

Seasonality and sheep-stealing: Wales, 1730–1830^{*}

by Nicholas Woodward

Abstract

In an earlier article in this *Review*, Osborne challenged the traditional assumption that seasonal fluctuations in sheep-stealing and other rural crimes simply reflected changes in economic activity and the employment opportunities of the labouring classes, arguing that other influences should be recognised. The aim of this paper is to examine these ideas in more depth. Drawing on the records of the Welsh Court of Great Sessions, the study considers how the nature of sheep-stealing changed with the seasons and the reasons for this. It shows that, although the pattern varied by occupational group, in aggregate there were three main seasonal peaks: during the winter, early-summer and mid-autumn. It is argued that, although these peaks were, indeed, influenced by employment opportunities, other factors, such as the ability to market stolen sheep and the intensity of shepherding, played a role too.

One of the characteristics of many, although not all, contemporary crimes is that they display considerable seasonality.¹ For example, the numbers of most crimes of violence tend to be low in the first quarter of the year; they then rise, peaking in the third quarter, before falling back in the fourth.² By contrast, property crimes tend to rise in the early part of the year reaching a high in the summer months, before declining in the third quarter and rising again towards the end of the year. However, not all property crimes conform to this pattern. Burglary tends to be high in the first and particularly the fourth quarters. Robbery tends to be low in the first quarter and to rise in the third and particularly the fourth quarters.³

The interpretation of such patterns is not always straightforward. One useful paradigm, associated with the names of Cohen and Felson, is the routine activities theory.⁴ At the heart of the theory is the idea that crime patterns are strongly conditioned by the nature of everyday life. Property crime, we are reminded, can only occur when three conditions coexist. First,

^{*} Subject to the usual disclaimer, the author would like to thank David Howell for his comments on an earlier draft of the paper and the staff of the National Library of Wales for their assistance in compiling the database on which the study is based.

¹ See, for example, S. Hurwitz and K. O. Christiansen, *Criminology* (1983), pp. 140–3; G. Farrell and K. Pease, 'Crime seasonality: domestic disputes and residential burglary in Merseyside, 1988–90', *British J. Criminology* 34 (1994), pp. 487–98. Forgery and motor vehicle theft are crimes that display little seasonality.

² GB, *Monthly Digest Statistics*, various. The figures relate to the 1990s.

³ S. P. Arnold, *Patterns of seasonal variation in*

property crime (University of Leicester, Discussion Papers in Economics, 96/8, 1996).

⁴ L. E. Cohen and M. Felson, 'Social change and crime rate trends: a routine activity approach', *American Sociological Rev.* 44 (1979), pp. 588–68; for an application of the theory, S. F. Landau and D. Fridman, 'The seasonality of crime. The case of robbery and homicide in Israel', *J. Research in Crime and Delinquency* 30 (1993), pp. 163–91.

there must be motivated offenders. Their supply, of course, may fluctuate over the course of the year in response to changes in both economic conditions and the risks of detection.⁵ But one of the advantages of the routine activities approach is that the focus of analysis is shifted away from the criminal towards the victim and his or her possessions. Thus, a second condition for crime is that suitable targets must be available. Whether an item is a suitable target for theft will depend on its characteristics, such as its value, portability and disposability. However, the supply of targets, like the supply of potential offenders, may change with the seasons as people's daily habits adjust. Thus, it is no coincidence that consumer durable theft is high over the Christmas period or that bicycle-theft peaks during the summer. But whether a suitable target is stolen, however, will also depend on a final condition – whether it is protected. Again, the degree of protection may vary over the course of the year as people's lifestyles change. Thus, some property crimes tend to increase in the summer because less time is spent in the home.⁶

It would be disingenuous to claim that rural historians have neglected seasonal fluctuations in crime. Archer has shown that incendiarism in nineteenth-century East Anglia was concentrated into the late autumn and winter months, a seasonality which he links to wage movements and employment conditions.⁷ Shakesheff has examined wood and crop theft in nineteenth-century Herefordshire. He found that the former peaked in the early winter, coinciding with lower temperatures and a relatively high incidence of seasonal unemployment, while the latter peaked in the autumn months following the harvest.⁸ There have also been a couple of studies of poaching. Howkins found that in Oxfordshire in the mid-nineteenth century, convictions peaked twice during the course of the year – in January and again in October.⁹ In a more detailed study, Harvey Osborne discovered, again for the nineteenth-century, that not only did poaching display considerable seasonality but that the pattern varied according to the item of game and the region under consideration.¹⁰ His central message, however, was that we cannot hope to understand seasonal fluctuations simply by considering levels of need. Not only was the seasonal correlation between economic activity and poaching weak, but existing accounts paid little attention to other influences, especially the role of natural forces. Now, in a routine activities framework, seasonal variations in the pace of economic activity might influence the potential supply of offenders, but before poaching took place suitable targets had to be available and these depended on natural forces.

Osborne argued, moreover, that poaching was not peculiar; the seasonality of many rural crimes was a multi-causal phenomenon. Food-stealing, for example, was affected by harvest patterns as well as hardship, and he speculated that not only was sheep-stealing subject to considerable seasonal fluctuations but these were the result of the interplay of a number of

⁵ S. Field, *Trends in crime and their interpretation* (Home Office Research Study, 119, 1990).

⁶ Such influences are evident for the period under consideration. The National Library of Wales (NLW) database (to be discussed later) shows that horse-theft and burglary, for example, sometimes took place when the victims were at church or at market.

⁷ J. E. Archer, *By a flash and a scare. Incendiarism, animal maiming and poaching in East Anglia, 1815–1870*

(1990), pp. 131–4.

⁸ T. Shakesheff, 'Wood and crop theft in rural Herefordshire, 1800–60', *Rural Hist.* 13 (2002), pp. 1–17.

⁹ A. Howkins, 'Economic crime and class law: poaching and the game laws, 1840–1880', in S. Burman and B. E. Harrell-Bond (eds), *The Imposition of Law* (1979), pp. 273–87.

¹⁰ H. Osborne, 'The seasonality of nineteenth-century poaching', *AgHR* 48 (2000), pp. 27–41.

influences. Unfortunately, he did not specify what these were, although a number of possibilities – the buoyancy of sheep sales, the condition of the sheep, the intensity of shepherding, and the opportunities for theft provided by the hours of daylight – spring to mind.

It is the main aim of this paper to consider these possibilities in more detail by examining the Welsh experience in the late eighteenth- and early nineteenth-centuries. The paper begins with a discussion of sheep-stealing in Wales and the characteristics and motives of the thieves. We then examine the pattern of seasonality. The remainder of the analysis is concerned with the possible reasons for the seasonal peaks. The main source of information for the study has been the Gaol Files of the Court of Great Sessions. The Court, which existed between 1538 and 1830, was equivalent to the English assize courts. It had four circuits: Brecon (incorporating the counties of Brecon, Glamorgan and Radnor), Carmarthen (Carmarthen, Cardigan and Pembroke), Chester (Denbigh, Flint and Montgomery) and North Wales (Anglesey, Caernarvon and Merioneth). The Gaol Files include a range of materials, such as examinations, witness depositions and jury lists, all of which can be used for qualitative analysis. The National Library of Wales (NLW), however, has recently used the Files to compile a crime database for the years between 1730 and 1830, and this has been used to identify the seasonal patterns, as well as to provide other quantitative evidence about the crime.¹¹

As with all court records, the Gaol Files need to be used with care. Most obviously, some of the records are missing, and information about many of the cases is sparse. It is possible to reconstruct detailed histories for only a small proportion of thefts. Another problem is that the court officials did not always collect the information with as much accuracy as historians would regard as desirable. Some of the occupational descriptions, for instance, lack precision. Thus, following convention, women were invariably described by their marital status, while the court officials may have eschewed accurate descriptions in favour of convenient labels, such as 'labourer' or 'yeoman'. In addition, the level of indictments may not always accurately reflect real movements in crime rates. It has been argued, for example, that changes in prosecution practices reduce the value of indictments as an indicator of both long-run trends and cyclical fluctuations.¹² In similar vein, it is possible that indictments may not always capture seasonal movements in criminal activity. We would expect prosecution rates to be inversely related to the costs incurred. These, in turn, will depend on both the legal expenditures and costs arising from a loss of working-time. The latter, moreover, might have been considerable for a hill farmer at a busy time of the year, such as during lambing or haymaking.¹³ As a result, it is possible that prosecution rates may have fluctuated over the course of the year to such an extent that indictments do not mirror changes in theft. However, as there is no accurate means of measuring seasonal prosecution rates, we are obliged to take the indictment figures on trust.

With Wales, we are dealing with a major sheep-producing area. It supported many types of

¹¹ The database can be used both in the Library and on-line (at <http://www.llgc.org.uk/sesiwn-fawr/index-s.htm>). The library version was used in this study.

¹² J. Innes and J. Styles, 'The crime wave. Recent writing on crime and criminal justice in eighteenth-century England', *J. British Studies* 25 (1986), pp. 380–435; P. King, *Crime, justice and discretion in England, 1740–1820*

(2000), especially pp. 1–220.

¹³ This problem should not be exaggerated. As argued in the text, sheep were intensively protected during lambing. With farmers spending a high proportion of the day outside, the same may also have been true during the harvest and haymaking.

TABLE 1. Livestock holding patterns from Welsh probate inventories

	Farmers/Yeomen				Labourers – Brecon Diocese
	1730–1754	1775–1779	1780–1804	1805–1830	1730–1830
Number of Cases	41	59	81	49	83
Sheep Mentioned (%)	78.0	84.7	82.7	81.6	38.6
Horses Mentioned (%)	92.7	93.2	100.0	94.1	41.0
Cattle Mentioned (%)	100.0	94.9	97.4	97.9	34.9
Sheep-Stock Ratio (%)	11.9	14.8	26.3	44.3	22.5

Note: Sheep-stock ratio is measured in value terms. The stock figure included all stock including pigs and poultry. No Monmouthshire inventories were included.

