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# *AGRICULTURAL DECISION-MAKING AND MANAGERIAL RESPONSE AT DURHAM CATHEDRAL PRIORY DURING THE LONG FOURTEENTH CENTURY, c.1300-1453*

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### How to cite:

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AGRICULTURAL DECISION-MAKING AND MANAGERIAL RESPONSE AT  
DURHAM CATHEDRAL PRIORY DURING THE LONG FOURTEENTH  
CENTURY, c.1300-1453

Ryan K. Wicklund

**ABSTRACT:** The role of agency and the framework which we use to discuss agriculture in the Later Middle Ages and in the medieval economy deserves fresh consideration. Previous scholars have often portrayed medieval economic actors as unmoved by or uninterested in the changing world around them. However, the true role of decision-making is obscured in much of this literature on medieval agriculture due to the common framework of proto-capitalistic and profit-maximising within which the field is often analysed. In such circumstances, the role of individuals is much too easily obscured. My thesis addresses these issues while paying particular attention the roles of manorial managers and monastic obedientiaries and the effect the actions of these individuals had on manorial farming. In this thesis, I examine the extant manorial accounts from the estate of the Durham Cathedral Priory bursar, of which there are over four hundred. I use the data gathered from these accounts to examine measures of arable productivity. I additionally use data from tithe receipts and rental books, which provide evidence for the extra-demesne economic activities of those who managed the bursar's manors. The evidence from these sources is then examined in light of the agricultural treatises of the period, including Walter of Henley's *Husbandry*, *Les Reules de Seynt Roberd* by Robert Grosseteste, Bishop of Lincoln, and the anonymous *Senechausie*. I argue throughout this thesis for a re-evaluation of the motives and capabilities of those involved in medieval agriculture. These activities of these very capable individuals too easily become lost when careful analysis is not undertaken to deliberately restore their agency.

AGRICULTURAL DECISION-MAKING AND  
MANAGERIAL RESPONSE AT DURHAM  
CATHEDRAL PRIORY DURING THE LONG  
FOURTEENTH CENTURY, c.1300-1453

RYAN KNOWLTON WICKLUND

DISSERTATION SUBMITTED AS PART REQUIREMENT FOR THE  
DEGREE OF DOCTOR OF PHILOSOPHY  
IN THE DEPARTMENT OF HISTORY  
DURHAM UNIVERSITY

2021

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## Acknowledgements

I have been supported by so many people throughout this project, and I am grateful for the support of so many people, while I must offer my apologies to anyone unfortunately omitted here. My first thanks go to my supervisors. Dr. Ben Dodds was the first to spark my interest in economic history and for that, and his boundless enthusiasm and patience, I owe him my thanks. I would also like to thank Dr. Julie Marfany and Dr. Alex Brown. Their endless support, encouragement, and help has made this thesis possible. My thanks also to the Durham University Special collections staff, particularly those individuals at 5, The College who were always available to help with the interpretation of medieval documents and quirks of handwriting a millennium and half old. The assistance of Dr. Michael Stanfield and Messrs. Andrew Gray and Francis Gotto has been invaluable. My friends have been a never-ending source of laughter, support, and phenomenal meals. Drs. Jack Baker, David Chivers, and Nicholas Hoggard undoubtedly kept my sanity at respectable levels throughout this thesis, and for that, I suppose, I must thank them. My thanks to Mr. Lawton Duncan who, despite being 5,000 miles away, has been a constant presence. I owe no little thanks to my wife, Lissa, and she deserves more than the heartfelt gratitude than I can offer here. Her support, encouragement, and utterly dependable ability to make me laugh enabled me to finish this thesis. My final thanks are reserved for my parents, to whom this thesis is dedicated. I cannot begin to sufficiently express the debt I owe them. Their unwavering support has been ceaseless throughout this project, as it has been throughout my life. Their belief in me has pushed me to take chances I would not have thought possible. I simply cannot imagine beginning this project, much less finishing it, without them.

Though I have been supported by so many individuals throughout this thesis, what follows is my own work. As such, any unfortunate mistakes that follow are my own.

Ryan K. Wicklund

London 2021

# Dedication

*To my parents*

# Chapter I: Introduction

## I. A Time of Reoccurring Challenges: English Agricultural History in the Long Fourteenth Century

The long fourteenth century in England was undoubtedly a period of tumultuous upset and rapid change. The Great Famine of 1315-17, described by Philip Slavin as ‘arguably the single worst agrarian and food crisis in northern and central Europe’ in the last two thousand years, was the first of the cataclysmic events that rocked England in the Late Middle Ages.<sup>1</sup> High rainfall and flooding from 1314-1316 caused three successive harvest failures, leading to the death of ten to fifteen per cent of the population of Europe.<sup>2</sup> The Great Bovine Pestilence struck England and Wales in 1319 and 1320, leading to the loss of roughly sixty-two per cent of cattle, including draught animals and dairy cows, causing a subsequent protein deficiency for the next twelve years.<sup>3</sup> The Black Death of 1348 needs even less introduction. The effect of the apocalyptic loss of life, with estimates that a third to two-thirds of Europe perished in the first outbreak alone, cannot be overstated. Nor did the threat of plague cease after the first wave, and *pestis secunda* (1361), *pestis tercia* (1369), *pestis quarta* (1375), and *pestis quinta* (1379-1383) all took their toll on England’s population.

Similarly, disastrous climatic conditions plagued England during the long fourteenth century, often going hand in hand with the reoccurring outbreaks of pestilence. For much of the thirteenth century, the Medieval Climate Anomaly had led to mild and wet winters, warm

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1. Philip Slavin, ‘The Great Bovine Pestilence and its economic and environmental consequences in England and Wales, 1318–50’, *Economic History Review*, 65(4) (2012), p. 1239.

2. This marked the end of the Medieval Climate Anomaly (MCA). Bruce M. S. Campbell, *The Great Transition: Climate, Disease, and Society in the Late-Medieval World* (Cambridge, 2016), p. 34, Slavin, ‘Great Bovine Pestilence’ p. 1239.

3. Ibid., pp. 1242, 1263.

summers, and predictable weather conditions, which meant that the High Middle Ages saw a period of exceptionally fruitful arable agriculture.<sup>4</sup> The high rainfall and subsequent flooding of 1314-1316 coincided with the end of the Medieval Climate Anomaly, and the Great Famine was an inevitable result. Weather conditions improved after 1350, with a period of solar irradiance lasting until the 1380s, termed by Bruce Campbell the ‘Chaucerian Maximum,’ in which temperatures again rose.<sup>5</sup> Yet the Chaucerian Maximum had merely postponed the effects of further climate change: the Little Ice Age (LIA) took effect at the close of the fourteenth century. Campbell argues that

one of the most striking features of LIA climates was their instability, with marked annual variation in temperature and precipitation. Societies, as a result, had to cope with far greater environmental uncertainty at a time when they were also contending with heightened biological risks from plague and other diseases.<sup>6</sup>

As the climate and demography of medieval England changed, so too did society and the economy. Wages, both real and nominal, rose following the Black Death, while living standards for much of England improved.<sup>7</sup> Manorial labourers started to demand – and receive – better foodstuffs in their liveries, seen especially in the switch from the formerly common brown bread to white, wheaten bread, and Christopher Dyer notes a typical case of manorial workers refusing their customary cider in favour of ale.<sup>8</sup> With the steep decline in population, wage-earners were important to fill labour shortages. Such individuals were not unaware of their newfound power, and wage-earners found themselves bargaining from positions of greater

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4. Campbell, *The Great Transition*, p. 34.

5. Ibid., p. 15.

6. Ibid., p. 337.

7. That such rising real wages had an effect on wage-earners is a topic of debate. See John Hatcher, ‘Unreal wages: long-run living standards and the “golden age” of the Fifteenth Century’ in Ben Dodds and Christian Liddy, (eds.) *Commercial Activity, Markets and Entrepreneurs in the Middle Ages: Essays in Honour of Richard Britnell 2011* pp. 1-24.

8. Christopher Dyer, ‘Changes in diet in the late Middle Ages: the case of harvest workers’, *Agricultural History Review*, 36(1) (1988), pp. 35-36.

power, demanding increased wages and, as we have seen, better foodstuffs. And while landlords had been able to adjust following the Black Death, these changes were nonetheless felt and often lamented by seigneurial lords.

It is against this backdrop of rapid changes and need for careful management that this study examines the operation of the Durham Cathedral Priory bursar's estate. In such circumstances, considered decision-making became extremely important, as did the motivations of those making such agricultural decisions. Yet historians have argued against such skill and economic acumen, leading to a loss of agency for a large swathe of medieval economic actors.

Such an argument is not new: M. M. Postan argued medieval landlords tended to squander the majority of any returns from their estates, rather than investing in their holdings.<sup>9</sup> Furthermore, while Postan acknowledged that, 'in some branches of medieval agriculture and on some large estates...market fluctuations and psychological attitudes which go with them influenced the economic decisions of men,' many medieval economic actors 'could not be expected to expand or to contract their holdings or to contract their holdings... to sow more or to work harder in response to the stimuli of prices or under the influence of a pessimistic or optimistic view of future business prospects'.<sup>10</sup> Postan argues a lack of investment and, for most estates and smallholders, a disinterest in the market on the part of both landlords and their managers which kept yields low and medieval agriculture largely inefficient.<sup>11</sup> Indeed, Postan states that 'at the turn of the thirteenth and fourteenth centuries the average yields per acre on

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9. Michael M. Postan, 'Investment in medieval agriculture', *Journal of Economic History*, 27(4) (1967), p. 580.

10. Michael M. Postan, 'Note', *Economic History Review*, 12(1) (1959), p. 79.

11. As the most common indicator of agricultural success — or failure — grain yields are the most used metric throughout this study, as they are in other, similar research. Here, grain yields are yields per seed and net of tithe. Yield per seed is calculated by dividing the total harvest of a crop by the amount of seed sown. Therefore, a yield per seed of one would mean that the same amount was harvested as was originally sown, while a yield of two would have twice the amount harvested as was sown, etc. *Chapter III: Measures of Agricultural Success* discusses yields at Durham Cathedral Priory and compares them with estates elsewhere in England.

English manors...were lower than in the most backward agrarian areas of the prewar [pre-Second World War] Balkans and Middle East'.<sup>12</sup>

This pessimism is further visible in research such as A.R. Bridbury's study on agriculture following the Black Death. Bridbury referred to the 'Indian summer of demesne farming' (from c. 1350 to c. 1370), during which period direct seigneurial farming benefited from high grain prices and agricultural practices could continue as they were prior to the Black Death.<sup>13</sup> According to Bridbury, only during the late fourteenth century did demesne agriculture suffer and patterns of land use change, as demesnes were less likely to be kept in hand and were either leased out whole or piecemeal.<sup>14</sup> Yet the theory espoused by Bridbury that demesne managers simply carried on in the same manner as they or their counterparts did before the Black Death ignores the changes to which decision-makers would have been forced to adapt. As David Stone points out, the loss of large swathes of the workforce from plague and famine would have been prohibitive to 'business as usual.' Bridbury's theory not only 'indicates a structural continuity in demesne farming, but also suggests that this was simply the result of good fortune on the part of landlords and that they continued to farm the land in exactly the same way as they had in the years before 1348'.<sup>15</sup> Bridbury's framework for understanding for this period relies on the idea that 'medieval landlords and their officials were economically unsophisticated, inflexible, virtually bystanders,' which, I argue, was demonstrably not the case.<sup>16</sup> The pessimistic view continues to shape even stronger expression in more recent work. Citing Postan, Eric Schneider states that manorial officials may have been economically irrational, and could not be expected

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12. Postan, 'Investment in medieval agriculture' pp. 576-577.

13. A.R. Bridbury, 'The Black Death', *Economic History Review*, 26(4) (1973), pp. 583-584, 586. Bridbury draws upon prices series constructed by Lord Beveridge, Thorold Rogers, and D. Farmer.

14. *Ibid.*, pp. 583-584, 586.

15. David Stone, *Decision-Making in Medieval Agriculture* (Oxford, 2005), p. 83.

16. *Ibid.*, pp. 4, 6.

to change agricultural practices based on external economic stimuli. Even if they were not irrational, Schneider argues that manorial officials may have been constrained by manorial customs or the volatility of grain prices.<sup>17</sup> Similarly, though he concedes that some manorial officials may have been ‘proto-capitalists,’ H. Kitsikopoulos concludes that in their management of demesnes in London’s hinterlands officials’ choices may have been ‘irrational’.<sup>18</sup>

This study seeks to build on Stone’s argument and demonstrates that manorial officials were constantly adapting to changing circumstances and not merely being borne along by custom. It does so by examining the decision-makers for the various manors on the Durham Cathedral Priory bursar’s estate, their motivations, and their mindsets. As such, in this thesis I will make three sustained points. Firstly, that much of the historiography of medieval English agricultural history obscures the individual agency of medieval decision-makers. Secondly, I argue throughout this thesis that current analytical trends that focus on big data sets may obscure the actions of individuals and the particular effect those actions may have had and, in doing so, also discourage further research into the extra-manorial activities of agricultural decision-makers.<sup>19</sup> By contrast, the nature of the data I gathered for this study (discussed in

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17. Eric B. Schneider, ‘Prices and production: agricultural supply response in fourteenth-century England’, *Economic History Review*, 67(1) (2014), pp. 86-87.

18. Harry Kitsikopoulos, ‘Manorial estates as business firms: the relevance of economic rent in determining crop choices in London’s hinterland, c.1300’, *Agricultural History Review*, 56(2) (2008), p. 163, Schneider, ‘Prices and production’, p. 86.

19. Studies that follow such trends include those by Schneider, Kitsikopoulos, Campbell, and Clark. See Bruce M. S. Campbell, ‘Arable productivity in Medieval England: some evidence from Norfolk’, *Journal of Economic History*, 43(2) (1983), pp. 379-404, Bruce M. S. Campbell, *English Seigniorial Agriculture, 1250–1450* (Cambridge, 2000), Bruce M. S. Campbell and Ó Gráda, Cormac, ‘Harvest shortfalls, grain prices, and famines in preindustrial England’, *The Journal of Economic History*, 71(4) (2011), pp. 859-886, Gregory Clark, ‘The cost of capital and medieval agricultural technique’, *Explorations in Economic History*, (1988), pp. 265-294, Gregory Clark, ‘Yields per acre in English agriculture, 1250-1860: evidence from labour inputs’, *Economic History Review*, 44(3) (1991), pp. 445-460, Gregory Clark, ‘Markets before economic growth: the grain market of medieval England’, *Chlometrica*, 9(3) (2015), pp. 265-287, Kitsikopoulos, ‘Manorial estates as business firms’, pp. 142-166, Eric Schneider, ‘Evaluating the effectiveness of yield-raising strategies in Medieval England: an econometric approach’, *ideas.repec.org*, (2011), Schneider, ‘Prices and production’, pp. 66-91.

detail in *Chapter I: Introduction, section IV* and *Chapter II: Sources & Methods*) allows for an in-depth investigation into the socio-economic standing of decision-makers and an analysis of their successes and failures during their careers. Thirdly, that the framework used by many studies to examine medieval agriculture is problematic. Studies, such as those discussed in the following sections, which attempt to explain seigneurial agriculture through price-responsiveness and capitalistic or proto-capitalistic behaviour err in assuming that profit-maximisation was the end goal sought by medieval decision-makers. When such behaviour is not found, the possibility is invariably raised that medieval decision-makers were simply irrational, unskilled, or unconcerned with profit; the latter is perhaps the most correct of the three. Even if profit-maximisation was a key concern to medieval manorial landlords and managers, the terms capitalistic and proto-capitalistic are too vague to serve any real purpose. Rather, I argue throughout this thesis that manorial landlords and managers were, more often than not, skilled at their work and valued not only profit, but also preserving their wealth and providing a measure of security through agriculture during a period of inherent uncertainty.

## II. Decision Making

Numerous studies such as those by R.H. Hilton, Alexandra Sapoznik, Dyer, Chris Briggs, S.H. Rigby, and Mark Bailey have discussed the society and economy of medieval English peasants, ranging from their material world to class conflict and inter-community relationships, but the peasantry's role in manorial administration remains understudied.<sup>20</sup> Those who made

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20. See, for example, R.H. Hilton, *The English Peasantry in the Later Middle Ages: the Ford Lectures for 1973 and Related Studies* (Oxford, 1975), Alexandra Sapoznik, 'Resource allocation and peasant decision making: Oakington, Cambridgeshire, 1360–99', *Agricultural History Review*, 61(2) (2013), pp. 187–205, Christopher Dyer, *Making a Living in the Middle Ages: The People of Britain, 850–1520* (London, 2002), Chris Briggs, 'The availability of credit in the English Countryside, 1400–1480', *Agricultural History Review*, 56(1) (2008), pp. 1–24, S.H. Rigby, *English Society in the Later Middle Ages: Class, Status and Gender* (London, 1995), Mark Bailey, 'Peasant welfare in England, 1290–1348', *Economic History Review*, 51(2) (1998), pp. 223–251, and Mark Bailey, *The Decline of Serfdom in Late Medieval England: from Bondage to Freedom* (Woodbridge, 2014). This list is not exhaustive.

agricultural decisions on demesnes, including reeves, serjeants, and other manorial officials, have largely been ignored, with some notable exceptions.<sup>21</sup> Though Schneider's study of approximately fifty manors on the Bishop of Winchester's estate provides possible insight into the running of these manors, it nevertheless falls short in providing a level of personal agency to the individuals who managed the demesnes. While Schneider uses large amounts of data to provide information about larger trends in demesne agriculture, his method, by its nature, strips all identifying details from the individuals who made agricultural decisions. Schneider's study mentions no reeves by name, even while noting that some may have been better managers than others, which can only be speculation given the lack of information on any one reeve's actions.<sup>22</sup> Schneider's partial adjustment model of supply response keeps the reader from gauging any effectiveness on the part of individual manorial officials as the result of their actions is lost among the econometric equations. This trend towards the removal of agency from individual medieval decision-makers is similarly present in Kitsikopoulos's study on the impact of economic rent on cropping choices on manors in London's hinterland.<sup>23</sup> Kitsikopoulos is concerned with cropping patterns and grain yields, but not with the individuals who made the decisions that affected these outcomes. By reducing the decision-making process of manorial landlords and officials to an equation of economic rent, Kitsikopoulos cannot investigate the effectiveness of individual actors, and any examples of high and low ability among such individuals are lost in the calculations. Indeed, Kitsikopoulos limits his conclusions on decision-

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21. All three offices were charged with overseeing the demesne, though the title varied according to time, geographical location, and the social situation of the office. For greater discussion, see *Chapter V: The Serjeants of Durham Cathedral Priory*.

22. Schneider, 'Prices and production', p. 84.

23. Kitsikopoulos, 'Manorial estates as business firms', pp. 142-166.

making to summarise that ‘some manorial officials may have acted as proto-capitalists taking production decisions based on unsophisticated judgements’.<sup>24</sup>

This study cannot perform the same econometric analysis used by Schneider and Kitsikopoulos; the nature of the extant records and resulting data does not allow for it. There are simply too few data points to conduct such analysis. Even if it were possible, however, it would not be the most suitable methodology for the following thesis. In contrast to other sources, the nature of the Durham Cathedral Priory manorial accounts and other extant texts, including tithe receipts and rentals, allow for a much more in-depth investigation into the manorial and extra-manorial affairs of the demesne serjeants. This focus on individuals does not supplant or necessarily invalidate the arguments based on econometric analysis, but instead seeks to use the Durham Cathedral Priory data that is available to its greatest effect. In doing so, this approach furthers the investigation into the agency of demesne managers and landlords, a primary area of interest to this thesis. By seeking to explore not only the efficiency and successes of the various serjeants during their service at the bursar’s manors, but also their socio-economic standing, this thesis seeks to restore a level of individual agency to medieval agricultural managers.

In contrast to Postan, more recent studies have argued that yields could be raised or lowered depending on the economic circumstances of the time. Stone, in his case study of Wisbech Barton in Cambridgeshire, convincingly asserts that demesne landlords and managers demonstrated ‘flexibility and effectiveness’ when responding ‘to changing market conditions’ by ‘their management of inputs,’ and operational adjustments, including the use of labour; these actions often deliberately led to falling yields, which often characterised the late fourteenth

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24. Kitsikopoulos, ‘Manorial estates as business firms’, p. 163.

century.<sup>25</sup> By observing past economic trends and predicting future swings of the market and decreasing the amount of labour inputs such as weeding and manuring, among others, manorial managers and landlords deliberately sought to lower yields when the market did not provide a financial incentive to do so. Conversely, these same individuals could raise yields when market conditions were favourable. Stone builds upon this view and investigates the effectiveness and managerial approach of individual reeves (the individuals who managed the demesne for the lord) at the manor of Wisbech Barton.<sup>26</sup> In one notable example, Stone examines the case of one reeve at Wisbech Barton, Robert Black, reeve between 1362 and 1366. During Black's management of the manor, Stone notes the significant changes to demesne cropping patterns, going so far as to state that Black was 'preoccupied with the reorganization of demesne cropping'.<sup>27</sup> Despite the importance of Stone's work on the manorial officials, the narrowness of his scope still leaves much room for further historiographical debate, for it remains unclear if his findings on manorial officials on the lands held by the Bishop of Ely are applicable elsewhere. It is, in part, the focus of this thesis to build upon Stone's work on motivations and abilities of seigneurial landlords and manorial managers by investigating the individual manorial managers on the estate of the Durham Cathedral Priory bursar throughout the long fourteenth century.

Campbell similarly acknowledges that '[a]dopting innovative and intensive methods did not always make good economic sense' and would not always be profitable.<sup>28</sup> As such, Campbell agrees with Postan's assertion that medieval grain yields were often low, but for very

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25. Stone, *Decision-Making*, p. 120.

26. Ibid., pp. 77-79, 95-98.

27. Ibid., pp. 95-98.

28. Campbell, *English Seigniorial Agriculture*, p. 363. This, and Campbell's subsequent arguments, echoes the work of A. V. ChaiŁanov. See A. V. ChaiŁanov et al., *A. V. Chayanov on the Theory of Peasant Economy* (Manchester, 1986) for further.

different reasons. Whereas Postan argued that yields were low due to agricultural inefficacy and a lack of motivation, Campbell argues that at an institutional level low yields were often a choice — one that was deliberate and calculated. Manorial landlords and managers determined when large amounts of labour and yield raising techniques were and were not economically viable, and adapted their strategies accordingly, not out of irrationality or inefficiency. I seek to argue throughout this thesis that demesne landlords and manorial managers were proactive in their management of their crops, and adjusted labour inputs to raise or lower yields as their circumstances required, thus building upon Campbell's analysis of broader institutional trends.

### III. Problems with Capitalistic Perspective

Studies that judge landlords and manorial officials in terms of profit-maximisation are arguably beginning with an essentially flawed premise. Previous studies have put forward the idea that landlords and manorial officials were primarily concerned with profit-maximisation, though in no little part challenged by Campbell; there is little reason to assume that the majority of landlords or their officials were overly concerned with profit, which was, as I shall show, a nebulous concept during the long fourteenth century, or price-responsiveness, or economic rent. By avoiding such terms as 'proto-capitalist' or 'proto-capitalistic,' etc. we are able to move further away from the idea, posited by Kitsikopoulos, of landlords and officials as 'taking production decisions based on *unsophisticated judgments* (emphasis added) ... as opposed to adopting a modern methodology of profit calculation'.<sup>29</sup> Medieval landlords and agricultural managers, I will argue throughout this study, made sophisticated judgements based on the information that they had available and appropriate to the economic circumstances in which

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29. Kitsikopoulos, 'Manorial estates as business firms', p. 163.

they found themselves, even if that meant purposely lowering yields and behaving in fashions that might, with retrospect, be otherwise considered irrational. We thus move further away from the idea that medieval farmers were ‘ritualistic and superstitious, based on faith rather than reason,’ and, as such, uninvolved in complex economic decision making.<sup>30</sup>

This thesis argues that by moving away from a completely profit-seeking model of ecclesiastical estate management, we can gain a better perspective on the decision-making process of landlords and estate managers. These individuals certainly interacted with their local and regional markets, but their main goal was not to maximise agricultural production to receive the greatest amount of cash relative to their production costs when goods were sold on the market. Rather, landlords and managers were well aware of the grain and labour markets, but, particularly in the case of Durham Cathedral Priory, sought to insulate themselves from its fluctuations and variabilities, while demonstrating their familiarity with larger markets and the skills necessary to interact with them. In such a scenario, a failure to plant in response to changes in price, circumstances which Schneider noted and variously ascribed to high volatility in grain prices, manorial customs and planting strategies, and ‘that reeves were simply economically irrational’, would not necessarily indicate economic irrationality, but merely a set of differing values.<sup>31</sup>

Indeed, there is little reason to even suspect that medieval landlords and demesne managers would seek profit-maximisation on agricultural holdings. Bailey argues that medieval landlords ‘certainly expected good returns, and ready flows of cash for other expenditures but did not look to maximise profits’.<sup>32</sup> Bailey’s argument is certainly in agreement with the extant

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30. Stone, *Decision-Making*, pp. 4, 6.

31. Schneider, ‘Prices and production’, p. 86.

32. Mark Bailey, ‘Historiographical essay: The commercialisation of the English economy, 1086–1500’, *Journal of Medieval History*, 24(3) (1998), p. 309.

agricultural texts from the medieval period. The various agricultural treatises, discussed in greater detail in subsequent chapters, which sought to educate demesne lords, both lay and religious, were not concerned with profit. Walter of Henley's *Husbandry* and Robert Grosseteste's *Les Reules de Seynt Roberd* both mention the virtues of selling the product of an estate at the optimal time, but this is not their primary focus.<sup>33</sup> Both Walter of Henley and Robert Grosseteste are keen for their readers to follow their advice and to run their estates optimally, but their advice for grain returns and prices is fixed, suggesting that only a suitable level of outright financial return was desirable, and any further actions that sought to raise returns above a reasonable level were likely much too risky.<sup>34</sup> Walter of Henley and Grosseteste were both writing for individuals who would have sources of income outside of the production of their agricultural holdings, including rents, fines, wardships, and similar. Regardless of what proportion of their income was derived from demesne agriculture, maximising profits on their demesne would not necessarily have been their main concern. Instead, agricultural returns could be used to protect themselves as much as possible from outside factors for, as Walter of Henley counselled '[i]f you can approve your lands by tillage or cattle or other means beyond the extent, put the surplus in reserve, for if corn fail, or cattle die, or fire befall you, or other mishap, then what you have saved will help you'.<sup>35</sup>

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33. See *Walter of Henley's Husbandry*: 'Vendez e achetez [en seson] par la vewe de un leal homme ou de deus' ('Sell and buye in season and that in the presence of one honest man or twayne'), and Robert Grosseteste's twenty-fifth rule: 'e ben poez enendre ke si vus volez avenye vendre, dunc le porrez vus meuz vendre e plus prendre quant a force covent ke chescun yet a semer' ('And you should well understand, that if you want to sell oats you will be able to sell better and take more for them later on in the year when everyone is forced to sow'). Dorothea Oschinsky, *Walter of Henley and Other Treatises on Estate Management and Accounting* (Oxford, 1971), pp. 340-341, 397-397. Oschinsky includes 'en seson' in her translation, a trait of the  $\beta$  manuscript category.

34. Walter of Henley stated that 'Su lissue de votre grange ne respoigne forqe au terz del semail vous ne gaignez ren si blee ne se vend ben' ('If the summe <content> of thy barne doe (answer only) three tymes so muche as thy seede was thou gaynest nothing by it unlesse corne beare a good (greate) price <or yeeld welle>'). *Ibid.*, pp. 324-325.

35. See *Walter of Henley's Husbandry*: 'Si vous poez vos terres approuver par gaygnage, ou par estor, ou par purverance plus qe lestente, le surplusage metez en estu, qar si blee faille, ou estor meorge, ou arcun survegne, [lu aoutre mescheances adonc vus vaudra coe ke vus avet en estue' ('If youe may youre lands amende, eyther by tillage <thritfe> or by stock of cattaille or by any other provision above the yearly extente putte <turne> that overpluis into money, for if corne fayle [or stock

Even if we were able to accept that medieval ecclesiastical landlords and agricultural managers sought to maximise their profits, we cannot be sure how such individuals envisaged profit, a problem compounded by the nature of the accounting records. In his analysis of the financial practices of Durham Cathedral Priory during the Middle Ages, Alasdair Dobie analyses extant accounting records to demonstrate the different management techniques which the prior and obedientiaries employed.<sup>36</sup> Such techniques, Dobie argues, helped determine and inform the financial and managerial courses followed by the Priory. Of particular importance for this study is the focus on the development and use of charge and discharge accounting, a form of single-entry bookkeeping in which receipts and expenses are calculated separately, for manorial management.<sup>37</sup> Total profit and loss could be determined with some calculation, but such arithmetic is clumsy compared with the intuitive layout of double-entry accounts.<sup>38</sup> Importantly, this form of accounting was not overmuch concerned with the profits a manor produced, though these were not ignored, but rather ensured that the demesne officials were conducting manorial affairs honestly and not cheating their employers.<sup>39</sup>

Eric Stone further studies the nature of manorial accounts to examine the calculation of profit in manorial accounts. In doing so, E. Stone notes that the format of manorial accounts, while admirably designed to answer the question ‘are we being cheated?’, did not easily allow

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die] or fier doe happen or any other mischaunce then wille be somewhat woorth to you which / you have in coyne’). Ibid., pp. 308-310.

36. Alasdair Dobie, *Accounting at Durham Cathedral Priory: Management and Control of a Major Ecclesiastical Corporation, 1083-1539* (New York, 2015).

37. Ibid., pp. 55-60, 192-197.

38. P.D.A. Harvey (ed.), *Manorial Record of Cuxham, Oxfordshire, circa 1200-1359* (London, 1976), p. 15. ‘Third, the written accounts could be used to calculate the profits from any particular manor. This last was not the original purpose of the account; its form was directed solely at establishing the state of the proprietor’s account with his local agent and to use this record to calculate profit was rather like using a modern bank statement to work out someone’s income — a possible exercise, but not one for which the form of the document was intended, and at times valid only if certain invisible factors were allowed for’.

39. Ibid., pp. 57-58.

landlords and agricultural managers to determine how much their land was paying.<sup>40</sup> E. Stone states that ecclesiastical landlords were calculating the profit of a manor by 1224/5 at Canterbury Cathedral Priory. Different monastic houses calculated profit using different factors, further muddling our understanding of how various convents viewed profit. By the mid-fourteenth century, Norwich recorded the profit of the manor, but did not include deductions for wainage, suggesting that manorial operational costs were not subtracted from the final profit figures.<sup>41</sup> David Postles argues that the general shift in terms used in manorial accounts to denote profits (e.g., from *proficuum* to *valor*,) ‘coincided with a shift in the economic climate’ to the extent that *valor* ‘simply comprised cash liveries from manors now leased,’ rather than manors held in hand by the lord.<sup>42</sup> As such, whereas in previous periods the term *proficuum* may have included the value of the goods produced on a manor and any other incoming cash, *valor* came to mean simply the value of a manor when it was put to farm; changing methods of seigneurial income had changed the nature and perception of profit. Most importantly for this study, Postles contends that landlords recognised the profitability of ‘manors which produced simply for internal consumption as well as those properties which operated for the supply of the market. The attempts by landlords to assess profit thus fully recognised the contribution of the supply of the household’.<sup>43</sup> In this study I seek to build upon this claim, arguing that landlords were keenly aware of the value of the produce of their estates while also relying on these estates

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40. E. Stone, ‘Profit-and-loss accountancy at Norwich Cathedral Priory’, *Transactions of the Royal Historical Society*, 12(1962), p. 25.

41. E. Stone, *Profit-and-loss accountancy*, pp. 27-28, 39. Bailey describes wainage as ‘a labour service involving carting goods for the lord. A wain is a light, two-wheeled, cart,’ while the term may also apply to agricultural implements. Mark Bailey, *The English Manor c. 1200-c. 1500* (2002), p. 247. David Postles further examines manorial profit on lands held by Merton College, Southwick Priory, Bolton Priory, God’s House, and the Bishopric of Lichfield before landlords shifted away from direct management of demesne lands.<sup>41</sup> David Postles, ‘The perception of profit before the leasing of demesnes’, *Agricultural History Review*, 34(1) (1986), pp. 12-28.

42. Postles, *Perception of profit*, pp. 14-15. See also R. R. Davies, ‘Baronial accounts, incomes and arrears in the later Middle Ages’, *Economic History Review*, 21(2) (1968), pp. 211-229.

43. Postles, *Perception of profit*, p. 22.

to support the landlords during times of economic difficulty and uncertainty.

As stated, this thesis seeks to show that capitalistic and profit-maximisation approaches to understanding medieval agriculture are not the most appropriate measures by which to gauge medieval agriculture and economy. Rather, this thesis develops and puts forward the case for a preservationist mindset in which the Priory, above all, sought to protect the patrimony of Saint Cuthbert which they held in sacred trust and, through careful interaction with the market, remain financially insulated from the turbulence of the long fourteenth century.<sup>44</sup> As the use of this preservationist mindset at Durham Cathedral Priory is explored in the following chapters, this thesis will demonstrate its applicability and success through the lens of three main criteria. Firstly, in *Chapter III: Measures of Agricultural Success*, that the Priory sought to insulate itself from an unpredictable era through a careful eye on relative prices and labour investment. Surprisingly, this seemingly preservationist approach resulted in high grain yields that rivalled or surpassed some of the best performing manors in medieval England; the disconnect between such results and the convent's preservationist mindset is explored throughout this thesis. Secondly, in *Chapter IV: The Monks & Their Mindsets*, that the Priory followed the intellectual trends of the day and the advice of the popular agricultural treatises then in circulation and that the Priory followed this advice and, as such, lowered the financial risks to which they were exposed. Thirdly, in *Chapter V: The Serjeants of Durham Cathedral Priory*, that the bursar was careful to hire capable and seasoned serjeants to manage his demesne and, on the rare occasion where a serjeant proved to be incompetent, removed serjeants who performed poorly. This removal of incompetent managers was a facet of the Priory's

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44. Throughout this thesis, I emphasise that the convent's mindset was 'preservationist' rather than 'conservative'. Though both terms speak to the Priory's wish to maintain and keep their wealth, I feel the term 'conservative' suggests too much that the convent would be against change at all costs, rather than being open to differing approaches should the level of risk be acceptable. The connotation of 'preservationism' also, I believe, makes it clear that maintaining wealth, not profit, is overall object of this mindset.

preservationist mindset, and such necessary action allowed the convent to maintain their wealth and holdings.

#### **IV. The Importance of the Demesnes of Durham Cathedral Priory**

In addition to the careful study of decision-making and the overall frameworks in which the Priory and its lay officials operated, this thesis also examines the management of Durham Cathedral Priory as a northern monastic house and in regard to the state of the study of medieval northern English demesne farming. The omission of northern agriculture is common in current scholarship, which instead focuses overwhelmingly on southern England. The estates of Westminster Cathedral Priory, Norfolk Cathedral Priory, and the Bishoprics of Ely and Winchester dominate. The studies conducted by Stone, Sapoznik, Schneider, Kitsikopoulos, and others detail how seigneurial agriculture was practiced in southern England; it remains unclear the extent to which these findings are applicable to northern English demesne farming.<sup>45</sup> Ian Kershaw's study of the finances of Bolton Priory is one of the few in-depth studies of demesne workings on a northern medieval ecclesiastical estate.<sup>46</sup> While Campbell has compiled the largest single database of medieval English crop yields, incorporating work by J. Z. Titow, David Farmer, and others, this database focuses overwhelmingly on demesnes no

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45. David Stone, 'The productivity of hired and customary labour: evidence from Wisbech Barton in the fourteenth century', *Economic History Review*, 50(4) (1997), pp. 640-656, David Stone, 'Medieval farm management and technological mentalities: Hinderclay before the Black Death', *Economic History Review*, 54(4) (2001), pp. 612-639, Stone, *Decision-Making*, David Stone, 'The Black Death and its immediate aftermath: crisis and change in the fenland economy, 1346-1353' in Mark Bailey and Stephen Rigby, (eds.) *Town and countryside in the age of the Black Death: essays in honour of John Hatcher* (Turnhout, 2012), pp. 213-244, Sapoznik, 'Resource allocation', pp. 187-205, Alexandra Sapoznik, 'The productivity of peasant agriculture: Oakington, Cambridgeshire, 1360-99', *Economic History Review*, 66(2) (2013), pp. 518-544, Schneider, 'Prices and production', pp. 66-91, Kitsikopoulos, 'Manorial estates as business firms', pp. 142-166.

46. Ian Kershaw, *Bolton Priory: The Economy of a Northern Monastery, 1286-1325* (Oxford, 1973).

further north than Cambridgeshire and there is no data on manors north of Cambridgeshire following the Black Death.<sup>47</sup>

We must also remember that northern English agriculture is underrepresented in scholarly literature due to a relative paucity of sources, making the need for a fresh, long-run study as this thesis all the more important. Campbell notes that ‘[t]he north-eastern counties of Durham and Yorkshire are somewhat better served’ than much of the rest of northern England,’ but records are still much less abundant than in the better represented southern counties.<sup>48</sup> Campbell’s assertion that ‘the scarcity of accounts is probably an indication that direct demesne management was never very important’ relies, at least partially, on an absence of evidence and we cannot assume on this argument alone that demesne agriculture was not an important part of the medieval northern economy.<sup>49</sup>

Both Campbell and Tuck emphasise the pastoral nature of northern agriculture during the long fourteenth century, with sheep and other herd animals forming the backbone of the economy due to the climate, soil, and landscape of the region.<sup>50</sup> As such, too little focus is given to arable production.<sup>51</sup> Though arable production may have been of lesser importance than pastoral in some regions of northern England, this does not mean that arable productivity, when managers deemed the conditions favourable, was lower than elsewhere in England. Intensive cultivation, in contrast to the extensive nature of pastoral husbandry, may well have

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47. See Bruce M. S. Campbell (2007), Three centuries of English crops yields, 1211-1491 [WWW document]. URL <http://www.cropyields.ac.uk> [accessed on 06/03/2019].

48. Campbell, *Seigniorial Agriculture*, p. 49.

49. *Ibid.*, p. 32.

50. Bruce M. S. Campbell, Bartley, Kenneth C., and Power, John P., ‘The Demesne-farming systems of post-Black Death England: a classification’, *Agricultural History Review*, 44(2) (1996), pp. 131-179, J. A. Tuck, ‘Chapter 3: Farming Practice and Techniques. A. The Northern borders’, in Edward Miller (ed.) *The Agrarian History of England and Wales, Volume III 1348-1500* (Cambridge, 1991), p. 587-595.

51. See Ben Dodds, *Peasants and Production in the Medieval North-East: The Evidence from Tithes, 1270-1536* (Woodbridge, 2007), Ben Dodds, ‘Demesne and tithe: peasant agriculture in the late middle ages’, *Agricultural History Review*, 56(2) (2008), pp. 123-141 for a correction to this trend, though Dodds does not analyse manorial data.

made possible the astonishing yields discussed in later chapters of this thesis. Yet the classifications by Campbell, Kenneth Bartley, and John Power of agricultural types during the late Middle Ages argue otherwise: ten demesnes in Durham and Yorkshire were found to practice ‘extensive arable-husbandry’ as the second choice farming type.<sup>52</sup> At least two of these demesnes, Elvethall and Witton, belonged to Durham Cathedral Priory, being the purview of the Priory hostillar and almoner, respectively. Yet this classification system omits the lands held by the Durham Cathedral Priory bursar, one of the richest sources of agricultural data from Durham Cathedral Priory and medieval northeast England.

With only two exceptions, no work has covered the yields and management of the bursar’s demesnes since Elizabeth Halcrow’s 1949 thesis. Richard Britnell, in his collection of early Durham manorial accounts, gave yields for five manors.<sup>53</sup> As these yields are not the main purpose of the volume, Britnell, justifiably, gives little attention to them:

Yields on the priory's (*sic*) small crops of barley were exceptionally good by those of contemporary standards, those for wheat good, and those for oats and legumes no worse than usual elsewhere in England. There is no mystery about the high yields of barley, given the smallness of the acreage it occupied relative to the large potential sources of manure.<sup>54</sup>

Britnell’s brief analysis is consistent with the results discussed in *Chapter III: Measures of Agricultural Success*, even if wheat certainly became more productive over the course of the long fourteenth century. Britnell also calls attention to the role that manuring, considered further in later chapters of this thesis, had in raising and maintaining high yields, particularly over a relatively small number of acres.<sup>55</sup> When examining the accounting history of Durham Cathedral Priory during the Late Middle Ages, Dobie similarly touches briefly on yields on the

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52. Campbell, Bartley, and Power, ‘Demesne-farming systems’, p. 173

53. Richard Britnell, *Durham Priory Manorial Accounts, 1277-1310* (Woodbridge, 2014), pp. xlvi, xlvi.

54. *Ibid.*, p. xlvi.

55. *Ibid.*, p. xlvi.

bursar's manors, albeit only to explain the method behind the auditor's yields calculations and does not give any actual yield figures.<sup>56</sup> These calculations and their use throughout this thesis are discussed in detail in *Chapter II: Sources & Methods*.<sup>57</sup> We are thus left with Halcrow's thesis as the only other study on yields on the bursar's manors. However, this study is not without problems. Halcrow's calculations undoubtedly demonstrate the high yields found on the manors which I discuss in detail in the following chapters; the high yield of wheat at Pittington in 1397/8 (7.38) is noticeable, as are the barley yields at Westoe in 1371/2, 1372/3, and 1373/4 (11.6, 12.2, and 7.57, respectively).<sup>58</sup> Nevertheless, Halcrow was much more haphazard in her coverage of manors than this study, which has covered all extant manorial accounts on the bursar's estate. In the section on Houghall yields, for example, Halcrow has entries only for seven years, omitting the whole of the 1380s and 1390s, instead of including the twenty-four years for which yields of any major crop are available.<sup>59</sup> Such omissions are also found in her data for Bearpark and Wardley; Halcrow also completely omits Belasis from the data set. Notably, Halcrow gives details for an account which does not exist in today's catalogue; no account is extant for Ketton in 1386/7. Halcrow was working with a vastly different catalogue of accounts than those today; this likely accounts for the difference at times present between my calculations and those of Halcrow and may account for the omission of some manors. The catalogue of manorial accounts was reorganised in the late twentieth century by Alan Piper, at which time many accounts were substantially repaired; the auditor's yields were on the left margins of the accounts which were often damaged.

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56. Dobie, *Accounting at Durham Cathedral Priory*, pp. 192-193.

57. See *Chapter II: Sources & Methods*, Section IV.iii *Calculations and Use of Yield per Seed and Sown Acreage*.

58. These yields were calculated for this thesis as 11.56, 12.21, and 7.57. Halcrow is not consistent in the number of decimal places to which the yields are given. Elizabeth M. Halcrow, *Administration & Agrarian Policy of the Manors of Durham Cathedral Priory*, B.Litt. Dissertation (Oxford, 1949), pp. 138-142.

59. Ibid., pp. 138-142, DCD-Hough. acs.

Northern medieval English arable demesne agriculture is understudied, and the characteristics of the region are too rarely emphasised in current scholarship, at least partially through a lack of sources.<sup>60</sup> The productivity of this husbandry is thus underappreciated. Indeed, these two issues are intrinsically related. Tuck, in his work on northern agriculture, is clear in his evaluation of arable productivity in northern England, particularly on the estates of Durham Cathedral Priory. Grain yields, he states, were ‘very respectable by medieval standards,’ with some yields ‘noticeably higher...than Lord Beveridge’s averages for the whole of the thirteenth and fourteenth century,’ and ‘this alone should dispose of the some of the more extravagant generalisations about the northern economy in the later middle ages’.<sup>61</sup> Yet this does not accurately cover the success of northern agriculture demonstrated by the bursar’s estates at Durham Cathedral Priory. I shall demonstrate in *Chapter III: Measures of Agricultural Success* that abundant harvests were not restricted to the 1370s, the decade to which Tuck points.<sup>62</sup> Instead, harvests were extremely successful throughout the long fourteenth century and therefore further dispel the notions of medieval northern economic mediocrity cited by Tuck.<sup>63</sup> These successful harvests and high yields that characterised the bursar’s manors were not the result of profit-maximising behaviour. Rather, intensive agriculture and high labour inputs, as mentioned by Britnell, followed from the convent’s preservationist approach, as I will discuss in *Chapter III: Measures of Agricultural Success*.<sup>64</sup> Through the use of high labour inputs and intensive agriculture to ensure the high productivity the characterised these manors, the

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60. Non-demesne arable agricultural productivity has been extensively investigated using tithe data by Ben Dodds. See Ben Dodds, ‘Estimating arable output using Durham Priory tithe receipts, 1341–1450’, *Economic History Review*, 57(2) (2004), pp. 245–285, Ben Dodds, ‘Managing Tithes in the Late Middle Ages’, *Agricultural History Review*, (2005), pp. 125–140, Dodds, *Peasants and Production*, and Dodds, ‘Demesne and tithe’, pp. 123–141 for the results of this research.

61. Tuck, ‘Northern borders’, p. 179.

62. *Ibid.*, p. 179.

63. *Ibid.*, p. 179

64. Britnell, *Manorial Accounts*, p. xlvi.

convent, I argue, sought to insulate itself from the unstable economic conditions that characterised the long fourteenth century and preserve and maintain the wealth they held in trust.

Geographical location alone would thus be a powerful reason to study Durham Cathedral Priory, supported by the remarkable completeness of the bursar's manorial accounts compared to other northern convents. Moreover, Durham Cathedral Priory is of particular importance due to the relative density of its holdings. The Bishop of Winchester's estate was particularly vast, including sixty manors across seven southern counties at its height, and can hardly be recognised as representative of ecclesiastical estates.<sup>65</sup> Similarly, the estates of Westminster Abbey were geographically dispersed; the Abbey had holdings in Berkshire, Cambridgeshire, Northamptonshire, Lincolnshire, Nottinghamshire, Rutland, Staffordshire, and Sussex, in addition to those in the hinterlands of London.<sup>66</sup> The estate of Battle Abbey was also spread over several counties, with manors in Sussex, Berkshire, Essex, Surrey, and Kent. The holdings of Durham Cathedral Priory, in contrast, were overwhelmingly concentrated between the Tyne and Tees Rivers, within County Durham, while the bursar's estate was entirely within the historical patrimony of Saint Cuthbert.

This geographic layout of the Priory's temporalities presents several unique opportunities for this study. Of particular interest is the effect that the proximity of the manors to the Priory may have had on the management of the demesnes. Unlike the estate of the Bishop of Winchester or that of Westminster Abbey, where monastic officers were unlikely to have the

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65. 'Unfortunately, the Winchester manors were not representative of seigniorial agriculture across England...Even for ecclesiastical manors, the Winchester manors were larger than average...The Winchester estate was also held in direct management for longer than almost any other estate for which records survive, and relied more heavily on labour obligations than other estates which had to hire labour... from a very early date they sold larger amounts of their produce than other seigniorial estates' Schneider, 'Prices and production' p. 71.

66. See Barbara Harvey, *Westminster Abbey and its Estates in the Middle Ages* (Oxford, 1977), pp. 335-364 for a full list of the holdings of Westminster Abbey from its foundation to the Dissolution.

time to visit the entirety of their holdings each year, the bursars of Durham Cathedral Priory would have been able to tour their manors with regularity, perhaps even overseeing manorial audits. The bursars and their *socii* (assistants) would have therefore been well placed to form ongoing relationships with their manorial managers and to gain a familiarity with a manor and the people living in its environs, allowing the convent to choose the most skilled individual for the office of serjeant. Similarly, the geographic layout of the bursar's estate allows for multiple case studies on how yields differed on neighbouring manors and vills, which would have experienced the same external factors in terms of weather; this means that I am able to explore the effect individuals and their decisions mattered in demesne agriculture, in direct contrast to much of the current scholarship.

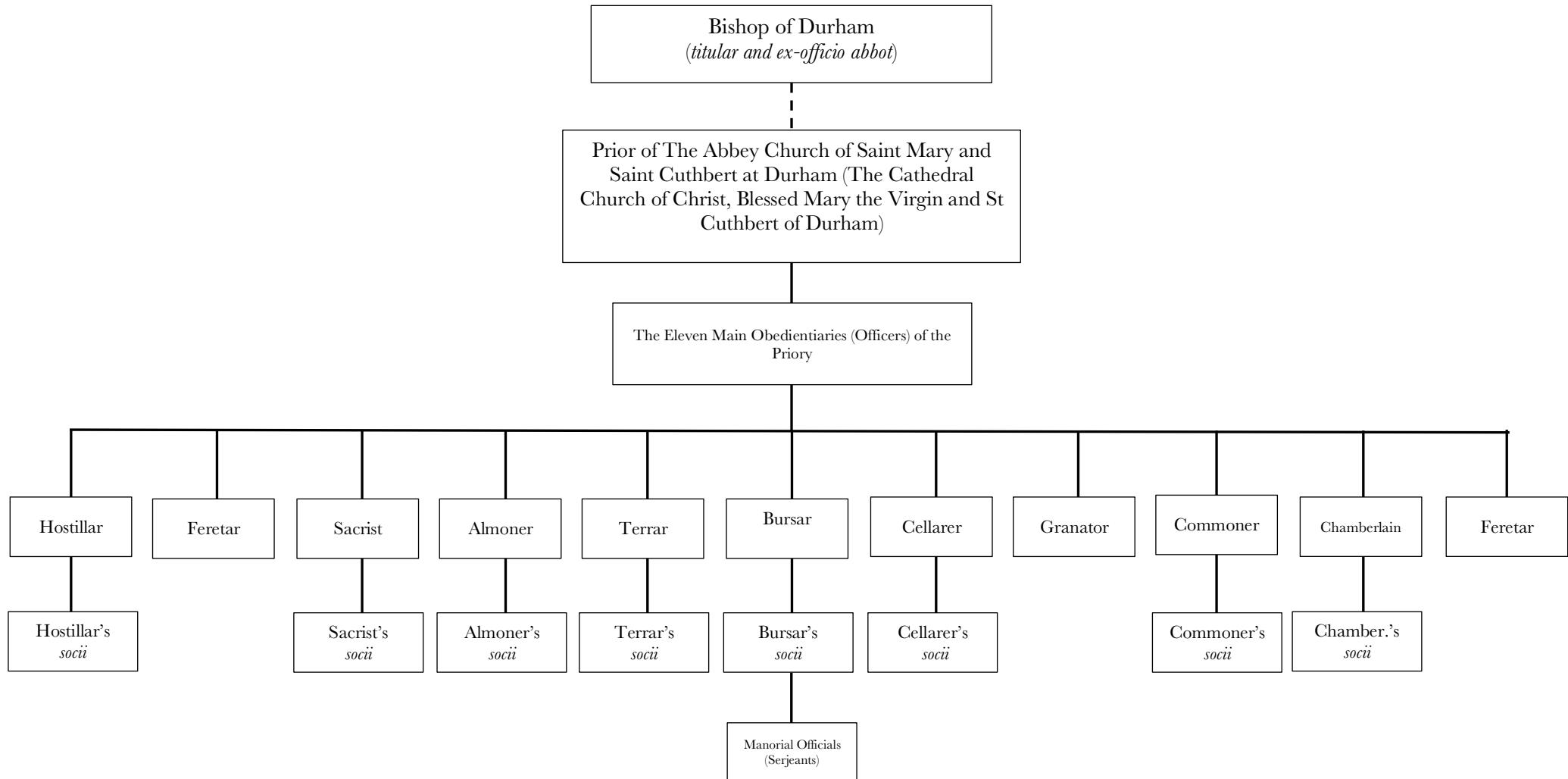
## **V. The Organisation of Durham Cathedral Priory**

Following the Norman Conquest and the establishment of the Benedictine chapter at Durham Priory, the monks became organised according to typical monastic forms with many of the common monastic officers. The Bishop of Durham was the *ex officio* abbot, though the relationship between the monks of Durham Cathedral Priory and their nominal abbot was often characterised by conflict, particularly over the various rights and liberties of the monks and the Bishop's prerogative of visitation, or inspection, of the Priory. The Priory and Bishop agreed to *le Convenit* in 1231, which granted to the convent, as a seminal charter of rights for Durham Cathedral Priory, the right to free elections, and to the prior the liberty to decide upon monastic officers; the Bishop was guaranteed an annual visitation due to his *de jure* abbacy.<sup>67</sup>

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67. David Knowles, *The Religious Orders in England, Volume I* (Cambridge, 1962), pp. 255-256, Dobie, *Accounting at Durham Cathedral Priory*, pp. 25-26. Despite the agreements reached in *le Convenit*, periodic disputes did arise and in 1300 Bishop Anthony Bek (r. 1284-1311) 'sequestered the goods of the Priory and convent, putting in keepers of the same, and replacing many monastic officials' (Dobie, *Accounting at Durham Cathedral Priory*, p. 26).

*Simplified Organisational Structure of Durham Cathedral Priory During the Long Fourteenth Century*



Source: Dobson, *Durham Priory*, p. 66.

*Le Convenit* also granted the prior the right to appoint any monastic officers, or obedientiaries unlike Christ Church, Canterbury, which was similarly a convent attached to a powerful bishopric, the prior could admit novices and oversee the transfer of his monks between the Priory and its dependent cells.<sup>68</sup> Indeed, the prior of the convent was given the episcopal staff, ring, sandals, and mitre after 1379 and, after the Bishop of Durham, the prior ‘was recognized as first in the diocese...and sat during a vacancy with the archdeacons’.<sup>69</sup> The prior was also a seigneurial lord with vassals owing knight’s service and his own courts, while his manor of Bearpark (*Beaurepaire*) was, by the fifteenth century, ‘one of the greatest country seats in northern England’.<sup>70</sup> The prior, did, however, have the sole prerogative of appointing the bursar, which likely helped in keeping the prior and his household in funds, though conflict between the prior and the rest of the convent had ‘led to the imposition of a series of constitutional checks...on his abbatial power’.<sup>71</sup> We cannot underestimate the power and influence the bursar must have wielded through his control over the majority of the Priory’s finances. Yet the prior was dependent on his officials, or obedientiaries, to contribute to his income, as he ‘had no special sources of income allotted to him,’ for the prior ‘was not one of those many monastic prelates “qui habent bona et possessiones a conventu discreta”’ (‘who had their own goods and possessions separate from the convent’).<sup>72</sup>

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68. Knowles, *The Religious Orders in England, Volume I*, p. 256, R. B. Dobson, *Durham Priory, 1400-1540* (Cambridge, 1973), p. 223.

69. *Ibid.*, pp. 207, 258.

70. Dobie, *Accounting at Durham Cathedral Priory*, p. 192. Dobson, *Durham Priory*, pp. 96-97.

71. *Ibid.*, p. 115.

72. Dobie, *Accounting at Durham Cathedral Priory*, p. 192, David Knowles, *The Religious Orders in England: Volume II: The End of the Middle Ages* (Cambridge, 1967), pp. 313-314, Dobson, *Durham Priory*, pp. 96-97, 115, W. A. Pantin (ed.), *Documents Illustrating the Activities of the General and Provincial Chapters of the English Black Monks, 1215-1540* Volume III (London, 1947), p. 110.

Though the *Rule of Saint Benedict* mandated only that a cellarer be appointed to assist in the administration of the monastery, a number of subordinate offices arose by the thirteenth century.<sup>73</sup> Under the prior came the sub-prior, responsible for keeping discipline among the monks, and a number of officers, eleven of whom were responsible for a large part of the Priory's operations and were accountable to the chapter, while eight of these obedientiaries, including the bursar, would have their own staff (*socii*).<sup>74</sup> The obedientiaries acted with a large amount of independence and largely free from the oversight of the prior, who, by the late fourteenth century, spent only about seventeen weeks of the year in residence at the Priory.<sup>75</sup> These eleven obedientiaries were required to render accounts at the annual chapter meeting every June. Three of the eleven were most concerned with feeding the Priory: the cellarer, granator, and bursar, with the bursar controlling the largest estate and two thirds of the Priory's income.<sup>76</sup> Because the bursar controlled most of the Priory's wealth and oversaw much of its manorial operations, his office is the focus here and throughout much of this thesis.

The office of bursar became prevalent and reached its level of importance among the black monks by the end of the thirteenth century.<sup>77</sup> The bursar would have originally acted as a sort of treasurer for the convent, holding the *bursa*, or purse, and received and held funds and distributing 'it in the expenses of the house as instructed by the prior'.<sup>78</sup> By the fourteenth

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73. *Regula Sancti Benedicti, caput XXXI: De Cellario Monasterii* ('*Curam gerat de omnibus; sine iussione abbatis nihil faciat. Quae iubentur custodiat; fratres non contristet.*'). However, the *Rule* recognised that the cellarer may need to appoint assistants ('*si congregatio maior fuerit, solacia ei dentur, a quibus adiutus et ipse aequo animo impletat officium sibi commissum.*'). See also Knowles, *The Religious Orders in England: Volume II: The End of the Middle Ages*, pp. 309-310.

74. Dobson, *Durham Priory*, p. 66. These eleven were the bursar, cellarer, granator, terrar, sacrist, feretrar, almoner, hostillar, chamberlain, commoner, and master of the infirmary. The bursar, cellarer, terrar, sacrist, almoner, hostillar, chamberlain, and commoner would have had their own staff. The feretrar was responsible for the upkeep the Cathedral's shrine to Saint Cuthbert (Miranda Threlfall-Homes, *Monks and Markets: Durham Cathedral Priory 1460-1520* (Oxford, 2005), p. 21).

75. Knowles, *The Religious Orders in England: Volume II: The End of the Middle Ages*, p. 253.

76. Dobie, *Accounting at Durham Cathedral Priory*, pp. 29-30, R. A. Lomas, *Durham Cathedral Priory as a Landowner and a Landlord, 1290-1540*, Ph.D. Dissertation (University of Durham, 1973), p. 8.

77. Threlfall-Homes, *Monks & Markets*, p. 18

78. Dobie, *Accounting at Durham Cathedral Priory*, pp. 29-30.

century, however, the bursar had his own sources of income and also distributed funds to the other obedientiaries; by 1270 the bursar recorded ‘over 230 separate sources of revenue including income from rents, customary dues, tithes, pensions, fisheries, and mills,’ while the same payments would have flowed through the bursar from thirty-one townships before the Black Death.<sup>79</sup> The men who held the office of bursar and the office of terrar, *de jure* higher in precedent even if *de facto* lower in importance often held it multiple times, frequently holding the two offices simultaneously.<sup>80</sup> The bursar also controlled a number of manors, including fifteen between the Tyne and Tees Rivers which were all directly managed, even if only periodically, during the long fourteenth century. Moving roughly north to south, these manors were Westoe, Wardley, Fulwell, Muggleswick, Rainton, Dalton, Bearpark, Pittington, Houghall, Ferryhill, Merrington, Bewley, Billingham, Belasis, and Ketton (see Figure 1.1). The administration of these manors, and the background and decisions of the individuals who managed them are the focus of this thesis. Due to his vast responsibilities, which included presenting accounts at the annual meeting of the convent chapter for audit and touring his estate and constituent manors, the office was ultimately burdensome. Richard Lomas and Piper argued that the bursar would be roughly middle aged to best combine experience and vigour; this question is explored in the following chapters. The burden of the office ultimately led to the responsibilities being divided in 1438 into three parts, although the full office was restored seven years later, when the monks and the sitting Bishop of Durham, Robert Neville agreed that the division of the office was more expensive in terms of the accompanying staff, and too

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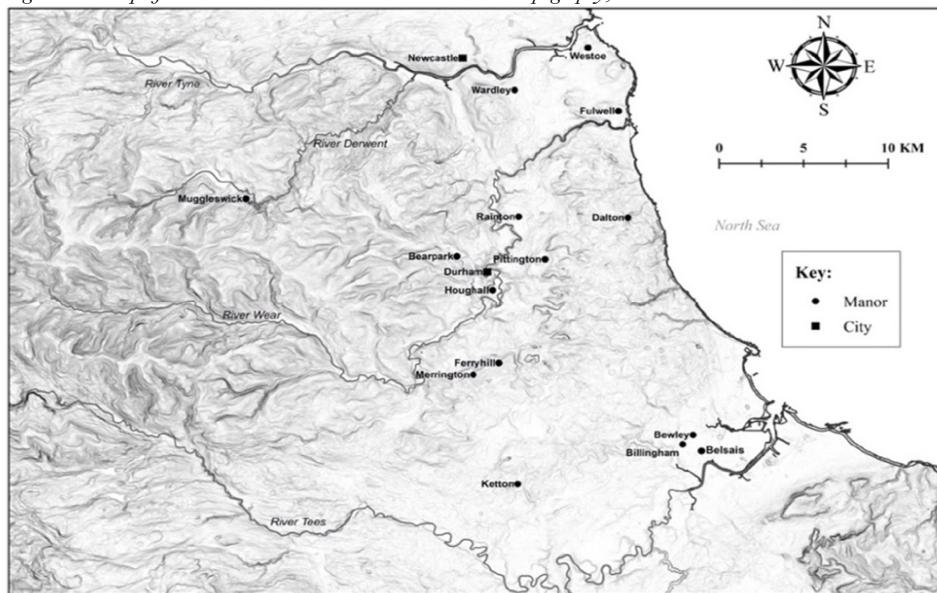
79. Dobie, *Accounting at Durham Cathedral Priory*, p. 23, R. A. Lomas and A. J. Piper (eds.) *Durham Cathedral Priory Rentals, Volume I: Bursars Rentals* (Newcastle, 1989), pp. 23-29, R. A. Lomas, ‘Developments in land tenure on the Prior of Durham’s estate in the later middle ages’, *Northern History*, 13(1) (1977), p. 35.

80. Lomas, *Durham Cathedral Priory as Landowner and Landlord*, p. 10. See also the list of obedientiaries in David Rollason and Lynda Rollason (eds.) *The Durham Liber Vitae: London, British Library, MS Cotton Domitian A. VII: Edition and Digital Facsimile with Introduction, Codicological, Prosopographical and Linguistic Commentary, and Indexes*. Edited by David and Lynda Rollason; Including the Biographical Register of Durham Cathedral Priory (1083-1539) by A.J. Piper. Volume III (London, 2007), pp. 492-503.

many monks were away from divine services.<sup>81</sup> Like many of the other obedientiaries, the bursar often had *socii* to aid him, while full-time serjeants<sup>82</sup> or manorial managers (discussed in detail in subsequent in *Chapter V: The Serjeants of Durham Cathedral Priory*) oversaw the demesnes according to the bursar's wishes.

## VI. The Manors & Crops During the Long Fourteenth Century

Figure I.1: Map of the Bursar's Manors Held in Hand with Topography, c. 1300 to c. 1453



Any discussion and analysis of the material gathered for this thesis or the conclusions drawn from such material requires, at the bare minimum, a brief description of the manors administered by the bursar during the long fourteenth century. This description also informs the manorial groupings used in the following chapter, which are primarily based on geographic location and the sort of agriculture practised there. Also necessary is an overview of the three

81. Dobie, *Accounting at Durham Cathedral Priory*, p. 30, pp. 287-290.

82. From the Latin *serviens*, meaning 'one who serves'.

main crops grown on the fourteen manors covered by this study, including their social, economic, and caloric implications.

The paragraphs below give that overview necessary for the rest of the thesis to be relevant and, indeed, fully comprehensible. The first of the following two sections gives a brief history and geographical overview, including size, of the different manors. This geographic overview informs *Chapter III: Measures of Agricultural Success*, as the groupings used in that chapter to analyse their management, are largely based on geographical location: Westoe, Fulwell, and Wardley, the northernmost manors, comprise the Tyneside Manors; Houghall, Pittington, and Bearpark, the manors closest to Durham and held in hand the longest, make up the Home Farms; Ketton and Merrington, being geographically isolated from the other manors are the Peculiar Manors; while Bewley, Billingham, and Belasis are included in the Teesside Manor group as they are situated at the mouth of the Tees River, in some of the most fertile land in the county.

I also detail the different numbers of labourers on these manors, the wages of these individuals, the varying financial circumstances, and the acreage devoted to the three main crops, which, usually, were farmed at all the manors. In the second section, I describe the three main crops grown on the manors – wheat, barley, and oats. I describe the different transport costs, the caloric energy that could be extracted from these grains, and the role the different grains had in social prestige. The former section is necessary to give the reader the requisite information to understand the scale of operations at each manor and understand the different conditions that affected them; the latter provides a background understanding of the various uses to which the three main crops were put – which informed the factors influencing their planting – as well as the societal implications behind each as this allows us to see the changing standards of living through the composition of the grain liveries of the *famuli*.

During the long fourteenth century, the manors were managed by a lay official, appointed by monastic obedientiaries, called a *seriens* or serjeant. These individuals were responsible for organising the manorial workforce, directing the ploughing, harvesting, reaping, and other tasks, as well as determining the seeding of different crops and, though not a focus of this study, overseeing whatever livestock was resident on the demesne.<sup>83</sup> Unlike livestock, monastic obedientiaries were not normally resident on the demesnes, with the notable exception of Bearpark, which served as the Prior's retreat. The prior would periodically tour his demesne; Prior William of Tanfield visited Pittington seven times, Bewley four times, Ketton and Dalton three times, Merrington and Muggleswick, and Wardley and Westoe once, implying that these manors had lodgings to fit his station in 1310/11, though such mobility seems to be exceptional.<sup>84</sup> Other manors such as Westoe, Pittington, and Billingham tended to have customary tenants and settlements clustered around them.<sup>85</sup> At Wardley, Pittington, Belasis, Bewley, Houghall, and Ketton demesne land was kept separate from tenant land, while at other manors strips of demesne land would have been mixed between tenant holdings.<sup>86</sup>

#### VI.i. The Manors of the Durham Cathedral Priory Bursar During the Long Fourteenth Century

##### VI.i.a. Westoe

Westoe was one of the original possessions of the Priory, located at the mouth of the Tyne and near the dependent cell of Jarrow. The manor was quite some distance from the Priory – roughly seventeen miles (twenty-seven kilometres) from Durham and much closer to the

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83. I explore the role the serjeants played on the manors, their socio-economic station, and their role in their respective communities in *Chapter V: The Serjeants of Durham Cathedral Priory*.

84. Britnell, *Manorial Accounts*, p. xxv.

85. Ibid., pp. xxxii-xxxvi, Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, pp. 205-206, 208-209, 214-219.

86. Lomas, *Durham Cathedral Priory as Landowner and Landlord*, p. 111.

commercial centre of Newcastle, about seven and a half miles (about twelve kilometres) away. Westoe, like Wardley and Fulwell, sat on the East Durham Limestone Plateau, and was characterised by slightly acidic and permeable, albeit rich in loam and clay, soil, that, while not always freely draining, was still moderately to highly fertile.<sup>87</sup> Two freeholdings were still present by 1430, one of thirty acres and one of forty acres, which continued to owe labour services on the manor, while a number of small holdings had been created from the land exchanged by one Richard the Hosteller and his wife Agnes in 1333.<sup>88</sup> An additional five husbandlands of twenty-four acres each and thirteen bovate holdings of twelve acres each were associated with the manor.<sup>89</sup> Throughout the long fourteenth century Westoe was always average sized by the standards of the Priory's other manors; in 1304/5, Britnell estimates that nearly two hundred and twenty-nine acres were used for arable husbandry, with one hundred acres sown with wheat, despite wheat not performing its best in acidic soils, just over twenty-one acres sown with barley, and about sixty-nine acres given over to oats.<sup>90</sup> This was slightly larger than the national average acreage for 1250 to 1349 calculated by Campbell (199.5 acres).<sup>91</sup> By 1372, a little over seventy acres were sown with wheat, about seventy acres with barley, and slightly less than ten acres were sown with oats, slightly less than the post Black Death national average of 155.8 acres.<sup>92</sup> Much like the acreage of the manor, the number of *famuli* employed follows expected trends: as agricultural wages rose, fewer individuals were employed on the manor. In 1330/1, nine people constituted the *famuli*: one carter who was

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87. Farewell, T.S., Truckell, I.G., Keay, C.A., Hallett, S.H (2011), The derivation and application of Soilscapes: soil and environmental datasets from the National Soil Resources Institute, Cranfield University, Cranfield University 2022. The Soils Guide. Available: [www.landis.org.uk](http://www.landis.org.uk). Cranfield University, UK. Last accessed 09/03/2022.

88. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*. p. 203.

89. *Ibid.*, p. 203.

90. Britnell, *Manorial Accounts*, p. xlvi, Campbell, *English Seigniorial Agriculture*, p. 218.

91. *Ibid.*, p. 69

92. *Ibid.*, p. 69.

paid 5s for his labour, five ploughmen (5s each), a swineherd (3s), and a milkmaid (3s) were hired for the year, while two carters (2s each) were employed for the Pentecost term. By 1370/1, when the accounts resume following a *lacuna* after the Black Death, eight individuals were employed, with three ploughmen, a carter, a milkmaid, and a swineherd being employed for the full year. Though the expenses of the manor often exceeded its receipts prior to the 1330s (in 1324/5, this amounted to £2 12s 11 1/2d), in many subsequent years the manor enjoyed a healthy surplus. In 1328/9, this came to £3 14s, £6 19s 8d in 1340/1; and £19 14s 4d in 1371/2, of which a staggering £26 17s 10.5d of the surplus of these years came from the sale of malt and corn, presumably either at market in Newcastle or in fictitious purchases by the Priory.<sup>93</sup>

#### VI.i.b. Wardley

Wardley was just over twelve miles (twenty kilometres) from the Priory on the south side of the River Tyne, close to Newcastle in the parish of Jarrow on the East Durham Limestone Plateau, sharing the same loam and clay soil that was present at Westoe and Fulwell.<sup>94</sup> Even before the Black Death Wardley was not one of the largest manors, with only about one-hundred and sixty acres under cultivation in 1304/5, less than the national average of about two hundred acres, yet it remained under the direct management of the Priory well into the later fourteenth century.<sup>95</sup> Wardley had no township or village associated with the manor, though the twelve cottage holdings of twelve acres each of Nether Heworth owed labour services at the manor

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93. A fictitious purchase was used to balance the receipts and expenses section of medieval accounting material. See Elizabeth Gemmill, Dodds, Ben, and Schofield, Philip, 'Durham grain prices, 1278-1515', *Archaeologia Aeliana*, 5(39) (2011), pp. 319-320.

94. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

95. Britnell, *Manorial Accounts*, p. xlvi. By 1371/2, I estimate that there were approximately seventy-one acres under cultivation at Wardley, with about forty-seven seeded with wheat, sixteen with barley, and eight with oats, a significant change from the seventy-five acres seeded with wheat, seven with barley, and fifty-two with oats in 1304/5. Campbell, *English Seigniorial Agriculture*, p. 69.

until this was commuted in 1357; perhaps some of these individuals were also hired as *famuli*.<sup>96</sup> The serjeants of Wardley usually did not keep a large staff of full-time labourers. In 1329/30, a representative pre-plague year, Robert de Monkton, the serving serjeant, employed one carter and two ploughmen for the year for 7s each, two miscellaneous labourers for 5s 6d each, and a smith for 4s.<sup>97</sup> In 1332/3, Robert de Monkton increased the number of staff, hiring one carter (4s), four ploughmen (4s each), and an general labourer (2s) for Martinmas term, one carter (3s), five ploughmen (3s each), a boy to lead the plough (2s), and two men to look after the cattle (12d) for Pentecost term. In 1378/9, following the Black Death in a period of changing economic circumstances, the serjeant William Colynson hired Robert de Schaffeld as a ploughman for Martinmas and Pentecost terms (15s), Thomas Firthe for an unstated purpose for Pentecost (6s), and a *pagius* (2d).<sup>98</sup> This clearly represented a winding-down of direct management at the manor. The manor was not always financially stable and during the early fourteenth century relied on a regular payment from the bursar to meet all necessary expenses (for example, £9 in 1302/3, £7 6s in 1303/4, and £4 18s in 1323/4). Nevertheless, the expenses of the manor regularly exceeded its receipts, and the manor ran a deficit in 1299/1300, 1302/3, 1322/3, 1324/5, 1325/6, 1328/9, 1329/30, and 1378/9, ranging from a few shillings to well over £5 in 1299/1300.

#### VI.i.c. Fulwell

Located at the mouth of the River Wear not far from the dependent Priory cells of Monkwearmouth and Jarrow, Fulwell was a relatively small manor that nevertheless was not finally farmed out until the early fifteenth century. So little data survives from the early

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96. Britnell, *Manorial Accounts*, p. xxxiii; Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 201.

97. These two *famuli* were *pagii*, a generic term for a young male labourer.

98. Young male servant, cf. with 'page,' a knight's personal attendant.

fourteenth century that we must focus on the post-Black Death operations of the manor. During the late fourteenth century, there were fifteen holdings in the surrounding area: 'two holdings of thirty-two acres, three of sixteen acres, six of twelve acres, one of nine acres, one of six acres and two cottages without land,' though during the thirteenth century there had been four holdings of forty-eight acres each.<sup>99</sup> The manor was further associated with the settlements of Southwick and Monkwearmouth.<sup>100</sup> By 1386/7, only about sixty acres were under cultivation, with about twenty-acres devoted to wheat, another twenty-five acres of barley, and the remaining ten acres given over to oats, well below the national and FTC average sown acreage for that period (155.8 acres and 178.4).<sup>101</sup> This land would have been characterised by moderately to highly fertile soil that was rich in clay and loam.<sup>102</sup>

During the tenure of the serjeant John de Monkton, who ran the manor for the last two decades of the fourteenth century, the manor had a relatively small staff of *famuli*, hardly surprising given its comparatively small size. Interestingly, the Fulwell accounts often give the names of the *famulus*, but not his specific role. In 1382/3, the manor employed Thomas Egermond, Hugh Scott, John Cose, John Lilly, Robert Scott, Henry Bullock, Robert son of (presumably the previous) Henry, and an unnamed woman gardener; individuals such as Henry Bullock and John Lily had seemed to have worked for most of the 1380s at Fulwell, after which they disappear from the record. The financial situation at Fulwell was somewhat varied. In 1383/4, the account closed with a 2s 7d surplus, while in 1401/2 the manor recorded a surplus of 60s; the following year the manor's expenses exceeded its receipts by 70s. The practice of selling grain at the gate does not seem to have provided enough income, nor did the

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99. Lomas, *Durham Cathedral Priory as Landowner and Landlord*, p. 40.

100. Ibid., p. 40.

101. Campbell, *English Seigniorial Agriculture*, p. 69

102. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

grain sold occasionally to the Priory as fictitious purchases seem to have offset the deficits.<sup>103</sup>

This precarious financial situation likely explains why the manor was not often in hand before the Black Death and was leased shortly after the turn of the fifteenth century.

#### VI.i.d. Dalton & Rainton

These two neighbouring manors were only about four miles (seven kilometres) apart, yet any in-depth investigation into their workings or comparisons between the two manors is hampered by a dearth of extant information. The manors sat on the limestone soil that characterises the East Durham Limestone Plateau and enjoyed fertile soil, slightly hampered by impeded drainage.<sup>104</sup> Both Dalton and Rainton were original possessions of the Priory, and the manor of Rainton is attested in a papal document dating to 1157.<sup>105</sup> Both manors had nearby settlements which provided a labour pool upon which the manors could draw. East and West Rainton were close to the manor and those holding the thirty-three small twelve acre bovates that were associated with these settlements likely found it necessary to supplement their income with paid labour; Dalton too had a small township and four customary tenancies – one eighty acre bondland and four bovates of eighteen acres.<sup>106</sup> Though Rainton and Dalton were not the largest manors under the control of the bursars (the Teesmouth manors were by far the largest), they were hardly unsubstantial. Britnell estimated that Dalton had about 283 acres under plough in 1305/6, with about 130 acres devoted to wheat, sixteen acres for barley, and the remaining 137 acres given over to oats, while estimating that Rainton consisted of about 136 acres, with about fifty-one acres sown with wheat, five acres of barley, and seventy-six acres of

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103. Gemmill, Dodds, and Schofield, 'Durham grain prices', pp. 318-319.

104. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

105. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, pp. 205-206

106. Britnell, *Manorial Accounts*, pp. xxxiii-xxxiv, Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, pp. 205-206.

oats.<sup>107</sup> The former manor was larger, greater in size than the average manor in the FTC counties (223.7 acres) and only slightly smaller than Hinderclay in the years before the Black Death (average sown area of 291 acres).<sup>108</sup> The number of *famuli* at the two manors were not high. At Dalton in 1336/7, one carter, six ploughmen, and a dairymaid were paid 52s in cash for their work for the year, as well as a grain stipend. In 1343/4, the last extant Dalton account, only one carter and five ploughmen were hired for the Pentecost term for a total of 42s, in what would have been a busy time of the agricultural year. At Rainton, for which only four accounts are extant, the number of *famuli* was even smaller; in 1303/4 only four ploughmen and a swineherd were hired on a permanent basis, though the ploughmen were lucky enough to receive their grain stipend in wheat.

#### VI.i.e. Bearpark

Bearpark, or, more properly Beaurepaire (beautiful retreat) was never a demesne on a level with the rest of the bursar's estate as it likely never was intended to be a major supplier of grain for the Priory or the market. From the late thirteenth century, Bearpark served as the prior's retreat and manor house and the site of the monastic *ludi*.<sup>109</sup> Though the retreat covered more than 1,500 acres slightly northwest of Durham, there was rarely a large arable operation here, with the focus instead being on pastoral agriculture.<sup>110</sup> Given that the manor was situated on acidic loam and clay-based soil that was not especially fertile, this made good economic sense

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107. Britnell, *Manorial Accounts*, p. xlvi.

108. Campbell, *English Seigniorial Agriculture*, p. 69, Stone, 'Medieval farm management', 617.

109. See Dobson, *Durham Priory*, pp. 97-98. The *ludi*, or games, were an easing of monastic rules for a period of two weeks or more, involving periods of relaxation, informal interactions between junior and senior members of the community, and copious consumption of meat. At the *ludi* of 1391, five oxen or cows, twenty-two sheep, and seven pigs were consumed in the two-week period, though fish was eaten on Wednesdays, Fridays, and Saturdays. Between thirty and forty monks would have been resident in Durham at any time during the late fourteenth century. For the timeline of the formation of the manor, see Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 218.

110. Ibid., p. 218, Britnell, *Manorial Accounts*, p. xxxiii.

for the Priory.<sup>111</sup> Britnell estimated that in the 1304/5 agricultural year, there were only about 39 acres cultivated, with about seven acres seeded with rye and the rest with oats, presumably as fodder for the prior's horses and other livestock.<sup>112</sup> By the late fourteenth century (1371/2 agricultural year), the size of the arable operation had not changed overmuch: I estimate that there were about forty acres under plough, with about eighteen acres seeded with wheat, three with barley, and the remainder with oats. It goes nearly without saying that the number of arable acres under plough was well below national levels for the period; only seventeen manors before the Black Death and nineteen manors after the plague that were surveyed by Campbell had less than fifty acres sown (407 manors surveyed for 1250-1349 and 262 for 1350-1449).<sup>113</sup> Unsurprisingly, the serjeants at Bearpark rarely found it necessary to have a large labour force on hand. In 1330/1, the manorial records show that Richard de Thinley only employed two carters, two ploughmen, a dairymaid, and a smith for the Martinmas and Pentecost term costing the manor some £2 3s 9d in wages. By 1370/1, John de Lethom, the serjeant of the demesne, employed a carter, a ploughman, two wood-carters, a park-keeper, a cowherd, and a milkmaid for the Martinmas and Pentecost terms for a total of £3 8s 4d. It certainly does not seem that the bursar expected the manor's receipts to exceed its expenses, though it did in some years. In 1333/4, the manor was 25s 5.25d in arrears, though this was remarkably better than the following year, 1334/5, where the expenses exceeded receipts by some 76s 7d. This pattern changes after the Black Death and in 1369/70 the manor recorded a £1 10s surplus. In 1370/1 there was only a 16s 4 1/2d surplus and in 1373/4 the manor recorded a surplus of only 9s. Again, these financial circumstances likely did not pose any difficulties, as the manor was first and foremost a retreat for the monks and place for the prior to receive guests in a manner

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111. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

112. Britnell, *Manorial Accounts*, p. xlvi.

113. Campbell, *English Seigniorial Agriculture*, p. 69.

suiting his rank; any arable operations were, at best, only a secondary concern. In the later fourteenth century, however, the manor was valued variously between £4 3s (in 1371/2) and £6 3s 7d (in 1373/4).

#### VI.i.f. Pittington

Located just a few miles north and east of Durham city, the manor of Pittington remained in hand far longer than many others, likely due to its relative proximity to Durham and the rich and fertile soil on which the manor was situated.<sup>114</sup> By 1370/1, I estimate that only about 181.5 acres were under cultivation, down from 275.3 acres in 1304/5 estimated by Britnell, still, in both snapshots, above national averages for the period.<sup>115</sup> Wheat and oats were the predominant crops by percentage of the total harvest throughout much of the fourteenth century, though barley began to usurp wheat at the close of the fourteenth century. Though day and piece labourers would have been hired by the serjeants on an *ad hoc* basis around the harvest, there were still always the *famuli*, full-time members of agriculture staff, at Pittington. Like the number of cultivated acres, their numbers decreased from the opening of the fourteenth century to the mid fifteenth. In the 1327/8 agricultural year, there were eleven full-time members of staff, not including the serjeant, at Pittington: two carters, nine ploughmen, and a swineherd, costing the manor £4 1s in agricultural wages. After the Black Death and the close of Bridbury's 'Indian summer of demesne farming,' during the 1378/9 agricultural year, Pittington only employed nine full-time individuals with one carter, five ploughmen, two *fuganes carucam* or individuals who led the plough team while the ploughmen guided the plough, and one *gardenaria*, or a woman gardener.<sup>116</sup> The manor paid £4 19s that year for the labour of

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114. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

115. Campbell, *English Seigniorial Agriculture*, pp. xlvi-xlvii, p. 69.

116. Bridbury, 'The Black Death', p. 584.

these individuals. By the 1422/3 agricultural year, only six full-time members of staff worked at Pittington: three ploughmen, one cowherd, one *fugans carucam*, and one carter, costing the manor £4 4s 8d in wages. Noticeably, the number of individuals employed on the manor declined over time while the amount paid in cash wages slightly increases. This is hardly unusual and fits the trends in wages both locally and nationally. Presumably, the serjeant found it uneconomical to keep a high number of *famuli* working at the manor, especially during a period of agricultural curtailment.<sup>117</sup> It seems that arable husbandry was curtailed and expanded intermittently at Pittington. In 1331/2, twenty-four acres were brought into cultivation for wheat, while in 1333/4 no barley was grown and in 1337/8, no barley or oats are recorded as being harvested. Such oddities ceased after the Black Death and Pittington was managed in a much more standard fashion. As such, there are no years where a given crop was not planted, nor were there any large reclamations of land. Throughout the fourteenth and early fifteenth centuries, grain was often sold from Pittington, either *in foro* (at the market) or at the gate of the manor. This could be a substantial sum, as it was in 1299/1300 when the manor received £6 3s 14 1/2d from the sale of grain.

#### VI.i.g. Houghall

Houghall was never the largest manor, nor the most productive of the bursar's manors, but its proximity to the Priory undoubtedly made it one of the most important. The especially rich and well-drained soil on which Houghall lay likely contributed to this, and the bursar may well have kept it in hand for so long secure in the knowledge that production and productivity on

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117. See David Farmer, 'Prices and wages, 1350-1500' in Edward Miller, (ed.) *The Agrarian History of England and Wales, Volume III 1348-1500* (Cambridge, 1991), pp. 431-525. For a wider perspective on the decline of demesne agriculture and the accompanying agricultural curtailment, see John Munro, 'The late medieval decline of English demesne agriculture: demographic, monetary, and political-fiscal factors' in Mark Bailey and Stephen Rigby, (eds.) *Town and Countryside in the Age of the Black Death* (Turnhout, 2012), pp. 299-338.

the manor could be quickly increased.<sup>118</sup> Houghall came into Priory ownership through the Bishop of Durham, but only indirectly. Bishop Ranulf Flambard (r. 1099-1128) granted the land to his relative William son of Ranulf in the early twelfth century and William's descendant Thomas of Herrington gave the manor to the Priory in 1292 for chantry provisions; a connection to a loan of 200 marks to Thomas of Herrington and three others in 1260 is only speculative.<sup>119</sup> Houghall did not have a manor house where visitors could lodge, nor was there a village or tenant holdings attached to Houghall. Workers must therefore have travelled the mile (a kilometre and a half) from the village of Shincliffe to the east.<sup>120</sup> As mentioned previously, Houghall was not a large manor, and Britnell estimated that only about one hundred and twenty-three acres were cultivated in 1304/5, with nearly forty-seven acres sown with wheat and the remainder with oats, well below the sown acreage at both Hinderclay and at the national and FTC averages (291 acres, 199.5 acres, and 223.7 acres, respectively).<sup>121</sup> By 1371/2, I estimate that approximately eighty-one acres were under plough, with twenty-nine acres seeded with wheat, another twenty-nine acres seeded with barley, and the remaining twenty-three acres given over to oats. 1320/1 saw the *famuli* employed not on an annual contract, but per term. Four ploughmen, a carter, and a man to lead the plough cost the manor 18s in the Martinmas term, while six non-described labourers cost 12s for the Pentecost term; only the smith was employed for the entire year.<sup>122</sup> In 1380/1, following the 'Indian Summer of demesne farming', John Ponchon, the long-serving serjeant of Houghall, employed William

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118. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

119. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 219.

120. Richard Britnell, 'Labour turnover and the wage rates on the demesnes of the Durham Priory, 1370-1410' in Martin Allen and D'Maris Coffman, (eds.) *Money, Prices, and Wages: Essays in Honour of Professor Nicholas Mayhew* (London, 2015), p. 158. As Houghall consisted only of demesne land, there were no manorial courts or tithe receipts and therefore a lack of further documentation pertaining to the surrounding area.

121. Britnell, *Manorial Accounts*, p. xlvi, Campbell, *English Seigniorial Agriculture*, p. 69, Stone, 'Medieval farm management', p. 617.

122. However, as the earlier accounts do not give the name of the labourer, it is impossible to say if any of the six *famuli* of Martinmas term were hired again for Pentecost term, though this certainly is a possibility.

Plaything (15s), John Emanson (14s), Laurence Oxenhird (15s 6d), Alexander Ponchon (6s), and a gardener (3s) for the year, while employing William, a ploughman, for one term (10s). In 1396/7 only six *famuli* received a cash wage, three general labourers at 7s 6d each, a John Emanson (14s), John Beiden (14s), and a gardener (4s), costing the manor some £3 2s in wages.<sup>123</sup> Before the Black Death, the manor often received an annual sum for the bursar to finance its operations, but nevertheless expenses surpassed all receipts, and the manor often found itself around 8s in debt; 1301/2 is a notable exception as the manor found itself with a surplus of £3 13s 2d. The 1370s certainly occasionally saw better economic fortunes for the manor and the 1374/5 agricultural year saw a surplus of £7 15s 7d in cash, though years such as 1393/4 in which the manor ran a debt of £3 7s 5 1/4d were much more common.

#### VI.i.h. Ferryhill & Merrington

Though geographically relatively close to the Priory itself (approximately three to four miles, or between five and seven kilometres), any importance these two manors may have had is hidden by the paucity of surviving sources. Though Lomas and Piper asserted that Ferryhill manor was ‘worked by the monks almost without interruption until 1381,’ only the accounts for 1305/6, 1316/7, 1320/1, 1324/5, 1332, 1332/3, 1333/4, and 1446/7 are extant and legible, and these provide relatively little information.<sup>124</sup> Similarly, only seven accounts are extant and legible from Merrington, despite the manor covering some one hundred and twenty two acres by 1371/2, slightly less than the national average of 155.8 acres, and, according to Lomas and Piper, being ‘worked by the Priory in most years until 1386’.<sup>125</sup> Ferryhill was not a small manor. Britnell estimates that about 194 acres were under cultivation in the early

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123. For a more detailed overview of the staff and staff turnover at Houghall and other manors, see Britnell, ‘Labour turnover’, pp. 158-179.

124. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 216.

125. Ibid., p. 215. Campbell, *English Seigniorial Agriculture*, p. 69.

fourteenth century, with about sixty-seven acres of wheat, about eight acres of barley, and about 109 acres of oats, making it nearly average for sown arable land during this period.<sup>126</sup> Nor were the manors particularly poorly geographically situated; both sat on freely draining lime-rich soils, though parts of the manors may have extended into areas with decidedly less fertile, acidic soil.<sup>127</sup> Like many of the manors, the expenses of Ferryhill often exceeded its receipts to a varied extent. In 1324/5, this deficit was low, only 2d, while the account from the Sunday after Michaelmas 1332 to the Saturday after the feast of Saints Philip and James (1 May) 1333, shows expenses to exceed receipts by £7 18s 11d. This extreme deficit follows what may have been a period of mismanagement of the manor. Though each account normally covers one calendar year, six accounts were made over a two-year period at Ferryhill with four different manorial serjeants showing what must have been extraordinary circumstances. The manor's complement of full-time agricultural workers was of average size, and there was usually one carter, six ploughmen, a smith, a dairymaid, a swineherd, and a shepherd. The paucity of accounts for Merrington along with a fair amount of damage from damp makes it difficult to say much about the full-time staff at the manor, and its financial circumstances were often precarious. In 1376/7, the manor's expenses exceeded its receipts by £2 8s, and in 1377/8, the expenses exceeded receipts by 2s 3d, with the manor being valued at £3.

#### VI.i.i. Ketton

Ketton was the most geographically isolated of the bursar's manors, just under ten miles (fifteen kilometres) from Durham on the edge of the Tees lowlands on particularly fertile and permeable soil characterised by clay and loam.<sup>128</sup> By the fourteenth century Ketton was a well-

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126. Britnell, *Manorial Accounts*, p. xlvi, Campbell, *English Seigniorial Agriculture*, p. 69.

127. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

128. Ketton was the most isolated with the exception of Muggleswick which, being primarily a livestock centre, does not feature heavily in arable husbandry. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

established part of the bursar's estate, but its earliest history is not entirely clear, for, while it may have been given to the monks by William de St-Calais, Bishop of Durham (r. 1080-1096), and passed back to the control of the bishop, it is only in 1195 that Bishop Hugh de Puiset (r. 1154-1195) gave the lands back into the Priory's permanent control.<sup>129</sup> The Priory likely recovered a number of free holdings and moved tenants in order to constitute the demesne, centred around Ketton Hall.<sup>130</sup> Before the Black Death, Ketton was by far one of the largest manors under the bursar's control, numbering some four-hundred and twenty acres, surpassed only by Bewley, and was thus larger than ninety-eight per cent of the manors surveyed by Campbell for the period from 1250 to 1349 and nearly one and a half times the average size of Hinderclay before the Black Death.<sup>131</sup> Yet in the later fourteenth century the arable operations at Ketton had massively constricted and I estimate that only about one hundred and twenty-eight acres were cultivated in 1371/2. Approximately sixty-nine acres were seeded with wheat, fifteen with barley, and the remainder with oats. The manor still employed four *famuli* labourers, one carter, and a gardener in 1396/7, who, along with the serjeant, William de Stokeslay, cost the manor £5 1s 4d in cash wages. This was nevertheless a good fiscal year for the manor and the auditors valued it at £12 18s 9d; its value had further increased by 1399/1400 when it was valued at £18 9s 4 1/2d.

#### VI.i.j. Billingham & Belasis

Though these were two separate manors, the few surviving accounts from Belasis and the geographic proximity of the two manors makes it suitable to describe them together. The manor of Billingham was long held by the Priory and may have been one of the original

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129. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 214.

130. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 214.

131. Britnell, *Manorial Accounts*, p. xlvi. Campbell, *English Seigniorial Agriculture*, p. 69, Stone, 'Medieval farm management', p. 617

possessions, though any dating of Belasis is much more difficult. Lomas and Piper assert that Billingham and Belasis were worked until 1359 and 1373, respectively, but the paucity of surviving accounts make any commentary on demesne operations after the Black Death impossible.<sup>132</sup> Both manors were large and were in the fertile Tees lowlands and on fertile soil rich in clay and loam.<sup>133</sup> Britnell estimated that in 1304/5 Belasis covered nearly 320 acres, with about 166 acres planted with wheat and the remaining one hundred and forty acres with oats, while Billingham covered about 209 acres, of which about eighty-four were given to wheat, fifteen to barley, and one hundred to oats, though the scale of arable operations at Belasis was smaller than those in the FTC counties, where an average of 223.7 acres were sown.<sup>134</sup> Much like the other manors, Billingham and Belasis often had the expenses exceed receipts, despite often receiving substantial sums from the bursar. At Billingham in 1304/5, the bursar provided £10 7s and £2 19s 9d came from the sale of grain and similar, yet the manor nevertheless ran a debt of 2s 7 1/4d. In 1320/1, Billingham carried over a debt of £2 1s 3 1/2d from the previous year, keeping the manor in arrears despite otherwise having the receipts exceed expenses by 12s 1/2d. Belasis had similar circumstances, as in 1325/6 when the manor's receipts totalled £9 6s 6d, most of which was sent by the bursar, carried over a debt of 6s 1 1/4d, and had its expenses come to £9 17s 11 1/4d.

#### VI.i.k. Bewley

Prior to the upsets caused by the Black Death, Bewley was by far the largest manor under the bursar's control. In 1304/5, Britnell estimated that approximately 700 acres were cultivated, with about two hundred and eighty-eight acres seeded with wheat, eleven acres with barley,

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132. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, pp. 208-9.

133. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

134. Britnell, *Manorial Accounts*, p. xlvi., Campbell, English Seigniorial Agriculture, p. 69.

and three hundred and ninety-three acres sown with oats.<sup>135</sup> This was substantially more than most demesnes in England during this time. Ninety-seven per cent of the manors in Campbell's national survey and ninety-six per cent of the FTC manors between 1288 and 1315 had five hundred acres or less under plough.<sup>136</sup> Bewley was well situated geographically for this kind of production, given its position in the rich Tees lowlands and the loam and clay heavy soil that characterised so much of the county.<sup>137</sup> As early as the 1230s, Bewley was already a large demesne, and required ten ploughs, more than any other manor.<sup>138</sup> Yet by 1371/2, only about one hundred and fourteen acres were under plough, with about sixty-two acres of wheat, fourteen acres of barley, and forty-eight acres of oats, a decrease of nearly eighty-four per cent from pre-Black Death levels and less than the national average of 155.8 acres of arable land under plough on a demesne.<sup>139</sup> Bewley consisted only of a demesne, with labourers likely coming from the nearby settlements of Billingham and Wolviston. At its busiest (1305/6), twenty-one ploughmen and five carters were necessary for the Martinmas term, though by 1336/7, a smaller staff was necessary, consisting of two carters and five ploughmen for Martinmas and Pentecost terms (7s each), a boy to lead the plough (6s), a gardener, and a swineherd for Pentecost term (1s). A similar number of *famuli* was required following the Black Death and, in 1375/6, Robert de Wearmouth, a carter paid 7s in Pentecost term, William Carter, paid 6s 8d for Pentecost term, and John Garre, also for Pentecost term when he was paid 6s, a gardener paid 2s 6d for the same period, and a smith made up the *famuli*. 1377/8 saw a slightly larger staff and the manor required four ploughmen for Martinmas and Pentecost terms. In the first part of the fourteenth century, Bewley often ran small debts at the end of

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135. *Ibid.*, p. xlvi.

136. Campbell, *English Seigniorial Agriculture*, p. 69.

137. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

138. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 209.

139. Campbell, *English Seigniorial Agriculture*, p. 69, Britnell, *Manorial Accounts*, p. xlvi.

each year, occasionally for as little as a penny as in 1322/3, though sums closer to 6s were much more common. Following the Black Death, these debts increased significantly, and expenses exceeded receipts by £4 10s 6d in 1369/70 and £4 11s 7d in 1405. Unsurprisingly, the manor appears to have been leased in 1308.

## VI.ii. The Main Crops

On the demesnes of the Priory, wheat, barley, and oats were by far the most important part of manorial arable operations. Rye was grown periodically, particularly at Houghall, but it seems it was never part of a larger operational scheme, nor was it planted in any significant amount. This is not terribly surprising, for rye was invariably regarded as far inferior to wheat, which was increasingly demanded by the *famuli* during the Late Middle Ages.<sup>140</sup> Nevertheless, rye was more often grown for use in liveries than as a market crop and so, despite rye being a much hardier crop than wheat, its cultivation here seems to have been limited on the estates of the Durham Cathedral Priory.<sup>141</sup> Peas, vetches, and assorted legumes were grown on the manorial demesnes, but their production was limited and used primarily as fodder for draught animals; any consideration of a wider market or economic forces that drove their cultivation would have been minimal. Yet, while wheat, barley, and oats were the most important crops, we can only speculate on the level of interspecies diversity.<sup>142</sup> We are given the Latin names of each major crop – *frumentum* (wheat), *ordeum* (barley), *avena* (oats) – as well as the very occasional mixed crops that were sown, but nothing beyond that. But, as Campbell notes, crops likely underwent some sort of modification through seed selection and by 1523 John Fitzherbert noted seven different types of corn; these Latin terms likely obscured crop diversity.<sup>143</sup>

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140. Campbell, *English Seigniorial Agriculture*, p. 219.

141. Ibid., p. 220.

142. Ibid., pp. 213-214. Stone, *Decision-Making*, p. 37.

143. Campbell, *English Seigniorial Agriculture*, p. 214.

### VI.ii.a. Wheat

Throughout the period of this investigation, and throughout the Middle Ages as a whole, wheat was by far the prestige grain. Oats were feed for animals and the poor, barley was malted and brewed to make lesser bread, while wheaten bread was by far preferred by members of monastic houses and those who could afford it. Yet the price of wheat was consistently high, albeit volatile.<sup>144</sup> Transport costs for wheat were invariably greater than for other grains due to its density per bushel, with cartage fees being about a third of a penny per quarter at the beginning of the fourteenth century.<sup>145</sup> The demanding nature of wheat, with its susceptibility to bad weather and poor soil, nevertheless was offset by the high rate of kCal per bushel.<sup>146</sup> One bushel of wheat could provide 80,560 kCal; assuming an individual needed 1,500 kCal per day, a bushel of wheat could meet an individual's calorie needs for about fifty-three days.<sup>147</sup> Much of the wheat grown on the bursar's estates was distributed as part of the liveries of the *famuli*. The rest, rarely an insignificant amount, was either sent to the Priory if the estate was close to Durham itself, or sold *in foro* if the manor was far from the Priory and transport costs would be economically prohibitive. Increasingly by the late fourteenth century, the liveries were mostly wheat, normally paid a rate of a quarter per twelve weeks. This quarter of wheat would provide some 644,480 kCal, enough to meet the caloric needs of a household of four people for nearly one hundred days. Wheat was not only the prestige grain, but was by far the most nutritious.

### VI.ii.b. Barley

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144. See Farmer, 'Prices and wages', pp. 431-525 and Gemmill, Dodds, and Schofield, 'Durham grain prices', 145. Campbell, *English Seigniorial Agriculture*, p. 215.

146. *Ibid.*, pp. 214-219.

147. *Ibid.*, p. 215.

Though barley did make a lesser bread than wheat, it was nevertheless omnipresent in the medieval diet and on the estates of the Durham Cathedral Priory. Barley could be sown in winter or spring (on the bursar's estate *ordeum*, or spring sown barley overwhelming dominated), though its lesser density per bushel meant that it could be less calorically economical than wheat when transport costs were considered.<sup>148</sup> One quarter of barley would provide about 534,336 kCal, enough for one individual for about one year or for a family of four for about ninety days.<sup>149</sup> Despite the caloric gap between wheat and barley, barley was a much hardier crop, could be sown without regards to a rotation system, and did not require as much care as wheat.<sup>150</sup> Of the barley grown on the demesnes under investigation, much was used as fodder for the draught animals of the manor or as liveries for the members of the *famuli*. Grain was typically sent to the Priory itself, as threshed grain or either as malt for brewing; at Bewley in 1302/3, seventy-two quarters and two pecks of barley was malted.<sup>151</sup> Like wheat, it seems barley was sold either *in foro* (at market) or at the gate when transportation costs were prohibitive.

#### VI.ii.c. Oats

Though oats were hardly a prestige grain and, since they made such inferior ale and bread, were considered fit for only the poor and for fodder for beasts, the oats harvests across the estates of the bursar were considerable. The medieval oat was a hardy crop, for it could sustain lower temperatures and higher rainfalls than other standard crops and could be sown thickly to grow over any weeds and lessen labour inputs; yet oats produced significantly fewer calories

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148. Cartage fees for barley came to just over a farthing per mile per quarter

149. Campbell, *English Seigniorial Agriculture*, p. 215.

150. *Ibid.*, pp. 222-223.

151. Given that multiple accounts specifically mention malted barley being sent to Durham or sold, it seems likely that at least some malting was done on the demesnes, particularly on estates farther from Durham (i.e. Westoe, Billingham, and Belasis). This seems to fit with Bruce Campbell's estimation that one-fifth of barley was malted on the manor in the FTC (Feeding The City of London) demesnes (See *Ibid.*, p. 223).

than wheat or barley, providing about 482,688 kCal per quarter.<sup>152</sup> Throughout the late medieval period, oats were ‘the nation’s most universal cereal’ and, given the difference in price between wheat and oats, ‘its harvest was consequently more material to the nutrition of the poor’.<sup>153</sup> Oats, it seems, were grown because they were necessary for the running of the demesnes, not for any sort of market involvement, for both the local and national price per bushel was invariably low.<sup>154</sup> Though it made inferior ale to barley, oats could be malted, as occurred at Dalton in 1309/10, where thirty-three quarters of oats were made into thirty-seven quarters and four bushels of malted oats.<sup>155</sup> This practice ceased after the Great Famine, after which oats were used nearly exclusively for the fodder of the manor’s draught animals.

### VI.iii. Conclusion

I have used the above sections to give a brief history and overview of operations of the manors which the bursar controlled during the long fourteenth century, as well as some insight into the farming, perception, use, and caloric value of the three main crops grown on these manors. These preceding sections have sought to provide a basis for the analysis which follows and to give the reader the material necessary to understand the workings of these manors. Importantly, this background information demonstrates the different circumstances at each manor, paving the way for the analysis in *Chapters IV & V* and demonstrating the effect that individual serjeants and their monastic superiors could have on the manors which they managed. Without such a background and the option for serjeants or obedientiaries to scale back the total number of

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152. *Ibid.*, pp. 215, 224-226.

153. Campbell and Ó Gráda, ‘Harvest shortfalls, grain prices, and famines in preindustrial England’, p. 863.

154. This is not to say that oats produced on the bursar’s demesnes were never sold, for oats were routinely sold at Fulwell, though less commonly sold at other manors. Rather, it seems that whatever was deemed to be excess was sold.

155. DCD-Dalt. acs 1309-10.

acres under plough or to change their focus from one crop to another, the competency – or lack thereof – of manorial managers is nearly impossible to determine.

## **VII. A Note on Periodisation**

Throughout the following pages of this thesis, I discuss the long fourteenth century and how the various events of this period affected the medieval English economy and society. For the purpose of this thesis, the period of the long fourteenth century should be understood to last from *c.* 1300 to *c.* 1453. Though 1453 marks the fall of Constantinople and a commonly accepted end of the Middle Ages and the beginning of the ‘Renaissance,’ the news of the fall on May 29<sup>th</sup> of the rump of the Roman Empire would likely not have reached Durham for some time, and, in any case, almost certainly had no real impact on the management of the convent. Rather, I have used 1453 as a *terminus* for this study as it is the last year for which agricultural data gathered from a manorial account of the bursar of Durham Cathedral Priory’s estate is extant. These accounts are all from Pittington, and are limited in number, though they remain important; the bulk of the data persists until *c.* 1420. I have used *c.* 1300 as an opening as it begins the actual fourteenth century, with all the accompanying political, social, economic, and climatic changes that characterised this tumultuous period, while yield data from before that date is largely unavailable.

## **VIII. Thesis Structure**

This thesis is composed of three main chapters, as well as introductory material including a separate sources and methods chapter which explains the nature, layout, and history of the primary sources used in this study, a chapter detailing the manors, and a translation of the *Forma Compti*, as well as a conclusion chapter.

*Chapter III: Measures of Agricultural Success* details the agricultural successes and failures of the various manors under the control of the Durham Cathedral Priory bursar during the long fourteenth century, numbering some fifteen manors in total. This chapter explores the impact that climate change, demographic shocks caused by the Great Famine and Black Death, and the endemic warfare that characterised Anglo-Scottish relations during the early fourteenth century had on grain yields and arable agriculture. In doing so, this chapter expands the field of medieval agricultural history in two important ways. Firstly, this study fills a fundamental gap in our understanding of English seigneurial agriculture. The previously mentioned studies focus entirely on southern England and, as such, so do many of the models upon which the current understanding of seigneurial agriculture during that period. By expanding the available data and providing subsequent interpretations, this study examines the extent to which northern English agriculture fits the models described by Schneider, Campbell, Kitsikopoulos, and others. Secondly, the data presented in this chapter is drawn from a comparatively small geographic area. The manors covered, particularly those separated by only a few miles, experienced broadly similar climatic conditions and growth habitats. A large degree of any significant difference in agricultural productivity can therefore be reasonably ascribed to human intervention. This effect and the accompanying interplay of managerial strategy is explored in *Chapter V: The Serjeants of Durham Cathedral Priory*.

*Chapter IV: The Monks & Their Mindsets* considers the intentions and institutional mindset Durham Cathedral Priory and the various bursars had towards the manors during the long fourteenth century. In doing so, this chapter considers the social status of the monks and the age at which monks held the office of bursar to gauge the experience and, perhaps, their consequent effectiveness in fulfilling their duties. The findings ultimately agree with the assertion of Lomas and Piper that bursars were usually in their middle years and thus combined

experience with vigour.<sup>156</sup> The chapter then examines the agricultural treatises that provided the late medieval period with practical and philosophical advice on the management of demesne. I argue that these texts, including Walter of Henley's *Husbandry* and *Les Reules de Seynt Roberd* by Robert Grosseteste, gave the convent and the bursar a framework in which both could act upon an innate desire to preserve their wealth (termed throughout this thesis as 'preservationism' rather than the more politically charged term 'conservatism') and give diverse sources of income to cushion the effect of any further catastrophes such as pandemic or famine that might affect the Priory. By adopting a preservationist outlook to estate management, the convent and bursar avoided excessive risk and eschewed a profit-maximising approach that would categorise a capitalistic or proto-capitalistic approach to direct management of demesne agriculture. As such, I argue that methodologies that seek to explore seigneurial agriculture in terms of profit-maximisation or capitalistic behaviours are not always appropriate, if ever.

*Chapter V: The Serjeants of Durham Cathedral Priory* explores the roles, responsibilities, aptitude, and social status of the serjeants, the lay manorial officials employed by the bursar to manage the demesnes. The chapter opens by defining the role of the serjeants and the difference between the serjeants hired by the convent and the reeves and bailiffs who oversaw the manors of other ecclesiastical houses. This chapter consistently argues that the serjeants employed by the convent were, as a rule, highly skilled individuals who were capable of adapting their managerial techniques to rapidly changing circumstances. Here, I expand the argument from *Chapter III: Measures of Agricultural Success* by demonstrating that, when growth conditions and habitat were largely equal due to the proximity of the manors, individual managers could and did have drastic effects on the success of a harvest as demonstrated through the yield per seed

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156. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 8.

of the crops. I subsequently explore the social status and extra-manorial activities of the serjeants. I demonstrate that many serjeants, particularly those who were effective manorial officials, did not confine their economic activities to the demesne, but were often active in the purchasing of tithes and the rental of land, manors, mills, and communal ovens. Of particular note is the purchasing of tithes and the rental of manors, the former of which suggests that many serjeants had large financial resources, while the leasing of whole manors by some serjeants would have placed such individuals among the ranks of the minor gentry.

## **IX. Conclusion**

Over the subsequent chapters, this thesis will further the understanding of medieval English agricultural, social, and economic history through the investigation of grain yields, intellectual trends, managerial mindsets, and prosopographical analysis of the serjeants and monks. This study explores the operations of a large northern monastic estate that operated in a remarkably different fashion to ecclesiastical estates in southern England, drawing out the unique situation of Durham Cathedral Priory and the effect on the management of its holdings. In doing so, I return a degree of personal agency, absent in much of the current scholarship, to the agricultural decision-makers that were vital to the convent's operations. I will argue throughout that both the monks and their managers consistently acted in a manner suitable to the rapidly changing circumstances of the long fourteenth century, seeking not simply the maximum level of profit, but instead, remembering the ongoing outbreaks of pestilence and climatic disaster, a level of security and dispersed risk in their operations.

# Chapter II: Sources & Methods

## I. Introduction

This study depends on three different types of sources. The first, main sources, the manorial accounts, or *comptoti* are used for the portion of this thesis that focuses on trends in agricultural practice and direction on the estates of the Durham Cathedral Priory bursar. The remaining two sources are the tithe receipts for the area between the Tyne and Tees Rivers and the Durham Priory bursar's rentals, showing payments made for the use of land controlled by the bursar. Though the rentals and tithe receipts are quite dissimilar to each other, and, indeed, to the manorial accounts, the two can be used to give us an in-depth profile of the men who managed the demesnes that are being studied, allowing us to better understand their social and economic status, their management styles and ability, and, hopefully, something of their worldview.

## II. Manorial Accounts

Though this study is far from the first to use manorial accounts for the study of medieval agriculture, as they are, along with tithe receipts, one of the best sources for understanding the field, an explanation of their purpose, content, and format is undoubtedly of benefit here. I consulted over four hundred accounts and I used these to gather the data that underpins this study; discussion concerning their use in this study will follow in the methodology section below.

## II.i. Physical Description

The manorial accounts, held in a collection at 5 The College, Durham and maintained by Durham University Library, Archives and Special Collections survive in remarkable numbers.

The earliest extant account covers the 1296/7 agricultural year and the latest the 1451/2 agricultural year (see Table II.3 and Figure II.3 for the time period covered by these accounts and decadal coverage, and *Chapter II: Sources & Methods, Appendix* for a full list of accounts by year). The surviving manorial accounts are easily divided into two different sets, those that are enrolled and contain information for several manors, and those that detail the administration of a single manor for (usually, though with some exceptions) a single agricultural year.

The enrolling of manorial accounts, most probably written and compiled in a central location, was prevalent throughout the beginning of the period under investigation. Accounts such as Dalton 1305/6, Ferryhill 1316/7, and others are notable exceptions from the period when manorial accounts were consistently enrolled at the Durham Cathedral Priory; it is certainly possible that these accounts were at some point intended to be part of an enrolled account but were never copied. The custom of enrolling accounts seems to have been standard at an early stage of accounting practice at Durham Cathedral Priory; the earliest extant manorial accounts (1296/7) are enrolled.<sup>157</sup> The practice of enrolling manorial accounts ceases after 1326 and ‘from that point forward only individual manorial accounts have survived’.<sup>158</sup> The enrolled accounts are physically large documents. Many, if not most, are composed from five membranes of parchment and are about 150 cm in length. The account of a manor can continue across multiple membranes of parchment and occasionally runs from *face* to *dorse* when

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157. There is a possibility that this date errs on the side of caution and there may have been earlier accounts in this roll. This account composed of two middle membranes that made up the larger account. That there is an endorsement from c. 1500 at the beginning of the account rolls suggests that by that point no other parchment preceded the first membrane.

158. Dobie, *Accounting at Durham Cathedral Priory*, p. 108.

necessary. The layout of these accounts is largely identical to the non-enrolled accounts; I provide further detail of the layout of manorial accounts below.

The non-enrolled accounts, while not as physically impressive as those discussed above, are more numerous and cover a much larger period of time; the last extant account is from the manor of Pittington for the agricultural year 1451/2. Though some single accounts occur in the early fourteenth century, they are consistent after 1326. Each account details the operations for a single manor for a set period of time, usually one agricultural year. Some exceptions exist, as in the accounts for Bearpark 1403/5 and Fulwell 1402/4, where two consecutive years are included together. Both *face* and *dorse* of the parchment is used. Accounts using more than one membrane of parchment are rare, though some accounts have slips of parchment sewn on where necessary information was missing.

The surviving manorial accounts are written on parchment.<sup>159</sup> As we might expect of what are essentially utilitarian documents, the quality of the parchment is often not the best and holes in the parchment and blemishes of the animal hide are common. Occasionally, it seems that either the scribe or *percamenarius*, the individual who made parchment, attempted to stitch closed such holes. The accounts are written in chancery hand, common in England throughout the fourteenth century and the hand in a given series of accounts is often consistent; as the accounts often mention a specific payment for the scribe who wrote the account (during the late fourteenth century, this was normally three shillings and four pence), it may be that the same scribe was hired each year and travelled to the manors with the auditors in the case of the non-enrolled accounts. Unlike Christ Church Canterbury, Saint Swithun's of Winchester, and

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159. Though there are exceptions, such as Houghall 1425/6, which was written on paper, not parchment. This agrees with Dobie's assertion that paper became more common towards the end of the medieval period. See Dobie, *Accounting at Durham Cathedral Priory*, p. 118.

other convents, the audit was conducted at the manor, rather than by summoning the serjeant to the monastery.<sup>160</sup> This approach was more in line with the agricultural treatises of the day and may have been preferred by the Durham monks as it lessened the chance for fraud and allowed the auditors to view the arable and pastoral products of the manor themselves.<sup>161</sup> Many accounts contain two different coloured inks in slightly different hands, which, Alistair Dobie suggests, were added by the auditors after the account was compiled and corrected any discrepancies and errors that had been present.<sup>162</sup> The scribes wrote in Latin, as was customary for the period among the educated. These accounts were heavily formulaic and abbreviated, but this standardisation would have been as useful to medieval readers as it is to modern ones, allowing the reader to quickly find necessary information.

The surviving accounts are, as we might have safely assumed, in various states of legibility and repair. Nearly seven centuries have taken their toll on some of the accounts, whereas others are remarkably well-preserved; improper storage, damp, and insects and rodents have damaged some accounts. Such damage is particularly notable in the decades preceding the Black Death, though the coverage provided by the accounts is generally good for this period (Figure II.1, below). Nevertheless, the damage to these early accounts often kept me from gathering some crop yields for this period, as such damage, combined with missing annual accounts, led to some data being unavailable.

We must also remember that the manorial accounts were not the only kind of agricultural records used on the estates of the Durham Cathedral Priory. Wax tablets were

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160. Knowles, *The Religious Orders in England: Volume II: The End of the Middle Ages*, p. 319.

161. Ibid., p. 319. See the *Seneschacy*: 'Lez acuntes deyvent ester oyiz a chechun maner' ('Accounts should be audited at each manor') in Oschinsky, *Walter of Henley & Other*, pp. 288-289.

162. Dobie, *Accounting at Durham Cathedral Priory*, pp. 151-152. A simple change to the recipe for the ink, such as the addition of more soot, would cause a change in the colour of the ink.

certainly used at other monastic establishments and the ease of reuse would have made them convenient for on-the-go notes, though evidence for their use at the Priory does not survive.<sup>163</sup> Tally sticks are mentioned often in the accounts and were used by the serjeants and monks to show receipt of grain, livestock, and money, among other goods. Notches recorded the number of items or the value of money transferred *per talliam* (as it was often sent by the bursar to manors). Even in periods of increasing literacy the use of tally sticks continued, and the Royal Exchequer only ceased using them in 1783.<sup>164</sup> During the compiling of the annual manorial accounts, the serjeants presented the year's tallies, often along with the pelts of animals that had died in the year, proving that the animals had not been stolen and sold. Unfortunately, these tally sticks do not survive.

## II.ii. Systems of Measurement and Accounting

These accounts also use measures of volume and non-decimal currency that often require a degree of translation and explanation for them to be useful to modern readers. Values of money are described in the system of pounds, shillings, and pence where one pound is made up of twenty shillings or 240 pence. One shilling is made up of twelve pence and would have been nearly two days wages for threshing in 1370.<sup>165</sup> Many of the accounts list values less than a penny using the halfpenny (being 1/480 of a pound) and the farthing (being 1/960 of a pound). A pound is recorded as a *librus* in the accounts and is abbreviated as £ in the accounts and throughout this project. Similarly, a shilling was known in Latin as a *solidus* and is abbreviated as s and a penny as a *denarius*, shortened to d throughout. Halfpennies or *oboli* were written as ob and farthings (*quarterii*) as qu or variations thereof in their rare use.

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163. Dobie, *Accounting at Durham Cathedral Priory*, p. 118.

164. Ibid., p. 118.

165. Farmer, 'Prices and wages', pp. 431-525.

Prior to the Black Death, many of the manorial accounts measured grain in a system of pecks, kennings, rasers, and quarters. Two pecks made one kenning, four kennings a raser, and four rasers a quarter. Following the break in the accounting material around the Black Death and continuing a trend towards their use in the preceding years, the manorial accounts use pecks, bushels, and quarters. Four pecks made a bushel (bz.) and 8 bushels a quarter (qtr.). This system is used as standard throughout the project and amounts of grain are discussed in bushels/quarters. Around the turn of the fourteenth century, one bushel of wheat would have a volume of approximately 36.37 litres or eight gallons and same measure of corn would weigh around 24 kg or 53 lb.<sup>166</sup> To give a further idea of the size of the units, a typical medieval cart could carry three quarters of wheat or three and a half quarters of barley or four quarters of oats.<sup>167</sup> A pound of wheat or barley would provide roughly enough calories to feed an individual for a day and therefore, using Bruce Campbell's rough estimations, one quarter of barley would provide an individual with approximately 1,500 kCal a day for a year, while a quarter of wheat would allow for an individual to receive 1,500 kCal for about four hundred and thirty days.<sup>168</sup> A quarter of oats would only provide enough calories for about ten and a half months.<sup>169</sup>

If we discuss the units that the monks and their dependents used on a daily basis, then we should also discuss the system in which these units were calculated. Somewhat fitting, given the use of Latin, all values in the accounts are expressed in Roman numerals. Hindu-Arabic numerals do not feature in the accounts. The final downward stroke, or *minim*, of each number, is made longer and often appears a 'j'; thus the number thirty-two would be rendered *xxxij*. This, Alistair Dobie suggests, may have been done to make any later alterations more difficult,

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166. Britnell, *Manorial Accounts*, p. lxviii.

167. Campbell, *English Seigniorial Agriculture*, p. 214.

168. *Ibid.*, pp. 214, 392-396.

169. *Ibid.*, p. 214.

as well as simply marking ‘that it is the final minim’.<sup>170</sup> Larger numbers are given as a ‘multiple of two factors’, so that *ijj<sup>xxx</sup>* expresses the number ninety.<sup>171</sup> Though J.T. Fowler identifies a number of errors in the Durham grantor’s accounts, such discrepancies are reconciled when the value of the Roman numeral ‘C’ is considered.<sup>172</sup> If ‘C’ is taken to be equal to one hundred, these errors are, as Fowler and Miranda Threlfall-Holmes both note, present; however, when ‘C’ is understood to note the ‘long hundred,’ or one hundred and twenty, such discrepancies noted by Fowler disappear.<sup>173</sup> This long hundred, common to languages with Germanic roots, was most often used for units of measure such as length and weight. ‘C’ was used as the short hundred for money and giving the year in the *anno Domini* format; the short hundred was expressed as *v<sup>xx</sup>* in other circumstances.<sup>174</sup>

### **II.iii. Purpose and Content**

#### **II.iii.a. Purpose**

These accounts certainly served multiple purposes for those who compiled them, but two purposes bear mentioning here: firstly, that the records were used to ensure accountability among the obedientiaries and serjeants and, secondly, to have a record of agricultural practices and returns. While the second purpose is of more immediate use to this study, their use to ensure accountability gives us insight into the purpose behind these manors.

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170. Dobie, *Accounting at Durham Cathedral Priory*, p. 120.

171. Ibid., p. 119

172. J.T. Fowler, *Extracts from the Account Rolls of the Abbey of Durham, from the Original MSS* (Surtees Society, 1898), p. liv.

173. Dobie, *Accounting at Durham Cathedral Priory*, p. 147.

174. Britnell, *Manorial Accounts*, pp. lxiv-lxv, R.D. Connor, *The Weights and Measures of England* (London, 1987), pp. 58-59.

Given the large holdings of the Priory and the need for accurate records, several obedientiaries were required to present annually an accounting of their actions and money spent and received and, perhaps not surprising, the Priory kept extensive records. Though often of varying levels of detail, these documents, which survive in a surprisingly large number, allow for excellent insight into the administration of a large ecclesiastical operation during the Late Middle Ages. Of these accounts, those pertaining to the bursar's estate are the focus here. They survive in large numbers and, given the scope of the office of bursar, reflect the running of a large part of the estate and a large portion of the Priory's income. These manorial accounts form the major data source for this thesis, while tithe records, which give insight into the workings of peasant agriculture that made up between four-fifths and two-thirds of total arable output, are used for prosopographical analysis.<sup>175</sup>

These accounts (*compti*) were compiled annually and presented the actions of the manor's sergeant to an auditor and then to the bursar for his review. An individual account typically covered a calendar year from Michaelmas (the Feast of Saint Michael, on the twenty-ninth of September) to the following Michaelmas. Some accounts might terminate on a different date earlier than Michaelmas. When this occurred, a new account was written and typically ended on Michaelmas; as such changes were predicated by the departure of a serjeant, a new manorial manager was listed. These accounts were detailed but did not act as a form of proto-double-entry bookkeeping. The auditors and serjeants listed expenditure and receipts in enough detail to ensure the demesne lord knew he was not being cheated egregiously, using a system known as 'charge and discharge accounting'. In the first, or 'charge', section, the sergeant and auditors detailed the income of the manor from tithes, sale of grain, debts paid

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175. Dodds, 'Estimating arable output', p. 245.

and the like. The ‘discharge’ section contained ‘all expenditure made on behalf of the lord in the administration of the estate’.<sup>176</sup> This would include any wage payments made to day labourers or members of the *famuli*, the long-term staff of the manor, and any money spent on repairs, while the ‘charge’ section would include any income from the demesne or money sent *per talliam* (noted by a tally stick) by the bursar.<sup>177</sup>

This detailed system of accounting is not unique. Guides on estate management became, if not popular, then perhaps widespread during the thirteenth century. Treatises such as Walter of Henley’s *Le Dite de Hosebondrie*<sup>178</sup>, the anonymous tracts *Hosenbonderie* and *Seneschaucie*, and *Les Reules de Seynt Roberd* of Robert Grosseteste, Bishop of Lincoln, (r. 1235-1253), all advised demesne lords on how to manage their estates and what harvest yields the lords might expect. All universally supported an innate distrust of servants and an intricate audit. Such guides were not a ‘flash in the pan’, popular for a moment and then gone the next. The latest extant manuscript of *Husbandry* at the Bodleian Library dates to the rule of Elizabeth I; twenty other manuscripts survive. *Seneschaucy* and *Les Reules de Seynt Roberd* often were bound together with Walter of Henley’s *Husbandry*. These authoritative works, for they were long perceived as such, were certainly known to the Priory monks as their own library contained copies.<sup>179</sup> Monks and, by extension, their paid manorial managers were then keenly aware of what the returns of their lands should be. Following Robert Grosseteste’s seventh and twenty-fourth rules, the Priory conducted an extensive annual audit.<sup>180</sup> While the bursar and his fellow

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176. Dobie, *Accounting at Durham Cathedral Priory*, p. 56. See pp. 55-57 for a more detailed description of ‘charge and discharge accounting.

177. The *famuli* were long term employees or dependents of the manor. They would be provided a set wage for a given period of time, normally one of the agricultural terms, unlikely individuals who performed day labour or piece work.

178. Hence referred to simply as ‘*Husbandry*’.

179. Ibid., pp. 60-61.

180. Oschinsky, *Walter of Henley & Other*, pp. 394-395. ‘Le setyme reule uous aprent coment vus porrez saver, par comparer les acantes as aescmes, del entente u la defaute de voz seriaunz e bayilliz de maners e de terres’ (‘The seventh rule teaches you how you may learn by the comparison of the accounts with the estimates the diligence or negligence of your

obedientiaries were obliged to give an account at the Priory's annual general chapter, the manorial sergeants too were audited, showing expenditure down to the farthing and showing tallies for the movement of livestock and grain, and skins and carcasses were used to show the death or slaughter of animals.<sup>181</sup> Manorial auditors frequently corrected amounts in the *comptotis*, though their use of a darker ink to be distinguishable from the scribe, as suggested by Dobie, is difficult to prove.<sup>182</sup>

The system of charge and discharge accounting and the careful admonitions of the agricultural treatises required the serjeant to detail his operations extensively. The Priory had little compunction in dismissing serjeants they thought were either under-performing or dishonest and, if nothing else, a serjeant would be eager to prove he was neither. The account would typically open with the name of the demesne, the period covered by the account, typically from Michaelmas on 29 September to Michaelmas the following year, and the name of the serjeant. Following this would be the 'charge' section of the account. Here would be any income that crossed the serjeant's hands, such as money from the sale of grain either 'at the gate' of the manor or *in foro* (at market) or, as mentioned before, money sent by the bursar to the serjeant to be used for the administration of the demesne. A total sum of all income would follow, occasionally in a different hand than the immediately previous lines, suggesting a later audit. Then typically came the 'discharge' section. Expenses such as new ploughs, carts, and building repairs were listed here. The serjeant then detailed wage payments for day labour or piece work such as threshing, mowing, reaping, and binding of grain, giving a subtotal for each type of work. Wages of longer-term employees – the *famuli* – were included in their own

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servants and bailiffs of manors and lands'); 'La vintequartime reule vus aprent par quele reysun vus devez saver le nombre de parcelles' ('The twenty-fourth rule teaches you the reason why you should learn the number of parcels of your lands').

181. Dobie, *Accounting at Durham Cathedral Priory*, pp. 151-153.

182. Ibid., pp. 151-152.

separate section, with wage rates given either by the term or the year along with wages for smiths, serjeants, and scribes. On the bursar's estates the *famuli* might include carters and ploughmen, though the accounts do not give us enough detail to determine if that was the whole of their duties. In many cases a name or occupation is given but not both, further compounding the issue. At the foot of the face side, three final sums were given: the total amount of income; the total amount of expenditures; and the difference between the two. On the dorse side, the serjeant provided details of the arable and pastoral agricultural state of the manor. For the three major crops of wheat, barley, and oats (for rye was rarely, if ever, grown on the Priory demesnes in any large quantity) the sergeant accounted for how much grain he had kept in seed (*in semine*) to be sown for the next agricultural year. The amount harvested of each grain that agricultural year was recorded down to the peck and, occasionally, fractions of it. If grain from previous accounts was present for whatever reason, it too was recorded; the total amount of grain on hand was totalled and noted slightly below the preceding paragraph. The uses of harvested grain were detailed, whether it was sold at the gate or market, used as livery payments to farm workers in a rate fixed by custom, if it was malted, or if it was sent to Durham and the Priory.<sup>183</sup> Occasionally, though not universally, the serjeant or auditor would note in the margins the yield of the grain. This too was done for vetches, beans, and peas, though these were rarely sent to Durham and were of lesser importance. Finally, the state of the livestock was set out. The number of pigs, draught horses, cattle, sheep, poultry, and other animals were given and divided into the appropriate age and use category (for example, mature pigs in one category, and yearling pigs in another). If the animal was slaughtered or died, this too was recorded. Most livestock was recorded through the livestock centre at Muggleswick,

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183. See *Chapter V: The Serjeants of Durham Cathedral Priory* for further discussion on grain liveries.

and pastoral farming was not an important part of the normal demesne, as a result, the topic of livestock husbandry is not a focus of this thesis.

A simple question naturally follows any description of these accounts: why are they and the information that they contain useful? And yet for such a simple question, there is not a simple answer, or at least a brief one. At the heart of the matter is that manorial accounts, whether from Winchester, Norwich, Ely, or Durham, all contain a wealth of information that can be used in nearly a myriad different ways. They can, as will follow in *Chapter V: The Serjeants of Durham Cathedral Priory*, be used to create a prosopographical image of a single individual or of a group. Such an approach allows us to better understand the goals, ideas, and patterns of life for individuals who are often underrepresented in the historical record. Given enough accounts, we can, as will be shown in following chapters, recreate the management strategies of ecclesiastical estates. As the Church was the single largest landowner in medieval England, such an understanding is important. We can use the prices and wages that the serjeants recorded to further our understanding of the medieval economy, even if only in a small way. Finally, the extant Durham Cathedral Priory manorial accounts cover a large time period, both before and after the arrival of the Black Death in England in 1348. The Durham accounts, bookending the eventful long fourteenth century as they do, allow us to better understand the changes brought about by the Black Death and compare the periods before and after the pestilence in a region that has been understudied.<sup>184</sup>

After extolling the benefits of these accounts, what must now be mentioned are the problems with them. The first and most obvious difficulty is in the numbers and manner in which the manorial accounts survive (Figure II.1 & Table II.3 in the chapter appendix). Figure

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184. For an example of purported changes during the long fourteenth century, see Hatcher, 'Unreal wages', pp. 1-24.

II.1 displays the distribution of extant accounts by decade and manor, showing both the difficulties of finding surviving accounts in the period near the Black Death and the relatively low rate of survival of accounts for some manors, particularly notable in Merrington, Rainton, and Belasis. There unfortunately appears to be little reason as to which accounts survive and which do not. Damage from damp, has, as mentioned above, made some accounts illegible and of little use. This is frustrating when damp interrupts what would otherwise be an exceptional run of accounts. Some gaps of course may be explained by a manor being leased out, as Wardley was in 1308/9, but this certainly does not explain all of the putative non-extant accounts.<sup>185</sup> The ravages of the Black Death certainly give some explanation, for records during the plague years are sparse here. But from Michaelmas in 1345 to Michaelmas in 1369, as noted in Table II.3, no Priory manorial accounts survive. It is possible, though not probable, that accounts simply were not made during this period. Yet this gap is too large to be due to the Black Death and the associated disruption that followed in its wake. The 'Indian summer of demesne farming' that followed the Black Death was, as A.R. Bridbury argues, a boon to manorial farming and, given the advice given to the monks by Robert Grosseteste and Walter of Henley, careful records would have been extremely useful.<sup>186</sup> Accounts may not have been made during particularly troubling times. Nevertheless, though Scots raided into and fought in Durham in the years 1312, 1314, 1315, 1317, 1318, 1324, 1342, 1346, and 1388, which included the Scots holding Durham itself for ransom, many accounts are extant (Table II.3).<sup>187</sup> Furthermore, papal edicts and Benedictine conventions required monastic houses to keep

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185. R. A. Lomas, 'The Priory of Durham and its demesnes in the fourteenth and fifteenth centuries', *Economic History Review*, 31(3) (1978), p. 341.

186. See Bridbury, 'The Black Death', pp. 577-592.

187. Alisdair Dobie, *Accounting, Management and Control at Durham Cathedral Priory c. 1250-c. 1450*, Ph.D. Dissertation (Durham University, 2011), p. 86, R. B. Dobson, *Church and Society in the Medieval North of England* (London, 1996), p. 86, Dodds, *Peasants and Production*, pp. 56, 57, 61, 67, 69.

records of their estates.<sup>188</sup> Failure to make such accounts would have meant breaking such ordinances.

There is the further possibility that some accounts were written on parchment that had been reused meaning that a previous account may have been scraped clean so the details of a new agricultural year could be written. Yet there is no evidence for this. A.J. Piper re-catalogued the Durham Cathedral Muniments, of which the Medieval Accounting Material is part, and did not note any instances where such reuse occurred or where such instances of recycling of parchment may have been likely. Similarly, Richard Britnell consulted the earlier manorial accounts for his volume for the Surtees Society and makes no mention of any such practice.<sup>189</sup> And while many accounts were viewed under an ultraviolet lamp for the purpose of this project, there were no signs that a parchment had been scraped clean. Though there were more outbreaks of plague, and associated gaps in the account runs do occur, a twenty-five-year gap cannot be blamed on plague alone. Some other reason must be to blame, perhaps simply that the box containing these accounts was lost or damaged beyond repair before modern archival practices were introduced.

Furthermore, the Durham manorial accounts lack much of the detail that made the records used by David Stone, Philip Slavin, and Eric Schneider so useful. The Winchester Pipe Rolls and the accounts of the Norwich Cathedral Priory and the Bishop of Ely give the number of acres sown with a particular crop in each account; seeding rates are also often noted. Yet in the Durham Priory manorial accounts it is rare for the exact acreage sown with a crop to be detailed, and named fields, more common in the South, are non-existent. This creates something of a knock-on effect regarding the details in the account. Because fields are not

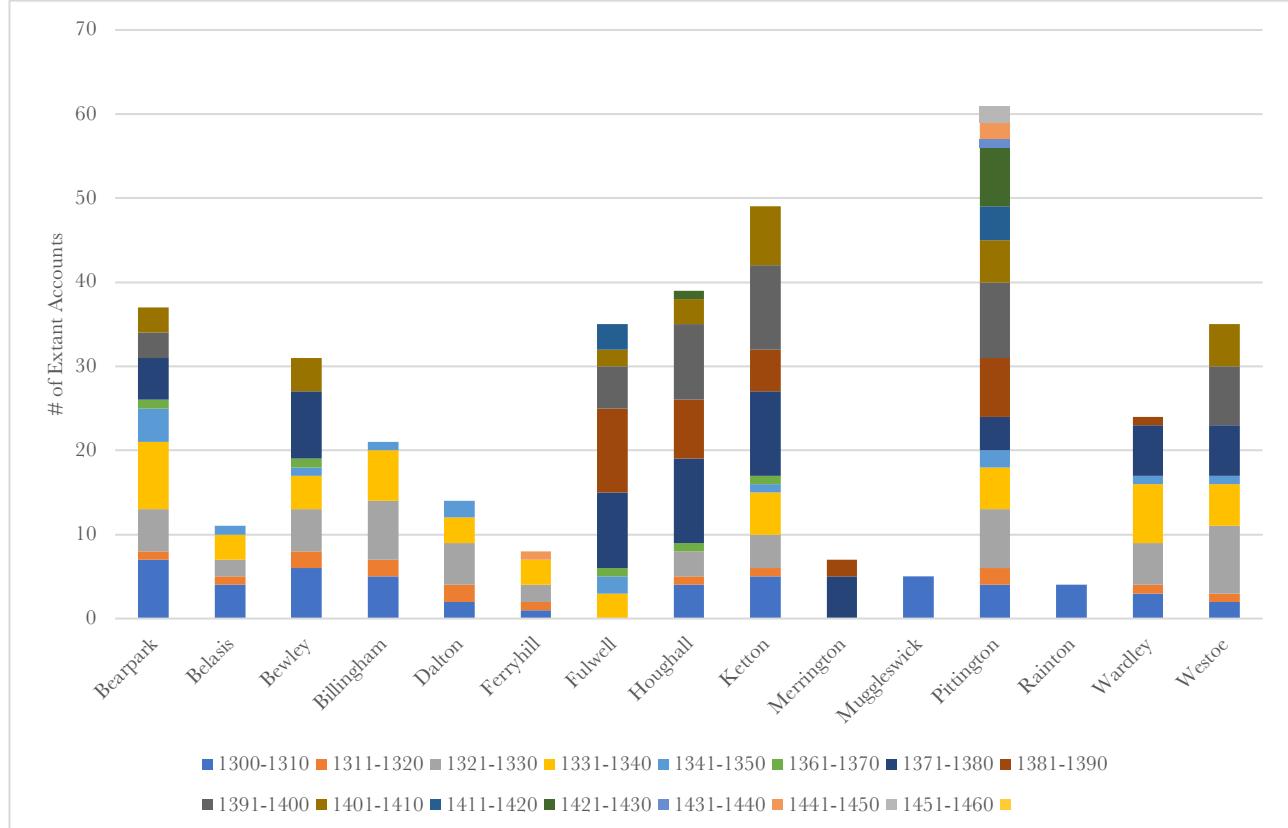
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188. Dobie, *Accounting at Durham Cathedral Priory*, pp. 68-69.

189. See Britnell, *Manorial Accounts*.

named and the accounts do not detail the work done on particular fields, it is difficult for us to gauge the agricultural labour inputs. There are of course proxies, which will follow in the methodology section. The Durham accounts rarely give seeding rates (the amount of seed used per acre), which certainly seemed relatively fixed from what evidence is available. This too creates its own set of problems, all of which will be addressed below.

Figure II.1: Decadal Account Coverage by Manor



### III. Tithe Receipts and Bursars' Rentals

#### III.i. Tithe Receipts

Though continental historians and those of the Annales school in particular have made great use of tithe data, comparatively little work has been done with the extant English tithe sources,

a neglect described as regrettable.<sup>190</sup> While Ben Dodds' work is a notable exception to British historians' lack of interest in tithe records, he does not focus on estate management but instead on peasant holdings.<sup>191</sup> These tithe receipts are overtly simple documents, but no less valuable for that. The Durham Cathedral Priory had the right, among others, to the garb tithes from its appropriated parishes, or one tenth of all production of wheat, barley, oats, peas, and beans grown. But while this grain was by law and custom the due of the Priory, it was not without its own set of hassles. Producers were not eager to part with the fruits of the labour and various techniques were used to defraud the tithe collectors. Dodds notes various schemes which the producers used, including the use of inferior grain and the removal of the other sheaves of grain not part of the tithe from the field, keeping the tithe collector from knowing that he was receiving smaller shares.<sup>192</sup> The Priory also incurred various expenses in collecting the tithes, for they were still responsible for threshing, transport, and storage of the grain. In an effort to balance, as they might have seen the issues, rewards and hassles, the Priory sold the right to these tithes on (usually) an annual basis. Buyers would review the corn in the field before harvest and make a cash offer for the right to this grain. Such an estimation would by necessity be careful and made by a skilled individual, knowledgeable of the local markets, weather, and agricultural conditions and balanced against the possible costs of transport, labour, and storage, among others. If the Priory accepted the offer, the buyer would pay for the tithes on certain days in the coming year and receive the grain at harvest; as this was in all but name a loan, Dodds suggests that 'an interest payment was added to the value of the tithe corn when the

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190. R. Kain, 'Les Dîmes, Les Relevés de Dîmes et la Measure de la Production Agricole Dans La Grande-Bretagne Préindustrielle' in E. Le Roy Ladurie and J. Goy, (eds.) *Prestations Paysannes, Dîmes, Rente Foncière et Mouvement de la Production Agricole à l'Époque Préindustrielle* (Paris, 1982), p. 726

191. Dodds, *Peasants and Production*, p. 9. See also Dodds, 'Estimating arable output', pp. 245-285, and Dodds, 'Demesne and tithe', pp. 123-141.

192. Dodds, *Peasants and Production*, p. 7.

purchase agreement was drawn up'.<sup>193</sup> This purchase agreement recorded the value paid for the tithes, the ville and parish where the tithes were located, and the name(s) of the buyer(s). Though Dodds used the tithe receipts as a measure of peasant agricultural production, he acknowledged their value in prosopographical research.<sup>194</sup> It is for this purpose that these receipts will be used in this study; greater detail on their use follows in the methodology section.<sup>195</sup>

### **III.ii. Bursar's Rentals**

Finally, this project will use the rentals of the Durham Cathedral Priory bursars. These rentals together with the tithe receipts and manorial accounts will help give a further understanding of the social and economic position of the serjeants on the bursar's demesnes. Further details on this follow in the methodology section. Multiple customs and regulations required the bursar to annually account for his income and spending to the Priory, as discussed above and, as money from rents made up part of the income of the bursar, such income had to be accounted for. These rentals met this requirement though they do not form as complete a set as the tithe receipts or even the manorial accounts. These bursar's books were written in Latin on both parchment and paper depending on the time of creation and bound together in something of a haphazard manner with little regard for the chronology of the documents.<sup>196</sup> Indeed, Richard Lomas and Piper argued that the surviving rentals do not completely cover the period from

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193. Dodds, *Peasants and Production*, p. 29.

194. *Ibid.*, p. 31.

195. These tithe receipts, as with all the documents used in this study, are held in the Durham Cathedral Archives at 5, The College. However, Ben Dodds kindly provided extracted data from his own work on the Durham tithe receipts, for which assistance I am extremely grateful.

196. The bursar's rentals are part of the Durham Cathedral Archive: Rental collection (reference code: GB-0033-DCD-Rntls) and are held by Durham University Library, Archives and Special Collections at 5, The College, Durham. An edited volume with selections from these rentals was published by the Surtees Society in 1989 as Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*. The term bursar's rentals refers to what the catalogue now designates as 'Bursar's Book A-M'.

1300 to 1540, especially as a large number of headings are missing.<sup>197</sup> These documents were practical and not meant for display; *Bursar's Books A* and *E* both show signs of annotation, some of which is in the same hand.<sup>198</sup> However fragmentary and difficult to work with as these sources might be, the information contained within is extremely useful. The name of the person renting the land, the location of the land, the amount of land rented, typically in acres, and the amount paid in rented are all provided. These names, locations, and other data can then be cross-checked against the names of serjeants and other manorial records and, together with data from the tithe receipts, can then be used to create a prosopographical study of the individuals who managed the bursar's demesnes.

## **IV. Methodology**

### **IV.i. Descriptive Statistics and Quantitative Analysis**

This study and its analysis of the workings of the Durham Cathedral Priory bases itself upon and builds on the work of numerous other medieval agricultural, economic, and social historians, all of whom took distinct approaches to our gaps in understanding medieval agriculture and its effects for our perception of the pre-modern world. It is worthwhile then to describe the methodology of this paper: what that methodology is and what it is not.

Though an econometric approach to medieval agriculture is used to very effectively by Schneider, such a method cannot be used here.<sup>199</sup> This limitation is caused by the fundamentally smaller sample size in this study. While Schneider has some forty-nine manors of the bishop of Winchester for the period 1325 to 1370 upon which to draw, this study has

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197. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 9.

