The Importance of Sheep and Their Wool to the Economy of Wales from 1100 to 1603

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ABSTRACT

This thesis investigates the economy of Wales through the activities of farmers and landlords, particularly through their attitudes to the keeping of sheep. It then places this activity in the context of the value that sheep and wool brought to the economy of England over this same period. It is concerned with the extent to which the Welsh agricultural economy followed the English pattern, and the effect that this had on the overall success of that economy. The thesis demonstrates that sheep can be used as a gauge to monitor the degree of penetration of new ideas and practices brought into the region through invasion and immigration, and consequently the degree to which Welsh society retained its cohesion socially. On a smaller scale, it is also concerned with the economics and practicalities of keeping, and selling, sheep, and the production of wool in the areas of Pembrokeshire and Gwynedd (Wales) from the 12th through to the beginning of the 17th centuries, together with the changing importance of the role that sheep played in the agricultural economies of both large and small landholders. Pembrokeshire and Gwynedd were chosen as initially they followed divergent paths; early Norman domination of Pembrokeshire is in contrast with the Welsh retention of Gwynedd until the end of the 13th century This creates contrasting views of two dichotomous political and social environments and their evolution, which can then be used as a proxy to illuminate conditions throughout the majority of Wales.

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CONTENTS

Figures

Charts

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CHAPTER 1. INTRODUCTION

This thesis is concerned with the keeping of sheep and the production of, and trade in, wool in two areas of Wales, Pembrokeshire and Gwynedd. It demonstrates how the keeping of sheep increased in significance over the period from the 12th to the beginning of the 17th centuries, and therefore informs our understanding of the place of sheep in the Welsh economy in the medieval and early modern periods. Through the study of this one aspect of agricultural activity, a deeper appreciation of Welsh economy and society is possible. This thesis therefore throws further light on the place of sheep in society and their importance to the economy of Wales through the study of sheep farming and wool production, and to place this into context with the economy of England[1].

Much has been written about the economic impact of the wool trade in England, and it was the obvious lack of a similar output concerning Wales that initially prompted the research. In the past wool has been a very important economic commodity especially in the later middle ages in England. There, the trade in raw wool and woolfells[2] was large scale, well organised and recognized as a prime mover in increasing the wealth of that country. In Wales this is not perceived to have been the case, except in certain isolated instances, such as the activities of the monastic foundations in the 13th century, or some of the Norman landlords, particularly the Bohuns[3] in South Wales. Conversely, the textile industry in Wales has received much attention, and the interest that there has been appears to have been in finished textiles rather than in the raw materials going into those textiles.

The reason for the dearth of scholarship about sheep farming and wool production became apparent soon after commencement of the research; relevant records from medieval Wales are far fewer and much more fragmented than those to be found covering England. This disparity is highlighted when looking at medieval manorial and ecclesiastical records existing in both England and Wales. In England evidence comes from a variety of sources covering a number of years, so that a detailed analysis of those

[1] This thesis is not concerned with the textile industry except on the periphery.

[2] Sheepskins with wool still on them.

[3] Rees, W, 1924, p 257

records is possible. In contrast, in Wales, the survival of a record from one manor (or the Welsh equivalent) or estate for one year would be regarded as unusual. Similar problems arise from the early post-medieval period, particularly in the 15th century. As evidence is so restricted and spasmodic in distribution, there is also the problem of balancing one type of record against another; there is a danger that those records that do exist can assume great importance, and therefore could distort the overall picture. The nature of evidence also changes over time, so that direct comparison of, for example, 12th century records with those from the 15th is difficult, if not impossible.

It soon became apparent that a reassessment of options was necessary. Therefore, in order to give coherence to the thesis, it was decided to restrict the geographical scope of the research to two physically comparable areas, Pembrokeshire and Gwynedd, yet ones with contrasting histories.

Wales was much affected by a Norman[4] and English presence from the late 11th century onwards, culminating in the incorporation of the whole of Wales into the political and legal structures of England in the 16th century. However, this influence was not uniform, with some areas resisting this alien presence for longer than others. In these areas, social, political and legal frameworks remained within Welsh control, with the limited records available reflecting this. Other areas suffered the imposition of Norman/English systems over, and instead of, existing structures. It was therefore decided to restrict the research firstly to within the area of Pembrokeshire in south-west Wales, which was under the influence of the Normans at a very early stage in the conquest of Wales, and secondly to an area comprising the old counties of Ynys Môn (Anglesey), Caernarvon and Meirionydd, which were the core of the old Welsh principality of Gwynedd in north-west Wales. This latter region was the last to succumb to the English at the end of the 13th century.

The thesis analyses the evidence for the presence and impact of sheep within the

[4] Throughout the thesis there have been issues raised with some nomenclature, particularly when referring to the Normans, Anglo-Normans or the English. As the Norman hold on England and Wales increased following the Norman Conquest in the 11th century the distinctions between purely Norman government and that of England gradually blur and become indistinguishable. Therefore, in this thesis, the term 'Norman' has been used exclusively for the period at the beginning of the 12th century, when parts of Pembrokeshire were invaded and ruled by Norman lords aided by influxes of Flemish and English immigrants. The term 'Anglo-Norman' has been used after that period until the 13th century when 'English' becomes more appropriate. See Davies, R R, 2000, pp 142-145 for a discussion on the problem of this nomenclature, a problem that has often been pushed to the sidelines.

economy and society of the two areas in order to draw out any disparities or similarities, and to place them into context with the generally successful wool- and cloth-based economy of England. Both Gwynedd and the county of Pembrokeshire are peninsulas that project into the Irish Sea, so the climate would have been similar. Gwynedd is more mountainous that Pembrokeshire, (which aided its resistance to Norman and English influence). The climate of Wales as a whole is regulated by the mountains central to the country, giving the western areas a high rainfall while the eastern areas are in a rain shadow. The surrounding sea gives it a maritime type climate with mild winters and cool summers.

The thesis is divided, therefore, between these two areas, and tries to compare and contrast the evidence that is available. As has been stated earlier, direct comparison is not always possible. The records also fall into two distinct groups, those available from the 12th to the 14th centuries, and those from the 15th to the early 17th centuries up to the end of the reign of Elizabeth I in 1603. In the early period the evidence mainly comes from governmental, manorial and ecclesiastical record keepers; later records see the beginnings of probate records and also records kept by individuals on their own estates.

Sources and Methodology

Initially, the research took the form of a review of the historiography to ascertain the scope of information that was already available. It became apparent that there have been no recent studies that provide a comprehensive picture of the sheep and wool industry in Wales (Ryder[5] in his book *Sheep and Man* covers the period from the 11th to the 17th centuries in six short paragraphs; England of the same period has over thirty pages).

Most work at any time has been done on parts of the sheep farming enterprise, some isolating areas geographically[6] and/or looking at conditions as a snapshot of a particular time[7]; others separate the keeping of sheep from the wool trade[8], or cover it

[5] Ryder, M L, 1983

[6] Elfyn-Hughes et al, 1973

[7] Thomas, C, 1968

[8] Trow-Smith, R, 1957

briefly within the context of agriculture as a whole (as with Jack[9], and Emery[10]). This thesis therefore attempts to draw together the disparate strands of evidence, and to place them in the context of the whole of Wales (through the two regions which can be seen as characteristic of other areas of Wales because of their relative histories), and the whole of the wool-producing industry. Wherever possible, original documents, or transcripts of those documents, have been used. These are indicated in the bibliography.

