

Risk and Value in Medieval Leases: The Trajectory of Leasing Manorial assets on the See of Winchester. (2,746 words)

Introduction

From the early 13th century, English seigneurial estates had farmed a proportion of their land (the 'demesne', typically a quarter to a third) for their own benefit, the remainder being worked by free tenants and the unfree class of villeins. Following the Black Death, with labour scarce and wage rates rising, landlords chose to lease out their demesne land. The terms of medieval leases could be constructed flexibly and revised at renewal, giving them a commercial character distinctly different from the customary land rentals that tied peasants to their tenancies. I propose to view these leases as risk transfer: the lord received a fixed payment replacing the volatile income from agriculture.

My research concentrates on the estate of the Bishop of Winchester, one of the largest estates in medieval England, with c. 60 properties from London to Somerset. The constituent manors of the estate were managed in local groups, 'bailiwicks', under the oversight of a bailiff. At each manor, arable and pastoral agriculture was managed and rents collected by a reeve appointed from the tenants. Three bailiwicks (Witney, Wargrave and Taunton) are outlined in the map below.

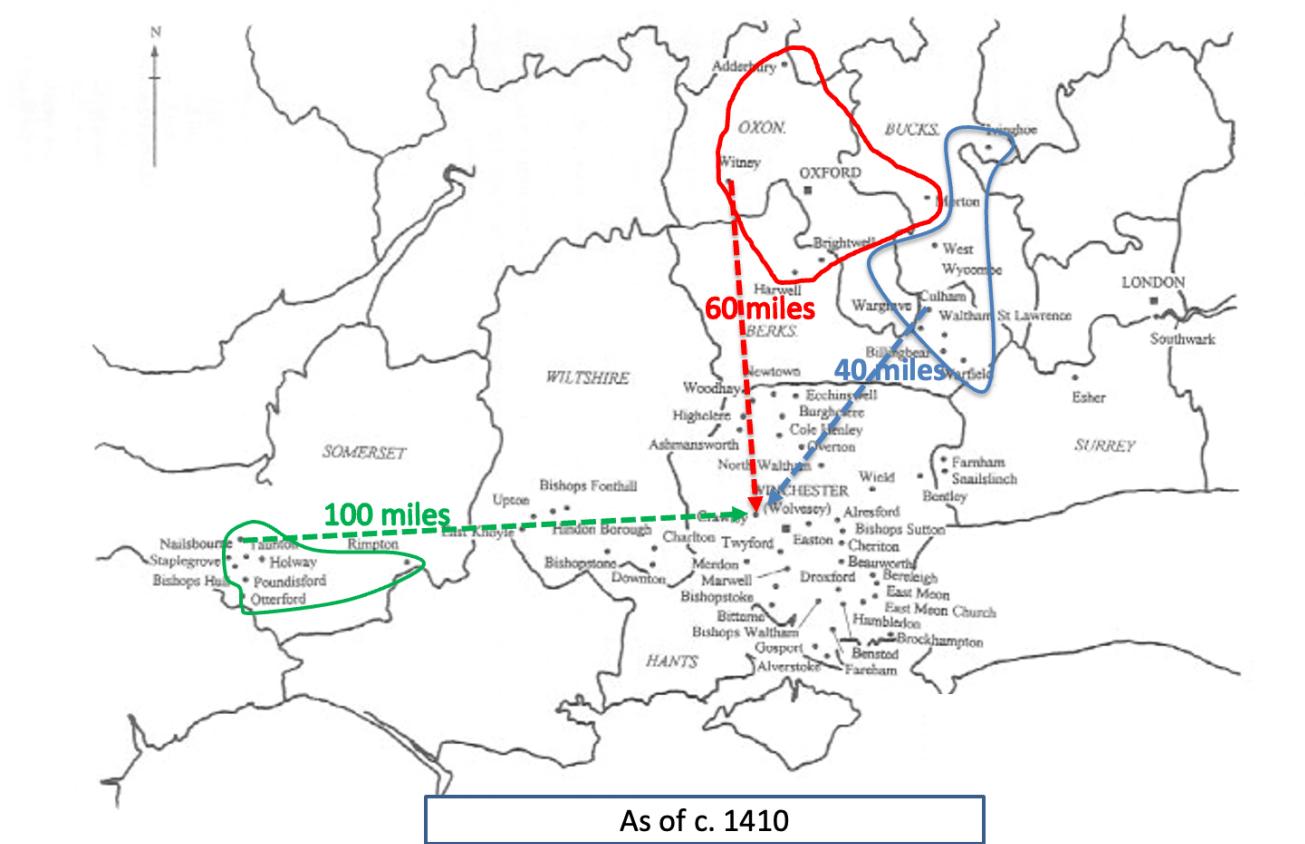


Figure 1 - The Winchester estate c 1410

The Winchester estate was broadly typical in its transition to being wholly leased. Similar transitions were seen at Battle Abbey and Durham Cathedral Priory, for example. At both, the estate gave up direct management in favour of leasing its manors over a similar period;

their leasing strategies supported their purpose as food-farms for a community. However, at Winchester, the objective was to raise cash.¹ In addition to their political/administrative roles, bishops of Winchester were prodigious builders.² Levett suggests that the demands of supporting Bishop Wykeham's educational establishments were as significant as the Black Death in transforming the functional priorities of the estate.³ As land management evolves from seigniorial agriculture, documented by Bruce Campbell, to the yeoman's world of Bob Allen, we should be able to see, on the Winchester estate, which assets were preferred and how lease terms evolved.⁴

Research Interests, methodologies and data

In my research, I take a contemporary view of leasing as a risk management exercise, and apply it to the medieval world. Decisions are shaped by risk appetite and risk tolerance. The first refers to the level of volatility an enterprise is prepared to accept in pursuit of their objectives, the second to the level of volatility that they can withstand while staying short of failure. Risk appetite may be seen as a trigger for the decision to lease out or take on a lease. The tolerance concept underpins McCloskey's estimate of the benefit of scattered land holdings, which, she shows, pushed the risk of famine out from 1:9 years to 1:14.⁵

In this paper, I present first, an account of the overall trajectory of leasing the Winchester manors; second, my approach to the evaluation of lease prices. These are then combined in a case study of leases of Crawley manor. A third line of research, not covered here, applies regression analysis techniques to investigate the complex set of factors which may have influenced the timing of leasing decisions.