198. Ibid., pp. 32, 70-73.

199. See Schneider, 'Prices and production', pp. 66-91.

fifteen. And though the records of the bishop of Winchester give excellent runs of accounts, the accounts of the Durham Cathedral Priory bursar can be, though should not be exclusively described as, patchy with occasional gaps in the runs. As such, this study avoids the use of econometric models favoured by Eric Schneider and other economic historians. Instead I use descriptive statistics to further our understanding of agriculture on the bursar's estate. This approach is not without precedent; Sapoznik and Stone both used such methods in their respective studies of the Crowland Abbey manor of Oakington in Cambridgeshire and of the Bishop of Ely's manor of Wisbech Barton in the marshlands of Cambridgeshire.<sup>200</sup>

#### IV.ii. Calculations and Use of Yield per Seed and Sown Acreage

The two main measures of agricultural productivity that will be the focus of this thesis are yield per seed and sown acreage. Though harvest size will also be considered, thankfully, little enough calculation is required to present that information. Yield per acre is a more exact metric of agricultural productivity and success. Calculating yield per acre requires that the amount of acres under plough with a particular crop be known. However, as discussed above, the manorial accounts for whatever reason record sown acreage so infrequently that this study cannot use yield per acre. Yield per acre is not used as a metric of harvest success or failure in this thesis. Yield per seed must be used instead and is the most important measure of agricultural productivity used in this thesis. Yield per seed can be best understood as the amount harvested divided by the amount seeded or, if yield is  $y$ , the amount sown in bushels is  $s$ , and the amount harvested is  $h$ , then  $y=h/s$ . Though yield per seed is perhaps a less exact measurement than yield per acre, it is something of a standard measurement in medieval agricultural history, particularly when factored, as it is here, as net of tithe, as can be seen in

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200. See Sapoznik, 'Resource allocation', pp. 187-205, Sapoznik, 'Productivity of peasant agriculture', pp. 518-544, Stone, *Decision-Making*.

Bruce Campbell's *English Seigniorial Agriculture* and his 'Three Centuries of English Crop Yields, 1211-1491' database. Yield per seed (henceforth, simply yield) is an effective way to gauge the relative success or failure of a harvest. Climatic factors lay outside human control, and the Priory and its officials had little ability to dampen the effects of wider socio-political factors, warfare included: the Scots raided northeast England and into County Durham, likely causing people to avoid going out of doors in fear, and large engagements such as the Battle of Neville's Cross of 1346, just under half a mile (one kilometre) from Durham, certainly led to crops being stolen or trampled and villages sacked.<sup>201</sup> As will be discussed in greater detail in subsequent chapters, manorial officials were capable of influencing yields greatly, including lowering and raising labour inputs and changing methods of agriculture.<sup>202</sup> We can then use the yield of a crop as a stand in for the labour information that the Durham manorial accounts lack. This allows us to further understand the decision-making process of Priory and manorial officials by investigating how trends in a particular crop's yield may have been influenced by nominal (local and national) and relative grain prices, the cost of agricultural labour, as well as more *longue durée* factors of climatic and demographic change. This investigation of the decision-making process is interesting by itself, but it also allows us to better understand the rationale by the decisions, the values, and the *mentalités* of those making these choices.

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201. Dodds, *Peasants and Production*, p. 67

202. See Stone, 'Medieval farm management', pp. 612-639, David Stone, 'The productivity and management of sheep in late medieval England', *Agricultural History Review*, 51(1) (2003), pp. 1-22, Stone, *Decision-Making* for detailed discussion on the importance of manorial staff in agricultural success. Such methods include extensive and intensive agriculture. In a system of intensive agriculture, relatively fewer acres would be under plough and labour inputs would be at their highest. In extensive agriculture, relatively more acres would be under plough, though labour inputs would be much lower. In the first case, yields would be high, as would labour costs. In the second, yields would be low, but labour costs would also be low. All else being equal, harvest size would be approximately the same. The decision between such systems often depended on the relative cost of labour and the price of grain. See Campbell, Bartley, and Power, 'Demesne-farming systems', pp. 131-179 for an in-depth study.

The calculation and use of sown acreage requires slightly more care. As mentioned briefly in the *Sources* section of this chapter, the manorial serjeants and auditors for whatever reason often chose not to include sown acreage or seeding rates (the number of acres sown with a particular crop and the amount of seed used per acre, respectively) for each crop in the manorial accounts. This naturally makes the discussion and analysis of trends in sown acreage difficult. And yet such discussion and analysis is vital for this work. Sown acreage reveals long-term trends in estate management, allowing this thesis to investigate how landlords and manorial managers changed practices as a result of changes in economic conditions. Landlords and managers may have constricted the number of acres under cultivation as labour costs rose over the course of the long fourteenth century; similarly, changes in sown acreage may evidence the practice of intensive or extensive agriculture in response to changing prices. We must ground the discussion and analysis of trends in sown acreage in a number of key conjectures, though an explanation of why the seeding rate is so important bears mentioning.

Although the sown acreage is rarely recorded, the amount kept in seed often is. Therefore, if the previous account is extant, we can use the amount of grain kept for seed and then sown to give an estimate of sown acreage. Put differently, if the amount sown in bushels is represented by  $s$ , acreage sown by  $a$ , and seeding rate as  $r = s/a$ , then we can calculate the acreage sown ( $a$ ) as being equal to  $s/r$ . Yet this method of calculating sown acreage cannot then be used for calculating yield per acre as such a figure would be only an estimation and not in any way reliable.

Table II.1: Variation in Seeding Rates on the Bursar's Manors, c. 1380-c. 1420<sup>203</sup>

	<b>Wheat</b>	<b>Barley</b>	<b>Oats</b>
<i>StDev</i>	0.10	0.49	0.46
<i>Average (bz per acre)</i>	2.02	3.19	3.76
<i>Coeff OF Var</i>	0.049	0.15	0.12
<i>% Coeff OF Var</i>	4.85%	15.29%	12.29%
<i>n.</i>	26	25	22

For this to be a valid method, we must first agree that the seeding rate used was fixed throughout both the period under investigation and at the manors that are to be studied. The first is more likely — what evidence there is in the extant manorial accounts suggests that the seeding rate remained relatively fixed from c.1380-c.1420. With the available data, spanning approximately fifty years, on seeding rates from the bursar's manors, there is little evidence of any great shifts in seeding rates over the long fourteenth century. On six manors for which seeding rates can be calculated (Merrington, Bewley, Pittington, Ketton, Fulwell, and Ferryhill), seeding rates showed little variation either across the chronological period of the sample or geographically, particularly for the seeding of wheat (Table II.1). Similar stability during the early fourteenth century allowed Britnell to estimate cropping patterns and the number of sown acres using locally recorded seeding rates from 1305-1310.<sup>204</sup> The issues concerning seeding rates set out below cannot be overcome with the data that is available; nevertheless, this is the method employed by Britnell and ultimately used in this thesis.

These locally recorded rates differ from the data observed by Campbell, but given the different geography and climate and that Campbell's research largely focuses on counties south of the Humber, this is not surprising (Table II.2).<sup>205</sup> Furthermore, if harvests and yields were

203. This table uses accounts DCD-Bewl. acs 1405-1406, 1406-1407, 1407-1408; DCD-Fery. acs 1446-1447; DCD-Fulw. acs 1410-1411, 1411-1412, 1412-1413; DCD-Ket. acs 1406-1407, 1409-1410; DCD-Merr. acs 1376-1377; DCD-Pitt. acs 1405-1406, 1406-1407, 1407-1408, 1408-1409, 1409-1410, 1412- 1413, 1413-1414, 1419-1420, 1420-1421, 1422-1423, 1423-1424, 1424-1425, 1427-1428, 1428-1429, 1433-1434, 1446-1447, 1449-1450, 1450-1451, 1451-1452.

204. Britnell, *Manorial Accounts*, p. xlvi.

205. In the Three Centuries of English Crop Yields, 1211-1491 database, only about six per cent of the manors represented in the database were north of the Humber. Bruce M. S. Campbell (2007), *Three centuries of*

controlled through acreage and labour inputs, it seems likely that seeding rates would then be kept at a constant level. Perhaps, if demesne managers were aware that different agricultural techniques could (largely) produce the results they desired, adding an extra variable would only have increased the likelihood of an undesired outcome.

*Table II.2: Seeding Rate (b.z. per acre) on FTC Demesne, Pre- & Post-1350*

	<b>Wheat</b>		<b>Barley</b>		<b>Oats</b>	
	<i>Pre-1350</i>	<i>Post-1350</i>	<i>Pre-1350</i>	<i>Post-1350</i>	<i>Pre-1350</i>	<i>Post-1350</i>
<i>Min.</i>	1.3	1.3	1.6	1.3	2.1	1.3
<i>Mean</i>	2.8	2.7	4.2	2.8	4.8	2.8
<i>Max.</i>	4.8	8.0	6.6	8.0	8.0	8.0
<i>n.</i>	154	134	130	120	153	132

*Source: Campbell, English Seigniorial Agriculture, p. 310.*

Although the bursar controlled manors throughout County Durham, from Fulwell near the mouth of the River Wear to Pittington near Durham Cathedral Priory itself, to Bewley near Stockton and the North Sea, this method of estimating acreage is still useful. Serjeants may have used a fixed seeding rate at one manor that would allow for the best chance for a preferred outcome and purpose of a manor, while a serjeant at another demesne located elsewhere in the county may have used a different seeding rate. The evidence available does not speak directly to any great geographical variation in seeding rates on the bursar's manors, but this does not mean that such slight variations did not occur; there is simply no evidence for this. Seeding rates did not tend to fluctuate more in one part of the county than the other, nor were seeding rates at the mouth of the River Tyne significantly different from those used on the manors near the mouth of the River Tees. Even if seeding rates were fixed throughout the period but differed

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English crops yields, 1211-1491 [WWW document]. URL <http://www.cropyields.ac.uk> [accessed on 06/03/2019].

across manors, this is not an insurmountable problem. Acreage across manors may still be calculated and the resulting figures used, albeit, perhaps, with a degree of caution.

In the absence of any strong evidence for variation in seeding rates over time or geographically, the bursar's manors, I will use the method, as used by Britnell, described above in this thesis as appropriate and assume that seeding rates were either fixed or did not vary to an extent that would make any comparison meaningless.

#### **IV.iii. Prosopographical Methods**

The later part of this study will be devoted largely to a prosopographical method. After looking at larger trends in sown acreage, grain yields, labour costs, and grain prices and how the Durham Cathedral Priory as an institution responded to the difficulties caused by the Great Famine, Black Death, climate change, and political upset, the final chapter will seek to understand the social and economic status and capability of the serjeants who implemented the larger agricultural plans of the Priory on the ground. Furthermore, I will argue that the serjeants were capable and effective individuals who had direct and noticeable impacts on the lands they managed.

The tithe receipts and bursar's rentals are invaluable for this purpose and the information they provide allows us to see a fuller profile of the manorial officials. The manorial accounts always provided the name of the serjeant of the demesne for the time-span covered by the account and thus, apart from a few examples where the heading of an account is illegible, can be used to create a list of serjeants. This leaves us with a list of approximately one hundred and thirty-five distinct individuals who managed a demesne of the bursar's estate. I then checked these names against the tithe receipts analysed by Dodds and I subsequently extracted the names of individuals who were both tithe buyers and manorial officials. Unfortunately,

family names during this period were not completely fixed and given names were chosen from a fairly limited list. There is no method available to medieval economic historians that this study can use to ensure, for example, that one John de Monkton is the same John de Monkton mentioned in an account for the following year. The probability is that it is the same individual, and this probability would be increased if the patronymics were identical, but we cannot be completely sure. In the case of the individuals who are listed as tithe buyers and those listed as manorial serjeants, I only assumed the putative tithe buyer was the same individual as the manorial serjeant if he were buying tithes in the same area (no more than approximately ten miles or sixteen kilometres) as the manor for which he was serjeant and the tithe receipt was from a period within a normal working lifespan. Here, I have decided to err on the side of caution and set that figure at approximately twenty years, though there are a few exceptions. I then checked the list of serjeants against the available bursar's rentals, primarily printed sources given sometimes spotty coverage of the extant documents, to see if these individuals also rented land.<sup>206</sup> Armed with this information, I observed how active serjeants were outside of the duties for the Priory and the amount of capital they had available with which to interact with a larger market.

Finally, we can complete our image of the serjeants through the use of agricultural data such as harvest size, sown acreage, and grain yields. As manorial serjeants often served multiple terms of office at either the same manor or a neighbouring one, we can track the relative success and failures of each serjeants through the changes in yields and sown acreage and the influence of labour costs and real and relative cost of grain on their agricultural decision-making.<sup>207</sup> At a

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206. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals* is used in this thesis as the source of all rental data.

207. See *Chapter V: The Serjeants of Durham Cathedral Priory*.

glance and discussed in detail in later chapters, some serjeants were markedly more effective than others and may have been moved by the Priory between different manors to act as a sort of ‘agricultural fixer’; John Ponchon, active in the late fourteenth century, is but one of multiple likely examples. If individuals such as John Ponchon were indeed employed as agricultural fixers, and the data certainly suggests that this was the case, then we can further broaden our understanding of the individuals who managed the bursar’s estates in County Durham and, perhaps, those who ran manors throughout the rest of England during the fourteenth century.

## **V. Conclusion**

By combining the various methods of analysis, including descriptive and qualitative analysis and prosopographical research, that are suitable for the extant data, I will be able to confidently analyse and discuss the productivity of northern agriculture during the Late Middle Ages, gain insight into the mindsets of manorial managers and the monastic superiors, and discuss the ability of these individuals. Such discussion and analysis allows me to shed further light on northern agriculture, demonstrating the high level of success on the demesnes of the Durham Cathedral Priory bursar, which was often as productive, if not more so, as agricultural practiced in the southern English counties. In later chapters I argue for greater agency for both lay and monastic agricultural decision makers and awareness of the different skills and priorities of these two groups.

Table II.3: Account Coverage by Manor During the Long Fourteenth Century

<b>Account Year</b>	<b>Bearpark</b>	<b>Belasis</b>	<b>Bewley</b>	<b>Billingham</b>	<b>Dalton</b>	<b>Ferryhill</b>	<b>Fulwell</b>	<b>Houghall</b>	<b>Ketton</b>	<b>Merrington</b>	<b>Muggleswick</b>	<b>Pittington</b>	<b>Rainton</b>	<b>Wardley</b>	<b>Westoe</b>
1300	✓		✓												
1301								✓			✓	✓			
1302	✓		✓					✓					✓	✓	
1303	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	
1304	✓	✓	✓	✓					✓		✓	✓	✓	✓	
1305	✓	✓	✓	✓					✓		✓	✓	✓		✓
1306	✓	✓	✓	✓	✓	✓		✓	✓						
1307															
1308															
1309															
1310	✓			✓					✓		✓				✓
1311															
1312															
1314															✓
1315															
1316				✓											
1317			✓		✓	✓			✓			✓			
1318															
1319															

Table II.3: Account Coverage by Manor During the Long Fourteenth Century

Account Year	<i>Bearpark</i>	<i>Belasis</i>	<i>Bewley</i>	<i>Billingham</i>	<i>Dalton</i>	<i>Ferryhill</i>	<i>Fulwell</i>	<i>Houghall</i>	<i>Ketton</i>	<i>Merrington</i>	<i>Muggleswick</i>	<i>Pittington</i>	<i>Rainton</i>	<i>Wardley</i>	<i>Westoe</i>
1320	✓	✓		✓	✓			✓					✓		✓
1321	✓		✓	✓	✓	✓		✓	✓			✓			✓
1322															
1323			✓		✓								✓		
1324		✓	✓	✓	✓			✓	✓			✓		✓	✓
1325	✓			✓	✓	✓		✓	✓			✓		✓	✓
1326		✓	✓	✓	✓				✓			✓		✓	✓
1327															✓
1328	✓				✓							✓			✓
1329	✓				✓							✓		✓	✓
1330	✓		✓	✓										✓	✓
1331	✓			✓								✓		✓	✓
1332	✓					✓	✓	✓		✓			✓		✓
1333	✓		✓			✓	✓							✓	
1334	✓	✓		✓			✓			✓			✓		✓
1335	✓			✓						✓					✓
1336	✓	✓	✓	✓	✓			✓		✓			✓		✓
1337															
1338	✓		✓	✓				✓				✓		✓	✓
1339															
1340	✓	✓	✓	✓					✓						✓
1341	✓					✓		✓					✓		✓

Table II.3: Account Coverage by Manor During the Long Fourteenth Century

Account Year	<i>Bearpark</i>	<i>Belasis</i>	<i>Bewley</i>	<i>Billingham</i>	<i>Dalton</i>	<i>Ferryhill</i>	<i>Fulwell</i>	<i>Houghall</i>	<i>Ketton</i>	<i>Merrington</i>	<i>Muggleswick</i>	<i>Pittington</i>	<i>Rainton</i>	<i>Wardley</i>	<i>Westoe</i>
1342	✓	✓													
1343	✓														
1344	✓		✓	✓	✓		✓		✓					✓	✓
1345													✓		
<b>Black Death Lacuna</b>															
1370	✓		✓				✓	✓	✓						
1371	✓		✓				✓	✓	✓						✓
1372	✓		✓				✓	✓	✓						✓
1373	✓		✓				✓	✓	✓						✓
1374	✓						✓	✓	✓						✓
1375	✓		✓				✓	✓	✓					✓	✓
1376			✓				✓	✓	✓	✓				✓	✓
1377			✓				✓	✓	✓				✓		✓
1378			✓				✓	✓	✓	✓			✓		✓
1379			✓				✓	✓	✓	✓			✓		✓
1380							✓	✓	✓	✓			✓		✓
1381							✓	✓	✓	✓			✓		✓
1382							✓	✓	✓	✓			✓		
1383							✓	✓					✓		
1384							✓	✓					✓		
1385							✓						✓		
1386							✓	✓	✓						

Table II.3: Account Coverage by Manor During the Long Fourteenth Century

<b>Account Year</b>	<b>Bearpark</b>	<b>Belasis</b>	<b>Bewley</b>	<b>Billingham</b>	<b>Dalton</b>	<b>Ferryhill</b>	<b>Fulwell</b>	<b>Houghall</b>	<b>Ketton</b>	<b>Merrington</b>	<b>Muggleswick</b>	<b>Pittington</b>	<b>Rainton</b>	<b>Wardley</b>	<b>Westoe</b>
1387							✓								
1388							✓								
1389							✓	✓	✓				✓		
1390							✓	✓	✓				✓		
1391							✓	✓	✓				✓		
1392							✓	✓	✓						
1393							✓	✓	✓				✓		
1394								✓	✓				✓		✓
1395							✓	✓	✓				✓		✓
1396							✓	✓	✓				✓		✓
1397	✓							✓	✓				✓		✓
1398	✓							✓	✓				✓		✓
1399	✓							✓	✓				✓		✓
1400									✓				✓		✓
1401									✓						✓
1402								✓		✓					✓
1403								✓		✓					✓
1404	✓														
1405	✓		✓							✓					✓
1406			✓						✓	✓			✓		
1407	✓		✓						✓	✓			✓		
1408			✓						✓				✓		✓

Table II.3: Account Coverage by Manor During the Long Fourteenth Century

<b>Account Year</b>	<b>Bearpark</b>	<b>Belasis</b>	<b>Bewley</b>	<b>Billingham</b>	<b>Dalton</b>	<b>Ferryhill</b>	<b>Fulwell</b>	<b>Houghall</b>	<b>Ketton</b>	<b>Merrington</b>	<b>Muggleswick</b>	<b>Pittington</b>	<b>Rainton</b>	<b>Wardley</b>	<b>Westoe</b>
1409													✓		
1410									✓				✓		
1411							✓								
1412							✓								
1413							✓						✓		
1414													✓		
1419													✓		
1420													✓		
1421													✓		
1420															
1423													✓		
1424													✓		
1425													✓		
1426								✓							
1427															
1428													✓		
1429													✓		
1430													✓		
1431															
1432															
1433															
1434														✓	

Table II.3: Account Coverage by Manor During the Long Fourteenth Century

Account Year	<i>Bearpark</i>	<i>Belasis</i>	<i>Bewley</i>	<i>Billingham</i>	<i>Dalton</i>	<i>Ferryhill</i>	<i>Fulwell</i>	<i>Houghall</i>	<i>Ketton</i>	<i>Merrington</i>	<i>Muggleswick</i>	<i>Pittington</i>	<i>Rainton</i>	<i>Wardley</i>	<i>Westoe</i>
<b>Accounts intermittent hereafter</b>															
1447						✓							✓		
1450													✓		
1451													✓		
1452													✓		
1453															

Sources: *DCD-Beapk. acs.*, *DCD-Bewl. acs.*, *DCD-Bel. acs.*, *DCD-Bill. acs.*, *DCD-Dalt. acs.*, *DCD-Fery. acs.*, *DCD-Fulw. acs.*, *DCD-Houg. acs.*, *DCD-Ket. acs.*, *DCD-Merr. acs.*, *DCD-Pitt. acs.*, *DCD-Ward. acs.*, *DCD-West. acs.*, *DCD-Enr. man. acs.*

# Chapter III: Measures of Agricultural Success: Yields and Acreage

## I. Introduction

This chapter presents and analyses harvest data gathered from the extant accounts of the bursar's manors during the long fourteenth century, c.1300-c.1450. My analysis of the management, economic rationale, and skill of manorial managers, for which a large amount of agricultural data is necessary, rests upon the material I present and discuss in this chapter. Additionally, in this chapter I will demonstrate that arable agriculture as practiced on the manors of the Durham Cathedral Priory bursar was often as productive, if not more so, than arable husbandry practiced elsewhere in England. My analysis thus furthers our understanding of the North-South agricultural divide during the Late Middle Ages. This chapter gives the only long-term study of grain yields in northern England during the long fourteenth century. Though Bruce Campbell's 'Three Centuries of English Crop Yields' database is extensive, there is little coverage of estates north of the Humber during the long fourteenth century, and no coverage for north-east England following the Black Death. Other studies have relied on much smaller sample sizes that have distorted the differences in agriculture in northern and southern England, notable in Campbell's work.<sup>208</sup> Rather than the common view of northern agriculture in which arable productivity is somewhat looked over in favour of southern England

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208. See, for example, Campbell, Bartley, and Power, 'Demesne-farming systems', pp. 131-179 and Bruce M.S. Campbell and Power, JP, 'Mapping the agricultural geography of medieval England', *Journal of Historical Geography*, (1989), pp. 24-39.

due to the reasons discussed previously in *Chapter I: Introduction*, this study demonstrates that the productivity of the bursar's estate usually equalled, and often surpassed, levels seen nationally and in the most commercialised and productive of the English counties. As discussed in *Chapter I: Introduction*, both recent and past secondary literature placed a high importance on yields as a measure of agricultural success, evidenced by Campbell's 'Three Centuries of English Crop Yields' database and the work of individuals such as Gregory Clark, David Farmer, Richard Lomas, and David Stone, among others.<sup>209</sup> Eric Schneider has used econometric theory to gauge the effectiveness of yield-raising techniques and to investigate agricultural supply responses, arguing that throughout England there was a lower level of commercialisation than previously posited, with findings at odds with those of Stone who, among others, argued for the ability of manorial managers to gauge market trends and raise or lower the level of yield-raising techniques employed on the demesne.<sup>210</sup> Harry Kitsikopoulos investigated Johan von Thunen's model of economic rent influencing cropping patterns and productivity, a model endorsed by Campbell and Keene in their 'Feeding the City' project, before concluding that either there was no true London grain market or that production for the market was not the ultimate purpose of demesne agriculture.<sup>211</sup> This thesis seeks to engage with the latter conclusion, and argue that, while the actual cash income received from a manor may not have been the largest priority of manorial lords, the relative benefits and security provided a vital safety-net during times of economic and demographic upheaval. The protection the bursars derived from demesne agriculture was augmented by the often high grain yields on the manors.

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209. See, for example, Clark, 'Yields per acre in English agriculture', pp. 445-460, David Farmer, 'Grain yields on the Winchester manors in the Later Middle Ages', *The Economic History Review*, 30(4) (1977), pp. 555-566, R. A. Lomas, 'A Northern farm at the end of the Middle Ages: Elvethall Manor, Durham, 1443/4-1513/14', *Northern History*, 18(1) (1982), pp. 26-53, and David Stone, *Decision-Making in Medieval Agriculture* (Oxford, 2005).

210. Schneider, 'Evaluating the effectiveness', Schneider, 'Prices and production', pp. 66-91. See Stone, 'Medieval farm management', pp. 612-638, Stone, *Decision-Making*.

211. Kitsikopoulos, 'Manorial estates as business firms', p. 142-166.

Campbell's analysis of a decrease in cultivated acres, in which he argues that 'cropped acreages of demesnes retained in hand were reduced by approximately a fifth,' is certainly applicable to the situation in County Durham during the late fourteenth century, though his classification of farming methods seems less pertinent.<sup>212</sup> Campbell notes that ten of the twenty-eight farms he characterised as practising extensive arable husbandry were found in County Durham and Yorkshire; manor names are not given.<sup>213</sup> The broad trends in sown acreage and yield data, both discussed in further detail below, suggest that this classification obscures a significant shift in the management of the bursar's estate and may be inaccurate. Rather than manorial managers continuing to plough the same amount of land after the Black Death as before it, acreage, we shall see, decreased significantly while grain yields remained high. The serjeants and their monastic superiors most probably allowed the least fertile land to go to waste or converted it to pasturage while farming the most fertile land much more intensely, in the same manner suggested by J. Z. Titow in his study of the manors controlled by the Bishop of Winchester during the same period.<sup>214</sup> This would be in direct contrast to the extensive farming method suggested by Campbell as characterising agricultural operations in County Durham.<sup>215</sup> Interesting patterns emerge when we group the manors by type, as taking all the manors together obscures the fact that different manors served different purposes within the bursar's holding; these groupings are discussed below.

This chapter relies on several different sources of data: harvest data, including acreage sown with a particular crop, yield per seed net of tithe<sup>216</sup>, and the size of a harvest, among other information. Yield per seed was the single most important metric the Priory had at its disposal

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212. Campbell, Bartley, and Power, 'Demesne-farming systems', p. 133 and see *Ibid.*, p. 143 for the farming classifications used by Campbell et al.

213. *Ibid.*, p. 173.

214. J. Z. Titow, *Winchester Yields: A Study in Medieval Agricultural Productivity* (Cambridge, 1972), pp. 21-22.

215. Campbell, Bartley, and Power, 'Demesne-farming systems', p. 173.

216. Henceforth, yield per seed is understood to include 'net of tithe'.

for determining the success, or failure, of its operations, and the Priory's own auditors were, from the mid-fourteenth century onwards, keen to leave their own yield per seed calculations in the margins of the accounts. Instructional literature of the period, including texts such as Walter of Henley's *Husbandry*, discussed in later chapters, suggest what sort of yields a lord may expect his fields to produce.

I consulted the extant accounts for the long fourteenth century (c. 1300 to c. 1450) and extracted the relevant information. The sole previous study that published yields, sown acreage, and related agricultural figures for the bursar's estate was conducted in 1949 by Elizabeth Halcrow.<sup>217</sup> The data I collected for this study is markedly different from the collection by Halcrow. Halcrow gives a limited survey of manorial yields during the fourteenth century and makes only small use of the auditor's yields in the account margins, nor does she discuss the difference in yield per seed as calculated by the auditors and the yield per seed calculated based on the recorded amount sown and harvested. Such discussion will follow in this chapter. It must too be noted that Halcrow worked with a rather different corpus of accounting material than what is now present: many of the manorial accounts have been significantly repaired and reorganised since her study. This allows for a much more nuanced and comprehensive investigation of trends in demesne agriculture, which is of particular import to my subsequent analysis of the abilities and *mentalités* of monastic officials and lay manorial managers.

Richard Lomas and Richard Britnell have also used manorial accounts, but in limited ways. Lomas explored the operation of the hostilar's manor of Elvethall, the Priory as a landlord and landowner, and the timeline and causes of the decline of demesne farming on the lands of Durham Cathedral Priory.<sup>218</sup> Though Lomas was certainly concerned with agricultural trends,

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217. See Halcrow, *Administration & Agrarian Policy*,

218. See Lomas, *Durham Cathedral Priory as Landowner and Landlord*, pp. 339-353, and Lomas, 'A Northern farm', pp. 26-53.

he focused on obedientiary income and rents; he did not systematically study the accounts of individual manors and he drew primarily on records from halmote courts and obedientiary accounts. Again, his concern was primarily on the decline of demesne agriculture and not with a focus on economic mindsets. Richard Britnell produced an edited volume of selected Durham Cathedral Priory manorial accounts from 1277-1310, which also gives a brief overview of the estate and the operations at the manors in hand during this period.<sup>219</sup> Britnell's other notable work on the estates of the Priory bursar focused on labour turnover and wage rates during the late fourteenth century, and, as such, does not explore the rationale behind the management of the estate, those lay individuals that administered it nor any yield data.<sup>220</sup>

All of the manors used in this study were under the control of the bursar and between the Rivers Tyne and Tees. Unlike many of the large monastic houses elsewhere in England, most of the Priory's holdings were within the county, with Coldingham Priory, north of the Scottish border, and Durham College, Oxford, being the most notable exceptions. As discussed in *Chapter I: Introduction*, fifteen manors examined during this study covered the breadth of the county, from Westoe at the mouth of the Tyne; Fulwell near Monkwearmouth; Muggleswick at the edge of Weardale, Dalton and Rainton just north of Durham; Houghall, Bearpark, and Pittington all close to the city of Durham; Ferryhill and Merrington to the east of the River Wear; Ketton midway between the Rivers Wear and Tees; and Bewley, Billingham, and Belasis near the mouth of the River Tees. These scattered manors were often early possessions of the Priory. The manors of Rainton, described as *Reinuintun* in the Durham Episcopal Charters, Pittington, part of the *duo Pittindunas*, and Dalton were original possessions of the Priory.<sup>221</sup> Billingham, often grouped with the manor of Belasis, was similarly an early acquisition by the

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219. Britnell, *Manorial Accounts*.

220. Britnell, 'Labour turnover', pp. 158-179.

221. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, pp. 205-206.

Priory, as were Merrington and its appendage Ferryhill.<sup>222</sup> Other manors were added later, often from grants by the various Bishops of Durham with whom the Priory was not in conflict; Ketton and Muggleswick were acquired in this way, as were various portions of the prior's retreat at Bearpark.<sup>223</sup> This chapter seeks to expand on Philip Slavin's idea of multiple monastics demesnes, such as the bursar's scattered manors, forming a sort of medieval 'diversified portfolio,' in which a great monastic house, Norwich in Slavin's study, used both the market and their own holdings to meet the nutritional needs of the house.<sup>224</sup> Though Slavin is primarily concerned with two channels of supply, market and demesne, this study seeks to view the bursar's holdings as a diversified real-estate portfolio in and of themselves.<sup>225</sup> In this view, each manor can be made economically viable either through interaction with a wider grain market or by meeting the Priory's grain needs directly, while the geographically diverse locations of the manors lessen the risk that a single environmental catastrophe would entirely upset the Priory's supply chain.

The following sections explore first the nature of the data available for this study, its limitations, and the arable farming operations of the bursar's manors. Though the accounts of the bursar's manors obscure some of the day-to-day work on the bursar's demesnes, because they do not give much detail on what yield-raising techniques were used on the different crops, such as increased manuring or weeding, name fields, or specify the number of acres under plough, we can nevertheless discuss certain similarities and notable differences that characterised the manors. To further muddle the picture of demesne farming, as the accounts do not state the acreage sown with a particular crop on a manor or give the name of fields, we

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222. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, pp. 208-209, 215-216.

223. Ibid., pp. 214, 218.

224. Philip Slavin, 'Church and food provisioning in Late-Medieval England, 1250-1450: production costs, markets and the decline of direct demesne management' in F. Ammannati., (eds.) *Religion and Religious Institutions in the European Economy, 1000-1800* (Florence, 2012), p. 616.

225. Ibid., p. 616.

cannot state with confidence what sort of crop-rotation system was used, though a three-course rotation may have been used on some manors.<sup>226</sup>

Subsequently, I will present overall trends for the manors over the period under investigation, drawing particular note to the high yield per seed seen on many of the bursar's manors when compared to other national and local studies. I will then group the manors by their geographic location (northern manors including Fulwell, Westoe, and Wardley; Durham manors consisting of Bearpark, Pittington, Houghall, and Rainton, the central manors with Ferryhill, Merrington, and Ketton, and the Teesmouth manors of Billingham, Bewley, and Belasis) and explore common trends therein. Finally, this information will be used to explore the economic *mentalité* behind the Priory's management of their lands and to highlight the exceptional productivity of the estate.

## **II. Measures of Success**

### **II.i. Yield per Seed**

Although harvest size and the amount of seed of a particular crop sown will of course be considered in this chapter, three other figures will be of greater importance: yield per seed; sown acreage; and the relative proportion of sown acreage and harvest of individual crops on the demesnes. Yield per seed is of particular importance to this study; this was the measure used in the Late Middle Ages to measure the success, or failure, of a harvest. Yield per seed is calculated by dividing the amount of a crop harvested (here, measured in bushels) by the amount of seed of that crop that was sown (also expressed in bushels). Throughout this chapter, yield refers specifically to yield per seed. Yield per acre is a similarly useful standard, but cannot be calculated for the demesnes in this study. As acreage is rarely mentioned in the accounts (see

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226. Britnell, *Manorial Accounts*, p. xlivi.

the following section), acreage must be estimated using a standardised seeding rate; this number would then be divided by the amount of seed sown, producing somewhat circular results. Furthermore, yield per acre, as noted by David Farmer and J. Z. Titow, can disguise problems created through the use of different sized customary acres and differing capacity measurements of volume for grain.<sup>227</sup>

Some factors that influenced yield lay outside the Priory' or serjeant's control. Climatic factors such as poorly timed rainfall, either too much or too little in the wrong time of year, depending on the crop, could devastate the harvest. The monks of Durham Cathedral Priory, relatively insulated from a single harvest failure, would not necessarily feel the effects, but a peasant family with a smallholding certainly prayed for good weather and a single poor harvest could be disastrous.<sup>228</sup> Climate aside, manorial officials were capable of influencing yields greatly and of adapting to changing circumstances, and it is on their efforts to influence yields that this study must focus.<sup>229</sup> Serjeants could control the amount of labour done in the fields, including weeding and the spreading of manure, or could change between systems of intensive and extensive agriculture.<sup>230</sup> Yet the accounts do not say which fields received such labour inputs or which strips were with what crop. We might know then, for example, that John was paid 6d. for spreading manure for one day, but we have no evidence which crops might benefit from this labour. We lack, then, concrete data for how much labour, whether by days, weeks, or terms, was performed on a particular crop. However, as such methods as those listed above could be controlled to increase yields, we can therefore use yield as an insight into the amount of labour performed on the estate.<sup>231</sup> While neither an ideal nor perfect metric, this proxy allows

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227. Farmer, 'Grain yields on the Winchester manors in the Later Middle Ages', pp. 555-556.

228. There are no studies on local or regional climatic conditions for the medieval northeast of England.

229. For a long-term case study of the effectiveness of manorial officials see Stone, *Decision-Making*.

230. See Campbell, Bartley, and Power, 'Demesne-farming systems', pp. 131-179 for an in-depth study.

231. See Stone, *Decision-Making*, p. 232. 'But what the Wisbech account rolls clearly indicate is that medieval farmers, for the most part, employed yield-raising techniques...including high labour input...when they found it in their interest to do so. For commercial farmers, the selective abandonment of such output-boosting but costly

us to see how the costs and prices might influence the amount of labour performed in certain economic conditions and under what circumstances and for what purpose manorial managers might seek to reallocate labour. I can then further the discussion on the decision-making process of Priory and manorial officials by investigating how trends in a particular crop's yield might have been influenced by nominal (local and national) and relative grain prices, the cost of agricultural labour, as well as more *longue durée* factors of climatic and demographic change. This investigation of the decision-making process is interesting by itself and remains an important part of this thesis, but it also allows us to better understand the rationale of the decisions, the values, and the economic mindsets of those making these choices.

As mentioned previously, yield per seed was the method favoured by serjeants and auditors for judging the success or failure of harvests, evidenced by notes left on the accounts. In many, though not most, accounts, the auditors left notes in the grange account under each crop subheading. These notes express the nearest whole (or half) number yield and a certain amount of grain necessary to make that calculation. For example, at Pittington in 1409/10, the auditor's yield for wheat reads, in a heavily abbreviated form, '*respondeat v<sup>to</sup> plus v quarteris ij bussellis*'. This is interpreted as being five quarters, three bushels above of a yield per seed of five. The yield per seed can then be calculated: the actual quantity harvested less the five quarters, three bushels is divided by five to give the amount of seed sown that year (about fifteen quarters and one peck). The amount harvested (here, eighty quarters and five bushels) is divided by the amount of seed sown (the fifteen quarters and one peck) to give an auditor's yield of 5.35. Alternatively, the auditor's yield could be given as a whole or half number yield and the amount of grain that must be subtracted to give that yield; for example, at Westoe in 1394/5, the wheat

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techniques was a perfectly rational response to falling prices...Equally, the comparatively high yields achieved through intensive farming were also a response to very particular circumstances.' See also *Ibid.*, p. 235 '[f]or the scaling down of inputs was an appropriate response to changing economic circumstances for commercial farmers throughout the country.'

yield was given as ‘*respondebat iv<sup>to</sup> minus iij quarterii*’. This could be interpreted as a yield of four, less three quarters. The yield is therefore calculated by adding the three quarters to the amount harvested, here, one hundred and fourteen quarters, four bushels, and two pecks, and then dividing the sum by four to give the amount seeded: roughly eighteen quarters, three bushels, and two pecks. After dividing the total harvest by the amount sown, we are left with an auditor’s yield of 6.22, only slightly different from the calculated yield of 6.01, which may be explained by the difference between the use of heaped or struck measures, or similar conventions.

These auditor’s yields in the margins of the accounts<sup>232</sup> appear after the end of the Black Death and the subsequent *lacuna* in the run of accounts; they are only found in accounts after 1370/1.<sup>233</sup> We are left somewhat in the dark as to why this shift occurs. The format of the accounts does not change after the Black Death, though the annual manorial accounts cease to survive as enrolled documents during this period. These yields written in the margins of the accounts are often in a different hand than the account itself, implying, as we might suspect, that the scribe and the auditor were two different individuals. It would have been most practical for the auditor to perform these figures at the manor itself, when he would have had access to the serjeant, members of the *famuli*, and the harvest itself.

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232. Hence, the alternative term to ‘auditor’s yields’ used in this thesis, is ‘marginal yields’. Here, ‘marginal’ only refers to their location on the physical documents.

233. A similar trend was noticed by D. L. Farmer in his study of grain yields on the Winchester estates, with auditor’s yields appearing after 1350. Farmer, ‘Grain yields on the Winchester manors in the Later Middle Ages’, p. 556.

Table III.1: Difference Between Internal and Auditor's Yields at Selected Manors, c. 1370 -c. 1420

Year	Bewley Wheat Yields Diff.	Bewley Barley Yields Diff.	Bewley Oats Yields Diff.	Fulwell Wheat Yields Diff.	Fulwell Barley Yields Diff.	Fulwell Oats Yields Diff.	Houghall Wheat Yields Diff.	Ketton Barley Yields Diff.	Houghall Oats Yields Diff.	Ketton Wheat Yields Diff.	Pittington Wheat Yields Diff.	Pittington Barley Yields Diff.	Pittington Oats Yields Diff.	Westoe Wheat Yields Diff.
1370	--	--	--	--	--	--	0.00	--	--	-0.90	--	--	--	--
1371	--	--	--	--	--	--	0.99	-1.04	0.05	--	--	--	--	--
1372	0.00	0.32	-0.08	--	--	--	-0.21	1.01	-7.54	--	--	--	--	-0.65
1373	-0.42	--	-2.99	--	--	--	-1.95	0.09	0.00	--	--	--	--	-0.08
1374	--	--	--	--	--	--	-7.06	0.10	-1.00	--	--	--	--	0.23
1375	--	--	--	--	--	--	-4.66	--	--	--	--	--	--	--
1376	-0.41	1.62	0.94	--	--	--	0.50	0.04	-41.17	0.14	--	--	--	-0.84
1377	-0.77	0.18	-0.65	--	--	--	0.00	--	-0.90	--	--	--	--	--
1378	-0.52	--	1.09	--	--	--	--	--	--	-0.37	--	0.80	-0.03	--
1379	--	--	-2.95	--	--	--	--	--	--	--	--	--	--	--
1380	--	--	--	-7.63	0.09	--	--	--	--	2.10	--	--	--	--
1381	--	--	--	--	--	--	--	-1.01	--	--	--	-7.71	2.51	--
1382	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1383	--	--	--	--	-1.12	--	--	--	--	--	--	--	--	--
1384	--	--	--	--	-2.32	-0.98	--	-1.03	--	--	-0.77	-1.07	-0.56	--
1385	--	--	--	--	-8.82	-0.46	--	--	--	--	-1.74	--	-1.53	--
1386	--	--	--	-4.15	-0.11	9.21	--	--	--	--	--	--	--	--

Table III.1: Difference Between Internal and Auditor's Yields at Selected Manors, c. 1370 -c. 1420

Year	Bewley Wheat Yields Diff.	Bewley Barley Yields Diff.	Bewley Oats Yields Diff.	Fulwell Wheat Yields Diff.	Fulwell Barley Yields Diff.	Fulwell Oats Yields Diff.	Houghall Wheat Yields Diff.	Ketton Barley Yields Diff.	Houghall Oats Yields Diff.	Ketton Wheat Yields Diff.	Pittington Wheat Yields Diff.	Pittington Barley Yields Diff.	Pittington Oats Yields Diff.	Westoe Wheat Yields Diff.
1387	--	--	--	-1.07	-1.68	--	--	--	--	--	--	--	--	--
1388	--	--	--	-0.77	--	0.00	--	--	--	--	--	--	--	--
1389	--	--	--	-0.32	--	--	--	--	--	--	--	--	--	--
1390	--	--	--	-1.00	--	-1.01	--	--	--	--	--	--	--	--
1391	--	--	--	--	-0.18	-1.04	0.05	0.42	-0.88	--	--	--	--	--
1392	--	--	--	--	--	--	-1.14	-1.74	0.11	--	--	--	--	--
1393	--	--	--	--	--	--	0.00	-0.15	-0.81	--	--	--	--	--
1394	--	--	--	-1.10	-0.39	-1.44	-0.04	-1.40	-1.20	--	-0.97	-1.15	-1.04	0.21
1395	--	--	--	-0.10	-1.03	--	-0.10	-0.92	0.00	--	-1.09	-3.43	-1.19	--
1396	--	--	--	-10.90	-1.09	-0.53	0.00	0.00	-2.23	--	--	--	--	--
1397	--	--	--	--	--	--	1.03	-0.46	0.00	-0.99	--	--	--	--
1398	--	--	--	--	--	--	--	--	--	-1.08	--	-1.62	--	--
1399	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1400	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1401	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1402	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1403	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1404	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1405	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1406	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table III.1: Difference Between Internal and Auditor's Yields at Selected Manors, c. 1370 -c. 1420

Year	Bewley Wheat Yields Diff.	Bewley Barley Yields Diff.	Bewley Oats Yields Diff.	Fulwell Wheat Yields Diff.	Fulwell Barley Yields Diff.	Fulwell Oats Yields Diff.	Houghall Wheat Yields Diff.	Ketton Barley Yields Diff.	Houghall Oats Yields Diff.	Ketton Wheat Yields Diff.	Pittington Wheat Yields Diff.	Pittington Barley Yields Diff.	Pittington Oats Yields Diff.	Westoe Wheat Yields Diff.
1407	--	-1.08	-2.46	--	--	--	0.10	-2.70	--	--	--	--	--	--
1408	-1.13	-0.07	1.59	--	--	--	--	--	--	-1.17	-1.07	--	--	--
1409	--	--	--	--	--	--	--	--	--	-1.00	-1.10	-1.83	--	--
1410	--	--	--	--	--	--	--	--	--	-1.09	-1.66	-1.05	--	--
1421	--	--	--	--	--	--	--	--	--	0.00	-1.54	-0.66	--	--
n.	9	8	11	12	13	11	19	18	16	9	11	13	12	8
Avg.	-0.54	0.19	-0.69	-3.00	-1.67	0.47	-0.78	-0.59	-4.27	-0.18	-0.98	-1.95	-0.60	-0.23
St Dev	0.38	0.96	1.89	3.83	2.62	3.56	2.15	0.95	11.27	1.21	0.48	2.26	1.28	0.49
CoEff Var	-0.70	5.00	-2.74	-1.27	-1.58	7.60	-2.75	-1.61	-2.64	-6.69	-0.49	-1.16	-2.14	-2.18

Sources: DCD-Bewl. acs., DCD-Fulw. acs., DCD-Hough. acs., DCD-Kett. acs., & DCD-Pitt. acs.

Table III.2: Internal Calculations & Auditor's Calculations at Ketton & Pittington, c.1377-c.1420

Year	Ket. Whe. Seeded (bz.)	Ket. Aud. Whe. Seeded Calc (bz.)	Pitt. Whe. Seeded (bz.)	Pitt. Aud. Seeded Calc (bz.)	Pitt. Bar. Seeded (bz.)	Pitt. Aud. Bar. Seeded Calc (bz.)	Pitt. Oats Seeded (bz.)	Pitt. Aud. Oats Seeded Calc (bz.)
1377	112	108.71	--	118.53	--	49.2380952	--	336.07
1378	114	134	95	163	120	110.904762	337	339.25
1379	--	51.33	137	--	104	--	296	--
1380	--	204	--	--	--	384.5	--	204.125
1381	218.5	--	--	--	--	--	--	--
1382	131	--	--	--	--	--	--	--
1383	--	--	--	--	--	--	--	--
1384	130	--	117	146	113	140.875	384	--
1385	109	--	113	178.67	112	--	320	458.67
1386	--	--	--	--	--	--	--	--
1390	--	--	--	--	--	--	--	--
1391	--	--	--	--	--	--	--	--
1392	--	--	--	112.5	--	99.8	--	720
1393	--	--	131	172	98	118.428	219	333.5
1394	--	178.5	116	134.833333	68	121	196	306.4
1395	128	--	--	--	--	--	--	--
1396	--	--	--	--	--	--	--	--
1397	--	138	--	--	--	--	--	--
1398	--	102.67	--	--	--	84.25	--	292
1399	--	--	--	--	--	--	--	--
1406	--	--	--	38.83	--	82.67	--	476
1407	--	168.25	--	--	--	--	--	--
1408	--	--	--	121.6	--	123.2	--	275
1409	--	--	104	124.8	112	128	216	352.67
1410	--	242.63	100	120.4	102	125.71	228	428
1413	--	--	--	149	--	130.67	--	304
1421	--	--	--	88.08	--	--	--	--
n.	7	9	8	12	8	13	8	13

Sources: DCD-Ket. acs., DCD-Pitt. acs.

It is notable, however, that these marginal yields, when made comparable to the calculated yields using the method above, offer different harvest data than the calculated yields. As shown in Table III.1 and Table III.2, the grain yields calculated by the auditors still show successful harvests and some of these differences are occasionally quite small and can possibly be attributed to differences in grain measurements, as suggested by Campbell at Alciston with

its difference in heaped and struck bushels.<sup>234</sup> The minor difference in barley yields at Bewley in 1371/2 in Table III.1 can likely be attributed to such a difference, while the matching barley yields at the same manor in 1375/6 suggested a rectification between two different systems of measurement. This explanation cannot be true, though, for the more glaring differences, such as the difference between the calculated and recorded wheat yields at Fulwell in 1379/80 in Table III.1., or the difference in recorded and calculated barley yields at Pittington in 1380/1. Fraud is at first glance the most likely reason for such disparities, and perhaps the serjeants under-reported the size of the harvest and pocketed the difference, as the various didactic contemporary literature suggests they were wont to do.<sup>235</sup> Yet the whole purpose of an audit was to uncover such perfidy, and the auditor would have to be able to view the harvest to be at all effective at his job. Furthermore, the fact that the auditor's yields are different from the calculated yields demonstrates that, if there was fraud, it was quickly uncovered and corrected. We would therefore not expect to see serjeants known for fraudulent dealing continuing in their posts. That John de Baumbrugh and Thomas de Esyngwald, both serjeants at Bewley during the fourteenth century, John de Monkton, serjeant at Fulwell for nearly a quarter century, William Scott of Ketton, and William Porter, serjeant at Ketton during the opening of the fifteenth century, all continued their office after the greatest discrepancies between the auditor's yields and the calculated yields strongly suggests that the serjeants were not stealing grain from the manors that they oversaw. Perhaps the manorial accounts do not provide all the information that the auditors had to hand and any discrepancies between the marginal yields

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234. Bruce M. S. Campbell (2007), Three centuries of English crops yields, 1211-1491 [WWW document]. URL <http://www.cropyields.ac.uk> [accessed on 06/03/2019]

235. Oschinsky, *Walter of Henley & Other*, p. 341, for example in Walter of Henley's *Husbandry*, the narrator warns against the 'frawde of evell servantes'. See also Martha Carlin, 'Cheating the Boss: Robert Carpenter's Embezzlement Instructions (1261x1268) and Employee Fraud in Medieval England' in Ben Dodds and Christian Liddy, (eds.) *Commercial Activity, Markets and Entrepreneurs in the Middle Ages* (Woodbridge, 2013), pp. 183-198 for how employee fraud was practiced in arable agriculture.

in the accounts and the yields calculated for this project reflect this. Alternatively, the auditor's calculations may simply be inaccurate and do not reflect the state of the harvest in a given year. Marc Bloch characterised the period as one in which 'the regard for accuracy... [and] the respect for figures remained profoundly alien to the minds even of the leading men,' while David Fowler and Miranda Threlfall-Holmes both noted frequent arithmetical errors.<sup>236</sup> However, the difference between the two figures is substantial. Even given the disregard for figures and accuracy noted by Bloch, it is difficult to imagine that an auditor would make such an error. Alasdair Dobie found no such glaring mistakes in his systematic study of the accounting material at Durham Cathedral Priory.<sup>237</sup> The too often fragmentary runs of accounts means that any definite reason for this disparity must only be speculative. The most probable explanation must be that the auditors were working with information not recorded in the accounts and that their calculations were made without amending the actual account rolls.

The best course of action then is to give both the auditor's yields and the calculated yields when analysing trends on the manors. Given that the auditor's yields still reflect successful harvests, this step is not purely cautionary, but to give full transparency to the data that I collected. Where auditors did not record yields or the margins of the accounts are not legible or extant, I will note this appropriately. The auditor's yields are, as previously stated, only extant in the later part of the fourteenth century and during the fifteenth, so no such notes will be made before 1370/1. Yet both the calculated yields and the auditor's yields must both be used. Too few auditor's yields survive, given that they are written in the margins of the accounts, which are commonly damaged. If this thesis were to rely solely on auditor's yields, there would

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236. Marc Bloch, *Feudal Society, Volume I* (trans. L. A. Manyon), (London, 1967), p. 75, J.T. Fowler, *Extracts from the Account Rolls of the Abbey of Durham, from the Original MSS, Volume III* (Surtees Society, 1900), p. liv, Threlfall-Homes, *Monks & Markets*, pp. 31-32.

237. Dobie, *Accounting at Durham Cathedral Priory*, pp. 147-148.

be far too little data with which to conduct any meaningful research or make substantial conclusions.

This study does not, however, make use of average yields in the same manner as done by Campbell:

When neither consecutive accounts nor auditors' yield calculations are available, the mean yield ratio can nevertheless be estimated from discontinuous accounts using the internal evidence of grain harvested one year and seed sown the next, which all accounts record as a matter of course. The results are obviously less reliable since they rely on the assumption that on average the amounts sown of each crop varied relatively little from one year to the next. The accuracy of such 'internal' yields improves, as the number of accounts upon which they are based increases. Although an imperfect method it does offer the prospect of estimating yield levels for parts of the country where runs of consecutive accounts are either sparse or non-existent. Here it has been applied to those FTC manors with at least three sampled accounts.<sup>238</sup>

This method has not been used here. As mentioned elsewhere in this thesis, too few accounts are extant and, given the chronological spread of what accounts are extant, even when there are more than three accounts extant, the results would be neither representative nor useful. Though it is not a problem when estimating sown acreage (see below), the amount of grain seeded before and after the Black Death seems not to have been fixed. This suggests that there was some degree of adjustment to cropping patterns, likely undertaken by the serving sergeant, in response to external pressures. Using an estimate seeding rate makes the chance of inaccurate yield data too high in these circumstances.

## **II.ii. Sown Acreage**

Sown acreage is simply the number of acres sown with a particular crop. As a metric, it allows us to gauge the relative importance of a crop, particularly if the number of acres devoted to a crop was high and was accompanied by a high yield. The discussion and analysis of trends

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238. Campbell, *English Seigniorial Agriculture*, p. 317.

in sown acreage must rest upon the assumptions detailed in *Chapter II: Sources & Methods*: that seeding rate was fixed throughout both the period under investigation and at each of the manors discussed in this thesis. Despite the reservations mentioned previously in *Chapter II: Sources & Methods*, using a standardised seeding rate, as utilised by Richard Britnell, enables an in-depth investigation into estate management and attitudes towards a wider market during the long fourteenth century that would otherwise be impossible. Furthermore, the decline in seeding rates as discussed by Campbell does not have a great effect on the calculation of sown acreage. When the standardised seeding rate is decreased by the amount Campbell observed on seigniorial estates in Norfolk, the number of acres sown with a particular crop does not change overmuch.<sup>239</sup> Using Houghall during the late fourteenth century as an example, I calculated both the number of acres sown with a particular crop using the standardised seeding rate and the number of acres sown with a particular crop using the standardised seeding rate decreased by Campbell's observation (three per cent drop for wheat, six per cent for barley, nine per cent for oats).<sup>240</sup> The results are shown in Table III.4 below. The difference in the two calculations for wheat and barley acres is extremely minor, as can be seen in 1373 and 1374 in the cultivation of wheat (difference of 0.66 and 0.55 acres respectively) and 1373 and 1377 for the farming of barley (difference of 1.36 and 1.48, respectively). The difference in the two estimates for wheat is never more than 1.11 acres, with an average difference of 0.71 acres with a standard deviation of 0.19. The differences in the barley acreage calculations are similarly minor; the difference is never more than 2.59 acres, with an average difference of 2.05 acres and a standard deviation of 0.36. Only the difference between the two oats acreage calculations is noteworthy as it is always less than 10.19 acres, with an average difference of 6.91 acres and

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239. Sown acreage is calculated by dividing the amount of seed sown by the seeding rate.

240. Campbell, *Seigniorial Agriculture*, p. 311.

a standard deviation of 2.32; such notable differences are seen in 1390 and 1393 (10.19 and 8.96, respectively). This small variation, oats aside, means that an estimate of sown acreage or an index of sown acreage based on seeding rates remains useful, even if it must be used with caution. This approach is a small risk that must be taken if we wish to fully understand demesne farming in the medieval northeast during the fourteenth and fifteenth centuries, particularly to understand the scale of the demesne farming at Durham Cathedral Priory.

Attempting to give a snapshot of the number of sown acres is a difficult, yet valuable process. As calculating the number of sown acres requires the amount of seed sown which must be calculated from the previous year's account (e.g. the account for the agricultural year 1372 at Houghall is needed to calculate the sown acreage for agricultural year 1373 at Houghall), this study is only able to produce snapshots. For the analysis that follows, I use two snapshots: the first Richard Britnell's estimates of sown acreage on the bursar's manors for the 1304/5 harvest year, the second my own estimate for the harvest year 1371/2 using a standardised seeding rate.

Table III.3: Sown Acreage Calculations at Houghall (c.1371-1399) Using Standardised Rate & Decreased Calc, from Campbell<sup>241</sup>

Year	Wheat Seeded (bz.)	Wheat Acres Using 2.7 bz per acre	Wheat Acres Using 2.62 (3% Decay)	# Acres Between 2.7 & 2.62	Barley Seeded (bz.)	Barley Acres Using 2.8 bz per Acre	Barley Acres Using 2.63 (6% Decay)	# Acres Between 2.8 & 2.63	Oats Seeded (bz.)	Oats Acres Using 2.8 bz per Acre	Oats Acres using 2.55 (9% Decay)	# Acres Between 2.8 & 2.55
1371	59.75	22.13	22.81	0.68	70	25	26.62	1.62	194	69.29	76.08	6.79
1372	85	31.48	32.44	0.96	87	31.07	33.08	2.01	80	28.57	31.37	2.8
1373	58	21.48	22.14	0.66	59	21.07	22.43	1.36	258	92.14	101.18	9.03
1374	49	18.15	18.7	0.55	67	23.93	25.48	1.55	194	69.29	76.08	6.79
1375	83	30.74	31.68	0.94	86	30.71	32.7	1.99	168	60	65.88	5.88
1376	65	24.07	24.81	0.74	109	38.93	41.44	2.52	208	74.29	81.57	7.28
1377	57	21.11	21.76	0.64	64	22.86	24.33	1.48	241	86.07	94.51	8.44
1378	80	29.63	30.53	0.9	88	31.43	33.46	2.03	256	91.43	100.39	8.96
1379	25.5	9.44	9.73	0.29	--	--	--	--	260	92.86	101.96	9.1
1380	88	32.59	33.59	1	102	36.43	38.78	2.35	224	80	87.84	7.84
1381	--	--	--	--	80	28.57	30.42	1.85	--	--	--	--
1382	64	23.7	24.43	0.72	104	37.14	39.54	2.4	187	66.79	73.33	6.55
1384	40	14.81	15.27	0.45	77	27.5	29.28	1.78	176	62.86	69.02	6.16
1390	41	15.19	15.65	0.46	73	26.07	27.76	1.69	291	103.93	114.12	10.19
1391	41	15.19	15.65	0.46	97	34.64	36.88	2.24	248	88.57	97.25	8.68
1392	57	21.11	21.76	0.64	98	35	37.26	2.26	368	102.86	144.31	41.46 <sup>242</sup>
1393	58	21.48	22.14	0.66	104	37.14	39.54	2.4	256	91.43	100.39	8.96
1394	98	36.3	37.4	1.11	105	37.5	39.92	2.42	242	86.43	94.9	8.47
1395	71	26.3	27.1	0.8	101	36.07	38.4	2.33	248	95.38	97.25	1.87
1396	76	28.15	29.01	0.86	97	34.64	36.88	2.24	248	95.38	97.25	1.87
1397	60	22.22	22.9	0.68	80	28.57	30.42	1.85	192	68.57	75.29	6.72
1398	65	24.07	24.81	0.74	112	40	42.59	2.59	192	68.57	75.29	6.72
1399	61	22.59	23.28	0.69	92	32.86	34.98	2.12	168	60	65.88	5.88
n.	22	22	22	22	22	22	22	22	22	22	22	21
Average of Difference				0.71	--	--	--	2.05	--	--	--	6.91
Standard Deviation				0.1999	--	--	--	0.36	--	--	--	2.32

Source: DCD-Hough. acs, Campbell, English Seigniorial Agriculture pp. 312-313.

241. Campbell, *English Seigniorial Agriculture*, p. 312.

242. Entry excluded as an outlier from any analysis or discussion.

Table III.4: Estimation of Acres Sown with the Three Major Crops on Individual Manors

Manor	1304/5 Snapshot <sup>243</sup> (percentage)				1372 Snapshot (percentage)			
	Wheat	Barley	Oats	Acreage	Wheat	Barley	Oats	Acreage
Bearpark	0.00 (- -)	0.00 (- -)	32.04 (100%)	32.04 --	18.00 (45%)	2.90 (7%)	19.43 (48%)	<b>40.33</b> --
Belasis	165.87 (54%)	0.00 (0%)	140.30 (46%)	306.18 --	-- (- -)	-- (- -)	-- (- -)	-- --
Bewley	288.32 (42%)	10.50 (2%)	393.29 (57%)	692.10 --	62.00 (54%)	14.00 (12%)	37.86 (33%)	<b>113.86</b> <b>113.86</b>
Billingham	84.44 (42%)	14.60 (7%)	100.08 (50%)	199.12 --	-- (- -)	-- (- -)	-- (- -)	-- --
Dalton	129.94 (46%)	16.14 (6%)	137.02 (48%)	283.10 --	-- (- -)	-- (- -)	-- (- -)	-- --
Ferryhill	67.07 (36%)	8.16 (4%)	109.64 (59%)	184.87 --	21.22 (48%)	18.80 (43%)	4.06 (9%)	<b>44.08</b> --
Houghall	46.75 (38%)	0.00 (0%)	75.95 (62%)	122.70 --	29.00 (36%)	29.00 (36%)	22.86 (28%)	<b>80.86</b> --
Ketton	158.68 (39%)	12.21 (3%)	241.18 (59%)	412.06 --	68.63 (54%)	15.60 (12%)	43.45 (34%)	<b>127.68</b> --
Muggleswick	0.00 (0%)	0.00 (0%)	9.12 (100%)	9.12 --	45.25 (37%)	18.82 (15%)	58.14 (48%)	<b>122.21</b> --
Pittington	101.86 (39%)	2.75 (1%)	153.89 (60%)	258.51 --	75.24 (41%)	28.80 (16%)	77.50 (43%)	<b>181.54</b> --
Rainton	51.08 (39%)	5.45 (4%)	76.00 (57%)	132.52 --	-- (- -)	-- (- -)	-- (- -)	-- --
Wardley	74.98 (56%)	6.60 (5%)	52.61 (39%)	134.19 --	46.50 (66%)	16.00 (23%)	8.19 (12%)	<b>70.69</b> --
Westoe	99.97 (52%)	21.32 (11%)	69.25 (36%)	190.55 --	72.50 (74%)	16.67 (17%)	9.43 (10%)	<b>98.60</b> --
Total (Average)	1268.96 (37%)	97.72 (3%)	1590.38 (59%)	2957.06 --	438.34 (51%)	160.59 (20%)	280.91 (29%)	<b>879.84</b> --

Sources: DCD-Bepk. acs., DCD-Bewl. acs., DCD-Fery. acs., DCD-Fulv. acs., DCD-Houg. acs., DCD-Ket. acs., DCD-Merr. acs., DCD-Pitt. acs., DCD-Ward. acs., DCD-West. acs.; Britnell, *Manorial Accounts*, p. xlvi. Percentages rounded to the nearest whole number.

The results are shown in Table III.4 above. The change between 1305/6 and 1371/2

in the number of acres under plough and the shifts in cropping patterns is undoubtedly dramatic and reflects the changing economic conditions under which the Priory and its lay managers were labouring. At the opening of the fourteenth century, the bursar had nearly three thousand acres sown with wheat (approximately 37 per cent), barley (approximately 3 per cent), and oats (approximately 59 per cent). In 1371/2, the number of acres sown with the three main crops had dropped by about 70 per cent, to about 880 acres, of which 51 per cent were sown with wheat, 20 per cent with barley, and 29 per cent with oats. The drop in the number of cultivated acres is significant, and cannot be attributed only to Belasis, Billingham, Dalton, and

243. Created from Britnell, *Manorial Accounts*, pp. xlv-xli.

Rainton being put out to farm, for, in 1371/2, only 113.86 acres were cultivated at Bewley, down from 692.10 in 1304/5. Similar contractions, as noted in Table III.5 above, also occurred, notably at Ketton, Ferryhill, and Westoe. Only at Muggleswick and Bearpark did the number of acres cultivated with the three main crops increase but, as these manors were the main livestock centre and the Prior's retreat, respectively, these changes were likely made to meet the periodic or immediate needs of the inhabitants and were less driven by market forces. The increased space given over to the farming of wheat and barley in terms of the percentage of sown acreage correlates with the rising prices of these two grains and their increased consumption, especially wheat, in the late medieval diet.<sup>244</sup> Such a contraction in sown acreage was hardly unique to County Durham or the Priory's holdings. Campbell states that the mean sown acreage of demesnes that were not farmed out decreased by a fifth.<sup>245</sup> The size of Norwich Cathedral Priory's estate similarly dropped drastically by 70 per cent from pre-Black Death levels and the size of the manors still in hand had dropped by three-fifths.<sup>246</sup> The increased farming of barley both in absolute and relative terms is striking; barley was the only crop which saw such an increase in the number of acres sown. The rising price of barley likely influenced this decision, as did an increase in real wages, leading many to choose prestige grains over oats.<sup>247</sup>

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244. See Farmer, 'Prices and wages', pp. 431-525 for grain prices throughout the medieval period and Christopher Dyer, *Standards of Living in the Later Middle Ages: Social Change in England, c. 1200-1520* (Cambridge, 1989), pp. 158-159 regarding the changing patterns of grain consumption during the Late Middle Ages.

245. Campbell, Bartley, and Power, 'Demesne-farming systems', p. 133.

246. Campbell, *English Seigniorial Agriculture*, p. 235.

247. Gregory Clark, 'The long march of history: farm wages, population, and economic growth, England 1209-1869', *Economic History Review*, (2007), p. 109.

### **III. Manor Types & Groupings**

The bursar's manors have been grouped by type and location in the sections that follows, with the exception of three manors for which insufficient data survives. Little data is extant for the manors of Rainton and Dalton, which were only sporadically directly managed by the Priory during the long fourteenth century. Few accounts for either manor survive, and only at Rainton for the harvests of 1303/4 and 1304/5 was I able to calculate yields. As these accounts were enrolled, no auditor's yields were included, if they were indeed taken. In both 1303/4 and 1304/5 the wheat harvest was extremely fruitful, with a yield of 8.39 in 1303/4 and 8.82 in 1304/5. The yields are high, well above the levels experienced in the FTC counties and England as a whole, where the mean yield was 4.18 from 1300-1349. They must therefore represent a substantial amount of labour and yield-raising techniques.<sup>248</sup> Similar techniques must have been used for the barley crop in these two years; in 1303/4 the barley yield was 14.00 and 12.35 in 1304/5. Again, these yields well exceed the national mean (1300-1349) of 3.88 calculated by Campbell.<sup>249</sup> Only for oats, where only one yield is calculable, is the yield less than extraordinary. In 1304/5, the oats harvest had a 2.73 return on the seed sown, which nevertheless slightly exceeded the mean national yield of 2.63 for the first half of the fourteenth century.<sup>250</sup> Meanwhile, very few accounts survive from Ferryhill and there are no extant auditor's yields; these accounts pre-date this practice. As such, I cannot calculate yields for the

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248. Campbell, *English Seigniorial Agriculture*, p. 316; Bruce M. S. Campbell, 'Grain yields on English demesnes after the Black Death' in Mark Bailey and Stephen Rigby, (eds.) *Town and countryside in the age of the Black Death: essays in honour of John Hatcher* (Turnhout, 2012), p. 132. The F(eeding) T(he) C(ity of London) counties included Kent, Surrey, Berkshire, Oxfordshire, Northamptonshire, Buckinghamshire, Bedfordshire, Hertfordshire, Middlesex, and Essex. These were among the most commercialised areas in England during the Late Middle Ages.

249. Campbell, *English Seigniorial Agriculture*, p. 316; Campbell, 'Grain yields on English demesnes', p. 132.

250. Campbell, *English Seigniorial Agriculture*, p. 313.

manor of Ferryhill. In the following sections, I discuss not only the grouping of the manors, but also the agricultural successes and failures on each manor.

### III.i. Group I: The Home Farms: Houghall, Pittington, & Bearpark

Table III.5: Harvest Statistics Before (c. 1300-c. 1348) and After the Black Death (c. 1370-c. 1450) at the Home Farms

Bearpark	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<i>Avg. Pre-Black Death</i>	40.47	--	63.58	25.04	--	74.96	--	--	--	3.7	--	2	--	--	--
<i>Avg. Post-Black Death</i>	37.39	12.04	56.05	36.9	7.42	59.92	--	--	--	5.03	7.68	4.43	--	--	--
Houghall	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<i>Avg. Pre-Black Death</i>	27.92	0.7	75.09	43.86	4.25	70.61	--	--	--	--	--	--	--	--	--
<i>Avg. Post-Black Death</i>	15.08	33.37	51.55	17.13	22.88	59.99	11.39	16.64	16.64	4.73	7.72	4.42	4.82	7.20	3.56
Pittington	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<i>Avg. Pre-Black Death</i>	54.95	14.51	35.38	--	--	--	--	--	--	2.97	4.03	1.01	--	--	--
<i>Avg. Post-Black Death</i>	27.16	32.77	40.01	24.88	23.54	53.49	19.50	24.17	56.33	5.40	7.7	4.04	7.74	6.62	2.88

Source: DCD-Bearp. acs., DCD-Hough. acs., DCD-Pitt. acs.

These three manors are distinguished by their proximity to Durham, the frequency with which grain was sent to Durham, and the relatively late date until which they were directly managed by the Priory. Bearpark, Houghall, & Pittington were all within two and half miles (approx. 4 km) from the Priory and were farmed into the fifteenth century, with the final extant account from Pittington dating to 1451/2. Although not as near to Durham as the manor of Elvethall, the three manors of the Home Farms served a similar purpose to the hostellar's

farm.<sup>251</sup> These three manors were hardly the largest under the bursar's control, as noted in Table III.5, but are noteworthy for their cropping patterns, harvests, and disposal of grain. Houghall and Pittington periodically transported grain to Durham or, in the case of Bearpark, supplied grain to the monks sporadically resident on the estate. Such quantities of grain varied from relatively small sums, such as the two bushels of wheat John Ponchon sent from Houghall to Durham in 1371/2, presumably to be consumed by the monks, to the twelve quarters of oats Robert Kirkman sent for use at the Prior's *ludi* in 1394/5. On the Home Farms the wheat and barley crops were of particular importance. Yields for these crops were typically high, as can be seen in Table III.5 above, and the large relative amount of seed sown suggests that wheat and barley were often farmed intensively with high levels of labour inputs into yield-raising techniques. While oats were perhaps not the overall main focus on the manors, oats were a significant source of fodder to the draught animals used on the manors and any relatively high yields are likely a testament to the hardiness of the crop than any special attention paid to their cultivation.

The focus here on yields and prices, as throughout the following sections, rather than on price and acreage devoted to each crop, is caused in no small part due to the nature of the Durham accounts.<sup>252</sup> Unlike Schneider, who was able to use the acreage devoted to wheat, barley, and oats as recorded by J. Z. Titow and David Farmer, the Durham accounts very rarely give either seeding rate or record the acreage given over to each crop. Of the over four hundred accounts consulted for this thesis, only about six per cent gave a crop's seeding rate or the number of acres on which it was planted. Using seeding rates to estimate acreage on which I would then rely for vital analysis seems at best a risky proposition. This is further compounded

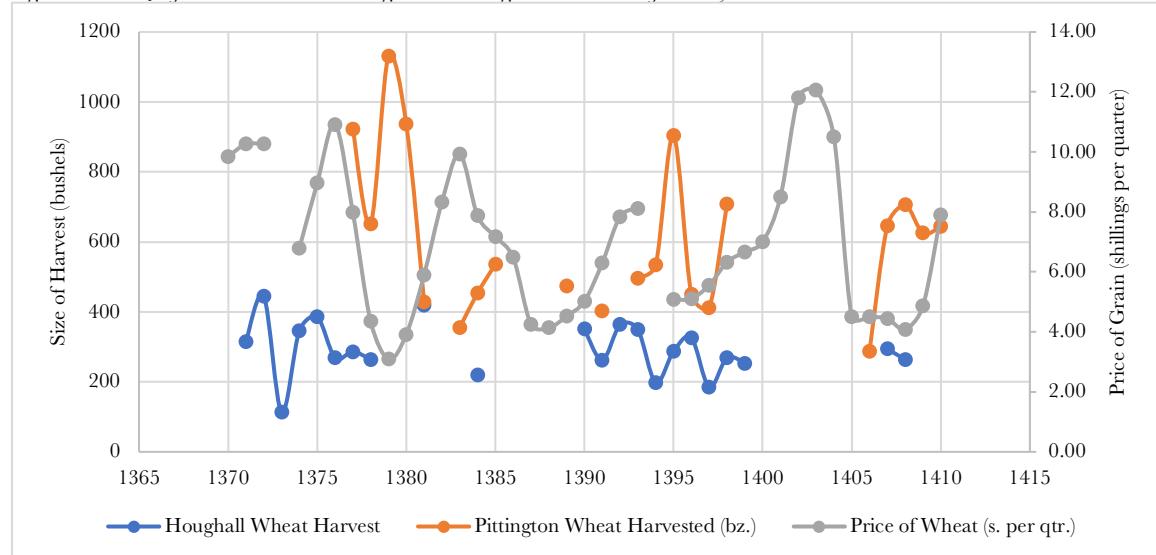
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251. See Lomas, 'A Northern farm', p. 26-53.