Once it was obvious that any information would be disparate and fragmented, it became necessary to have a framework within which to place the evidence as it appeared. Agricultural practice and development is closely linked to political, social, legal and cultural matters, and an understanding of these aspects is necessary to place them in context. Chapter 2 is, therefore, concerned with an outline of the geography of Pembrokeshire and Gwynedd, together with relevant detail concerning Welsh and Anglo-Norman/English social and economic structures. Once this was in place, any references to sheep, wool or trade were followed up and could be linked to this underlying framework.

Chapter 3 looks at Pembrokeshire from the 12th to the 14th centuries, where the 'Black Book of St David's' (edited by Willis-Bund) was invaluable in looking at the stock and customs found on the estates of the bishop of St David's in the 14th century, situated principally in the north of Pembrokeshire. Other records of the same estates in the 13th century were also available, and gave the opportunity to compare stocking levels on the manors about thirty years apart. The writings of Giraldus Cambrensis (Gerald of Wales) proved to be very useful for the background; also of general use were the various treatises on medieval agricultural practice. Other evidence came from a variety of sources including Inquisitions Post Mortem and Ministers' Accounts taken on Anglo-Norman lordships in Pembroke, ecclesiastical records from various monastic landlords and customs records from the ports of Haverfordwest and Milford.

In Chapter 5, which covers the same period in Gwynedd, some of the most useful medieval records were found in Extents, or surveys, carried out by Edward I in an

[9] Jack, I R, 1988

[10] Emery, F V, 1965

attempt to find out the details of the holdings of the defeated Prince of Wales, Llewelyn. These proved invaluable in looking at the agricultural practices in Gwynedd just prior to Edward's conquest. Commutation of services to rents in the post-conquest period means that much of the agricultural basis of the rents was lost. Taxation records were also invaluable, such as the *Taxatio Ecclesiastica* of 1291 which details the holdings of the various ecclesiastical establishments, and the Lay Subsidy rolls which detail attempts to tax the lay population at the end of the 13th and the beginning of the 14th centuries. These latter two sources give details of the actual stock held by individuals and their nominal value, and provide a much-needed snapshot of agriculture at that time. The undeniable 'welshness' of Gwynedd led to an investigation of the various versions of the Welsh Laws of Hywel Dda. They are of interest because of the importance (or lack of) given to sheep and wool from the 10th century when they were first codified or written down (as far as we are aware), through to the 13th century.

Chapters 4 and 6 cover the period from the 14th century to the beginning of the 17th century in Pembrokeshire and Gwynedd respectively. The period from the 14th century onward provided more in the way of personal details such as those of George Owen from Cemais in Pembrokeshire, and Morus Wyn of Gwydir in Gwynedd, both substantial landowners. George Owen wrote a number of treatises on local farming conditions and practices, with his *Description of Penbrokeshire* [sic] and *The Taylors Cussion* being of most use. He set out accounts of various farms on his estate showing how the economy of the farm worked. Unfortunately, they are for one year only as he was using them as a way to show the best way to manage the farm. Morus Wyn, on the other hand, provides sets of accounts for the farms on his estate over three years, the only source to provide a data set that shows changes that occur year on year.

It is this lack of an adequate data set from any source that precluded the use of detailed statistical analysis of any of the sources such as has been done by Overton and Campbell[11] on estates in Norfolk. For the most part, only simple analyses, such as looking for means and percentages, have been possible, or useful. In order to obtain some idea of the relationship between sheep and cattle in the Aberffrau Lay Subsidy

[11] Overton, M & Campbell, B M S, 1992

returns an analysis using Pearson's correlation coefficient (or product-moment correlation coefficient) was attempted. This analysis took two variables from a normally distributed population[12] and used the following equation to work out the correlation coefficient.

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{)[n\sum x2 - (\sum x)2][n\sum y2 - (\sum y)2]}$$

r is the product-moment correlation coefficient

x and y are the two variables

In the case of Aberffrau the two variables were the number of sheep and cows respectively held by each taxpayer. The value of the coefficient can range from –1 to +1 with zero showing that there is no relationship at all. The result from the above analysis produced a positive correlation of 0.411808.

In the 16th century probate records begin to appear in significant numbers, but they are only of use for the Pembrokeshire region; probate records from Gwynedd are only available in useable numbers from the seventeenth century onwards. These types of record are extremely valuable as, for the first time, details of the type and number of stock held by the smallholder become available. Some records from a period after the death of Elizabeth I have been included as they do give an idea of the types of stock that were kept by the householder prior to his or her death.

'Port Books', compiled as records of customs taxes in the various ports around the country, also show the trade that was taking place, both imports and exports, from the coastal towns of both Pembrokeshire and Gwynedd. Trade is extremely difficult to quantify without such specific records. Records concerning much land-based trade have been lost, but those surviving from a Fair in Newport, Pembrokeshire in 1603 do give a hint of the types of transactions that were taking place. Unfortunately, very few records of this type have survived, and none from Gwynedd.

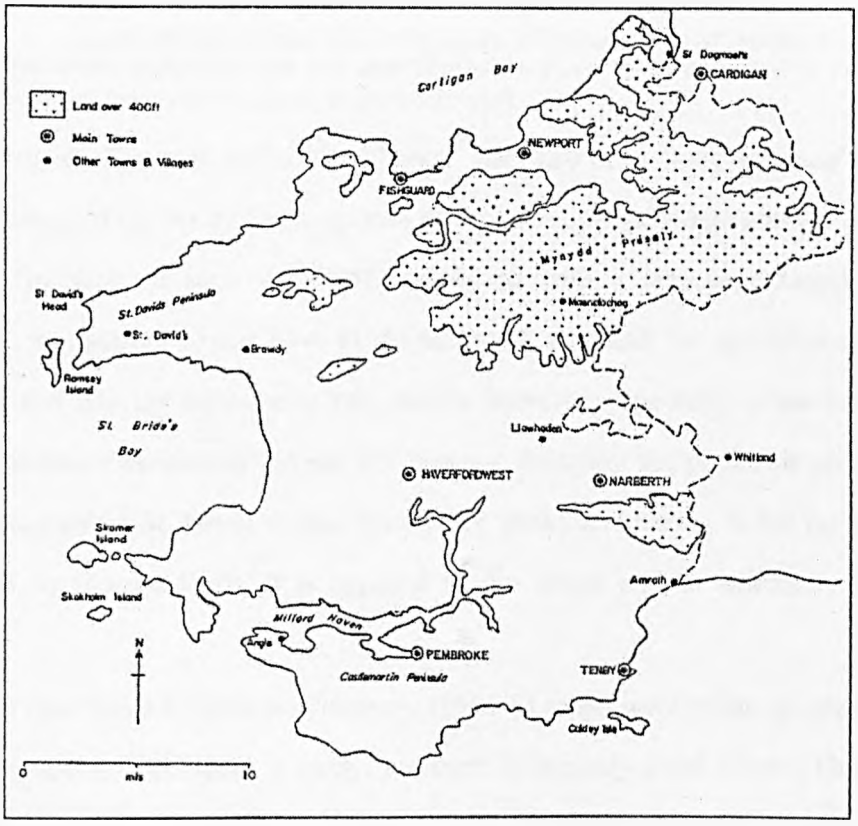
[12] Ebdon is of the opinion that normal distribution is very rarely found in geographical data. Nevertheless, this technique is widely used and in geographical literature the term 'correlation' can usually be taken to mean product-moment correlation. Ebdon, D, 1985, , p 91

CHAPTER 2. PEMBROKESHIRE AND GWYNEDD – AN OVERVIEW

This chapter will look briefly at the geographic and social conditions to be found in both Pembrokeshire and Gwynedd. A view of the social structures of the Welsh in particular, as compared to those of the Norman/English/Flemish immigrants, is necessary to understand how developing agricultural and economic pressures would or could affect the life of most of the populace, and would influence the direction that economic development was to take. The geographical locations of the two areas are also important, as an understanding of how and why the two areas could have so rapidly developed, giving such different outlooks on agriculture, is rooted in the landscape.