Source: NLW, wills and probate inventory files.

sheep in the eighteenth and early nineteenth centuries, although the dominant animal was the small, hardy, coarse-wool ‘mountaineer’.¹⁴ There are no accurate returns for the numbers of sheep in Wales until the second half of the nineteenth century.¹⁵ These suggest that, although they were not farmed very intensively, per capita sheep holdings were high. Thus, in 1871 Wales accounted for thirteen per cent of both the national flock and land area of England and Wales, yet only five per cent of its population. Obviously, the importance of sheep to the economy varied from county to county. The topography of mid-Wales, in particular, encouraged farmers to stock large numbers.¹⁶ Thus, in order of importance, Breconshire, Radnorshire, Montgomeryshire and Merioneth accounted for at least half of the Welsh sheep. Judging from the Board of Agriculture Reports of the 1790s, we can be fairly confident that the pattern was similar eighty years earlier.¹⁷ Harder evidence on the importance of sheep comes from a sample of probate inventories (Table 1). These imply that most farmers kept some sheep, and that they became increasingly important over the period. This, in turn, reflected the expansion of the Welsh woollen trades and, given that a considerable number of stores were exported, the growth of the English meat market too.¹⁸ It is also evident that ownership was fairly dispersed. Almost forty per cent of labourers who left probate inventories owned sheep.¹⁹ This view is strengthened

¹⁴ See Walter Davies, *General view of the agriculture and domestic economy of North Wales* (1810); id., *General view of the agriculture and domestic economy of South Wales* (1815); R. Trow-Smith, *A history of British livestock husbandry, 1700–1900* (1959); R. J. Moore-Colyer, ‘Sheep’, in G. E. Mingay (ed.), *The agrarian history of England and Wales*, VI, 1750–1850 (1989), pp. 313–35.

¹⁵ Unlike some of the English counties, no livestock returns were collected for Wales during the French Wars. M. Turner, ‘Counting sheep: waking up to new estimates of livestock numbers in England, c.1800’, *AgHR* 46 (1998), pp. 142–61.

¹⁶ F. V. Emery, ‘Wales’, in J. Thirsk (ed.), *The agrarian history of England and Wales*, V, 1640–1750 (2 vols, 1985),

I, pp. 393–426.

¹⁷ These were all entitled *General view of the agriculture of (county name)*. The authors were: J. Clark, *Brecknock and Radnor* (1794); J. Fox, *Glamorgan* (1796); C. Hassall, *Carmarthen and Pembroke* (1794); G. Kay, *Caernarvon, Denbigh, Flint, Merioneth and Montgomery* (1794); T. Lloyd and D. Turnor, *Cardigan* (1794).

¹⁸ Trow-Smith, *British livestock husbandry*, p. 8.

¹⁹ No claim is made that this is an accurate reflection of the sheep-holdings of Welsh labourers. Indeed, the figures are likely to exaggerate their ownership, because many labourers, particularly the least affluent, escaped the probate system. Nevertheless, the table makes it clear that ownership was quite widely dispersed.

by the occupational and status descriptions of those who were listed as prosecutors in sheep-stealing cases. Of these, almost eight per cent were women; four per cent were labourers; and ten per cent were artisans, tradesmen and professionals. The remaining 78 per cent were mainly farmers and yeomen, although a few gentlemen, shepherds and husbandmen were listed too.

I

It should come as no surprise to discover, therefore, that sheep figured prominently in the crime of the Principality. Some of the crimes were fairly mundane. There were, for example, a number of cases of pound-breaching, sheep-worrying, changing earmarks and the theft of sheep skins. There were also some cases of unlawfully shearing sheep, a little surprising perhaps in view of the relatively low price of Welsh wool. Nevertheless, on some occasions the crimes were more dramatic with sheep playing a central role in both riots and murder.²⁰ Yet, sheep-stealing was the most common cause of a prosecution.²¹ Overall, there are over 1500 suspected sheep-stealers in the Gaol Files database. However, as some crimes were committed in groups of two or more, there were just under 1300 suspected cases of theft. As Figure 1 shows, in the 1730s on average slightly under ten cases came before a grand jury each year. By the 1820s the figure had fallen a little to just under nine. However, in view of the large element of hidden theft, the use of informal sanctions and the possibility of changing prosecution rates, it would be unwise to assume that the actual number of sheep stolen was on a downward trend. Nevertheless, we can be fairly sure that sheep-stealing exceeded both horse and cattle-theft by a considerable margin, although, given the size of the Welsh flock, this is hardly surprising. Overall, sheep-stealing accounted for 57 per cent of all agricultural crimes in the NLW database.²² If anything, this figure, which make no allowance for hidden crime, understates the relative importance of sheep-stealing, because, unlike horses and cattle, sheep commanded relatively low prices so that the incentives to both recover them and prosecute suspects were weak.²³

Sheep-stealing, of course, was important in other areas of Britain too, although it seems to have particularly thrived in Wales.²⁴ The reasons for this are fairly predictable. Relatively low

²⁰ NLW, 4/616/3, 4/388/6.

²¹ For further evidence on sheep-stealing see BPP, 1844, V, *Report from the Select Committee on Commons' Inclosure*, especially the evidence of Thomas Williams, Frankland Lewis, John Iveson and W. Edwards.

²² There were also cases of hay, poultry and pig theft in the database, although these usually came under the jurisdiction of the lower courts.

²³ This is not to imply that sheep-owners never tried to recover their stolen animals or prosecute thieves. Like horse-owners, occasionally they used to carry-out person-to-person inquiries and issue handbills. They used to advertise in the newspapers too. Thus Charles Williams and Priscilla David from Panteage, Monmouthshire, placed an advert in the *Hereford J.*, 4 Jan. 1787, offering a two guinea reward for the capture of John Willams, a butcher, who had been apprehended for

sheep-stealing but had escaped. The advert included a physical description of Williams.

²⁴ See B. J. Davey, *Rural crime in the eighteenth-century: north Lincolnshire, 1740–80* (1994), pp. 9–13; Beatrice, *Crime and the courts in England, 1660–1800* (1986), p. 147; King, *Crime, justice and discretion*, p. 137. BPP, 1819, VIII, *Report of Select Committee on criminal law relating to the capital punishment in felonies*, Appendix, which also includes a range of interesting tables. These show, amongst other things, that sheep-stealing was more important than either horse or cattle theft, although its relative importance varied considerably from area to area. In general, it was higher in the rearing than the fattening areas. For some brief comments on the extent of sheep-theft and its geographical distribution see D. Howell, *The rural poor in eighteenth-century Wales* (2000), p. 235.

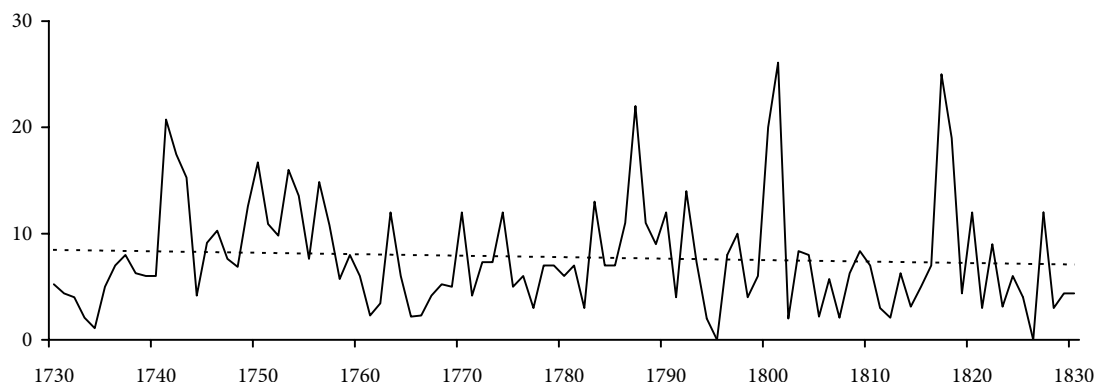


FIGURE 1. Number of indictments for sheep-stealing: Wales

Source: National Library of Wales (NLW), Gaol Files database.

living standards in conjunction with relatively small, impoverished farms ensured that there was an elastic supply of potential offenders.²⁵ At the same time, the importance of sheep in local agriculture and their size ensured that there was a plentiful supply of suitable targets, while the topography, the tendency to graze sheep on the wastes and a relatively low intensity of shepherding ensured that sheep enjoyed little protection from theft.²⁶ As one of the Board of Agriculture authors put it:

Every member of the community, who is not employed in the performance of some useful or good action, is generally busy in the accomplishment of some wicked deed. That immense loss which many of the honest part of the community have, in the vicinity of the commons, sustained from the numerous depredations of numerous gangs of sheep-stealers that infect these hills are too numerous to be questioned, and they justify the truth of that remark.²⁷

Furthermore, sheep-stealing was a low-risk crime. As the sheep were pastured on the hills, it was difficult to monitor the flocks on a day-to-day basis, so that farmers would not always have been immediately aware that some of their sheep had disappeared.²⁸ When losses were discovered, it could not always be assumed that they were due to theft: straying was common and sheep were subject to relatively high mortality rates. For example, one of the agents for the Powis estate worked on the basis of an annual loss rate of ten per cent.²⁹ Harder estimates come from the Edwinsford farm in Talley, Carmarthenshire, which, in 1822, lost almost seven

²⁵ M. Humphreys, *The crisis of community. Montgomeryshire, 1680–1815* (1996); Howell, *Rural Poor*.