The data needed for the evaluation of manorial leases is drawn from medieval manorial accounts. The Winchester accounts were compiled annually for each manor and survive, with a few interruptions, from 1208 to 1454 in their final copies written in Latin on parchment.⁶ Income, expenses, and names of reeves and lessees have been transcribed from c. 500 accounts (an example account and the data collection sheet are attached as Appendices). Supplementary sources include research notes and transcriptions in the archived papers of Jan Titow (which reference the Winchester accounts) and crop yield and price series compiled by Campbell, Farmer and Clark.⁷

¹ Eleanor Searle, *Lordship and Community : Battle Abbey and Its Banlieu, 1066-1538* (Toronto: Pontifical Institute of Mediaeval Studies, 1974), 259; E M Halcrow, "THE DECLINE OF DEMESNE FARMING ON THE ESTATES OF DURHAM CATHEDRAL PRIORY," *The Economic History Review* 7, no. 3 (1955): 345–56, doi:10.1111/j.1468-0289.1955.tb01535.x. Note that the estate of Battle Abbey was approximately one third the size of the Winchester estate.

² Peter Partner, "Wykeham, William (c. 1324–1404), Bishop of Winchester, Administrator, and Founder of Winchester College and New College, Oxford" (Oxford University Press, 2018), doi:10.1093/ref:odnb/30127.

³ Paul Vinogradoff et al., *Oxford Studies in Social and Legal History. Vol.5 , The Black Death : Rural Northamptonshire under the Commonwealth.*, 1916.

⁴ Bruce M S Campbell, *English Seigniorial Agriculture, 1250-1450* (Cambridge: Cambridge : Cambridge University Press, 2000); R C Allen, *Enclosure and the Yeoman: The Agricultural Development of the South Midlands 1450-1850*, OUP Catalogue (Oxford: Oxford University Press, 1992), doi:10.1093/acprof:oso/9780198282969.001.0001.

⁵ Deirdre N McCloskey, *Measurement and Meaning in Economics : The Essential Deirdre McCloskey*, ed. Stephen T Ziliak (Cheltenham: Cheltenham : Edward Elgar, 2002). McCloskey estimates the cost of this protection at c.10% of production.

⁶ They are held at Hampshire Record Office, Winchester and are now available in high-resolution photographs.

⁷ J Z Titow, *Winchester Yields : A Study in Medieval Agricultural Productivity* , Cambridge Studies in Economic History. (Cambridge: Cambridge University Press, 1972); D L Farmer, "Grain Yields on the Winchester Manors in the Later Middle Ages," *The Economic History Review* 30, no. 4 (1977): 555–66, doi:10.1111/j.1468-0289.1977.tb00282.x; Gregory Clark, "The Price History of English Agriculture, 1209-1914," *Research in Economic History* 22 (2003). Bruce M. S. Campbell (2007), *Three centuries of English crops yields, 1211-1491* <https://www.bahs.org.uk/crop-yields-database>

The Trajectory of Leasing

The critical period for leasing, 1350 to 1475, spanned the incumbencies of Bishops Wykeham, Beaufort and Waynflete. The timeline (Figure 2) is based on the 42 rural manors in the data set used by Titow.⁸ By the end of the 15th century, the estate was no longer active in agriculture; all rural properties were either leased or rented.⁹ Using this dataset, we can address questions around the identities of the incoming lessees and the contractual duration of the leases.

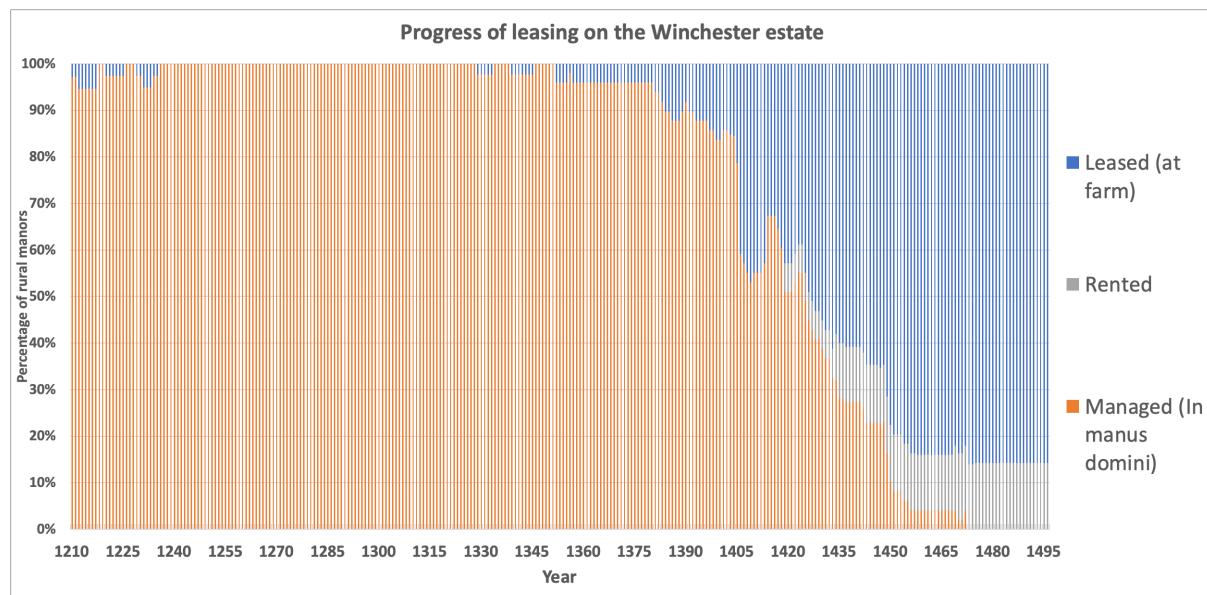


Figure 2 The Trajectory of Leasing 1210 - 1495

A question running through the literature is the extent to which local knowledge determined who took on the first leases, as noted in Dyer's study of leasing in the bishopric of Worcester.¹⁰ A similar pattern emerges across the Winchester estate, in 12 of the initial leases, the lessee had previously been the reeve at the manor.¹¹

Clearly, two key risks to the estate would be mis-pricing and default. Short leases would limit risks to the estate, allowing it, in theory, to recover the assets after a short period. The trajectory in Figure 2 has some reversals: 18 leases ended in a return to direct management (more than once at some manors). Of these 18, 12 were at the end of the first lease.¹² There were none after 1433 and none after a manor had been leased for more than 9 years, suggesting that options available to management had become limited.

A short lease would shape the lessee's incentives and make investment unattractive. One would expect to see longer leases being granted as the estate became increasingly

⁸ File "Farming out of Demesnes" in the Titow Archive at the Hampshire Record Office. The percentage relates only to those rural manors that were within his study of crop yields. The urban manors were less suited to leasing, the records show them being, instead, disposed as numerous smaller rented properties.