2.1 A Description of Pembrokeshire[1]

Figure 2.1 Pembrokeshire Topography[2]



[1] All references to Pembrokeshire refer to a land area consistent with the county boundaries of Pembrokeshire just prior to the county restructuring of 1974.

[2] Taken from John, B, 1976, pp 26-7

Medieval Pembrokeshire was also not as well wooded as were other parts of Wales, even the mountains of Snowdonia[3]. There were large woods, particularly in the more easterly parts of the county such as around Narberth or at Llawhaden, but not on the same scale as elsewhere in Wales. The deep river valleys were also well wooded but much of rest of the land area was either *rhos (*moorland), this aspect giving one area of Pembrokeshire its name from pre-Norman times, or un-wooded plains used for animal grazing or tillage. This was noted by Leland[4] on his 16th century tour through Wales, describing Pembrokeshire as having 'the ground ... sumwhat baren of wood, ... al Penbrookshire almost is, except where a few parkes be'.

By the 16th century much clearance of woodland had taken place throughout Wales, but one is left with the distinct impression that, even at an early date, Pembrokeshire was not well endowed with extensive forests. The *Extent of Cemais* of 1594 gives some indication of the clearance of woodland. Coed Cadw

> ... was a foreste belonging to the lordshipp of Kemes and never rented out until it was leased to the aforesaid John and Elizabeth nor ever tylled before. The wood thereof was long sythence destroyed and consumed[5].

A wood outside Newport called 'Coedllonck' had also been 'long sithence' destroyed by the removal of timber by the burgesses of the town, the privilege granted to them by charter[6]. The lack of such woodland, combined with a landscape largely without prominent mountains, would have made access to the land for agriculture relatively easy. The soil was not necessarily very fertile, however, especially in the north of the county. Giraldus Cambrensis[7], in the 12th century, describes the peninsula on which the church and town of St. David's were situated as 'rocky and barren. It has no woods, no rivers and no pasture lands. It is exposed to the winds and to extremely inclement weather'.

By time Leland wrote his *Itinerary* (1536-9) crops were being grown there. He wrote 'The soil of Pebidiauc is stony, yet there is meately good corne[8]; Dewys land,

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[3] Davies, R R, 1987, p 141
[4] Leland (Toulmin-Smith, L (ed), 1906), p 115
[5] Howells, B E & K A, 1977, p 21
[6] ibid, p 17
[7] Thorpe, L (ed), 1978, p 161
[8] Leland (Toulmin-Smith, L (ed), 1906), p 64

alias Pebidiauc, ... bare of wood and meately plentiful of barly corne, and reasonably of al other corne'[9].

Other parts were more conducive to tillage. Giraldus (in the 12th century) gives a vivid description of his birthplace, the castle of Manorbier near Pembroke, and states that the region was 'rich in wheat, with fish from the sea and plenty of wine for sale'[10]. Leland, however, describes Manorbier as a 'towne of howsbundry'[11] suggesting that, by the 16th century, the area was used more for pasture than arable land.

George Owen (writing at the end of the 16th and the beginning of the 17th centuries) was still able to class 'corne' as one of the chief products of the county[12], stating that at least some parts of the county were 'much more apt for tillinge than for breede'.

Neither Giraldus nor Leland, in recording their perambulations around Pembrokeshire, paid much attention to the livestock that they must have encountered, regarding the type of crops grown as a more important, or perhaps more obvious, indicator of the wealth or otherwise of a region. It was left to George Owen to give a more detailed account of the agriculture of Pembrokeshire.

He described his home county as being fertile, and 'loaden with Corne and grasse'. The more hilly areas were home to abundant herds of 'all sorts of Cattle'[13]. The best area for corn was the southern Hundred of Castlemartin, followed closely by Rhos which was 'champion', or plain, with very little in the way of woods[14]. The Hundred of Narberth was described as being woody, with more enclosures than elsewhere, as the inhabitants had carved them out of the forest. They were said to convert more of their land for its use solely as pasture than was the case in 'Dewysland', where there was more access to the fertilisers of the time such as lime, marl and sea sand[15]. The proximity of much of Pembrokeshire to the influences of the sea meant that the land

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[9] ibid, p 63
[10] Thorpe, L (ed), 1978, p 150
[11] Leland (Toulmin-Smith, L (ed), 1906), p 61
[12] Owen, G, 1603, i, p 54
[13] The term cattle referred to sheep and horses as well as what we regard as cattle today. Owen, G, 1603, i, p 11
[14] ibid, p 55
[15] Owen, G, 1603, i, p 55

was often swept by storms and high winds. There were large stretches of land bare of woods, or even enclosures, where great herds of cattle roamed[16].

2.2 A Description of Gwynedd[17]

In contrast to Pembrokeshire, Gwynedd supported large tracts of woodland and forest, and is quite mountainous. However, both are comparable in area, and both are influenced by the sea.

The region comprising Snowdonia (Eryri[18]) and its surrounding mountains proved to be very difficult to access although the Romans did attempt to build their roads throughout the area. Even in the 13th century Edward 1 built his castles around the fringes on the lower lying coastal areas[19].

In the 16th century, when Leland wrote about the area, he stated that all of Snowdon was forest and that little was grown in the hills except a little barley and some oats. 'If ther were the deere wold destroy it.'[20] Woodland was also plentiful around Conwy Abbey and Penmachno to the north of Snowdonia, as well as around Bangor and many other places[21]. It appears that most arable agriculture was carried out on the lowland coastal plains where reasonable corn was grown. This was certainly true of the region to the west of Snowdonia, the Lleyn peninsula. The Lleyn is a broad promontory which sticks out into the Irish Sea, but which is mostly lowland and which supported a series of Iron Age hill forts showing that the area was able to support populations of similar size to those of the medieval towns of Edward 1[22].

Leland found that the western end of the Lleyn was 'sumwhat playne and [ ] having very good plenty of corne and grasse, but very little woode.' The mention of grass shows that grazing animals were probably found there alongside arable land. The only actual reference to animals is seen on St Tydwal's Island off the southwestern tip of the

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[16] Owen, G, 1603, i, p 42

[17] The modern administrative area of Gwynedd corresponds closely with the medieval area of the same name. (Millward, R & Robinson, A, 1978, p 9)

[18] See Fig 2.2

[19] Millward, R & Robinson, A, 1978, p 15

[20] Leland (Toulmin-Smith, L (ed), 1906), p 81

[21] ibid, p 81

[22] Millward, R & Robinson, A, 1978 pp 39-43

Lleyn where Leland saw sheep and rabbits. At Criccieth, on the southeastern coast of the Lleyn, Leland also noted the presence of good corn and pasture, but he thought it not as good as that further west[23].

