36.5 metres long.		
Excavation/Assemblage Discussion: Excavations of the cave uncovered a small Iron Age, Roman Iron Age and Early Medieval assemblage in the upper layers of the cave. **Pottery**: Iron Age pottery found in the cave was comprised of four rim sherds decorated with horizontal lines dating to between 300-0 BC. The other sherds of pottery found in the cave were dated to the Roman Iron Age. These included, a sherd of fumed olla with incised trellis pattern along with 3 fragments of Roman tile (Branigan et al. 1991a: 152). **Bonework:** A bone pin and spindle whorl found in the main chamber were considered Iron Age or Roman in date (Branigan et al. 1991a: 152). **Metalwork:** An Irish bronze brooch was found in the cave and dated to the 7th century AD (Glamorgan Gwent 00306w). **Beads**: Saxon beads were reported from the cave (Glamorgan Gwent 00306w).		
Chronology: Bacon Hole appears to have been used during at least 3 periods in the 1st millennia BC and AD. Late Iron Age activity in the cave is demonstrated by finds of decorated pottery and possibly by a bone pin and spindle whorl. Finds of a fumed olla and roof tiles also suggest that the site was used during the Roman Iron Age. A bronze Irish-style brooch indicates later use towards the end of the 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: IA; RIA; EM	**Suggested Date Range:** 500 BC- 1000 AD	

Name: Nanna's Cave	**ID:** 119	**HER:** 305461
Bibliography: Branigan et al. 1991a: 172-173; Davies 1989; Lacaille et al. 1956; Lacaille et al. 1961; Leach 1916, 1917		
Excavation Date: 1858;1911;1913;1950; 1973-86	**Type:** Single Chamber	**Altitude (m):** 31
Cave Description: The cave orientated east is 9 metres below the cliff top on the northern coast of Caldey Island. The cave has a maximum height of 3.6 metres with a total a length of 6 metres.		
Excavation/Assemblage: Roman Iron Age artefacts was reported in the upper layers of the cave chamber and on old spoil heaps outside the cave (Branigan et al. 1991a: 172). The majority of this material may have come from a midden deposit within the cave. **Pottery**: Vessels dating to the 3rd-4th centuries AD were found in the cave, identified as 3 fumed ollae, 2 flanged bows, 1 brown painted hammerhead mortarium, 1 carination coarse ware bowl and 3 buff imitations of Samian ware (Branigan et al. 1991a: 173). **Glass**: A dark blue glass bead with triangular central piercing was found in the cave and considered Iron Age or Roman Iron Age in date (Branigan et al. 1991a: 173). **Coinage**: A Denarius minted during the reign of Severus Alexander was found in the cave.		

Metalwork: A trumpet brooch, possible of Hull type 15, was found in the cave and may have dated to the 2nd century AD. The only other metal object found in the cave was folded worked bronze sheet.

Bonework: A bone pin developed from Crummy type 2 dating between 50 and 250 AD was found with broken shaft and conical head.

Stonework: A lignite armlet fragment and a sandstone spindle whorl were considered Iron Age or Roman in date.

Human Remains: A complete skeleton was recovered from the cave.

Animal Remains: An undated faunal assemblage included ox, sheep, pig, horse and dog was found in the cave.

Chronology: It is likely that Nanna's Cave was in during the 2nd-4th centuries AD, which is demonstrated by the pottery corpus and the find of a coin minted during the reign of Severus Alexander.

Radiocarbon Dates:

Suggested Broad Date: RIA	**Suggested Date Range:** 800 BC- 400 AD

Name: Lesser Garth Cave	**ID:** 120	**HER:** 307799
Bibliography: Alcock 1959; Branigan et al. 1991a 158- 159; Branigan et al. 1992: 92; Davis 1983; Hussey 1966; Redknap et al. 2009; Wheeler 1922, 1923		
Excavation Date: 1912-1914;1920;1922;1963-1964	**Type:** Multi-Chamber	**Altitude (m):** 119

Cave Description: The cave located on Lesser Garth hill is located on a steep slope and is accessed by a southwest facing entrance, which is 2.1 metres wide. The cave entrance is joined by a passage 91 metres long, being 15 metres high and 6 metres wide at its greatest extent, which leads into two further chambers.