²⁶ Lloyd and Turner, *General view ... Cardigan*, p. 22. In the early-modern period and before, protection had been enhanced by the practice of *hafod* – the summer farming of the uplands. However, this seems to have gone into decline during the eighteenth century. E. Davies, 'Hafod and Lluest. The summering of cattle and upland settlement in Wales', *Folk Life* 23 (1984–5),

pp. 76–96.

²⁷ Clark, *General view ... Brecknock*, p. 40

²⁸ We should not exaggerate this problem. Low labour costs encouraged farmers to employ shepherds. Furthermore, on the open hills the sheep from a particular farm would tend to congregate together. Monitoring was also eased by the tendency of sheep to congregate in groups of twenty or so.

²⁹ Shropshire Archives, 552/15/2177/1.

per cent of its flock outside the lambing season.³⁰ But, even when theft was suspected, it cannot always have been possible to identify a culprit, and, when one was, successful prosecution could not be guaranteed.³¹ Grand juries, it seems, were reluctant to find a true bill when suspected sheep-stealers came before them, with the result that only 63 per cent of those indicted appeared before a trial jury. It is likely that the Act of 1741, which made sheep-stealing a capital crime, in conjunction with a growing reluctance on the part of juries to convict for hanging offences, was responsible for this.³²

It was evident too that when a suspect did appear before a trial jury he was unlikely to be convicted. The Welsh data suggest that only 37 per cent were found guilty. This is quite similar to King's estimates for Essex over a broadly comparable period and Beattie's for Surrey and Sussex for the eighteenth century. Moreover, when a guilty verdict was returned, only a small proportion of defendants were executed. The official returns for England and Wales for the years between 1826 and 1831 suggest that only 1.5 per cent of those convicted were executed; six per cent were transported for life; nineteen per cent transported for shorter periods, while the remainder were imprisoned for relatively short periods. Whether someone was executed probably reflected a variety of considerations. Those unable to secure decent character references, recidivists and those suspected of previous offences were particularly at risk.³³ However, the discretionary nature of the legal system is evident from the fact that occasionally executions were recommended for their deterrent value. Thus, in his report on John Edward, a yeoman from Brecon who was indicted on a number of charges of sheep-stealing in 1784, John Wilson argued that not only was Edward a bad character but that, as there had been no executions over the previous 20 to 30 years, his death would deter future crime.³⁴

Before we consider the seasonal pattern, we need to examine the characteristics of the suspects and their possible motives. The latter have important implications for seasonal patterns. If sheep were stolen because of hunger or hardship, we would expect the seasonal supply of offenders to be influenced by employment conditions and the availability of alternative means of supplementing the diet. If, by contrast, sheep were stolen for profit, then market conditions and the condition of the sheep would have been important. Yet, it is impossible to be precise. Legal records rarely provide direct evidence about a criminal's motives, which have to be inferred. In any case, these may have been both complex and mixed. Some thieves, for example, may have stolen sheep for resale in order to repay a debt that had been incurred in hard times. Nevertheless, the issue of motivation has been explored in some depth by both Rule and Wells.³⁵ They approach the question by relying on depositions, and from the inferences that

³⁰ NLW, Edwinstford Papers, 4654.

³¹ Farmers, of course, protected their sheep against theft through ear and pitchmarking. At this time, moreover, they also used to nose-burn. Nevertheless, this was not always a deterrent. One Hereford official attributed the low detection and conviction rates to the tendency of sheep-stealers to work in gangs of five or six, in which some acted as thieves and others as guards. He also pointed to the tendency to slaughter the sheep at the place of theft and carry away the flesh. Hereford RO, BF16/49.

³² For some evidence see *Report of Select Committee on the criminal law*.

³³ King, *Crime, justice and discretion*, pp. 222–58.

³⁴ TNA, HO 47/8/15.

³⁵ R. A. E. Wells, 'Sheep-rustling in Yorkshire in the age of the industrial and agricultural revolutions', *North-east Hist.* 20 (1984), pp. 127–45; J. G. Rule, 'The manifold causes of rural crime: sheep-stealing in England, c.1740–1840', in J. G. Rule (ed.), *Outside the law. Studies in crime and order, 1650–1850* (Exeter Papers in Economic History, 15, 1982).

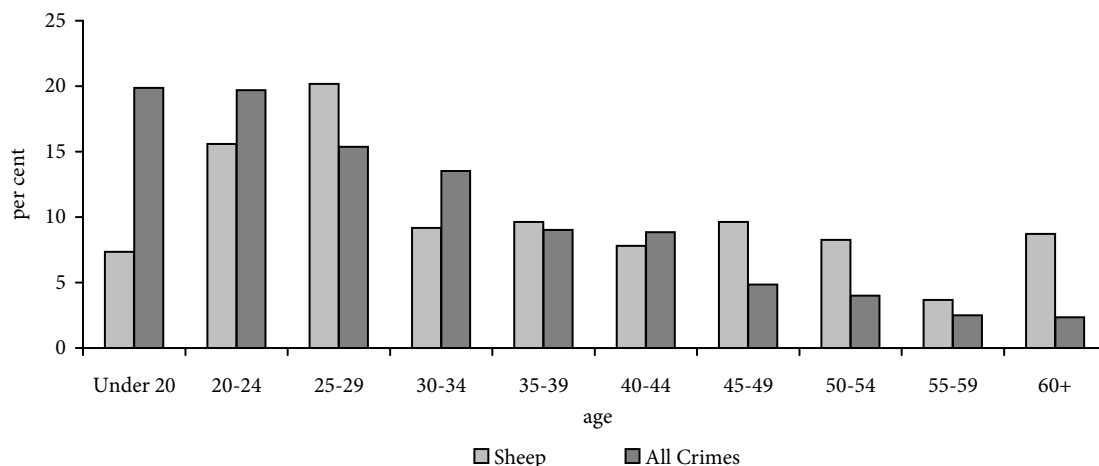


FIGURE 2. Age distribution of criminals: sheep-thefts and all crimes

Note: Number of cases (N) = 221.

Source: NLW Goal Files database.

can be drawn from the age and occupation of the thieves, their strategies, the number of sheep stolen and whether there was evidence of gang activity, recidivism and professionalism. They drew the conclusion that sheep-stealing was driven by a range of motives, although their discussion implies that economic hardship and, to a lesser extent, profit were amongst the most important.³⁶ Does this conclusion hold for Wales too?

To some extent the characteristics of the thieves are fairly predictable. Only a small proportion (ten per cent) of those in the Gaol File database are women (Table 2). No doubt this figure understates their importance; women were less likely to be suspected of crime, and more likely to receive informal justice.³⁷ Nevertheless, we can be fairly sure that women stole sheep infrequently, and, when they did, it was often in the company of another thief. Thus, 75 per cent of suspected females, compared with only 20 per cent of men, are known to have had an accomplice. Usually the accomplice was a man, although occasionally it was another woman. Thus, Catherine Evan from Llangelynnin, Merionethshire, stole four sheep with her two daughters in November 1792.³⁸ For this she received a prison sentence, although one of her daughters, Mary, was transported for life.

Rule has suggested that we can presume the hardship motive was important if a high proportion of thieves were in their late twenties and thirties, an age when family dependency rates were

³⁶ One set of documents which they did not consult was the letters of recommendation of the circuit judges. Although only a few of these have survived, they tend to strengthen the conclusion that poverty and extreme hardship occasionally influenced theft. (See TNA, HO 47/2/31 and HO 47/6/31). Due to limitations of space, no discussion of professionalism or gang activity has been

included. Nevertheless, the Great Session records do not suggest that this was very important, a conclusion that was drawn by Rule too.

³⁷ King, *Crime, justice and discretion*, pp. 196–216.

³⁸ E. V. Jones, 'Sheep-Stealing at Llangelynnin', *J. Merioneth Historical and Record Society* 7 (1973–6), pp. 384–403.

TABLE 2. Occupational/status descriptions of sheep-stealers (per cent)

Land	43.3	Tradesmen/Artisans	10.7
of which: Yeoman	37.0	of which: Butcher	3.8
Farmer	2.3	Tailor/Breechmaker	1.2
Husbandman	1.7	Cobbler/Shoemaker	0.8
Shepherd	1.3	Blacksmith	0.7
Other	1.0	Tiler/Slater	0.6
Labourer	35.9	Weaver	0.6
Women	10.1	Other	2.3
of which: Spinster	4.6		
Widow	1.7		
Married	3.8		

Note: N = 1555.

Source: NLW, Gaol Files database.

high.³⁹ Judging from the database, it emerges that there was considerable dispersion in the age of sheep-stealers. At one end of the age-distribution there were two octogenarians, while at the other extreme there were boys of eleven and twelve.⁴⁰ It is evident, however, that sheep-stealers were on average quite old. We usually find that age-specific crime rates rise with age up to the late teens or early twenties, after which they decline. This may reflect the circumstances in which young people find themselves, although they may also exercise less caution than their elders. Whatever the reason, this pattern is replicated amongst the criminals in the Gaol Files database (Figure 2). Nevertheless, it is evident that the peak-age of sheep-stealers occurred considerably later than for most criminals, sometimes persisting well into old-age. Thus, the median age of sheep-stealers was 36 years compared with an overall average of 32 in the database.