Figure 2.2 Gwynedd Topography Showing Land over 800 ft[24]

South of Snowdonia and the Lleyn (Llŷn) lies Meirionydd[25], which is also mountainous. The lowland areas were used for growing good corn but they were very limited. Most of the area seems to have been wood or pasture[26]. The Romans do not appear to have been very interested in this region[27].

To the north lies the island of Anglesey, Ynys Môn. There are nine Iron Age hill forts dating from just before the Roman occupation in 78AD, and a find of richly-decorated metal objects at Valley shows the importance of Anglesey in Iron Age times[28]. The Romans built a fort at Caer Gybi on Holy Island (off the northwest coast of Anglesey) that may have been to protect their trade routes. Bede, a monk living in

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[23] Leland (Toulmin-Smith, L (ed), 1906), p 87-88
[24] Taken from Bowen, D Q, 1977 p 14
[25] The modern Welsh version 'Meirionydd' will be used wherever possible rather than the English 'Merioneth'.
[26] Bowen, D Q, 1977, pp 76-78
[27] Millward, R & Robinson, A, 1978, pp 50-51
[28] Millward, R & Robinson, A, 1978, pp 26-27

Northumbria in the 7th and 8th centuries, wrote that Anglesey was able to support a population of 960 families[29]. Giraldus Cambrensis stated that Anglesey was the granary of Wales and that there were 343 settlements there, the equivalent of three *cantrefi*[30].

Giraldus and his company only spent eight days traveling around north Wales, possibly because of the difficult terrain. Consequently his observations of the region were fairly sketchy compared to his views of the southern half of Wales. He describes the 'territory of Cynan' (Gwynedd), and especially Meirionydd, as the 'rudest and roughest of all the Welsh districts. The mountains are very high, with narrow ridges and a great number of very sharp peaks all jumbled together', and the mountains of Snowdonia as having summits reaching the clouds with pastures that could feed all the herds in Wales[31].

Compared with Pembrokeshire, Gwynedd seems to have been more difficult to access, more heavily wooded and with less arable land available for tillage. Around its coasts it was subject to influences from other cultures, but inland lack of accessibility meant that it was slow to have changes imposed on it and the relative isolation allowed the local population to resist invaders.

2.3 Welsh Society

At this point it is important to try to define the meaning of the term 'Wales', as only after the Acts of Union in 1536 and 1542 was any permanent boundary given to the country we now know as Wales. Prior to 1100 and before the Norman incursions of the late 11th century Welsh society was well developed and well organised. The region was often split into disparate principalities and was not united under one king or overlord, although this had been attempted, and achieved, at various times[32]. Administratively Wales was divided into a number of political regions or *gwladau.* In each *gwlad* a king or lord exercised control through his courts or *llysau,* which made up his royal

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[29] Bede, 1955, p 113 (book 2, chapter 9)

[30] Millward, R & Robinson, A, 1978, p 29

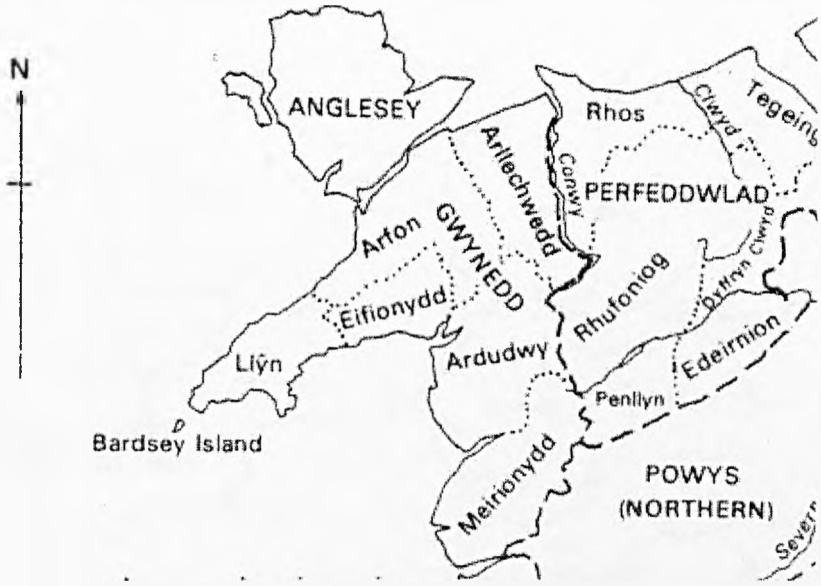
[31] Jones, T, 1949, pp 126-129; Thorpe, L (ed), 1978, p 182

[32] Bartlett suggests that it was this lack of a unifying dynasty that allowed to Normans/English to make such inroads into Wales and to take it over, rather than being subsumed into the region as occurred in Scotland. (Bartlett, R, 1993, p 84)

household. The *gwlad* was subdivided into *cantrefi* and each *cantref* was responsible for collecting the various dues or taxes from the local populace[33]. *Cantrefi* were subdivided into *commotes.*

Gwynedd was one of the four major principalities in Wales prior to the arrival of the Normans[34]. It consisted of the *cantrefi* of Anglesey, Llŷn, Eifionydd, Arfon, Arllechwedd, Ardudwy and Meirionydd (see Fig 2.3).

Figure 2.3 *Cantrefi* of Gwynedd[35]



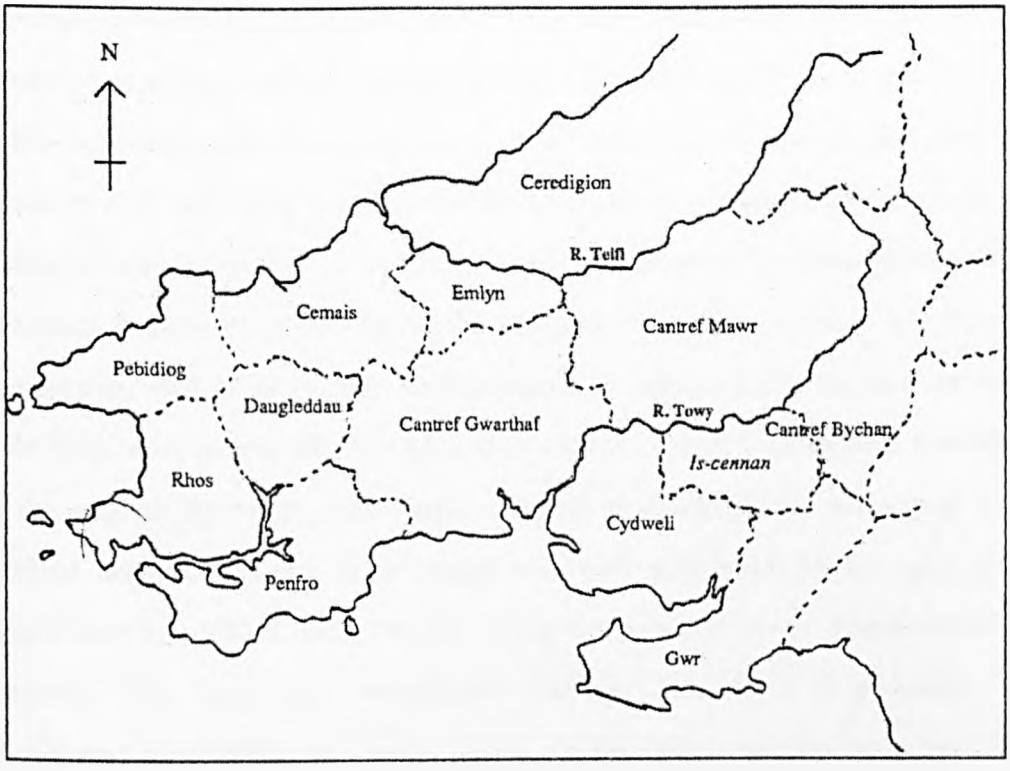
In the south, Pembrokeshire was part of the Welsh principality of Deheubarth, and covered mainly the *cantrefi* of Pebidiog, Cemais, Rhos, Daugleddau and Penfro.