252. Compare the approach in Schneider, 'Prices and production', pp. 66-91.

by high coefficients of variation among the seeding rates, notably for barley and oats: 15.29 per cent and 12.29 per cent, respectively.<sup>253</sup> Any estimations as to sown acreage must, therefore, rely on a standardised seeding rate and the assumption that seeding rate did not vary over time or geographically within the county, whether due to geographic location of a manor or the purpose to which it was put by the Priory and the bursars. This method was used successfully by Britnell to give estimates of sown acreage for the bursar's manors held in hand during the early fourteenth century.<sup>254</sup> I have replicated this approach for the 1372 snapshot seen above in Table III.4, relying on typical cropping patterns and what seeding rates may be available for each manor or, failing that, the manor grouping in which I have placed them. Yet this method remains fundamentally too imprecise to be the foundation on which vital analysis rests. Consequently, as further discussed earlier in this chapter and in *Chapter II: Sources & Methods*, any use of sown acreage can be reserved only for supplementary information, such as the approximate size of a manor. Yields must, therefore, be the main focus when discussing relationships between crops and price.

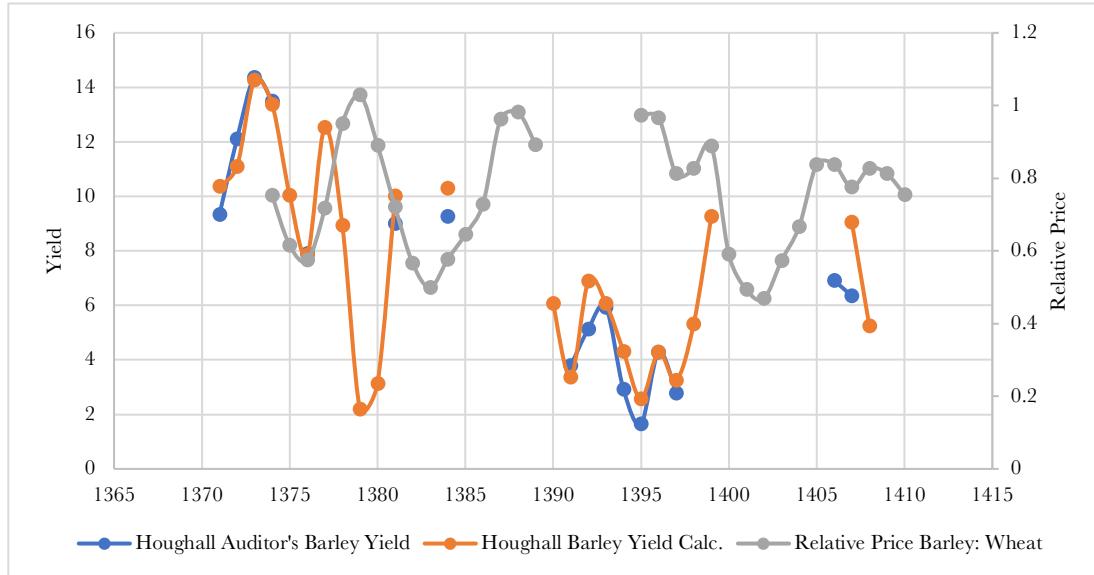
Figure III.1: Size of Wheat Harvests at Houghall & Pittington & the Price of Wheat, c. 1370 to c. 1410



253. See *Chapter II: Sources & Methods, Section IV.ii Calculations and Use of Yield per Seed and Sown Acreage*, Table II.1 for the statistical breakdown of the seeding rates observed in this project.

254. Britnell, *Manorial Accounts*, pp. xlvi-xlvii.

Figure III.2: Barley Yields & Price of Barley Relative to Wheat at Houghall, c. 1370 to c. 1410



Though the price of grain was certainly a factor in the arable agriculture practiced at Pittington and Houghall, there is little evidence that the cost of grain was linked to the overall size of the harvest. As Figure III.1 shows, the price of wheat seems to have had little effect on the size of the wheat harvest at either manor during the late fourteenth and early fifteenth centuries and there is no real correlation.<sup>255</sup> Similarly, there is no long-term correlation between the size of the barley and oats harvests at Pittington or Houghall and the prices of these two grains for the same period. When the yield of a crop and its price are compared, we see a similar lack of relationship. Should such a correlation have been present, it may have suggested that the serjeants were devoting more labour when prices were high. Neither the wheat and barley yields calculated for this study, nor the yields recorded by the auditors give any real incitation of any sort of yield raising techniques being used when barley and wheat prices were high. Using this nominal data, we might at first conclude that the Priory and its lay servants were not concerned with changing their arable agriculture operations to respond to price, as Schneider

255. Unless otherwise noted, this thesis uses the price data compiled by Gemmill *et al.* and is lagged by using the average price of the previous two years, as used by Ben Dodds. See Gemmill, Dodds, and Schofield, 'Durham grain prices', pp. 307-327 and Dodds, *Peasants and Production*.

argued in his analysis of price elasticities of supply for the bishop of Winchester's estate.<sup>256</sup> Yet this lack of direct price responsiveness does not mean that the monks and their managers were ignorant or neglectful of wider market forces. Rather, the monks and serjeants were much more concerned with and influenced by the relative prices of different crops. Figure III.2 shows the auditor's and calculated barley yields at Houghall from c. 1370 to c. 1410 alongside the price of barley relative to wheat. There is a noticeable relationship between these yields and the relative price of barley. This is particularly striking in the 1370s and 1380s when yields and relative price largely rose and fell together; similar trends were observed at Pittington from c. 1400 to c. 1410 for barley yields and the price of barley relative to wheat. This suggests that the monks and their managers paid attention to the larger market forces and devoted greater labour to a particular crop when the economic conditions were suitable. In these two examples, the serjeants must have determined that the relative price of barley to wheat was high enough to warrant greater attention to the barley crop. This judgement was likely influenced by the serjeant considering the rising cost of labour during the late fourteenth century and the amount of effort required to raise yields, as well as relative and nominal prices.<sup>257</sup> In anachronistic terms, the serjeants were considering the relative costs of growing each grain.<sup>258</sup> For these two examples, the serjeants likely judged that, given that barley was a less temperamental crop than wheat and that the relative price of barley to wheat was at an acceptable level, it made good sense to devote greater labour inputs to the barley crop.<sup>259</sup> Direct price responsiveness and the maximisation of profit, which was a nebulous term, as discussed, was likely considered too risky in light of the rapidly changing economic conditions of the late fourteenth and early fourteenth

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256. See Schneider, 'Prices and production', pp. 66-91.

257. Farmer, 'Prices and wages', pp. 431-525.

258. Further research is necessary to explore this point further, as it was outside the original scope of this thesis.

259. Campbell, *English Seigniorial Agriculture*, p. 218, 222-223.

centuries. Adjusting agricultural practices based on relative prices may have seemed a safer choice.

An allocation of labour based on relative costs of grain was clearly of greater importance to the manorial managers than a sort of price-responsiveness in which overall production was valued instead of yield. When using the local prices calculated by Gemmill et al. and lagged using the method proposed by Dodds, there is little evidence of serjeants allocating greater labour to particular crops, thus increasing yields to respond to high nominal prices. Nor is the reverse true: serjeants did not reallocate labour inputs from crops that were fetching low prices at market. Though on some occasions, particularly at Pittington from about 1408 to 1412, grain prices and yields seem to correlate, these are short-term correlations and thus unlikely to be evidence of long-term shifts in strategy.

The sort of price-responsiveness seen on the Home Farms and, as discussed below, on the other manorial groups was characterised by the Priory's desire to minimise relative costs and was directly tied to the convent's characteristic focus on preservationism. The relative cost of grain, especially when examined in light of the previous years' trends, must have seemed a surer metric to the serjeants and the convent than other available options. This focus on keeping relative costs low in relation to labour inputs and, thus, yields, saved the Priory from financial and labour outlays on crops that were unlikely to give an adequate return on the investment to grow them relative to other options. By purposefully lowering the yield of one grain crop while devoting labour to raise the yield of another in response to relative costs, the managers of the Home Farms would have lessened the risk to the Priory that the dependency on the price of one grain would have caused. The Priory rejected a directly profit-maximising management approach in which greater labour was devoted to crops that would fetch the highest prices on

the market. Such an approach also demonstrated a complexity of analysis that runs counter to Kitsikopoulos's assertion that landlords and officials relied on 'unsophisticated judgements'.<sup>260</sup>

Arable husbandry at Houghall, Bearpark, and Pittington was not responsive to grain prices in a direct fashion. Yet this version of price-responsiveness in which relative cost was more important than the nominal price of grain should not be considered synonymous with the results found by Eric Schneider, in which he suggests that the lack of price-responsiveness, nominal or otherwise, could be due to a low level of commercialisation, a fixation on manorial customs, or that prices were too volatile to predict during the period, among other causes.<sup>261</sup>

Nor should M.M. Postan's previously-cited maxim that medieval agricultural producers, 'though not wholly innocent of money and markets, could not be expected to sow more or to work harder in response to the stimuli of prices or under the influence of a pessimistic or optimistic view of future business prospects' be applied here, if it must be at all.<sup>262</sup> To apply arguments regarding simple nominal price-responsiveness and the maximisation of productivity or output in direct correlation with the price of grain here would obfuscate the purpose of the Home Farms. The purpose of any market orientation on these manors was to fulfil the labour resources necessary to meet the needs and desires of the Priory, while focusing labour investments on crops with lower costs relative to other crops. Surpluses could still be sold at the gate or *in foro* for prices favourable to the Priory, if the serjeant or bursar thought it prudent.<sup>263</sup>

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260. Kitsikopoulos, 'Manorial estates as business firms', p. 163.

261. Schneider, 'Prices and production', pp. 85-87.

262. Postan, 'Note', p. 79.

263. '...The convent could use their powers as landlords, through the agency of the tennar, to restrict the tenants' access to market, thus preventing competition and high prices for the grain available, which was needed at Durham itself.' Knowles, *The Religious Orders in England: Volume II: The End of the Middle Ages*, p. 323. See also Halcrow, *Administration & Agrarian Policy*, p. 57.

These Home Farms should instead be considered in light of the Priory's nearly innate preservationist mindset and desire to protect itself from the tumultuous events in the fourteenth century, and the memory of those events into the fifteenth century. Repeated outbreaks of plague, the Great Famine of 1315-1317, endemic warfare with the Scots, and political uncertainty forced the Priory to seek a measure of certainty. The Home Farms, together with interactions with the market, acted 'as a rational measure of security against crop failures,' and, in effect, served as a diversified food supply portfolio for the Priory, all while remaining within easy distance of the Priory and as part of this pattern of diversification and risk-dispersing which was comprised of all the bursar's manors.<sup>264</sup> Bearpark, Houghall, and Pittington, together with all the manors as a whole, served much the same purpose as the open-field system, allowing for three geographically distinct holdings near to the Priory, ensuring low transportation costs.<sup>265</sup>

### III.i.a. Houghall

Only in 1320/1 is there enough data to calculate grain yields at Houghall prior to the gap in the manorial accounts around the time of the Black Death. Of these three main crops, only the wheat harvest was poor, with a yield per seed of 2.51, well below the levels seen at other manors under the bursar's control. The barley harvest was similar to the national average barley yield for the first half of the fourteenth century (national mean yield per seed = 4.03) while the oats harvest was extremely successful, with a return of 4.64, well beyond the national average (1300-1349) of 2.47.<sup>266</sup> However, the accounts from 1370/1 to 1398/9 survive in remarkable numbers, making analysis of grain yields following the Black Death particularly

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264. Slavin, 'Church and food provisioning', p. 616.

265. See D. N. McCloskey, 'Persistence of English common fields' in William N. Parker and Eric L. Jones, (eds.) *European Peasants and Their Markets: Essays in Agrarian Economic History* (1975), pp. 73-120, D. N. McCloskey, 'English open fields as behavior towards risk' in *Research in Economic History* (Greenwich, 1976), pp. 124-170. For further developments on McCloskey's work, see, for example, Cliff T. Bekar and Reed, Clyde G., 'Open fields, risk, and land divisibility', *Explorations in Economic History*, 40(3) (2003), pp. 308-325.

266. Campbell, 'Grain yields on English demesnes', p. 133.

fruitful. Yields were often high, if varied.<sup>267</sup> Throughout the period, the wheat yield reached peaks as high as 8.55, as it did in the particularly fruitful harvest of 1389/90 and higher than 99 per cent of the English demesnes surveyed by Campbell from 1350 to 1399, but also fell to a nadir of 1.95 in 1372/3.<sup>268</sup> Nevertheless, wheat yields averaged 4.68 from 1370/1 to 1398/9, significantly higher than the mean yield in the last quarter of the fourteenth century on the often-commercialised FTC demesnes where the average harvest had just a 3.60 return on seed.<sup>269</sup> Throughout the late fourteenth century, wheat yields at Houghall tended toward a drastic spike, followed by a slow decline and a subsequent spike and slow decline, at which point the pattern repeated itself, such a pattern was similarly visible in the auditor's yields. The poor calculated wheat yield of 1380/1, where the return on seed was just 2.10, is unlikely to have been caused by the Peasants' Revolt further south and perhaps poor weather may have affected the crop, as it did the barley crop at Pittington in the same year.<sup>270</sup> The similarly poor harvest of 1393/4 in which the calculated wheat yield was 2.02 and the auditor's wheat yield was 1.98. It seems likely to have also been caused by poor weather as the barley and oats harvests also suffered. Such instability in productivity may have been caused by the onset of the Little Ice Age in the 1340s, notwithstanding the Chaucerian Maximum, as 'one of the most striking features of LIA climates was their instabilities, with marked annual variations in temperatures and precipitation,' which could have influenced grain yields.<sup>271</sup> The final years of

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267. The coefficient of variation for all three main crops was high and equalled 37.61 for wheat, 51.53 for barley, and 48.62 for oats.

268. Campbell, 'Grain yields on English demesnes', p. 133.

269. Campbell, *English Seigniorial Agriculture*, p. 319. There was a very slight trend ( $R^2 = 0.0045$ ) for wheat yields to decline.

270. Bruce Campbell, 'North-South dichotomies, 1066-1550' in A.H.R. Baker and M. Billinge, (eds.) *Geographies of England: The North-South Divide, Material and Imagined* (Cambridge, 2004), p. 147.

271. Campbell, *The Great Transition*, pp. 15, 284, 337. Campbell also notes that '[s]ocieties, as a result, had to cope with far greater environmental uncertainty at a time when they were also contending with heightened biological risks from plague and other diseases'. *Ibid.*, p. 337.

the fourteenth century saw a degree of stability in the wheat yield at Houghall and from 1394/5 to 1398/9 hovered around 4.00.

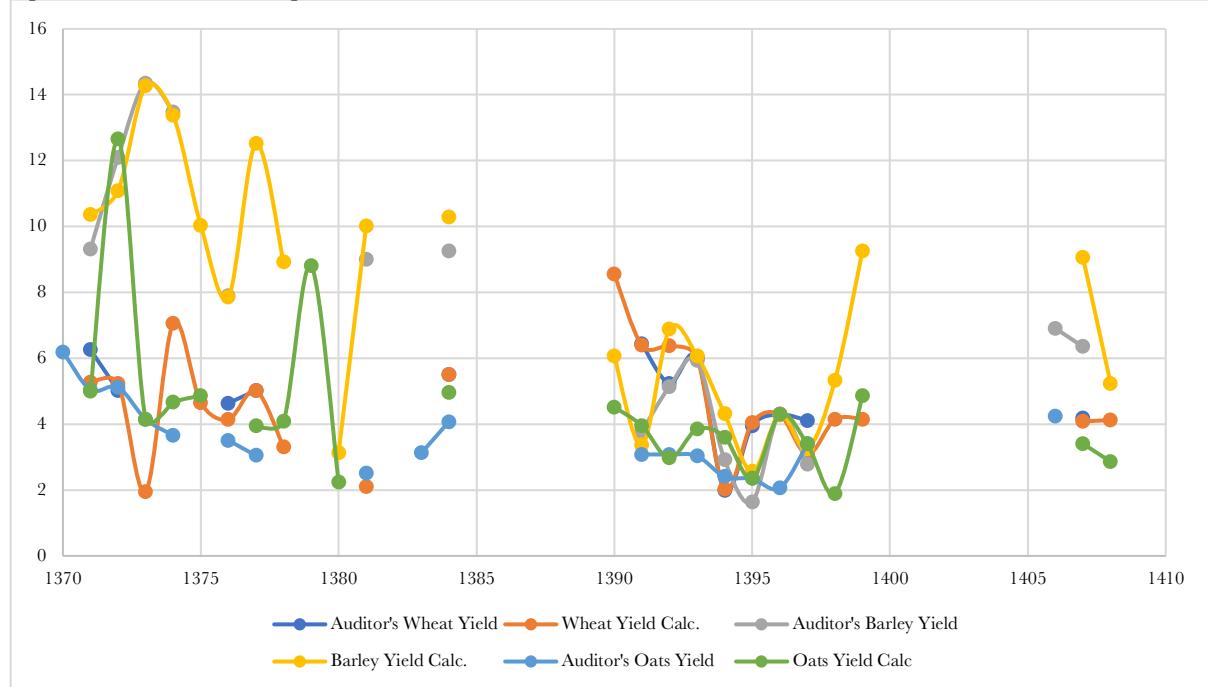
From 1370/1 to 1377/8, the cultivation of barley at Houghall was at its most productive, with harvests of around 850 bushels of grain and yields between 7.85 and 14.27. Such high yields cannot be the result of small-scale intensive farming as the barley harvests were often two or three times higher than the wheat harvests, despite being farmed on a similar number of acres. Indeed, the harvest of 1372/3, with a calculated yield 14.27 and an auditor's yield of 14.36, was just over three times higher than the national mean barley yield for 1350 to 1399 (national mean yield per seed = 4.18).<sup>272</sup> From 1378/9, when the barley harvest was poor with a yield of just 2.18, to 1398/9 the yield tended to decline, though 1380/1 and 1383/4 saw calculated yields of 10.02 and 10.29 and auditor's yields of 9.011 and 9.26, respectively, while the mean calculated yield was 5.32. 1369/70 to 1378/9 was similarly a period of high yield oats harvests in which the mean calculated yield was 6.02 and the mean auditor's yield was 4.39; as both the spring sown barley and oats crops fared well in this period, there may have been a period of inclement winter weather harming the winter sown wheat. Nevertheless, barley yields suffered a long-term decline at Houghall throughout the late fourteenth century despite an increased importance placed on the crop during the period as evidenced by Table I.5, above, which demonstrates the increasing number of acres given over to the farming of that crop. Oats yields declined following 1378/9, with poor harvests in the subsequent two years before recovering in 1382/3, after which, until 1398/9, the calculated oats yields averaged a return of 3.58, slightly higher than the national mean for the second half of the

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272. Campbell, 'Grain yields on English demesnes', p. 133.

fourteenth century (national mean yield per seed = 3.02), while the auditor's yield averaged 2.77.<sup>273</sup>

Figure III.3: Grain Yields at Houghall, c. 1370 to c. 1410



### III.i.b. Bearpark

Wheat and oats were overwhelmingly the predominant crops at Bearpark. Data for barley harvests are available for only six years, all in the late fourteenth and early fifteenth century. Wheat yields were low by the standards of the bursar's other demesnes and by those of much of England. Before the Black Death and in years for which we have enough extant information, only in 1335/6 did the wheat yield surpass the national median and mean yield per seed for 1300-1349 as observed by Campbell. 1335/6 saw 6.85 return on the sowing of wheat exceeding the national median and mean of 3.94 and 4.18, respectively.<sup>274</sup> Indeed, the period from 1330/1 to 1343/4 resembles most closely the internal FTC wheat yields from 1288 to 1315

273. Campbell, 'Grain yields on English demesnes', p. 133.

274. Ibid., p. 132.

calculated by Campbell, where the mean wheat yield was 3.2 and most yields clustered between a two and fourfold return.<sup>275</sup> When accounts resume after the Black Death, wheat yields were initially high and 1370/1, 1371/2, 1373/4, and 1374/5 all saw successful harvests with yields well above the mean wheat yields in the FTC demesnes between 1375-1400 (yield per seed = 3.2) and above the national median and mean wheat yields (median yield per seed = 3.94, mean yield per seed = 4.18).<sup>276</sup> The last few years of the fourteenth century, however, saw a decline in the wheat yield and from 1396/7 to 1398/9 yields averaged just 3.33. Only for 1371/2 to 1373/4, 1398/9, and 1406/7 is there any extant harvest data for the barley crop, and only for 1371/2 to 1373/4 is there enough evidence to calculate yields. Only for 1372/3 is there an auditor's yield, where the return was 4.47. For the three years for which barley yields are available, yield per seed was high, calculated at 8.7 in 1371/2, 6.33 in 1372/3, and 8 in 1374/5. Though this is well above the national average (mean yield per seed = 3.99) and higher than 93 per cent of English yields for that period, barley does not seem to have been an important crop at Bearpark, given how rarely it was farmed. The oats harvests at Bearpark were not particularly noteworthy, and very few harvests were unusually successful or poor.

Before the Black Death, the demesne managers could reasonably expect just over a two-fold return for the harvest, lower than the mean national yield per seed (3.88), but some 22.3 per cent of English demesnes sampled by Campbell show a yield per seed between two and three.<sup>277</sup> 1329/30 and 1342/3 were the only noteworthy exceptions to this trend. The oats harvest in 1329/30 very nearly failed completely, with a yield per seed of less than one, while 1342/3 saw an oats yield of just 1.41. From 1370/1 to 1398/9, oats yields were higher, and

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275. Campbell, *English Seigniorial Agriculture*, p. 319.

276. Ibid, p. 319, Campbell, 'Grain yields on English demesnes', p. 132.

277. Ibid., p. 133.

yields varied between just over a threefold return to maximum yield of 6.51, averaging 4.44. The calculated oats yields were similarly high, and in 1370/1 and 1712/3, the auditors recorded a return of 6.52 and 6.24, respectively. Given the need for livestock during the Priory *ludi*, or games which included the relaxation of monastic restrictions, and the consumption of meat, which became a particular fixture of cloistered life at the Priory in the late fourteenth century, and the Prior's frequent entertaining at the manor, such a high oats yield may have been necessitated by the constant need for fodder.<sup>278</sup> Unlike the early fourteenth century, this placed Bearpark among the more productive demesnes for oats production during a period where the national yield per seed was 2.98.<sup>279</sup>

### III.i.c. Pittington

Wheat yields at Pittington were varied, especially during the later fourteenth century (Figure III.4). The three years for which yields can be calculated prior to the Black Death (1328/9, 1331/2, 1332/3) must reflect a precarious situation on the manor. 1328/9 saw a successful wheat harvest, with a yield of 5.12, well above the England 1300-49 mean yield (mean yield per seed = 4.18) and the Norfolk mean yield per seed 1250-1349 (mean yield per seed = 4.6) calculated by Campbell.<sup>280</sup> Yet 1331/2 saw a poor harvest with a wheat yield of just 3.11 and 1332/3 experienced a near complete failure in wheat harvest with a yield of 0.68. The oats yields suffered around the same period, with yields of just 1.97 and 0.04 in 1330/1 and 1332/3, respectively. The 1332/3 harvest was particularly disastrous. Despite just more than 71 quarters of oats being seeded, slightly more than the previous year, only 3 quarters were harvested. These terrible harvests were apparently confined to Pittington and no other manors

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278. Dobson, *Durham Priory*, p. 97. Cf. Knowles, *The Religious Orders in England: Volume II: The End of the Middle Ages*, p. 246, who suggests that the practice spanned the fourteenth century.

279. Campbell, 'Grain yields on English demesnes', p. 133.

280. Ibid., p. 132; Campbell, *English Seigniorial Agriculture*, p. 318.

reported similar results, suggesting that wide ranging problems such as Scottish raids or poor weather were not to blame. More localised problems, such as wandering and destructive livestock, were likely the culprits. From the 1370s onwards wheat yields were often good, but there was still a level of volatility that must have made the serjeants uncomfortable. Focusing first on the auditor's yields, we can note an average wheat yield of 4.73. This is much higher than the mean yield for England observed by Campbell (3.90), suggesting greater success at Pittington in the farming of wheat than elsewhere in England.<sup>281</sup> It is much higher than the mean yield per seed of demesnes in the FTC counties, where wheat yields averaged 2.8 from 1375-1400.<sup>282</sup> Some years certainly represented relatively poor harvests, as occurred in 1377/8 when the auditor's wheat yield was 4, a decline from the previous year where a yield of 6.35 was recorded. Yields subsequently improved and auditors recorded yields averaging 4.49 from 1390 to 1410. Calculated yields show largely similar trends but in more detail, as there are twenty-three years for which yields can be calculated, compared to the thirteen auditor's yields available. The poor wheat harvest that the auditor's recorded in 1383/4, in which they noted a yield of just 3.11, is echoed in the calculated yield of 3.88.

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281. Campbell, 'Grain yields on English demesnes', p. 132.

282. Campbell, *English Seigniorial Agriculture*, p. 318.

Figure III.4: Wheat Yields at Pittington, c. 1330 to c. 1460

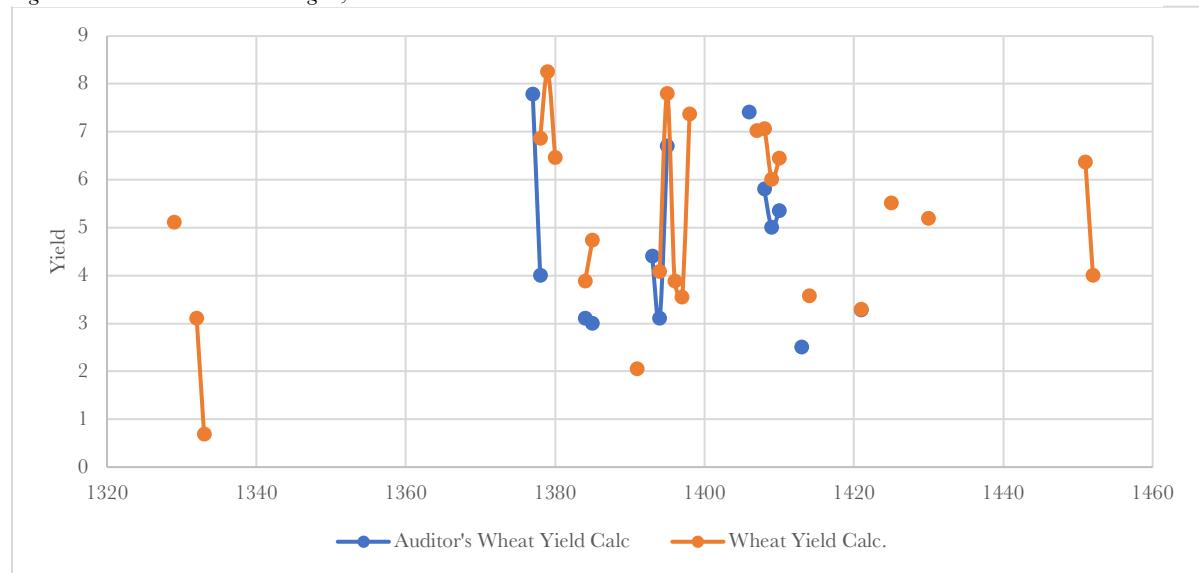
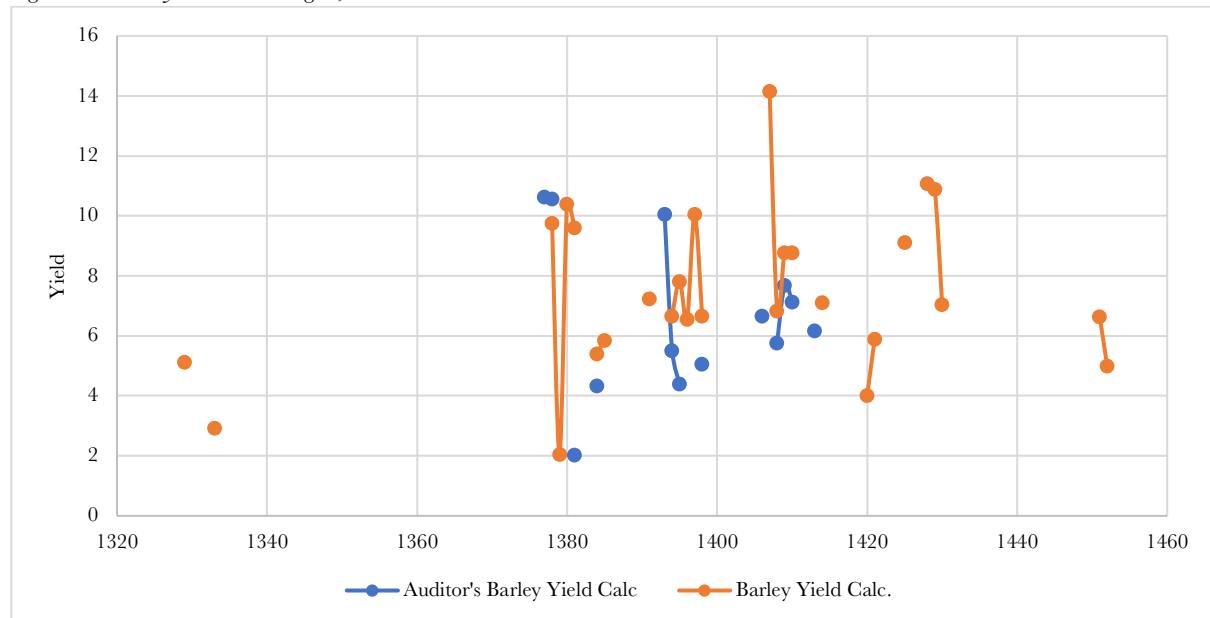


Figure III.5: Barley Yields at Pittington, c. 1320 to c. 1460



Barley consistently saw good yields at Pittington (see Figure III.5), with a few notable exceptions, throughout the long fourteenth century, though without as clear a trend as seen at Houghall. In 1328/9 and 1332/3 for which we have calculated yields, barley yield per seed was at 5.13 and 2.93, respectively. Though the yield in 1332/3 was low, it was still within the typical range at a national scale and some 44.2 per cent of barley yields on demesnes sampled by Campbell on Norfolk from 1250 to 1349 fell between 2 and 3, while over a third of sampled

demesnes between 1288-1315 in FTC counties (36.8 per cent) were within the same range.<sup>283</sup>

The harvest of 1328/9 was particularly successful, especially given the warfare with the Scots in the previous year.<sup>284</sup> The barley yield was well above the national average yield per seed for the first half the fourteenth century (mean yield per seed = 3.88) and similarly surpassed the mean yields at the Winchester and Westminster estates for the same period (mean yield per seed = 4.03, 4.53, respectively).<sup>285</sup> Following the Black Death, the manorial auditors began recording their calculated yields in the margins of the accounts. Much like the auditor's yields that were calculated for wheat, the yield per seed recorded by the auditors follows many of the same trends and pitches around the same levels on the above figure. By any standards, the barley harvests of 1376/7 and 1377/8 were extremely successful; barley yields were 10.64 and 10.56 in those two years.<sup>286</sup> The yield in these two years is significantly higher than any observed by Campbell in fifteen southern English counties, in which barley yields never surpassed 6.47 and tended to about four and a half.<sup>287</sup> Throughout the rest of the fourteenth century and the early fifteenth century, the auditor's yields remained largely stable with barley yields hovering around 5.90. 1380/1 saw a poor harvest with a less than twofold return. As noted above, this is unlikely to have been a result of the upset caused by the Peasants' Revolt of 1381 concentrated in south-east England which largely passed northern England by; instead,

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283. Campbell, *English Seigniorial Agriculture*, p. 319.

284. This fighting was part of the Weardale Campaign. Andy King and Michael A. Penman, 'Anglo-Scottish relations in the Fourteenth Century – an overview of recent research' in Andy King and Michael A. Penman, (eds.) *England and Scotland in the Fourteenth Century: New Perspectives* (Woodbridge, 2007), p. 10.

285. Campbell, 'Grain yields on English demesnes', p. 133.

286. These years of high yields correlated with the years in which John Ponchon, one of the more capable serjeants employed by Durham Cathedral Priory, managed this demesne. His career at Pittington and Houghall is discussed in *Chapter V: The Serjeants of Durham Cathedral Priory*, Section V.

287. These counties are Berkshire, Wiltshire, Sussex, Surrey, Suffolk, Somerset, Oxfordshire, Norfolk, Middlesex, Kent, Hertfordshire, Gloucestershire, Essex, and Buckinghamshire. Bruce M. S. Campbell (2007), *Three centuries of English crops yields, 1211-1491* [WWW document]. URL <http://www.cropyields.ac.uk> [accessed on 06/03/2019].

poor weather was likely to blame.<sup>288</sup> 1383/4 saw a failure in the barley harvest with less than one bushel harvested per bushel of seed sown, perhaps the lingering effects of a plague outbreak a few years earlier. 1392/3 was a particularly successful year with nearly a tenfold return on the amount seeded setting it well apart from other demesnes of this period.<sup>289</sup> Subsequently, the auditor's yields remained higher than the national means (mean yield per seed = 3.99 in 1350-1399 and 3.94 in 1400-1449), with the exception of 1394/5 in which the barley harvest produced a more modest yield of 3.62.<sup>290</sup>

The yields calculated from the data within the accounts again show similar trends while occasionally being higher than the yields calculated and recorded by the medieval auditors. The calculated barley yield for 1377/8, however, is very close to the auditor's yield (9.76 vs. 10.56, respectively), further evidencing a period of high barley yield at Pittington. The calculated barley yield also fell in 1378/9, though much more drastically, going from 10.46 to 2.05, the lowest calculated barley yield for the later fourteenth century and early fifteenth century at Pittington. The harvest of 1379/80 was nevertheless extremely successful with a barley yield of 10.41. Whatever factor may have caused the poor barley harvest in 1378/9 must have only had an impact in the short-term and the serjeant, John Ponchon, must have reacted quickly to ensure the following harvest was successful. For the rest of the fourteenth century and until 1452 the calculated yields suggest a period of fruitful harvests with barley yields averaging 7.70 and, at times, twice as high as the Norfolk means, even when the calculated yields are pessimistically decreased by a third. The difference between the calculated and

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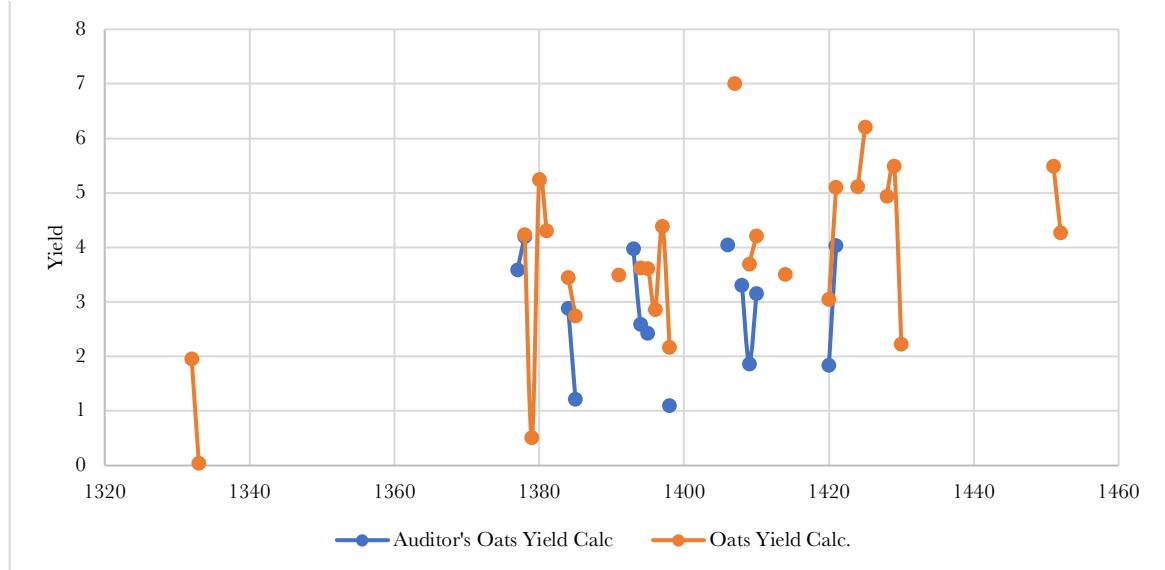
288. Campbell, 'North-South', p. 147.

289. Campbell records three demesnes as having a barley yield per seed between 9 - <10. Campbell, 'Grain yields on English demesnes', p. 113. However, Campbell's Three centuries of English crops yields, 1211-1491 database, from which the tables in 'Grain yields on English demesnes' draws, does not contain data from demesnes relevant to this study north of the River Humber, with the exception of the manor of Malham belonging to Bolton Priory in the West Riding of Yorkshire. Data for Malham ceases after 1324.

290. Campbell, 'Grain yields on English demesnes', p. 133.

auditor's yields does suggest that the former need to be used cautiously, yet they are well within the realm of possibility given the high yields recorded by the auditors.

Figure III.6: Oat Yields at Pittington, c. 1320 to c. 1460



Oats yields were often good at Pittington, unsurprising given that oats were notoriously a hardy crop (Figure & Table III.6). However, oats yields, both the auditor's and calculated yields, were volatile on the manor, in trends similar to the other crops, suggesting fluctuating amounts of labour inputs done for the crop or, perhaps, capricious weather. The harvests of both 1330/1 and 1331/2 were poor. 1330/1 saw an oats harvest of merely 1.97, much lower than the mean English oats yield from 1300-1349 as calculated by Campbell (2.63) and the harvest of 1332/3 was an unmitigated failure and oats returned a yield of merely 0.04.<sup>291</sup> In this year the wheat yield was similarly disastrous with 0.68, despite both crops being seeded with slightly more grain than preceding years. Very little in the fields must have been salvageable. 1329 to 1333 was evidently a difficult period at Pittington and all grain yields suffered. This does not seem to have been a particularly widespread issue and is certainly not

291. Campbell, 'Grain yields on English demesnes', p. 133.

evident throughout southern England, suggesting a much more local problem, perhaps a knock-on effect from conflict with the Scots in 1323 and 1327.<sup>292</sup> In the later fourteenth century when the auditor's yields begin to appear, the yields recorded by these individuals indicate substantially varying harvests. A fourfold return on oats was not unusual at Pittington, well above the national mean of 2.98, though Campbell calculates that 34.2 per cent oats yields from the sampled manors between 1350 and 1399 were between 3 and 4.<sup>293</sup> In two years (1384/5 and 1397/8) the auditor's oats yield was nearly one, demonstrating that only one bushel of oats was harvested for every bushel of seed sown. Similar trends are noticeable in the yields I calculated; 1378/9 had a yield of less than one. In all these cases, though both the auditor's and calculated oats yields could be large (in 1406/7 the calculated oats yield was 7.01, just less than three times the national mean of 3.42), the varying success of the harvests suggests that less care may have been paid to what was a cheap and relatively economically unimportant crop.<sup>294</sup> The indexed sown acreage gives further evidence of this. Even when yields were at their lowest, the number of acres under plough remained within the range normal for Pittington. It seems most likely that oats were sown on the poorest land of the manor and, if the crop was not left to its own devices, then relatively little attention was paid to it. Whatever was harvested would be useful as fodder and it may be that the serjeants at Pittington considered the cost of bringing oats onto the manor to be less than the cost of labour to help secure a large oats harvest.

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292. Bruce M. S. Campbell (2007), Three centuries of English crops yields, 1211-1491 [WWW document]. URL <http://www.cropyields.ac.uk> [accessed on 06/03/2019], Dodds, *Peasants and Production*, p. 57, King and Penman, 'Anglo-Scottish relations in the Fourteenth Century – an overview of recent research', p. 10

293. Campbell, 'Grain yields on English demesnes', p. 133.

294. Ibid., p. 133.

Table III.6: Oats Yields and Acreage at Pittington in the Late 14<sup>th</sup> Century

<b>Yea r</b>	<b>Calc. Yield.</b>	<b>Auditor's Yield</b>	<b>Indexed Calc. Acres</b>	<b>Indexed Auditor's Acres</b>
1377	--	3.59	--	--
1378	4.24	4.21	100.00	100.67
1379	0.52	--	87.83	--
1380	--	--	99.70	--
1381	--	3.02	85.46	--
1382	--	--	76.85	--
1383	--	--	--	--
1384	--	2.89	113.95	136.10
1385	3.45	1.22	94.96	213.65
1386	2.75	--	85.46	--
1387	--	--	--	--
1388	--	--	--	--
1389	--	--	--	--
1390	--	--	91.39	--
1391	--	--	67.66	--
1392	3.50	--	57.86	--
1393	--	3.98	--	98.96
1394	3.63	2.60	64.99	90.92
1395	3.62	2.43	58.16	86.65
1396	2.86	--	87.83	0.00
1397	4.40	--	--	--
1398	2.18	1.11	71.81	141.25
1399	--	--	59.35	--
1400	--	--	--	--
<i>n.</i>	9	9	16	8

Source: DCD-Pitt. acs., 1377/8-1400/1. (100 = 120.36; calculated oats acres in 1378)

### **III.ii. Group II: The Peculiar Manors: The Case of Ketton & Merrington**

Southernmost and most isolated of the bursar's manors, about ten miles or fifteen kilometres from the Priory, and not close enough to the mouth of the Tees to be considered neatly with the three manors there, Ketton defies a clear classification and must be treated as unique. Wheat and oats certainly appear to be the main crops on the manor, but the production of one crop does not seem to be favoured above the other, and barley was farmed at inconsistent levels. Merrington was less remote than Ketton, about halfway between Durham and the latter manor, but is likewise difficult to place in any neat classification. No one crop dominated either manor, though, like at Ketton, barley does not seem to have been an overly important crop. Determining the extent to which market forces impacted arable operations at Merrington is difficult, given the limited data available. As there is somewhat more data on arable farming at Ketton, it is possible to speak in slightly greater detail about the influence of market forces on yield-raising techniques, which were applied more to the wheat and barley crops than to the oats crops, since these last fetched lower prices, as seen in Table III.7, where the calculated yields of wheat and barley far surpass the yields of oats both before and after the Black Death. The late fourteenth- and early fifteenth-century serjeants at Ketton and their monastic superiors do not seem to have been overly concerned with changing their practices in response to shifting nominal grain prices. Rather, they were most concerned with the relative prices of the wheat and barley crops in order to maximise the return, but this too appears to have been attempted either sporadically, as from c.1377-c.1380 with the wheat crops and from c.1400-c.1405 for both wheat and barley, or without much success. Perhaps the relative isolation of these manors served the Priory well: as they were distant from any of the manors that made up the other groupings, they were less likely to be affected by any difficulties that might befall them

and, therefore, were used to spread out the inherent supply issues and risk in medieval agriculture.

Table III.7: Harvest Statistics Before (c. 1300-c. 1348) and After the Black Death (c. 1370-c. 1420) at the Peculiar Manors

Ketton	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<i>Avg. Before Black Death</i>	47.58	--	50.35	39.42	--	60.58	--	--	--	4.45	--	2.53	--	--	--
<i>Avg. After Black Death</i>	42.55	19.39	38.06	35.41	16.87	47.71	51.78	15.86	32.36	3.66	4.93	2.87	3.50	4.46	3.84
Merrington	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<i>Avg. Before Black Death</i>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<i>Avg. After Black Death</i>	34.62	30.1	39.65	--	--	--	--	--	--	7.86	5.95	2.75	8.30	6.17	3.00

Sources: DCD-Ket. acs., DCD-Merr. acs.

Ketton and Merrington often benefited from the sale of grain and sent grain to the Priory, lessening the convent's dependence on the grain market. The bursar directly financed operations at Ketton before the Black Death by sending cash *per talliam*, as was done at the Tyne and Wear manors, below, to a greater or lesser degree.<sup>295</sup> This practice occasionally had great returns for the investment. In 1309/10 John de Belasis, the serjeant at Ketton oversaw the often piecemeal sale of grain worth £20 10s 9d which contributed heavily to the £15 10s 1d surplus in that account, while also sending malted barley to Durham. In other years, such as 1331/2 in which the manor received £3 4s 11d from the sale of grain, the sum received was

295. Such sums varied wildly and in some years the sum was large (£20 in 1305/6) or less than a quarter of the manor's receipts for that year, as was the case when the bursar sent £1 3s 6.5d in 1323/4).

much less, but nevertheless represented a large part of the manor's income. During the late fourteenth and early fifteenth century, Ketton continued to derive income from the sale of grain while occasionally sending grain to the Priory, despite the latter making little apparent financial sense. In 1401/2, £2 14s 6d was received from the sale of grain and in 1409/10, the Priory received some three quarters and four bushels of barley from the manor; there must have been a particular need for grain at that time. From the late 1370s to the early 1380s, for which period the Merrington accounts are extant, that manor consistently raised large sums of cash, though never as much as Ketton in 1309/10, from the sale of grain. From 1376/7 to 1381/2, Merrington received £19 8s 8d from the sale of grain, averaging about £3 4s 9d per year. Wheat and barley were sent to Durham, including 30 quarters of barley in 1377/8, 35 quarters of barley in 1378/9, and an indeterminate amount of wheat in 1380/1, often more than was sent by the Home Farms, further emphasising the peculiarity of this group of manors.

Ketton and Merrington must have had an important role in (what may be anachronistically referred to as) the bursar's real estate portfolio. The distance between the two manors and their relative remoteness would help to lessen the risk that both manors would be affected by the same inclement weather, marauding Scots, or loose livestock, though Merrington was often more successful in the farming of wheat and barley, particularly during the late 1370s. Though the manors may have occasionally fallen into arrears, as Ketton did at times, this was, for the monks, offset by the safety net, like the Home Farms, that Ketton and Merrington provided, both in terms of grain sent to the Priory and the cash that could be raised by the sale of grain. Indeed, a year after running a deficit of £7 7s 5d and being valued at just 44s in 1392/3, Ketton recorded a surplus of £19 7d and was valued at £6 6s in 1393/4. Though the financial situation at these two manors could vary drastically, their worth to the monks must have been easily recognised.

### III.ii.a. Merrington

Of the seven available accounts, six contain enough information to allow for the calculation of grain yields, all for the period from 1376/7 to 1381/2. Fortunately, several auditor's yields survive, allowing for a fuller picture of the agricultural productivity during this period. The auditors recorded two wheat yields, one in 1377/8 at 7.05 and again in 1381/2 at 9.54. The calculated yield of 10.92 for 1377/8 is relatively close to the auditor's yield, given the normal expectation that calculated yields are, as a rule, slightly higher than those calculated by the medieval auditors. 1378/9 saw a more normal calculated yield of 4.80, suggesting a successful if not extraordinary harvest; 44.5 per cent of the manors surveyed by Campbell had wheat yields of 4 or higher in the second half of the fourteenth century.<sup>296</sup> The auditors also reported a series of successful barley harvests during this period. In 1377/8, the auditors calculated a return of 9 at the harvest, though falling to 5 in 1378/9. This return in 1377/8 corresponds to the highest wheat yields at the manor and to periods of high yields at Pittington. This suggests that these years were a period of favourable climatic conditions or, alternatively, as explored below, economic conditions made increased labour inputs a reasonable expenditure.<sup>297</sup> The auditor's yield continued to fall slightly and in 1381/2, the auditors recorded a return on the barley harvest of 4.82, still well above the average barley yield (1350-1399) of 4.18 calculated by Campbell.<sup>298</sup> The calculated yield for 1377/8, 9.52, shows the same high yield as the auditor's yield, with which the calculated yields for 1378/9 and 1380/1 are largely in line. The farming of oats at Merrington was much less noteworthy than that of the other main crops. In

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296. Campbell, 'Grain yields on English demesnes', p. 132.

297. No large tree-ring study exists for northeast England, thus prohibiting arguments about favourable climatic conditions on an annual basis impacting crops. However, this period does correspond to Campbell's 'Chaucerian maximum,' a period of agriculturally favourable weather. See Campbell, *The Great Transition*, p. 334.

298. Campbell, 'Grain yields on English demesnes', p. 133.

1377/8 and 1378/9 the auditors reported yields of 3 and 3, slightly higher than the English mean yield for the second half of the fourteenth century (national mean yield per seed = 2.98).<sup>299</sup> Only the calculated yield of 3.19 from 1378/9 exceeded this level, while the calculated yields of 1379/80 and 1381/2 are entirely similar to the preceding auditor's yields. The low oats yields likely reflect the lack of labour put into a crop that was often seen as fit only for fodder and, as low number of the *famuli* suggests, little may have been needed for fodder for draft animals.

### III.ii.b. Ketton

Few grain yields can be calculated at Ketton before the Black Death, and only for wheat and oats; no auditor's yields exist before 1371. As noted in Figure III.6, in 1334/5 the wheat harvested returned a yield of 5.86, while the wheat yields in the two subsequent years (1335/6 and 1336/7) were 5.33 and 2.16. The harvests of 1334/5 and 1335/6 were fruitful by national metrics, surpassing the mean yield for wheat harvests in Norfolk from 1250 to 1349 and the national mean from 1300 to 1349 (mean Norfolk yield per seed = 4.6; mean England yield per seed = 4.18).<sup>300</sup> The steep decline in 1336/7, however, suggests either a localised problem with the wheat harvest, as similar declines are not mirrored on other demesnes in this year, or a drastic shift in the economic priorities determined by the Priory or the serving serjeant. After the Black Death, the auditor's wheat yields show largely similar trends to those of the calculated yields but are occasionally lower. Of the nine auditor's yields that are available, only in 1376/7 with a yield of 7.37 and in 1398/9 with a yield of 6.46 did the harvest have a return greater than 3.43, thereby surpassing the national mean from 1350 to 1399 (mean England yield per

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299. Campbell, 'Grain yields on English demesnes', p. 133.

300. Campbell, *English Seigniorial Agriculture*, p. 318; Campbell, 'Grain yields on English demesnes', p. 132.

seed = 4.09).<sup>301</sup> Excepting the harvests of 1376/7 and 1398/9, the mean wheat yield per seed at Ketton during the late fourteenth and early fifteenth centuries was 2.53, woefully below the levels reported by the other bursar's manors; even Pittington, which saw low yields in the 1380s, saw a period of high yields in the following decade. The calculated yields were often low, but have greater variability than the auditor's yields (standard deviation for auditor's yields = 2.00; standard deviation for calculated yields = 1.73). Only four harvests in the late fourteenth and early fifteenth century had calculated wheat yields higher than the national mean with the wheat yield exceeding 4.18 in 1371/2, 1372/3, 1376/7, and 1399/1400 (Figure III.7). The wheat harvest was extremely poor in 1379/80, with a calculated yield of just 1.33. The wheat harvest of 1401/2 was similarly characterised by low yields, suggesting that Ketton did not see the upturn in productivity that characterised most of the other manors at the turn of the fifteenth century.

Few auditor's yields are extant for the barley harvests at Ketton, making the yields I calculated an important metric for understanding barley productivity at the manor during the late fourteenth century, though the surviving auditors yields do follow the trends I found in the calculated yields (Figure III.8). These yields were varied, with a coefficient of variation of 47.97 for the period from 1371 to 1402. The harvest failed in 1374/5 and 1380/1 with yields of 1.5 and 2.03, well below the national mean of 4.18.<sup>302</sup> As seen in Figure III.7, barley yields rose and fell every year, showing very little stability. This may have been due to changing market conditions or rises in the cost of labour, or it could be due to detrimental climatic conditions near Ketton. In 1372/3 and 1390/1 the barley harvest and the accompanying yield calculations were noteworthy; the latter year saw auditors record a yield of 5.47 while I

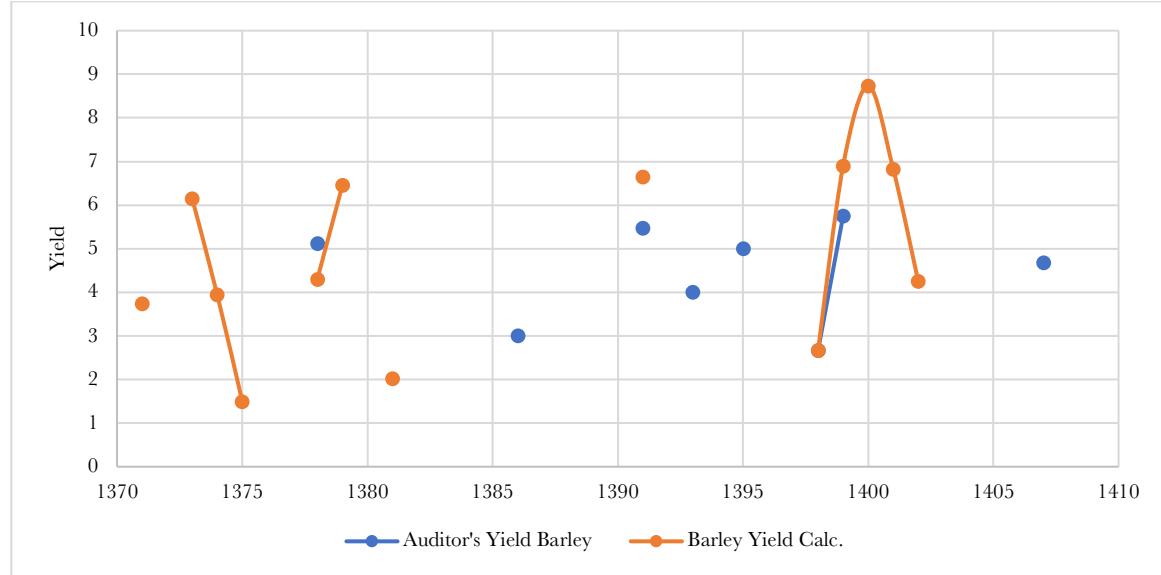
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301. Campbell, 'Grain yields on English demesnes', p. 132.

302. Campbell, *English Seigniorial Agriculture*, p. 133.

calculated a yield of 6.64. The opening of the fifteenth century saw some improvement, and I calculated yields of 8.74 and 6.83 for 1399/1400 and 1400/1.

Figure III.7: Barley Yields at Ketton, c. 1370 to c. 1410

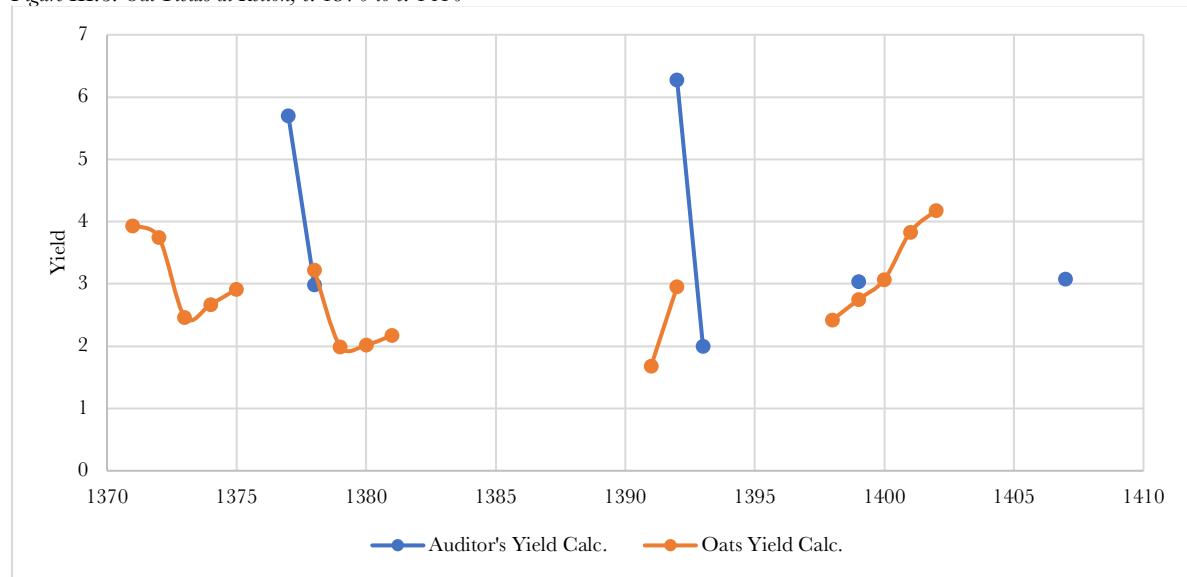


The oats harvest saw slightly lower levels of variance and during the late fourteenth and early fifteenth century, the calculated yield had a standard deviation of 0.75, and 1.72 for the auditor's yields. Yield levels prior to the Black Death were unremarkable, with a yield of 3.19 in 1301/2, 2.57 in 1302/3, and 1.85 in 1303/4, surpassing the national mean (2.63) for 1300 to 1349 only in the first year, but a lack of further data makes any further analysis difficult.<sup>303</sup> By the later fourteenth century oats yields calculated by the auditors become available, and these yields suggest a period of uncertainty for the oats harvest. In 1376/7, the yield was high with a return of 5.31, but this quickly fell to 3.23 in 1377/8, while the auditors recorded a return of 2.99. The oats harvest suffered badly in 1391/2 with a yield of just 1.68 and had recovered somewhat by 1392/3 when the harvest had a 2.96 return from seed. The auditors, however, recorded a much more successful harvest, with a return on oats of 6.28. The situation

303. Campbell, *English Seigniorial Agriculture*, p. 133.

improved in 1398/9 and the yield of 2.75 fell just short of the national mean (1350-1399) of 2.98.<sup>304</sup> The oats harvest of 1406/7 saw an auditor's yield of 3.08 and it is tempting to suppose a period of agricultural stability between 1398/9 and 1406/7, but the lacuna between the two accounts means that this cannot be proven. The calculated oats yields suggest a period of declining productivity, and from 1370/1 to 1391/2 there is a clear trend of variation giving way to stagnation with yields averaging 2.87 and thus short of the national mean. Like the barley harvests, the oats crop saw greater levels of productivity at the close of the fourteenth century and the beginning of the fifteenth and yields increase, and match or exceed the national average oats yield in 1400/1 and 1401/2 (national mean yield per seed = 3.42).<sup>305</sup>

Figure III.8: Oat Yields at Ketton, c. 1370 to c. 1410



### III.ii.c. Group III: The Teesmouth Manors

The three manors of Bewley, Belasis, and Billingham are characterised not only by their geographic location, sitting at the mouth of the Tees River, but also by their size, the quality of the land, which was among some of the best in the county, and the purpose to which they were

304. Campbell, *English Seigniorial Agriculture*, p. 133.

305. Ibid., p. 133.

presumably put. In the early fourteenth century, these manors were among the largest held by the bursar; Britnell estimated that Bewley had the most acres under plough in 1304/5 with about 700 acres cultivated, while Belasis, with about 320 acres cultivated, was roughly half the size of the former, and Billingham, with about 209 acres, was the smallest of the three.<sup>306</sup> During the period covered by this study, the Teesmouth Manors were most important in the first half of the fourteenth century; both Belasis and Billingham were put out to farm before the Black Death. These manors were characterised by the prominent cultivation of wheat and oats, with barley being of much lesser importance. At Bewley before the Black Death, barley was, on average, only about ten per cent of the grain harvested each autumn, while at Billingham it was about a quarter of the average harvest and only a tenth of the grain seeded. Barley harvests at Belasis were similarly small yet yield per acre was high, suggesting intensive cultivation; the barley harvest averaged about forty-three quarters of grain from approximately thirteen acres of land, or 26 bushels per acre, confirming Britnell's suspicion that high barley yields were achieved through high intensity farming over relatively few acres.<sup>307</sup> The wheat harvests at Belasis, on the other hand, averaged some 1,134 quarters of wheat from nearly two hundred acres, while the average oats harvest was just over a thousand quarters of grain from about three hundred and eleven acres.

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306. Britnell, *Manorial Accounts*, p. xlvi.

307. Ibid., p. xlvi.

Table III.8: Harvest Statistics Before (c. 1300-c. 1348) and After the Black Death (c. 1370-c. 1420) at the Teesmouth Manors

Bewley	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<b>Avg. Before Black Death</b>	46	20.22	43.76	--	--	--	--	--	--	--	--	--	--	--	--
<b>Avg. After Black Death</b>	40.14	26.52	33.35	42.43	20.17	37.39	42.13	17.49	40.38	4.77	7.28	3.96	4.48	6.90	3.39
Belasis	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield <sup>308</sup>			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<b>Avg. Before Black Death</b>	39.91	27.26	32.82	35.4	2.55	62.05	--	--	--	--	--	--	--	--	--
<b>Avg. After Black Death</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Billingham	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<b>Avg. Before Black Death</b>	40.06	25.34	43.69	36.81	9.72	53.46	--	--	--	1.88	6.72	1.97	--	--	--
<b>Avg. After Black Death</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Sources: DCD-Bewl. acs., DCD-Bels. acs., DCD-Bill. acs.

These manors supplied large amounts of grain to the Priory and the other obedientiaries, removing or lessening the need for the Priory to rely on a wider market and the risk from any accompanying economic changes. In 1316/7, twenty-six quarters of oats from Bewley and Belasis were malted into thirty quarters and sent to Durham, presumably for the brewing of ale, though, given the lower status of oaten ale, perhaps the barley ale was preferred by the brethren themselves.<sup>309</sup> Significant amounts of wheat were sent to the Priory; the cellarer received grain from Bewley and Billingham in 1333 and in 1336/7, John de Edmundbyres, serjeant at Bewley sent thirty quarters of wheat to the Priory and just over 125 quarters of wheat

308. Due to a lack of consecutive accounts, only one yield is calculable (see Section III.ii.e); I can therefore provide no average figure.

309. Philip Slavin, *Bread and Ale for the Brethren: The Provisioning of Norwich Cathedral Priory, 1260–1536* (Hatfield, 2012), pp. 161–162.

to the cellarer, likely at a cost of about £2 4s 2d.<sup>310</sup> The thirty quarters sent to the Priory would have been just under 5,780 kg of wheat, enough grain to meet the annual calorie needs of approximately forty-six individuals.<sup>311</sup> Even after Billingham and Belasis were put to farm during the later fourteenth century, Bewley continued sending large quantities of grain to Durham. Such sums could be modest, but most of the wheat and barley from the often substantial harvests was sent to Durham, its transfer noted by tally sticks to be inspected at the annual harvest.<sup>312</sup> Nearly twenty-one quarters of wheat and about the same of barley were sent to Durham in 1376/7, while in 1378/9 approximately fifty-four quarters of wheat and thirteen quarters of barley was carted from Bewley to Durham. Such shipment of grain would meet the grain needs of the Priory and its dependents who received part of their wages in grain or food or could be sold if cash were preferred.

It is difficult, however, to determine the degree to which market forces influenced cropping patterns and the use of yield raising techniques at the Teesmouth manors both before and after the Black Death. Too few yields can be calculated due to damage to the extant accounts and the relative paucity of consecutive accounts. This causes additional difficulties, as, along with varying ratios in what yields can be calculated and a changing amount of seed sown, it is not possible to calculate average yields in the manner done by Campbell as mentioned earlier in this chapter.<sup>313</sup> Such difficulties with measuring the impact of market forces on the Teesmouth Manors continues when the accounts resume after the 1370s. As only Bewley was kept in hand during the period, the pool of possible data points is smaller, making

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310. Based on the figures provided by Campbell, *English Seigniorial Agriculture*, p. 215 using the FTC cartage costs circa 1300; no local figures are available.

311. Using the figures from English Seigniorial Agriculture, and the estimate that one pound of wheat gives some 1,520 kCal, that one bushel of wheat weighs fifty-three pounds, and that an individual needs roughly 1,500 kCal per day. *Ibid.*, p. 215.

312. See *Chapter II: Sources & Methods* for further detail on methods of accounting at the manors.

313. *Ibid.*, p. 317.

such estimations as used by Campbell even less representative here. The difficulty with gauging the impact of market forces does not make the role of the Teesmouth Manors any less certain. The extant manorial accounts make very clear that these manors, despite their distance from Durham, supplied the Priory with substantial amounts of wheat and oats throughout the long fourteenth century. Even after the Black Death, Bewley continued to send large amounts of grain to the brethren, acting in a manner not dissimilar to the Home Farms and insulating the Priory from the effects of potential economic, political, or epidemiological upsets.

### III.ii.d. Billingham & Belasis

As so few accounts for Belasis are extant or legible, no yields can be calculated, and no auditor's yields survive. For Billingham, however, six accounts allow for the examination of calculated yields; as the final account is in 1337/8, there are no auditor's yields. 1328/9 seems to represent a disastrous wheat harvest, with a yield of just 0.47. The barley and oats harvest were exceptional and decidedly average (8.10 and 2.15, respectively). The poor wheat crop may be a result of a particularly difficult winter, while the spring-sown barley and oats may have benefited from more clement weather, for there is no evidence of Scottish raids in 1328/9. The wheat harvest improved in 1330/1 when it gave a four-fold return on seed, though still less than the national levels for the first half of the fourteenth century (national mean yield per seed = 4.18).<sup>314</sup> Barley yields had fallen and in 1329/30 and 1330/1 yields were 5.81 and 3.74, with the latter representing a fall just below the national mean of 3.88 for that period.<sup>315</sup> The wheat harvest was poor in 1334/5 when there was less than a twofold return on seed, though the barley harvest rose to 5.48, again suggesting poor weather during the winter. In 1337/8, the wheat harvest essentially broke even with the amount sown when the yield was merely one. In

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314. Campbell, 'Grain yields on English demesnes', p. 132.

315. Ibid., p. 133.

that year, the barley yield was again exceptional at 10.47, while the oats yield rose to 2.32 from 1.89 and 1.37 in 1330/1 and 1334/5.

### III.ii.e. Bewley

A lack of numerous consecutive accounts from which to calculate yields or extant auditor's yields means that there can be no real discussion about grain yields prior to the Black Death. Only for 1337/8 could I calculate the yield per seed of any of the grain harvests. In that year, the wheat harvest was particularly successful with a yield per seed of 5.99, higher than the mean national yield per seed (mean yield per seed = 4.18), the mean Norfolk yield per seed, a particularly fertile region (mean yield per seed = 4.6), and about 74 per cent of the demesnes sampled by Campbell between 1300 and 1349.<sup>316</sup> Barley yields cannot be calculated, though the yield per seed of oats was 3.04. This was high for the period, when the national mean yield per seed came to just 2.63 and less than a third of demesnes had oats yields with a threefold return or greater.<sup>317</sup> Following the Black Death, both the auditor's yields and those I calculated from consecutive accounts were varied, though a few harvests were poor. The wheat yields recorded by the manorial auditors ranged between 3.26, lower than the mean national yield (mean yield per seed = 4.09) for the period from 1350-1399 to 6.49, though the mean auditor's wheat yield per seed at Bewley (mean yield per seed = 4.48) was much closer to national trends.<sup>318</sup> 1376/7 was a very fruitful year for the wheat harvest, and auditor's yields were high across all three crops with wheat yields equalling 6.49. As at other manors, the calculated yields were slightly higher than the auditor's yields, and the mean calculated wheat yield per seed was 4.77. Barley was a particularly successful crop at Bewley from 1370/1 to 1407/8. The auditors

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316. Campbell, *English Seigniorial Agriculture*, p. 319, Campbell, 'Grain yields on English demesnes', p. 132.

317. Ibid., p. 133.

318. Ibid., p. 132.

did not record a yield below 5.33 and auditor's yields averaged 6.91, significantly higher than the mean auditor's yield for barley on FTC demesnes (mean yield per seed = 4.2) from 1375 to 1400.<sup>319</sup> This is surprising, given the often commercialised nature of many of the demesnes in the FTC counties.<sup>320</sup> The manorial managers must have concentrated labour inputs into these crops. The calculated yields for barley were similarly high, with a mean yield of 7.28. The harvest of 1372/3 showed a barley calculated yield of 11, while only 0.3 per cent of English demesnes sampled by Campbell for the period 1300-1399 exceeded a yield per seed of 9.<sup>321</sup> The auditor's oats yields at Bewley ranged from 2.07 to 5.44, averaging 3.40, surpassing the mean national yield (mean yield per seed = 2.98).<sup>322</sup> Calculated yields were similarly variable. The oats yield in 1375/6 was low, just 1.82, while after the turn of the fifteenth century saw calculated yields as high as 6.83, as they were in 1406/7.

Figure III.9: Yields at Bewley, c. 1370 to c. 1410



319. Campbell, *English Seigniorial Agriculture*, p. 318.

320. See Richard Britnell, *The Commercialisation of English Society, 1000-1500* (Manchester, 1996) for further discussion on the topic.

321. Campbell, 'Grain yields on English demesnes', p. 133. The format in which Campbell presents his data here precludes the determination of how many manors reached such high yields as Bewley.

322. Ibid., p. 133.

### III.iii. Group IV: The Tyne and Wear Manors

Situated in the east of the county between the Rivers Tyne and Wear, these three manors were Fulwell, Wardley, and Westoe. For these three, only one manor, Fulwell, has insufficient information to judge the scale and purpose of arable farming before the Black Death, while enough accounts survive to posit a purpose for the manors of Wardley and Westoe in the early fourteenth century.<sup>323</sup> Neither manor during this period sustained itself through dealings with the grain market, nor does it appear that the bursar or the manorial serjeants ever sought such a state. Rather, at Wardley in particular, funds were provided directly by the bursar to finance manorial operations. In 1299/1300, Adam de Newton, serjeant at Wardley, received £4 from the then bursar, Thomas of Haswell, while in 1302/3, the serjeant received £9 from the bursar for manorial operations that year, and £7 6s by tally in 1303/4 to meet the expenses of the manor.<sup>324</sup> Westoe similarly received funds from the bursar: in 1304, Adam de Newton,<sup>325</sup> serjeant at that manor, received 10s from the bursar, which was just over a third of his total receipts for the two months covered by that account. The Westoe account covering from about the fourth of October 1304 to the third of October 1305, though damaged, shows that the manor's receipts were £6 15s 4d<sup>326</sup>, and, as Britnell estimated that Westoe had nearly 230 acres under cultivation in 1304/5, while Wardley was only farming about 160 acres in that year, it seems highly probable that Westoe received similar sums from the bursar.<sup>327</sup> This direct

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323. Of the four extant accounts, the account for 1343/4 is almost entirely illegible, while the accounts covering the periods from the Feast of the Assumption of Mary (14 August) 1336 to Michaelmas (29 September) 1336, from Michaelmas 1336 to Michaelmas 1337, and from Michaelmas 1337 to Michaelmas 1338 do not provide enough information or a suitably large sample to make conclusive or even semi-conclusive statements about arable farming on the manor the period before the Black Death. One account, DCD-Fulw. acs. [1340-1 or 1342], is omitted here because of the uncertainty surrounding the date.