To examine their occupational status, the suspects were divided into three groups. First, there were those designated as 'land', which incorporated those described as farmer, yeoman, husbandman, waggoner and shepherd. A second group were labourers. Finally, a residual group – mainly artisans and tradesmen – were included. As a result of this exercise, it was less obvious that hardship was the driving force behind the crime. As Table 2 shows, many propertied criminals stole sheep. Indeed, it emerges that the land group were particularly important, although this should not be a source of surprise. As already mentioned, small farms occupied a particularly prominent role in Welsh agriculture, and yeoman farmers would often supplement their incomes through labouring, shepherding and other work, although occasionally, it seems, they resorted to sheep-theft too. Only slightly less important than the land group were labourers. No doubt, many of these worked in agriculture and would have had plenty of opportunities to steal sheep, although in Wales the same seems to have been true of some miners and ironworkers.⁴¹ Rather less important were the artisans and tradesmen. This group included a large number of

³⁹ Rule, 'Manifold causes', pp. 110–11.

⁴⁰ See NLW, 4/395/4; 4/630/7; 4/632/6; 4/398/3.

⁴¹ The main centres of coal and iron production were the central and eastern valleys of south Wales. These were in close proximity to Brecon Beacons and Black

Mountains, important centres of sheep production. J. E. Archer, 'Poaching gangs and violence: the urban-rural divide in nineteenth-century Lancashire', *British J. Criminology* 39 (1999), pp. 25–38, has noted the importance of industrial workers in rural crime.

TABLE 3. Means of disposal of stolen sheep

<i>Quarter</i>		<i>Killed</i>	<i>Killed and either meat or skin sold</i>	<i>Sold whole sheep</i>	<i>Added to flock</i>	<i>Total</i>
Jan – Mar	Number	6	3	6	3	18
	Row per cent	33.3	16.7	33.3	16.7	100.0
	Column per cent	30.0	50.0	31.6	50.0	35.3
Apr – Jun	Number	2	1	7	1	11
	Row per cent	18.2	9.1	63.6	9.1	100.0
	Column per cent	10.0	16.7	36.8	16.7	21.6
Jul – Sep	Number	5	1	4	2	12
	Row per cent	41.7	8.3	33.3	16.7	100.0
	Column per cent	25.0	16.7	21.1	33.3	23.5
Oct – Dec	Number	7	1	2	0	10
	Row per cent	70.0	10.0	20.0	0.0	100.0
	Column per cent	35.0	16.7	10.5	0.0	19.6
Jan-Dec	Number	20	6	19	6	51
	Row per cent	39.2	11.8	37.3	11.8	100.0
	Column per cent	100.0	100.0	100.0	100.0	100.0

Source: NLW, Gaol Files database.

butchers, although a number in traditional crafts, such as tailoring and shoemaking, played a role too. These were men who were heavily dependent on local markets, although they often maintained agricultural interests as a means of supplementing their incomes.⁴²

Another possible source of inference is the fate of the stolen sheep. If the sheep were killed or if, perhaps, their skins were sold, that might be indicative of hardship. Alternatively, if they were sold as live stock, that is more likely to point to an acquisitive motive. Unfortunately, it was possible to recover information for only 51 cases (Table 3). These seem to reinforce the view that many sheep were stolen because of hardship or hunger.⁴³ But, it is interesting to note that a considerable proportion of stolen sheep were sold, and some were incorporated into other flocks, possibly to be sold later. It also evident that the majority of sheep stolen in the first, third and fourth quarters of the year were more likely to be killed, while those stolen in the second were more likely to be sold. This suggests that the motives for sheep-stealing may have changed with the seasons.

To gauge the importance of the acquisitive crime, we might also raise the question whether sheep theft was highly lucrative. In fact, this is unlikely to have been the case because Welsh

⁴² J. Stobart, 'The economic and social worlds of rural craftsmen-retailers in eighteenth-century Cheshire', *AgHR* 52 (2004), pp. 141–60.

⁴³ Archer, 'By a flash and a scare', p. 201, argues that some incidents of alleged sheep-killing may have been cases of animal maiming.

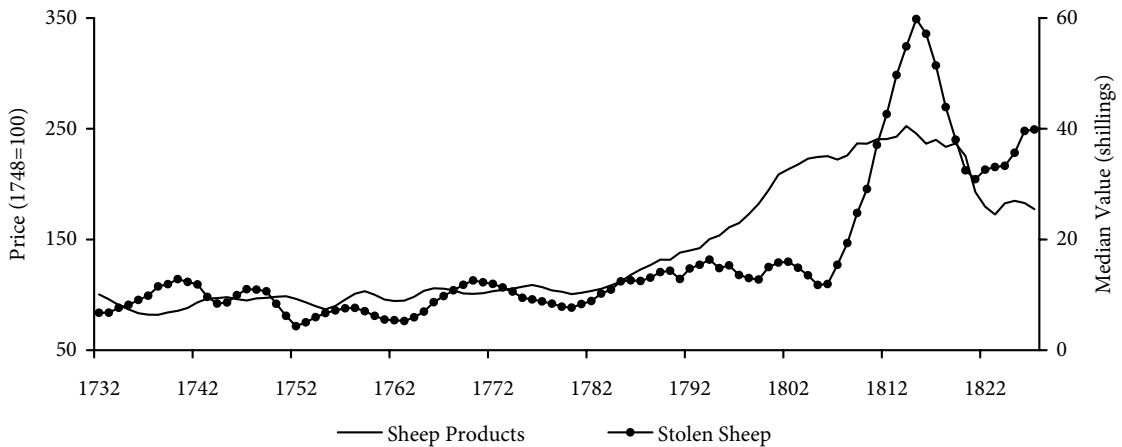


FIGURE 3. Average value of sheep stolen and price of sheep products (five year moving average)

Source: Price of sheep products see Table 5; value of stolen sheep, NLW Gaol Files database.

sheep commanded relatively low prices. An inventory carried out for Chirk Castle in 1788, for example, valued their 'large' sheep at 16s. each, their Shropshires at 14s., their wethers at 11s. but their Welsh lowland and hill sheep at only 5s. and 6s. respectively.⁴⁴ The payoffs from theft, therefore, would have been greater if the thieves had opted for English breeds. This, however, was not an effective option for those who intended to sell the stolen sheep or their carcasses, because the size of the animals would have aroused the suspicion of potential purchasers.⁴⁵ The median value of the sheep stolen over the period is shown in Figure 3. In the 1730s and 1740s the average was 4s. By the 1770s it had risen to 5s. and by the first decade of the nineteenth century to 10s. Such movements, of course, largely reflect the creeping inflation of the period and changes in the price of sheep products.

Yet, to determine the profitability of sheep-stealing we need to compare prices with local wages, and these were relatively low in Wales too.⁴⁶ In fact, available wage data suggest that sheep-theft could make a modest contribution to the income of a labourer. Table 4 compares the average wage of a labourer, as quoted in the 1790s Board of Agriculture surveys, with the median value of sheep stolen in that decade. It shows, for example, that a sheep stolen in Radnorshire was equivalent to over a month's wages. In Montgomeryshire it was between seven and ten weeks, depending on the time of year. However, it is also evident that, although the average value of sheep stolen was quite low, a few thieves were exceptionally well-rewarded from their crimes. Thus, in the 1730s those 60 per cent of the thieves with the lowest returns accounted for only 20 per cent of the money raised from sheep-stealing, implying that the remaining 40 per cent accounted for 80 per cent of the income earned. The pattern was little different in the other decades.

⁴⁴ NLW, Chirk Collection, F12510.

⁴⁵ A number of thieves were apprehended for this reason. For example, NLW, 4/48/4 and 4/390/9.

⁴⁶ D. W. Howell, 'The agricultural labourer in nineteenth-century Wales', *Welsh History Rev.* 6 (1973), pp. 262–87.

TABLE 4. Labourer's day wages (without diet) and value of sheep stolen: 1790s (in pence)

County	Winter	Summer	Harvest	Median value of sheep stolen 1790s	Number of Indictments for Sheep-Stealing
Anglesey	10–14	16	14–18	60	1
Breconshire		Average 14		60	27
Caernarvonshire	10	12	13–14	60	2
Cardiganshire	Lower	7	8	NI	
	Upper	6	8	NI	12
Carmarthenshire	South	8	10	NI	
	North	6–8	10–12	NI	21
Denbighshire	14	16	21	NI	0
Glamorgan	12	18	20	60	15
Merionethshire	8	12	NI	240	5
Montgomeryshire	12	14	17	120	20
Pembrokeshire	8	10		60	2
Radnorshire		Average 14		60	15

Notes: There were no wage figures for Flintshire and no indictments for sheep-stealing in either Flintshire or Denbighshire in the 1790s. Sometimes a range of wages figures was quoted when there were intra-county differences owing perhaps to the presence of industry or mining.

Source: Wage figures come from the Board of Agriculture *General views*; value of stolen sheep from NLW, Gaol Files database.

Finally, we may be able to draw some further inferences about the determinants of sheep-stealing from the annual number of recorded indictments. Figure 1 suggests that theft was high at times of harvest failure. For example, sheep-stealing indictments were well above trend in the early 1740s, in 1800/01, and in 1817, all notable periods of distress.⁴⁷ We might expect sheep-stealing, therefore, to be correlated with grain prices.⁴⁸ As Table 5 shows, there was a positive, if weak, association with lagged grain prices.⁴⁹ However, although grain prices may be

⁴⁷ On the 1740s crisis, see D. Dickson, *Arctic Ireland* (1998), J. D. Post, 'Climatic variability and the European mortality wave of the 1740s', *J. Interdisciplinary History* XV (1984), pp. 1–30; on 1801, see D. J. V. Jones, 'The corn riots in Wales, 1793–1801', *Welsh History Rev.* 2 (1964–5), pp. 323–50, R. Wells, *Wretched Faces. Famine in wartime England, 1793–1801* (1988), and on 1816/17, see J. D. Post, 'The economic crisis of 1816–1817 and its social and political consequences', *JECH* 30 (1970), pp. 248–50 and id., 'A study in meteorological and trade-cycle history. The economic crisis following the Napoleonic wars', *JECH* 34 (1974), pp. 315–49.