In the north of the country many of the population were bonded tenants who serviced the lordships[36]. In return for their land they performed certain services and paid dues either in kind or, in later times, in cash. This was not unlike the system found in the manors of England, although the services required seemed to have been less onerous for the Welsh peasant. These tenants lived in small hamlets, tilled the land as instructed

[33] Rees, W, 1951, p 24-25. (See also Jones, G R J, 1960-63 for an in-depth study.)
[34] Walker, D, 1990, p 2
[35] Taken from Walker, D, 1990, p 3
[36] Rees, W, 1951, p 25

by their overseers, and practiced transhumance[37], freeing the land for crops in the summer, mainly oats, rye, and hay for winter feeding of the stock. At this time these hamlets were the only type of village to be found in Wales and much larger concentrations of population were unknown.

Figure 2.4 Pre-Norman *Cantrefi* of South West Wales[38]



Ceredigion	Cantref
Is-cennan	Commote
Towy	River

The stock was taken onto the hills during the summer[39]. The cattle needed to be milked daily and this also would have applied to the sheep, if for a shorter period. There were also many predators such as wolves roaming the countryside and the animals would have needed protection. Temporary houses *(hafodau)* were set up for the peasants to

[37]Transhumance is defined as the seasonal migration of livestock to suitable grazing grounds.

[38] Taken from Davies, R R, 1991 Map 2, p 22

[39] From the Kalends of May to the Kalends of winter. This is a Roman method of reckoning dates where in March, May, July, and October the Kalends begin on the sixteenth day of the month; in all other months they begin on the fourteenth. Time is reckoned backwards from that point.

take care of the flocks and herds[40]. In the winter the stock was returned to the land around the hamlets and allowed to feed on the fallow, thus manuring it at the same time. This was very important even in the more fertile areas.

Contemporaneously, groups of freemen were increasing in number[41]. By being granted land and living on it for a number of generations families or clans *(gwelyau)* could claim possession and pass the land down to their descendants. This was one way that new areas of land could be cleared and used for agriculture. These people practised partible inheritance (known as *gavelkind*) to all sons, and blocks of land gradually became split up with each inheritor, bar the youngest who retained the family home, building his own homestead on his patch of land. This gave rise to a network of isolated homesteads in contrast to the nucleated settlements of the bond tenants. The freemen also paid dues such as the *gwestfa,* which began as a contribution to the food and drink for the king as he moved around his territory with his *llys.* It later became possible to pay the *gwestfa* in money rather than in goods representing the beginnings of an organized taxation system[42]. This process was well established by the time of the Norman incursions. This land, however, could not be sold[43], even after death of the incumbent. The land was redistributed between the direct descendants, and consolidation of holdings was not an option for individuals wanting to expand their enterprises.

Both freemen and bond tenants worked their lands by cooperation with their neighbours and had large tracts of land in common use. The bond tenants were required to work some of the land in common as part of their terms of service, whereas the freeholders used it, perhaps, because it was the most efficient way of managing their often disparate blocks of land, or because their neighbours were often members of their immediate families. While Jones's work refers to the north, similar social systems are

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[40] Jones, G R J, 1964-65. See also Davies, E, 1973, p 13.

[41] Jones, G R J, 1972, pp 283-384

[42] Rees, W, 1951, p 25

[43] The use of *pridd*, a method of leasing did allow some transfer of land to take place, the earliest record being in 1286, before the conquest. (Dyer, C, 2003, p 177. See also Jones, G R J, 1985, p 167)

believed to have been present in the south of Wales[44], although the names and practices were slightly different, and it was onto these systems that the Normans imposed, or tried to impose, their own manorial system with demesne[45] farms worked by their tenants.

Gwynedd proved to be relatively inaccessible to the Normans and English because of the difficult terrain, and even in the mid 12th century the princes of Gwynedd ruled all of North Wales up to the Dee estuary in the east (including the territory of Perfeddwlad[46])[47]. It was during the reign of the Welsh prince Llewelyn ap Iorwerth. in the first half of the 13th century that development and 'modernisation' of the internal organization of Gwynedd was started. 'Commutation of renders, the development of princely authority in matters of law, governance and resources, and the establishment of a serviential aristocracy'[48] all made the transition to English rule in the late 13th century easier; by creating systems similar to those of the English establishment. Even so the political authority of Welsh rulers was relatively underdeveloped and political institutions did not have the degree of control found within English political systems[49]. The fact that this process of modernisation was incomplete meant, significantly, that remnants of the Welsh government and society were visible for longer than was the case in much of the south of Wales, allowing a view of pre- and immediately post-conquest agricultural preferences. The process of the development of a money economy was continued under Llewelyn ap Gruffydd with his need to raise revenue to sustain his principality, but again, this process was far from complete and some renders were still paid in kind rather than cash[50].

After the death of Llewelyn ap Iorwerth in 1240 there was a deterioration in relations between England and the Welsh regions culminating in the takeover of

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[44] Ellis, T P, 1926 cites comparable laws and practices found in north and south Wales.

[45] The *demesne* was the home farm of an estate as opposed to the remainder, which was rented out to tenants. The demesne was not necessarily a compact piece of land, but was found on various parts of the estate as is seen on the various manors of the Bishops of St David's in Pembrokeshire. The demesne depended on its unfree or semi-free tenants for labour, and they were tied to the land by labour services (Postan, M M, 1972, p 73).

[46] Also known as the Four Cantrefs, it was granted to Edward by his father, Henry III, in 1254, but in 1256 Llewelyn ap Gruffydd recaptured the territory and started the campaign that brought Meirionydd, Deheubarth (south Wales) and Powys as well as Gwynedd under his control (Carr, A D, 1995, p 63). See Figure 2.3.

[47] Davies, R R, 1991, pp 48-49

[48] Davies, R R, 1991, pp 250-251

[49] Given J, 1990, p 37

[50] Carr, A D, 1995, p 71

Gwynedd and all of the rest of Wales by 1283, the Edwardian conquest. In Gwynedd all the rights and revenues possessed by Llewelyn ap Gruffydd passed into direct control of the English crown and were administered by English officials[51]. This led to detailed surveys of land holdings and agricultural practice being carried out, giving a much needed insight into the region[52].

2.4 Settlement

Pre-Norman settlement throughout Pembrokeshire is likely to have followed the same lines as in the rest of Wales, with small townships (in reality small hamlets) and the development, over a period of time, of farmsteads throughout the countryside (see 2.3). Kissock has postulated that certain villages in Pembrokeshire, such as Jeffreyston and Jameston that have a radial pattern of development, are examples of such pre-Norman settlements. In north Wales this form has been recognized as defining sites of ancient importance; in Pembrokeshire the basis for this has been lost[53]. The presence of greater numbers of settlements with the designation of 'town' came in post-Norman times. However, the process of urbanisation had already begun to some extent in north Wales, with small trading centres being set up, usually connected to the *llysau* of the princes. Some of these centres achieved borough status even before the English conquered the area[54], but were relatively underdeveloped.