⁹ The years from 1450 also showed an increase in the use of rental contracts in which the land and other assets of a manor were divided into separate rental contracts. This was a feature particularly of the cluster of manors in the bailiwick of Taunton.

¹⁰ Christopher Dyer, *Lords and Peasants in a Changing Society : The Estates of the Bishopric of Worcester, 680-1540* (Cambridge: Cambridge University Press, 1980), chap. 8.

¹¹ This figure is based only on noting identical names as reeve and lessee at the same manor. A richer picture can be built looking at the names of reeves at adjacent manors in the same bailiwick and at those who held other roles such as 'serviens' (a salaried equivalent of a reeve) or 'collector' (of rents, in place of the reeve).

¹² 6 occurred in the bailiwick of Wargrave, suggesting a local factor

accustomed to the arrangement; one would expect, too, that lessees would prefer longer leases. A stable set of lease terms should emerge to confirm the risk preferences of the estate and its lessees.

The data reveals a trend towards longer, investment-worthy lease periods in the sequence of extensions and renewals after the initial lease. Figure 3 shows the contracted lease duration by the year of the contract; in this dataset, all the initial leases and subsequent extensions and renewals are included.¹³ Initial leases of 6, 9 then 12 years became standard in Bishop Beaufort's time, with longer 20 and 40 year periods being granted as renewals.

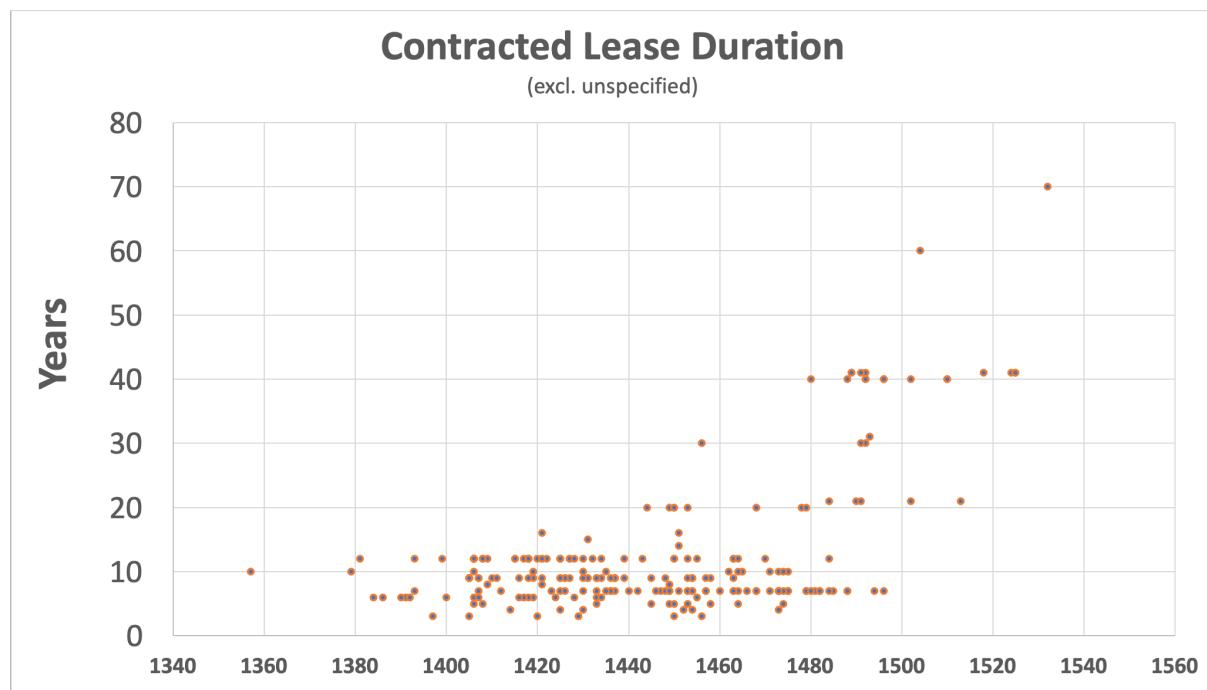


Figure 3 - Contractual Duration of Leases

The Pricing of Leases

This section examines management and decision-taking in a medieval organisation. It considers the question: How was a lease priced when manorial land, or sometimes an entire manor, was first leased?

The answers to this question contribute to the Brenner debate around lordly power.¹⁴ One could expect that the lease might be priced significantly above the run of recent performance. The estate, as the owner of the assets, might be able to command a high price. One then needs to explain why a lessee might be willing and able to pay such a price. Levett writes of cases where the customary tenants on Winchester manors were compelled to take on land that had been left tenantless by the Black Death, but the leases here cover

¹³ A total of 341 leases/renewals were identified. Renewals were identified as having the year count in the records reset to 1. In the case of extensions, the name remains the same and the year count increases above that given as the original term. 109 leases where the term was undefined are excluded.

¹⁴ Robert Brenner, "Agrarian Class Structure and Economic Development in Pre-Industrial Europe," *Past & Present*, no. 70 (1976): 30–75.

the demesne which was the lord's own land.¹⁵ There was no compulsion in these leases, the status quo ante was available to both sides.

One must consider therefore, that willingness to pay reflected the lessee's expectation of being able to make a profit through higher productivity and lower costs. There are reasons to believe that both factors might have been involved. Studies have suggested that peasant agriculture might have been of the order of 10% more productive than seigneurial management on large holdings, and more so on smaller holdings.¹⁶ Leasing the demesne as a single holding would have given a typical free peasant access to an acreage in the range of 5 - 10 times his typical 1 virgate holding.¹⁷ Allen, with reference to Titow, estimates that while a ½ to 1 virgate holding was sufficient to support a family, it did not exhaust the supply of labour available within the family.¹⁸ Evidence from lease contracts that endured and were renewed suggests that both factors were in play.

To determine how a lease was priced, a methodology is needed for linking a known lease payment to the value that the estate had previously received from the leased assets. The methodology developed here proceeds by identifying from the accounts the specific assets included in the lease, and then analyses the levels and volatilities of revenues and expenses over a period prior to the lease date. This is, essentially, a counterfactual value, an answer to the question: 'What net value would these assets have yielded if they had been leased over the period?' This counterfactual can then be compared to the actual lease payment to assess the balance of risk and value. The period for comparison should not exceed, say, 20 years so that performance in living memory is being used; it should however, be long enough that averages and standard deviations could meaningfully be calculated.¹⁹

The methodology allows the close study of a particular transaction in its contemporary context; values, costs, prices and yields are those seen at a manor at the time. Since we can see the names of the reeves and lessees, an important feature of the methodology can be assured: the information being used to construct the counterfactual would likely have been known by both parties.²⁰

Together with the set of first leases, the methodology can also be applied to the 18 occasions where the lease ended with assets taken back into direct management, to see how any changes to the terms of the lease affected the subsequent re-lease value.