⁴⁸ For some discussion of this possible relationship, see Beattie, *Crime and courts*, pp. 202–12; D. Hay, 'War,

dearth and theft in the eighteenth century', *Past and Present*, 95 (1982), pp. 117–60; King, *Crime, justice and discretion*, pp. 145–53.

⁴⁹ The earliest consistent run of grain prices dates from only the 1770s. As an alternative, therefore, southern prices were used. These should act as a reasonable proxy for local prices because by this time grain markets were fairly well integrated. See C. W. J. Granger and C. M. Elliott, 'A fresh look at wheat prices', *EcHR* 20 (1967), pp. 257–65; A. J. S. Gibson and T. C. Smout, 'Regional prices and market regions: the evolution of the early modern Scottish grain market', *EcHR* 48 (1995), pp. 258–82.

TABLE 5. Correlation Matrix: annual data, 1730–1830

	<i>Sheep theft</i>	<i>Grain prices</i>	<i>Grain prices lagged</i>	<i>Food theft</i>	<i>Wool prices</i>	<i>Mutton prices</i>	<i>Sheep product prices</i>
<i>Sheep Theft</i>	1.00						
<i>Grain prices</i>	-0.16	1.00					
<i>Grain prices lagged</i>	0.18***	0.01	1.00				
<i>Food theft</i>	0.53*	-0.27*	0.26*	1.00			
<i>Wool prices</i>	0.24**	0.06	0.02	0.10	1.00		
<i>Mutton prices</i>	0.15	0.33*	0.34*	0.24**	0.25**	1.00	
<i>Sheep product prices</i>	0.26*	0.16	0.15	0.17***	0.93*	0.58**	1.00

Note: * denotes significant at 0.01 level, ** at the 0.05 level, *** at the 0.100 level. The price of grain and sheep products have been measured as rates of change. Sheep products are a weighted average of wool and mutton prices. The weights were those suggested by P. O'Brien, 'Agriculture and the home market for English industry, 1660–1820', *English Historical Rev.*, 100 (1985), pp. 773–800.

Sources: Price of grainstuffs is taken from B. R. Mitchell and P. Deane, *An abstract of British historical statistics* (1962), Tables 9 and 10; mutton prices from W. Beveridge, *Prices and wages in England from the twelfth to nineteenth centuries* (1939), pp. 709–11; wool prices from Bowden in Thirsk (ed.), *Agrarian Hist.*, V (ii), pp. 843–4; and Mitchell and Deane, *Abstract*, pp. 494–5.

a good indicator of distress in urban communities, they are a more equivocal guide for rural ones.⁵⁰ A better indicator of distress may be the level of food theft. It is interesting to note, therefore, that there was a fairly strong correlation between sheep- and food-theft, although the latter was partially correlated with lagged food prices.

Rule has also suggested that we can gauge the importance of the acquisitive motive from the strength of the correlation between theft and sheep prices. Unfortunately, there is no comprehensive run of Welsh sheep prices over the study period, so that it was necessary to use southern wool and mutton prices. These suggest that sheep-stealing was positively correlated with the rate of change of both wool and mutton prices, although the latter was statistically insignificant. There was also a positive correlation between sheep-theft and a weighted sheep-products index.

⁵⁰ T. S. Ashton, *Economic fluctuations in England, 1700–1800* (1959), pp. 34–48.

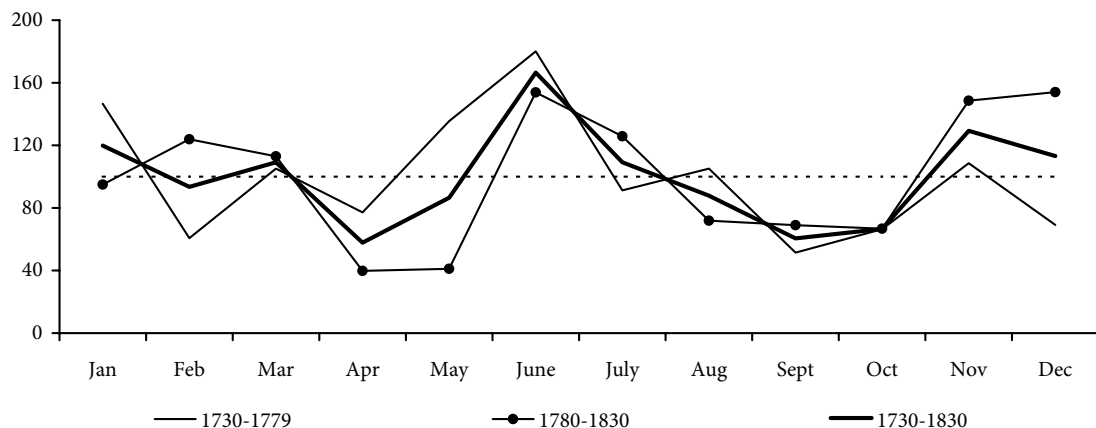


FIGURE 4. Sheep-stealing seasonal index: all Wales

Note: N = 1559.

Source: NLW Gaol Files database.

III

Sheep-stealing, therefore, was subject to a number of influences. Hardship seems to have played an important role, although there is evidence that sheep-theft was frequently an acquisitive crime too. But did it fluctuate over the course of the year? Our evidence suggests that it did, and that it displayed considerable amplitude, peaking on at least three occasions (Figure 4). It was fairly high at the beginning of the year, peaking in January. It then tended to decline until April, before rising to a second peak in June. This was followed by another decline which lasted until the late summer. During the autumn months theft increased again,

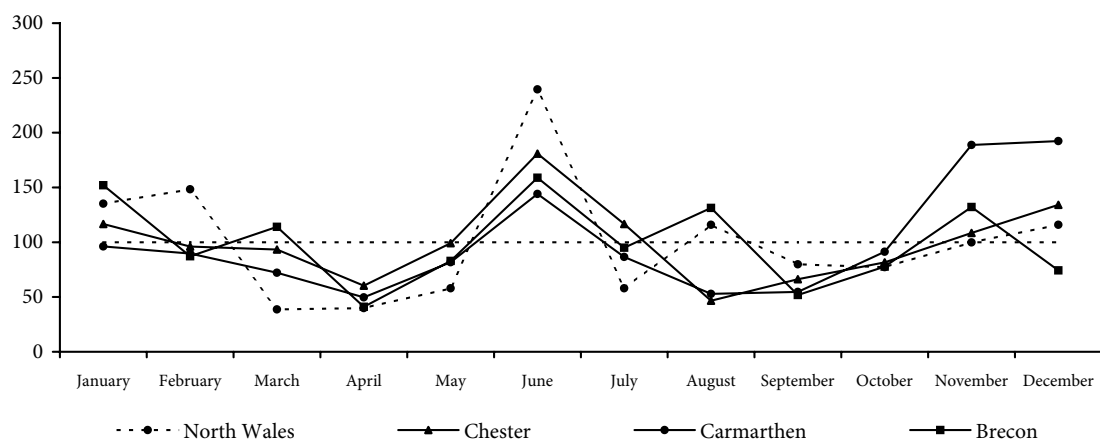


FIGURE 5. Sheep-stealing seasonal index: Welsh legal circuits

Note: North Wales, N = 74; Chester, N = 250; Carmarthen, N = 312; Brecon, N = 908.

Source: NLW Gaol Files database.

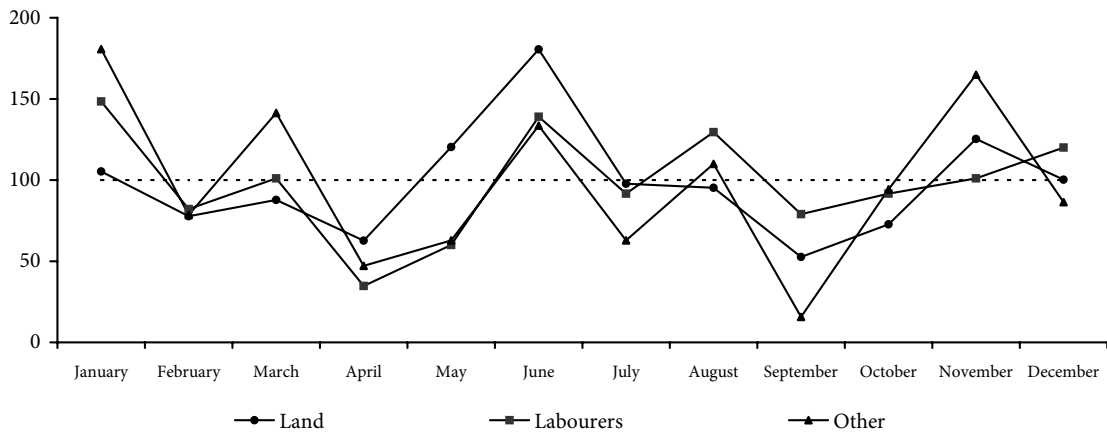


FIGURE 6. Sheep-stealing seasonal index: occupational groups

Note: Land, N = 682; Labourers, N = 543; Other, N = 330.

Source: NLW Gaol Files database.

peaking in November before falling slightly in December. To examine whether this pattern was stable over time, the period has been divided into two equal parts. In both half-centuries January and June were peak months. However, in the first period there was no decline in theft in December.