Evidence from the 12th and 13th centuries shows the development of many new settlements in Pembrokeshire and new boroughs throughout Wales, the vast majority through conquest and inward migration of new settlers, such as the Flemish and English in Pembrokeshire, and English settlers in late 13th century Gwynedd[55]. Such settlements could be thought of as towns through two, though not always connected, main criteria. One is economic, with issues of population density, commercialization, and specialization of some functions (there is a gray area here as to when these criteria are sufficient to push a settlement into the category of town). The other criterion is 'town'

[51] Dodd, A H, 1972, p 33
[52] See Chapter 4.
[53] Kissock, J, 1997, pp 133-135
[54] Carr, A D, 1995, p 70
[55] Dyer, C, 1997, p 166

as a legal entity, so designated by charter, irrespective of economy or population[56]. The Anglo-Normans in Wales created many towns in the legal sense when they set up settlements around their castles in both south and north Wales[57]. Residents in these legal boroughs were given certain privileges and liberties, which were incentives for settlers to move in. Boroughs were important in the economy of Wales as they acted as a focus for trade, and would have allowed larger scale ventures to develop, aiding both rural and urban enterprise. Farming would have benefited with the development of markets accessible to the smaller-scale producer.

It was the creation of the marketplace that was at the heart of the success of the town. It brought in people from the surrounding areas on a regular basis to sell their goods, thus allowing others to set up enterprises selling goods that these people could then buy[58]. At times of population increase they also acted as 'people magnets' by drawing in those who were searching for work. In Pembrokeshire population increase of the 13th century brought about the development of small hamlets as offshoots of larger villages, as in Carew Newton and Manorbier Newton[59], but the ravages of the plagues of the 14th century drastically reduced the population of the area as in other parts of Wales, and many such settlements were reduced in size or vanished altogether.

Castles attracted settlements around them, which could be given borough status. In Gwynedd new fortresses were erected relatively quickly to make sure that Edward could protect his new acquisitions[60]. English immigrants and troops were the main settlers here. These settlements were probably more an attempt to draw in non-Welsh settlers to shore up the conquest than to develop an initial commercial and economic environment particularly as these immigrant burgesses were expected to defend the castles around which they had grown[61]. Townspeople controlled trade by creating rules and regulations both within the town and in the surrounding countryside attempting to

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[56] Bartlett, R, 1993, pp 167-168
[57] ibid, p 170
[58] Dyer, C, 2003, p 197
[59] John, B, 1976, p 59
[60] Davies, R R, 1991, pp 359
[61] Bartlett, R, 1993, p 172

encourage (or force) the local population to come into the town to sell their wares. Beaumaris and Caernarfon were among the leading towns of medieval north Wales for trade and/or as ports, on a par with Haverfordwest in the south, all having developed around castles[62].

The towns of Harlech, Criccieth, Caernarvon, Beaumaris and Conwy were all important trading centres, all near the sea allowing for ease of supply in a region that had few land routes for communication with England[63]. However, when Leland traveled in the region in the 16th century he noted that '[at] Crikith be a 2 or 3 houses[ ]. There hath beene a franchised toune, now clean decayed'[64]. Inland, the settlements remained small and only grew slowly.

Pre-Norman Pembrokeshire was affected by the constant inroads into the area by Norsemen, Anglo-Saxons and their fellow Welshmen as details from the *Brut y Twysogyon*[65] show. The Vikings also left a legacy, seen principally in the place names of coastal locations such as Fishguard, and of islands such as Grassholm and Skokholm[66]. The conclusion must be that, far from being a unique event, the incursions of the Normans were just another problem for the Welsh inhabitants to contend with. As far as the Normans were concerned, Wales was one more conquest to make in the climate of Norman expansion throughout Europe[67]. The Normans and their allies (particularly Flemish mercenaries), who took over large areas of the county, imposed their own rules and regulations upon it[68], and parts of the south of the county (particularly those areas covered by the ancient *cantrefi* of Rhos, Daugleddau and Penfro[69]) were (according to George Owen[70]) emptied, to all intents and purposes, of the indigenous Welsh. However, the fact that Welsh personal and place names persisted

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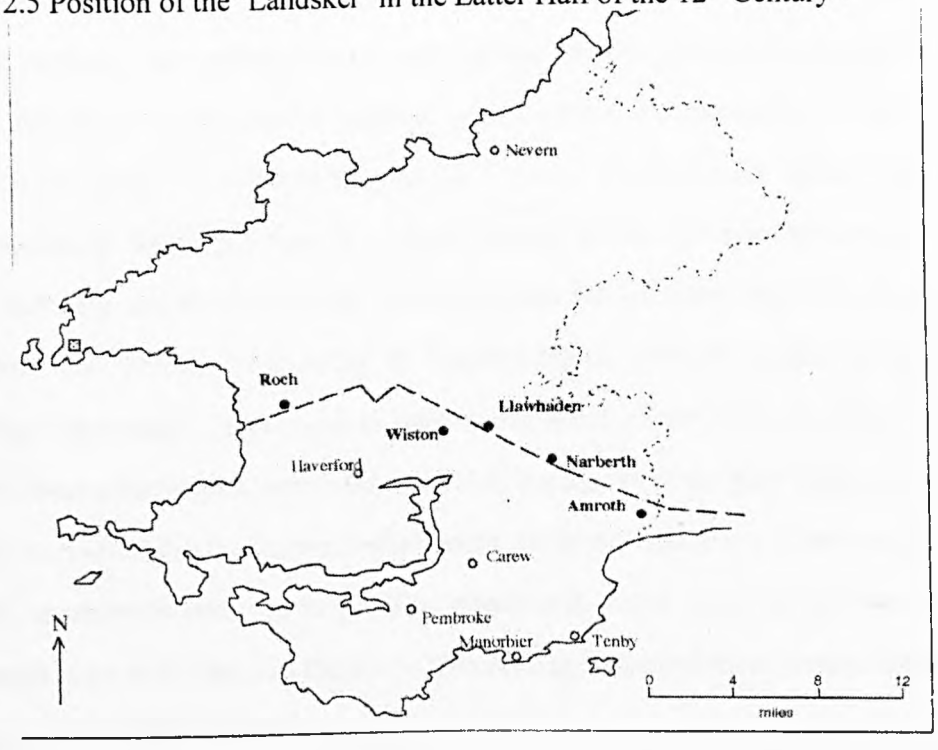
[62] Carr, A D, 1995, p 96
[63] Millward, R & Robinson, A, 1978, p 72
[64] Leland (Toulmin-Smith, L (ed), 1906), p 88
[65] Jones, T, 1952, pp 3-16
[66] Lloyn, H, 1976, pp 8-9 (See also Potts, W T W, 'History and blood groups in the British Isles', *Medieval Settlement*, Sawyer, P H (ed), 1976).
[67] Walker, D, 1990, p 20
[68] See below.
[69] See Figure 2.4.
[70] Owen, G, 1603, i, p 39

to some extent in all of these places, albeit in a very minor way in Rhos, indicates that this 'ethnic cleansing' was not complete.