¹⁵ Vinogradoff et al., *Oxford Studies in Social and Legal History. Vol.5, The Black Death : Rural Northamptonshire under the Commonwealth.*, 85. In the period of this study, the manor of Crawley shows a case of compulsion applied to virgaters, but here, as Levett notes, the compulsion was not wholly successful. Mark Page, *The Pipe Roll of the Bishopric of Winchester 1409-10* (Winchester: Hampshire County Council, 1999), 381 and fn.

¹⁶ Alexandra Sapoznik, "The Productivity of Peasant Agriculture: Oakington, Cambridgeshire, 1360-99," *The Economic History Review* 66, no. 2 (2013): 520, doi:10.1111/j.1468-0289.2011.00654.x; Ben Dodds, "Estimating Arable Output Using Durham Priory Tithe Receipts, 1341-1450," *The Economic History Review* 57, no. 2 (2004): 245-85, doi:10.1111/j.1468-0289.2004.00278.x. Sapoznik has estimates of acreage to support productivity calculations, Dodds has estimates of total harvest size. Both are working from tithe receipts to estimate peasant production from the 10% given in tithes to the church.

¹⁷ Allen, Enclosure and the Yeoman: The Agricultural Development of the South Midlands 1450-1850, 62-64. See Tables 4-1, 4-2 and 4-3.

¹⁸ *Ibid.*, 62.

¹⁹ This methodology was presented on my poster at the EHS Conference 2025 in Strathclyde and has since benefited from feedback received at the British Agricultural History Society's 2025 conference and at a seminar in the Cambridge 'Medieval Economic and Social History' series.

²⁰ Although probably not the mean and standard deviation.

Case study: leases at Crawley.

The first two leases at Crawley show a major change in lease terms, with substantially different risk profiles. The valuation methodology provides analytic insights into the risk positions taken by the bishop and the lessees. There is evidence of long-running local connections to successive leases.

The first lease

The first lease was wholly atypical. Transacted in 1407-08, in the early years of the incumbency of Bishop Beaufort, it was, unlike most other agreements at the time, to be paid in quantities of grain.²¹ The lease ended after seven years, with the manor taken back into direct management for 35 years.

The lease states that

"William Cuppere, reeve there, has charged himself...to render annually 60 quarters of wheat unless the price of wheat exceeds 6s. 8d. a qtr, and if it exceeds the said price of 6s. 8d. then he will answer for 50 qtrs, and that agreement to be kept from year to year for 12 years...²² And he will render account for the sale of the said wheat and other corn and the other issues of this manor and he will give satisfaction to the lord at the audit by pledge of Thomas Cuppere, John Wylde, John Sely and John Mulward."²³

Similar terms applied to the harvests of barley and oats (see charts below and Table 1).

Supporting the argument that the counterparties would have been familiar with the harvests at Crawley, the accounts show that of those pledging to ensure satisfaction, Thomas Cuppere had been reeve in 1397, and John Sely and John Mulward were villeins named in the accounts as paying for their labour services to be commuted.²⁴

The treatment of costs is atypical. Here the farmer appears not to bear any of the production costs. The costs of ploughs and of the harvest continue to be charged to the estate. The accounts record only the contracted quantities of each of the grains, so, although not stated explicitly, we must assume that he was entitled to keep any quantity harvested above the lease commitment. This interpretation is confirmed by a pattern of usage, similar to that seen pre-lease, persisting during the lease: for seed, animal fodder, liveries of manorial staff and sales.²⁵

Comparing the actual harvest outcomes in previous years with those contracted in the lease gives a measure of the risk that the farmer had taken on. The following three charts show harvests and sale prices at Crawley from 1389 to the start of the lease.²⁶ In each, the upper panel shows the actual harvest with a line projecting back the normal contracted quantity. The lower line shows the quantity expected in a year when price exceeded the threshold

²¹ There were two other leases where the payment was specified in grain: Ashmansworth (1383) and Wield (1393). Both had been leased under Bishop Wykeham and neither included a reduction in the event of high prices.

²² A quarter is a quarter of a ton, i.e. 512 pounds. Monetary values were given in Pounds, Shillings and Pence (£1 = 20s, 1s = 12d).

²³ Page, *The Pipe Roll of the Bishopric of Winchester 1409-10*, 384.

²⁴ As, for example, the account for 1398-99 (Ref 11M59_148_56) showing labour services of Wm Mulward and John and Robert Sely commuted.

²⁵ The account for each grain opens with the contracted quantity, as if it had been delivered, but a subsequent entry records any shortfall as a 'sale at the audit'. See below following Chart 4.

²⁶ The gaps are years for which the accounts have not survived or are illegible.

shown on the lower panel. From Chart 1, the actual wheat harvest would have fulfilled the lease in 3 of 13 years.²⁷