The pattern of sheep-theft was also quite similar across Wales, although not all areas conform exactly to the above description. Figure 5, which compares the pattern for the various legal circuits, shows that all four experienced a decline in indictments between the winter and the spring, followed by an increase during the spring and early summer and a June peak. But the decline in the summer months was less pronounced on the Brecon circuit and two of the circuits did not experience a November peak. Subject to qualifications, there are also some similarities in the seasonal pattern for the three broad occupational groups (Figure 6). All three experienced peaks in June. For the land group, however, there was no January peak, while sheep-stealing amongst labourers rose continuously during the autumn and early-winter months. Sub-peaks in March and August are also evident for all three groups (Figure 6).

How did the seasonal pattern compare with that for other items of livestock? There were some similarities between sheep- and cattle-theft (Figure 7). They both peaked in June and in the autumn, although cattle-stealing hit its autumn peak a month earlier. The main difference is that there was very little cattle-theft in the early part of the year. The contrasts between sheep- and horse-stealing are greater. Indeed, horse-stealing, unlike sheep-theft, experienced no well-defined winter or autumn peaks, being confined largely to the spring and summer months.

For obvious reasons, comparisons with food theft may be of interest. In fact, some of those indicted for food theft in Wales were food-rioters, and a slightly different pattern emerges if they are included in the figures (Figure 8). Nevertheless, it seems that whereas sheep-stealing experienced three seasonal peaks, food theft peaked only once – during the

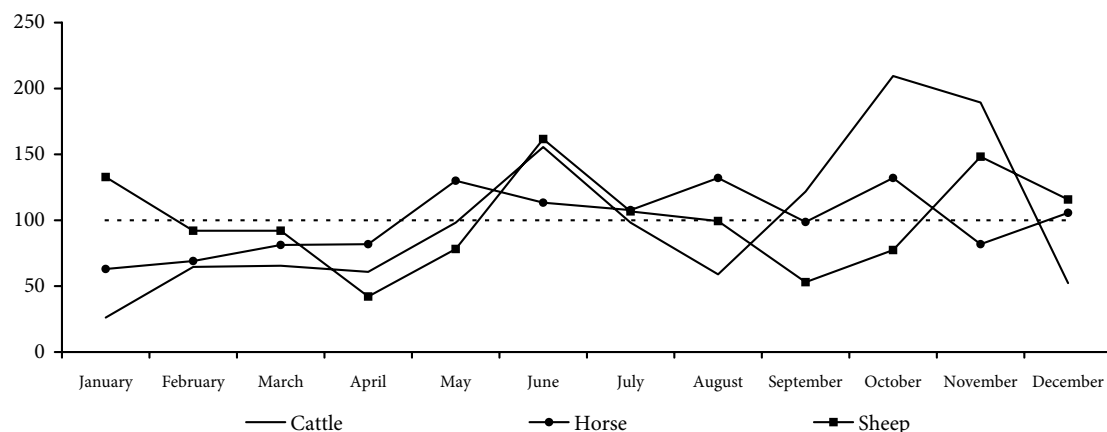


FIGURE 7. Livestock seasonal indexes: Wales, 1730-1830

Note: Sheep, N = 1559; Cattle, N = 201; Horses, N = 594.

Source: NLW Gaol Files database.

winter months. No doubt a number of factors account for this winter peak. The main items targeted at this time were grain, meal and flour, which were still in plentiful supply during the winter months. Moreover, the long hours of darkness offered the thief some protection against detection. Finally, of course, it is likely that winter hardship increased the supply of potential offenders. Some support for this hypothesis comes from an occupational analysis of the suspects. This shows that during February and March labourers accounted for forty per cent of those indicted for food-theft, while in the non-peak months they accounted for a third. We shall examine winter hardship in more detail in the next section. It is worth noting at this stage, however, that any hardship was not a consequence of exceptional

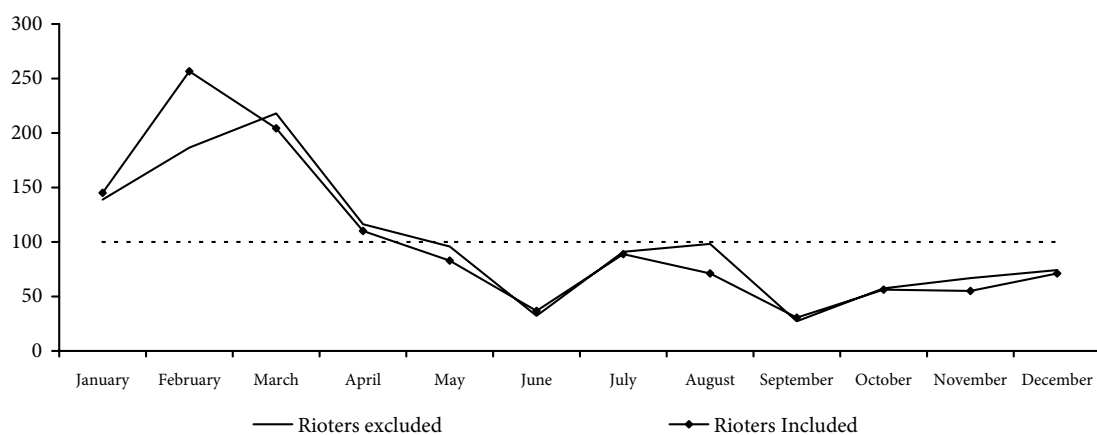


FIGURE 8. Food theft seasonal index: Wales, 1730-1830

Note: N = 707.

Source: NLW Gaol Files database.

grain prices at this time of the year. Indeed, if anything, grain prices were relatively low during the winter.⁵¹

IV

Turning to possible explanations for the seasonality, the first question we need to address is: why did sheep-stealing experience a January peak? Following the previous discussion, a possible explanation may be that it was linked to the long hours of darkness. There are, however, good reasons to doubt whether this was a crucial influence. Whilst it is true that a thief would be less conspicuous in the dark and that it is relatively easy to catch sheep at such times, there is no reason to suppose that daylight thieves were particularly disadvantaged.⁵² Indeed, a common practice seems to have been to catch a sheep during the day and hide it, before recovering it at night. Thus, one suspect tied the legs of his quarry and hid it in some rushes; another hid his in a cave.⁵³ There were, in any case, circumstances under which daylight was a positive advantage. This was particularly the case when the thief intended to drive the sheep away.

There is a stronger case for arguing that the peak was linked to economic hardship amongst the labouring classes. The problem of winter distress has been highlighted by a number of authors for the southern and eastern counties.⁵⁴ But it was a feature of life in the western pastoral counties too. There were a number of reasons for this. First, during the winter months there was invariably a reduction in the daily wage. The Chirk Castle records for the 1760s, for example, show that in the first week of November the daily wage was reduced from 1s. to 10d.⁵⁵ This, of course, was a response to a decline in the number of daylight hours (Figure 9). Thus, the usual length of the working day in Wales during the summer (outside the harvest period) was from six am to six pm, a twelve hour day.⁵⁶ During the winter, however, it was from daylight to dusk which at the beginning of January was roughly eight hours. A second reason was that task-work, which generally offered the prospect of earning relatively high wages, was discontinued during the winter months. Finally, adverse weather conditions and a decline in farming activity frequently curtailed the number of days which day-labourers could work.⁵⁷

Thus, the winter months were associated with a decline in the income and employment

⁵¹ P. J. Bowden, 'Agricultural prices, wages, farm profits and rents', in Thirsk (ed.), *Agrarian History V* (ii), pp. 37–41. The Beveridge Winchester wheat series for 1730 to 1816 seems to confirm this. The quarterly indicators were: Sept.-Dec., 103, Dec.-Mar., 97, Mar.-June, 100, June to Sept., 99. The respective figures for Westminster bread prices for the years 1730–84 were: 99, 99, 101, 101 respectively.

⁵² It has been alleged that on the Herefordshire hills thieves used to construct well-hidden holes, roughly four foot deep, which were used to hide sheep that had been stolen in daylight. Hereford RO, K12/46.

⁵³ NLW, 4/522/5, 4/281/5.

⁵⁴ K. D. M. Snell, *Annals of the labouring poor* (1985), pp. 15–66; G. R. Boyer, *An economic history of the English*

poor law, 1750–1850 (1990), pp. 88–93.

⁵⁵ The data refers to the 1760s. NLW, Chirk Collection, F12458.

⁵⁶ The figure of twelve hours was quoted in a number of the contributions to Board of Agriculture surveys of the 1790s. However, Davies in *General View... North Wales*, p. 355, quotes a figure of between 13 and 14 hours.

⁵⁷ In their responses to the Rural Queries of the 1832 Poor Law report, a number of Welsh parishes reported that unemployment was highest during the winter months and that this was accompanied by a decline in weekly wages. Comparisons with Boyer's figures for the east and south-east suggest, however, that the incidence of winter unemployment was relatively low.