Figure 2.5 Position of the 'Landsker' in the Latter Half of the 12th Century[71]



- Norman Castles along the 'landsker'
- Other Norman Castles
- St. Davids

'Landsker' dividing those lands under fairly secure Norman control in the south from the northern regions

The foreign influence over the whole of Pembrokeshire was varied in its effectiveness. In the northernmost areas of Pembrokeshire, and also in those eastern areas of the county that bordered what was the 16th century county of Carmarthenshire, Welsh social structure and language retained its influence.

Modern place names of the whole county of Pembrokeshire clearly show a distinct dichotomy between north and south, these areas separated by a 'landsker' or border, nowadays seen principally dividing areas with a preponderance of Welsh names, and those of English/Flemish derivation; it also corresponds to areas with different language preferences. It was tangibly represented by a series of fortifications, the remains of which can still largely be seen in central Pembrokeshire at Roch, Wiston,

[71] Taken from Davies, R R, 1991, p 220

Llawhaden, Narberth and Amroth (see Fig 2.5). These can be seen as an early military frontier protecting the newly acquired Norman territories from the Welsh[72] and acting as points of influence throughout the local countryside. It divided the county into two distinct portions; the southernmost parts of Pembrokeshire under Norman/English control for longer uninterrupted periods, with northern Pembrokeshire more loosely governed in terms of Norman/English law, more Welsh in its social structures, accommodating Welsh practices to a greater extent. It was the development of castles by the Normans and their allies that provided nuclei for settlement that created many of the towns and villages seen today in Pembrokeshire. Not all castles succeeded in attracting a permanent large town to their walls; some of the earliest castles (such as Wiston) were overrun and destroyed by Welsh insurgents at an early stage and did not manage to re-establish themselves; others were not in the right place to encourage trade, or their incumbents declined in political power and status. Most of the stone castles were built close to the sea and the towns that developed around them were helped by the trading opportunities this brought.

The manorial system introduced by the Normans also encouraged the development of more permanent settlements, particularly in the south of Pembrokeshire where Norman influence was strongest; groups of houses clustered round small castles or fortified manor houses, often incorporating a church.

Major allies of the Normans were Flemish immigrants encouraged to settle in the region. Certain Flemish lords acted as *locatores*[73] in order to establish settlement (Tancred and Wizo were two such recruiters. Wizo founded the settlement of Wiston in the district of Rhos some time in the early 12th century[74] and raised a castle there as the centre of the lordship of Daugleddau, a fief of the lordship of Pembroke[75]). The presence of immigrants from Flanders has been mooted as playing an influential part in

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[72] John, B, 1976, p 56

[73] 'The *locator* [ ] was an entrepreneur who acted as a middleman between the lord [ ] and the new settlers. [He] was responsible for [ ] recruitment of the colonists and the division of land, and received [ ] a substantial landed estate in the new settlement with hereditary privileges.' Bartlett, R, 1993, pp 121-122

[74] Rees, J R, 1897, p 96

[75] Rees, W, 1947, p 27

the development of the cloth making industry in this and other parts of Wales[76]. The Flemings as a whole were noted for their weaving skills and Flanders supported a successful industry based on the production of fine textiles. This industry flourished, starting in the 11th century and continued into the 14th century, when increased competition from English cloth exports together with a decrease in wool imports on which the industry survived, took their toll[77]. Apart from their famed talents as soldiers, they were also noted for the quality of their husbandry[78] and general agriculture[79]. It is likely that they or their families brought this expertise with them when they settled in Pembrokeshire.

Large scale Flemish immigration into Pembrokeshire took place at the behest of various Anglo-Norman monarchs, for example William Rufus (1087-1100) and Henry I (1100 - 1135). According to Camden an area of Pembrokeshire 'called by the Britans (Welsh) ROSE or ROS' was settled by the Flemings by the leave of Henry I when the sea, breaking its banks, overflowed great parts of Flanders[80] forcing the inhabitants to flee to other countries. The date of this inundation is unclear but probably took place between 1105 and 1113[81]. These people were actual refugees from a natural catastrophe. They were given land and places to live in Rhos and around Pembroke and Tenby, as well as other places, and they began the building of the towns of Tenby, Pembroke and Haverfordwest in order to protect themselves from the local Welsh population.

Henry II (1154-1189) was responsible for another large migration when he reportedly banished all Flemings brought into England by his predecessor Stephen (1135-1154)[82]. Some of these were sent to 'theire Cozens' in Pembrokeshire[83]. It is not

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[76] Mendenhall, T C, 1953, p 2

[77] Power, E, 1941, pp 12-13; see also Nicholas, D, 1979, p 23

[78] Camden's Brittania (MDCVII) (Gough, R (ed), 1806, Vol 3, p 144). Camden was a 16th century antiquary. Much of his work is therefore unsourced, and must be treated as such.

[79] Giraldus Cambrensis, p 77, (translated by Hoare, R C, 1976)

[80] Camden's Brittania (MDCVII) (Gough, R (ed), 1806, Vol 3, p 144)

[81] Owen, H, 1895, p 96-101

[82] Owen, H, 1895, p 97; for further references see Anon, 1850, 'The Flemings in Pembrokeshire', *Archaeologia Cambrensis* Vol I, pp 138-142

[83] Owen, G, 1603, i, p 17

beyond the bounds of probability that the agricultural and practical skills of the Flemings would have infiltrated and influenced a neighbouring local population, so enhancing the keeping of sheep, the production of wool, and also the weaving of cloth for the local market. Certainly in 1337, when Edward III was concerned about restricting imports of foreign cloth into his kingdom, he issued a call to any cloth workers from whatever country to come and settle in return for certain privileges and protection. Further large numbers of Flemings came to England, Ireland and Wales in response to the invitation[84], and, as southern Wales was the centre of Welsh cloth manufacture at that time, it is likely that Pembrokeshire was one of the places to which they migrated.

By the end of the 16th century there were three market towns in Pembrokeshire, Pembroke itself, Haverfordwest and Tenby, all in the south of the county. George Owen described Pembroke as being 'verie ruinous and much decayed, yet good for such houses as are standinge'[85]. Haverfordwest was a wealthy town, situated on the Cleddau River at a point below which the river ceases to be fordable; Tenby was 'a little towne, lyvinge by the sea'. Milford Haven was also well used as a safe anchorage for ships. George Owen dismissed all other towns in the county as being 'poore and decayed'. The development of Milford Haven for a burgeoning trade in transport of goods by ship in the 16th century tended to reduce the importance of ports along the northern coastline of Pembrokeshire.

Throughout Gwynedd and Pembrokeshire settlement of any type was affected by the lack of good communications overland. The terrain of Gwynedd was a major drawback, and even the relatively low-lying landscape of Pembrokeshire proved difficult to access. Both regions were relatively remote from England. Access to the sea would therefore be vital for trade.

2.5 The Church and Monastic Holdings

The foremost landholder in Pembrokeshire was the Bishop of St. David's, who held

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[84] Jones, E J, 1928, p 28

[85] Owen, G, 1603, iii, pp 349-59

land in his own right as well as overseeing church lands belonging to the See of St. David's. The Bishops were able to exercise a considerable degree of social and economic power arising from their substantial land holdings and their control over the distribution of patronage[86].

The See of St. David's was one of four dioceses in Wales; the estates of the Bishops of the See of St. David's comprised large areas of land in Pembrokeshire, particularly in the ancient *cantref* of Pebidiog, and to a lesser extent in Cardiganshire, Carmarthenshire and Breconshire. These estates were run in a similar way to Norman lay manors, but large areas of land were owned by the See outside Pembrokeshire and, in the 12th and 13th centuries, were to be found in Welsh controlled and governed areas. Records allow some insight into the differences that this dichotomy produced in agricultural practices[87].