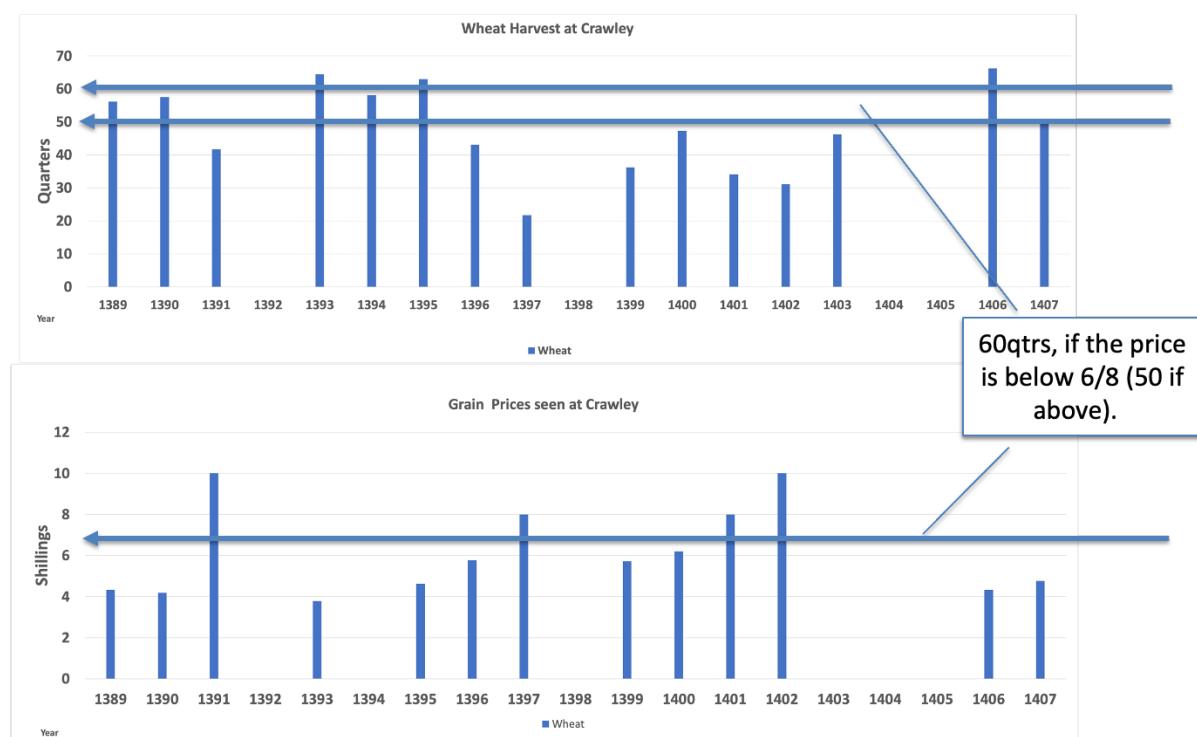


Chart 1 - Pre-lease Wheat Harvest

The barley harvest would have fulfilled the lease in 2 of 14 years.

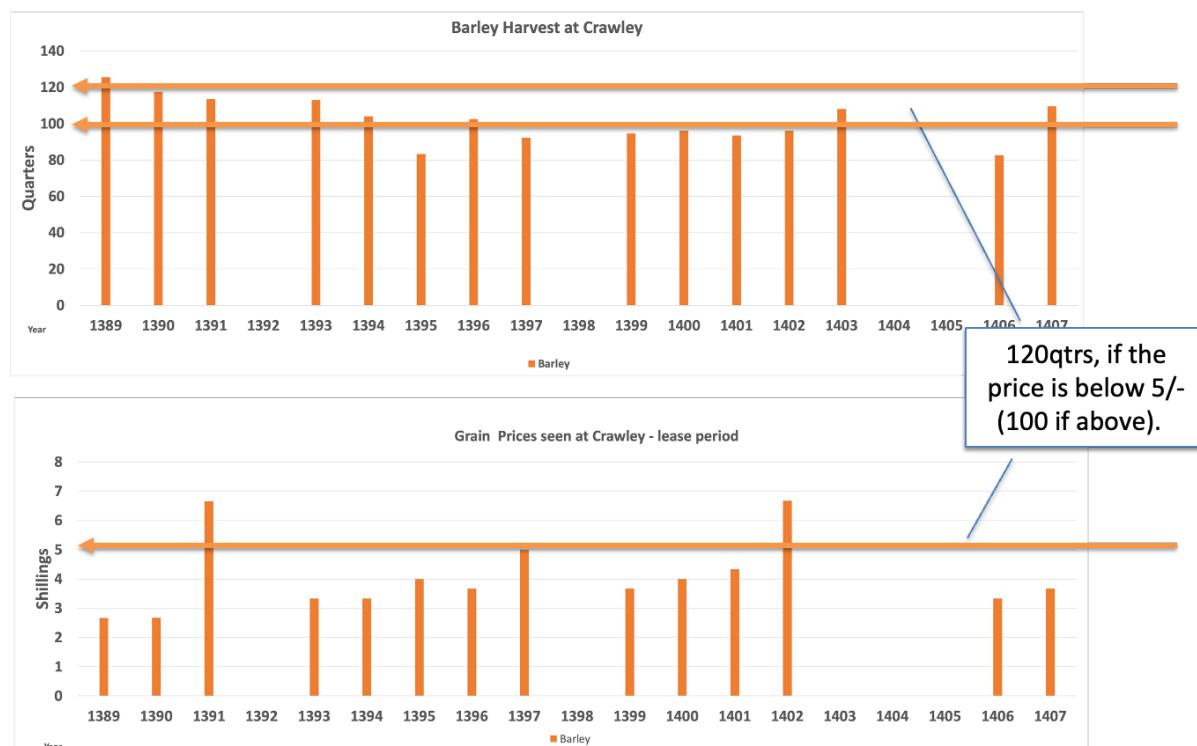


Chart 2 - Pre-lease Barley Harvest

²⁷ In the cases of the 1394 and 1403 wheat harvest, and the 1403 barley harvest, the manuscript is damaged and the price cannot be read or calculated from legible material.

The oat harvest would have fulfilled the lease contract once in 14 years (in 1397).