324. In 1302/3 Adam de Newton's expenditures exceeded his receipts (which was comprised of the £9 from the bursar) by 23.5d. He managed to avoid going into arrears in 1303/4, in which the manorial account shows a surplus of 1s 1/2d.

325. It is possible that Adam de Newton was serjeant at both Wardley and Westoe in 1303 and 1304.

326. As this account is badly damaged, the source of the bulk of this sum (108s 4d) is of indeterminable origin.

327. Britnell, *Manorial Accounts*, p. xlvi.

funding of Westoe and Wardley by the Priory was not without benefits: throughout the early fourteenth century these manors sent significant amounts of grain to the Priory. Over three agricultural years (1299/1300, 1302/3, 1303/4), the serjeant at Wardley, Adam de Newton, sent roughly one hundred and thirty-five quarters of wheat and one hundred and sixty-five quarters of malted barley to the Priory. The practice of sending large quantities of grain to Durham from Wardley and Westoe continued throughout the early fourteenth century. Westoe sent nearly forty-four quarters of wheat to the Priory in 1309/10; Wardley sent approximately twenty-eight quarters of wheat in 1325/6 and about half of that quantity in 1329/30, along with malted barley in 1309/10, 1330/1, and 1331/2. Though it is clear that these two manors contributed much to the Priory's granaries and, possibly by extension, its coffers, too little data survives to calculate enough yields and similar metrics which would be analysed alongside relative and absolute grain prices and used to form conclusions.

Table III.9: Harvest Statistics Before (c. 1300-c. 1348) and After the Black Death (c. 1370-c. 1420) at the Tyne & Wear Manors

<b>Fulwell</b>	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<b>Avg. Before Black Death</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Avg. After Black Death</b>	41.34	50.41	8.25	41.59	46.22	12.19	50.08	41.39	8.53	5.93	6.77	4.49	5.85	6.02	4.94
<b>Wardley</b>	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<b>Avg. Before Black Death</b>	69.07	--	30.93	55.68	--	44.01	--	--	--	4.52	--	2.61	--	--	--
<b>Avg. After Black Death</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Westoe</b>	% Harvest			% Seeded			% Auditor's Seeded			Calc. Yield			Auditor's Yield		
	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats	Whe.	Bar.	Oats
<b>Avg. Before Black Death</b>	60.22	22.43	20.15	47.31	13.15	39.54	--	--	--	5.09	5.09	2.64	--	--	--
<b>Avg. After Black Death</b>	60.08	24.18	15.74	56.79	19.07	24.14	74.30	17.75	7.95	5.17	6.83	5.23	6.37	8.04	6.98

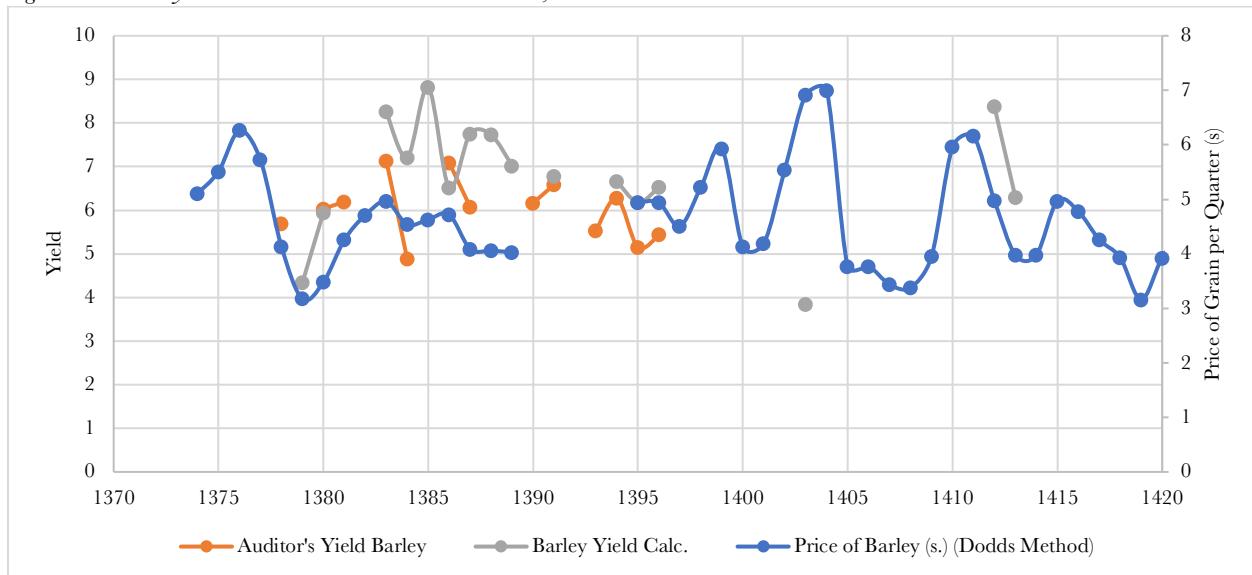
Sources: DCD-Fulw. acs., DCD-Ward. acs., DCD-West. acs.

Table III.10: Selected Grain Sales at Westoe

Year <sup>328</sup>	Sergeant	Receipts from Sale of Grain
1370/1	Richard de Hartlawe	£21 10s 6d
1371/2	Richard de Hartlawe	£26 17s 10.5d
1372/3	Richard de Hartlawe	£20 10s
1373/4	Richard de Hartlawe	£18 15s 4d
1375/6	Richard de Hartlawe	£17 8d
1394/5	John Watson	£15 5s 6d
1396/7	John Watson	£11 2s 6d
1397/8	John Watson	£9 3s 8d
1398/9	John de Neuton	£9 3s 6d
1399/1400	John de Neuton	£11 12s
1401/2	John de Neuton	£15 13s 4d
1402/3	John de Neuton	£20 9s 7.5d
1407/8	John de Newton	£15 15s 8d

Sources: DCD-West. acs.

Figure III.10: Barley Yields at Fulwell & Nominal Grain Prices, c. 1370 to c. 1420

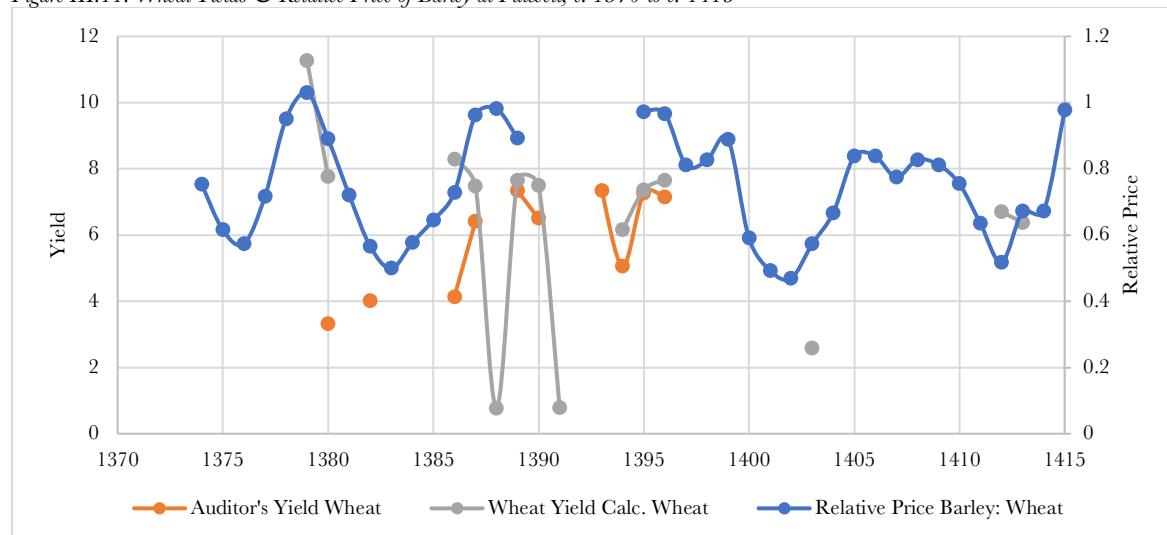


Following the Black Death, the Tyne and Wear manors became much more commercially focused. Under a succession of five serjeants, from 1370/1 to 1407/8, Westoe generated significant sums from the sale of grain, ranging from £9 3s 6d to £26 17s 10.5d. Fulwell and Wardley also both sold large quantities of grain and in 1380/1 Wardley received

328. Each account beginning and ending at Michaelmas.

£4 10s 10d from the sale of grain, contributing to the £2 10s 9.5d surplus in that year. Though manorial managers and their monastic superiors seem to have been mindful of nominal grain prices, as can be seen in the farming of wheat at Fulwell in the late fourteenth century, especially during the 1380s, they seemed particularly concerned with the relationship between the relative cost of grain and the amount of labour that they were willing to dedicate to that crop (Figure III.11). As the price of barley relative to wheat increased, so too did both the auditor's and calculated yields. The evidence available suggests that wheat was farmed with a close eye to the relative price of barley at Westoe in the 1370s and again in the late 1390s and early 1400s. That the serjeants seem to have been most concerned with the relative costs of wheat and barley is unsurprising, as these crops fetched the highest prices and would have been a sizeable portion of the manor's income from the sale of grain. At Fulwell, there is clear evidence the relative prices of wheat and barley influenced the yield-raising techniques used on these crops, particularly in the farming of wheat in the late 1370s to c.1386 and in the farming of barley from c.1370 to 1390, as can be seen in Figure III.11. This mirrors the approach at the Home Farms where the hardiness of barley and the prestige and price commanded by wheat were carefully considered by the serjeants and monastic officials.

Figure III.11: Wheat Yields & Relative Price of Barley at Fulwell, c. 1370 to c. 1415



As discussed above in *Section I.i.: Group I: The Home Farms: Houghall, Pittington, & Bearpark*, the analysis in this chapter cannot rely on sown acreage to gauge the convent and official's market orientation due to the paucity of recorded sown acreage or seeding rates and the high variation among the seeding rates that the compilers of the accounts saw reason to include. Estimations of sown acreage are used here to give a rough idea of the size of the different manors and the long-term changes in cropping patterns that occurred. We must instead focus on yields and the impact yield-raising techniques may have had on the productivity of the main crops. Though details are somewhat scant in the extant accounts, there is little doubt that the serjeants made use of labour intensive techniques that were a vital component of raising yields. We may not know to what crops the often repaired and replaced manure forks carried manure or on what crops manure was spread, as at Pittington in 1338/9, but their use and the practice are indisputable.<sup>329</sup> Similarly, various legumes were grown on many demesnes, as at Westoe in 1395/6 in which some thirty five quarters of peas were harvested, presumably for fodder for draught animals and, more importantly here, for their nitrogen-fixing properties.<sup>330</sup>

The proximity of the Tyne and Wear manors to the commercial hub of Newcastle meant that the serjeants at Fulwell, Westoe, and Wardley would have had ample opportunity to find buyers for their grain either at the gate or *in foro*, while providing a valuable source of income for the Priory, even if the returns were at times unpredictable. The close eye to relative price of the major grains would have allowed the serjeants of these manors to receive the best and safest return relative to labour expenditure. The distance of the Tyne and Wear manors from Durham and the associated transportation fees made a commercial orientation for these

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329. Halcrow, *Administration & Agrarian Policy*, pp. 64-65.

330. DCD West. acs. 1395-96.

manors the most logical action for the bursar if he wished to continue directly managing them; the cost of carting large amounts of grain to Durham would have been prohibitive. Unlike the Peculiar Manors, particularly Ketton, the Tyne and Wear manors were close to Newcastle, the second city of the North and ‘decidedly more than a mere market town’, given its importance in the coal and wool trades, where such agricultural produce would likely have found a ready buyer.<sup>331</sup>

### III.iii.a. Westoe

Following the catastrophe caused by the Great Famine and the largely concurrent livestock pestilences, wheat yields at Westoe from 1328/9 to 1331/2 remained high. The wheat yield per seed in 1328/9, 1329/30, and 1330/1 was consistent and the manor saw a fivefold return for wheat in these years. This was well above the national mean for 1300-1349 (mean yield per seed = 4.18), though in 1331/2, the yield per seed fell to a lower, but still successful, return of 3.46, higher than the mean Westminster yield (mean yield per seed = 3.23).<sup>332</sup> 1337/8 is the last year prior to the Black Death for which we have wheat yield data; this was a particularly successful harvest in which the yield per seed was 6.65. Auditor’s yields begin to appear in 1372/3, though only in a limited fashion. According to the auditor’s yields, 1372/3 and 1373/4 were both hugely successful years for the wheat harvest and the yield per seed was 8.52 in 1372/3 and 8.71 in 1373/4. 1374/5 and 1375/6 both saw mediocre harvests in which auditors reported yields of 3.92 and 3.87. The next recorded auditor’s yield in 1394/5 suggests a growing level of success, with a return on wheat of approximately six and a fifth. By 1407/8, the auditor recorded a wheat yield of 5.74, well above the national mean wheat yield per seed

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331. A.J. Pollard, *North-Eastern England During the Wars of the Roses: Lay Society, War, and Politics, 1450-1500* (Oxford, 1990), pp 38, 41, Campbell, ‘North-South’, p. 159.

332. Campbell, ‘Grain yields on English demesnes’, p. 132.

for 1400-1449 (mean yield per seed = 4.11).<sup>333</sup> The calculated wheat yields per seed are largely similar to those recorded by the auditors; there does not seem to be the same degree of inflation as seen on manors such as Pittington, among others. The wheat harvest of 1371/2 had a 6.65 return; the auditors recorded a sixfold return to seed sown. 1372/3 showed a substantial increase to a yield of 8.59 and the calculated wheat yields from the next harvests are very close to the auditor's yields. Westoe saw a decrease in wheat yields from 1395/6 to 1402/3; 1395/6 and 1397/8 both had yields of about five, which quickly decreased to 3.66 in 1401/2 and 1.37 in 1402/3.

As barley yields were consistently high at Westoe, it seems likely that many yield-raising techniques and, by extension, labour inputs were used for this crop. From 1328/9 to 1331/2, the calculated yield per seed was between 4.86 and 5.32. In comparison, only 15.4 per cent of the Norfolk manors sampled by Campbell for 1250-1349 and 41.2 per cent of English manors between 1300 and 1349 had yields of four or above.<sup>334</sup> Following the Black Death, barley yields were nearly universally high at Westoe; only in 1394/5 (yield per seed = 4.32) and 1395/6 (yield per seed = 4.27) were the auditor's yields below a six-fold return. In 1370/1 and 1372/3, the auditor's yield per seed was 11.30 and 11.58, respectively, while the calculated barley yield was 11.56 in 1371/2 and 12.21 in 1372/3. This is well above the national mean for 1350-1399 (mean yield per seed = 3.99) and only 0.3 per cent of manors sampled by Campbell, or about nine manors out of 2,897, had a barley yield above nine during this period.<sup>335</sup> Indeed, the early 1370s seem to be a particularly fruitful few years for the bursar's manors. Barley yields in 1373/4 remained high, with both the auditor's and calculated yields both showing a yield of

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333. Campbell, 'Grain yields on English demesnes', p. 132.

334. Campbell, *English Seigniorial Agriculture*, p. 319, Campbell, 'Grain yields on English demesnes', p. 133.

335. *Ibid.*, p. 133.

about 7.5. The auditor's yields declined with the 1394/5 harvest (yield per seed = 4.32), a trend continued in 1395/6, in which the yield per seed was 4.27. The calculated yields show a slightly different trend and between 1394/5 and 1399/1400, yields stayed at about 4.35. The harvest of 1402/3 showed a calculated yield of 4.36, noticeably lower than previous years, while in 1407/8 the auditors noted an even smaller return on barley with a yield of 3.4.

Figure III.12: Wheat Yields at Westoe, c. 1320 to c. 1420

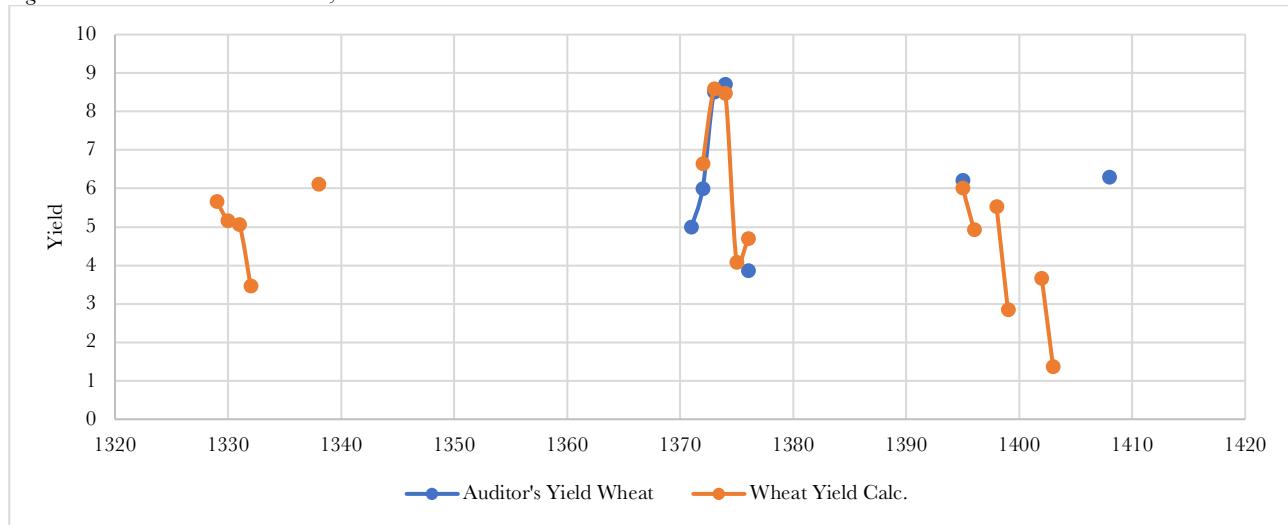
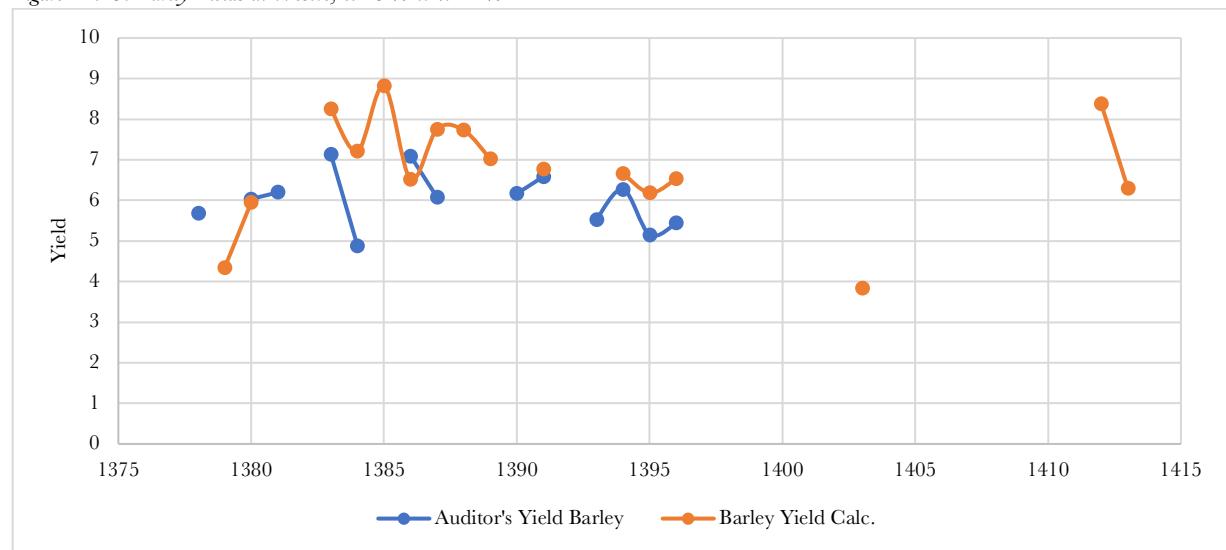


Figure III.13: Barley Yields at Westoe, c. 1320 to c. 1420



In 1328/9, 1329/30, 1330/1, and 1331/2, the oats harvests at Westoe saw returns largely similar to southern counties with a mean yield per seed of 2.12, while 69 per cent of the manors sampled by Campbell had an oats yield per seed between 1 and 2.99.<sup>336</sup> In 1337/8, the oats yield had increased to 4.71, well above previous years. Following the Black Death, though the harvest details of other grains were often included auditors' yields, only four such calculations are included or extant in the Westoe accounts. The auditors recorded an extraordinary yield per seed of 10.75 in 1370/1. By 1371/2 the yield had decreased somewhat, and the auditor's yield recorded an 8.39 return on the harvest. However, by 1375/6, the last year in which auditors recorded a yield, the oats yield had dropped to 3.28, though this still surpassed the mean yield per seed for England from 1350 to 1399 (mean yield per seed = 2.98).<sup>337</sup> The calculated yields were varied, but always high, during the final years of the fourteenth century and the beginning of the fifteenth. From 1371/2 to 1374/5 the average oats yield was 6.65, higher than 99 per cent of manors sampled by Campbell from 1300-1399.<sup>338</sup> This trend towards high yield was not seen again at Westoe and from 1375/6 to 1397/8, the oats harvest gave just over a threefold return. In 1398/9 and 1399/1400 yields again increased, with a yield of 5.67 in 1398/9 and 6.14 in 1399/1400. In 1401/2 and 1402/3 yields were lower, falling to 4.36 and 3.27, but still represented a successful harvest.

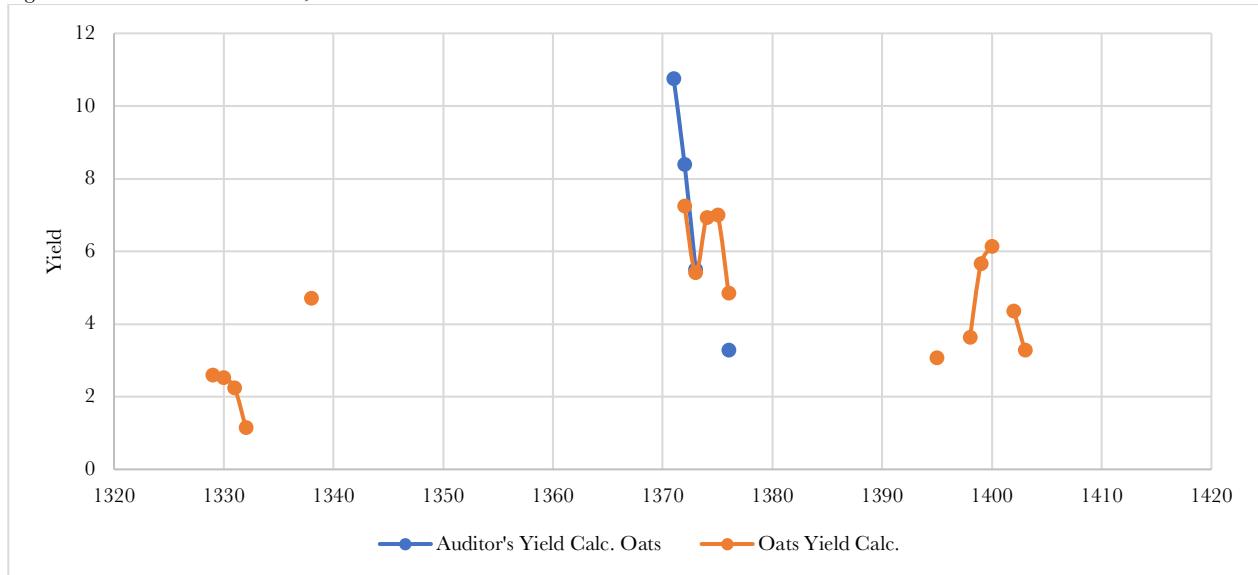
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336. Campbell, 'Grain yields on English demesnes', p. 133. 72 per cent of Norfolk demesnes showed oats yield per seed between 1 and 2.99 from 1250 to 1349, while the mean auditor's yield for oats for the FTC counties from 1288 to 1315 was 2.6. Campbell, *English Seigniorial Agriculture*, p. 318.

337. Campbell, 'Grain yields on English demesnes', p. 133.

338. Ibid., p. 133. As such, Westoe's yields during these four years was equalled or exceeded by only 32 manors.

Figure III.14: Oat Yields at Westoe, c. 1320 to c. 1420



### III.iii.b. Wardley

Relatively few yields can be calculated for Wardley and only for wheat and oats; no auditor's yields are extant. Wheat yields before the Black Death were at times slightly higher than the rest of England from 1300 to 1349, where the mean wheat yield per seed was 4.18 and the fertile fields of Norfolk had a mean wheat yield of 4.6 from 1250 to 1349.<sup>339</sup> In 1329/30 and 1330/1 grain yields were lower than the national average, with a return of 3.89 in 1329/30 and 3.21 in 1330/1. The harvests improved in 1333/4 and 1334/5 with returns of 5.14 and 5.83. After the Black Death, only in 1379/80 can a wheat yield per seed be calculated and the manor saw a yield of 2.72, substantially lower than the national mean for this period (mean yield per seed = 4.09).<sup>340</sup> Oats yields in the early fourteenth were varied, but often below the average rate of return for oats harvests at a national level from 1300 to 1349 (national mean yield per seed = 2.98).<sup>341</sup> 1330/1 and 1333/4 both had harvests that exceeded the national

339. Campbell, 'Grain yields on English demesnes', p. 132; Campbell, *English Seigniorial Agriculture*, p. 318.

340. Campbell, 'Grain yields on English demesnes', p. 132.

341. *Ibid.*, p. 133.

average, with yields of 2.75 and 3.66, while 1329/30 and 1334/5 had yields of 2.5 and 1.54.

In 1379/80 and 1380/1, the only extant accounts following the Black Death, the oats yields were 2.17 and 2.44, representing relatively successful harvests, but still below the national average for 1350 to 1399 (national mean yield per seed = 2.98).<sup>342</sup>

### III.iii.c. Fulwell

No grain yields can be calculated for harvests at Fulwell prior to 1378/9 and no auditor's yields are extant before 1377/8. However, the subsequent excellent run of manorial accounts means that we can observe manorial operations at Fulwell in greater depth. Indeed, grain yields at Fulwell during the late fourteenth century and early fifteenth were, with very few exceptions, universally high (Figures III.15-17). The auditor's wheat yields for 1379/80 and 1381/2 are the lowest recorded at Fulwell during the late fourteenth and early fifteenth century and show a return of 3.32 and 4.01, respectively. These yields are lower than the national average (national mean yield per seed = 4.18) and reflect similar levels of productivity as Westminster for the period from 1350 to 1399 (Westminster mean yield per seed = 3.36).<sup>343</sup> Subsequent auditor's yields from 1386/7 to 1395/6 give evidence of extremely successful harvests with an average wheat yield per seed of 6.40. Given the lower yields seen at other manors during this period, it is most likely the serjeant, John de Monkton, kept labour inputs high with an eye to the grain market and the needs of the Priory.<sup>344</sup> The calculated yields, like on some of the bursar's manors, are often higher than the yields given by the auditors, though the difference is not as striking as it is in other manors. In 1378/9 and 1379/80, the wheat yield was high, and the harvest gave over a tenfold return in 1378/9 and nearly an eight fold return in

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342. Campbell, 'Grain yields on English demesnes', p. 133.

343. Ibid., p. 132.

344. John de Monkton's career is discussed in further detail in *Chapter V: The Serjeants of Durham Cathedral Priory*.

1379/80. Yields fell in the next extant account and in 1382/3 the wheat yield is still very high at 6.75. From 1385/6 to 1395/6 the calculated yields reflect the successes recorded by the auditors. The mean wheat yield was 7.44, higher than 98.7 per cent of the 3,460 manors sampled by Campbell for the period from 1350 to 1399.<sup>345</sup> The harvest of 1402/3 saw a steep decline from previous norms with a yield per seed of just 2.57. By 1411/2 the harvest had reached its previous level and 1411/2 and 1412/3 saw yields of 6.71 and 6.38.

The auditor's barley yields were, like the wheat yields, consistently high. From 1377/8 to 1395/6 the average barley yield calculated by the auditors was 6.02, well above both the mean national and Westminster barley yield from 1350 to 1399 (national mean yield per seed = 3.99; Westminster mean yield per seed = 4.52).<sup>346</sup> Only in the 1390s did auditors note a clear decline in the barley yield, but the harvests of 1392/3, 1393/4, 1394/5, and 1395/6 still represent very successful harvests with yields of approximately 5.60 in these three years. As usual, the yields calculated for this study are slightly higher than those written by the auditors at harvest; the average calculated barley yield from 1377/8 to 1395/6 was 6.90, dropping to 6.77 with the inclusion of the three fourteenth century harvests for which there is sufficient data to calculate yield per seed. The harvests of 1378/9 and 1379/80 had yields less than subsequent years, even if still representing very fruitful harvests, likely reflecting the difficulties towards the barley crop evidenced by the low auditor's yields for 1377/8, 1379/80, and 1380/1 which then improved. From 1382/3 to 1395/6, the calculated yields were high, even by the standards set by other Durham manors, and the lowest yield for this ten-year period was 6.18, higher than

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345. Campbell, 'Grain yields on English demesnes', p. 132.

346. Ibid., p. 133. In 1383/4, the barley yield recorded in the margin of the account appeared to read '*respondebat minus jtoj bussellis*'. This is either a scribal error or due to the poor condition of the parchment (a missing 'v' would be appropriate, for a yield of six), as the account records a harvest of some 418 bushels of barley, well within the mean harvest size for the late fourteenth century at Fulwell (mean harvest = 360.02 bushels of barley).

96.7 per cent of the English manors sampled by Campbell for the period 1350 to 1399.<sup>347</sup> The calculated yield dipped in 1402/3 to 3.84, lower than previous harvests, but still evidencing a successful harvest, then rose to 8.38 in 1411/2 before falling again to 6.30 in 1412/3. This upswing in agricultural productivity may have been a last attempt to make the direct administration of the manor by the Priory feasible, and wheat yields similarly rose during these years, but such a conclusion cannot be firmly made with the evidence that is available.

In contrast to the relative stability shown in the wheat and barley harvests, the oats yields at Fulwell showed a much greater degree of variation (Figure III.17). The auditor's yields from 1383/4 to 1395/6 varied from 10.67 to 2.08, averaging 4.94. The calculated yields showed the same variation from 1378/9 to 1402/3, ranging from a low of 1.50 in 1388/9 to a high of 6.89 in 1383/4 and averaged a return of 4.50. These figures are undoubtedly higher than the average national yield (national mean yield per seed = 2.98) for the period of 1350 to 1399, but the lack of a clear trend in oats yields over time suggests that the crop may have been farmed with relatively little attention and labour inputs.<sup>348</sup> Given the low price fetched by oats and their reputation for hardiness, this is entirely possible.

Figure III.15: Wheat Yields at Fulwell, c. 1375 to c. 1415



347. Campbell, 'English grain yields', p. 133.

348. Ibid., p. 133.

Figure III.16: Barley Yields at Fulwell, c. 1375 to c. 1415

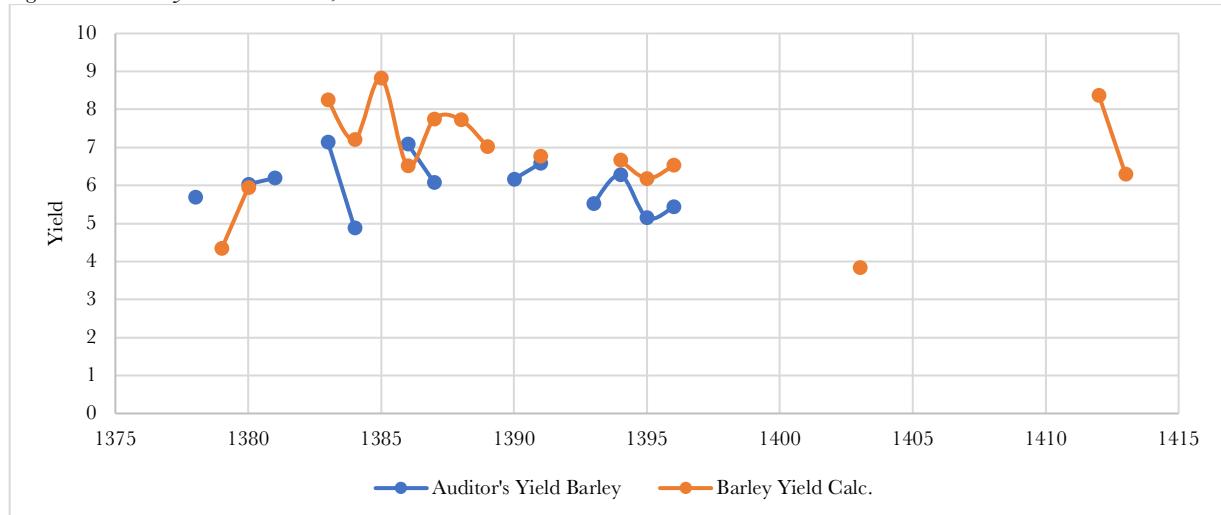
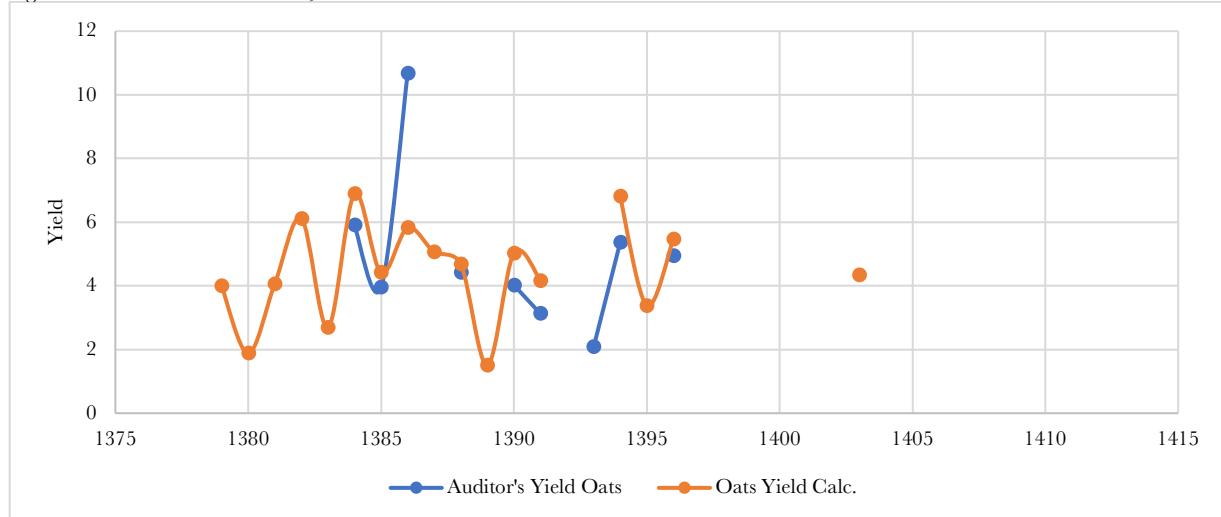


Figure III.17: Oat Yields at Fulwell, c. 1375 to c. 1415



#### IV. The High Yields of Durham Cathedral Priory

The yields seen on the Durham Cathedral Priory bursar's manors were undoubtedly respectable, as J. A. Tuck noted, but our appreciation for the productivity of these manors must not stop there.<sup>349</sup> Rather, in many years, grain yields were nothing short of astonishing, with

349. Tuck, 'Northern borders', p. 179.

Durham manors outperforming many of the manors surveyed by Bruce Campbell. Houghall, Ketton, and Pittington in the late fourteenth century and early fifteenth century saw wheat yields similar to the long-run averages (1313-1429) observed by Stone at Wisbech Barton in Cambridgeshire: Ketton had a lower average wheat yield (3.66) than that calculated by Stone (4.5) while Pittington surpassed that average with a mean wheat yield per seed ratio of 5.7.<sup>350</sup> Of the manors surveyed by David Farmer in his 1977 study of grain yields on Winchester manors in the Late Middle Ages, only Ecchinswell had an average higher wheat yield (4.35 for 1349-1380, 5.93 for 1381-1410) than Pittington; even the most successful of these Winchester manors, by Farmer's criteria, Cheriton, had an average wheat yield of 5.18 for 1349-1380 and 4.37 for 1381-1410.<sup>351</sup> The average calculated barley yields for Fulwell and Westoe in the post-Black Death era (6.77 and 6.83, respectively) both comfortably surpassed the average post-1350 barley yield in both northeast and southeast Norfolk (3.50, 2.67, respectively).<sup>352</sup>

Yet the methods used to achieve such levels of productivity are somewhat obscure. It must also be noted that the Durham demesnes sat on uncommonly rich land, either on the East Durham Limestone Plateau, or the Tees and Wear lowlands. Indeed, the soil found on most, though not all, of the bursar's demesnes, which was characterised by its permeability, slight acidity, and clay and loam composition, was similar to what could be found in central Norfolk and much of the FTC counties and highlights the particular circumstances of agriculture on the bursar's demesne.<sup>353</sup> Given the similar geographical circumstances of the manors, we have an opportunity to see the effect of policy and managerial efficacy on these manors, which is further explored in the subsequent chapters. Of all the bursar's manors, only Bearpark was

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350. Stone, *Decision-Making*, p. 38

351. Farmer, 'Grain yields on the Winchester manors in the Later Middle Ages', pp. 556, 559.

352. Campbell, 'Arable productivity', p. 395.

353. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

situated on fundamentally poor soil, which may well have led to its service as the Prior's retreat and the site of the monastic *ludi*; notoriously hardy oats predominated at the manor and served to feed the Prior's horses and the livestock consumed on the manor.<sup>354</sup> The rich soil of these manors is in stark contrast to much of the rest of northern England above the Humber where less fertile soil typically dominated. We must also consider the bursar's holdings within a highland and lowland divide; these manors were, importantly, not near the Pennines or the Durham Dales and likely had few traits in common with the decidedly more pastoral-prone areas of northern England. The consideration of the bursar's manors within such a divide must further strengthen the notion that the Durham manors were farmed in similar conditions to many of the southern estates. Nevertheless, even if the bursar's manors were situated within a sort of coastal microclimate, they were still subjected to some features of their northern location, particularly fewer daylight hours. We may very well be seeing a unique situation: a discernibly northern monastic house, with decidedly northern problems – the endemic warfare with the Scots being the most notable example – yet with many geographical conditions distinctly similar to the great estates of southern England.

In this chapter I discussed possible yield-raising techniques as well as external factors that could positively or negatively influence arable productivity. These factors included intensive farming methods such as increased weeding and manuring over relatively small plots of land, changing climatic conditions, and warfare. The bursars and serjeants certainly engaged in yield-raising techniques. The planting of legumes such as peas and beans was a common, if not quite ubiquitous, facet of arable agriculture on the bursar's demesnes and would have acted as a low-risk way to raise yields to achieve the desired level of productivity through nitrogen

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354. Farewell, et al., 'The Soils Guide', 'Soilscapes', National Soil Resources Institute.

fixing. Such cultivation could be on a relatively large scale, as at Ketton in 1333/4 in which thirty-four quarters, six bushels, and three pecks of beans and peas were harvested or at Ketton in 1398/9 in which forty-nine quarters and two bushels of peas were grown.<sup>355</sup> Elsewhere, the growing of legumes was much more limited, but still likely played a role in keeping the soil fertile; at Bewley in 1371/2, roughly eleven and a half quarters of peas were harvested, while at Houghall in 1380/1 one quarter of white peas and just under two quarters of black peas were grown.<sup>356</sup> Pittington in 1408/9 came closest to striking a middle ground between these two extremes and three quarters, one bushel, and one peck of white peas and eight quarters of black peas were grown in that year.<sup>357</sup> Labourers were hired on demesnes for tasks such as hoeing and weeding, with the total wages for these tasks coming to several shillings, but it is unclear on which crops such labour was focused. At Billingham in 1328/9, the serjeant paid some twenty-nine shillings for weeding and hoeing, while at Westoe in 1329/30, the account notes that women were paid for the same task, albeit for a total of two shillings and eight pence.<sup>358</sup> The amount paid for these tasks on average were higher during the end of the fourteenth century and the beginning of the fifteenth, for seventeen shillings and eleven pence were paid for weeding and mowing at Wardley in 1378/9 and ten shillings and one pence at Ketton in 1409/10 for the same task, but this may merely reflect the trend towards rising wages during this period.<sup>359</sup> Similarly, though details are scant, Halcrow notes the regular practices of manuring fields on the bursar's demesnes, drawing this conclusion from the 'constant

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355. DCD-Kett. acts. 1333-34, 1398-99.

356. DCD-Bewl. acs. 1371-72, DCD-Hough. acs. 1380-81.

357. DCD-Pitt. acs. 1408-09.

358. DCD-Bill. acs. 1328-29, DCD-West. acs. 1329-30. The possibility of individuals such as these women being related to members of the *famuli* is explored in Claridge and Langdon, 'Composition of *famuli* labour', see pp. 217-218.

359. DCD-Ward. acs. 1378-79, DCD-Ket. acs 1409-10. See Farmer, 'Prices and wages', pp. 431-525 regarding rising costs and wages in the Late Middle Ages.

reference to the purchase or repair of dung forks' in the manorial accounts.<sup>360</sup> From the late fourteenth century onwards, the high yields that characterised the bursar's demesnes can be attributed not only to the nitrogen-fixing properties of legume cultivation and labour-intensive activities such as weeding and hoeing, but also to the number of acres to which such yield-raising techniques were applied. While costly and labour-intensive, these methods formed the backbone of the convent's preservationist approach.<sup>361</sup> In the 1372 snapshot of sown acreage, Houghall only had about eighty-one acres under plough, well below the national mean for 1350-1449 of 155.8 acres and the mean acreage under plough for the FTC counties for 1375-1400 (178.4) given by Campbell.<sup>362</sup>

Elsewhere in this thesis I have detailed exogenous forces that could harm the productivity of arable agriculture, including Scottish raids, warfare between England and Scotland, changing climatic patterns, and changing demographic patterns caused by reoccurring outbreaks of plague. To this list must also be added more mundane, but no less impactful occurrences that were common to medieval agriculture regardless of geographic location, such as the eating of seed by birds or trampling of crops by stray animals, the latter of which is often found in medieval court books, surveys, and similar sources.<sup>363</sup> Yet the impact of these any of these forces, regardless of their ubiquity to medieval agriculture or typical of northern English agriculture, relative to the yield raising techniques employed by Durham Cathedral Priory and its religious and lay managers remains difficult to gauge. The inclination to imagine farmers battling against constant negative conditions may not be correct, especially if one is more prone to A. R. Bridbury's concept of an 'Indian Summer of demesne farming'

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360. Halcrow, *Administration & Agrarian Policy*, pp. 63-64.

361. The relationship between intensive agriculture and this approach is discussed in the following section.

362. Campbell, *English Seigniorial Agriculture*, p. 69. See Table III.4, *Chapter III: Measures of Agricultural Success*, Section II.ii Sown Acreage.

363. See, for example, Bailey, *The English Manor c. 1200-c.1500*, pp. 64, 194, 202, 203, 208.

than to Stone's argument for constant manorial adjustment to changing conditions following the Black Death.<sup>364</sup> Lacking precise climatic data for northeast England, any conclusions relating to poor weather must remain speculative. Nor can we be certain of the exact impact that warfare or Scottish raids may have had on arable productivity, though we can assume that even if such violence may not have occurred on the demesnes themselves, the threat of such a possibility may well have caused vital work to be delayed. The lack of specific detail on which crops laborious yield-raising techniques were employed means we cannot be certain of the efficacy of such techniques when they were applied. Nevertheless, there is some evidence that increased expenditure on hoeing and weeding contributed to higher yields during the late fourteenth century, notably at Merrington, where increased expenditure seems to correlate to higher yields (Table III.11 & Figure III.18, below). The day wages paid for hoeing and weeding at Merrington indicate, though not perfectly, that increased use of yield-raising techniques led to higher yield. This is particularly notable in 1378/9 where the reduction in wages paid for these tasks coincides with a nearly fifty per cent decrease in wheat and barley yields. Nor were the wages paid at Merrington for this task out of line with the other manors controlled by the bursar: Bewley often paid about 7s for the same work and Ferryhill paid much the same, even before the Black Death.<sup>365</sup> We can then perhaps feel more comfortable in attributing high yields to the efforts of manorial managers than to the benefits of circumstances, much as Stone argued.<sup>366</sup>

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364. Bridbury, 'The Black Death', pp. 577-592, Stone, *Decision-Making*, pp. 19-20, 119-120.

365. DCD-Bewl. acs, DCD-Fery. acs.

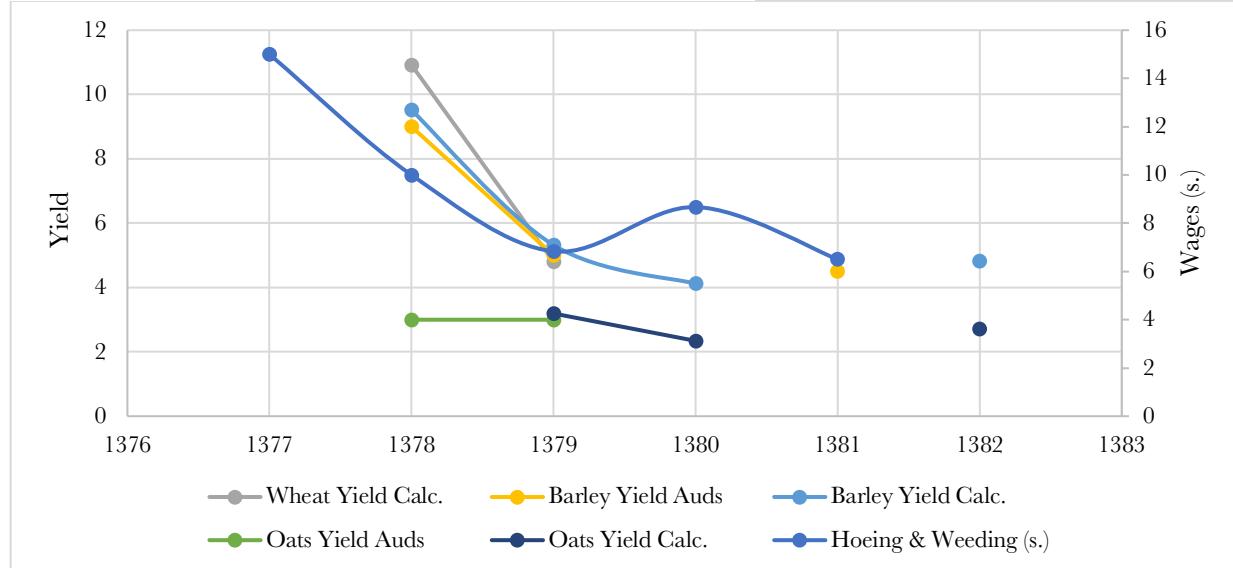
366. Stone, *Decision-Making*, pp. 119.

Table III.11: Hoeing & Weeding Wages and Yields at Merrington, 1377-1381

Year	Hoeing & Weeding (s.)	Wheat Yield Calc.	Auditor's Barley Yield	Barley Yield Calc.	Auditor's Oats Yield	Oats Yield Calc.
1377	15	--	--	--	--	--
1378	10	10.92	9	9.52	3	--
1379	6.83	4.8	5	5.32	3	3.19
1380	8.67	--	--	4.12	--	2.34
1381	6.5	--	4.5	--	--	--

Source: DCD-Merr. acs.1376-77-1380-81

Figure III.18: Hoeing & Weeding Wages and Yields at Merrington, 1377-1381



#### IV.i. Implications of a Northern example

We must move away, then, from Tuck's view that yields on Durham demesnes were merely respectable. Yet such spectacular yields do not at first fit well with the preservationist attitude which this thesis argues the bursar, and Durham Cathedral Priory as a whole, followed. The reasons why the bursar was willing to accept the labour inputs and probable risk are somewhat less clear. The simplest, and in my view most likely, answer stems from the contraction in acres under plough during the long fourteenth century.<sup>367</sup> Faced with rapidly changing economic circumstances and the uncertainty that naturally followed, the Priory

367. The number of acres sown with the three main crops decreased by 44.68 per cent from Britnell's 1304/5 acreage estimates and my estimates for 1372. See Table III.4, *Chapter III: Measures of Agricultural Success*, Section II.ii Sown Acreage.

presumably let the less productive land either lie fallow, converted it to pasturage, or leased it out. As such, even with the rising cost in wages, both throughout England as a whole and the Durham demesnes in particular, large amounts of labour could be concentrated into a relatively small area, lowering the overall cost and risk of yield-raising techniques in relation to the cost of labour.<sup>368</sup> Between the 1304/5 and 1372 snapshots, the Durham Cathedral Priory bursar's demesnes saw a nearly forty-five per cent contraction in sown acreage; this contraction was likely greater between 1304/5 and the final leasing off of demesnes at the end of the long fourteenth century. Yet this reduction in sown acreage was decidedly greater than the reduction in labour inputs during this period and further illustrates the preservationist mindset of the convent. Though this method of agriculture was perhaps not as financially sensible following the Black Death as it had been during the early fourteenth century, the convent was able to keep productivity very high on these demesnes through a continuation in the labour inputs used. In certain cases, the number of the *famuli* remained stable both before and after the Black Death, which undoubtedly allowed greater labour to be focused on these diminished demesnes. Even though the manors of Bewley and Westoe contracted by 84 per cent and 48 per cent (respectively) between the 1304-1305 and 1372 snapshots, there was no great reduction in the number of *famuli*. In 1329/1330, there were five ploughmen and a carter employed at Westoe, an identical figure to 1370/1.<sup>369</sup> At Bewley in 1329/1330, two carters and five ploughmen were hired for the agricultural year, and in 1372/3 four ploughmen and a carter were hired for the year, with an additional ploughman who served during the Pentecost term.<sup>370</sup> As such, at some manors the monks continued to employ roughly the same size staff in the much changed circumstances of post-Black Death England to ensure that production levels remained

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368. See Britnell, *Manorial Accounts*, pp. 171-172 for discussion regarding Durham *famuli* wages.

369. DCD-West. acs. 1329-30, 1370-1.

370. DCD-Bewl. acs. 1329-30, 1372-3.

consistent through higher yields. Such a system precludes the monks seeking to maximise their profits due to the increased costs such a labour force demanded; this system would have been cost-prohibitive when applied to larger holdings. Perhaps, then, we must reconsider at least some of the posited importance that northern estates placed on pastoral agriculture as arable agriculture was still demonstrably highly productive, albeit in a more concentrated fashion.<sup>371</sup>

This system of agricultural management therefore meant that the Priory had a widely dispersed set of farms that practised agriculture characterised by a concentration of labour inputs in which risk from the wider economy was minimised. These dispersed farms were, as previously noted, highly productive, with wheat, barley, and oat yields per seed that rivalled and often surpassed the most productive southern manors on the great ecclesiastical estates. The dispersal of these manors acted much like the open-field system in reducing risk by lowering the possibility that a catastrophe would strike all the manors at once, much like Slavin's suggestion for the manors of Norwich Cathedral Priory.<sup>372</sup> Simultaneously, the intensive agriculture and high yields would allow for substantial harvests to help meet the Priory's needs. Though the grain grown on the demesnes was often used to make up the liveries of the serjeants and *famuli*, this was not the only use of such grain. As noted previously, grain was often sold in substantial amounts as at Ketton, Merrington, and Westoe, the latter of which received £21 10s 6d in 1370/1 and £26 17s 10.5d in 1371/2 from the sale of grain.<sup>373</sup> In the event of a wider collapse in which the Priory could not otherwise source its grain, such sales as these could be stopped and the grain instead rerouted to the Priory itself to meet the need of

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371. Pastoral farming, according to Campbell et al., was highly important in northern England, who note that 'ten of the 28 *extensive arable-husbandry* demesnes are located in Durham and Yorkshire where they comprise just over half of all sampled demesnes'. Campbell, Bartley, and Power, Demesne-farming systems, p. 173.

372. See McCloskey, 'English open fields', pp. 124-170 and Slavin, 'Church and food provisioning', p. 616.

373. See *Chapter III: Measures of Agricultural Success*, Section III.ii Group II: The Peculiar Manors and Section III.iii Group IV: The Tyne and Wear Manors, Table III.10.

the monks. Such a system for the transfer of grain was already in place even in the most far-flung manors in the county. In 1316/7 Bewley and Belasis sent thirty quarters of malt to the convent and in 1316/7 the serjeant of Bewley, John de Edmundbyres sent thirty quarters of wheat to the Priory with an additional 125 quarters earmarked for the cellarer.<sup>374</sup> This transfer of grain implies that the Priory would have had ample storage, for the thirty quarters of wheat sent to the convent itself would have measured about 282 litres or 5,775 kilograms of grain.<sup>375</sup> Similarly, a well-developed transportation system with ample cartage would also have been vital, as the thirty quarters would have likely taken ten well-laden carts to carry it to Durham, over five and half kilometres in a straight line, further suggesting that adequate roads were in place.<sup>376</sup> Such systems would likely have been in place for the other demesnes, and the Tyne and Wear Manors (Fulwell, Wardley, and Westoe) would certainly have benefited from existing trade networks connecting Newcastle and Durham. As such, while the manors could operate independently, secure in their wide dispersal and fulfilling the usual purpose to which the convent and bursar put them, as discussed in further detail above and in *Chapter IV: The Monks & Their Mindsets*, they could, at times of need, be used to buffer the Priory against catastrophe amid the turmoil of the long fourteenth century.

## V. Conclusion

This chapter has sought to demonstrate both the high arable productivity on the bursar's estate in the long fourteenth century and to rectify the commonly held theory that northern England was substantially less productive than the FTC counties, Norfolk, and elsewhere in southern

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374. DCD-Bewl. acs 1316-17, 1336-37.

375. Calculated using standard figures with one quarter of wheat equalling 281.9 litres or 192.5 kilograms. Campbell, *English Seigniorial Agriculture*, pp. xxv, 215, Britnell, *Manorial Accounts*, p. lxviii.

376. Campbell suggests that most medieval carts could carry three quarters of wheat. Campbell, *English Seigniorial Agriculture*, p. 214.

England. Rather, the data presented here has demonstrated that monastic landlords and their lay manorial managers were able to consistently return yields that were equal to or exceeding those found on a national level and in the counties previously believed to have been most productive. It is likely that the high yields on the Durham Cathedral Priory Bursar's manors were not an accident, but due to the intensive farming of a reduced number of cultivated acres, with the most fertile land on each manor being ploughed and the rest being converted to waste; the manors that were farmed out early in the long fourteenth century were presumably ill-suited to such a style of arable agriculture. The management, and thus the productivity, of the bursar's manors depended heavily on the geographical location and manorial grouping of individual manors: the Home Farms, clustered around Durham, lacked the more explicit commercial orientation of the Tyne and Wear Manors, and were instead focused on reducing risk, while the latter group were an important source of income for the Priory. As such, this chapter has also sought to explore and expand on Slavin's idea of a 'diversified (real estate) portfolio' to mitigate the risk caused by the uncertainties of the long fourteenth century; the bursar's manors provided multiple sources of income while also allowing for the transport of grain from relatively local sources. Indeed, that the manors covered much of the county was likely no accident and their scattered nature acted in a manner similar to the open fields used by the local peasant farmers. While one catastrophe may have ruined the crop of a single manor – or a single field held by a peasant – it was unlikely to damage the productivity of all the manors in the bursar's portfolio, or all the fields worked by a peasant.<sup>377</sup>

Though this chapter and this thesis are overwhelmingly focused on estate-management and the economic *mentalités* of monastic landlords and their administrators, this discussion has

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377. For further on the use of open fields as a method of risk mitigation, see McCloskey, 'Persistence of English common fields', pp. 73-120 and McCloskey, 'English open fields', pp.124-170.

further implications for the understanding of peasant agriculture. Given the constraints under which peasant agriculture operated, the importance of a successful harvest for peasant families, and the small size of many peasant holdings, it seems likely that many would have chosen to farm their plots in a similarly intensive manner. In such a case, yields on peasant lands may be significantly higher than expected. Even if peasants were forced to cultivate land inferior to that cultivated in seigniorial agriculture, Postan's assertion, albeit with reference to the thirteenth century, that '[w]e could not expect their output per acre to equal that of a well-managed demesne in the same locality,' seems questionable.<sup>378</sup> Nor does it seem likely that peasants would be willing to depend entirely on a wider market, curtailing or expanding their cultivation in response to good yields or falling prices, respectively, as Postan also suggests.<sup>379</sup> Rather, as Sapoznik argues, peasant land productivity likely exceeded that of demesne agriculture, given the nature of the economic demands on the growers.<sup>380</sup> Similarly, peasants were likely to use this productivity to grow crops, such as barley and wheat, aimed at the market and peasant farmers would have incentive to farm these crops with high returns.<sup>381</sup> Unlike those involved in seigniorial agriculture, peasants did not, as a rule, have vast holdings with which they could mitigate the risk of bad harvest and had to rely on the protection of strip-farming and open fields and intensive cultivation of what land they had available to meet their economic and subsistence needs.<sup>382</sup>

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378. Michael M. Postan, *The Medieval Economy and Society: An Economic History of Britain in the Middle Ages* (London, 1972), p. 125.

379. Ibid., p. 126.

380. Sapoznik, 'Productivity of peasant agriculture', p. 539

381. Mark Bailey, *Medieval Suffolk: An Economic and Social History, 1200-1500* (Woodbridge, 2007), p. 78, pp. 128-32, Stone, *Decision-Making*, p. 270, quoted in Sapoznik, 'Productivity of peasant agriculture', p. 540.

382. McCloskey, 'Persistence of English common fields', pp. 73-120 and McCloskey, 'English open fields', pp. 124-170.

This chapter has explored the arable agricultural operations at the manors of the Durham Cathedral Priory bursar and, in doing so, I have demonstrated that both calculated and auditor's yields were high across these demesnes. I have intended that these findings and the subsequent discussion to inform my analysis of the actions of the bursars and serjeants, which constitutes the following two chapters. By comparing levels of agricultural success under the tenure of different officials, we can discuss their relative abilities and estimate the overall competency of medieval agricultural officials. Furthermore, the data which this chapter presents allows us to consider how the agricultural treatises and intellectual trends of the long fourteenth century impacted the Priory's management of its demesnes, as evidenced by trends in yields and other agricultural metrics.

# Chapter IV: The Monks & Their Mindsets

## I. Introduction

Benedictine monasteries – the houses of the black monks – such as Durham Cathedral Priory were, by definition, cloistered and cut off from the secular sphere: they were in the world, but not of it.<sup>383</sup> Nevertheless, this was hardly the case in practice. Members of the convent were often travelling, whether for business, pilgrimage, or to and from the Priory's dependent cells and colleges. Such travel allowed the monks to engage in the intellectual currents of the day and conduct such affairs as necessary to keep the Priory running. Indeed, such a connection with the world outside of the Priory walls was necessary for the monks to manage their estates with any degree of success. There is certainly no dearth of scholarly writing on the rhythms of monastic life, the cult of saints, and the history of monasticism in England during the Middle Ages; little enough space is given over to these topics in this chapter beyond what is necessary for understanding the circumstances in which Durham Cathedral Priory and its monks found themselves during the long fourteenth century.<sup>384</sup> Similarly, there has been considerable research done on the intellectual life and education within and among monasteries on an ample amount of sources – the writings of Peter Abelard form only a particularly well-known part of

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383. See *John 15:19*, *Vulgate*: ‘*Si de mundo fuissetis, mundus quod suum erat diligenter: quia vero de mundo non estis, sed ego elegi vos de mundo, propterea odit vos mundus.*’ (‘If you belonged to the world, it would love you as its own. As it is, you do not belong to the world, but I have chosen you out of the world. That is why the world hates you. [NIV translation]’).

384. See Dobson, *Durham Priory*, Dobson, *Church and Society*, David Knowles, *The Monastic Order in England: A History of Its Development From the Times of St. Dunstan to the Fourth Lateran Council, 943-1216* (Cambridge, 1940), Knowles, *The Religious Orders in England, Volume I*, Knowles, *The Religious Orders in England: Volume II: The End of the Middle Ages*, David Knowles and R. Neville Hadcock, *Medieval Religious Houses, England and Wales* (London, 1971). This list is not exhaustive but the above provide in-depth understanding of the history of English monasticism and Durham Cathedral Priory.

such sources.<sup>385</sup> Much less has been done on how such factors as intellectual trends and individual origins of the monks and obedientiaries affected their decision-making processes.

As such, this chapter will attempt to build a fuller image of the fifty-two individuals who held the office of bursar and the experiences and intellectual trends that drove them. It will explore the social status of the monks, and by extension, the bursars, the age of the bursars when holding office, and the ability of the bursars as it relates to the management of their estate in a period of intense change. This chapter is focused on the convent's bursars; nevertheless, I must, by the nature of the sources used for this study, investigate them through the lens of the choir monks as a whole. Not every monk would have served a term as bursar, nor would every monk have been qualified, but the monks would have been told of the bursar's activities at the annual chapter meeting where he had to account for his activities: a bursar did not act without oversight and auditing. For such control to have been in any way meaningful, the Priory monks must have been knowledgeable enough to offer advice and to sniff out incompetence or corruption on the rare occasions this occurred. The convent's bursars may have been perhaps slightly more ambitious than their fellow monks, but, given the length of their terms and the office's turnover (discussed in further detail below), it seems unlikely that the bursars and other obedientiaries would have been separated by a wide gulf in ability; what background and ability that may hold true for the bursars, likely held true for the rest of the monks. The monks' social status and places of origin are investigated as these factors will shed light on an individual's probable experience with estate management and age. This may therefore suggest a level of administrative experience in older monks. This chapter also undertakes research into the length

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385. In addition to the texts mentioned in Footnote 380, also covering monastic education, see Barbara Harvey, *Living and Dying in England, 1100-1540: The Monastic Experience* (Oxford, 1993) for an overview of Benedictine monastic life. John Hatcher, Piper, A. J., and Stone, David, 'Monastic mortality: Durham Priory, 1395-1529', *The Economic History Review*, 59(4) (2006), pp. 667-687 provides an overview for the final stages of monastic life in the late fourteenth to mid-sixteenth centuries.

of time bursars held office. As few bursars held office for an extended period of time during the long fourteenth century, there was little chance to make long-term changes to the Priory's agricultural orientation.<sup>386</sup>

This short time in office combined with the institutional inertia and the inherent preservationist drive of large organisations, and monastic houses in particular, meant that agricultural policy adjustments could be made quickly on the manorial level, which was bereft of bureaucracy, while changing the Priory's overall policy would be much more difficult.<sup>387</sup> The final section of this chapter will thus attempt to investigate the agricultural success and failures different bursars faced during their tenures, particularly in regard to grain yields, the most common indicator of success in arable husbandry.

As I discussed in the *Chapter I: Introduction*, this thesis seeks to move away from the capitalistic and profit-driven framework espoused by much of the current literature in medieval agricultural history. I have therefore avoided referring to monastic houses such as Durham Cathedral Priory as 'firms' or 'businesses' or undertaking complex econometric analysis based on modern economic theory.<sup>388</sup> Such terms, models, and equations would have been foreign to late medieval monks for whom the concept of profit itself may have been quite alien.<sup>389</sup> My primary concern is that, by using modern models or business frameworks, we may impose current economic motives and obscure the practical decision-making appropriate to late medieval economic structures, as well as miss the agency and the individuals who made such decisions. As such, to supplement our understanding of the needs of the bursar and the Priory,

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386. The term lengths for the various bursars during the period covered by this thesis is discussed in greater detail below.

387. See Michael T. Hannan and Freeman, John, 'Structural inertia and organizational change', *American Sociological Review*, 49(2) (1994), pp. 149-164, regarding institutional inertia in organisations in general.

388. See Kitsikopoulos, 'Manorial estates as business firms', pp. 142-166 and Schneider, 'Prices and production', pp. 66-91.

389. See Postles, 'Perception of profit', pp. 80-116.

this chapter will examine seigneurial agricultural treatises such as Walter of Henley's *Husbandry*, the anonymous *Hosenbonderie* and *Seneschacie*, and *Les Reules de Seynt Roberd* of Robert Grosseteste, Bishop of Lincoln, and consider how the advice given in these documents and the intellectual currents of the day influenced monastic management of agricultural affairs.

## II. The Monks of Durham Cathedral Priory

There is, unfortunately, relatively little direct evidence on the lives of the various bursars and other monastics at Durham Cathedral Priory, for there are no extant mortuary rolls and the Durham *Liber Vitae* only records monastic milestones, such as the year a monk celebrated his first mass.<sup>390</sup> The best method to identify and discuss origins, careers, and lives of the Priory monks and, by extension, the bursars, is to build upon the monastic biographical work undertaken by A.J. Piper and presented in Lynda Rollason and David Rollason's edited version of the *Liber Vitae*. As such, I used the dates of ordinations, professions, and other significant milestones of bursars for whom biographical details were available to calculate their age when holding office (Section II.i, below), while analysing further details such as place of birth, familial relations, and trips away from the convent to give further information on the geographical origins and careers of the monks. The monks of the Priory would have been well acquainted with the area around the convent as many would have been from the area around the Priory, giving them the local knowledge needed for the management of the estate. R.B. Dobson argues that the monks' toponym-derived surnames suggests that they were drawn from no further than

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390. Held at the British Library as BL, MS Cotton Domitian vii. However, this thesis makes use of the volume compiled and edited by Rollason & Rollason using that manuscript (David Rollason & Rollason, Lynda (eds.) *The Durham Liber Vitae: London, British Library, MS Cotton Domitian A. VII: Edition and Digital Facsimile with Introduction, Codicological, Prosopographical and Linguistic Commentary, and Indexes. Edited by David and Lynda Rollason; Including the Biographical Register of Durham Cathedral Priory (1083-1539) by A.J. Piper.* (London, 2007)).

thirty or forty miles afield from the convent.<sup>391</sup> Many had familial connections throughout the county. Richard Kellawe (fl. c. 1300) was from an established family with ties throughout County Durham. Thomas Lythe (bursar from 1396-1397) had a sister who lived at the almoner's Magdalen Hospital c.1394. Robert of Mainsforth's (bursar from 1400-1404 and again from 1405-1407) nephew, William Hotton, augmented St Katherine's Chantry at the Sedgefield parish church, and the mother of Henry Helay, bursar from 1417-1419, lived in the Magdalen Hospital from c. 1428 to c. 1443.<sup>392</sup>

It seems most likely that the monks were members of the 'middle ranks of urban and rural society'.<sup>393</sup> Such origins would have been unremarkable among other English black monks during the period: English monks at other houses nearly invariably 'came from the manors and estates owned by the monastery and (in the case of urban sites) from the town or city and its environs'.<sup>394</sup> Similarly, Dom David Knowles felt confident to state that the majority of monks were of burgess families or were the offspring of rural landowners; very few monks in English houses during the later middle ages were of aristocratic or royal lineages.<sup>395</sup> The monks of rural origins would likely have been familiar to some degree with the agricultural practices of the region and likely shadowed their fathers before being destined for the Priory's grammar school and holy orders.<sup>396</sup> Though the monks of rural roots might not have the skillset born of long experience to run a large estate, they would nevertheless have some understanding of managerial duties. Even if not the sons of gentry, the monks of Durham Cathedral Priory were

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391. Dobson, *Durham Priory*, p. 58.

392. Rollason and Rollason (eds.), *The Durham Liber Vitae*, vol. III pp. 215-216; 290-291; 293-294. This list is not intended to be exhaustive but is given merely for the sake of example.

393. Dobson, *Durham Priory*, pp. 58-59.

394. Knowles, *The Religious Orders in England: Volume II: The End of the Middle Ages*, p. 229.

395. *Ibid.*, pp. 229-230.

396. The grammar school was a common method of entry for the sons of country gentlemen and the patronage of individual monks played no little part in admission (Dobson, *Durham Priory*, p. 60). The education of the Durham Cathedral Priory monks is discussed in greater detail in *Section III* of this chapter.

always of free and legitimate birth and were proud of their station, given the vigour with which some monks fought any defamation to the contrary.<sup>397</sup> Henry Helay, bursar from 1417 to 1418, slandered his fellow monk John Oll by stating he was of servile birth. John Oll took no little umbrage at this accusation and an inquest was held; the Earl of Westmorland and thirteen knights and gentlemen testified to his free birth on July 26, 1446.<sup>398</sup> This case demonstrates not only the acrimony that could grow in the confines of the convent, but also the role of one's station at birth. For all the monks depended on the labour of the peasant *famuli* and the management of the serjeants, they were separated from them by both spiritual and social standing. The serjeants might work for them and use their office to gain access to new opportunities, but they too would have been mindful of the gap between themselves and the Priory monks.

### II.i. The Office of Bursar

As discussed previously in *Chapter I: Introduction*, although the Priory averaged between sixty and eighty monks, with some scattered in dependent cells, eleven monks acted as obedientiaries, or officers, and were trusted by the prior with managing large parts of its operation.<sup>399</sup> These eleven obedientiaries were required to render accounts at the annual chapter meeting every June. Of these eleven obedientiaries, the bursar, cellarer, and granator were most responsible for feeding the Priory and, of these three, the bursar controlled the largest estate. The office of bursar appeared in Benedictine convents near the end of the thirteenth century and was therefore a relatively recent development during the period in question here.<sup>400</sup> The origin of

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397. Dobson, *Church and Society*, p. 58.

398. Rollason and Rollason (eds.), *The Durham Liber Vitae*, vol. III, pp. 335-336.

399. Hatcher, Piper, and Stone, 'Monastic mortality', p. 668.

400. Threlfall-Homes, *Monks & Markets*, p. 18.

his title confirms his role: he controlled the *bursa* or purse of the convent.<sup>401</sup> Two-thirds of all the income from the Priory's estates passed through the bursar's hands at one point or another, for which all had to be accounted. Though the bursar may have originally functioned to receive income and spend it as directed by the prior, by the period under investigation the bursar acted with more independence and, with the aid of lay and monastic subordinates, directly managed his estates, from which he received an income.<sup>402</sup> This income was then used in the provisioning and maintenance of the Priory and, to some extent, its dependent cells. However, by 1438 the office of bursar was deemed such a burden that the prior could find no one to take the office. The revenue was then divided into thirds, though the full dignity of the office was restored by 1445.<sup>403</sup> That the office was deemed too onerous for one monk is telling. Though some individual bursars might be incompetent or dishonest, as discussed below, the expectation of the Priory was that the bursar would be extremely active in exercising his office and coordinating the efforts of his lay and religious subordinates.