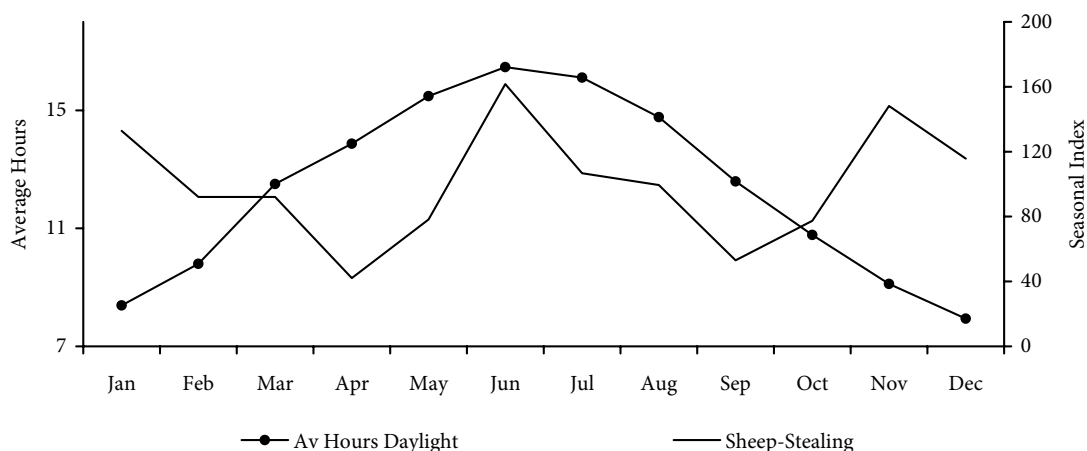


FIGURE 9. Average hours of daylight and sheep-theft

Source: NLW Gaol Files database.

prospects for many poor families,⁵⁸ and this provided them with both the incentive and the opportunity to resort to illegal activities. This claim is supported by the occupational data which show that labourers were strongly over-represented amongst the sheep-thieves in January. The same was also true of women. Over the year as a whole they accounted for ten per cent of the suspects, but in January that figure rose to 17 per cent. Indeed, January accounted for just under one-fifth of all the sheep they stole.

It seems, therefore, that for many labouring households the driving force in the early winter was economic need. Nevertheless, it would be wrong to identify this as the sole reason for the January peak. Such high levels of theft were possible only because sheep were readily accessible and enjoyed only modest protection from thieves. In the Wales at this time, sheep were invariably over-wintered on the hills, in contrast to cattle and horses which were usually grazed on the hillsides. Furthermore, eighteenth-century Welsh farmers did not usually feed-out unless the winter was very severe, and shepherding was less intensive during in the winter than at certain other times of the year. As a result, hill sheep were probably relatively soft targets for the thief in the winter.

Indeed, given the state of the rural economy during the winter months, it is perhaps surprising that the peak was not more pronounced. Part of the reason for this may be that the degree of hidden sheep-theft was particularly marked at this time. There is evidence from the south-east of England that the victims of property crime were reluctant to prosecute those who were either in poverty or had a large number of dependants.⁵⁹ If, as the evidence suggests, hardship-related theft was high at this time of the year, prosecution and indictment rates would have been low.⁶⁰ But there may have been other reasons. For one thing, the

⁵⁸ For some further empirical evidence (from estate wage books) on the decline in wage incomes in the early part of the year, see C. Thomas, 'Agricultural employment in nineteenth-century Wales: a new approach', *Welsh History Rev.* 6 (1972), pp. 143–60. F. M. Eden, *The*

state of the poor (1928 edn), esp. pp. 245–8, 293–301, 368–74, includes some evidence on seasonal income and expenditure patterns for Wales.

⁵⁹ King, *Crime, justice and discretion*, pp. 22–46.

⁶⁰ *Ibid.*, p. 33.

incentive to steal for resale was weak during the winter months. At this time of year sheep sales were flat, reflecting the condition of the sheep and the length of the day, which precluded moving sheep long distances. In any case, we probably should not exaggerate the severity of the winter months or the capacity of the rural poor to deal with it; rural families were often resourceful when dealing with the seasons.⁶¹ Furthermore, there was the safety net of the Poor Law and possibly local charity. It was, for example, quite a common practice for some Welsh landowners to slaughter a beast for the poor in the winter months.⁶² Occasionally, there were also opportunities to borrow during the winter, although no doubt many families would have saved part of their income during the more prosperous summer months.⁶³ The potato also came to Wales relatively early, and was a supplementary source of sustenance for the rural poor in the winter months.⁶⁴ Finally, it is worth noting that Welsh agriculture had a relatively high dependence on farm servants, who were more likely to be cushioned from the vagaries of the seasons than local labourers.⁶⁵

V

Following the January peak, sheep-stealing theft declined between February and April. In part this reflected an improvement in the income prospects of the poor. With the increase in daylight there was an increase in the length of the working day and hence in the daily wage. At Chirk Castle, for example, the summer wage rate was restored at the beginning of February. At the same time an agricultural labourer could, on average, expect to find work for a considerable number of days each week. These were, after all, the months of lambing and calving, and when peas, barley and oats were sown.⁶⁶ As a result, there were both fewer incentives and opportunities to steal sheep. As sheep markets remained relatively depressed, it was also a relatively inopportune time to steal sheep for resale. Sheep also tended to enjoy more protection against theft; during lambing sheep were sometimes, although not always, brought down to the lower ground, and were shepherded more intensively.

The turnaround in May and June, therefore, was partly due to a return of the sheep to the hills and to less intensive shepherding. But the high levels of theft also probably owed much to lengthening of the days. Obviously, sheep could only be stolen when people were outside, so the supply of potential offenders was highest when the days were longest and warmest. As Figure 9 shows, spring and summer sheep-stealing was positively correlated with the number of hours of daylight.

However, other influences may have been at work at this time. First, it is possible that the

⁶¹ F. Thompson, *Lark Rise to Candleford* (1973), pp. 17–27.

⁶² This practice was not peculiar to Wales. See *Hereford J.*, 4 Jan. 1787.

⁶³ Howell, *Rural Poor*, pp. 66–115.

⁶⁴ R. Salaman, *The history and social influence of the potato* (1949), pp. 409–23; A. Armstrong, 'Labour, II, food, shelter and self-help', in Mingay (ed.), *Agrarian Hist.*, VI, pp. 733–4.

⁶⁵ Service declined later in Wales too. See Howell, *Rural poor*, pp. 66–92; Snell, *Annals*, pp. 67–103.

⁶⁶ D. Howell, *Land and people in nineteenth-century Wales* (1986), p. 139, has noted that often lambing in the mountainous areas in Wales took place fairly early in the year as the absence of fences allowed the rams to come early to the flocks. This would help account for the relatively high mortality rates noted above.

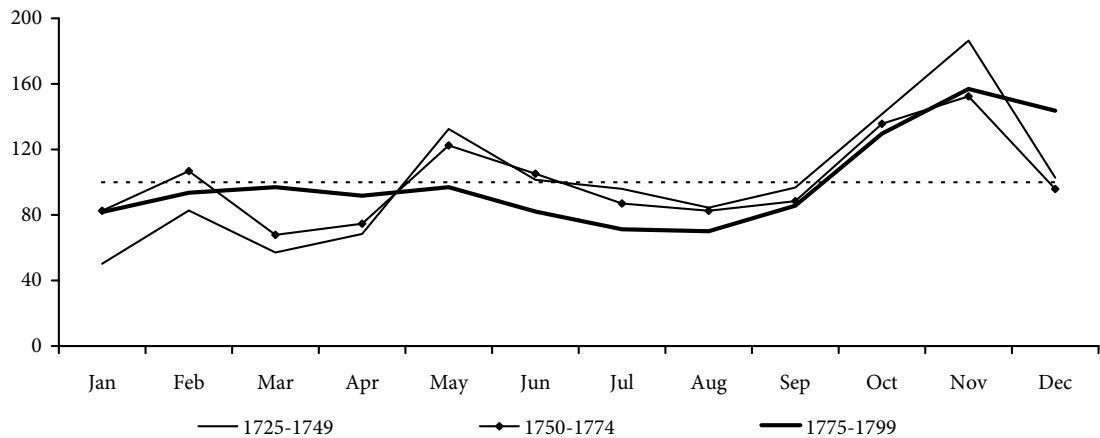


FIGURE 10. Marriage seasonal index: Carmarthen, 1725-1799

Source: See text.

opportunities to steal sheep may have been affected by the re-emergence of some slack to the labour market following the end of lambing and sowing. Some support for this hypothesis comes from the marriage registers.⁶⁷ If there was a decline in the level of economic activity in the late spring and early summer, there should have been an increase in marriage. Unfortunately, the Welsh parish registers are of poor quality and have attracted relatively little research. Nevertheless, evidence from one parish – Carmarthen – suggests that in the second and third quarters of the eighteenth-century there was a marked increase in marriage in the late spring and early summer, although, as south-west Carmarthenshire also supported a fairly large arable sector, there was a more pronounced peak between September and November (Figure 10).⁶⁸ To approximate conditions in the pastoral parishes, evidence has been taken from the relevant Shropshire parishes in Wrigley and Schofield's sample.⁶⁹ As Figure 11 shows, in these parishes there was a very marked increase in marriages in May, consistent with a slackening in the pace of activity.⁷⁰

The other possible influence at this time of year is that sheep became more marketable, increasing the attractions of theft for resale. May and June were months when farmers needed to dispose of various types of sheep to accommodate the new lambs.⁷¹ As a result, sheep sales tended to be high. Unfortunately, we have no hard information on the volume of sheep sales. However, as Chartres has shown for England and Wales as a whole, the incidence of sheep

⁶⁷ D. Cressy, 'The seasonality of marriage in Old and New England', *J. Interdisciplinary History* 16 (1985), pp. 1-21; A. Kussmaul, 'Time and Space, Hoofs and Grain: The seasonality of marriage in England', *J. Interdisciplinary History* 15 (1985), pp. 755-79.

⁶⁸ N. Woodward, 'Crisis mortality in a Welsh market town: Carmarthen, 1675-1799', *Welsh History Rev.* 22 (2005), pp. 432-62.

⁶⁹ For some discussion see E. A. Wrigley and

R. S. Schofield, *The population history of England, 1541-1871: a reconstruction* (1981), pp. 298-305. The data is available on a CD-ROM issued by *Local Population Studies*.

⁷⁰ This may also explain why, in Wales, June was often the preferred month for shearing and why it was treated as a holiday month.

⁷¹ Davies, *General view ... South Wales*, p. 413.