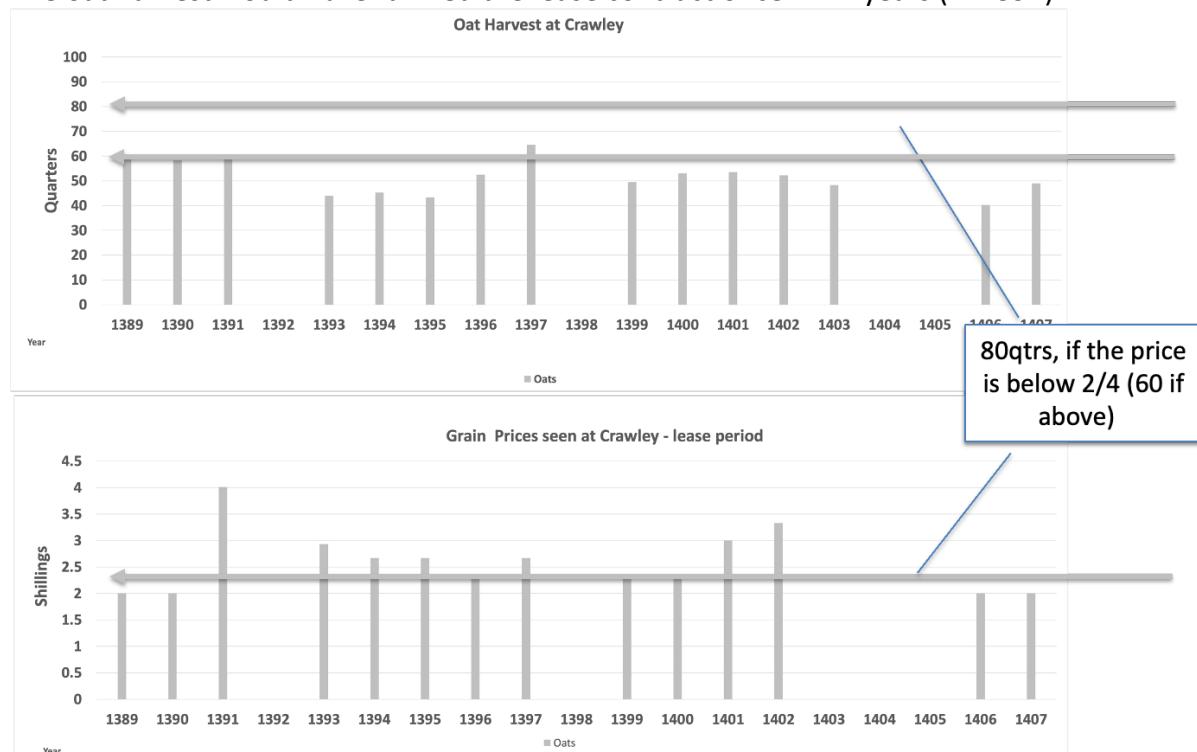


Chart 3 - Pre-lease Oat Harvest

Table 1 presents summary statistics covering the grain harvests compared to the quantities due under the lease. As was generally the case, the wheat harvest showed more volatility than either barley or oats.²⁸ All contracted quantities are a standard deviation or more above the mean, most notably in oats, which was the least variable in both quantity harvested and price. We can see, too that the variation of grain harvests was not due to varying acreages being sown.

Harvest Actuals 1389-1407						Lease contractuals		
		Max	Min	Ave	Sdev	CV	Normal	High Prices
Wheat	Quarters	66.25	21.75	47.9	13.3	27.7%	60	50
	Acres	62	48	58.1	3.4	5.8%		
	Price(shillings)	10	3.79	6.1	2.2	35.6%		If > 6.67
Barley	Quarters	125.5	82.5	102.1	12.4	12.2%	120	100
	Acres	56	50	52.1	1.7	3.2%		
	Price	6.67	2.66	4.1	1.3	30.8%		If > 5
Oats	Quarters	64.5	40.25	51.5	6.9	13.4%	80	60
	Acres	44	34	37.6	3.6	9.6%		
	Price	4.01	2	2.6	0.6	22.6%		If > 2.33
Total	Harvest (qtrs)	242.125	178.5	201.6	19.9	9.9%		
	Acres	160	138	147.8	5.3	3.6%		

Table 1 - Summary Actual Harvest vs Lease Contract

²⁸ Based on the yield figures in the CropYield Database at <https://www.bahs.org.uk/crop-yields-database/>

In chart 4, all three grains are shown together, with the recorded harvests in the lease years added. An asterisk indicates the contracted quantities of each that should have been delivered; by 1414 (when the lease ended) all three grains showed a shortfall. In the accounts, the shortfalls were recorded during the audit process, valued at market prices and then added to the farmer's debt, becoming a part of the growing arrears. (See Chart 5.)

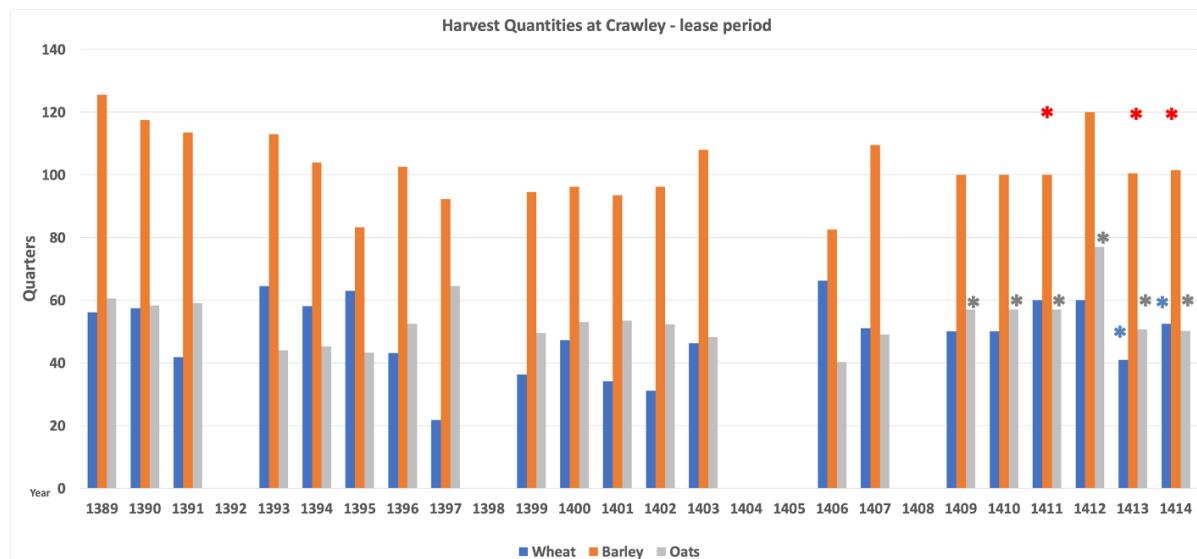


Chart 4 - Lease Harvest Shortfalls

Chart 5 shows cash from grain sales and yearly arrears. The agreement has not stabilised either the harvest or the cash income. From the farmer's view, the agreement has not provided a reliable surplus; his debts to the estate have reached £10-8-6.²⁹