As the bursar was responsible for the majority of the Priory's finances, he was expected to be well-informed about the running of his estate and to prove the effectiveness of his management at annual audits. He and his auditors would review receipts, tallies, and other documents such as the manorial accounts mentioned in previous chapters. This review would allow the bursar to gauge the relative success of his enterprises, including his agricultural operations, and make what adjustments he found necessary. Figures from the accounting year would be compared against estimations made at the end of the previous year and discrepancies discussed, as suggested by Robert Grosseteste in his *Les Reules de Seynt Roberd*.<sup>404</sup> A bursar who

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401. Alisdair Dobie, 'An Analysis of the bursars' accounts at Durham Cathedral Priory, 1278-1398', *Accounting Historians Journal*, 35(2) (2008), p. 29, Lomas, *Durham Cathedral Priory as Landowner and Landlord*, p. 8.

402. Dobie, *Accounting at Durham Cathedral Priory*, pp. 29-30.

403. *Ibid.*, p. 30.

404. *Ibid.*, p. 59.

wished to stay in office and on the correct side of monastic justice would be expected to furnish (though some, such as Thomas Lawson, discussed below, shirked such duty) a detailed annual account of his estates and expenditures while in office. By the fourteenth century, the bursar controlled some fifteen manors from Belasis on the north bank of the Tees to Westoe in the parish of Jarrow not far from South Shields. The bursar was also an active landlord, renting out whole manors, as was often the case with Aycliffe (*Akley*), small holdings with only a few acres, and mills, such as the one in Westoe, leased to William de Hilton who was serjeant at that manor. Though a bursar might rely on associates to ease his burden, as William of Stapleton aided William of Charlton and William of Hexham in 1334 and 1335, he was still responsible for a sizeable portion of the Priory's wealth, much of it agricultural.<sup>405</sup> Even if the bursar did not manage individual manors directly, which seems unlikely for multiple reasons, the least of which being the sheer geographic area covered by his estate, he likely set an overall direction for his estate as a whole or groups of manors based on geographic location. From there, he could allow his lay employees to carry out his directives.

Both Barbara Harvey and Richard Lomas and A. J. Piper suggested that the bursars would have been middle-aged, for the dual purpose of experience and health; Harvey argues that the obedientiaries of Westminster Abbey would have been over thirty, as the Abbey preferred to appoint monks who had been professed for at least ten years to office.<sup>406</sup> So too he would have needed more than a measure of ambition to climb the monastic *cursus honorum* to the post of bursar, though, during the long fourteenth century, no former bursar was elected to the office of prior. Yet ambition and age were, of course, little guarantee that a bursar would

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405. Rollason and Rollason (eds.), *The Durham Liber Vitae*, vol. III, p. 245.

406. Harvey, *Living and Dying in England*, p. 102, Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 8.

be diligent in fulfilling his office, for some bursars did have a notable lack of ambition, vigour, or even common sense. Hugh of Sherburn, bursar from 1377 to 1378, stabbed, but did not kill, the sub-prior at some point before 1400, the year in which he was granted absolution for the act by the Bishop of Durham.<sup>407</sup> Thomas Lawson, bursar from 1432 to 1438, was appointed to the office for lack of anyone qualified and failed to produce accounts. After an abortive flight north, he was apprehended by the Priory; after being reconciled with the Priory, he was later cellarer.<sup>408</sup>

In contrast, a successful bursar would have been a busy man indeed and often toured his estate and spent long hours travelling. The bursar, along with his monastic associates, often termed *socii*, who aided him in fulfilling his duties, would be expected to visit his manors annually, likely around the close of the agricultural year. William of Charlton (bursar from 1333 to 1335) took quite a hands-on approach to his office and is specifically noted as traveling to Fulwell, Dalton, Westoe, and Wardley.<sup>409</sup> He similarly supervised the movement of animals from Bearpark and the livestock centre at Muggleswick, likely with the aid of William of Stapleton, a bursar's associate from November 1334 to April 1335.<sup>410</sup> Thomas of Corbridge (bursar from 1380 to 1388) was no less active and travelled extensively throughout northern England conducting the business of the Priory.<sup>411</sup> Richard Haswell (bursar from 1404 to 1405 and again, following a residency in Oxford, from 1407-1409), together with his associate John Moore (bursar from 1409 to 1413) travelled throughout Yorkshire and Northumberland attending to Priory affairs. This familiarity with the office of bursar likely helped John Moore

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407. Rollason and Rollason (eds.), *The Durham Liber Vitae, vol. III*, p. 280.

408. Ibid., p. 338.

409. Ibid., pp. 244-245.

410. Ibid., pp. 244-245.

411. Ibid., p. 289.

secure his place as Richard Haswell's successor.<sup>412</sup> The men who held the office of bursar and what may have been the more senior office of terrar often held it multiple times, frequently holding the two offices simultaneously.<sup>413</sup> Some bursars went on to hold other important offices within the Priory, though none were ever elected prior. Roger de Mainsforth held office in dependent cells and monastic houses of Durham Cathedral Priory and became Warden of Finchale and was then Master of Jarrow before being Warden of Finchale again. Richard Haswell also held office in Priory dependencies, holding office as Master of Jarrow before becoming Prior of Holy Island. Though there could be no guarantee that the officeholder would fulfil his duties adequately, the majority of bursars seem to have been skilled administrators and intent on fulfilling the duties of their office, largely proving the argument made Lomas and Piper.

The lack of a year of birth for the Durham monks in the *Liber Vitae* does make assessing Piper and Lomas's claim that bursars were typically in their middle years somewhat difficult.<sup>414</sup> However, I was able to work backwards from the dates Rollason and Rollason gave for the various ordinations of the Durham monks, and the year in which a monk celebrated his first mass, and the ages before which canon law forbade ordination to get an approximate year of birth (Table VI.1). The Durham *Liber Vitae*, with its biographical details, does often record the year in which a monk was ordained an acolyte, subdeacon, deacon, and priest, though occasionally some milestone events are not recorded. A Benedictine novitiate only began when an individual was 19 years of age, a year after the canonical minimum age to be ordained a subdeacon (18 years of age), and the same age at which an individual could be ordained as a

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412. Rollason and Rollason (eds.), *The Durham Liber Vitae, vol. III*, pp. 316-317, 322.

413. Lomas, *Durham Cathedral Priory as Landowner and Landlord*, p. 10. See also the list of obedientiaries in Rollason and Rollason (eds.), *The Durham Liber Vitae, vol. III*, pp. 492-503.

414. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, pp. 29-30.

deacon. Additionally, canon law dictated that no man below the age of 24 be ordained a priest, though a papal pardon or dispensation could be issued when such ordinations occurred before the canonical minimum age.<sup>415</sup> As we do not know in what year these individuals first celebrated mass, calculating their age becomes more difficult. Such dispensation was given in the cases of the ordinations of Roger of Mainsforth and John of Newburn, who were ordained at ages 13 and 12, respectively; Roger of Mainsforth's local connections may have influenced the age which he was ordained (see below).<sup>416</sup>

Using the years of monastic milestones provided by the Durham *Liber Vitae*, I estimated a probable year of birth for twenty-three – those for whom there is sufficient information extant to make such calculations – of the fifty-two bursars who held office during the fourteenth and early to mid-fifteenth century (from *c.* 1300 to 1453). In Table VI.1, I have listed the names of these twenty-three bursars along with the years in which the individuals celebrated certain milestones: the year they were ordained an acolyte, sub-deacon, deacon, and priest and the year that they celebrated their first mass. Also included was the age a monk was if he received a papal pardon for being ordained before the canonical minimum age. Such dispensation, while not necessarily common, was not extraordinary. Monks received dispensations for being under the minimum canonical age for ordination at Westminster during the same period. This, Harvey argues, was due to a lack of priests to say Mass and such priests likely did not have the *cura animarum* (cure of souls).<sup>417</sup> Using the minimum canonical legal age for ordination as sub-

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415. The figures presented here provide for the best estimate of the age of an individual when he first held office, but cannot, unfortunately, be considered definite. For canonical legal ordination ages see P. H. Cullum, 'Boy/Man into Clerk/Priest: The Making of the Late Medieval Clergy' in Nicola F. McDonald and W. M. Omrod, (eds.) *Rites of Passage: Cultures of Transition in the Fourteenth Century* (York, 2004), p. 51. Hatcher, et al. used Harvey's assumption that monks were professed at the age of 20, though the difference of a year is unlikely to make a significant impact in this study (Harvey, *Living and Dying in England*, pp. 118-122; Hatcher, Piper, and Stone, 'Monastic mortality', p. 669).

416. Rollason and Rollason (eds.), *The Durham Liber Vitae, vol. III*, pp. 293-296.

417. Harvey, *Living and Dying in England*, pp. 119-120.

Table IV.1: Years of Ordinations and Other Rites and Estimated Age When First Holding Office for Select Bursars

Name <sup>418</sup>	Year Ordain- ed Acolyte	Year Ordain- ed Sub- Deacon	Year Ordain- ed Deacon	Year Ordain- ed Priest	Year of First Mass	Age at Pardon for Ordain- ed Below Age	Year of Birth Acolyte	Year of Birth Sub- deacon	Year of Birth Deacon	Year of Birth Priest	Year of Birth with First Mass	First Year When Bursar	Age When First Bursar	Age When First Bursar w/ Year of Birth Acolyte	Age When First Bursar w/ Year of Birth Deacon	Age When First Bursar w/ Year of Birth Priest	Age When First Bursar with Year of Birth with First Mass	Age When First Bursar with Year of Birth with First Mass	Age When First Bursar with Year of Birth with First Mass	Probabl e Age When First Bursar	
<i>Alan of Marton</i>	--	--	--	--	--	--	--	--	--	--	--	1322	--	--	--	--	--	--	--	--	--
<i>Alexander of Lamesley</i>	--	--	--	--	--	--	--	--	--	--	--	1316	--	--	--	--	--	--	--	--	--
<i>John of Harmby</i>	--	1307	--	--	--	--	--	1290	--	--	--	1312	--	22	--	--	--	--	--	--	22
<i>William of Killingswort h</i>	--	--	--	--	--	--	--	--	--	--	--	1324	--	--	--	--	--	--	--	--	--
<i>William of Charlton</i>	--	--	--	--	--	--	--	--	--	--	--	1331	--	--	--	--	--	--	--	--	--
<i>Thomas of Stockton</i>	1335	1337	1337	1338	--	--	1316	1320	1318	1314	--	1346	30	26	28	32	--	--	--	--	29
<i>John of Newton</i>	1342	1343	1344	1344	--	--	1323	1326	1325	1320	--	1349	26	23	24	29	--	--	--	--	26

418. The estimated age of the various bursars assumes, barring information to the contrary, that the monks received their various ordinations according to canon law and that the Priory followed the Benedictine practice of accepting acolytes from the age of seventeen. Therefore, it is assumed that a boy was ordained an acolyte at seventeen, a sub-deacon at eighteen, a deacon at nineteen, and a priest at twenty four. All information on the dates of the various rites of the Durham monks is from Rollason and Rollason (eds.), *The Durham Liber Vitae, vol. III* and for canonical ordination ages Cullum, 'Boy/Man into Clerk/Priest', p. 51.

Table IV.1: Years of Ordinations and Other Rites and Estimated Age When First Holding Office for Select Bursars

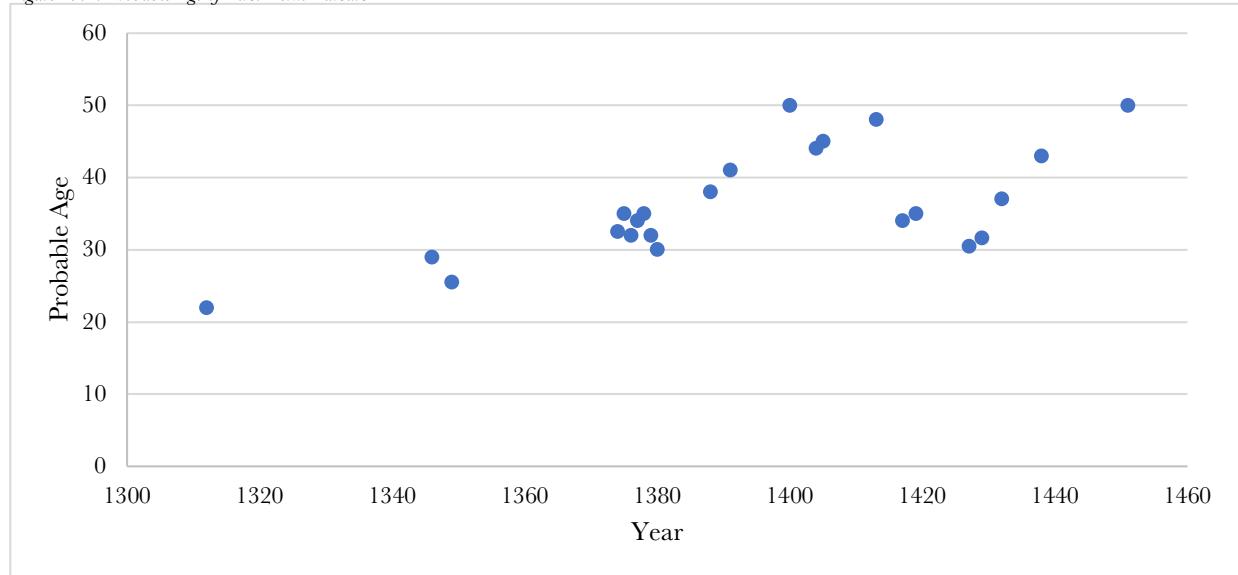
Name <sup>418</sup>	Year Ordained Acolyte	Year Ordained Sub-Deacon	Year Ordained Deacon	Year Ordained Deacon	Year Ordained Priest	Year of First Mass	Age at Pardon for Ordained Below Age	Year of Birth Acolyte	Year of Birth Sub-deacon	Year of Birth Deacon	Year of Birth Priest	Year of Birth with First Mass	First Year When Bursar	Age When First Bursar w/ Year of Birth Acolyte	Age When First Bursar w/ Year of Birth Sub-deacon	Age When First Bursar w/ Year of Birth Deacon	Age When First Bursar with Year of Birth Priest	Age When First Bursar with Year of Birth with First Mass	Probable Age When First Bursar
<i>Hugh of Howick</i>	--	1359	1360	--	--	--	--	--	1342	1341	--	--	1374	--	32	33	--	--	33
<i>William of Aislaby</i>	1357	1359	1360	--	1363	--	1338	1342	1341	--	1339	1375	37	33	34	--	36	35	
<i>Thomas Legat</i>	1362	--	--	--	--	--	1343	--	--	--	--	1378	35	--	--	--	--	--	35
<i>Hugh of Sherburn</i>	1362	--	--	--	--	--	1343	--	--	--	--	1377	34	--	--	--	--	--	34
<i>John of Berrington</i>	--	1364	--	--	--	--	--	1347	--	--	--	1379	--	32	--	--	--	--	32
<i>William of Killerby</i>	--	--	--	1368	--	--	--	--	--	1344	--	1376	--	--	--	32	--	--	32
<i>Thomas of Corbridge</i>	--	1370	1370	1370	--	--	--	1353	1351	1346	--	1380	--	27	29	34	--	--	30
<i>Thomas Lythe</i>	--	1370	1370	1370	--	--	--	1353	1351	1346	--	1391	--	38	40	45	--	--	41
<i>Roger of Mainsforth</i>	--	--	--	--	1374	13	--	--	--	--	1350	1400	--	--	--	--	50	50	
<i>John of Newburn</i>	--	--	--	--	1374	12	--	--	--	--	1350	1388	--	--	--	--	38	38	
<i>William Drax</i>	--	--	--	--	1389	--	--	--	--	--	1365	1413	--	--	--	--	48	48	

Table IV.1: Years of Ordinations and Other Rites and Estimated Age When First Holding Office for Select Bursars

Name <sup>418</sup>	Year Ordain- ed Acolyte	Year Ordain- ed Sub- Deacon	Year Ordain- ed Dea- con	Year Ordain- ed Priest	Year of First Mass	Age at Pardon for Ordain- ed Below Age	Year of Birth Acolyte	Year of Birth Sub- deacon	Year of Birth Dea- con	Year of Birth Priest	Year of Birth with First Mass	First Year When Bursar	Age When First Bursar w/ Year of Birth Acolyte	Age When First Bursar w/ Year of Birth Sub- Deacon	Age When First Bursar w/ Year of Birth Dea- con	Age When First Bursar w/ Year of Birth Priest	Age When First Bursar with Year of Birth with First Mass	Probabl- e Age When First Bursar	
<b>John Ryton</b>	--	--	--	--	1384	--	--	--	--	--	1360	1405	--	--	--	--	--	45	<b>45</b>
<b>Richard Haswell</b>	--	--	--	--	1384	--	--	--	--	--	1360	1404	--	--	--	--	--	44	<b>44</b>
<b>John Morris</b>	--	--	--	--	--	--	--	--	--	--	--	1409	--	--	--	--	--	--	--
<b>Henry Helay</b>	--	--	--	--	1407	--	--	--	--	--	1383	1417	--	--	--	--	--	34	<b>34</b>
<b>John Durham, jr.</b>	--	--	--	1408	--	--	--	--	--	--	1384	--	1419	--	--	--	35	--	<b>35</b>
<b>John Oll</b>	1415	1416	1416	--	--	1396	1399	1397	--	--	1429	33	30	32	--	--	--	<b>32</b>	
<b>William Partrike</b>	1415	1416	1416	--	1418	--	1396	1399	1397	--	1394	1427	31	28	30	--	33	<b>31</b>	
<b>Thomas Lawson</b>	--	--	--	--	1419	--	--	--	--	--	1395	1432	--	--	--	--	37	<b>37</b>	
<b>John Gateshead</b>	--	--	--	--	1419	--	--	--	--	--	1395	1438	--	--	--	--	43	<b>43</b>	
<b>John Penshaw</b>	1420	1422	1422	1422	1422	--	1401	1405	1403	1398	1398	1451	50	46	48	53	53	<b>50</b>	
<b>Avg.</b>	--	--	--	--	--	--	--	--	--	--	--	--	35	31	33	37	42	36	

deacon, deacon, and priest (nineteen [specifically the age at which the black monks would accept a novice], seventeen, nineteen, and twenty-four years of age, respectively) or the age given in the dispensation as appropriate, I calculated the possible birth years for these twenty-three individuals to give the possible age of each when they first held the office of bursar; I then averaged these possible ages to give a ‘probable age when first bursar’.

Figure IV.1: Probable Age of First Term Bursars



Once armed with a bursar’s year of birth and the year at which they were first bursar we can estimate their age when they took office. Most bursars during the period under investigation were likely in their mid- to late thirties when they first took office, with a mean estimated age of 36 and median estimated age of 35. Only Roger of Mainsforth and John Penshaw were in their 50s when they first held office, while Richard Haswell, William Drax, and John Ryton were in their mid to late forties. This trend towards older bursars is most characteristic of the early fifteenth century, part of an overall tendency for each bursar to be slightly older than the previous officeholder. After the first decade of the fifteenth century, incoming bursars tended to be in their mid-thirties or early forties. This decline in the probable

age of the bursars may be tied to a lack of willing, experienced candidates, circumstances that led to the infamous Thomas Lawson taking office in 1432 at the probable age of 37. If John Hatcher, A.J. Piper, and David Stone's estimate of a life expectancy for a Durham monk of a further 29.5 years at the age of 25 for the monastic cohorts entering between 1395 and 1474 can be applied to the bursars who entered the Priory after the Black Death in particular, where the average estimated age of monks when they held office was 38 and a median estimated age of 35, then many of the bursars would indeed be middle-aged by the life expectancy of their peers.<sup>419</sup>

## II.ii. Implications

Given the frequency with which bursars toured their estate and the ambition necessary to hold the office and perform the duties satisfactorily, we can assume that the bursars were reasonably well aware of the activities on their various manors. The bursars were, as a rule, capable men who had the stamina to fulfil their role and whose years of experience, for many bursars would have been a fully ordained member of the convent for about fifteen years before they became bursar, would have helped prepare them to manage much of the Priory's finances. They certainly visited the various manors under their control and would have had a level of knowledge that came from whatever previous managerial experience which qualified them for their office and from a possible familial background in agriculture. However, the geographic spread of the demesne farms, from the mouth of the Tyne to near Stockton-on-Tees, likely meant that a bursar would not be able to manage the manors individually. A staff of clerks and bursar's associates would have been necessary for proper management. The advice of long-serving manorial serjeants would have also been invaluable, given their practical experience.

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419. Hatcher, Piper, and Stone, 'Monastic mortality', p. 675.

Furthermore, from the turn of the fourteenth century to the middle of the fifteenth century, few bursars served more than two years in office, as shown in Table III.2 and Table III. Sixty-nine per cent of bursars held office for two years or less, sixteen per cent for three to four years, twelve per cent for five to six years, and just three per cent served seven or eight years. The average bursar held office for 2.36 years, with a median of eight years in office. Surprisingly, if a bursar was holding office after a previous tenure, he was slightly more likely to serve for a shorter period than those who served as bursar but once (Table IV.2 & Table IV.3). This short average tenure would not necessarily have kept individual bursars from attempting to enact sweeping changes in agricultural practices, yet might have caused a degree of institutional inertia, keeping the Priory from maximising profits, if it so wished, in a period of fluctuating grain prices. Similarly, a bursar may not have held office long enough to see the result of any long-term agricultural reforms he attempted. Again, experienced clerks and monastic associates would have been vital in ensuring and measuring the success of long-term agricultural changes.

*Table IV.2: Length of Office for Durham Cathedral Priory Bursars Who Served Multiple Terms, 1296-1453*

<b>Term Length in Years</b>		<b>Frequency Chart</b>		
		<i>Range</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Average</i>	2.17			
<i>Med.</i>	2	0-2 years	25	71%
<i>Max.</i>	6	3-4 years	6	17%
<i>Min.</i>	1	5-6 years	4	11%
<i>n.</i>	35	7-8 years	0	0%

Source Rollason and Rollason (eds.), *The Durham Liber Vitae*, vol. III, p. 280.

Table IV.3: Length of Office for Durham Cathedral Priory Bursars, 1296-1453

<b>Term Length in Years</b>		<b>Frequency Chart</b>		
		Range	Frequency	Percentage
Average	2.36	0-2 years	46	69%
Med.	2	3-4 years	11	16%
Max.	8	5-6 years	8	12%
Min.	1	7-8 years	2	3%
n.	67			

Note: The figure does not differentiate between bursars who served multiple terms and those who served only one term, but instead shows only distinct terms. Rollason and Rollason (eds.), *The Durham Liber Vitae*, vol. III, p. 280.

Table IV.4: Length of Office for Durham Cathedral Priory Priors, 1290-1456

<b>Term Length in Years</b>		<b>Frequency Chart</b>		
		Range	Frequency	Percentage
Average	15.27	0-10 years	5	45%
Med.	17	11-20 years	3	27%
Max.	33	23-30 years	2	18%
Min.	1	31-40 years	1	9%
n.	11			

Source: Rollason and Rollason (eds.), *The Durham Liber Vitae*, vol. I, p. 492.

Priors held office for much longer periods, being elected for life. Of the eleven priors who were in office between 1290 and 1456, only three served for five years or less and only five for ten years or less; fifty-five per cent of priors during this period held office for eleven or more years (Table IV.4).<sup>420</sup> A prior's responsibilities were considerably larger than any of their monastic subordinates and they were powerful lords in their own right, with their own courts and knightly retinues. Individual priors may have set out guidelines for fiscal and agricultural management, and their long term in office would allow them to see any results, but the degree to which they would have had a more direct role is uncertain.<sup>421</sup> The priors were certainly

420. David & Rollanson Rollason, Lynda (eds.), *The Durham Liber Vitae: London, British Library, MS Cotton Domitian A.VII: Edition and Digital Facsimile with Introduction, Codicological, Prosopographical and Linguistic Commentary, and Indexes*. Edited by David and Lynda Rollason; Including the Biographical Register of Durham Cathedral Priory (1083-1539) by A.J. Piper. Volume I (London, 2007), p. 492.

421. Dobie, *Accounting at Durham Cathedral Priory*, p. 40.

financially dependent on the incumbent bursar, for the priors apparently ‘did not “*habent bona et possessiones a conventu discreta* (have their own goods and possessions separate from the convent),”’ and their household expenses were met from the bursar’s purse.<sup>422</sup> As the financial dependence of the prior on the bursar may have coloured and indeed strained their relationship, it is certainly possible that individual bursars resented any interference in their affairs. Prior John Wessington did divide the responsibilities and incomes of the bursar to also include the cellarer and granator, but this was done with the consent of the senior monks of the chapter and, alongside his fondness for his stays at the manor of Bewley, seems to have been the limit of the extent to which even this long-serving prior directly intervened in estate management.

### III. Agricultural Treatises and Intellectual Trends

As noted previously in this chapter, many of the Durham Cathedral Priory monks would have first been educated in the Priory grammar school, more properly known as the Almonry School.<sup>423</sup> Whether supported by alms or patronage of lay people or fellow monks, students included John Wessington and William Ebchester, two future priors of the convent; the two would have continued their education in liberal arts and theology during their novitiate.<sup>424</sup> As ordered by *Summi Magistri*, a papal bull issued by Pope Benedict XII (r. 1334 – 1342) concerning the education of Benedictine monks, one out of every twenty monks in a monastic house was to attend university where they would engage with such subjects as arithmetic, logic, philosophy, and theology which would prepare them, as discussed below, for

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422. Dobie, *Accounting at Durham Cathedral Priory*, pp. 26-27.

423. Dobson, *Durham Priory*, p. 60.

424. Ibid., pp. 60, 353.

monastic management.<sup>425</sup> The most promising monks would likely have been sent to study at Oxford. Such attendance would have been made easier for the Durham monks with the existence of Durham College at Oxford, established in the late thirteenth century.<sup>426</sup> David Knowles stated that ‘[p]erhaps more than any other monastery Durham came to be governed and administered by university monks’.<sup>427</sup> R. B. Dobson argued that Durham College provided a university education for a great many Durham monks, arguing that ‘[i]t is probably no exaggeration to claim that almost half of all Durham monks received some form of university education’.<sup>428</sup> Similarly, he stated that ‘the exposure of large numbers of Durham monks to Oxford learning, Oxford scholastic techniques, and Oxford academic society was the greatest single cultural influence on the convent during the last 250 years of its existence’.<sup>429</sup> Those able individuals would have found themselves holding office in the Priory, thus making a residence at Durham College part of the monastic *cursus honorum*.<sup>430</sup> Alexander of Lamesley (bursar in 1322), Hugh of Howick (bursar from 1374-1375), Richard Haswell (bursar from 1407-1409), and Henry Helay (bursar from 1417-1419) were all noted as being resident at Oxford, though there is little room to comment on what degree, if any, they may have taken.<sup>431</sup>

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425. Dom Anthony Marrett-Crosby, ‘The Monastic Response to Papal Reform: Summi Magistri and Its Reception’, *English Benedictine Congregation History Commission – Symposium 2001*, (2001), p. 1, Dobie, *Accounting at Durham Cathedral Priory*, p. 61.

426. Dobson, *Durham Priory*, p. 343.

427. Knowles, *The Religious Orders in England, Volume I*, p. 319.

428. Dobson, *Durham Priory*, p. 352

429. Ibid., pp. 351, 342.

430. Dobson, *Durham Priory*, p. 352.

431. Rollason and Rollason (eds.), *The Durham Liber Vitae, vol. III*, pp. 226, 278, 311, 322. Dobson states that ‘relatively few monks actually graduated in theology, for the simple reason that the course of study was a long one’; however, there would have been an overall focus on the arts for the Durham monks (Dobson, *Durham Priory*, p. 352).

### III.i. Agricultural Treatises

Yet Durham College alone would not have provided all the training in or knowledge of business and administration. Agricultural treatises had begun to proliferate during the late thirteenth century detailing proper methods of estate management, as was briefly touched on in *Chapter I: Introduction* of this thesis. Treatises such as Walter of Henley's *Le Dite de Hosebondrie*<sup>432</sup>, the anonymous tracts *Hosenbonderie* and *Seneschacie*, and *Les Reules de Seynt Roberd* of Robert Grosseteste, Bishop of Lincoln, all advised demesne lords on how to manage their estates and what harvest yields the lords might expect. All universally supported an innate distrust of servants and an intricate audit. Furthermore, these agricultural treatises were all intensively conservative, or more properly, preservationist guides. There is no mention of profit in any of the four treatises, nor is there mention of the acquisition of land.<sup>433</sup> These guides were concerned foremost with the preservation of land and wealth, and stressed living within one's means, particularly notable in *Les Reules de Seynt Roberd*. Such guides were not a 'flash in the pan', popular for a moment and then gone the next. The latest extant manuscript of *Husbandry* at the Bodleian library dates to the reign of Elizabeth I; twenty other manuscripts survive. *Les Reules de Seynt Roberd* and the *Seneschacy* often were bound together with Walter of Henley's *Husbandry*, though it is ultimately unclear who the authors of the two latter tracts were.<sup>434</sup>

Though couched as an agricultural treatise, *Husbandry* also worked as a sermon delivered in the Dominican style with considerable focus given to 'the need to live within one's means' and the proper behaviour towards others, fitting neatly with Oschinsky's assertion that

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432. Hence referred to simply as 'Husbandry'.

433. The Statutes of Mortmain, dating from 1279 and 1290, were intended to keep religious houses from acquiring land, though there were difficulties with enforcement. The Durham monks did continue to acquire land through legal loopholes (Elizabeth M. Halcrow, 'The Decline of demesne farming on the estates of Durham Cathedral Priory', *Economic History Review*, 7(3) (1955), p. 349).

434. See Oschinsky, *Walter of Henley & Other*, pp. 10-49 for further details on individual manuscripts.

Walter of Henley was a professed member of the Order of Preachers.<sup>435</sup> *Husbandry* was, therefore, a piece of literature that was didactic on two fronts. *Husbandry* and the other agricultural treatises allowed their authors to preach in a language that was not only understandable, but practical to their audience, whether lay or religious. These guides sought to impose order through figures, calculations, and care. The message of these texts taught that excess, with the exceptional risk-taking that could follow, was to be avoided, and constraint became a form of visible piety. Even if *Les Reules* have been said to not 'have a plan or form comparable to the severe construction' of *Husbandry* and 'appear to have been jotted down haphazardly,' something of an unfair criticism as *Les Reules* are organised topically, they still stress that a lord, or lady, ought to exercise moderation and live within his means. It is highly unlikely that a reader, monastic, lay, or member of the secular clergy, would not notice the moralising nature of the treatise.<sup>436</sup> These agricultural treatises were certainly known to the Priory monks, for their library contained copies or derivative works, including their own instructions on how to properly conduct an audit: the *Forma Compoti* and its introduction.<sup>437</sup> Indeed, a copy of Walter of Henley's *Husbandry* was likely made at Durham Cathedral Priory in the first quarter of the fourteenth century, a specimen copy must have been held in the Priory library.<sup>438</sup> Though we cannot be sure if these management treatises were a sort of required reading for incoming bursars, their possession by the Priory strongly suggests that these texts were considered valuable and useful enough to justify their cost. The Durham *Forma Compoti*, dating from about 1381, included a 'treatise setting out the principles and procedure for

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435. Oschinsky, *Walter of Henley & Other*, pp. 147-148, p. 150.

436. Ibid., p. 197.

437. Dobie, *Accounting at Durham Cathedral Priory*, pp. 60-61.

438. This manuscript (titled 'History of the Kings of England and Scotland; L'estoire des 7 Sages de Rome; Le Château d'amour; Manuel des Péchés; Housebondrie') is held at the British Library as MS Harley 3860 (formerly BM, Harleian MS. 3860). Once owned by Sir Thomas Tempest (4th baronet) of County Durham, the manuscript contains historical texts, Robert Grosseteste's Chateau d'amour, Walter of Henley's Husbandry, as well as genealogies and an image of Robert Grosseteste. Oschinsky, *Walter of Henley & Other*, pp. 15, 140.

drawing up an account and for the detection and prevention of fraud,' as well as a sample account from the Prince of Wales' Honour of Wallingford.<sup>439</sup> This treatise and specimen account were part of a larger trend of *ordo compoti*, which detailed and laid out the different sections of accounts, compiled during this period and earlier. Due to mentions of Whitby in the *Forma Compoti*, it may be that the document was compiled from an original belonging to Whitby Abbey.<sup>440</sup> Oschinsky characterises the introduction to the *Forma Compoti* as 'disjointed and casual', prohibiting the reader from answering what she considers to be key questions, including the posited existence of a clerk's brotherhood or Inn that provided successive clerks with the previous year's accounts, and the role of the auditors and stewards.<sup>441</sup> Despite Oschinsky's tacit assertion that the Durham *Forma Compoti* is a fundamentally flawed document, its existence and the annotated sample account that accompany it demonstrate that the monks of Durham Cathedral Priory were nevertheless aware of and acting on the current administrative scholarship of the period.

Yet the introduction to the *Forma Compoti* does not correspond exactly to what may have been the realities of demesne administration at Durham Cathedral Priory. Some of the language does not fit with what we know about manorial administration in the late fourteenth century, as the manorial accounts for that period do not mention a prepositus or 'reeve'; the office of *serviens* or 'serjeant' was preferred. Nor did the manorial manager administer the numbers of livestock mentioned in the introduction to the *Forma Compoti*, for such matters as pastoral agriculture were typically managed from Muggleswick, nor did the Priory allow the

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439. Ibid., p. 249. The *Forma Compoti* is preserved in the Durham Cathedral Archives as DCD-Loc.II.15. A translation follows the main text of this chapter.

440. Oschinsky, *Walter of Henley & Others*, pp. 227-230. Elizabeth Halcrow notes a similarity to the treatise of Robert Carpenter (Halcrow, 'Decline of demesne farming', p. 348). As noted by Halcrow, see N. Denholm-Young, 'Robert Carpenter and the Provisions of Westminster', *The English Historical Review*, 50(197) (1935), pp. 22-35 for further on Robert Carpenter.

441. Oschinsky, *Walter of Henley & Other*, p. 232.

serjeant to hire the clerk and trust that his professional values would keep his account honest.<sup>442</sup> Many of the frauds recorded by Robert Carpenter and analysed by Martha Carlin would have been much simpler to commit if the clerk and the serjeant conspired together.<sup>443</sup> Furthermore, the introduction to the *Forma Compoti* does not need to be regarded as a prescriptive, static guide used by the Priory during the ‘Indian summer of demesne farming’ and the subsequent decades. Monastic managers may well have selected practices that they felt particularly applicable to the changing circumstances of the fourteenth century. Even if only some of the advice in this introduction was heeded, the monks of Durham Cathedral Priory would still be following the advice laid down by Walter of Henley, Robert Grosseteste, and the anonymous authors of the *Seneschacie* and *Husbandrie*. In doing so, they would have ensured that their lay servants were not cheating them of the rightful returns of their lands by subjecting each manor to a thorough audit<sup>444</sup> and by knowing the likely yields for different grains as detailed in *Husbandrie*.<sup>445</sup>

The *Forma Compoti* also contains a sample account of the Honour of Wallingford in Oxfordshire often associated with the Prince of Wales, with subheadings in red ink and the body of the text in black ink as well as a sample grange account. The use of both red and black ink further emphasises the didactic nature of the sample account and is not found in any of the manorial rolls which I consulted for this thesis. The two inks draw attention to the different sections of a manorial account and highlight the necessary form so that it might be understood by a variety of readers. As the monks did not draw up the accounts themselves, leaving the tasks to auditors, it seems likely that such a document allowed new monastic clerks and obedientiaries

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442. Oschinsky, *Walter of Henley & Other*, p. 232.

443. See Carlin, ‘Cheating the Boss’, pp. 183-198.

444. As suggested by the *Seneschacie*, Walter of Henley’s *Husbandry*, Robert Grosseteste’s second, fourth, seventh, and eighth rules, and the *Husbandrie*. Oschinsky, *Walter of Henley & Other*, pp. 291, 293, 343, 389, 391-393, 395-397, 439.

445. Ibid., p. 419.

to understand the manorial accounts. Similarly, two related manuscripts survive from the early fourteenth century. The first, in both Latin and French, details the forms of oaths of fealty, documents for marriages, leases, liberties, and the sale of ale, and the proper form of manorial accounts, the last of which is continued in a separate manuscript that also lays down regulations for court-rolls.<sup>446</sup> As the use of such documents demonstrates, the monks of Durham Cathedral Priory would have been familiar with larger trends in estate management.

### **III.ii. Evidence in Priory Practices**

In carefully ensuring that their estates were being run honestly and the manorial managers were not cheating them egregiously, the monks of Durham Cathedral Priory and, by extension, their manorial servants, were then naturally keenly aware of what the returns of their lands should be. Following Robert Grosseteste's seventh and twenty-fourth rules, the Priory conducted an extensive annual audit to ensure their estates were being run honestly and productively.<sup>447</sup> The year's accounts were compared to previous accounts and serjeants were made to explain arrears or agricultural mishaps to the auditors. The monks were known to summarily dismiss claims made by serjeants or issue monetary fines to ensure proper administration.<sup>448</sup> Indeed, this desire to properly account for their expenditure went beyond best managerial practice and fitted well with commentary from Church Fathers and biblical apocrypha, both of which stressed the importance of understanding the world through weights, numbers, and measures. St. Augustine confidently stated that the world could be understood

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446. DCD-Loc.II.8 and DCD-Misc.Ch.7130, respectively.

447. 'Le setime reule uous aprent coment vos purrez sauoyr par comparer les acountes as asines de la estente ou de la defaute de vos seriaunz e bailliſ de maneres e de teres' ('The seventh rule teaches you how you may learn by the comparison of the accounts with the estimates the diligence or negligence of your servants and bailiffs of manors and lands'), 'La vinte quartyme reule vos aprent pur quele reson le nombre des parcels' ('The (twenty-fourth rule teaches you the reason why you should learn the number of parcels of your lands'). Oschinsky, *Walter of Henley & Other*, pp. 249, 394-395.

448. Halcrow, *Administration & Agrarian Policy*, pp. 34-35.

through measure, numbers, and weights in his *De Trinitate Libri Quindecim*.<sup>449</sup> This built upon the *Liber Sapientiae*, detailing the wisdom of Solomon, telling how God ordained the world ‘in measure, count, and weight’.<sup>450</sup> Though occasionally regarded as apocryphal, the deuterocanonical *Liber Sapientiae* was included in St. Jerome’s *Vulgate*. The monks of Durham Cathedral Priory would thus have been familiar with this text, as they would have been with the writing of the Church Fathers, including St. Augustine. This keenness for a proper return from their lands saw the monks conduct an extensive audit in 1436/7 when the Priory became increasingly concerned with their dwindling income. Covering incoming monies from tithes, the main estate, and the estates of the obedientiaries, the report noted the loss of holdings in Scotland, depopulation from Black Death and reoccurring outbreaks of plague, and the conversion of arable land to pasturage.<sup>451</sup> The investigation allowed for the full effects of a tumultuous fourteenth century to be fully felt and the monks to study the impact on their revenues. Such an audit was proper practice as dictated by the literature of the time and allows for an idea of what proactive steps were taken by the Priory; other attempts to rectify falling income may have occurred previously. The accounting practiced by Durham Cathedral Priory, its obedientiaries, and lay servants also imposed the order sought by *Husbandry*, *Les Reules*, and the other notable agricultural treatises. The monks of Durham Cathedral Priory were eager to preserve the wealth of the convent in their role as the inheritors of the patrimony of Saint Cuthbert, even if their overall objective was not necessarily to grow their wealth.<sup>452</sup>

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449. See Augustine of Hippo, *De Trinitate*, W. J. Moutain (ed.), (1968), 11:18: ‘*Ubi speramus invenire nos posse secundum trinitatem imaginem Dei, conatus nostros illo ipso adiuante, quem omnia, sicut res ipsae indicant, ita etiam sancta Scriptura in mensura et numero et pondere disposuisse testatur.*’ (‘We hope to be able to find there a trinity which is an image of God. He Himself will aid our efforts; He, of whom as the things themselves indicate, so also the Sacred Scripture testifies that He has ordered all things in measure, number and weight.’ Augustine of Hippo, *On the Trinity* (trans. Stephen McKenna), (Cambridge, 2002), p. 81 ).

450. See *Liber Sapientiae* 11:21, *Vulgate* (‘*sed omnia in mensura, et numero et pondere disposuisti.*’ [‘You ordained all in measure, count, and weight’]).

451. Dobie, *Accounting at Durham Cathedral Priory*, pp. 187-188.

452. Ibid., p. 159.

#### IV. Conservatism and Preservationism: Implications of the Agricultural Treatises

These agricultural treatises do much to explain the economic *mentalités* of Durham Cathedral Priory and, likely, other monastic houses. Institutions are, as a rule, slow to change and are inherently conservative in outlook. The conservative, or preservationist, outlook meant that monastic houses such as Durham Cathedral Priory could seek to preserve what wealth they had, rather than to expand it, though such an outlook would be dependent on the monastic house and the time period.<sup>453</sup> This preservationist attitude echoes the advice given in the agricultural treatises mentioned above, both in the agricultural management advice given in a strict reading or the homiletic nature present when the texts are viewed as sermons. Clerical readers in particular would have recognised the intrinsic moral of the agricultural treatises, especially in *Les Reules de Seynt Roberd*; the exhortations towards moderation and self-sufficiency would have resonated well with those living under the Rule of St. Benedict with its focus on *ora et labora*.<sup>454</sup> Seeking to maximise returns from their lands by increasing yields or the acreage under cultivation would have exposed the Priory to what could have been a substantial amount of risk. In particular, it would have threatened the patrimony of Saint Cuthbert, one of the foremost saints in medieval England behind Saint Thomas Beckett, whose patrimony they held in sacred trust. Any effort to engage with the wider market would have been a careful and considered action, and the Priory would have gauged the relative costs of different crops and put forth only the effort needed to make the desired return of their investment. Rather than

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453. Preservationist is a term decidedly less fraught with political overtones and will be used henceforth.

454. Chapter 48 of the *Rule of Saint Benedict* prescribes that all monks be engaged in work, while Chapter 39 dictated moderation in meals ‘*quia nihil sic contrarium est omni christiano quomodo crapula* (because nothing is thus incompatible to all that is Christian as gluttony),’ referencing *Luke 21:34 (ad tendite autem vobis ne forte graventur corda vestra in crapula et ebrietate et curis huius vitae et superveniat in vos repentina dies illa* [And take heed to yourselves, lest perhaps your hearts be overcharged with surfeiting and drunkenness, and the cares of this life, and that day come upon you suddenly.]).

maximising the output of Priory land, some manors were used as a buffer against uncertain economic conditions in a way that was essentially risk-averse or, perhaps more appropriately, risk-minimising. It is likely that for this reason some manors remained in hand long after the Priory had made an overall shift towards the leasing of their demesnes; Houghall and Pittington remained in hand well into the middle of the fifteenth century and the manor of Elvethall, part of the hostillar's estate, remained under the Priory's direct management longer still.<sup>455</sup> This served, as Philip Slavin suggests with reference to Norwich Cathedral Priory, to spread risk among the Priory's holdings and not leave the convent unreasonably dependent on the market.<sup>456</sup> As Slavin notes, this idea of risk-spreading is 'somewhat anachronistic when dealing with late-medieval food security', yet it demonstrates that the Norwich Cathedral Priory obedientiaries did not depend on one source of provisions; 'if the demesnes failed, the market could come to the rescue, and the other way around'.<sup>457</sup> Deidre McCloskey made a similar argument earlier, suggesting that the open field system would have helped to minimise potential risks to harvest success.<sup>458</sup> In this case, the lack of direct price-responsiveness in yields, sown acreage, and harvest size is sensible in which productivity and output was directly related to nominal price; keeping relative costs and risks low was by far preferable. The purpose of the demesnes kept in hand throughout the fourteenth and early fifteenth centuries was not necessarily to produce goods for market, but to provide a careful level of return directed by grain prices and the cost of labour. Likely, a steady, low risk supply was more acceptable to Durham Cathedral Priory than the alternatives as it protected them from an often-changing economic climate without risking the overall wealth of the Priory. Furthermore, a

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455. See Lomas, 'A Northern farm', pp. 26-53 for further on the manor of Elvethall.

456. Slavin, 'Church and food provisioning', p. 616.

457. *Ibid.*, p. 616.

458. See McCloskey, 'English open fields', pp. 124-170.

preservationist approach would also have fit well with the management structure of Durham Cathedral Priory. Indeed, this structure almost necessitated it. As noted above, few bursars held office for extended periods; merely fifteen per cent of bursars remained in their post for more than four years. As such, enacting sweeping agricultural change could not have occurred under a single bursar and would have required concerted efforts between multiple individuals. Not only was their economic *mentalité* of preserving wealth in accordance with intellectual trends at the time, but it was also largely necessitated by an obedientiary's inability to plan for and gauge the success of changes in agricultural management. This would lead to a level of institutional inertia, exacerbated by the management structure, keeping change from happening swiftly.

## **V. Gauging the Effectiveness of Individual Bursars**

Though we can evaluate the effectiveness, successes, and failures of individual manorial serjeants with some confidence, as discussed in detail in the following chapter, doing so for the monks who held the office of bursar is much more difficult, though still informative. From the outset, it bears noting that few bursars held office for extended periods: 69 per cent of the bursars from 1296 to 1453 held office for two years or less while only 16 per cent of bursars from the same period held office for three to four years.<sup>459</sup> This difficulty is exacerbated, though it can yet be overcome, by the occasional break in accounts which prohibit the calculation of yields, especially when the auditors' yields are absent. We cannot, for example, see the effect of Thomas Lawson's disastrous tenure as bursar (1432-1438) on the direct farming of manors as too few accounts are extant for that period.

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459. Rollason and Rollason (eds.), *The Durham Liber Vitae, vol. III*, p. 280.

Figures IV.2, IV.3, and IV.4 illustrate the situation using the three manors of Houghall, Ketton, and Pittington. I chose these manors as examples as they have some of the most complete runs of accounts during the late fourteenth and early fifteenth centuries; yield data from before the Black Death is too sporadic to analyse to gauge the effectiveness of individual bursars. Each graph displays the yield per seed of the three main grains from *c.* 1370 to *c.* 1400 at Ketton and Houghall, and to *c.* 1415 at Pittington, and the serving bursar is also displayed. The sample size, given the difficulties already discussed, is unfortunately small. Indeed, as each bursar was rarely in office for more than two years, it is difficult to determine to what extent agricultural success of a bursar was influenced by that of his predecessor. This issue is seen most clearly in the case of Hugh of Sherburn, who was bursar during the 1378 agricultural year. While he was in office, wheat yields were thirty per cent lower than the mean yield at these manors, while barley and oat yields were up by fourteen per cent each from the mean. Yet we can neither blame Hugh of Sherburn for the fall in wheat yields, nor can we praise the rise in barley and oat yields, for his tenure was too short to be sure if these harvests were a result of his own deliberate agricultural policy, weather conditions that favoured the hardier barley and oat harvests, or a knock-on effect from the actions of his predecessors in the office.

As discussed in *Chapter III: Measures of Agricultural Success*, yields, as a rule, declined over the long fourteenth century, with a notable decrease after c.1370 to c.1380. This trend is most visible in Figures IV.2 and IV.3, particularly in the barley yields. At Houghall, yields declined during Thomas of Corbridge's period in office (1381-1388), an occurrence mirrored in Pittington (Figures IV.2 and IV.4).<sup>460</sup> During Thomas of Corbridge's tenure barley yields were

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460. In the following figures, each bursar's name is only given once for his entire term. If the following years are blank, it is to be assumed that the bursar was in office until another name is given on the x-axis. The process then repeats.

on average nearly ten per cent lower than the mean barley yield across these three manors, while oat yields were typically three quarters of the mean yield during this period. John of Newburn, who held office from 1389 to 1391 and again from 1395 to 1396, is a similarly useful example. While he was in office, wheat yields were, on average, eight per cent higher than the mean on the manors, while barley and oats were twenty and seven per cent less, respectively. It seems likely that John of Newburn was less interested in instructing his manorial managers to focus on the barley and oats crops, especially as national and local costs of barley and oats were dwarfed by the rising cost of wheat during the first part of his tenure.

Yet these are short-term trends which could be the result of many different factors, not all of which we can reasonably ascribe to the management styles and priorities of different bursars. Other exogenous factors such as poor weather or political upheaval could well have played a role in our assessment of the various bursars' abilities; so too could the competency of manorial serjeants. It is similarly possible that bursars had clear ideas for the purpose of their manors and of the manner in which they wished their demesnes to be administered, but any instructions did not actually bear fruit. Some manorial officers may have been unable to achieve the goals required by their monastic superiors. The possible reasons for such inability are as varied as they are ultimately unconfirmable. The serjeants may well have acted in good faith and attempted to meet the hypothetical goals set by the bursars, but found themselves constrained by external factors, perhaps demographic changes, economic circumstances, or perhaps even by the effects of Anglo-Scottish warfare. Alternatively, as discussed in the following chapter, some serjeants were much more capable than others. It is certainly possible that the less capable serjeants could not realise the bursars' wishes. Perhaps the various bursars did affect the productivity and success of the different manors, but the outcome of any instructions that they gave the serjeants are not apparent with the available data. This could

perhaps be due to the relatively rapid turnover of bursars: any change in agricultural agenda simply took too long to bear fruit and thus be visible in the extant data. It may well have been the case that the bursars' oversight and instructions had little effect on the actual administration of the various manors. In such circumstances, the manors that were historically highly productive would continue to be so regardless of who was bursar. This was the case with Pittington and Fulwell; these manors in particular maintained a level of productivity during the late fourteenth and early fifteenth centuries (see *Chapter III: Measures of Agricultural Success*).

It is also possible that the manorial managers could have varied their yield-raising techniques with different bursars if they were so instructed. This seems particularly unlikely, given the lack of deviation from trends in grain yields demonstrated in previous chapters and the different purposes individual manors served. For example, a drop in wheat yields would be expected if a bursar decided a certain manor should focus its efforts on the cultivation of barley. Such evidence is not present. This static approach to arable agricultural productivity and, more generally, arable agricultural management under a number of different bursars throughout the long fourteenth century suggests that the Priory desired stability and predictability in its manorial returns.

This should not, however, be viewed as neglect or complacency on the part of the Priory and bursar in the managing of the estate. The bursars cannot be accused of inactivity in fulfilling their office; that the office was deemed so burdensome that no monk was willing to hold it and the responsibilities were divided for a time during the fifteenth century directly contradicts this. Nor did the Priory and the various bursars refuse to act when changing circumstances demanded it. The combination of frequent turnover of monastic managers, institutional inertia, and adherence to intellectual trends advocating a preservationist attitude

to estate management may have perhaps slowed the Priory's response to the changing economic circumstances following the Black Death and the subsequent 'Indian summer of demesne farming', but these factors did not keep the Priory from taking measures to improve their financial security and guarantee their income in the during a period of climatic and economic uncertainty.<sup>461</sup> The difficulty of the period was further driven home by the Priory's audit of its holdings in 1436/7 which ascribed the declining revenue to the loss of the Priory's Scottish holdings, the depopulation caused by reoccurring outbreaks of plague, and the conversion of arable land into pasturage.<sup>462</sup>

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461. See Bridbury, 'The Black Death', pp. 577-592.

462. Dobie, *Accounting at Durham Cathedral Priory*, pp. 187-188. This audit further speaks to the difference between a 'preservationist' mindset rather than a 'conservative' one. Under a preservationist mindset, this audit, though separated from normal audits by its scale, acted to help the convent preserve the patrimony of Saint Cuthbert.

Figure IV.2: Bursars & Calculated Yield per Seed at Houghall, c. 1370- c. 1400

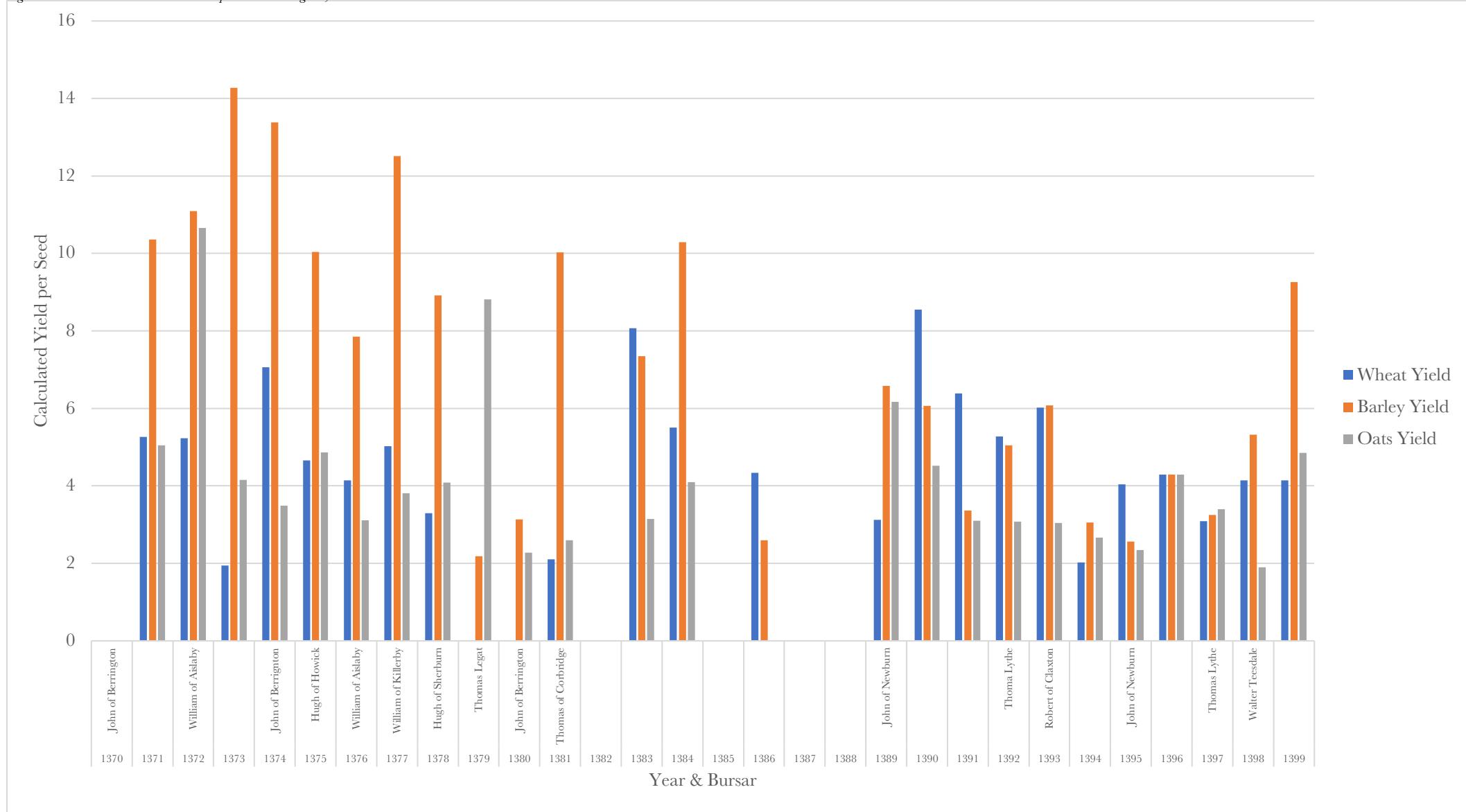


Figure IV.3: Bursars & Calculated Yield per Seed at Ketton, c. 1370- c. 1400

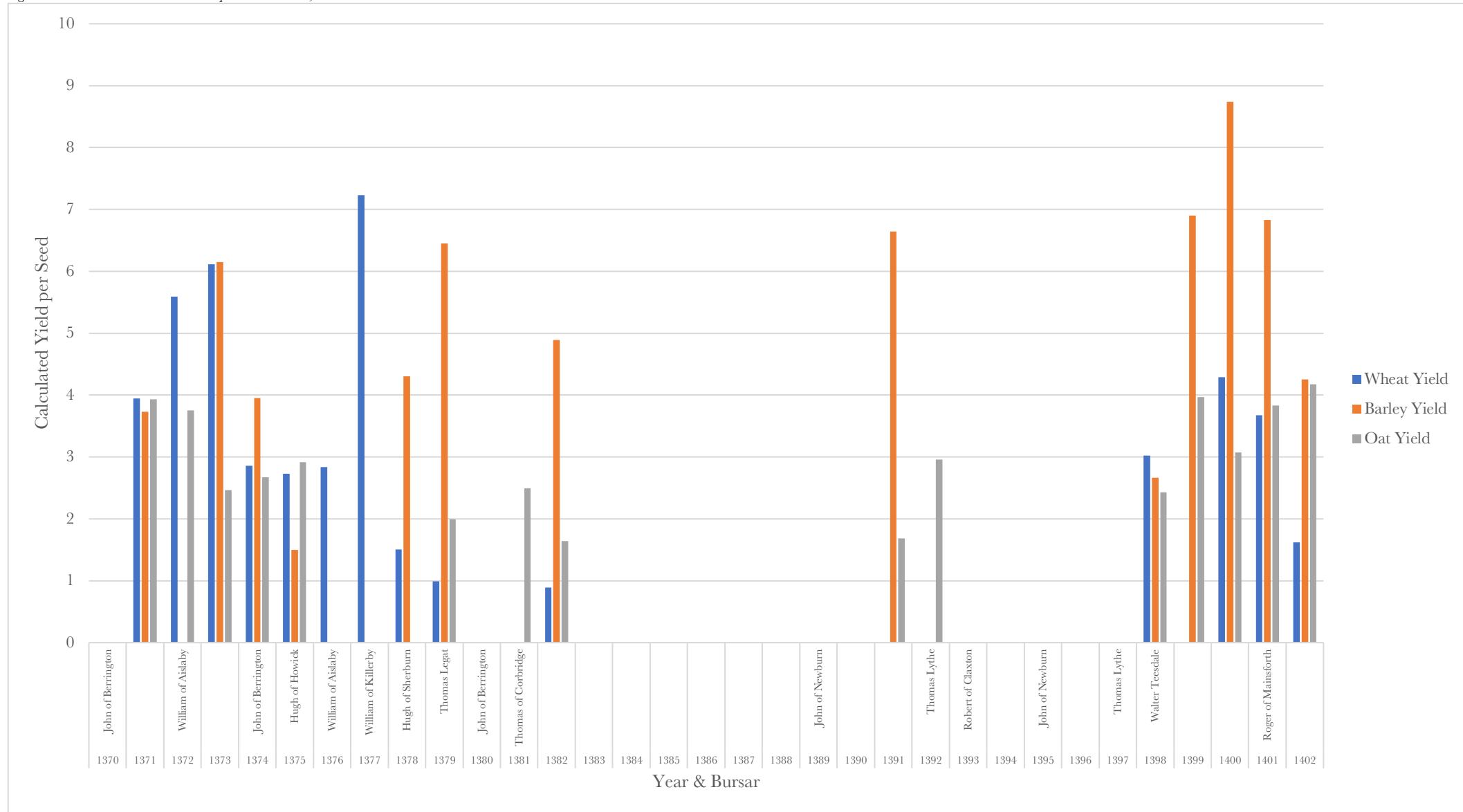
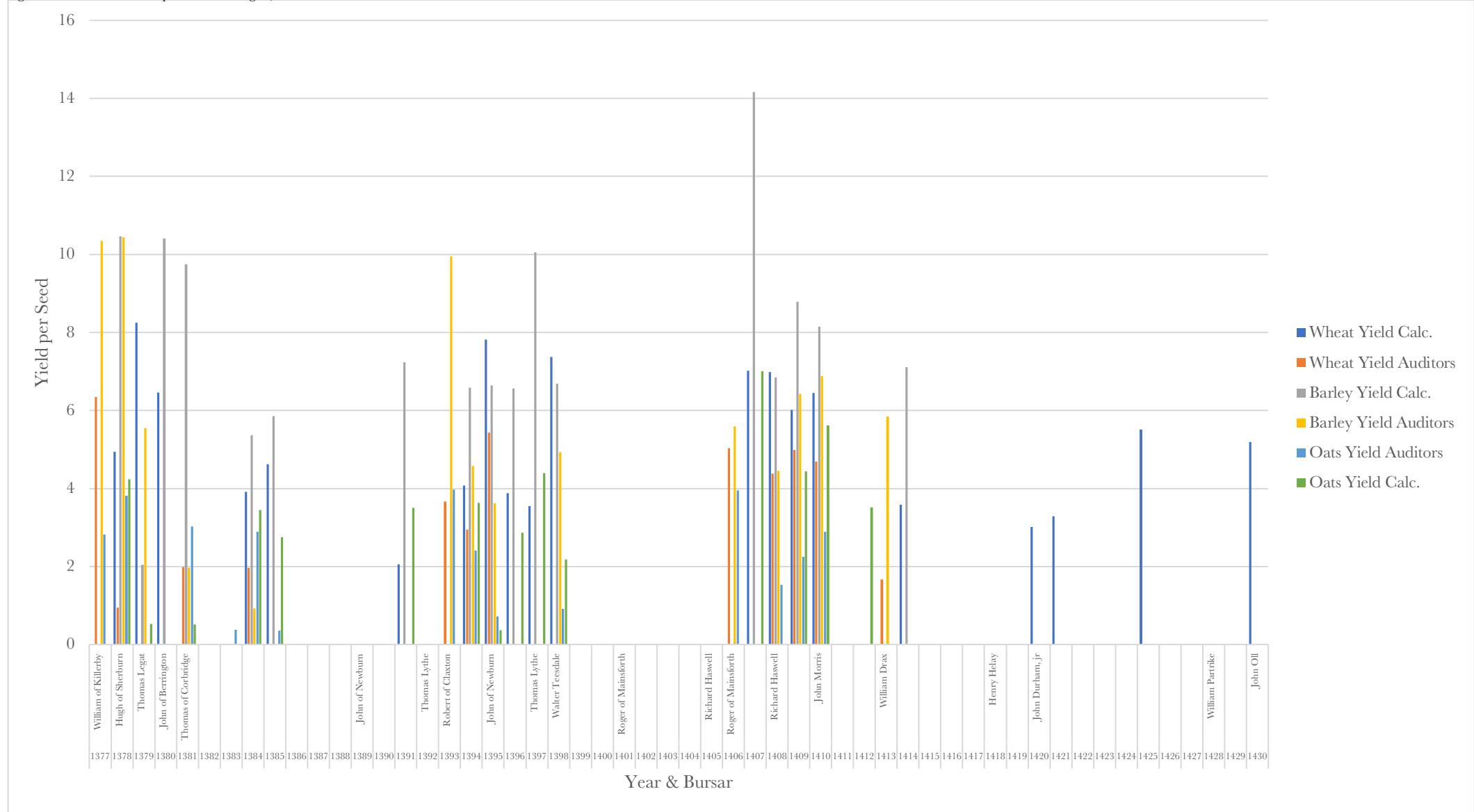


Figure IV:4: Bursars & Yield per Seed at Pittington, c. 1375- c. 1415



## VI. Conclusion

This chapter has demonstrated that the Priory policy towards its demesnes, particularly those of the bursar, which is the focus of this thesis, was dictated by four factors. Firstly, that bursars rarely served a long period in their office. As the vast majority of bursars who were in office between 1296 and 1453 only held the post for two years or less, few bursars would be able to enact sweeping agricultural policy changes.<sup>463</sup> Even if a bursar was in office long enough to make such policy changes or reform, he was statistically unlikely to continue to hold the role long enough to judge the long-term efficacy of any changes or reform he was able to accomplish. Secondly, that the bursars' responsibilities were wide and ultimately burdensome, eventually leading to a dearth of capable individuals willing to hold the office (and hence the selection of the infamous Thomas Lawson in 1432). By 1438, the situation had become so dire and no one was willing to assume the role; the office was divided into three parts which were only reconciled in 1445.<sup>464</sup> As such, bursars were forced to rely not only on their monastic subordinates, but also to depend heavily on their lay manorial managerial staff, further amplifying the effects of the first factor. Thirdly, that, as an overarching principle, the Priory sought to preserve rather than increase its wealth, seeing itself as the guardian of patrimony of Saint Cuthbert. In this chapter I have argued that such a stance was taken as a result of the innate risk-aversion lest the Priory lose any of its holdings or fall into irreparable financial ruin. This third factor was further bolstered by the fourth, that the intellectual and religious currents of the period advised careful moderation, predictability and a degree of self-sufficiency. Many of the brethren were educated at the Priory's college at Oxford and would have been instructed, at least in part, in practical matters; these monks would have returned and shared such

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463. Figures gathered from the list of obedientiaries in Rollason and Rollason (eds.), *The Durham Liber Vitae, vol. III*, p. 280.

464. Dobie, *Accounting at Durham Cathedral Priory*, p. 30.

knowledge with the rest of the Priory. The monks of the convent were aware of such texts as *Les Reules de Seynt Roberd*, Walter of Henley's *Husbandry*, and the other anonymous agricultural tracts, and followed their strictures of careful management, consultation of previous accounts to predict future trends, and living within the means provided by one's estates. These factors kept Durham Cathedral Priory from conducting its affairs in ways that would consistently be familiar to modern business practices. The convent did not seek to acquire additional resources or turn a profit. Yet the managerial practices of the Priory made good sense to the obedientiaries and priors. The convent heeded both the implicit homilies and the practical advice in the agricultural tracts, while the bursars managed their affairs in a manner that was fitting both with their education and origins as well as the difficulties associated with their office. This economic behaviour was similarly present into their oversight of the manorial serjeants through the employment of capable individuals, who are further explored in the following chapter.

## VII. Chapter Supplement

*Table IV.5: Priors of Durham Cathedral Priory During the Long Fourteenth Century*

<b>Prior</b>	<b>Term</b>
Richard de Hoton	1290-1308
Henry of Lusby	1300-1301
William of Tanfield	1308-1313
Geoffrey of Burdon	1313-1321
William of Guisborough, senior	1321
William of Cowton	1321-1341
John Fosser	1341-1374
Robert of Walworth	1374-1391
John of Hemingbrough	1391-1416
John Wessington	1416-1446
William Ebchester	1446-1456

*Source: Rollason and Rollason (eds.), The Durham Liber Vitae, vol. III, p.280.*

Table IV.6: Bursars of Durham Cathedral Priory During the Long Fourteenth Century

<b>Bursar</b>	<b>Term</b>
Thomas of Haswell	1296-1301
Stephen of Howden, junior	1300-1301
Thomas of Haswell	1302-1305
Hugh de Monte Alto	1305-1305
Roger of School Aycliffe	1306-1308
Robert of Stamford	1308-1308
John of Harmby	1308-1310
Thomas of Haswell	1310-1312
John of Harmby	1312-1313
John of Barmpton	1312-1313
Alexander of Lamesley	1313-1316
John of Harmby	1317-1318
Alexander of Lamesley	1318-1318
Nicholas of Thockerington	1319-1320
Alexander of Lamesley	1320-1321
John Luttrell	1321-1321
Alexander of Lamesley	1322-1322
Alan of Marton	1322-1322
John Luttrell	1323-1324
William of Killingworth	1324-1325
John Luttrell	1325-1327
John de Crepyng	1328-1330
John of Hartlepool	1329-1329
William of Hexham	1330-1330
Walter of Scarisbrick	1330-1331
William of Charlton	1333-1335
William of Hexam	1335-1336
Adam of Darlington	1335-1357
Robert of Middleham	1336-1341
Robert of Benton	1341-1346
Thomas of Stockton	1346-1349
John of Newton	1349-1355
Richard of Birtley	1357-1363
John Abel	1363-1364
Richard of Birtley	1364-1367
John of Berrington	1367-1371
William of Aislaby	1371-1373
John of Berrington	1373-1374
Hugh of Howick	1374-1375
William of Aislaby	1375-1376
William of Killerby	1376-1377
Hugh of Sherburn	1377-1378
Thomas Legat	1378-1379

Table IV.6: Bursars of Durham Cathedral Priory During the Long Fourteenth Century

<b>Bursar</b>	<b>Term</b>
John of Berrington	1379-1380
Thomas of Corbridge	1380-1388
John of Newburn	1388-1391
Thomas Lythe	1391-1392
Robert of Claxton	1392-1394
John of Newburn	1394-1396
Thomas Lythe	1396-1397
Walter Teesdale	1397-1400
Roger of Mainsforth	1400-1404
Richard Haswell	1404-1405
Roger of Mainsforth	1405-1407
Richard Haswell	1407-1409
John Morris	1409-1412
William Drax	1412-1417
Henry Helay	1417-1419
John Durham, junior	1419-1427
William Partrike	1427-1429
John Oll	1429-1432
Thomas Lawson	1432-1438
John Gateshead with John Oll	1438-1439
John Gateshead	1439-1445
William Eden	1445-1447
John Middleham	1447-1451
John Penshaw	1451-1453

Source: Rollason and Rollason (eds.), *The Durham Liber Vitae*, vol. III, p.280.

# Chapter V: The Serjeants of Durham Cathedral Priory

## *The Reeve, General Prologue, The Canterbury Tales*<sup>465</sup>

Ther was noon auditour koude on him wynne.  
Wel wiste he by the droghte and by the reyn  
The yeldynge of his seed and of his greyn.  
His lordes sheep, his neet, his dayerye,  
His swyn, his hors, his stoor, and his pultrye  
Was hooly in this Reves governynge,  
And by his covenant yaf the rekenynge,  
Syn that his lord was twenty yeer of age.  
Ther koude no man bryng hym in arrerage.  
Ther nas baillif, ne hierde, nor oother hyne,  
That he ne knew his sleigte and his covyne;  
They were adrad of hym as of the deeth.  
His wonyng was ful faire upon an heeth;  
With grene trees yshadwed was his place.  
He koude bettre than his lord purchace.  
Ful riche he was astored pryvly.  
His lord wel koude he plesen subtilly

No auditor could gain a point on him.  
And he could judge by watching drought and rain  
The yield he might expect from seed and grain.  
His master's sheep, his animals and hens,  
Pigs, horses, dairies, stores, and cattle-pens  
Were wholly trusted to his government.  
He had been under contract to present  
The accounts, right from his master's earliest years.  
No bailiff, servant, or herdsman dared to kick.  
He knew their dodges, knew their every trick;  
Feared like the plague he was, by those beneath.  
He had a lovely dwelling on a heath,  
Shadowed in green trees above the sward.  
A better hand at bargains than his lord.  
He had grown rich and had a store of treasure  
Well tucked away yet out it came to pleasure  
His lord with subtle loans or gifts of goods

## I. Introduction

Manorial managers, if we are to trust the popular literature of the time, were a study in contrasts: occasionally of servile status, but often with considerable personal resources, loyal to their lord, but mistrusted. Chaucer's Reeve was certainly knowledgeable in arable and pastoral agriculture, while also knowing all the tricks to prevent fraud. Nevertheless, his pretensions in his dress and his 'store of treasure' are emblematic of his social pretensions.<sup>466</sup> Yet previous historians have been unsure how to characterise serjeants and reeves — the individuals who managed a manorial demesne. Elizabeth Halcrow described them as a 'highly skilled body of small scale administrators,' in her study on the decline of demesne farming at Durham Cathedral Priory, the implications of which are discussed below.<sup>467</sup> More recently, however, Bruce Campbell stated that '[f]ollowing the Black Death manorial officials proved hard to

465. Middle English text: Geoffrey Chaucer, *The Riverside Chaucer* (Oxford, 2008), lns. 594-610, p. 33, Modern English Gloss: Geoffrey Chaucer, *The Canterbury Tales* (London, 1977), lns. 612-629.