Excavation/Assemblage Discussion: Roman Iron Age finds were recorded from a hearth near the entrance, on the interface between the first and second chamber, a rubbish dump below the main floor and a single sherd was also found in the second chamber (Branigan et al. 1991a: 158). A shaft was located towards the western side of the cave wall 1.8 metres in diameter and opposite the crevice that contained human remains. A forge was identified in the passage with a large amount of clinker, metal and sherds of pottery and crucible. A hearth towards the entrance was found associated with Roman Iron Age pottery. A Late Bronze Age hearth was also noted in the second chamber (Hussey 1966: 33).

Pottery: Bronze Age pottery found in the cave, including Devell-Rimbury type and a piece of Late Bronze Age knobbed pot (Savory et al. 1956: 48). In his analysis of pottery from the cave, Boon (1951: 175) identified a small light grey fabric being of Belgic antecedence considered to be early 1st century AD in date. Other forms belonged to pottery dating to the 2nd-3rd centuries AD (Boon in Hussey 1966: 28). Early Medieval pottery dating to the 5th-7th century pottery was also found and were similar to those found at Dinas Powys.

Human Remains: Human remains were found in a natural crevice that was located alongside the Western wall of the cave and 3.35 metres away from the cave entrance (Hussey 1966:18). Further undated remains were located in a shaft directly west of the crevice (Hussey 1966: 20). At least 7 individuals were recorded from the cave, including child aged between 5-6 years, the other dating from 16-30 (Madgwick 2007). Five individuals were radiocarbon dated, 2 of which were dated to the Early Medieval period.

Metalwork: Metal objects found in the cave, included 28 round-headed iron studs, which may have belonging to Caligula type boots (Hussey 1966: 29). Early Medieval metalwork found in the cave included a loose bronze ring-pin of Irish antecedence and dated to the 7th-9th centuries AD, a gilt bronze plano-convex ornament, bronze nob, waste lumps of bronze, silver sheets and lead droplets (Hussey 1966: 29-31). Further metalwork included a bronze ring, two knife blades, and an iron slotted tool, all of which were considered to date to the 7th-9th centuries AD (Hussey 1966: 31).

Animal Bone: An undated animal bone assemblage included cow, piglet and pig, sheep/goat, horse and dog.

Stonework: Stone rubbers a pounder and 2 whetstones were recorded from the excavations and could be of any date (Branigan et al 1991a: 159).

Bonework: Four bone pins along with an Iron Age bone weaving comb (Branigan et al. 1992: 92).

Coinage: Wells et al. (2007) records the finding of two coins most likely from the cave thought to be Greek/Hellenistic in style dating from 200-27 BC.

Chronology: Lesser Garth Cave appears to have had a long and complex history of use and may have been used during the Iron Age, Roman Iron Age and Early Medieval period. Iron Age activity in the cave is demonstrated by finds of Belgic type pottery, a weaving comb and four bone pins. The two coins found in the cave of Hellenistic style may also demonstrate late 1st millennium BC, although these may also have been reliquaries and consequently may not have been deposited during the Iron Age (Guest et al. 2007). Roman Iron Age activity within the cave dates to the 2nd and 3rd centuries AD. The main phase of cave-use, however, appears to have been during the Early Medieval period. Finds of metalwork and metalworking debris, as well as pottery, indicate activity in the cave taking place sometime during the 7th-9th centuries AD and thus corresponds with two radiocarbon dates obtained from 2 individuals buried in a shaft in the main chamber.

Radiocarbon Dates:

UBA 10639 Individual 1 730 BP	**1051-1297 cal AD**
UBA 10638 Individual 3 726 BP	**1261-1288 cal AD**
UBA 10642 Individual 5 261 BP	**1629-1667 cal AD**
UBA 10640 Individual 6 1572 BP	**425-544 cal AD**
UBA 10641 Individual 7 1435 BP	**572-655 cal AD**

Suggested Broad Date: IA; RIA; EM	**Suggested Date Range:** 1200-600 BC; 200 BC- 300 AD; 500-900 AD

Name: Little Hoyle	**ID:** 121	**HER:** 305459

Bibliography: Alcock 1958; Anon 1991; Campbell et al. 1993; Campbell 1988; Campbell et al. 1989; Green 1986; Bronk Ramsey 2000; Laws 1877; Leach 1918, 1945; McBurney 1959; Rae et al. 1987; Rolleston 1878; Valdemar 1970

Excavation Date: 1866; 1877; 1878; 1958; 1986	**Type:** Multi-Chamber	**Altitude (m):** 24

Cave Description: Little Hoyle is a multi-chambered cave located on a limestone crag. The site has two entrances, one of which is orientated towards the northwest, whilst the other faces south. The cave itself is made of phreatic passage, which leads to a single chamber that is 7.6 metres in length and has a maximum height of 4 metres.