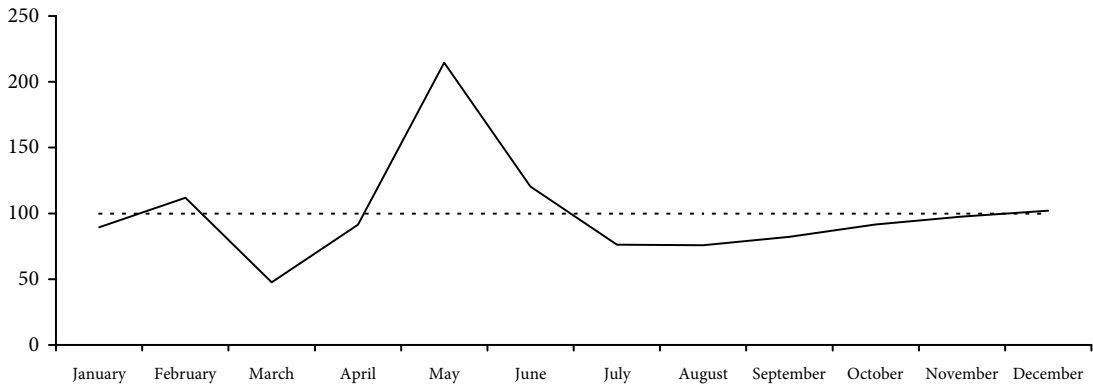


FIGURE 11. Marriage seasonal index, Shropshire pastoral parishes, 1730–1830

Note: Includes the parishes of Alderbury, Baschurch, Onibury and Oswestry

Source: Local Population Studies, CD

fairs peaked in May and June, and, as Figure 12 shows, this pattern was replicated for Wales and the English border counties.⁷² Further support for this claim comes from the finding that those in land occupations were over-represented at this time of the year. Thus, taking the year as a whole, they accounted for 43 per cent of all thefts, but between April and June the figure rose to 57 per cent.

VI

Following the June peak, sheep-stealing fell-back in July, August and September. Given the tenor of the discussion so far, the reasons for this are fairly predictable. It is true that in some respects conditions favoured high levels of theft. Sheep, which often grazed the wastes with little protection, were still soft-targets for thieves. Moreover, judging from the incidence of sheep fairs, sales remained fairly high at this time, so stolen sheep could be disposed of relatively easily (Figure 11). Nevertheless, the days were becoming shorter, and, with haymaking and the harvest, there was less slack in the rural labour market. Consequently, both the incentives and opportunities to steal sheep were more limited.

Nevertheless, the late autumn witnessed another increase in theft. It is true that theft was low in October, a month when the level of rural activity remained quite high. But it then increased in November before falling back slightly in December. Again, given the previous discussion, we can link this to sheep sales and changes in the pace of economic activity. As usual it was difficult to protect hill-sheep from theft, but November and December were months when both employment prospects and living standards declined again. Thus, the daily wage declined in response to the shorter days, while a deterioration in weather conditions left labourers with fewer opportunities to work a full week. November was also a month in when many households made their preparations for the winter, and some sheep-theft may have been

⁷² J. A. Chartres, 'The marketing of agricultural produce', in Thirsk (ed.), *Agrarian Hist.*, V (ii), pp. 406–502.

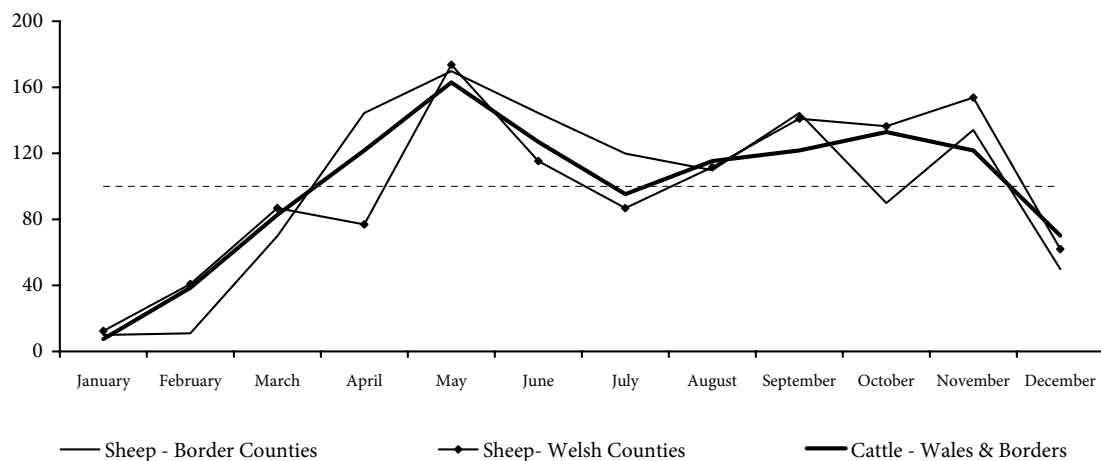


FIGURE 12. Seasonal Index of the incidence of sheep and cattle fairs, 1776

Source: Pocket Book of John Bennett, farm bailiff, 1776, Shropshire Archives, 522/10/851.

a response to this. Indeed, the Welsh for November is *tachwedd*, which is also the old word for slaughter.⁷³

However, it is also possible that the high level of theft at this time was due to an exceptional level of sheep sales. Indeed, Jones has suggested that it was at this time of the year that the main transfer of store sheep from the western counties to the fatteners in the east and south took place, although the extent of the demand was dependent on a number of influences, not least the supply of fodder in the receiving counties which, in turn, was influenced by weather conditions during the summer.⁷⁴ If this was the case, it would have provided thieves with an opportunity to dispose of stolen sheep. It is interesting to note, therefore, that the number of sheep fairs peaked in November, the same month as sheep-stealing. November was also the second most frequent month for sheep-stealing by those in land occupations. Finally, support for the role of marketing opportunities comes from the association between cattle-theft and the incidence of cattle fairs, both of which peaked at this time of the year, albeit in the previous month, October (Figures 7 and 12).

One other feature of the November peak is that it coincided with an increase in theft amongst craftsmen and tradesmen, especially butchers. The database suggests that 64 per cent of the sheep taken by butchers occurred between October and December. This figure rises to 76 per cent if January is included. This may reflect their dependency on local markets which, with the exception of the Christmas lamb trade, were relatively depressed from the late autumn. It is likely, therefore, that their incomes were low at this time. It is possible, moreover, that their problems partly stemmed from an increase in meat prices in the autumn months as fewer carcass sheep came onto the market.⁷⁵ Unfortunately, we do not have any monthly series on

⁷³ P. Jenkins, 'Times and seasons: the cycles of the year in early-modern Glamorgan', *Morgannwg*, 20 (1986), p. 26.

⁷⁴ E. L. Jones, *Seasons and prices. The role of the weather in English agricultural history* (1964), pp. 78–98.

⁷⁵ Ashton, *Economic fluctuations*, p. 11.

Welsh meat prices, although a couple of contributors to the Board of Agriculture Surveys suggested that they were high during the autumn and winter months.⁷⁶ Nevertheless, evidence from the south of England suggests that both beef and mutton prices rose at this time of the year.⁷⁷ Assuming this was the case in Wales too, it would have provided butchers with a price incentive to steal sheep, and, if, as modern estimates suggest, the demand for meat was price elastic, it would have depressed their sales and revenues too.⁷⁸

VII

According to the explanation advanced here, therefore, there is a good deal of support for Osborne's contention that seasonal fluctuations in sheep-stealing were a multi-causal phenomenon. Traditional interpretations of seasonality, which tend to stress the impact of fluctuations in economic activity and hardship on the supply of motivated offenders, gain considerable support. When the level of activity was low, as in the early part of the year, the early summer and the autumn, theft was high. Alternatively, when economic activity was high, as in the spring and late summer, theft was relatively low. But, it is evident that other influences were at work too. The supply of offenders was probably positively related to the hours of daylight and, with the changes in both the condition of the sheep and their marketability, there were changes in the effective supply of targets over the course of the year. It is probably more than coincidence, therefore, that the high peak in sheep-stealing occurred in the early summer when sheep were in good condition and readily marketable. It is also the case that high levels of theft are only possible when the sheep were poorly protected. When they were closely watched-over, as during lambing, theft tended to be low, and it is a moot point whether this was primarily due to high levels of economic activity or intensive shepherding.

The case for arguing that seasonality was subject to a range of influences is further strengthened when the criminals are disaggregated by occupational group. Traditional need explanations are most convincing when trying to account for the crime patterns of labourers, although, even for this group, some qualification is necessary. A disproportionate number of labourers, it is true, stole sheep in the early part of the year, when their incomes were lowest. But they also stole large numbers of sheep during the early summer and in the autumn, when it would be more difficult to invoke such an explanation. This implies, perhaps, that sometimes labourers stole sheep for acquisitive reasons. Such motives were more evident amongst farmers and yeomen, who rarely stole sheep during the winter, confining themselves to those times of the year when sheep were most marketable. Marketability might also explain why theft amongst butchers was exceptional during the autumn, although the incentives to steal sheep at this time of the year were enhanced by high sheep prices and relatively low earnings.

⁷⁶ Hassel, *General view ... Pembroke*, p. 48; Lloyd, *General view ... Cardigan*, p. 16.

⁷⁷ Bowden in Thirsk (ed.), *Agrarian Hist.*, V (ii), p. 40.

⁷⁸ Modern estimates suggest a price elasticity of

demand for carcass meat of roughly 1.5. See, for example, B. Hill and D. Ray, *Economics for agriculture* (1987). Presumably, in a low or medium income country the elasticity would be even higher.