466. Alastair Minnis and David Stone, 'The Reeve' in Stephen Rigby (ed.), *Historians on Chaucer* (Oxford, 2014), p. 417. See also Bryan Carella, 'The Social Aspirations and Priestly Pretense of Chaucer's Reeve', *Neophilologus*, 94(3) (2010), pp. 523-529.

467. Halcrow, *Administration & Agrarian Policy*, p. 89.

recruit, dilatory in the discharge of their duties, and fraudulent in their dealings'.<sup>468</sup> David Stone has done much on the economic *mentalités* of manorial reeves and his *Decision-Making in Medieval Agriculture* is in a very large way a re-evaluation of economic attitudes in the medieval period. Stone argues that

...by dint of necessity historians tend to assume what happened on the demesnes of bishops and abbots must also have happened on the farms of gentry and on the strips of land that were so essential to the survival of peasant families. By reaching an understanding of the mentalities of medieval reeves, it becomes possible to distinguish differences in the way that land was managed at different levels of society and thus to draw meaningful conclusions about variations in economic success and agricultural productivity.<sup>469</sup>

Stone is not hesitant to focus on the role manorial officials played in late medieval agriculture. He argues that '[h]ad demesne officials not been so skilled at reading the market, recorded prices would have been significantly lower and the Indian summer decidedly cooler' as 'the reeves and bailiffs on this demesne'<sup>470</sup> responded to these challenges with remarkable flexibility and proficiency, carefully adjusting the use of resources from year to year as circumstances changed'.<sup>471</sup> Yet Halcrow somewhat downplays the role of manorial serjeants, for while they may have 'commanded considerable resources in excess of their standard salary', they were a 'body of small of small scale administrators' of the demesne and, by implication, their own affairs, albeit ones that were 'highly skilled'; this view can perhaps be attributed to her focus on the decline of demesne agriculture at Durham Cathedral Priory and not the actual management of the estate.<sup>472</sup> I will argue here that Halcrow's statement overly limits the scope of activities of the serjeants off the manor, in describing them as 'small-scale administrators', while Campbell's statement does not accurately describe the state of affairs on the estates of the Priory bursar. Nor were these individuals unfree tenants obliged to serve as manorial officials

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468. Campbell, 'The Land', pp. 225-226.

469. Stone, *Decision-Making*, p. 21.

470. Wisbech Barton in Cambridgeshire.

471. Ibid., pp. 214, 79

472. Halcrow, 'Decline of demesne farming', p. 347, Halcrow, *Administration & Agrarian Policy*, pp. 88, 86.

and perhaps not keen to take on the role again, as Stone characterises late fourteenth century manorial officials, but instead capable professionals who used their office as a gateway to economic advancement.<sup>473</sup>

This chapter will therefore examine the role of the Durham Cathedral Priory manorial serjeants, who they were, what they valued, and what ability they possessed. For this purpose, I consulted the extant manorial accounts for the Durham Cathedral bursar's manors and gathered and analysed the relevant data to demonstrate the managerial styles and relative successes and failures of the manorial serjeants. I additionally consulted tithe receipts from the fourteenth and fifteenth centuries and two of the bursar's rental books to examine the role played by the manorial serjeants in other decision-making situations. The chapter will thus use quantitative data, prosopographical research, and the intellectual currents of the time to put both the individual and the institution as an individual in the fore of an economic history study. This chapter therefore does not seek to reduce the economic activities and social standings of the manorial serjeants into overall trends defined by models, but aims to comment on the decisions, abilities, and economic *mentalités* of individuals. Consequently, this chapter seeks to further our understanding of the manorial serjeants and their activities both on and off the demesne, and their actions in the affairs of the lords and on their own behalf. In doing so, I will explore and answer three main questions. Firstly, who were the serjeants, what incentives did they have for performance, and what roles did they fulfil on the bursar's demesnes? Secondly, in what extra-manorial economic activities did the serjeants take part and to what scale? Thirdly, how skilled were the serjeants both individually and as a group? Once these three main questions have been explored, this chapter will reassess the role of serjeants as small-scale administrators and explore the societal roles and standings these individuals occupied.<sup>474</sup>

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473. Halcrow, Administration & Agrarian Policy, p. 89, Stone, *Decision-Making*, pp. 13, 168, 223.

474. Much of the data used in this study is given in the chapter supplement.

## II. Who Were the Serjeants?

It is worth noting from the outset that the serjeants of Durham Cathedral Priory do not appear to be exactly synonymous with reeves elsewhere in England. Unlike reeves further south who were often serfs by blood (see below) as well as holding customary tenancy, the serjeants of Durham Cathedral Priory were free and their holding of customary tenancies had no stain of serfdom, though they may have once been obliged to serve based on their tenancies in earlier periods. However, the Durham serjeants seem to command personal economic resources beyond what could be expected of a normal manorial reeve. On the balance of the evidence that follows, it seems likely that the office of serjeant on the estates of the Durham Cathedral Priory bursar would have been considered a more prestigious and responsible role than the office of reeve on the estates of the Bishops of Winchester and Ely, for example, as discussed by others.<sup>475</sup> This does not mean, however, that we cannot make, or should not make, comparisons between manorial serjeants on the estates of the Durham Cathedral Priory and the manorial reeves elsewhere in England. These individuals carried out many of the same functions, even if the serjeants may have had slightly more authority than the average reeve. The lack of a manorial reeve meant that the serjeants had to undertake the roles normally filled by those individuals. When Richard Lomas touched on them briefly in his wider thesis, he argued that the serjeants had a relatively unimportant and supervisory role, for their ‘supervision was close and frequent’ and they ‘had nothing to do with rents or fines’ off the demesne and therefore ‘were virtually devoid of income’.<sup>476</sup> Yet to devalue the serjeant’s role because of his lack of income or the level of supervision placed upon him by the Priory seems somewhat ill-advised,

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475. Stone gives an excellent introduction to the role and capabilities of reeves, many of which would have been shared with the Durham Cathedral Priory serjeants in Stone, *Decision-making*, pp. 13-14. See also Stone, ‘Medieval farm management’, p. 614.

476. Lomas, *Durham Cathedral Priory as Landowner and Landlord*, pp. 112-113.

particularly when their activities off and on the manor shed light on their economic standing and status.

There is, of course, some debate over the nature of a serjeant's status. For the purpose of this study, a high or higher 'economic standing,' 'economic status,' or similar terms are understood as an individual's access to ready cash or credit with which he might interact with the wider market, often at informed speculation, above the level necessary for subsistence. Such interaction with a wider market is taken to include the purchasing of tithes and sale of grain and the renting of land, including land for crops or pasture, mills, and entire manors.

The office of serjeant was, unsurprisingly, an important role. Each serjeant was responsible for the manor at which he was employed. As at Wisbech Barton in Cambridgeshire, 'the day-to-day decisions about marketing, sown acreage, livestock numbers and the intensity of cultivation' were left to local officials.<sup>477</sup> This was likewise the situation on the Durham demesnes. No stewards or other officials acted as a liaison between the serjeants and the convent; the obedientiaries are not visible in the manorial accounts except as recipients of grain. As such, the serjeants were responsible for the *famuli* and for the hiring, management, and payment of day and piece workers. They were also responsible for the planting, weeding, manuring, and other tasks throughout the agricultural year, as well as the harvest itself. Their decisions on the planting would be determined by the objectives of the Priory and the agricultural patterns would be determined by 'movements in market price, fluctuations in yield, changing consumption requirements, and even weather conditions'.<sup>478</sup> Serjeants at the bursar's manors also sold grain, presumably at the directive of the bursar for larger quantities, at either the gate of the manor or *in foro* (at market). These quantities could be either the petty surpluses mentioned by Lomas for the earlier part of the fourteenth century, or larger amounts of grain,

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477. Stone, *Decision-Making*, p. 32.

478. *Ibid.*, pp. 206, 163

such as the 6 quarters, 1 bushel, 2 pecks of oats sold at Westoe in 1373.<sup>479</sup> The serjeants were responsible for a myriad of managerial responsibilities and would be required to implement the agricultural policies of the bursar and the Priory as a whole. Indeed, serjeants at the more far-flung manors such as Ketton and Belasis were unlikely to have as much direct oversight as serjeants at manors closer to Durham, which would have perhaps made these offices rather attractive posts, especially for those serjeants who did not like direct management. The serjeant was also responsible for the well-being of the livestock on the manor and the upkeep of manorial buildings and tools and transportation such as ploughs, carts, and wagons, even if the funds for such needs were channelled through the bursar.<sup>480</sup> As yield per seed was often used as the measure of the success of a harvest, manorial officials could be 'held personally responsible for any shortfall'.<sup>481</sup>

Though the role of a serjeant is relatively clear, personal details about the officeholders are much more obscured, though not unexpectedly so. A manorial serjeant on the Durham Cathedral Priory bursar's estates would invariably be male. Mark Forrest notes that '[w]hile women manorial offices were widely distributed, they were not the norm and they do not appear on the majority of manors; in large areas, perhaps whole counties, they are absent'.<sup>482</sup> Furthermore, there are no extant references to women who acted as manorial managers or other officials in the Durham Priory manorial accounts. The age of the serjeants when they served is strikingly difficult to estimate, for there are no records that provide a birth year.

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479. Lomas, *Durham Cathedral Priory as Landowner and Landlord*, p. 113. The amount sold was noted from DCD-West. acs. 1372-3. For this account and any further mentions of specific accounts of manors within the bursar's estate or information on agricultural activity on these manors is a result of information gathered from the primary research for this thesis. These accounts are noted in the catalogue as GB-0033-DCD-Enr., DCD-Beapk. acs., DCD-Bels. acs., DCD-Bewl. acs., DCD-Bill. acs., DCD-Dalt. acs., DCD-Fery. acs., DCD-Fulw. acs., DCD-Hew. acs., DCD-Houg. acs., DCD-Ket. acs., DCD-Merr. acs., DCD-Pitt. acs., DCD-Ward. acs., DCD-West. acs. (Enrolled manorial accounts, Bearpark, Belasis, Bewley, Billingham, Dalton, Ferryhill, Fulwell, Heworth, Houghall, Ketton, Merrington, Pittington, Wardley, and Westoe, respectively).

480. Most pastoral agriculture was centred at Muggleswick and le Holme. Most serjeants would have been responsible for a limited amount of livestock. Dobie, *Accounting at Durham Cathedral Priory*, p. 30.

481. Campbell, *English Seigniorial Agriculture*, pp. 315-316.

482. Mark Forrest, 'Women manorial officers in Late Medieval England', *Nottingham Medieval Studies*, 57(2013), p. 60.

Furthermore, with recurrent outbreaks of disease and the possibility of agricultural mishap, any record giving the year of death of a serjeant cannot be used to estimate the age of serjeant when they served, even if such records were available, for we cannot be sure they had died of old age. Presumably, a serjeant would be in his middle years, for such an age would allow him to gain the necessary experience from managing his own farm before taking over the operations of a demesne farm. Furthermore, it would allow him to, hopefully, gather a reputation for competency that would be noticed by either a serving serjeant, the bursar, or a lay official of the latter. We can assume that a serving serjeant had responsible adults, either grown children or his wife, on his own farm or the financial wherewithal to engage enough hired labour to replace any labour lost by his management of the demesne. That a serjeant would serve and knowingly spend time away from his own holding is also telling, though estimating the time away from his own land is difficult and would vary according to the season. At planting and harvest, when his oversight would be most needed, a serjeant would be very busy indeed on both his own holdings and the bursar's manor. His inability to bilocate at such important times would further necessitate trusted labourer or managers on his own holdings and the wherewithal to suitably compensate such individuals.

*Table V.1: Serjeant Wages and Terms*

<b>Serjeant Name</b>	<b>Serjeant at</b>	<b>Average of Wages (s)</b>	<b>Terms Served</b>
John, serviens de Ketton	Ketton	13.33	1
John de Chilton	Ketton	20	5
John de Monkton	Fulwell	13.66	17
John Ponchon	Houghall & Pittington	14.63	9
John Witbrow	Pittington	10	1
Richard Wright	Ketton	6.67	1
Robert de Murton	Houghall	13.33	11
Robert Kirkman	Pittington	13.51	11
Thomas Watson	Ketton	9.67	2
William de Stokeslay	Ketton	20	4
William Scott	Ketton	14.78	6
William Willy	Pittington	13.08	3

*Source: DCD-Fulw. acs., DCD-Houg. acs., DCD-Kett. acs., DCD-Pitt. acs.*

Table V.2: Serjeant Wage Data at Four Manors, 1372-1400

	<b>Average</b>	<b>Median</b>	<b>Max.</b>	<b>Min.</b>	<b>StDev</b>	<b>n.</b>
Fulwell	13.66	13.33	20	6.67 <sup>483</sup>	2.62	17
Houghall	13.69	13.33	20	12.33	1.70	16
Ketton	18.04	20	20	13.33	3.04	16
Pittington	13.73	13.33	19	12.58	1.14	18

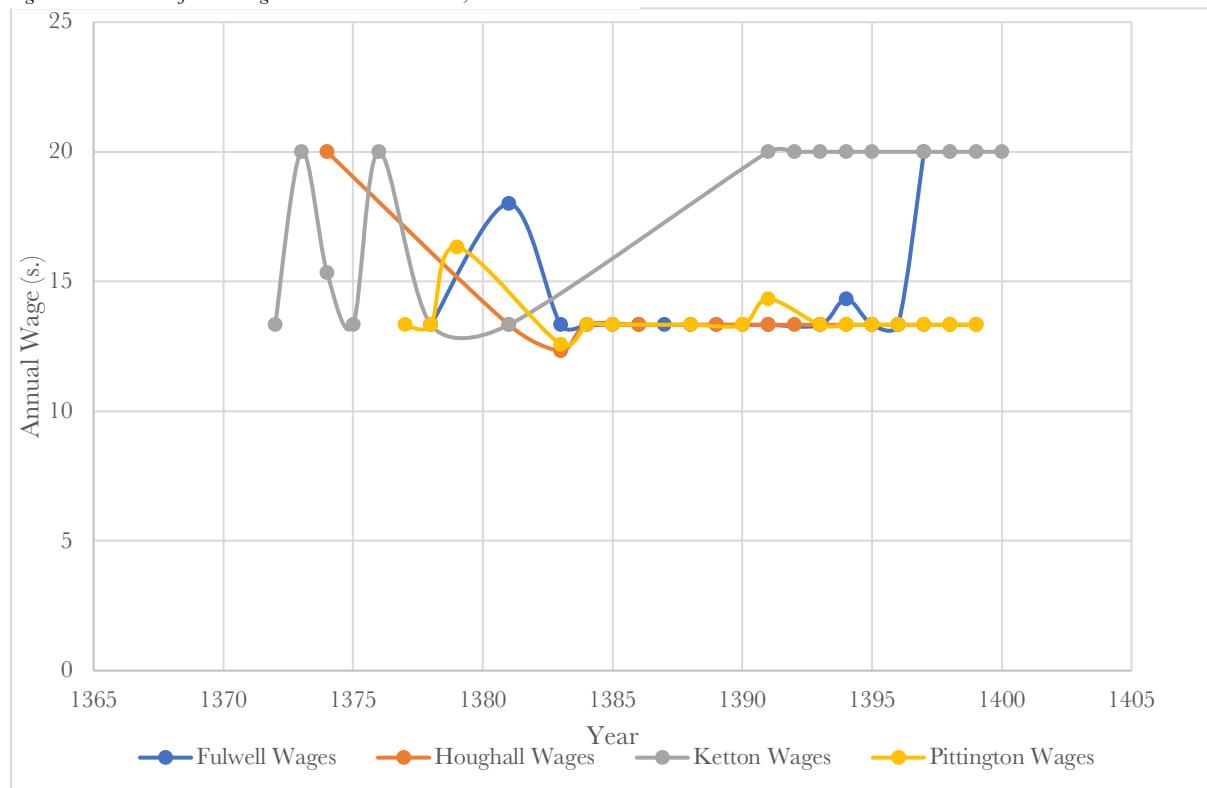
Source: DCD-Fulw. acs., DCD-Houg. acs., DCD-Kett. acs., DCD-Pitt. acs

A serjeant's compensation for service was not, at face value, substantial. Halcrow stated that a serjeant would receive twenty shillings and a robe, though the *corpus* of manorial accounts which I consulted speak to more wage variation (see Tables V.1 and V.2).<sup>484</sup> Some manors might pay little and others more, often fluctuating. At Bewley, for instance, in the 1372/3 agricultural year, the serjeant, one Thomas of Esingwald, received 13s 4d for his service, but in the 1377/8 agriculture year, the serving serjeant, John de Baumbrugh, was paid 16s. A few years earlier in 1375/6 about ten kilometres away at Ketton, William Scott was paid 20s for his service. Using Fulwell, Houghall, Ketton, and Pittington, for these four manors provide excellent coverage for the late fourteenth century, we can create a geographically wide sample of serjeants' wages from 1370 to 1400, the period for which the record is most complete. At first glance it appears that the serjeants who served the most terms commanded the highest wages, but as in the case of John de Chilton and William de Stokeslay, they received high wages at the beginning of their careers as serjeants: 20s, which was the apparent customary wage at Ketton from at least 1391. These two examples are also geographically isolated; both served at Ketton in the final decade of the fourteenth century. Previous salaries at Ketton had been much more in line with the other manors and were either 13s 4d or 15s and 4d. John de Monkton, who served at Fulwell for over twenty years, likely never saw an increase to his salary of 13s 4d until his final term in 1396, when he earned 20s, despite what would have been considerable experience.

483. The length of time covered in this particular account is not completely clear.

484. Halcrow, *Administration & Agrarian Policy*, pp. 85-86.

Figure V.1: Annual Serjeants' Wages at Four Selected Manors, c. 1370-c. 1400



Based on the data from these four manors, the geographic and chronological location of the manors and wage data is the largest predictor of the annual wage (Figure V.1). Wages at manors closest to Durham were lower than those in the more far-flung regions of the county. Given the reliance of the monks on the manors of Pittington and Houghall, this seems somewhat unusual though manorial custom may have been stronger at these two manors than elsewhere. There is similarly the possibility that individuals were harder to recruit on manors further from Durham, though such manors may have relied on local men.

Serjeants were also provided, similarly to other members of the *famuli*, with a livery of grain typically fixed by custom. At Bearpark in 1340/1, the serjeant Richard de Thinley received his livery of wheat mixed with rye at a rate of a quarter per ten weeks, while the other employees of the manor received a quarter of wheat mixed with rye every twelve weeks. John Ponchon serjeant at Houghall for 1374/5, received 5 quarters, 1 bushel, and 2 pecks of wheat at a rate of a quarter per ten weeks; members of the *famuli* a quarter of wheat, often mixed with rye, every twelve weeks. Such rates are consistent with the national findings of Jordan Claridge

and John Langdon in their study of *famuli* labour.<sup>485</sup> Such a livery constituted an important aspect of the payment of the *famuli* and the serjeants as it could provide a substantial amount of subsistence. Claridge and Langdon estimated that a livery of rye or barley and oats could either feed 2.8 or 2.3 people, respectively; given that wheat has a higher caloric extraction rate and more kCal per bushel, this figure would be higher for the Durham manors given the apparent custom to provide liveries in wheat.<sup>486</sup> Given the rising, albeit erratically, price of wheat in England as a whole and County Durham in particular during the fourteenth century, many members of the *famuli* and the serjeants on the lower end of the socio-economic ladder may have sought to sell their wheat livery for a lower priced crop and save the difference. This would have been particularly profitable c. 1360 to c. 1380 when the price of wheat in County Durham was close to 10s per quarter. John Ponchon in 1374/5 could theoretically have sold his 5 quarters, 1 bushel, and 2 pecks of wheat he received in livery for about £2 15s 6d and then purchased about 8 quarters, 2 bushels, and 2 pecks of barley and break even at 1375 prices.<sup>487</sup> As such, John Ponchon would have received a salary of £3 8s 10d. His grain livery made up the majority of his annual compensation and may have been particularly vital to many serjeants, especially those whose own activities were more limited than many of their contemporaries. Furthermore, the size of grain liveries was stable and fixed by custom and not by the price of grain; in years of particularly high grain prices, the value of the grain liveries could increase substantially and, with that, the salary of the serjeants.<sup>488</sup>

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485. Jordan Claridge and Langdon, John, 'The composition of famuli labour on English demesnes, c. 1300', *Agricultural History Review*, 63(2) (2015), p. 193.

486. Ibid., p. 214, Campbell, *English Seigniorial Agriculture*, p. 215.

487. The carters, ploughmen, and shepherds were paid at a lower rate than John Ponchon. Each would receive a quarter of wheat every 12 weeks each for their service, or about 4 quarters, 2 bushels, and 2 pecks of wheat per person per year. Assuming the *famulus* was able to sell and buy grain at the right times, he could sell his wheat livery for £2 6s 4d and then purchase 7 quarters of barley and break even. The gardener at Houghall in that same agricultural year had a significantly smaller wheat livery of a bushel of wheat every three weeks, totalling 2 quarters, 1 bushel, and 2 pecks of wheat. This would have fetched about 23s 6d at market and allowed for the purchase of about 3 quarters and 4 bushels of barley. These calculations are based on one quarter of wheat fetching 10.70s and one quarter of barley fetching 6.62s as provided in Gemmill, Dodds, and Schofield, 'Durham grain prices', p. 320.

488. See Claridge and Langdon, 'Composition of famuli labour', 187-220 for further on the role of grain liveries in the renumeration of the *famuli*.

Any other perks from the role of serjeant are more difficult to uncover. If practice at the Durham Cathedral Priory demesnes mirrored those elsewhere, members of the *famuli* could likely expect a meal of pottage during the working day and manorial feast days would provide a meal or more and between ½d and 1d in gratuity.<sup>489</sup> The serjeants would perhaps have taken part in these feasts and perhaps received a slightly larger cash gift than the workers whom they oversaw. Stone suggests that manorial reeves at Wisbech Barton received an extra 7s 4.5d at harvest time c.1320-1330, though the evidence for such a practice on the bursar's estate is lacking.<sup>490</sup> At Wisbech Barton, reeves would also have received exemption from customary services and serving as a juror and were 'also exempted from paying some if not all of their cash rents and other customary payments' and may have had the opportunities for informal gain; though, as seen below, serjeants on the bursar's manors continued to pay fines in lieu of villein labour obligations.<sup>491</sup> The chance to act on informal opportunities as noted by Stone should not be discounted either. An unscrupulous serjeant could try to supplement his income through less than honest means. Such egregiously dishonest behaviour was observed by Chris Briggs in his study of the monitoring of manorial managers through courts, including a notable – but hardly unique – example in which the reeve of Heacham (Norf.) was accused, and found innocent, of stealing grain by night from his lord's demesne and illegally allowing his beasts to mix and be provisioned with those of the lord.<sup>492</sup> Indeed, Briggs notes that the local courts may have not have acted in the lord's best interest, and instead based their judgement on 'the way in which his (the official's) management style affected their own interests'; after failing in a court

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489. Claridge and Langdon, 'Composition of famuli labour', p. 216.

490. Stone, *Decision-Making*, p. 33.

491. *Ibid.*, p. 33.

492. Chris Briggs, 'Monitoring demesne managers through the manor court before and after the Black Death' in Richard Goddard, John Langdon, and Miriam Müller, (eds.) *Survival and Discord in Medieval Society: Essays in Honour of Christopher Dyer* (Turnhout, 2010), pp. 183, 186. The reeve was exonerated by the manorial court. Such research into the surviving court books of the Priory (GB-0033-DCD-Halmote Court Rolls and GB-0033-DCD-Halmote Court Books) and the occurrences of manorial officials in the court is beyond the scope of the present thesis, but instead remains an avenue of enquiry I wish to pursue in further projects.

case, in which he was depending on the report of the jurors, a lord would likely have had no further recourse beyond not again employing the official.<sup>493</sup>

In a trend either prompted by managerial dishonesty or in an effort to prevent it, agricultural tracts such as that of Walter of Henley or *Les Reules de Seynt Robert* advised oversight and proof of a serjeant's actions. Lords and auditors were well aware of the ways in which they could be cheated and the effect of such actions on their income.<sup>494</sup> If an animal died or was slaughtered, the serjeant was to either display the animal to an auditor before it was flayed or have the hide at the time of the audit. The serjeant would be further responsible for presenting receipts and tallies at the annual audit to justify his expenses.

The documentary evidence leaves no trace of a serjeant's unwillingness to serve, though we cannot rule that out. Nor do we have extensive evidence of the method of their selection. Elsewhere in England and when servile obligations were at their highest, manorial officials could be unfree tenants serving in rotation or elected by their peers. Yet this does not seem to have been the case at Durham. We do see, however, serjeants filling the role for an extended period of time. Though some serjeants only served for a year or a portion of a year, many served multiple terms usually, though not always, at the same manor. If a serjeant completed his first year in office, he was likely to serve three years or more as the demesne manager. Such was the case of John de Lethom, serjeant at Bearpark from 1369/70 until 1374/5, John de Seaham, serving at Pittington in 1324/5, 1325/6, 1327/8, and 1328/9, and John Watson, who was serjeant at Fulwell from 1410/1 until 1412/3. The regular term for a serjeant was twelve months, usually from Michaelmas of one year to Michaelmas of the next (or the Sunday before or after Michaelmas to the Sunday before or after Michaelmas of the next year), though custom

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493. Briggs, 'Monitoring demesne managers through the manor court before and after the Black Death', p. 195.

494. See Carlin, 'Cheating the Boss', pp. 183-198.

dictated the contractual dates for some manors and Martinmas seemed to be the preferred secondary option.<sup>495</sup>

When a serjeant served for only part of a year, it is likely that they were filling a position after an individual had been dismissed for incompetence or had become unable to undertake the role, either due to illness, injury, old age, or death. The manorial accounts themselves show this. With very few exceptions, when an account does not cover the agricultural accounting year customary to that manor, the following account shows a new serjeant in charge of the demesne. Manorial records show that John Luclyne served as serjeant at Billingham from 1325/6 to 1329/30 on annual terms that began and ended on Michaelmas or the Sunday before it. However, in 1330/1, John Luclyne's term began as normal on the Sunday after Michaelmas but ended abruptly on the Sunday before the feast of St Ambrose (31 March) 1331. Walter del Byres took office the following day and served until Michaelmas 1333. The abrupt departure of John Luclyne does not seem to have been for misconduct or inability to serve, for in 1333/4 he began service at Ketton, where he remained until 1335/6. John Luclyne was instead responsible for filling the gap left by the abrupt departure of another serjeant, presumably to replace Walter Tonkotes, who disappears from the record shortly before John Luclyne became serjeant at Ketton.

By contrast, William Scott, also serving at Ketton, took office on Michaelmas 1369 and continued to serve on a yearly basis as serjeant, with each term beginning and ending on Michaelmas until 1377, when he left the role on the Feast of the Purification of the Blessed

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495. Of the 406 accounts I consulted for this thesis, 76 per cent opened on Michaelmas or within a few days of the Feast (i.e. the 1343/4 account for Bewley opened on the Sunday before Michaelmas. This system of opening the account before the feast is also used for the other feast days that are used in the accounts). 4 per cent began on or within a few days of Martinmas, while 79 per cent and 5 per cent end on Michaelmas or Martinmas (respectively) or within a few days of the feasts. 5 per cent and 17 per cent of accounts begin or end (respectively) on feasts other than Michaelmas or Martinmas; such accounts include the account for Ketton in 1336 which opened on the Sunday after Clement (24 November) 1336 and closed on the Sunday after John the Baptist (29 June) 1337. Of all the feasts other than Michaelmas that were used to open and close manorial accounts, Martinmas is the most frequent (18 per cent of these accounts open on Martinmas, while 22 per cent close on Martinmas. 280 accounts (69 per cent) begin and end within a few days of Michaelmas.

Virgin Mary, 2 February, 1377. Grain yields during the last few years of his office had begun to fall and during his last three years of office, wheat yield per seed net of tithe did not exceed 2.86, well short of the average wheat yield of 4.46 seen at neighbouring Bewley during the same period. Incompetence or inability is, it seems, the most likely cause of his departure as he is noted as renting land towards the close of the fourteenth century. Yet yields, particularly wheat yields, took some time to recover after he left office and it is tempting to assume that he did a fair job of running the manor into the ground during his final years in office.

The bursar certainly kept a close eye on the serjeants, and many manorial accounts show evidence of careful auditing. Some serjeants were fined rather than dismissed, though the bursar could be merciful. Robert de Rouseby, serjeant of Houghall in 1407/8, was pardoned the 6s 8d he was fined due to loses on the manor.<sup>496</sup> Some serjeants served long enough that they were likely as much a fixture of the manor as the fields themselves. John de Monkton served at Fulwell without interruption from 1377/8 until 1402/3 and then, possibly, went on to serve at Bewley from 1404/5 until 1406/7.<sup>497</sup> John Ponchon is identified as the serjeant at Houghall for eleven years and as serjeant of Pittington for four more years; gaps in the run of accounts preclude us from stating that he served for a longer period, but in the periods where the gaps are only one or two years, it seems likely.

### **III. Serjeants and Tithes**

As suggested above, the serjeants' presumed means and ability to take time away from their own farms and fields does much to demonstrate their economic, if not necessarily social, status. Roughly one serjeant in twelve purchased the right to collect tithes from the Priory, often at considerable expense, indicating a level of economic acumen and an acceptance of financial

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496. Halcrow, *Administration & Agrarian Policy*, p. 37.

497. His further service at Bewley must remain speculative, for such would mean that John de Monkton served an unusually long time as a manorial serjeant, and with a wider geographic breadth than any other officer. Alternatively the John de Monkton who served as serjeant at Bewley may have been a relation, perhaps a son, of the aforementioned John de Monkton.

risk. Twenty-two serjeants are reliably identified as purchasing tithes out of the 123 serjeants for whom we have both a given name and either a patronymic or toponym, or both.<sup>498</sup> Within these parameters, I identified the relevant serjeants from a raw data set with over 8,720 entries of separate tithe purchases.<sup>499</sup> Methodologically, the approach used here errs on the side of caution; only tithes from vills within a radius of about twelve kilometres and purchased no more than fifteen or so years after when an individual is last attested as serving as serjeant were included. This approach could well have caused tithes purchased by individuals identified as serjeants to be ignored, but I believe it is more appropriate to give an image of the serjeants' economic activities that is too conservative than one that is much too optimistic.

Durham Cathedral Priory had the right to the garb tithes from its appropriated parishes, or one tenth of the grain harvest. And while this grain was by law and custom the due of the Priory, it was not without its own set of hassles. The Priory incurred various expenses in collecting the tithes, for they were still responsible for threshing, transport, and storage of the grain. More importantly, those who produced the grain were not eager to part with it and employed various tactics to ensure the Priory received as little as possible.<sup>500</sup> The Priory therefore sought to ensure that the rewards surpassed the hassles of collecting the grain and sold the right to these tithes on (usually) an annual basis. Buyers would review the corn in the field before harvest and make a cash offer for the right to this grain. Such an estimation would by necessity be careful and made by a skilled individual, knowledgeable of the local markets, weather, and agricultural conditions and balanced against the possible costs of transport, labour, and storage, among other outlays. If the Priory accepted the offer, the buyer would pay for the tithes on certain days and receive the grain at harvest and an agreement between the

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498. Out of the 136 serjeants identifiable in the manorial accounts, all but thirteen are named with sufficient enough clarity to distinguish them.

499. All tithe data was kindly provided by Dr Ben Dodds; I then identified individuals who served as serjeants and extracted that information (Dodds, B. (2007). Durham Tithes Database, 1270-1536. [data collection]. UK Data Service. SN: 5607, <http://doi.org/10.5255/UKDA-SN-5607-1>).

500. Dodds, *Peasants and Production*, p. 7.

two parties would be written out. Payment for the grain was due ‘on appointed days in the year following the harvest’.<sup>501</sup> The buyer would then take possession of the grain following the harvest and, ideally, sell it at an inflated price. For example, when Reginald of Haswell purchased the tithes to Eden and South Sherburn for £15 13s 4d before the harvest on the first of August 1342, he agreed to pay half the agreed sum on the day before the feast of St Benedict, 20 March, 1343 and the balance on the feast of the nativity of St John the Baptist, 24 June, 1343.<sup>502</sup> As this was in all but name a loan, Dodds suggests that a level of interest would have been added to the amount the tithe buyer would pay.<sup>503</sup> After the harvest, the grain would be collected by the purchaser and, assuming that the grain was to be sold when prices were highest, stored long after the harvest. This purchase agreement recorded the value paid for the tithes, the vill and parish where the tithes were located, and the name(s) of the buyer(s).

One John Greveson, serjeant at Pittington in 1419/20, 1420/1, 1424/5, 1427/8, and 1428/9, purchased eleven separate tithes from the Pittington parish from 1421 to 1432. This would not have been an insignificant sum. Altogether, his entrance into the tithe market cost him £21 3s. If we assume that the John Greveson who purchased tithes in the parish of St. Oswald in 1447-1448 was the same individual, an additional £1 13s was spent. John Greveson spent £23 2s 4d on tithes in total, significantly more than the hundred shillings he received during his entire tenure as serjeant. Adam Carter, serjeant of the manor of Wardley in 1374/5, 1375/6, and 1376/7 purchased six tithes in total (1376, 1377 [2 receipts], 1383 [2 receipts], 1386, and 1389). All of the tithes came from the parish of Jarrow only a few kilometres from Wardley and from either the vill of Harton or Hebburn and totalled £55 6s 8d. John de Chilton, longstanding serjeant at Ketton, was even more active in the tithe market. He purchased the right to eighteen different tithes in the period from 1389 to 1400 for the princely

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501. Dodds, *Peasants and Production*, p. 29.

502. Dodds, ‘Estimating arable output’ p. 254.

503. Dodds, *Peasants and Production*, p. 29.

sum of £276 9s 8d; with ‘*sociis suis*’, he purchased the right to two tithes in 1396 and 1401, the first for £2 and the second for £73 6s 8d. We cannot assume John de Chilton was a man of middling means.

Nor was the purchase of tithes by manorial serjeants only common in the late 14th and early 15th centuries. Adam de(l) Newton, serjeant at Wardley in 1299/1300, 1302/3, and 1303/4 and at Westoe in 1303/4 and 1309/10, purchased the right to four tithes in the period 1307 to 1310 in the vills of Harton and Westoe, both in the parish of Jarrow. Unfortunately, the amount received by the Priory is not extant. Similarly, Walter de Thocotes, serjeant at Bewley in 1305/6<sup>504</sup>, purchased the rights to the tithes in the vill of Billingham in the parish of the same name in 1310 and 1311. Again, we do not know the amount paid for the right to these tithes.

Many serjeants seem to have been considerably more active in the tithe market than other speculators. Of the 8,242 named, distinct individuals in the tithe receipts covering the period from 1291 to 1536, only 436 individuals bought more than the average 4.13 tithes (See Table V.4). A striking number of individuals only interacted with the tithe market once (1,796 individuals); only 370 individuals are recorded as purchasing the right to collect ten or more tithes, three of whom are identifiable as serjeants (see Table V.4). The financial outlay of the typical tithe speculator was also considerably lower than that of many serjeants: 7,672 receipts are for a value of 15s or less (see Table V.4.) In contrast, even John Goodwin, who was less active than the other tithe-buying serjeants, bought the right to collect five tithes, none for less than 69s, and for a total of nearly £20. William Scott only purchased two tithes, but nevertheless spent 56s in total. The scope of the activities of John de Chilton (eighteen tithes

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504. I identified a Walter de Thocotes as serving as serjeant at Ketton in 1331/2 and at Westoe in 1322/3, 1323/4, and 1324/5 based on extant manorial sources. That the same Walter served at Ketton is certainly possible, though, if he served continuously and any relevant records to do not survive, he would have served over twenty-five years as serjeant, longer than John de Monkton who is the longest serving, directly attested serjeant (twenty-one years). Walter de Thocotes would also have the widest geographical range of service as serjeant.

for a total of £261 9s 8d), John Greveson (fifteen tithes for a total of £23 2s 4d), and John Watson (seven tithes for a total of £58) are staggeringly greater than the norm, even if these are some of the most active serjeants. Serjeants who served for longer periods were no more likely to buy more tithes or pay more for their tithes than the rest of their tithe-buying colleagues. Serjeants were more likely to pay more on average for tithes the more they purchased, but this likely reflects the activities of the most market-oriented serjeants. The tendency to increased purchase of tithes or a higher average amount paid by serjeants most likely came down to the resources an individual could command or a desire to be involved in the market.

Table V.3: Serjeants, Tithes Purchased, and Prices, c. 1300 to c. 1500

<b>Serjeant</b>	<b>Total Tithes</b>	<b>Average Paid (s)</b>	<b>Total Tithes with Known Values<sup>505</sup></b>
Adam Carter	6	184.44	6
Adam Neuton	4	--	0
Gilbert Wodom	11	134.58	8
John de Bamburgh	2	24.83	2
John de Belasis	3	--	0
John de Chilton	18	394.98	14
John de Chilton <i>et sociis suis</i>	2	75.33	2
John Godwin	5	95	4
John Greveson	15	33.02	14
John Hesleden	6	93.32	1
John Marshall	2	--	0
John Monkton	6	140.51	6
John Russell	6	80	2
John Seton	3	--	0
John Watson	7	165.71	7
Richard Hertlawe	2	--	0
Richard Wright	6	63.33	8
Robert White	8	13.33	8
Thomas Watson	1	8	1
Walter Tonkotes	2	--	0
William Currour	1	--	0
William Disher	1	--	0
William Forester	2	19	2
William Scot	2	28.33	2

Source: Dodds, B. (2007). Durham Tithes Database, 1270-1536. [data collection]. UK Data Service. SN: 5607, <http://doi.org/10.5255/UKDA-SN-5607-1>, DCD-Bels. acs., DCD-Bewl. acs., DCD-Bill. acs., DCD-Fery. acs., DCD-Fulw. acs., DCD-Ket. acs., DCD-Merr. acs., DCD-Pitt. acs., DCD-Ward. acs., DCD-West. acs.

Serjeants would certainly have an advantage in the tithe market. When they purchased the rights to tithes in areas near the manor at which they worked, they would have been familiar

505. Tithe receipts that do not include the amount paid for the tithe were not included in this calculation.

with the capabilities of the land, common yields, and the skill of the individuals growing the grain. It is certainly reasonable, even if ultimately unverifiable, that the Priory may well have been prepared to accept slightly lower offers than the market rate for the right to the tithes as the serjeants would be well known to and perhaps trusted by the Priory obedientiaries. This familiarity and trust would have lessened the Priory's perceived risk of non-payment. These serjeants may also have, through their purchase of tithes, played an important role in the local communities. The collection of tithes by either the church or those who had purchased the right to a tenth of the harvest was an undeniably exploitative practice that extracted surplus from those who had produced it. Naturally, producers were keen to keep as much of their harvest as possible. Even if the tithing process was normally completed without undue conflict, 'individual cases of reluctance to pay tithes, including those of clerics and religious institutions, were more typical than organised, collective resistance'.<sup>506</sup> Tithe collectors were aware that producers were likely to attempt to cheat them and were on the lookout for such tricks.<sup>507</sup> Perhaps unsurprisingly, tenants of whole vills and parishes came together and bought the rights to their own tithes, essentially paying the Priory not to collect the fruits of their labour.

Though somewhat more common in the sixteenth century than the fourteenth or fifteenth centuries, vills such as Shoreswood in Norham parish, very near the ever lively border with Scotland, purchased the right to their own tithes for sizeable sums; the tenants of Shoreswood paid £5 13s 4d in 1370, £3 16s 8d in 1371, and £3 16s 8d in 1373. Perhaps, given the distance of these vills and parishes from the Priory and the accompanying difficulty of transporting the grain, the convent was much more willing to sell the right to the tithes, treating the sale as an additional cash rent. Tenants of Grindon in Aycliffe parish, about fifteen kilometres from Durham, paid £2 for their own tithes in 1355, while tenants of Nether Heworth and Over Heworth in Jarrow parish, nearly 27 kilometres from the Priory, paid £11

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506. Rigby, *English Society in the Later Middle Ages*, p. 234.

507. See Carlin, 'Cheating the Boss' and Dodds, 'Demesne and tithe'.

13s 4d. Yet we cannot be sure that this was the extent of the tenants' activities in the tithe market. The more prosperous independent tithe buyers, like many of the Priory's serjeants may have acted as middlemen of sorts, fronting the ready cash to the Priory to pay for the right to the tithes and then selling the grain or, indeed, the right to collect the grain back to the producers with an additional fee for their trouble. The degree that this could be exploitative is speculative, but it would be unwise to think that buyers would not seek to sell the grain back to the growers without some degree of profit and, in doing so, hopefully skirting any usury laws. Even if the serjeant had explicitly charged interest, it was improbable that any problems would arise, as usury and the charging of interest were relatively common during the period.<sup>508</sup> Indeed, if a lender wished to charge interest and found it conscionable, the Church would be unlikely to object: canon lawyers accepted fourteen different exceptions to the ban on usury, suggesting that the church recognised the reality of charging interest.<sup>509</sup> Even Robert Grosseteste, Bishop of Lincoln (r. 1235-1253), was comfortable enough to discuss examples of its practice.<sup>510</sup> Regardless how this may have been practised and even with a relatively small profit, it would likely have been advantageous to individuals such as John de Monkton or John de Chilton. They would not need to organise transport or storage of the grain after the harvest, nor would they have to seek out a buyer on to whom they could sell the grain. By having an individual buyer front the payment for the tithe grain, the producers would have had more time to gather any necessary funds.

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508. James Davis, 'The Morality of money in late medieval England' in Martin Allen and D'Maris Coffman, (eds.) *Money, Prices and Wages: Essays in Honour of Professor Nicholas Mayhew* (London, 2015), pp. 154-155.

509. Pamela Nightingale, 'The English parochial clergy as investors and creditors in the first half of the fourteenth century' in P. R. Schofield and N. J Mayhew, (eds.) *Credit and Debt in Medieval England c.1180-c.1350* (Oxford, 2002), p. 88.

510. Robin R. Mundill, 'Christian and Jewish lending patterns and financial dealings during the twelfth and centuries' in P. R. Schofield and N. J Mayhew, (eds.) *Credit and Debt in Medieval England c.1180-c.1350* (Oxford, 2002), p. 49.

Table V.4: Frequency of Tithes Purchases & Values

<b>Overall Sample Tithe Price Frequency, 1291-1536</b>	
<i>Amount Paid for Tithe (s)</i>	<i>Frequency</i>
0-5	5,141
6-10	1,926
11-15	605
16-20	275
21-25	123
26-30	34
31-35	18
36-40	17
41-45	48
46-50	18
51-55	14
56-60	5
61-65	3
66-70	3
71-75	7
76-80	1
81-85	0
86-90	0
91-95	0
96-100	0
101-105	0
106-110	0
111-115	0
116-120	4
<i>n.</i>	<i>8,242</i>

Source: Dodds, B. (2007). Durham Tithes Database, 1270-1536. [data collection]. UK Data Service. SN: 5607, <http://doi.org/10.5255/UKDA-SN-5607-1>.

<b>Number of Buyers Who Bought Only 1-5 Tithes, 6-10 Tithes, 11-15 Tithes, etc.<sup>511</sup></b>	
<i>Groups</i>	<i>Frequency</i>
1-5	1,478
6-10	215
11-15	60
16-20	37
21-25	23
26-30	9
31-35	8
36-40	9
41-45	3
46-50	1
51-55	0
56-60	1
61-65	2
66-70	1
71-75	3
More	0
<i>n.</i>	<i>1,850</i>

## IV. Serjeants and Rented Land

The Durham Cathedral Priory Bursar's Rentals similarly provide a wealth of information on the manorial serjeants. Such economic activity demonstrates that many of the serjeants had the income or stored wealth to take on additional land, while, by taking on additional land, we can assume that they believed they had the resources, time, and ability to extract enough during the span of their lease to recoup their original outlay. These rentals list the length of the lease, the name of the leaseholder, the plot of land they took on, the size of the plot, and the amount paid; if the leaseholder rented a whole manor, communal oven, or mill, the relevant details are similarly noted. However, as detailed by Lomas and A. J. Piper, '[t]he surviving rentals do not

511. All data is from Dodds, B. (2007). Durham Tithes Database, 1270-1536. [data collection]. UK Data Service. SN: 5607, <http://doi.org/10.5255/UKDA-SN-5607-1>

in themselves provide a complete conspectus (summary) for the period 1300-1450,<sup>512</sup> and many of the surviving manuscripts are jumbled and not always consistently organised; hence, only some of the extant rentals are here used.<sup>512</sup> This thesis uses the rental for 1340/1 as it provides a substantial amount of data midway through the earlier part of the long fourteenth century, and the 1396/7 rental as it is the only post-Black Death rental that is not defective or covering only a single vill.

Many more manorial serjeants were involved in the rental of land than in the purchase of tithes; roughly one serjeant in four rented land from the bursar compared to the (roughly) one serjeant in six that purchased tithes. Thirty-one serjeants out of the one hundred and twenty-three serjeants for whom we have both a given name and either a patronymic or toponym (or both) rented land from the bursar; their rentals are detailed in Table V.6. That one serjeant in four rented land from the bursar is likely a conservative estimate. Lacking more complete records we cannot be sure that other serjeants did not rent land in a given year. The amount, type, and value of land that the serjeants rented could vary considerably. Richard Wright, serjeant at Ketton in 1385/6, rented seven acres of pasturage in 1396/7 at Billingham for half a shilling. In comparison, Thomas Watson, serjeant at Ketton in 1379/80, rented 131 acres of land for 53s 6d. Earlier, John Marshall, serjeant at Ketton in 1343/4 and Billingham in 1344/5, rented 29 acres at Wolviston in the Billingham parish for nearly 10s. John Tyd, serjeant at Billingham in 1336/7, rented 34 acres for 22s 4d; this land was likely considered more fertile than the land rented by John Marshall.<sup>513</sup>

Others rented significantly more land, whole manors, mills, or common ovens. John Ponchon, oftentimes serjeant at Houghall and Pittington, rented 122 acres in 1396/7 for about

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512. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 9. Any further mentions of the 'bursar's rental book,' 'rental,' or similar refers to this volume and either B.Bk A ff.21-36v or B.Bk E ff. 24-47 for the periods 1340/1 and 1396/7, respectively; both books are held at 5 The College, Durham.

513. The land he rented in Wolviston would have been either freehold or rented from the demesne. Customary holdings, if such ever existed in Wolviston, had disappeared by the beginning of the thirteenth century. *Ibid.*, pp. 51-52; 209-210.

£1 1s 4d. John de Monkton, serjeant at Bewley and perhaps the same as the John de Monkton who served as serjeant at Fulwell, spent about 38s 6d on rents in 1396/7, though only for 44 acres of land near Billingham. John Watson seemingly preferred to spend not on the right to tithes, but on what may have been a safer investment, especially if local inhabitants were limited by manorial custom to which mills they could use. In addition to the 17 acres he rented for nearly 10s in 1396/7, he also rented the mill at Westoe for 120s. Fifty years before, his predecessor at Westoe, William de Hilton, rented the same mill for 100s in 1340/1. John de Chilton, in addition to being a prolific tithe buyer, was also active in the land market. In 1396/7, the same year he spent £3 15s 4d on the purchase of tithes, John de Chilton rented the watermill in Aycliffe a few miles northwest of the manor of Ketton. Gilbert de Wodom (serjeant at Ketton in 1323/4) rented the entire manor of Aycliffe in 1340/1 for £5 6s 4d. William Colynson (serjeant at Wardley from 1379 to 1381) rented the manor of Muggleswick for the significantly lower sum of 20s in 1396/7. This would not have ended the Priory's pastoral operation, as other nearby 'stock-centres continued under a stock-keeper'.<sup>514</sup> John Russell, serjeant at Ferryhill 1332/3 rented the *communi furno* (communal oven) at Fery for 10s in 1340/1 and John Luclyne (sometime serjeant at Billingham) similarly rented a communal oven at Newton Bewley in 1340/1 for 3s 4d.

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514. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, p. 218.

Table V.5: Serjeant Rental Details

<b>Serjeant</b>	<b>Total Amount Paid (s)</b>	<b>Total Tofts Rented</b>	<b>Total Acres Rented</b>	<b>Total Villein Holdings</b>	<b>Total Cottages Rented</b>	<b>Total Tenements Rented</b>	<b>Total Mills Rented</b>	<b>Total Manors Rented</b>
Gilbert de Wodom	106.67	--	--	--	--	--	--	1
John de Belasis	32.33	2	42	--	--	--	--	--
John de Beulu	3.67	--	--	--	--	--	--	--
John de Chilton	86.00	--	--	--	--	--	1	--
John de Hesilden	3.63	1	4	--	--	--	--	--
John de Lethom	4.00	--	3	--	2	--	--	--
John de Monkton	38.46	4	44	--	--	--	--	--
John de Newton	29.21	--	--	2	--	1	--	--
John de Pittington	4.50	--	8.5	--	--	--	--	--
John de Shele	2.00	2	40	--	--	--	--	--
John de Todou	5.21	-	13	--	--	--	--	--
John Luclyne	18.33	1	30	--	--	--	--	--
John Marshall	9.88	2	29	--	--	--	--	--
John Ponchon	15.33	4	122	--	--	--	--	--
John Russell	10.00	--	--	--	--	--	--	--
John Shyncle	4.00	--	--	--	--	--	--	--
John Tyd	22.33	1	33	--	3	--	--	--
John Watson	129.71	--	17	--	--	--	1	--
Richard de Hertlawe	23.83	3	66	--	--	2	--	--
Richard Wright	0.52	1	7	--	--	--	--	--
Robert Ayre	0.25	--	--	--	--	--	--	--
Robert de Maynesford	3.75	--	0.5	--	--	--	--	--
Robert de Monkton	15.00	2	24	--	1	--	--	--
Robert de Scouland	12.00	3	31	--	--	--	--	--
Thomas Watson	53.50	5.5	131	--	--	--	--	--
Thomas Wawayn	30.96	2	67	--	3	--	--	--
William Colynson	25.00	--	--	--	--	--	--	1
William Currour	32.58	--	47.5	2	--	--	--	--
William de Hilton	141.83	8	109.5	--	2	--	1	--
William de Langeley	5.25	1	6	--	1	--	--	--
William Scott	31.48	2.5	46	--	--	--	--	--

Source: Data gathered from Lomas and Piper (eds.), Durham Cathedral Priory Bursars Rentals, pp. 36-128.

The trend for manorial officials to rent demesnes and large portions of rented land is not, however, unique to County Durham or the bursar's estates. Chris Dyer noted that many manorial reeves leased demesnes which they had managed before the manor was farmed out.<sup>515</sup> If the reeve or tenant-to-be was a customary tenant, then the lord could exercise control through the manorial courts.<sup>516</sup> Furthermore, land that had been rented from the bursar could then be sublet, creating a consistent form of income. Though permission from the original landlord was required, quite often such permission was not sought, as when Robert Hardgill endeavoured to sublet the oven in Billingham in 1393.<sup>517</sup> If discovered, the sublet properties could be seized, as were the two cottages sublet by William del Raw and his wife in 1379, but, as proposed by Tim Lomas, 'the threat of confiscation may well have been outweighed by the likelihood of escaping detection'.<sup>518</sup> Such practices may well have provided a hidden source of income for the renting serjeants that would escape any historical record.

In addition to what was often an impressive outlay on rents, some serjeants took up customary tenancies or, as termed in the rentals, *de bondagio*. Bondland, land held *in bondagio*, was the typical customary tenancy of Durham Cathedral Priory; such tenancies were typically around 30 acres on the lands of the Bishopric of Durham, which were common in the medieval northeast, though exceptions the standard size of course abounded.<sup>519</sup> Perhaps, as noted by Mark Bailey, these were hereditary customary tenancies.<sup>520</sup> Alternatively, and perhaps more likely, these were tenancies held by individuals who were personally free. Though these serjeants were unlikely to be 'serfs by blood', such customary holdings did carry a number of obligations and placed the individuals under the jurisdiction of the manorial court controlled

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515. Dyer, *Making a Living in the Middle Ages: The People of Britain, 850-1520*, p. 346.

516. *Ibid.*, p. 346.

517. Tim Lomas, 'South-east Durham: late fourteenth and fifteenth centuries' in P.D.A. Harvey (ed.), *Peasant Land Market in Medieval England* (Oxford, 1984), p. 293.

518. *Ibid.*, p. 293.

519. *Ibid.*, p. 274.

520. Bailey, *Decline of Serfdom*, p. 199

by the landlord. Holders of customary tenancies on Priory land could expect to pay a variety of dues and fines, from the ten pence *averpenys*, to *wodeladepenys* worth 1s 4d, or to the *avermalt* of 3 quarters and 4 bushels of grain.<sup>521</sup> Rents on customary holdings were typically low as lords sought to fill them following the Black Death and may have presented an attractive opportunity for the serjeants and other tenants on the whole. William Currou held two villein tenancies with 30 acres for 22s in rent, and John de Newton held two villein tenancies for £1 8s 4d in rent. John de Monkton held four villein tenancies, for which he paid just over £1. William Scott leased a further 46 acres in 1396/7 for about £1 11s 6d and John de Newton also rented a tenement in Crossgate across the River Wear from Durham city.

## V. The Varying Ability of the Serjeants

I have demonstrated that many of the serjeants who managed the bursar's manors were clearly men of considerable expertise and resources who were involved in a wide range of economic activities distinct from their role as manorial administrators; focus can now shift to the serjeants' successes and failures in estate management. While some degree of agricultural output and success can be attributed to climatic conditions, medieval agricultural managers had no little degree of control over the output of their land through labour inputs, crop specialisation, and arable intensity.<sup>522</sup> Even if most serjeants were capable administrators, some were more capable than others while some were dishonest or inept, as demonstrated by Halcrow.<sup>523</sup>

A look at the different grain yields on the same manors further demonstrates the effectiveness of individual serjeants (Table V.7). A serjeant such as John de Monkton, as seen below, would have been able to keep crop yields at a fairly consistent level. Others had a

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521. Lomas, 'South-east Durham: late fourteenth and fifteenth centuries', pp. 274-275.

522. See Campbell, Bartley, and Power, 'Demesne-farming systems', pp. 131-179, Clark, 'Yields per acre in English agriculture', pp. 445-460, Stone, 'Productivity of hired and customary labour', pp. 640-656, Stone, 'Productivity and management of sheep', pp. 1-22.

523. See Halcrow, *Administration & Agrarian Policy*.

shocking inability to do the same. Even accepting that the 1378/9 agricultural year was an outlier, the 1379/80 serjeant at Houghall, Richard Soniour, still seemed to have displayed a deplorable lack of skill. Despite seeding 102 bushels of barley, nearly 26% more than the average amount sown in the previous nine years, only 320 bushels of barley were harvested, about a 62% decrease from the average amount harvested in the previous nine years. The yield per seed of 3.14 was noticeably less than the average yield per seed in England as a whole, on the estates of the Bishop of Winchester, and the estates of Westminster Abbey for 1350 to 1399 (3.99, 4.18, and 4.52, respectively).<sup>524</sup>

In contrast, John Ponchon, then serving as serjeant at Pittington, was able to recover from the disastrous 1378/9 agricultural year with an increase in the barley yield of 600% from 1378/9 and a 37% increase from the presumed normalcy of 1377/8. John Ponchon's return to Houghall saw the barley harvest improve and the yield of that crop reach the levels prior to his temporary departure from the manor. The wheat crop from 1381 to 1386 during his final tenure as serjeant was somewhat more temperamental, though it does not seem to be due to his mismanagement. The 1379/80, 1380/1, and 1381/2 agricultural years seem to have been poor for wheat across the bursar's manors and barley and oats also suffered on some manors. Wheat was a notoriously temperamental crop to grow and would suffer badly under inclement weather.<sup>525</sup> Campbell found a drop in wheat and oat yields throughout England during these years; the Peasants' Revolt in the south and poor weather in the north may have been to blame.<sup>526</sup> John Ponchon may have served as a 'crisis-manager' for the manors around the city of Durham itself, moved between manors as the need arose to raise up under-performing manors. His sudden move back to Houghall from Pittington suggests that Richard Soniour

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524. Campbell, 'Grain yields on English demesnes' p. 133.

525. Campbell, *English Seigniorial Agriculture*, p. 218.

526. Campbell, 'Grain yields on English demesnes' p. 127. See also Campbell, 'North-South'.

certainly was not up to the task of managing one of the Priory's most vital manors. John Ponchon's transfer to Pittington was certainly not due to poor performance wheat and oat yields were good and barley yields at Houghall were never as high as when he managed the demesne.

Even after John Ponchon's presumed retirement, grain yields and harvests were similar to the levels under his management and may have been slightly more consistent. It is tempting to imagine that subsequent serjeants were familiar with Ponchon's farming techniques and emulated and built upon them. Pittington remained an important manor following Ponchon's departure, but a level of agricultural curtailment seemed to follow. William Willy, serjeant from 1382/3 to 1384/5, and Robert Kirkman, serjeant from 1388/9 to 1398/9 only exceeded the wheat yields under John Ponchon once and the wheat harvest was invariably smaller than during the four years in which the manor was run by him. The barley and oat yields and harvests varied. There were no great agricultural successes at Pittington from 1380/1 to 1398/9, but nor were there any failures.

John de Monkton seems to have taken a different approach to the barley crop than his contemporaries ten miles or so to the southwest. He perhaps devoted slightly less labour to it than other crops, as evidenced by the comparatively lower yields, which were nevertheless higher than the mean and median barley yield per seed for England from 1350-1399 as observed by Campbell.<sup>527</sup> His priorities seem to have been focused on other areas besides raising the barley yield, even if he did vary the number of acres sown with barley. He was able to keep the barley yield quite stable even in the 1378/9 agricultural year in this limited sample and continue to do so throughout his tenure as serjeant. From 1382/3 onwards, the yield stays largely consistently between 6.5 and 8, with only one year dipping down to a yield of 6.18.

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527. Campbell, 'Grain yields on English demesnes', p. 133.

Indeed, John de Monkton seems to have had stability as a goal during his tenure. This seems to have been at odds with his approach to the purchase of tithes. On the six occasions he purchased tithes, he never spent less than 74s, well above the values purchased by others and he was considerably more active than other buyers.<sup>528</sup>

Table V.6: Barley Yield per Seed (Net of Tithes, etc) at Selected Manors<sup>529</sup>

Year	Houghall Wheat Yield	Houghall Barley Yield	Houghall Serjeant	Pittington Wheat Yield	Pittington Barley Yield	Pittington Serjeant	Fulwell Wheat Yield	Fulwell Barley Yield	Fulwell Serjeant
1378	3.3	8.92	William Lesmaker	4.94	10.46	John Ponchon	n/a	n/a	John de Baumbrugh
1379	n/a	2.18	John de Benton	8.25	2.05	John Ponchon	11.27	4.34	John de Monkton
1380	n/a	3.14	Richard Soniour	n/a	14.34	John Ponchon	10.95	5.96	John de Monkton
1381	2.1	10.02	John Ponchon	n/a	9.74	William de Hoton	n/a	6.09	John de Monkton <sup>530</sup>
1382	n/a	n/a	John Ponchon	n/a	n/a	John Witbrow	n/a	n/a	John de Monkton
1383	8.07	7.35	John Ponchon	n/a	n/a	William Willy	6.75	8.26	John de Monkton
1384	5.5	10.29	John Ponchon	3.91	5.37	William Willy	n/a	7.21	John de Monkton
1385	n/a	n/a	John Ponchon	4.62	n/a	William Willy	n/a	8.18	John de Monkton
1386	4.34	2.59	John Ponchon	n/a	n/a	n/a	8.29	6.52	John de Monkton
1387	n/a	n/a	Robert de Murton	n/a	n/a	Robert Kirkman	7.48	7.78	John de Monkton
1388	n/a	n/a	Robert de Murton	n/a	n/a	Robert Kirkman	7.44	7.27	John de Monkton
1389	3.13	6.58	Robert de Murton	n/a	n/a	Robert Kirkman	7.66	n/a	John de Monkton
1390	8.55	6.07	Robert de Murton	n/a	n/a	Robert Kirkman	7.5	n/a	John de Monkton
n.	7	9	--	4	5	--	8	9	--

Source: DCD-Fulw. acs., DCD-Hough. acs., DCD-Pitt. acs., DCD-Ward. acs., DCD-West. acs..

528. See Figure V.4 for further. Tithe buyers overwhelming paid 15s for the right to collect tithes. Out of the 8,242 tithe receipts purchased by named individuals, 7,672 receipts are for a value of 15s or less.

529. Yields here are the calculated, as opposed to the auditor's, yields. Houghall is roughly two kilometres south-southeast of Durham while Pittington is roughly 3 kilometres north-northeast of both Houghall and Durham and is on the east bank of the River Wear. Fulwell is approximately 13 kilometres north-northeast of Durham at the mouth of the River Wear. Houghall, Pittington, and Fulwell are all at approximately the same elevation (see the map in *Chapter I: Introduction* for further discussion on the geographic layout of the bursar's manors during the long fourteenth century.).

530. Though the name of the serjeant at Fulwell for 1381 does not survive, John de Monkton had served as serjeant for the previous three agricultural years and would continue to serve as serjeant on that manor from 1381/2 until 1401/2. His tenure as serjeant is both the longest at the manor of Fulwell and on any of the bursar's manors for the period under review and based on the extant documents.

Table V.7: Indexed Sown Acres at Fulwell During Tenure of John de Monkton, 1378/9-1402/3 (100=1379)

<b>Year</b>	<b>Fulwell Wheat Acre Index</b>	<b>Fulwell Barley Acre Index</b>	<b>Fulwell Oats Acre Index</b>
1379	100	100	100
1380	98.04	73.75	200
1381	96.08	--	100
1382	--	--	106.25
1383	103.92	67.5	200
1384	100	72.5	112.5
1385	--	68.75	212.5
1386	86.27	66.25	137.5
1387	100	66.25	200
1388	105.88	68.75	200
1389	100	61.25	200
1390	100	--	212.5
1391	103.92	68.75	225
1392	94.12	69.38	212.5
1393	--	--	--
1394	103.92	68.75	300
1395	103.92	68.13	200
1396	101.96	68.75	187.5
1402	--	--	--
1403	101.96	77.5	150
<i>n.</i>	16	15	18

Source: DCD-Fulw. acs. 1377-1378, 1378-1379, 1379-1380, 1381-1382, 1382-1383, 1383-1384, 1384-1385, 1385-1386, 1386-87, 1387-1388, 1388-1389, 1389-1390, 1390-1391, 1391-1392, 1392-1393, 1393-1394, 1394-1395, 1395-1396, 1401-1402, 1402-1403.

Under his management, wheat yield per seed hovered comfortably around 7.5 with a coefficient of variation of 0.17 and about nineteen acres were sown with annually (coefficient of variation of 0.05) (Table V.8). Such stability is nothing if not the result of careful management. With the changing climatic conditions and economic realities of the period, this consistency required proactive measures by John de Monkton and clear instructions from the Priory. A manor upon which the Priory could depend for a known amount of grain would have been a welcome backstop in a period of demographic, climatic, and economic uncertainty. This perhaps served, as Philip Slavin suggested with reference to Norwich Cathedral Priory, to diversify the Priory holdings and minimise risk. Accordingly, Slavin suggests Norwich Cathedral Priory obedientiaries did not depend on one source of provisions; 'if the demesnes

failed, the market could come to the rescue, and the other way around'.<sup>531</sup> Skilled individuals such as John de Monkton would have been vital if this was indeed the goal of Durham Cathedral Priory as well.

Table V.8: Crop Stability at Fulwell under John de Monkton (1377/8-1396/7)

	<b>Wheat Yield</b>	<b>Wheat Acres</b>	<b>Wheat Harvest (bz)</b>	<b>Barley Yield</b>	<b>Barley Acres</b>	<b>Barley Harvest (bz)</b>		<b>Oat Acres</b>	<b>Oat Harvest (bz)</b>
<i>STDEV</i>	1.41	0.90	65.5	1.01	2.38	40.95	1.99	0.69	31.8
<i>MEAN</i>	8.07	18.86	409.20	6.75	20.19	385.88	4.91	1.75	67.12
<i>CV</i>	0.17	0.05	0.16	0.15	0.12	0.11	0.41	0.40	0.48
<i>n.</i>	9	15	14	13	14	17	16	17	17

Source: DCD-Fulv. acs. 1377-1378, 1378-1379, 1379-1380, 1381-1382, 1382-1383, 1383-1384, 1384-1385, 1385-1386, 1386-87, 1387-1388, 1388-1389, 1389-1390, 1390-1391, 1391-1392, 1392-1393, 1393-1394, 1394-1395, 1395-1396, 1401-1402, 1402-1403.

## VI. Small-scale Administrators?

We are here seeing a rather different sort of individual than the small-scale administrator or the unfree reeve described by Halcrow and Stone.<sup>532</sup> Though some serjeants held land *in bondagio*, this, as noted by Bailey and others, was not uncommon, and the amount of land that individual serjeants held clearly set them apart from cottagers and other small holders. Many serjeants rented significant amounts of land, such as Richard de Hertlawe and William Hilton, and even those who rented comparatively smaller amounts still evidently felt they could comfortably manage a larger amount of land. We must also remember that these rental figures are not meant to demonstrate the total amount of land held by a serjeant or the total amount of rent he may have paid. Many, if not indeed most, would have had other lands not listed in the bursar's rentals, either from freehold or leases from different lay landlords or monastic obedientiaries.

531. Slavin, 'Church and food provisioning', p. 616.

532. Halcrow, *Administration & Agrarian Policy*, p. 89, Stone, *Decision-Making*, p. 13.

We cannot consider these serjeants to be simply ‘small scale administrators’, lest we think that their skill lay only in the administration of their lord’s estates. The tithe receipts and even the limited amount of evidence provided by the fragmentary bursar’s rentals suggests otherwise. John de Chilton was certainly a capable administrator of the demesne at Ketton, but he was further able to engage in potentially profitable, but also unpredictable and time-consuming ventures. If we assume that John de Chilton was serjeant at Ketton in 1391/2 and 1393/4<sup>533</sup>, then during his term of service from 1390 to 1396, he spent approximately £124 6s 4d on the right to the tithes near Ketton. Such an outlay of cash is a staggering amount. If we use the relative seeding ratios of the three significant crops at Ketton for 1395/6, the year in which he spent 800s for the right to collect the tithes from Newton Ketton, Brafferton, Heighington, Killerby, Middridge, Middridge Grange, Newbiggin, West Thickley, Redworth, and Walworth, (40% of seed sown was for wheat, 7% for barley, 53% for oats) and using the same local price data, his outlay might have fetched about 278 quarters of grain, of which about 54 quarters were of wheat, 12 quarters of barley, and 212 quarters of oats. These 278 quarters of grain would meet the caloric needs of one hundred people for roughly two and a half years.<sup>534</sup> Equally, we must be aware of the effort and time that went into the right to purchase the tithes and collecting, storing, and selling or otherwise disposing of that grain. At the c. 1300 cartage rates, likely significantly lower than during the period under investigation, John de Chilton would have paid about 15s 4d per mile for transport of his grain.<sup>535</sup> If he wished to take the grain from the parish of Aycliffe to Durham, the only market of any note, and a distance of about ten miles in a straight line, he would have to pay at least £7 13s 4d to transport the grain.

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533. In both agricultural years the heading is either missing or otherwise illegible. Based on my analysis of these and other manorial accounts for Ketton, I have identified John de Chilton as the probable serjeant.

534. Campbell, *English Seigniorial Agriculture*, p. 215. This calculation is based on the figures given by Campbell in which one bushel of wheat would allow for some 80,500 kCal, one bushel of barley 66,792 kCal, and one bushel of oats roughly 60,336 kCal.

535. Ibid., p. 215. Campbell estimates a cost of about one farthing per quarter mile at the turn of the fourteenth century (0.23d per quarter per mile c.1300).

The estimates above used above assume that local, peasant producers were planting their crops in roughly the same proportions used by seigneurial producers; it nevertheless gives a more local data driven view of John de Chilton's tithe activities, for Ketton was the nearest Priory manor to the areas in which he purchased tithes. His organisational skills would have had to be considerable. So too would have been his knowledge of the local area and its people. As noted by Dodds, the potential buyers of tithes would see the grain in the field prior to the harvest and, on that basis, make an offer for the grain.<sup>536</sup> John de Chilton and the others like him would have had to be aware of typical weather conditions that might impact the growth or harvest, the local price of grain, and be able to estimate the total amount of grain they might receive. Even if John de Chilton had a sizeable family, the collection, storage, transport, and sale of the tithe grain would likely have required hired labour which he would have to use local networks to find, engage, and negotiate wages. He or a trusted individual would further have had to oversee the entire operation. Nor should we discount less tangible expenses such as the time away from his own fields and the demesne that he managed that all such activities would have necessitated.

John de Chilton was certainly something of an outlier in terms of his activity in the purchasing of tithes, but even serjeants who kept their involvement small would have had to exhibit the same organisational skills and local knowledge. Gilbert de Wodom may have spent only £6 on the right to collect tithes in 1333 in the vill of Ricknall, but, using the same rough estimations as before, he would have found himself with about 56 quarters of oats or 250 lbs that would similarly have to be gathered, stored, and either sold or otherwise disposed of. In addition to his activities on the tithe market, Gilbert de Wodom spent £5 6s 8d to rent the

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536. Dodds, *Peasants and Production*, p. 29.

entire (roughly) 240-acre manor of Aycliffe.<sup>537</sup> The rental of the entire manor and not piecemeal parcels of it came with its own considerable expenditures and socio-economic considerations.<sup>538</sup> Labour would have to be hired for the planting, weeding, harvesting, and other tasks, ploughs and additional livestock for ploughing would need to be secured, and seed corn acquired, among other tasks. The manor would have required three or four plough-teams as well as any harvest labour or transport teams, though the plough-teams could have made up a part of either labour groups; for each plough, there were normally eight draught animals per plough.<sup>539</sup> What seigneurial rights, if any, accompanied the lease of the manor is uncertain, though such rights would have furthered the gap between the serjeants and their neighbours. Individuals such as John de Chilton, John Watson, and William de Hilton who all rented local mills did not take part in a passive investment, for such mills would have required upkeep and staffing by trained individuals who would need oversight and paying.

Even William Forester and William Scott who spent a total of £1 8s and £2 3s 4d, respectively, on the right to collect tithes and are thus among the serjeants who invested the least, still would have had to come up with significant amounts of cash when their payments were due. Such ready cash would also be necessary for any rents that became due. Some rents were certainly smaller and individuals such as John de Shele or Robert de Mainsford paid quite small amounts for their land (2s and 3s 8d, respectively). Rents such as these, should they fall due in a year when an individual was serving as serjeant, could be paid out of the salary, but otherwise the serjeants would have had to have the cash in hand or rely on the availability of

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537. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals* p. 213 for the details of the manor of Akley (Aycliffe). The manor had been farmed out since about 1290 and was one of the Priory's original manors. As Richard Lomas noted, the Durham records are 'extremely reticent about manorial acreages' and that a document from the mid thirteenth century states that the manor was two carucates, though it gives no conversion of carucates to acres (Lomas, 'Priory of Durham and its demesnes', p. 348). Accepting Bruce Campbell's figure of one carucate equalling 120 acres, Aycliffe was likely of around 240 acres (Campbell, *English Seigniorial Agriculture*, p. 121).