Excavation/Assemblage: The cave has been excavated at least 5 times. Artefacts were mainly concentrated in the main chamber, whilst a single pottery spindle whorls was found in the talus outside the north western facing entrance (Branigan et al. 1991a: 160).

Pottery: A spindle whorl made of a piece of Samian Ware was found outside the north western facing entrance. Inside there were sherds belonging to grey ware and a globular storage vessel. Fragments of Samian ware were considered to be intrusive from a swallet above the cave (Branigan et al. 1991a:

161), however given evidence of Roman Iron Age use in the cave they likely reflect purposeful use of the cave.

Coinage: A coin of Gallienus (260-268 AD) may have also been found in the cave (Branigan et al. 1991a: 161).

Metalwork: Finds of slag within the main chamber were thought to belong to the Iron Age. Two sheets of bronze were also considered to date to the Early Medieval period (Branigan et al. 1991a: 161).

Bonework: A bone awl, which was dated to the Iron Age was found in the cave (Branigan et al. 1991a: 161).

Human Remains: The remains of at least 11 individuals were found in lower levels of the caves and considered Neolithic or Bronze Age in date

Animal Remains: An undated faunal assemblage recorded in the cave included shellfish, dog, sheep/goat, pig, horse and roe deer.

Chronology: Roman Iron Age use of Little Hoyle is attested though finds of Samian Ware and globular vessels and a coin minted to the reign of Gallienus (260-268 AD) This may suggest that the cave was at least in use at some point during the late 3rd or early 4th centuries AD. Finds of metal and bonework may also indicate Iron Age and Early Medieval activity. This can be compared to a range of other caves on the Welsh coastline, that contained metalworking activity dated to the Early Medieval period.

Radiocarbon Dates:

Suggested Broad Date: IA; RIA; EM	**Suggested Date Range:** 800 BC- 800 AD

Name: Lynx Cave	**ID:** 122	**HER:** 418688
Bibliography: Blore 1966, 1981; Bramwell 1963; Branigan et al. 1991a: 163- 164; Bronk Ramsey 2000; Thompson 1963		
Excavation Date: 1962-2012	**Type:** Single Chamber	**Altitude (m):** 301

Cave Description: Lynx Cave is a small single chambered cave located on a limestone escarpment. It is accessed by an entrance crawl, which is 0.6 metres wide and 0.4 metres high. This leads into a passage and chamber. In total the site is 13 metres long with a maximum height of 1.7 metres.

Excavation/Assemblage: Lynx Cave was excavated between 1962 and 2012 and finds were found in a number of disturbed deposits within the cave chamber (Branigan et al. 1991a: 163).

Metalwork: A trumpet brooch found in the cave has been stylistically dated between 80-150 AD (Branigan et al. 1991a: 164). A copper alloy plain disc headed bronze pin was regarded as Bronze Age in date.

Bonework: Fragmentary bone objects were thought to be contemporary with a disturbed burial mound and contemporary hearth within the passage beyond the chamber.

Stonework: A fragment of two shale bracelets were also recovered and thought to date between the Bronze Age and Roman Iron Age.

Human Remains: At least seven individuals were found in the cave in two separate layers that could indicate two separate periods of burial.