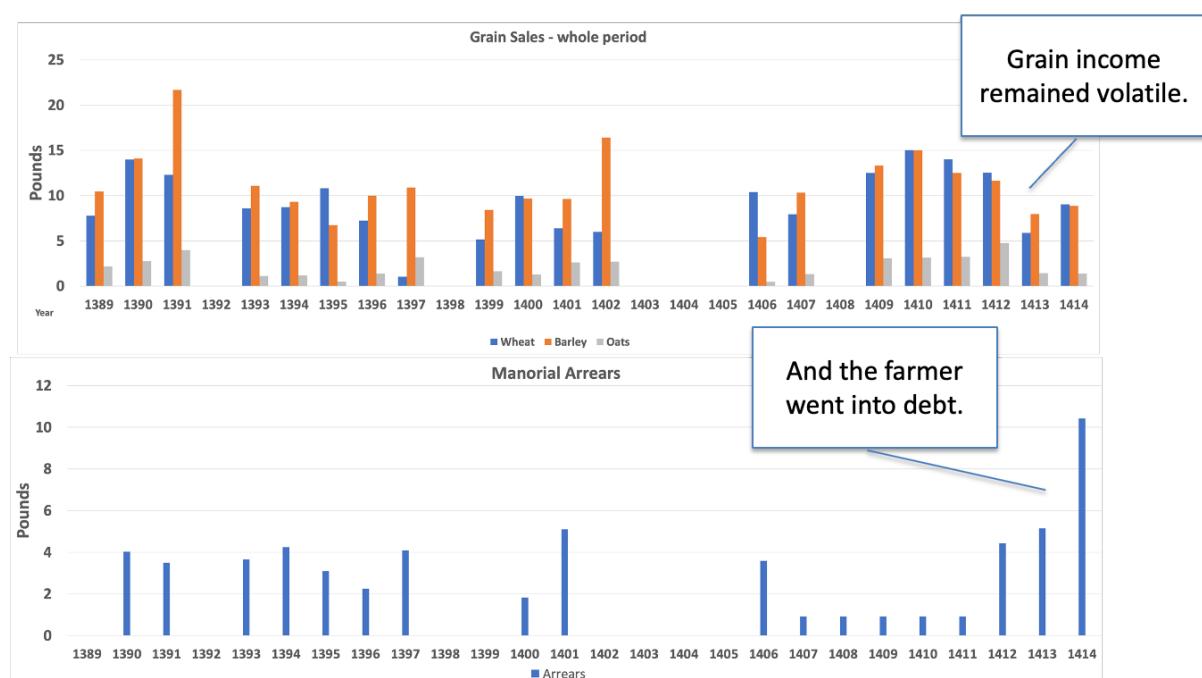


Chart 5 - Harvest Volatility and the Growth of Arrears

²⁹ The shortfalls were treated as notional 'Sales at the Audit'. (venditio supra compotum). In the years of the lease, the harvest shortfalls were responsible for the total of such notional sales.

The Second Lease

Crawley was re-leased in 1449 (2nd year of Bishop Waynflete). This and subsequent renewals over the next 70+ years were all on the same terms: £6-13-4 for the demesne land with quantities of seed-corn and traction animals (horses and oxen).³⁰ This time, the farmer bore the costs of production; the costs of ploughs and the harvest were immediately dropped from the accounts. The estate received the fixed cash payment, but had no rights to the grain harvest.³¹

Looking back to those pledging performance on the first lease 35 years earlier, the following names, suggestive of continuing family connections, appear as lessee in this and subsequent renewals.

Lease dates	Lessee
1449-64	Will Sely (previously reeve)
1465-91	John Cuppere
1491 – c.1525	Henry Cuppere

Chart 6 shows the counterfactual value of the grain harvest in the years leading up to the second lease. Grain appears to have been largely loss-making, attributable, in large part, to a high and unvarying cost of the harvest. This ran at £5-6-9½ from 1430, having the characteristics of a customary obligation, before increasing further and then dropping from the accounts once the land was leased.³² By eliminating the expenses of production, the lease of £6-13-4 looks to have been a success for the estate.

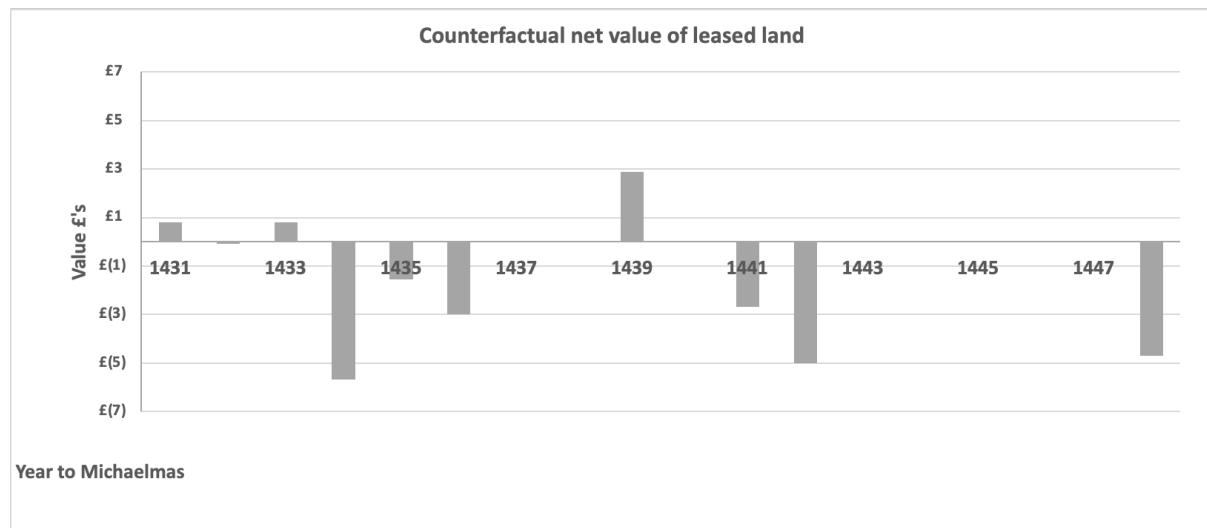


Chart 6 - Net value of grain from demesne land pre-lease

Conclusion

One cannot know William Cuppere's expectations on taking on the first lease at Crawley, but fulfilment, and his profit, had to be achieved by increasing yield. The second lease, with payment in cash, included costs and so could be fulfilled from broader productivity improvements. There is contrasting treatment of harvest risk. In the first, it was specified as

³⁰ Seed corn and the traction animals included at the start are "to be returned at the end of his lease".

³¹ Pastoral agriculture (the sheep) remained with the estate.

³² The pattern of harvest expenditure becoming a community expectation was noted by Levett in her study of Winchester before the Black Death, see in Vinogradoff et al., *Oxford Studies in Social and Legal History. Vol.5, The Black Death : Rural Northamptonshire under the Commonwealth.*, 156–57.

quantities with a step-down at a price, whereas the second has continuous market sensitivity built in. Notably, the other grain-payment leases were also short-lived and soon converted to cash. This move to cash leases parallels the transformation of both rentals and wages across the peasant sector.³³

Whatever position one takes on the Brenner debate, the data here suggest that the initial balance of power soon shifted. Once a manor had been leased for 9 years, it was no longer feasible to take it back into direct management. This loss of optionality perhaps weakened the estate's competitive position, once set, there were few major revisions to the terms of a lease.