538. Discussion of the socio-economic implications of the rental of whole manors follows in the next section.

539. *Ibid.*, p. 121.

credit. The English rural credit market was well established during the period under investigation and Briggs suggests that cash credit was increasingly common during the later fourteenth century.<sup>540</sup> Furthermore, as manorial officials, security for their loans could have come from the bursar in his role as lord of the manor, with whom they would have had, hopefully, a good working relationship.<sup>541</sup> As they were known to the Priory officials, serjeants may have been given some leeway in the payment of rents and tithes, and those same officials would know where to find the serjeants if such latitude was abused. Credit was extended to those who purchased the right to tithes as a matter of course by the Priory. The Priory expected payment well after the harvest and, as stated above, an interest payment was included in the amount to be paid.<sup>542</sup> This arrangement would allow for individuals such as William Forester and William Scott to sell enough grain to meet their obligation to the Priory. Those more heavily involved in the purchase of tithes such as Adam Carter and John de Monkton would have had to plan much more carefully. The £10 13s 4d Adam Carter paid for the right to the tithes of Harton in the Jarrow parish in 1389 or the £12 13s 4d John de Monkton paid for the tithes of Hilton (*Hylton*) and Southwick, both in the Jarrow parish in 1400 would undoubtedly have returned significant amounts of grain. These individuals would have to rely on a commercialised network of associates, middlemen, and buyers to sell enough grain to meet their obligations to the Priory if they did not have the cash readily available or access to a moneylender or moneylenders of considerable means. Reliance on such a network or even the knowledge of how to form one could well have been beyond the capability of a normal small holder or manorial labourer.

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540. Chris Briggs, 'Money and rural credit in the later middle ages revisited' in Martin Allen and D'Maris Coffman, (eds.) *Money, Prices and Wages: Essays in Honour Nicholas Mayhew* (London, 2015) p. 135. The credit market on the continent may have used more credit in kind (*Ibid.*, p. 140).

541. Philip Schofield, 'Access to credit in the early fourteenth-century English countryside' in P. R. Schofield and N. J Mayhew, (eds.) *Credit and Debt in Medieval England c. 1180-c.1350* (Oxford, 2002), p. 119.

542. Dodds, *Peasants and Production*, p. 29.

## VII. Serjeants and their Communities: A Social Consideration

We can have a fair idea of the serjeants' economic standing compared to that of their neighbours based on the available evidence. We can see how much these serjeants were paid and, to some degree, for what and how much they paid the Durham Cathedral bursar, whether for tithes, land, cottages, or the like. It certainly seems likely that the serjeants were economically ahead of many of their peers, but to what degree this economic advantage served to bolster their social standing remains to be seen. It is presumed that individuals who were — or were considered to be — of high or higher economic status would spend additional money on finer clothes or furnishing for their house but, lacking archaeological evidence, inventories, or wills, I can only speculate on this. I have no examples of the serjeants being perceived as putting on airs or reaching above their station by their peers, for example, though examples of mockery of such individuals can be found in the literature of the period.<sup>543</sup> Such evidence reinforces our concept of the serjeants as capable and highly enterprising individuals.

With such organisational skills and access to ready cash, we can safely assume that most serjeants would have been important individuals in their own communities, even though their manorial role did not include responsibilities off the manor. Unlike the village reeves, they were not elected by the inhabitants of a village and did not make presentations at manorial courts or arrest criminals.<sup>544</sup> Nevertheless, they would have been economically prominent within their communities. The ability demonstrated by many serjeants to raise sums of cash may have led them to become sources of credit within their villages. As noted by Briggs, 'many village credit networks featured many lenders and borrowers presumably well known to one another'.<sup>545</sup>

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543. See Carella, 'The Social Aspirations and Priestly Pretense of Chaucer's Reeve', pp. 523-529, Minnis and Stone, 'The Reeve', pp. 399-420.

544. Peter Larson, *Conflict and Compromise in the Late Medieval Countryside: Lords and Peasants in Durham, 1349-1400* (New York, 2014), pp. 59-60.

545. Briggs, 'The availability of credit', pp. 13-14.

Serjeants may well have acted not only as middlemen for communities wishing to purchase the right to their own tithes, but may well have lent the money that made such purchases possible.

The purchase of tithes by various serjeants would have widened the gulf between the purchaser and his neighbours, particularly if he was purchasing the right to collect the grain that they had endeavoured to grow. Indeed, the astronomical sums commanded by John de Chilton and his cabal must have caused resentment among those not involved with him. The very accumulation of money might have been viewed with distaste, distrust, and disgruntlement. Furthermore, manorial serjeants would have provided opportunities for employment within their community. As already discussed, individuals who leased large amounts of land would likely require greater amounts of labour than their household could provide. Nor can we discount the amount of power that a manorial serjeant might wield through his office over the surrounding area, especially in the hiring of labour. As noted by Richard Britnell, turnover rates among the manorial *famuli* were high throughout the late fourteenth century. Some manors might see one in three employees leave in a given year, though from 1370/1 to 1409/10 decadal averages across the Priory estate show even higher turnover rates of 45%, 38%, 37%, 33%, and 40%.<sup>546</sup> Britnell further notes that ‘the priory expected to have to replace at least a third of its *famuli* each year, and that it is therefore misleading to describe them as in any sense a stable or permanent work-force’.<sup>547</sup> Manorial serjeants would then have to fill such vacancies among their staff from the local labour force. They would have had to draw upon a network of local contacts to fill these roles and there were no systems in place to review those chosen to fill vacancies, beyond ensuring staff were not overpaid. Serjeants would likely have chosen individuals known to them and, in doing so, engaged in favouritism. An individual or family whom a serjeant found (real or imagined)

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546. Britnell, ‘Labour turnover’, pp. 164-165.

547. Ibid., p. 165.

reason to dislike could find themselves with fewer opportunities for employment as a member of the *famuli*. To what degree a serjeant could freeze an individual or individuals out of harvest day or piece labour is more uncertain. Labour needs teamed with the urgency of the harvest may well have tempered even the most unpleasant serjeants.

We also cannot discount the possibility of social or class strife characterising the relationship between serjeants and other individuals in their area. Though servants of the Priory, as suggested by their title, the serjeants were unlikely to have been of servile birth. Some serjeants such as John de Newton or William Page may have taken on customary holdings, though on a larger scale than was normal; William Page held four customary tenancies in 1396/7 at an annual rent of £4 17s 4d while John de Newton held two customary tenancies for which he paid £1 8s 4d in 1396/97.<sup>548</sup> They were not serfs by blood. Yet the distinction between those of servile and free birth was keenly felt in medieval England and status mattered, else those seeking to free themselves from servile status would not have claimed that 'their servile status was restricting and degrading'.<sup>549</sup> Defamation cases brought by alleging servile birth or the use of slurs such as *rusticum*, perhaps implying a certain degree of simplicity, and similar terms were heard by courts throughout England and relations between villeins and serf and the lord of the manor could be considerably less than cordial.<sup>550</sup> Accusations of servile birth were treated seriously, even after labour services had disappeared on the Durham Cathedral Priory estates in the 1380s. As the one of the most visible agents of the bursar in his capacity of lord of the manor, it is difficult to imagine that the serjeant did not face resentment from his unfree neighbours. Even if he was no longer enforcing or directing labour obligations, the serjeant was still a reminder of the individuals who kept unfree individuals in a state that was

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548. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, pp. 43, 79.

549. Bailey, *Decline of Serfdom*, p. 94.

550. Ibid., p. 94, J. V. Beckett, 'The Peasant in England: A Case of Terminological Confusion', *Agricultural History Review*, 32(2) (1984), pp. 117-119.

subordinate, restrictive, and degrading. Elsewhere in England, manorial reeves were periodically assaulted; Matthew Gilbert, reeve of Walsham-le-Willows in Norfolk, was attacked twice in the summer of 1367 and both times the assailants refused to deny the charge.<sup>551</sup> Such resentment could have flowed in the opposite direction as well. Because unfree peasants were degraded, restricted, and subordinated, they could become figures of scorn to be kept in such circumstances, a task made easier by the mandated duty of jurors to produce an annual list of serfs on each manor of the Durham Cathedral Priory, a practice which continued until 1470.<sup>552</sup> This scorn and the frequent allegations of socially reaching serjeants and reeves would have would have characterised the relationship between serjeants and those whom he employed or with whom he was neighbours. Furthermore, serjeants such as Gilbert de Wodom, who rented the manor of Akley, would have found themselves among the ranks of the gentry, further widening the socio-economic gap between the serjeantry and the peasantry. Gilbert de Wodom's actions, as well as those of other serjeants taking on similar properties, force us reconsider the station the serjeants occupied. We cannot be entirely sure just how exceptional or commonplace Gilbert de Wodom's and William Colynson's rental of entire manors was during the long fourteenth century; the huge sums involved in some of the serjeants' activities in the tithe market certainly suggest that that a sizeable portion of the serjeantry were either of gentry status or closely approaching it. Indeed, these actions and sums commanded by the serjeants on the estates of the Durham Cathedral Priory further widen the gulf between the serjeants and southern reeves. While southern reeves may certainly have had pathways to societal advancement through their office, they nevertheless remained peasants, even if they held positions of authority.

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551. Stone, *Decision-Making*, p. 223.

552. Larson, *Conflict and compromise*, pp. 147, 157-8.

Manorial managers and officials were targets of ridicule and claims of social climbing by those deemed their societal betters, but there is good reason Chaucer described his Reeve in the manner that he did: clever and valuable to his lord. Indeed, at least some of the Priory manorial serjeants do appear to be climbing the social ladder. Gilbert de Wodom and William Colynson, as mentioned before, could reasonably be considered minor members of the gentry. Serjeants such as Adam Carter, Adam Neuton, Robert White, and William de Hilton, with the amounts they spent on tithes and rented landed, would certainly have outpaced the wealth of the emergent yeomanry. If the £58 spent by John Watson for seven tithes over an eighteen year period was impressive, then John de Chilton's personal purchase of eighteen tithes over an eleven year period for £276 9s 8d was nothing short of spectacular. These exceptional individuals were not merely attempting to improve their financial well-being, but instead meant to leave behind their posited peasant background. We cannot forget that while a capable serjeant was valuable to the bursar at whose pleasure he served, he was in a position of power and authority in his community, from which critique and conflict might often follow.

## VIII. The Case of Roger of Mainsforth & William de Hoton

The manorial serjeants may have been separated from their neighbours and those they employed as *famuli* not only in terms of their economic power, but in their interpersonal connections and social station from birth. Roger of Mainsforth (bursar from 1400 to 1404 and again bursar from 1405 to 1407) and one Agnes were both the children of John of Hardwick. Agnes married twice, first to one John Killinghall, and finally to Gilbert de Hoton. Gilbert de Hoton and Agnes had issue, one of whom was William (de) Hoton, who was thus the nephew of Roger of Mainsforth, monk of Durham. Later in his life, William augmented the endowment of St Katherine's Chantry at the Church of St Edmund in Sedgefield for masses to be said for

the souls of his wife, father, mother, his mother's former husband, and his uncle.<sup>553</sup> This brief vignette of family ties in the latter Middle Ages, with widowhood and remarriages and religious observance, is hardly unusual and was likely repeated with minor variations throughout Latin Christendom during this period. All of the details here are as firm as events six centuries past can be. Yet there is room for some pertinent speculation. One William de Hoton was serjeant at Pittington for a single year, 1380/1, where he served with no real distinction. What if the William de Hoton, serjeant of Pittington, and William de Hoton, son of Gilbert, were the same individual? Unfortunately, such a situation can only be discussed with hypotheticals and conjectures, as evidence is sparse. Yet the parish of Sedgefield is not terribly far from Pittington, about 11 miles (17.7 km). If we accept Dobson's statement that many of the monks were members of the gentry or middle ranks of rural and urban society, then this possible relationship between a monk and a serjeant could have a profound impact on our understandings of the Durham serjeantry.<sup>554</sup> Perhaps many other members of the serjeantry were of higher social standing than we might have assumed, separating them further from the individuals they employed as *famuli* and placing them more on a social level with the Durham monks.

## **IX. Conclusion**

### **IX.i. Serjeants and Their Economic Mentalités**

This abundance of information helps us to build a more complete picture of the serjeants on the bursar's manors during the long fourteenth century. Many were prosperous with an astute sense for business opportunities. Some serjeants took the relatively safe investment of renting parcels of land while others were heavily involved in the tithe market and the lease of whole manors or mills. Unlike their monastic lords, many serjeants were comfortable engaging in

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553. Rollason and Rollason (eds.), *The Durham Liber Vitae, vol. III*, pp. 293-294.

554. Dobson, *Church and Society*, p. 57; Dobson, *Durham Priory*, p. 58-59.

economic risk-taking. And unlike peasant small holders whom a bad harvest could cause to starve, serjeants evidently believed themselves to be insulated enough from the possibility of such disasters that they could take financial risks that would be staggering to others. The purchase of tithes, as noted above, could require a network of individuals to make the venture a success, but it also required the buyer to be well aware of trends in the price of grain and possible fluctuations. That less prosperous peasants were involved in economic risk-taking and were keenly aware of wider market and climatic trends as a matter of survival is not something I am debating here, for Dodds and others have argued that they were quite convincingly.<sup>555</sup> Rather, the difference in the scale and the reasons for economic risk taking between these prosperous serjeants and poor peasants deserves some attention, if only to highlight the socio-economic gap between the serjeants and other members of the peasantry as a whole. The risk taking of poorer peasants was, as mentioned above, a matter of survival and ensuring that they grew enough grain to eat themselves or to sell on the market and a matter of weighing the relative costs and relative labour inputs of different grain crops. Dodds, in a study of tithe receipts in mid-fourteenth century south-eastern England, noted 'that the most commercially-minded non-seigneurial cultivators may have been found among smallholders forced to maximize the sale value of their output in order to make ends meet'.<sup>556</sup> Indeed, by the fourteenth century 'it is likely that over 10 per cent of total arable area was devoted to producing marketable crops by tenants,' and peasant farmers would have been likely to follow a work ethic 'aimed at satisfying a particular set of requirements rather than high profitability; ensuring that the relative costs of their work was low would have helped ensure this'.<sup>557</sup> In good years, they might seek to sell or stockpile enough grain to have a reserve should their fortunes change.

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555. See Dodds, 'Demesne and tithe' for further discussion on this topic.

556. Ibid., p. 141.

557. Britnell, *Commercialisation of English Society*, pp. 121-122, 202.

These prosperous serjeants discussed here seem to have approached economic risk taking in a very different fashion. The scale of the investments of such individuals as John de Chilton, John de Monkton, Gilbert de Wodom, William de Hilton, and others who rented large parcels of land or speculated on the tithe grain suggests that mere survival or subsistence farming were not their primary concerns. Accumulation of wealth and capital would have been the driving force behind their economic involvement. This economic involvement may not have only been entrepreneurial for its own sake but also to demonstrate status through land and livestock holdings.<sup>558</sup> Such an outlook could further Chaucer's critique of manorial officials' social grasping. Like less prosperous peasants, they would still have sought to compare the relative prices of grain and labour inputs, but the scale of their operations suggest very different motives. These serjeants and, by extension, the more prosperous peasants took risks that were truly in aim of capital accumulation seeking. Yet, as tempting as it may be to term these economic activities as entrepreneurial, doing so would be a deliberate anachronism with which I am distinctly uncomfortable. Nevertheless, these activities are in stark contrast to the economic mentality of the Durham Cathedral Priory which was characterised much more by innate conservatism and institutional inertia.

Moreover, this propensity for risk-taking and significant cash went against the conventional wisdom, at least as far as that wisdom pertained to seigneurial agriculture. The agricultural treatises that flourished in the fourteenth and thirteenth centuries were intensely conservative documents. *Les Rules de Seynt Roberd*, one such document opens by stating that by following the rules the reader will be able to live off the returns of the demesne while the fourth rule calls for a carefully calculated budget based on known returns from the demesne. Any speculation beyond the call to store grain for a half of year before selling to fetch the best prices

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558. Britnell, *Commercialisation of English Society*, p. 202.

is absent.<sup>559</sup> In none of Robert Grosseteste's twenty-three rules is there mention of the purchase or rent of additional land or the purchase of the right to collect tithes, even if members of powerful families such as the Nevilles or magnates like the Earl of Westmoreland did, on occasion, enter the tithe market. Even Walter of Henley's *Husbandy*, presented through the didactic conceit of a father speaking to his son, unlike *Les Rules de Seynt Roberd*, nominally addressed to the Countess of Lincoln, does not mention any such expenditure. Walter of Henley tells what yield the farmer might expect from his dairy cows, how to mix and spread manure, and to above all oversee one's employees carefully, all practical information for maintaining a farm in good working order, but not for expanding one's operations. These successful serjeants that we see being employed on the bursar's manors were, if not ignoring the advice of Walter of Henley and Robert Grosseteste, going beyond it. Their goals are not the pious constraints and modesty so frequently preached and ignored by the late medieval church. They were rather more likely to aim to become the well-dressed middling sorts targeted by the sumptuary legislation of the fourteenth and fifteenth centuries.

#### IX.ii. Reconciling the *Mentalités* of the Serjeants & Durham Cathedral Priory

This chapter and the chapter which proceeded it have demonstrated a gap between the manner in which the serjeants conducted their private affairs and the outlooks espoused by the bursar and Priory. Yet these two *mentalités* are hardly irreconcilable and the dichotomy between the entrepreneurial serjeants and the preservationist monks does not negate the argument against a 'capitalistic' perspective or interpretation of medieval seigneurial agriculture, one of the main stances of this thesis, but instead further speaks to the considerable skill of the serjeants. Regardless of the aims of the convent, there was a real need for skilled managers who were able to achieve these goals. The high yields found on the bursar's demesnes for so much of the long

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559. Oschinsky, *Walter of Henley & Other*, pp. 389, 392-393.

fourteenth century were not accidental but instead were the product of careful and capable managers. The evidence in *Chapter V: The Serjeants of Durham Cathedral Priory* strongly suggests that many manorial managers had a strong entrepreneurial drive. The manorial serjeants were, as a rule, open to taking large risks in their private affairs, a predilection that may have been somewhat present in their manorial dealings. Some serjeants speculated heavily on the tithe market, including John de Chilton who purchased the right to collect eighteen different tithes in the period from 1389 to 1400, totalling £276 9s 8d. The local knowledge that serjeants accumulated over the course of their careers may have lessened the risk of entering the tithe market somewhat, as they would have had an idea of the expected productivity of crops in a given area, but the risk of disaster was nevertheless always present. Other serjeants rented land, including mills, ovens, and, in the case of Gilbert de Wodom and William Colynson, whole manors.<sup>560</sup> Further evidence of the economic activities of the serjeants is likely obscured through gaps in the extant record, but there is little reason not to believe that many more serjeants were as active in their local markets as the ones for whom we have direct evidence. In distinct contrast, Durham Cathedral Priory, as demonstrated in *Chapter III: Measures of Agricultural Success* and *Chapter IV: The Monks & Their Mindsets*, valued a reasonable return to the investment that they put into demesne agriculture and insulation from demographic, economic, political, or climatic upsets; they sought to preserve and protect their patrimony, not add to it. Yet the behaviour of the serjeants in their own affairs, as well, as the high yields found on many of the demesnes suggests that the Priory may have allowed the serjeants to use similar practices on the demesne fields as on their own lands. If this was the case, as it certainly seems to be, then the Priory would have ensured that the serjeants kept risk and investment at predetermined reasonable levels and then gave the serjeants relatively free reign within these restrictions to

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560. The bursar's rentals show that Gilbert de Wodom rented the manor of Akley (Aycliffe) in 1340/1 for £5 6s 8d and William Colynson rented the manor of Muggleswick in 1396/7 for 20s. Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals*, pp. 54, 123.

meet or exceed the returns demanded by the obedientiaries. Intensive cultivation likely acted as a way for the serjeants to achieve high productivity while lessening risk. Nevertheless, while the serjeants could act in a similar fashion both on and off demesne, long term changes to greater and consistent market orientation would remain difficult as the Priory's organisational structure, either by design or happenstance, kept the convent from making long-term changes except in the face of monumental economic changes, the switch to the leasing of manors in the fifteenth century being the most notable example. Few bursars were in office for long periods; only fifteen per cent of bursars were in office for more than four years.<sup>561</sup> These relatively short terms of office kept the Priory from short-term overreach and an overhaul of its economic mindsets, as such a change would likely be the product of many years in office. Additionally, the dispersed demesnes controlled by the obedientiaries served to further insulate the convent from risk and the turbulence that characterised the long fourteenth century.<sup>562</sup> This was in accordance with the intellectual trends and agricultural treatises of the period, none of which mentioned the acquisition of more land.<sup>563</sup>

With such a management style, the serjeants would have been able to continue the entrepreneurial practices they used on their own holdings, albeit somewhat curtailed to meet the lowered risk and consistency of returns demanded by the convent. We cannot suppose that the serjeants were capable only of one approach to agriculture or, more broadly, business, for they would have had to adjust their own practices according to economic conditions to prosper and amass the wealth that I have demonstrated they commanded. So too would the Priory

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561. See *Chapter IV.II.ii* for further on the lengths of bursars' terms.

562. Slavin notes that while idea of risk-spreading is 'somewhat anachronistic when dealing with late-medieval food security', it nevertheless characterised the manner in which Norwich Cathedral Priory managed its estates and kept from being overly dependent on the market. Slavin, 'Church and food provisioning', p. 616, and see *Chapter IV: The Monks & Their Mindsets*.

563. See *Chapter IV: The Monks & Their Mindsets*, Section III: Agricultural Treatises and Intellectual Trends and Section IV: Conservationism and Preservationism: Implications of the Agricultural Treatises. While the Priory should have been kept from acquiring additional land by the Statutes of Mortmain of 1279 and 1290, loopholes did exist and there was difficulties with enforcement. Halcrow, 'Decline of demesne farming', p. 349.

obedientiaries have been able to direct the management of their estates to generate wealth. Yet, as we have seen in *Chapter I: Introduction*, many lay and religious demesne lords were not overly concerned with profit and their accounting practices were not well equipped to calculate it.<sup>564</sup> The Durham Cathedral Priory manorial serjeants must have been capable of shifting their economic priorities to align with those of the convent obedientiaries during their tenure. This should not be seen as a limitation in the scope of the economic activities of the Priory, but rather in the high degree of skill and acumen of the serjeants. These were highly capable individuals who were able to make complex decisions to further multiple economic priorities and successfully administer both their own affairs and convent demesnes. Given the evidence that is available to us, we cannot imagine that the majority of the Priory's serjeants were not ambitious men. Yet we should not think that the ambitions of the serjeants drove them blindly towards personal wealth solely through market involvement. These individuals recognised that successfully demonstrating restraint in managing the convent's demesnes and following the bursar's guidelines would allow them to build the connections with the monks that could conceivably have allowed for favourable prices on tithes or lands rented from the Priory.

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564. Bailey, 'Historiographical essay', p. 309, Dobie, *Accounting at Durham Cathedral Priory*, pp. 55-60, 192-197, Harvey (eds.), *Manorial Record of Cuxham, Oxfordshire, circa 1200-1359*, p. 15.

## X. Chapter Supplement

Table V.9: Serjeants at the Bursar's Manors during the Long Fourteenth Century

Year 565	Manor	Serjeant	Year	Manor	Serjeant
1302	Bearpark	William de Hesewell	1305	Ketton	William de Morton
1303	Bearpark	William de Hesewell	1306	Ketton	Will. & Amb. de Morton
1304	Bearpark	William de Hesewell	1310	Ketton	John de Belasis
1305	Bearpark	William de Hesewell	1321	Ketton	John Pittington
1310	Bearpark	Ralph de Cromclyve	1324	Ketton	Gilbert de Wodom
1320	Bearpark	John de Conyngham	1326	Ketton	Walter
1321	Bearpark	William, <i>bercarius</i>	1332	Ketton	Walter de Tonkotes
1328	Bearpark	Robert, Chaplain	1334	Ketton	John Luklyn
1329	Bearpark	Robert, Chaplain	1335	Ketton	John Luklyn
1330	Bearpark	Robert, Chaplain	1336	Ketton	John Luklyn
1331	Bearpark	Richard de Thinley	1337	Ketton	John Marshall
1332	Bearpark	Richard de Thinley	1370	Ketton	William Scott
1333	Bearpark	Richard de Thinley	1371	Ketton	William Scott
1334	Bearpark	Richard de Thinley	1372	Ketton	William Scott
1335	Bearpark	Richard de Thinley	1373	Ketton	William Scott
1336	Bearpark	Richard de Thinley	1374	Ketton	William Scott
1341	Bearpark	Richard de Thinley	1375	Ketton	William Scott
1342	Bearpark	Richard de Thinley	1376	Ketton	William Scott
1343	Bearpark	Richard de Thinley	1377	Ketton	William Scott
1344	Bearpark	Richard de Thinley	1378	Ketton	John
1370	Bearpark	John de Lethom	1380	Ketton	Thomas Watson
1371	Bearpark	John de Lethom	1381	Ketton	Thomas Watson
1372	Bearpark	John de Lethom	1382	Ketton	Thomas Watson
1373	Bearpark	John de Lethom	1386	Ketton	Richard Wright
1374	Bearpark	John de Lethom	1391	Ketton	John de Chilton
1375	Bearpark	John de Lethom	1393	Ketton	John de Chilton
1399	Bearpark	Thomas Herynger	1395	Ketton	John de Chilton
1407	Bearpark	John de Shyncle	1396	Ketton	John de Chilton
1303	Belasis	Walter	1397	Ketton	William de Stokeslay
1304	Belasis	Walter	1398	Ketton	William de Stokeslay
1305	Belasis	John Seton	1399	Ketton	William de Stokeslay
1306	Belasis	John Seton	1401	Ketton	William de Stokeslay
1320	Belasis	William Disscher	1402	Ketton	William de Stokeslay
1324	Belasis	John de Beulu	1405	Ketton	Robert White
1324	Belasis	John de Seaham	1406	Ketton	Robert White
1326	Belasis	John	1407	Ketton	Robert White
1300	Bewley	Gilbert	1410	Ketton	John de Heyworth

565. The final year covered by an account. For example, if an account covers 1370 to 1371, the year is noted as 1371.

Table V.9: Serjeants at the Bursar's Manors during the Long Fourteenth Century

Year 565	Manor	Serjeant	Year	Manor	Serjeant
1302	Bewley	Gilbert	1376	Merrington	John Whitbrun
1303	Bewley	Rich. & Rob. de Marton	1377	Merrington	John
1304	Bewley	Richard de Marton	1378	Merrington	William Currour
1305	Bewley	Walter de Thocotes	1379	Merrington	Adam Whyshyffe
1306	Bewley	Walter de Thocotes	1380	Merrington	Robert de Maynesford
1317	Bewley	Henry	1380	Merrington	Robert de Maynesford
1321	Bewley	John	1381	Merrington	William Forester
1323	Bewley	Robert Ayre	1382	Merrington	William Forester
1324	Bewley	William	1300	Muggleswick	Adam de Sessinghopp
1326	Bewley	Gilbert de Ketton	1301	Muggleswick	Adam de Sessinghopp
1330	Bewley	William de Walburn	1302	Muggleswick	William de Hilton
1332	Bewley	John de Thorp	1303	Muggleswick	William de Hilton
1333	Bewley	John de Thorp	1304	Muggleswick	William de Hilton
1337	Bewley	John de Edmundbyres	1310	Muggleswick	John de Aldewode
1338	Bewley	John de Shele	1300	Pittington	Richard Stere
1340	Bewley	John de Shele	1301	Pittington	Richard Stere
1344	Bewley	John de Edmundbyres	1302	Pittington	Alan de Reynington
1370	Bewley	William Carter	1302	Pittington	John de Pittington
1371	Bewley	Thomas de Esyngwald	1304	Pittington	Alan de Reynington
1372	Bewley	Thomas de Esyngwald	1305	Pittington	Robert de Scouland
1373	Bewley	Thomas de Esyngwald	1305	Pittington	Robert de Souland
1375	Bewley	John de Baumburgh	1310	Pittington	Robert de Lathes
1376	Bewley	John de Baumburgh	1320	Pittington	Ralph
1377	Bewley	John de Baumburgh	1321	Pittington	Adam de Birden
1378	Bewley	John de Baumburgh	1323	Pittington	Henry de Smython
1379	Bewley	Gilbert, reeve	1324	Pittington	Henry de Smython
1405	Bewley	John de Monkton	1325	Pittington	Henry de Smython
1406	Bewley	John de Monkton	1325	Pittington	John de Seaham
1407	Bewley	John de Monkton	1326	Pittington	John de Seaham
1303	Billingham	Peter	1328	Pittington	John de Seaham
1303	Billingham	William de Hoton	1329	Pittington	John de Seaham
1304	Billingham	Gilbert Sumle	1331	Pittington	John de Seton
1305	Billingham	Gilbert Sumle	1332	Pittington	John de Seton
1306	Billingham	Gilbert	1333	Pittington	John de Hesilden
1306	Billingham	Gilbert, reeve	1334	Pittington	John de Hesilden
1306	Billingham	John	1336	Pittington	Robert Scot
1316	Billingham	Robert del Lathes	1338	Pittington	Walter de Fery
1317	Billingham	Robert	1340	Pittington	Elias Raynald
1320	Billingham	Robert	1341	Pittington	Elias Raynald
1321	Billingham	Robert	1345	Pittington	Roger son of Hugh
1324	Billingham	John de Beulu	1377	Pittington	John Ponchon
1324	Billingham	John de Seaham	1378	Pittington	John Ponchon

Table V.9: Serjeants at the Bursar's Manors during the Long Fourteenth Century

Year 565	Manor	Serjeant	Year	Manor	Serjeant
1326	Billingham	John Lukelyn	1379	Pittington	John Ponchon
1328	Billingham	John Lukelyn	1380	Pittington	John Ponchon
1329	Billingham	John Lukelyn	1381	Pittington	William de Hoton
1330	Billingham	John Lukelyn	1382	Pittington	John Witbrow
1331	Billingham	John Lukelyn	1383	Pittington	William Willy
1333	Billingham	Walter del Byres	1384	Pittington	William Willy
1334	Billingham	Thomas Wawayn	1385	Pittington	William Willy
1335	Billingham	John de Hesilden	1389	Pittington	Robert Kirkman
1335	Billingham	Thomas Wawayn	1390	Pittington	Robert Kirkman
1337	Billingham	John Tyd	1391	Pittington	Robert Kirkman
1340	Billingham	John Marshall	1393	Pittington	Robert Kirkman
1344	Billingham	John Marshall	1394	Pittington	Robert Kirkman
1303	Dalton	Ralph	1395	Pittington	Robert Kirkman
1310	Dalton	John de Pittington	1396	Pittington	Robert Kirkman
1316	Dalton	Hugh de (Chilton?)	1397	Pittington	Robert Kirkman
1320	Dalton	Walter	1398	Pittington	Robert Kirkman
1321	Dalton	Walter	1399	Pittington	Robert Kirkman
1323	Dalton	William de Walobane	1406	Pittington	William Porter
1324	Dalton	William de Walobane	1407	Pittington	William Porter
1325	Dalton	William de Walobane	1408	Pittington	William Porter
1326	Dalton	William de Walburne	1409	Pittington	William Porter
1332	Dalton	Thomas Wawayn	1410	Pittington	William Porter
1333	Dalton	Thomas Wawayn	1413	Pittington	William Porter
1337	Dalton	Simon	1414	Pittington	John Elgy
1340	Dalton	Cuthbert	1419	Pittington	John Elgy
1344	Dalton	Cuthbert	1420	Pittington	John Greveson
1306	Ferryhill	William	1421	Pittington	John Greveson
1317	Ferryhill	Richard	1425	Pittington	John Greveson
1321	Ferryhill	Richard	1428	Pittington	John Greveson
1325	Ferryhill	John Hyne	1429	Pittington	John Greveson
1332	Ferryhill	Alan de Hetton	1430	Pittington	Robert Segefeld
1332	Ferryhill	Walter de Byres	1434	Pittington	Robert Segefeld
1333	Ferryhill	John Russell	1447	Pittington	John Mody
1333	Ferryhill	Robert Raynald	1450	Pittington	John Mody
1333	Ferryhill	Walter de Byres	1451	Pittington	John Mody
1334	Ferryhill	Robert Raynald of	1452	Pittington	John Mody
1447	Ferryhill	John Wardon, reeve	1300	Rainton	William de Langeley
1336	Fulwell	Robert de Monkton	1303	Rainton	William de Langeley
1338	Fulwell	Robert	1304	Rainton	William de Langeley
1378	Fulwell	John de Monkton	1305	Rainton	William de Langeley
1379	Fulwell	John de Monkton	1300	Wardley	Adam del Newton
1380	Fulwell	John de Monkton	1303	Wardley	Adam del Newton

Table V.9: Serjeants at the Bursar's Manors during the Long Fourteenth Century

Year 565	Manor	Serjeant	Year	Manor	Serjeant
1382	Fulwell	John de Monkton	1304	Wardley	Adam del Newton
1383	Fulwell	John de Monkton	1323	Wardley	Robert de Monkton
1384	Fulwell	John de Monkton	1324	Wardley	Robert de Monkton
1385	Fulwell	John de Monkton	1325	Wardley	Robert de Monkton
1386	Fulwell	John de Monkton	1326	Wardley	Robert de Monkton
1387	Fulwell	John de Monkton	1329	Wardley	Robert de Monkton
1388	Fulwell	John de Monkton	1330	Wardley	Robert de Monkton
1389	Fulwell	John de Monkton	1331	Wardley	Robert de Monkton
1390	Fulwell	John de Monkton	1332	Wardley	Robert de Monkton
1391	Fulwell	John de Monkton	1333	Wardley	Robert de Monkton
1392	Fulwell	John de Monkton	1334	Wardley	Robert de Monkton
1393	Fulwell	John de Monkton	1335	Wardley	Robert de Monkton
1394	Fulwell	John de Monkton	1337	Wardley	Robert...Thomas
1395	Fulwell	John de Monkton	1338	Wardley	Robert, son of Thomas
1396	Fulwell	John de Monkton	1344	Wardley	John, son of Robert
1402	Fulwell	John de Monkton	1375	Wardley	Adam Carter
1403	Fulwell	John de Monkton	1376	Wardley	Adam Carter
1411	Fulwell	John Watson	1377	Wardley	Adam Carter
1412	Fulwell	John Watson	1378	Wardley	Adam Carter
1413	Fulwell	John Watson	1379	Wardley	William Colynson
1301	Houghall	Ralph de Herlesay	1380	Wardley	William Colynson
1302	Houghall	Ralph de Cromclyf	1381	Wardley	William Colynson
1302	Houghall	Theobald	1304	Westoe	Adam del Newton
1302	Houghall	Theobald	1310	Westoe	Adam del Newton
1306	Houghall	Ralph de Cromclyf	1321	Westoe	William Page
1320	Houghall	Robert	1323	Westoe	Walter de Toukotes
1321	Houghall	Robert	1324	Westoe	Walter de Toukotes
1324	Houghall	Adam de Couton	1325	Westoe	John de Toudo
1370	Houghall	John Ponchon	1325	Westoe	Walter de Toukotes
1370	Houghall	John Ponchon	1326	Westoe	William de Walburne
1372	Houghall	John Ponchon	1327	Westoe	John de Tudhow
1373	Houghall	John Ponchon	1328	Westoe	John de Tudhow
1374	Houghall	John Ponchon	1329	Westoe	William de Hilton
1375	Houghall	John Ponchon	1330	Westoe	William de Hilton
1376	Houghall	William Lesmaker	1331	Westoe	William de Hilton
1377	Houghall	William Lesmaker	1332	Westoe	William de Hilton
1378	Houghall	William Lesmaker	1337	Westoe	William de Hilton
1379	Houghall	John de Benton	1338	Westoe	William de Hilton
1380	Houghall	Richard Soniour	1340	Westoe	William de Hilton
1381	Houghall	John Ponchon	1341	Westoe	William de Hilton
1382	Houghall	John Ponchon	1344	Westoe	William de Hilton
1383	Houghall	John Ponchon	1371	Westoe	Richard de Hartlawe

Table V.9: Serjeants at the Bursar's Manors during the Long Fourteenth Century

<b>Year 565</b>	<b>Manor</b>	<b>Serjeant</b>		<b>Year</b>	<b>Manor</b>	<b>Serjeant</b>
1384	Houghall	John Ponchon		1372	Westoe	Richard de Hartlawe
1386	Houghall	John Ponchon		1373	Westoe	Richard de Hartlawe
1389	Houghall	Robert de Murton		1374	Westoe	Richard de Hartlawe
1390	Houghall	Robert de Muton		1375	Westoe	Thomas Bower
1391	Houghall	Robert de Murton		1376	Westoe	Richard de Hartlawe
1392	Houghall	Robert de Murton		1394	Westoe	John Godwyn
1393	Houghall	Robert de Murton		1395	Westoe	John Watson
1394	Houghall	Robert de Murton		1396	Westoe	John Watson
1395	Houghall	Robert de Murton		1397	Westoe	John Watson
1396	Houghall	Robert de Murton		1398	Westoe	John Watson
1397	Houghall	Robert de Murton		1399	Westoe	John de Newton
1398	Houghall	Robert de Murton		1400	Westoe	John de Newton
1399	Houghall	Robert de Murton		1402	Westoe	John de Newton
1400	Ketton	William de Morton		1403	Westoe	John de Newton
1403	Ketton	William de Morton		1405	Westoe	John de Newton
1404	Ketton	William de Morton		1408	Westoe	John de Newton

Source: GB-0033-DCD-Enr., DCD-Beapk. acs., DCD-Bels. acs., DCD-Bewl. acs., DCD-Bill. acs., DCD-Dalt. acs., DCD-Fery. acs., DCD-Fulw. acs., DCD-Hew. acs., DCD-Houg. acs., DCD-Ket. acs., DCD-Merr. acs., DCD-Pitt. acs., DCD-Ward. acs., DCD-West. acs.

Table V.10: Details of Serjeants and Tithe Purchases

<b>Serjeant</b>	<b>Year</b>	<b>Parish of Tithe</b>	<b>Vill</b>	<b>Price (s)</b>	<b>Total Tithes</b>
Adam Carter	1376	Jarrow	Hebburn	93.33	6
	1377	Jarrow	Harton	160	
	1377	Jarrow	Hebburn	80	
	1383	Jarrow	Harton	280	
	1386	Jarrow	Harton	280	
	1389	Jarrow	Harton	213.33	
Adam Neuton	1307	Jarrow	Harton	--	4
	1308	Jarrow	Harton	--	
	1308	Jarrow	Westoe	--	
	1310	Jarrow	Harton	--	
Gilbert Wodom	1333	Aycliffe	Ricknall	120	11
	1335	Aycliffe	Aycliffe	--	
	1335	Aycliffe	Aycliffe	--	
	1335	Aycliffe	Ricknall half tithe	80	
	1335	Aycliffe	Ricknall	160	
	1343	Aycliffe	Ricknall	133.33	
	1346	Aycliffe	Ricknall	120	
	1347	Aycliffe	Woodham	196.67	
	1348	Aycliffe	Ricknall, Ricknall Grange	186.67	
	1361	Aycliffe	Aycliffe	--	
	1361	Aycliffe	Half tithe Ricknall	80	
	1360	Kirk Merrington	Hette in Spennymoor	26.67	2
John Bamburgh	1361	Kirk Merrington	Hett in Spennymoor	23	
	1310	Billingham	Wolviston	--	3
John Belasis	1311	Billingham	Wolviston	--	
	1330	Billingham	Cowpen Bewley	--	
	1389	Aycliffe	Brafferton	102.67	18
John Chilton	1389	Aycliffe	Newton Ketton	46.67	
	1390	Aycliffe	Brafferton	107	
	1390	Aycliffe	Newton Ketton	53.33	
	1394	Aycliffe	Newton Ketton	20	
	1396	Aycliffe	Brafferton	106.67	

Table V.10: Details of Serjeants and Tithe Purchases

<b>Serjeant</b>	<b>Year</b>	<b>Parish of Tithe</b>	<b>Vill</b>	<b>Price (s)</b>	<b>Total Tithes</b>
	1396	Heighington	Heighington	173.33	
	1396	Heighington	Killerby	133.33	
	1396	Heighington	Middridge, Middridge Grange, Newbiggin, West Thickley	40	
	1396	Heighington	Redworth	93.33	
	1396	Heighington	Walworth	253.33	
	1397	Aycliffe and Heighington	Aycliffe, Brafferton, Heworth, Preston le Skerne	1466.67	
	1397	Aycliffe and Heighington	Killerby Walworth School Aycliffe	--	
	1397	Aycliffe and Heighington	Newbiggin West Thickley Middridge Middridge Grange	--	
	1397	Aycliffe and Heighington	Newton Ketton, Nunstainton, Ricknall, Woodham	--	
	1397	Aycliffe and Heighington	Ricknall Grange Grindon Heighington Redworth	--	
	1399	Aycliffe and Heighington	Aycliffe and Heighington Parishes (except Newhouse and Coatsay Moor)	1466.67	
	1400	Aycliffe and Heighington	Aycliffe and Heighington Parishes (except Newhouse and Coatsay Moor)	1466.67	
John Chilton <i>et suis socii</i>	1396	Heighington	School Aycliffe	40	2
	1401	Aycliffe and Heighington	Aycliffe and Heighington Parishes (except Newhouse and Coatsay Moor)	1466.67	
John Godwin	1384	Jarrow	Westoe	100	5
	1384	Jarrow	Westoe	--	
	1388	Jarrow	Westoe	69	
	1389	Jarrow	Westoe	85.67	
	1390	Jarrow	Westoe	143.33	
John Greveson	1421	Pittington	South Pittington	33.33	15
	1422	Pittington	South Pittington	33.33	
	1423	Pittington	South Pittington	33.33	
	1424	Pittington	South Pittington	30	
	1425	Pittington	South Pittington	16	
	1426	Pittington	South Pittington	26.67	
	1427	Pittington	South Pittington	30	
	1428	Pittington	South Pittington	30	

Table V.10: Details of Serjeants and Tithe Purchases

<b>Serjeant</b>	<b>Year</b>	<b>Parish of Tithe</b>	<b>Vill</b>	<b>Price (s)</b>	<b>Total Tithes</b>
	1429	Pittington	South Pittington	36.67	
	1431	Pittington	Shadforth	-	
	1432	Pittington	Shadforth	160	
	1447	St Oswald	Lowykehalgh	3	
	1447	St Oswald	Thomas Billyngham fields garb and hay tithes	13.33	
	1448	St Oswald	campi Thome Billyngham garb and hay tithes	13.33	
	1448	St Oswald	Lowikehalgh	3.33	
John Hesleden	1335	Monk Hesleden	Monk Hesleden	--	6
	1335	Monk Hesleden	Monk Hesleden	--	
	1337	Monk Hesleden	Monk Hesleden	--	
	1351	Monk Hesleden	Monk Hesleden	--	
	1354	Monk Hesleden	Monk Hesleden	93.33	
	1361	Monk Hesleden	Monk Hesleden	--	
John Marshall	1346	Billingham	Wolviston	--	2
	1347	Billingham	Wolviston	--	
John Monkton	1390	Monkwearmouth	Hylton	109	6
	1396	Monkwearmouth	Hylton	74.08	
	1397	Monkwearmouth	Hylton, Southwick	306.67	
	1400	Monkwearmouth	Hylton	80	
	1400	Monkwearmouth	Southwick	173.33	
	1401	Monkwearmouth	Southwick	100	
John Russell	1343	Kirk Merrington	Spennymoor	--	6
	1346	Kirk Merrington	Ferryhill	--	
	1346	Kirk Merrington	Spennymoor	80	
	1347	Kirk Merrington	Ferryhill	--	
	1347	Kirk Merrington	Spennymoor	80	
	1347	Kirk Merrington	Spennymoor	133.33	

Table V.10: Details of Serjeants and Tithe Purchases

<b>Serjeant</b>	<b>Year</b>	<b>Parish of Tithe</b>	<b>Vill</b>	<b>Price (s)</b>	<b>Total Tithes</b>
John Seton	1308	Billingham	Billingham	--	3
	1310	Billingham	Billingham	--	
	1311	Billingham	Billingham	--	
John Watson	1373	Norham	Norham	213.33	7
	1386	Aycliffe	Woodham	40	
	1396	Jarrow	Harton	213.33	
	1399	Jarrow	Westoe	106.67	
	1400	Jarrow	Westoe	106.67	
	1401	Jarrow	Harton	240	
	1401	Jarrow	Wallsend, Willington	240	
Richard Hertlawe	1371	Jarrow	Harton	--	2
	1371	Jarrow	Preston, Simonside	--	
Richard Wright	1368	Aycliffe	Newton Ketton	56.67	6
	1380	Aycliffe	Brafferton	60	
	1381	Aycliffe	Brafferton	63.33	
	1383	Aycliffe	Brafferton	73.33	
	1384	Aycliffe	Ricknall	20	
	1386	Aycliffe	Brafferton, Newton Ketton	106.67	
	1419	Aycliffe	Newhouse	13.33	8
Robert White	1420	Aycliffe	Newhouse	13.33	
	1421	Aycliffe	Newhouse	13.33	
	1422	Aycliffe	Newhouse	13.33	
	1423	Aycliffe	Newhouse	13.33	
	1424	Aycliffe	Newhouse	13.33	
	1425	Aycliffe	Newhouse	13.33	
	1426	Aycliffe	Newhouse	13.33	
Thomas Watson	1386	Aycliffe	Ricknall	8	1

Table V.10: Details of Serjeants and Tithe Purchases

<b>Serjeant</b>	<b>Year</b>	<b>Parish of Tithe</b>	<b>Vill</b>	<b>Price (s)</b>	<b>Total Tithes</b>
Walter Tonkotes	1310	Billingham	Billingham	--	2
	1311	Billingham	Billingham	--	
William Currour	1377	Heighington	Heighington	--	1
William Disher	1308	Billingham	Wolviston	--	1
William Forester	1379	Aycliffe	Newhouse	22	2
	1380	Aycliffe	Newhouse	16	
William Scot	1371	Aycliffe	Newton Ketton	43.33	2
	1373	Aycliffe	Ricknall, Ricknall Grange	13.33	
<i>Average</i>				152.43	5.04

Source: All data is from Dodds, B. (2007). Durham Tithes Database, 1270-1536. [data collection]. UK Data Service. SN: 5607, <http://doi.org/10.5255/UKDA-SN-5607-1>

## Chapter VI: Conclusion

Over the course of this thesis, I have argued consistently for a re-evaluation both of the individual agency of manorial landlords and managers and of the lens through which we consider medieval economic motivation. I have also demonstrated for the need to reassess the historiography of the perceived differences in regional English productivity. Throughout this thesis, I have stressed the importance of Durham Cathedral Priory as a case study for it allows us to better understand northern monastic estate administration, the effects of agricultural decision-making, and the ways in which we must re-evaluate the frameworks through which we view medieval economic and agricultural history.

In the first chapter of this thesis, I laid out the current and past historiographical trends surrounding medieval English agricultural history, paying particular attention to the debates surrounding economic rationality, regional differences, individual effectiveness and agency, and the presumptions used when analysing medieval economy and agriculture. The second chapter provided a description of the different manors that made up the bursar's estate within the traditional patrimony of Saint Cuthbert and between the River Tyne and the River Tees. This included the location of each of the manors, the number of *famuli* who worked on the manor, its incomes and its expenditures, and, wherever possible, a brief history of Durham Cathedral Priory's association with that manor and the size of the demesne. In this chapter I also presented a summary of the three most important crops commonly grown on these manors

(wheat, barley, and oats), their transport costs, and their estimated nutritional value. *Chapter II: Sources & Methods* detailed the various sources and methods upon which this thesis relies. Of particular note for this study are the annual manorial accounts which listed in detail the expenses, incomes, and arable and pastoral income, all of which provided important data for this study. Here, I explained how the form of these documents were a natural result of their function: to check for fraud or theft among the manorial management and staff. The information from the manorial accounts was supplemented by data extracted from tithe receipts, which show the name of the buyer and the price paid for the right to collect the tithes, and also with extracts from the bursar's rentals which listed land rented and the price paid.

These introductory and explanatory chapters allowed me to engage with the larger historical debates surrounding medieval economic history. In *Chapter III: Measures of Agricultural Success*, I demonstrated that the yields per seed on the manors of the Durham Cathedral Priory bursar were consistently high and on a par with, or surpassing, national averages as observed by Bruce Campbell, David Stone, and others.<sup>566</sup> Such high yields across the bursar's manors during this period suggests an intensity of agricultural practices that were previously thought common only on estates in southern England. In doing so, I have shown how important a fresh study of a medieval northern ecclesiastical estate is for our understanding of medieval English economic and agricultural history. This chapter similarly argues against the belief that manorial managers and lords were virtual bystanders in a period of changing economic, climatic, and demographic circumstances: this chapter presented the results of a unique case study in which

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566. Data including that from Bruce M. S. Campbell (2007), Three centuries of English crops yields, 1211-1491 [WWW document]. URL <http://www.cropyields.ac.uk> [accessed on 06/03/2019], Campbell, *English Seigniorial Agriculture*, Campbell, 'Grain yields on English demesnes'.

data was drawn from geographically similar manors. Similarities such as these cannot be found in Westminster Abbey's scattered manors in Sussex and Staffordshire. This geographic layout would imply that, as conditions were likely largely identical on these manors, yields should also have been similar. Yet the disparity in yields and cropping patterns observed in this study demonstrates the differing goals that the bursars had for each manor and the purposes for which they sought to use the different demesnes. Such management was nothing if not deliberate.

In *Chapter IV: The Monks and Their Mindsets* and *Chapter V: The Serjeants of Durham Cathedral Priory*, I argued for the agency and ability of manorial managers and ecclesiastical landlords, disproving the pessimistic notions that these individuals were either incompetent, bound by previous methods in the face of rapidly changing circumstances, or hostages to the whims of a market and economy that they did not understand. These chapters also seek to challenge the capitalistic and profit-driven framework that dominates the study of medieval agriculture. I have argued that medieval monastic landlords and their managers were not solely concerned with profit, which, during the period, was a nebulous concept, difficult to calculate and with different definitions.<sup>567</sup> The insistence on holding medieval economic actors to a capitalistic structure in which profit is sought as a main objective can easily narrow our analysis to price-responsiveness and, when such behaviour is not observed or at best observed sporadically, lead to conclusions of economic irrationality. Moreover, the capitalist lens makes use of such terms as 'proto-capitalists' that are essentially meaningless due to their ill-defined nature, for what actions may count as proto-capitalistic behaviour in one study may be ignored in another.

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567. See Harvey (ed.), *Manorial Record of Cuxham, Oxfordshire, circa 1200-1359*, David Postles, 'Perception of profit', pp. 12-28, and Stone, 'Profit-and-loss accountancy', pp. 25-48 for discussion on the nature of profit.

As this framework is rarely, if ever, wholly applicable, I instead used agricultural treatises common to the period to show that medieval economic actors were more concerned about preserving their wealth and widely dispersing risk. In contrast to the pessimistic notion that monks were poor managers, the bursars of Durham Cathedral Priory were, as a rule, skilled managers with a keen eye for talent in their lay officials. I concur with Richard Lomas and A. J. Piper that the bursars were men invariably of middle-age by the standards of their time and peers, given the age demographics set forth by John Hatcher, Stone, and Piper.<sup>568</sup> The bursars would thus have been able to combine experience, often as a bursar's assistant, or *socius*, with the verve to responsibly carry out their office. These obedientiaries followed the intellectual trends common during the long fourteenth century towards temperance and the preservation of wealth. This preservationist outlook, bolstered by the monks' desire to preserve the patrimony of Saint Cuthbert, of which convent tradition deemed them the guardians, was particularly informed by the agricultural treatises in common circulation. Of particular note were *Les Reules de Seynt Roberd*, by Robert Grosseteste, Bishop of Lincoln (r. 1235-1253), the anonymous *Seneschaucie*, and Walter of Henley's *Husbandry*. Also important was the Priory's copy of a *Forma Compoti* and the accompanying introduction, dating to the late fourteenth century. This latter text included a clearly didactic sample account with multicoloured sections designed to help the reader differentiate the pertinent parts of a *compotus*. The *Introduction to the Forma Compoti* is of perhaps greater interest here, for it details how a manorial audit was to be conducted. Though the form of the audit is different from what we know the process on the

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568. See Lomas and Piper (eds.), *Durham Cathedral Priory Bursars Rentals* and Hatcher, Piper, and Stone, 'Monastic mortality', pp. 667-687.

bursar's manors to have been, it nevertheless demonstrates the interest and care the monks of Durham Cathedral Priory took in the running of the lands and the accountability of their officers.<sup>569</sup>

These texts, and others, I argued, preached moderation, temperance, accountability and the value of living within one's means, while risk and extravagant outlay were to be avoided. It was here that the framework through which we examine medieval agriculture became most important, for such a preservationist outlook goes against the profit-maximisation or proto-capitalistic *mentalités* commonly assumed by current scholarship. This preservationist mindset would also likely have served the monks by further protecting against the sort of catastrophes that plagued the long fourteenth century.

Continuing to contend for increased agency and recognition of individual ability, I consistently argued that the serjeants were not the small-scale managers, as envisaged by Elizabeth Halcrow.<sup>570</sup> With the notable exception of Stone's research on the manor of Wisbech Barton and Chris Briggs's work on the monitoring of demesne managers through the courts, little work has been done on manorial managers or officials during the long fourteenth century.<sup>571</sup> This is particularly notable in the historiographical gap in our understanding of the social and economic conditions of demesne managers. I have demonstrated in this thesis that many manorial managers were deeply involved in extra-manorial economic activities at a level that is surprising given their presumed status.

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569. See *Chapter IV: The Monks & Their Mindsets* and my translation and analysis of the *Introduction to the Forma Compoti* which accompanies this thesis.

570. Halcrow, *Administration & Agrarian Policy*, p. 89

571. See Briggs, 'Monitoring' pp. 179-195, Stone, 'Medieval farm management', pp. 612-638, Stone, *Decision-Making*.

By examining three different types of primary documents – manorial accounts, rentals, and tithe receipts – I demonstrated in *Chapter V: The Serjeants of Durham Cathedral Priory* that the convent's manorial serjeants were able to command large sums of money and other resources. This was particularly notable in the purchase of tithes by various serjeants, who would have been required to transport and store the grain until it could be sold or otherwise consumed, as well as pay the Priory on the dates agreed upon in the purchase agreement. Many serjeants showed a desire to increase their landholdings, often taking on plots of lands leased from the convent. The more prosperous serjeants leased mills or whole manors from the bursar. The lease of the latter, as in the case of Gilbert de Wodom and William Colynson leasing the manors of Akley and Muggleswick, respectively, may well have elevated them to the ranks of the minor gentry. In this chapter I expanded upon the impact of the geographical layout of the manors as it affected their management by the serjeants. As conditions on these manors were likely to be highly similar, if not so identical as to make no practical difference, differing measures of agricultural success would probably be due to the inputs of the managers. With this in mind, I was able to show that individual managers could have large impacts on yields, further highlighting the effect that individual agency could have during the period. The serjeants were, much like their monastic superiors, usually very capable individuals. Yet the bursars would not hesitate to dismiss serjeants who failed to perform to their standards, while moving capable serjeants to underperforming manors as agricultural problem-solvers. The latter possibility is

most visible in the case of John Ponchon who served as serjeant for at least nine years at the manors of Houghall and Pittington.<sup>572</sup>

This thesis has explored how Durham Cathedral Priory reacted to the agricultural challenges posed by the tumultuous long fourteenth century, including pestilence, armed conflict, and social and climatic changes. This study has undoubtedly benefited from the unique circumstances of Durham Cathedral Priory: its status as the sole northern monastic house for which muniments are extant in any real number, the multiple record types that allow for the prosopographical study of manorial officials, and the geographic layout of the manors that allows for analysis of individual managerial agency and effectiveness. These documents have received far less scholarly attention when compared to the estates of more southernly houses such as Westminster or Canterbury Abbey. This has accordingly caused less historiographical focus on the decision-making of Durham Cathedral Priory and its officials. Nevertheless, further research is undoubtedly feasible and, given the possibilities and arguments made throughout this thesis, would unquestionably be of great value.

I have not intended this thesis to invalidate the work done in previous studies. Current and past frameworks for interpreting the medieval economy and agricultural practices remain useful tools to historians that ought not to be discarded, even if more care should be given to their use. Rather, I have sought to argue throughout the previous chapters that such previously used frameworks – such as capitalistic and profit-maximising schema – are not the only possible

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572. John Ponchon also likely served as serjeant in the agricultural years 1375/6 and 1385/6, but the accounts for these years do not survive. Presumably, John Ponchon began his tenure as the serjeant for Pittington in 1375/6, the year after he left his post at Houghall, which was then filled by on William Lesmaker. This assumption is used here, as it was earlier.

explanatory methods. So too does econometric and model-heavy analysis have an important role to play within the field. Similarly, and nevertheless, these are two sorts of possible analytical methods among many; the case-study and individual-driven approaches upon which so much of this thesis relies may be no better or worse than the methods or perspectives I have implicitly and explicitly criticised. Case studies and prosopography, however, ought not to be overlooked and must be used when the nature of the available data demands it, as so much of the Durham Cathedral Priory data does. Through my use of case studies and individual-driven approaches, I have demonstrated the phenomenal effects individuals could have on the medieval English economy. We must continue the focus on individuals and their *mentalités* lest we overlook the agency of everyday economic actors.

# Appendix: Introduction to the Durham Cathedral Priory Forma Compoti (c. 1381), Translation & Analysis

## I. Introduction

The Durham Cathedral Priory monks did not learn their accounting methods in a vacuum, and neither did their lay officials. Copies of Walter of Henley's *Husbandry* were likely made in the convent's scriptorium, which presupposes a text from which they copied.<sup>573</sup> More unique to priory was the manuscript now held in the Durham Cathedral Archives as Loc. II:15, compiled c. 1381. As a part of the administrative literature genre termed *ordo compoti*, this manuscript provided a rough outline using the Honour of Wallingford as a model of how manorial accounts ought to be laid ou. Here, two different inks, red and black, were used by the scribe to highlight the different subheadings and areas of content necessary to properly draw up a manorial account. The pedagogical nature of the sample account is important, for it shows the convent's desire for well laid-out, informative accounting material and for the brethren and lay servants to be familiar with such documents.

Nevertheless, the specimen account and the accompanying sample court rolls and grange stock account are not the most interesting, or relevant, parts of this manuscript. Indeed,

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573. See *Chapter V: The Monks & Bursars of Durham Cathedral Priory & Their Mindsets*, Section XX for further.

such samples are relatively common and are discussed in depth by Dorothea Oschinsky.<sup>574</sup> The *Introduction to the Forma Compoti* is instead much more noteworthy.<sup>575</sup> The *Introduction* gives a detailed guide to the conducting of a manorial audit, though with some notable variations from the apparent practice at Durham Cathedral Priory during the long fourteenth century. The text that follows below is my translation from the transcription provided by Oschinsky in *Walter of Henley and Other Treatises on Estate Management and Accounting*. My analysis and conclusions follow this translation.

## II. Translation of the Introduction to the Durham Cathedral Priory Forma Compoti (c.1381)

Then the clerk will deliver the tally to either to the bailiff in which is marked that which has been received from one part and what was delivered on the other; otherwise, he must be taught so that he knows how to make the tally or other mark for the sake of the calculation of the grain in the granary or elsewhere so that they may be able to enrol securely those things received and delivered. And thus always the reeve will be in good standing and not fall into arrears.

In the beginning, the clerk making the account will draw up the front portion<sup>576</sup> of the account because here it will speak of increases and decreases; because everything producing and dwindling must go in the following part. And in that front portion, there is of course one section for charges and another for discharges and from there it has what has been received

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574. Oschinsky, *Walter of Henley & Other*, pp. 245-251.

575. Henceforth, *Introduction*.

576. This could also be translated as 'outward portion,' but, given the constant format of manorial account the reading provided seems more probable.

and those to be assigned. And that which depends on the previous account of the last year must be borne by the subsequent reeve because the foot of the account always speaks of the previous year.

There are three ways it is possible for the reeve or the bailiff to charge the harvest of grain, namely by estimating (the grain) in sheaves, and it is a bad charging for the lord and the bailiff because here lies great deception and if truly by this method of estimation he must assuredly charge the sheaves thus, the grain should be threshed and bound before the sight of the bailiff so that he knows what they contain! The second way of charging is to respond to the grain to the fourth, fifth, or sixth part and a second half according to the custom of the manor or place, and this is better for charging for the lord or the bailiff, and it is proper for all so that he may respond with certainty. If you are truly burdened with grain, it is not good to place the seed because in the second year they will respond the second custom of the country or area to the seed. The second way of charging is thus because someone must respond by the tallies of the *contrataleator*<sup>577</sup> and thus should they have been by means of any thief or two thieves, let them be bound by oath because he will make an oath by the counter-tallies<sup>578</sup>; the reeve or bailiff should always have tallies against any office they hold on the manor, because if a reeve says he has handed over money or grain or anything by tally, if he does not have for himself a tally or letter, it is possible through the knowledge of the auditors to strongly bind his hands and feet until the arrears are satisfied to his lord.

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577. Keeper of the tallies, term used at the Exchequer.

578. The corresponding portion of a tally stick.

Additionally, it must be seen to that neither the lord nor the *familia* take anything from the manor unless with a particular price and thus it is possible to put to any item a sure value.

The clerk who makes the account must never hand over the rolls or rolls of another accounting clerk, for if thus, because the reeve first swears, the second clerk does a poor account, and if the reeve will have been shown guilty of a previous falsehood, the account must be returned to the will of the lord and similarly all goods which is able to return, if the clerk truly lies<sup>579</sup> his liberty, then truly the lord's clerk will duplicate whatever is written.

The clerk should visit the reeve by the hedge each year so that he may assist matters because if by chance the seneschal should come and complain at the sight of the accounts and then the reeve hands over the non-duplicated account to him, then it is easily possible to be entrapped and accused of falsehood, because if the seneschal, sealing the previously mentioned accounts or holding them in his own care until he wishes (to test the reeve<sup>580</sup>) on the increases or decreases, unless the roll is duplicated, it is possible to show that two makes twenty and thus from similar things into financial loss and confusion of the reeve and therefore it is as mentioned and the roll of the account is duplicated.

And it must be known that there are two sorts of accounts, those from Westminster and Wolverhampton<sup>581</sup>, with Wolverhampton always fixed to the increases and decreases of Westminster.

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579. This could also read 'if the clerk swears truly'. *Perjurare* can also mean 'to swear intensely' or 'to swear to, vouch for'. A possible reading is 'if he lies by his liberty, or 'if he swears by his liberty'

580. Generally used, as it is here, in a judicial sense. It could be taken as 'to question the reeve'.

581. The Winchester and Westminster styles of accounting were the most common.

The clerk will always place the different types of grains in different sections, always with the better placed in front, and then the animals and then everything else following in the order the reeve observed.

The reeve may not speak much during the auditing of the account but may secretly sell at the gate of the manor wheat and small animals - such as piglets and the like - when they have been fattened on the manor, and may obtain other things of smaller value and put them in his spots so that in the returned account it is possible to answer<sup>582</sup>for a certain number; and thus it shows a number of rooster, hens, and other animals so that it is possible to have a certain number of yearlings and hens and other animals remaining for his own use against a rainy day.<sup>583</sup> From the sale of the horses let him be held to respond and not keep the profits. Let him sell forty when they have been tamed and let him purchase a hundred, as it is thus possible to respond to the whole number in the returned account; and if the foals or the bulls or bullocks or the young rams or the cygnets or (other) swans and thus from similar before the time of drafting animals into the next age group they secretly hold issue, it is possible to sell the issue to those having helped him or it is possible to place that issue in another place where he does not have issue/profit. Thirdly it is possible to sell the better offspring and place the weaker offspring in a better place. And if he will buy wheat or something else by tally, he would sell for the greater price and say he sold for the higher; and he would sell for higher and say he sold for less, etc. And the reeve may secretly fatten the pigs and certain other animals on the manor

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582. That is, the reeve can therefore show there were so many animals in the account and on the farm when he has hidden away animals for his own profit.

583. 'Against a rainy day' is used here as 'on a day of sadness' (*in die doloris*) is clumsy and inappropriate.

and sell them for his own use and say that they were buried<sup>584</sup> or struck (down), not knowing the cost of each and then if they are worth 4s or 5s, it is possible to say that they sold for 2s.

The clerk making the accounts should always have the rolls of previous years if possible, in which he may have sight of all things in which manner he added and subtracted and discharged any grain mixed with anything else – such as wheat with rye – so that he may have the wheat agreeing with the mixture of the *famuli* with what or with which it may be added or mixed equally one to one.

Moreover, the clerk should diligently watch over the reeve throughout the whole year in everything he does, unless he should often find his own information, then the clerk should accuse the reeve of wrongdoing.

And thus, although it is permitted to the reeve to be made responsible for the account, he returned that is in arrears, the clerk is always able to excuse him for this; for if the reeve truly has no counter-tally, it is better for him for the account will be shown later with profits.

And if he should have any sterile animas such as cows, bullocks, ewes, or other such animals, he will announce this to the lord or seneschal in open court, which the seneschal will make to be announced because if he has the wealth of the lord in his custody to the animals to be changed in this manner<sup>585</sup> and not make profit of it, then he is held for the lord's response.

It must be known that the received money must firstly be placed below and after the monetary expenses because whatever is received depends on the part that will follow, because

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584. Or destroyed

585. Moved to a different category of animal in the accounts.

everything hanging is less worthy than that on which it depends. The middle part depends on the following, therefore, etc.

On the nature of the account, all of the *famuli* must be managed on the stipend and provisioning by the custom of the place or country.

And if the auditor should be found to be false, many things in the account should be struck out by the reeve and clerk.

And the clerk will instruct the reeve so that he may assist him on the manor, always to specify for how many months they have had the swine and piglets, but the reeve is always well able to say the village or another place (where they are).

And if he should spend something for the pigs, for the dove house or other animals, he must always give a legitimate reason such as there was a difficult time or it rained for a whole week, and if he should respond well about the return, it is well possible to say there is more in expenses which he therefore spent at the time.

And if the reeve should be in arrears, he should immediately settle them, because if he has a day of payment and remains in his office resulting first in him razing goods in quantity, it is possible for the manor to be thus worse for the whole year.

And take care lest the *familia* or the neighbours think anything sinister through this, because if the reeve says anything against them, immediately they say to him "Be silent about this. If you say something bad about us, we will say the same about you." Nor is it good for the reeve because his private works may be seen(!) by his *familia* or neighbours, lest through the proposal of a lawsuit among them, it sometime comes to pass that these things are laid bare.

The clerk arranging the account of the reeve at the end of the year should always have another account in secret in writing or of the types of grain and of money and the receipts, so that if the reeve should wish to excuse him<sup>586</sup> at the end of the year from the office then the clerk coming after – and not knowing the form of the account on his own – would not be in ignorance for his own account.

It must be known that, however, that because vi<sup>8</sup>xx makes C in a weight of herring<sup>587</sup> and other such things, v<sup>8</sup>xx makes C in other living things. And it is good to specify in receipts and liveries if using the long or short hundred.<sup>588</sup>

The reeve will visit the shepherd once or twice a week so that if any sheep<sup>589</sup> will come out through him, they may be kept until the lord, who has lost his sheep, may testify before twelve jurors that they are his, etc.

### III. Analysis & Conclusions

The importance of the *Introduction* is not simply in the attitudes and mindsets that it confirms – most prominently, the desire for a neat audit that makes fraud much easier to detect – but instead in ways in which the process given in the *Introduction* differs from what we know of the actual manorial auditing process at Durham Cathedral Priory during the long fourteenth century. The most immediately striking differences in the *Introduction* to the actual practices of

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586. The clerk. In this document, the clerk is hired by the reeve.

587. A *clavus* was typically 6-8 pounds.

588. This paragraph centres around the different usage of the ‘hundred’ in medieval documents. The ‘long hundred’ or *maius centum* (noted as C) was equivalent to 120, while the short hundred was equivalent to 100.

589. Though *bidens* strictly means a two-year-old sheep, here, it is much more likely to refer to sheep in general. John L. Fisher (ed.) *A Medieval Farming Glossary of Latin and English Words, Taken Mainly from Essex Records* (London, 1968), p. 4.

the convent is, of course, a matter of terminology: the *Introduction* refers to manorial managers as *prepositus*, or reeve, whereas the manorial accounts overwhelming prefer *serviens*, or serjeant, which has a different, higher social status connotation than the former term.<sup>590</sup> Similarly, it is difficult to imagine that the bursar or the other obedientiaries would be content to let their manorial official have the power to dismiss the clerk responsible for the drawing up and auditing of the account, especially given the scrutiny devoted to the weeding out of fraud. Most telling, however, is the *Introduction*'s assumption that the audit would be conducted away from the manor. This is in contrast to what we know of the auditing practice on the estates of Durham Cathedral Priory during the long fourteenth century. From the beginning of the period, audits were conducted at the manor itself, likely as a way for the auditors to see for themselves whatever proof they might require the serjeant to present.<sup>591</sup> Such practice is recommended by the anonymous *Seneschacie*, though Walter of Henley is silent on the issue.<sup>592</sup> Indeed, such audits on the lands held by Durham Cathedral Priory were often done in the presence of the bursar, as Alisdair Dobie noted occurred at Westoe in 1355/6 and 1377/8, among other examples.<sup>593</sup>

Though these differences make it unlikely that the bursar or the obedientiaries of Durham Cathedral Priory as a whole put such advice as given in the *Introduction* into practice,

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590. See *Chapter V: The Serjeants of Durham Cathedral Priory* for further, and Briggs, 'Monitoring', pp. 180-181, Bailey, *The English Manor c. 1200-c.1500*, pp. 98, 241, 245, 246, and Harvey (ed.), *Manorial Record of Cuxham, Oxfordshire, circa 1200-1359*, pp. 12-13.

591. Knowles, *The Religious Orders in England: Volume II: The End of the Middle Ages*, p. 319.

592. 'Lez acuntes deyvent ester oyiz a checun maner, e dunke poet lem a checun maner par sey oyr laconte a saver le pru, e le damage, e le fet, e le apruement del seneschal, e del bailliff, e del provost, e dez autre' ('Accounts ought to be audited at each manor. On each manor by itself one may thereby hear the account and know profit and loss as well as the performance and improvements made by the stewards, bailiff, reeve, and the others'). Oschinsky, *Walter of Henley & Other*, pp. 288-289.

593. Dobie, *Accounting at Durham Cathedral Priory*, p. 151.

it remains an extraordinary document. The text, Oschinsky notes, is not elsewhere extant, and it seems likely that the text was written for a relatively limited distribution, if it was to have been distributed at all.<sup>594</sup> The *Introductions* immediate applicability to the management of the convent's holdings, though details such as the various ways reeves may perpetrate fraud would have been useful to the monks, is much less important than its existence in the Priory's library. Their ownership of the text and the accompanying sample documents demonstrates that the monks were endeavouring to keep abreast of the period's managerial best practice and learning about other methods of accounting and auditing, likely following the advice they found relevant, while discarding what to them seemed superfluous or unwise.

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594. Oschinsky, *Walter of Henley & Other*, p. 50

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