Animal Remains: Sheep, deer, reindeer and small animals were recovered from the disturbed stratigraphy. A complete horse tibia found in a hollow under a boulder at the cave entrance was

considered to have date to the Late Bronze/Early Iron Age (Clwyd Powys 100947). Although, given the disturbed stratigraphy, this cannot be confirmed.	
Chronology: Evidence of activity in Lynx Cave, likely dated to the late 1st or early 2nd centuries AD, which can be compared to similar Welsh cave assemblages that included early Roman metalwork. Other finds, including the animal and human remains, cannot be given a firm date.	
Radiocarbon Dates:	
Suggested Broad Date: IA(?); RIA	**Suggested Date Range:** 1200- 700 BC; 0-200 AD

Name: Nant-Y-Graig	**ID:** 123	**HER:** 306686
Bibliography: Branigan et al. 1991a: 174; Davies 1949; Tankard 1946		
Excavation Date: 1946-1948	**Type:** Rockshelter	**Altitude (m):** 101
Cave Description: The rockshelter is orientated towards the east and is located on a rock ledge on a cliff face. The site is 10 metres long and is between 2-3 metres high.		
Excavation/Assemblage: Artefacts were reported from the rear of the rockshelter (Branigan et al. 1991a: 174). **Pottery**: Sherds of Black-Burnished olla with lattice decoration were found towards the rear of the rockshelter and date between the 2nd-3rd centuries AD (Branigan et al. 1991a: 174). **Metalwork**: A mason chisel was found of apparent Roman Iron Age date. **Human Remains**: The remains of at least 6 individuals were reported from the rockshelter. These were considered Iron Age in date by the excavators, because they were below Roman Iron Age artefacts (Davies 1949). Without further evidence however, a date for the burial cannot be suggested		
Chronology: The rockshelter was likely in use sometime during the 2nd-3rd centuries AD, which is demonstrated through isolated finds of Black-Burnished olla.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 800- 0 BC(?); 100-300 AD	

Name: Ogof-Yr-Esgryn	**ID:** 124	**HER:** 96556
Bibliography: Branigan et al. 1991a: 176- 177 Davies 1978; D'elboux 1924; Mason 1968a, 1968b, 1971, 1977, 1978		
Excavation Date: 1923;1938-50;1972;1978	**Type:** Single Chamber	**Altitude (m):** 288
Cave Description: Ogof-yr-Esgryn is a large karstic cave and is part of 3 caves in the Dan-y-Ogof system in the Brecon Beacons. The cave is accessed by a 6.7-metre-long passage, which leads to a larger 20-metre-wide and 11-metre-long chamber that contains the underground waters of the Afon Llynfell.		
Excavation/Assemblage: The cave has been excavated at least 4 times. Two phases of Roman Iron Age activity were noted with a disturbed burial group found near the north wall of the chamber. A later hearth was also found near the north wall (Branigan et al. 1991a: 177). **Pottery**: Deverel-Rimbury type pottery was found in the cave and considered to date to the Late Bronze Age (Savory 1958: 46). A large corpus of between 90-100 sherds, dating to the Roman Iron Age, were also discovered. This included sherds belonging to Samian Ware forms 18/31, 32 and 38 and a section of Black-Burnished flanged bowl. The corpus was considered to date to the late 1st and 2nd centuries AD whilst a further 4 sherds were dated to the late-3rd and 4th centuries AD (Branigan et al. 1991a: 177). **Glass**: Four sherds of small Roman Iron Age beaker were found in the cave.		

Coinage: Roman Iron Age coins found were: 2 Vespasian Denarii (72-73 AD), a Trajan Sesterius minted between 103-111 AD, 2 Hadrian Denarii minted in 118 AD, a sestertius minted between 125-8 AD and one minted in 119 AD; two Constantine I urbs Roman minted between 332-333 AD, Gloria Exercitus minted between 333-334 AD, a Constantine II Caesar Gloria minted between 335-337 AD and a Constantiopolis imitation minted between 330-340 AD. Early coins dating in the cave were worn (Branigan et al. 1991a: 177), whilst the coins of Constantine and Constantius were thought to belong to a hoard (Clwyd Powys 58445).

Metalwork: Bronze Age metalwork found in the cave included an Early-Middle Bronze Age rapier, and Late Bronze Age razer, awl and a gold bead (Savory 1958: 46). A Colchester derivative fibula and a dolphin fibula were dated to the late 1st century AD. Second century AD metalwork including a Trumpet fibula with Celtic decoration, an Antonine silver inland disc and trumpet fibula, a brass Omega penannular brooch, a Hadrianic/Antionine enamelled disc-head button and loop fastener, circular seal box, steelyard arm and rod. Artefacts that dated to the 4th century AD, included a coiled finger ring and a bracelet with snake-headed terminals. Other objects of Roman Iron Age date included a rod, spatula, awl, iron sheet fragment, lead slag, a broken intaglio and a worked fragment of iron (Branigan et al. 1991a: 177).