Applying risk thinking to the trajectory of leasing across the Winchester estate reveals growing commerciality; the first leases became longer and their renewals longer still. As seen here at Crawley, and looking at a wider sample of manors, analysis of pricing suggests that the estate was able to improve on the return they had seen pre-lease. Continuity and stability thereafter suggests that many lessees were able to meet their obligations.

³³ Mark Bailey, "The Transformation of Customary Tenures in Southern England, c.1350 to c.1500," *Agricultural History Review* 62, no. 2 (2014): 210–30; Jordan Claridge, Vincent Delabastita, and Spike Gibbs, "(In-Kind) Wages and Labour Relations in the Middle Ages: It's Not (All) about the Money," *Explorations in Economic History* 94 (2024): 101626, doi:<https://doi.org/10.1016/j.eeh.2024.101626>.

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Soil data © Cranfield University and for the Controller of HMSO 2025, available at

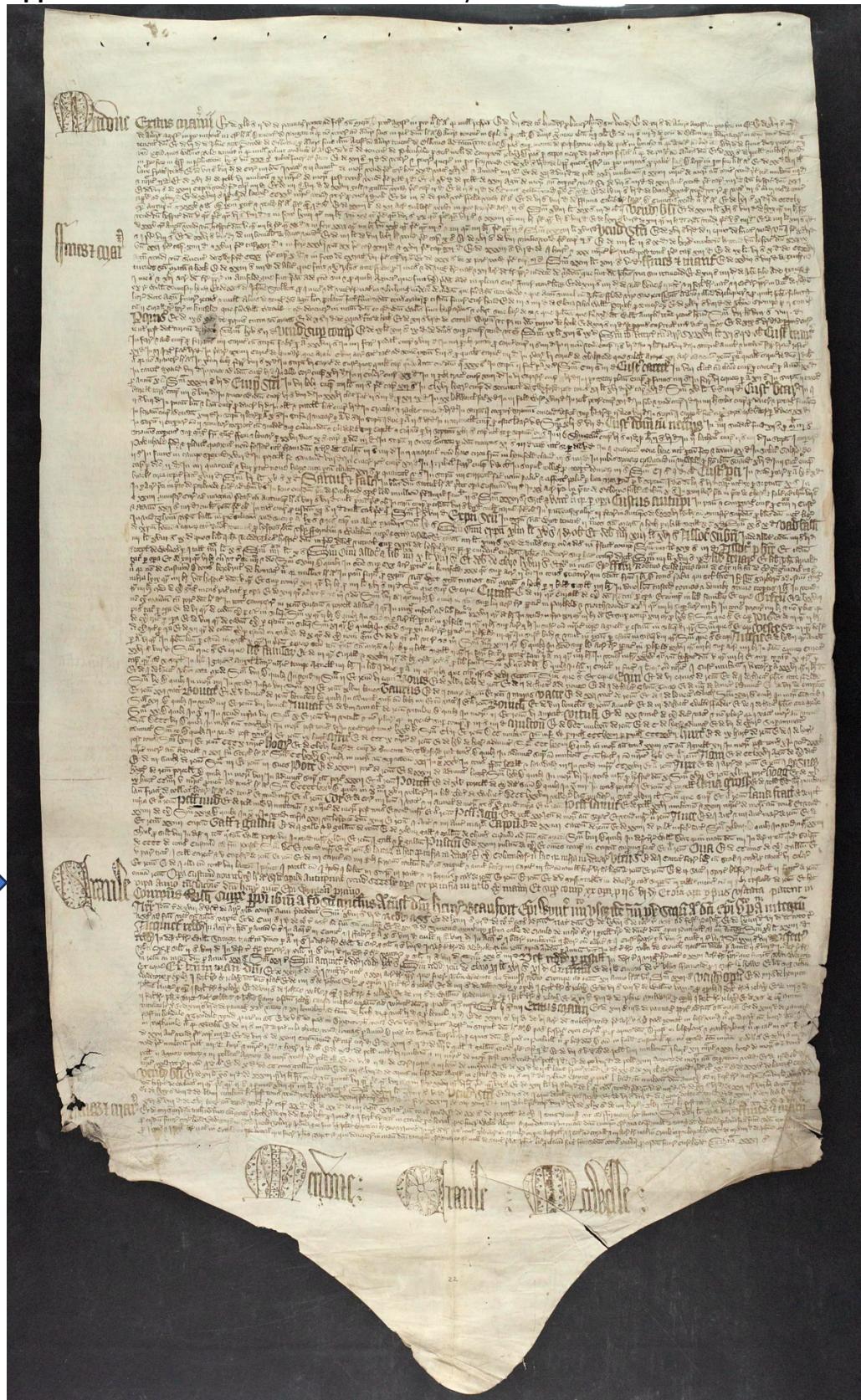
<https://www.landis.org.uk/data/>

Archive Sources

Winchester Pipe Roll image files held by the Hampshire Record Office, Winchester. File references 11M59/B1/91 to 11M59/B1/191 at: <https://calm.hants.gov.uk/>

Research papers of Jan Titow - 1950s-1990s held at the Hampshire Record Office, Winchester. Catalogue ID 97097 at <https://calm.hants.gov.uk/>

Appendix 1 Start of the account of Crawley for 1408-09³⁴



³⁴ Image file 11M59/B1/155 43 at Hampshire Record Office, Winchester. The account continues on the following sheet.

Appendix 2 - Data Transcription

Different selections were made from the long list of data items according to the style of the lease and therefore the calculation requirements of the counterfactual lease value.

Manor		Year		Img#	
Income lines		Net in-year Income			Counterfactual
10	Arrears	-			
20	Rents clear				
30	Lease val.				
40	Gifts/donation				
50	Ann'l Recog				
60	Ex. Man.				
70	Sale of labour				
80	Pasture sold				
90	Sale of corn			+	
100	Sale of stock	-Inv			
110	Wood				
120	Farms - mill				
130	Fines & mar				
140	Heriots in £				
150	Perqs crt				
160	Other inc.				
170	For. Rec.	-			
180	Total rec.	+			
Expenses					
190	Ploughs			-	
200	Carts			-	
210	Grain bought			- Seed	
220	Stock bought	+inv			
230	Thresh & win			-	
240	Harvest			-	
250	Weeding			-	
260	Buildings	+ Inv			
270	Necessary				
280	Cost of fold (& dairy)				
290	Cost of dairy				
300	Steward				
310	Bailiff				
320	Other Exp.				
330	Total exp.	-			
340	Et debit				
Stock					
350	Sheep - wethers				
360	Sheep - ewes				
370	Cows				
380	Wool fleeces				
390	Wool weight				
400	Wool Sale value	+		+	

Demesne +...