Bonework: Bone artefacts found in the cave dated to either the 1s-2nd century or the 4th century AD. Four pins of Crummy type 2, a needle, bodkin, handle, ring fragments, need and piercer may have been 2nd century AD in date, whilst a double-sided hair comb was considered to date to the 4th century AD (Branigan et al. 1991a: 177).

Human Remains: The remains of 40 individuals were found in the cave, consisting of 14 adults and 22 children, including neonatal remains. These were found with a coin of Trajan and were likely deposited during the Roman Iron Age (Branigan et al. 1991a: 177).

Animal Remains: A faunal assemblage found with the Roman Iron Age material was predominately made of sheep/goat, including young animals with pig and cow also reported.

Cloth: A possible fragment of linen bag was found with a coin of Vespasian (Clwyd Powys 58445).

Chronology: Ogof-yr-Esgryn appears to have served as a focus for deposition during the Bronze Age and Roman Iron Age. Similar extensive metalworking assemblages have been recorded at morphologically similar caves and stream ways, which included Poole's Cavern (**25**) and Wookey Hole (**166**). Chronologically, the material appears to suggest that the cave was used periodically throughout the Roman Iron Age, which begun during the Late 1st or 2nd century AD.

Radiocarbon Dates:

Suggested Broad Date: LBA; RIA	**Suggested Date Range:** 1200- 700 BC; 100- 500 AD

Name: Ogof-Yr-Ychen	**ID:** 125	**HER:** 310531
Bibliography: Bateman 1973;Branigan et al. 1991a: 178; Davies 1971a, 1971b;; Hedges 1994, 18; Bronk Ramsey et al. n.d., 30; Van Nedervelde 1972, 1973		
Excavation Date: 1970-1975	**Type:** Multi-Chamber	**Altitude (m):** 32
Cave Description: The cave is located on a sea cliff on Caldey Island, is 90 metres to the south of Nanna's Cave. It is made of 6 small chambers and is accessed by at least 2 entrances on a rock ledge.		
Excavation/Assemblage: Roman material was reported from an occupation layer in chamber 2 and from a midden of charcoal in chamber 4 (Branigan et al. 1991a: 178). **Pottery**: Roman Iron Age pottery of uncertain form or date was reported from the cave **Human Remains**: In Chamber 4, remains of a child were found with Roman Iron Age pottery		
Chronology: Three other caves were used on Caldey Island, which support the use of Ogof-yr-Ychen during the Roman Iron Age (**119, 125, 126, 127, and 203**). Roman Iron Age pottery found in the cave, also demonstrates that the site was used during the first part of the 1st millennium AD. Branigan and Dearne (1991a: 178) suggest that the inhumation of a child was also Roman Iron Age in date.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 43-410 AD	

Name: Potter's Cave	**ID:** 126	**HER:** 305462
Bibliography: Branigan et al. 1991a: 181		
Excavation Date: 1950;1973	**Type:** Single Chamber	**Altitude (m):** 40
Cave Description: Potter's Cave is located on a sea cliff on Caldey Island. The cave has two north facing cave entrances 10 metres apart on a small terrace, which is 40 metres above the shoreline. The first western entrance is a metre wide and 2 metres high whilst the east one is larger. The cave itself is made of a single chamber.		
Excavation/Assemblage Discussion: Excavation of the eastern entrance of the cave uncovered pottery belonging to the Late Bronze Age and Iron Age, along with Neolithic and Early Bronze Age types in disturbed upper layers. Medieval pottery was also identified from the eastern entrance. Further excavations in 1973, focused on the eastern cave entrance, and the interior. **Pottery**: Iron Age, Late Bronze Age, Bronze Age and Neolithic pottery was found in the 1950 excavation of the western entrance. Whilst potential Roman Iron Age pottery was found in the eastern entrance. **Metalwork**: Four pieces of bronze wire were found with flat pot sherds thought to be possibly Roman Iron Age in date. **Beads**: Forty-Eight blue glass beads were found in the Western entrance and passageway and were associated with two human burials. These were considered to date to either the Late Bronze Age or Iron Age. **Human Remains**: Human remains were found cemented within and beneath stalagmite, whilst two burials were found from the western passageway. These may date to the Late Bronze Age or Iron Age.		
Chronology: Potter's Cave is part of 4 caves located on Caldey Island that were in use during the 1st millennia. Finds of Late Bronze Age, Iron Age and Roman Iron Age pottery indicate activity took place within the cave sometime during the 1st millennia. The burials of two individuals may have also taken place during this period.		
Radiocarbon Dates:		
Suggested Broad Date: LBA; IA; RIA(?)	**Suggested Date Range:** 800- 0 BC; 43-410 AD	

Name: Daylight Rock	**ID:** 127	**HER:** 276053
Bibliography: Davies 1989		
Excavation Date: 1953-1954; 1988	**Type:** Single Chamber	**Altitude (m):** 3
Cave Description: Daylight Rock is a single chambered cave, which is located on a cliff face. Its entrance orientated towards the southwest, leads to a short rock chamber.		
Excavation/Assemblage Discussion: Human remains and Mesolithic flint and pottery, along with a number of sherds of Peterborough Ware were recovered from the cave. **Human Remains**: A radiocarbon sample of human bone provided a date 333-539 cal AD, suggesting that the cave may have been used during the Roman Iron Age (OxA-7685).		
Chronology: Roman Iron Age activity in Daylight Rock, is demonstrated by a single radiocarbon date taken from a human bone found within the short rock chamber.		
Radiocarbon Dates: OxA-7685 Human bone 1635±40 **333-539 cal AD**		
Suggested Broad Date: RIA	**Suggested Date Range:** 200- 500 AD	

Name: Upper Kendrick Cave	**ID:** 128	**HER:** 300812
Bibliography: Davies 1978b, 1979a, 1979b, 1983b; Stone et al. 1976; Stone et al. 1977; Stone 1994: 19-20		
Excavation Date: 1977-1978	**Type:** Single Chamber	**Altitude (m):** 66
Cave Description: The limestone cave is accessed by two entrance, which both face south. The largest entrance, located towards the west, is 4 metres wide and is separated from the smaller, 2-metre-wide entrance by a column of limestone. These lead into a single chamber, which is 11 metres long, 8.5 metres wide and 3 metres high.		
Excavation/Assemblage Discussion: The majority of finds reported from excavation of the cave between 1977 and 1978 dated to the Neolithic and Early Bronze Age. However, a single Roman Iron Age sherd was reported from the central trench, located in the main chamber (Stone 1994: 20). **Pottery**: A fragment of Roman Iron Age pottery was recorded from the central trench at 76 cm depth (Stone 1994: 20).		
Chronology: A single Roman Iron Age sherd, of uncertain type or date, may indicate use of Upper Kendrick Cave, sometime during the early 1st millennium AD.		
Radiocarbon Dates:		
Suggested Broad Date: RIA	**Suggested Date Range:** 0-410 AD	

Name: Ogof Pant Y Wennol	**ID:** 202	**HER:** 300821
Bibliography: Stone 1994: 11		
Excavation Date:	**Type:** Single Chamber	**Altitude (m):** 86
Cave Description: The cave's entrance, orientated towards the northwest, is 6 metres wide and 3 metres high. This leads to a small chamber, which is c.8 metres long and c.5 metres wide.		
Excavation/Assemblage Discussion: **Bonework**: An Iron Age bone weaving comb was found in the rubble of the cave with eleven teeth broken (Stone 1994: 11).		
Chronology: Finds of Iron Age weaving combs have been noted in a range of caves throughout the British Isles and demonstrate periods of activity in caves dating to the 1st millennium BC. Without any further finds of diagnostic material, however, it is difficult to date this period of activity.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 800 BC- 43 AD	

Name: Orchid Cave II	**ID:** 204	**HER**: (Clwyd) 103035
Bibliography: Aldhouse-Green 1996; Guilbert 1982		
Excavation Date: 1981(Caver finds)	**Type:** Single Chamber	**Altitude (m):** 335
Cave Description: The cave is located on a rock scarp and is accessed by a north western facing entrance. The cave mouth, which is 1.3 metres wide and 1.1 metres high leads to a small karst system.		
Excavation/Assemblage: Finds by cavers, include human remains which were radiocarbon dated to the Neolithic. **Bonework**: A bone toggle and pin were recovered from the cave and considered Iron Age in date (Clwyd 103035)		
Chronology: Finds of Iron Age bonework are recorded in a range of caves in Wales, which may support the date behind similar finds in Orchid Cave II. Nevertheless, such a date can only be tentative because of the non-diagnostic nature of the bone artefacts.		
Radiocarbon Dates:		
Suggested Broad Date: IA(?)	**Suggested Date Range:** 800 BC- 43 AD	

Name: B.S Pothole	**ID:** 231	**HER:** (Clwyd) 102804
Bibliography: Branigan et al. 1991a:153		
Excavation Date:	**Type:** Vertical Passage	**Altitude (m):** 6
Cave Description: The cave, accessed by a low creep, is located at the base of a cliff, which leads to an active karst system.		
Excavation/Assemblage Discussion: Roman pottery was recorded by cavers entering the low-lying cave (Branigan et al. 1991a: 153).		
Chronology: Given the isolated find of Roman Iron Age pottery of unknown quantity and date, only a tentative Roman Iron Age date can be given for cave-use.		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 43-410 AD	

Name: Great Orme's Head Cave	**ID:** 232	**HER:** (Gwynedd) 4547
Bibliography: Branigan et al. 1991a: 156; Jackson 1962: 291-292		
Excavation Date: 1860	**Type:** Cave	**Altitude (m):** 106
Cave Description: The cave is located on the northwest side of Great Orme's Head. The morphology of the cave is unknown.		
Excavation/Assemblage Discussion: **Human Remains**: Remains of one adult were recorded found along with two ram skulls, two fox canines and marine shell, considered by Jackson (1962:291-292) as Roman in date. Branigan and Dearne (1991: 156) considered Bronze or Neolithic date based on parallels to nearby Kendrick's Cave (**128**). **Coinage**: A coin of Domitian was found the grounds associated with the cave, although there is no direct evidence of association with the site itself.		
Chronology: The finds of a coin of Domitian may indicate Roman Iron Age activity in the cave during the late 1st century AD. However, because there is no direct relationship between the coin and the cave, it is unclear whether the cave was used during the Roman Iron Age.		
Radiocarbon Dates:		
Suggested Broad Date: RIA (?)	**Suggested Date Range:** 0-100 AD	

Name: Pigeon's Cave	**ID:** 340	**HER:** (Gwynedd) 4577
Bibliography: Savory 1958		
Excavation Date:	**Type:** Cave/Shaft	**Altitude (m):** 188
Cave Description: The cave is located on a platform overlooking the sea shore and is 10 metres above sea level. The cave is accessed by an overhang 30 metres wide, 13 metres high and 13 metres long. Behind this a 4 metres shaft descends into a small chamber that leads to sea level.		
Excavation/Assemblage Discussion: **Metalwork:** A hoard of bronze metalwork, known as the Orme's Head Hoard, was found in loose rock debris close to the cave in 1898 (Savory 1958: 14). The hoard, which dates between c.750-700 BC, included two penannular gold ear-rings, a bronze palstave, a socketed bronze implement and a leather-worker's awl (Savory 1958: 15).		
Chronology: Similar hoards of Late Bronze Age metalwork at sites such as Heathery Burn (**3**) demonstrates that caves were use as sites of deposition during the Late Bronze Age and Early Iron Age. The location of the Orme's Head Hoard, outside Pigeon's Cave, may therefore demonstrate an association between the metalwork hoard and the cave.		
Radiocarbon Dates:		
Suggested Broad Date: IA	**Suggested Date Range:** 750-700 BC	

Name: Llanymynech Cave	**ID:** 341	**HER:** 92487
Bibliography: Branigan et al. 1991a: 161; Jones et al. 2012; Musson et al. 1989; Rowley 2001; Savory 1966; Toms 1969		
Excavation Date: 1875; 1969	**Type:** Multi-Chamber	**Altitude (m):** 204
Cave Description: The cave is thought to have been used as a mine during the Late Iron Age and Roman Iron Age. The site is located at the base of a small crag, within the centre of Llanymynech hillfort, and is accessed by a gully, leading to an entrance approximately 4 metres wide.		
Excavation/Assemblage: Llanymynech Ogof is located within the centre of an Iron Age hillfort and is thought to have been used as a mine and later as a burial site in the 2nd century AD (Jones et al. 2004: 12). The cave is associated with a number of open-workings used to extract copper. **Metalwork**: A trumpet brooch was found in the cave, which dates to the 2nd century AD (Branigan et al. 1991a: 160). **Llanymynech & Copper working:** Evidence for the extraction of copper from the hillfort is demonstrated by finds of crucibles in the hillfort dating to 162 cal. BC – AD cal. 53, and 363-119 cal. BC (Musson et al. 1989). Furthermore, copper extracted from Llanymynech has been identified in a copper alloy horse bit found in the hoard at Llyn Cerrig Bach on Angelsey (Waddington 2013 18-19). Outside the cave were a number of pits containing copper waste and a hoard of Roman coinage and Black-Burnished Ware pottery (Musson et al. 1989). **Coinage:** Outside the cave, hidden in calcite waste and in the upper parts of deposits of copper waste was a hoard of coins minted during the reigns of Faustina and Antoninus (c.140-160 AD) (Branigan et al. 1991a: 161). **Pottery**: Black-burnished ware was also found associated with the coin hoard in the dead pits outside the cave entrance (Branigan et al. 1991a: 161). **Human Remains**: One burial was reported from the cave (Clywd/Powys 15884).		
Chronology: Evidence of direct use of Llanymynech Cave comes from finds of a trumpet brooch, Black-Burnished Ware pottery and a coin hoard, all of which date to the 2nd century AD. However, the cave also lies at the centre of a Late Iron Age hillfort and is associated with a number of open-workings that indicate that the site may have been related to the extraction of copper. This relationship is also clearly demonstrated by a series of pits dug outside the cave, which contained		

copper waste. It is therefore likely, that Llanymynech Cave was part of wider activity taking place inside the hillfort.	
Radiocarbon Dates:	
Recorded in Musson & Northover 1989 Human bone in ditch	**162 cal. BC –53 cal AD**
Recorded in Musson & Northover 1989 Human bone in ditch	**363-119 cal. BC**
Suggested Broad Date: IA; RIA	**Suggested Date Range:** 400 BC- 300 AD

Name: Ogof Morfran	**ID:** 343	**HER:** (Dyfed) 7395
Bibliography: Branigan et al. 1991a: 175; Davies 1969, 1974a, 1974b		
Excavation Date: 1969-1971;1974	**Type:** Rockshelter	**Altitude (m):** 18
Cave Description: The single chambered cave is located on a wide ledge, 18 metres above the current shore line The cave has a max height of 1.8 metres with a width of 9.1 metres and a length of 3 metres. The floor of the cave is disturbed by high tides.		
Excavation/Assemblage: Artefacts were recovered from both floor deposits and cemented on the rear wall (Branigan et al. 1991a: 175). These deposits were likely moved from the cave floor and washed against the wall during periods of flooding. **Pottery**: A Late Bronze Age bucket shaped vessel was found on the cave floor (Davies 1988: 81). A single sherd of Form 37 Samian Ware was found in scree deposits that were cemented against the rear cave wall (Branigan et al. 1991a: 175). **Coinage**: In total, 3 coins were found during the 1969 excavations of the cave, minted during the reigns of Claudius II (268-270 AD) and Tetricus II (273-274 AD) (Branigan et al. 1991a: 175). **Stonework** A sandstone saddle quern was recovered from the cave and considered Late Bronze Age in date (Davies 1988: 81). **Metalwork**: A hinged bronze fibula pin was recorded from the cave of uncertain Roman Iron Age date (Branigan et al. 1991a: 175).		
Chronology: Ogof Morfran appears to have been used during the Late Bronze Age, which is attested through finds of a sandstone saddle quern and a bucket shaped vessel. The cave then appears to have been used during the 2nd or early 3rd century AD.		
Radiocarbon Dates:		
Suggested Broad Date: LBA; RIA	**Suggested Date Range:** 1000- 700 BC; 200-400 AD	

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