When Bishop Bernard took over the See and its lands in 1115, he began the process of 'Normanisation', albeit constrained to some extent by Welsh law as far as his Welsh tenants were concerned. In the south of the county, where Welsh law and custom had already been significantly eroded, this included some degree of manorial tenure on ecclesiastical land holdings there.

The Knights Hospitallers were also prominent landowners, principally in the southern part of the county; some establishments, like the preceptory of the Knights Hospitallers at Slebech, were on a grand scale. Slebech was situated in the lordship of Daugleddau (Pembrokeshire) on the northern bank of the Eastern Cleddau, originally in the possession of Wizo the Fleming. His son or grandson was responsible for establishing the Knights at Slebech and many of the donations to the Order seem to have a connection with the 'Flemish' areas of Pembrokeshire. Areas not normally associated with Flemish settlement such as the neighbouring lordships of St. Clears and Narberth gave little to, and had little influence with, the Knights[88].

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[86] One Bishop, Peter de Leia, is accused by Giraldus Cambrensis of putting benefices up for sale, and occasionally having to accept sheep as payment. (Pryce, H, 1986-7, p 277)

[87] See Chapter 3.

[88] Rees, W, 1947, p 26, p 31

Monastic holdings were varied and depended on the type of institution. The Augustinian Canons in south Wales were located in or near towns (Haverfordwest and Carmarthen) and did not have large estates associated with them; the Benedictines in Wales, represented in Pembrokeshire by the priory at Pembroke, also did not seem to possess much land, but the abbey of St. Dogmael's (Cardigan) of the 'reformed' or 'new' order of Tiron possessed substantial land holdings. This land was found mainly in the north of the lordship of Cemais and in the south east of that lordship at Mynachlog-ddu. Land at Fishguard was added in the 13th century[89].

Although the Cistercians were prominent landholders and sheep-keepers in many parts of Wales, they do not feature in Pembrokeshire except for a grange at Blaengwyddno[90] attached to the Abbey of Whitland. However, they were relatively well represented in Gwynedd. The Cistercians were a monastic order that believed in manual labour as part of their religious ideals. Their communities comprised monks and *conversi*, the latter being laymen who took vows and who were, essentially, the 'workers', both in the monastery and on granges, the outlying farms characteristic of Cistercian estates. Their existence enabled the Cistercians to sustain an agrarian economy, with extensive land holdings[91]. They were known as the 'White monks' from the colour of their habits, produced from undyed wool, which was probably a product of their own enterprises[92]. They are of significance as they were well known as substantial producers of wool and keepers of sheep.

Cymer Abbey was founded in 1198 on the borders of Gwynedd, but it never developed to any great size and the church itself was never finished[93]. Most of the land associated with it was found within Gwynedd. It appeared to be distinctly Welsh in the racial composition of its monks and *conversi*[94]. Aberconway Abbey was founded in 1186 when a group of monks traveled to Rhedynog Felen, the original site of

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[89] Cowley, F G, 1977, p 63
[90] Rees, W, 1966, plate 35
[91] Williams, D H, 1984, p 2
[92] ibid, p 1
[93] Williams, D H, 1981, p 36
[94] See Lewis, F R, 1938, for an article on Cistercian political affinities.

settlement, although they finally settled at Aberconway itself shortly afterwards (the date is not known but certainly it had moved by 1197)[95]. Aberconway became the family monastery (and mausoleum) of the native princes of Gwynedd. However, it was dismantled by Edward I in 1284 to make way for his castle, and the community was moved to Maenan, seven miles away[96].

2.6 Sheep and Wool

Modern Wales is regarded largely as ideal sheep and cattle country; certainly the sheep population of the present day is very large, over six million according to the Welsh Tourist Board[97]. That equates to three sheep for every person in Wales. It appears, however, that the received wisdom is that sheep numbers were very low throughout Wales in the peasant communities in the medieval period[98].

The breeding season for sheep is in the autumn with the ewe producing a lamb early the following year. The lambs would have been left with the ewe until weaning, the time for this depending on whether the ewe was to be milked or not, milking usually lasting for about ten weeks[99]. Ewes' milk would be converted into cheese. Certainly most lambs would have been taken away from the ewe by May. Ewes need a certain amount of time to recuperate before 'tupping' time comes round again in order to be in condition to carry a lamb through the winter period.

Lambs and sheep were not seen as the meat animals that they are today. Lambs would have been small, as were most sheep types before the 18th century[100]. These sheep probably did not reach maturity until they were at least three years old. Two-year old ewes may have been put to the ram (or 'tup'), but were not usually expected to produce lambs until in their third year. Ewes were kept until either their teeth (or lack of them) prevented them from feeding, or until they were sterile. Wethers (castrated male sheep) were kept for longer periods only while their wool was important, and produced

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[95] Hays, R W, 1963, pp 4-5
[96] Williams, D H, 1984, Vol I, p 50
[97] Anon, Bwrdd Croeso Cymru / Welsh Tourist Board, 1981
[98] Ryder, M L, 1983; Trow-Smith, R, 1957
[99] Ryder, M L, 1983, pp 446-454
[100] See Chapter 3.

enough income to make feeding through the winter worthwhile. Their presence or absence in flocks is generally a good indicator of the importance placed on wool production. It appears that, in the main, sheep were only fattened and slaughtered for meat after other uses were no longer possible[101].

Wool is the natural product of the sheep and the amount and quality of wool produced depends on the breed of sheep and the conditions under which it was raised, a rural occupation requiring large areas of land for grazing[102]. In most cases wool was destined to be spun and then woven into cloth, although some underwent processing into felt. Wool production is very seasonal, with shearing taking place once, or at most, twice a year. Wool marketing usually took place around those times unless the fleeces were stored, which required dry conditions. If fleeces get wet during or after shearing, the wool goes rotten very quickly, even if stored. Therefore shearing only takes place if the weather is dry. Where transhumance was practised it is likely that shearing took place before the sheep were moved, to cut down mortality from overheating and exhaustion and to make handling and transport of fleeces easier.

Some of the best early evidence on the agrarian economy can be gleaned from the Laws of Hywel Dda, written down from the 10th century onwards (see Chapter 5) relating to Welsh society and its preferences. Early records from Pembrokeshire highlight in the greater part the attitudes of the Norman/English/Flemish incomers. This allows for some insight into the attitudes of the two sections of society. However, sheep were probably to be found as part of the agriculture in the vast majority of the Wales; only the scale of the enterprise was different.

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[101] Ryder, M L, 1983, pp 446-454

[102] On average a half a hectare of fallow is needed to feed 2 sheep for one year (Slicher van Bath, 1963, p 22).

CHAPTER 3. PEMBROKESHIRE SHEEP AND WOOL PRODUCTION

12TH-14TH CENTURIES

This chapter will argue that the part that sheep played in the agricultural milieu of the Middle Ages, the developments in sheep husbandry, and trade in wool in Pembrokeshire in the late medieval period cannot be divorced from the local political and social structures. In Pembrokeshire there developed a complex interrelationship that connected Welsh to Norman and other incomers through a web of land tenure and intermarriage that was difficult to unravel. Attempts to estimate the extent to which the presence of the Normans, and others, affected the local native agriculture can be helped by looking at the changes, if any, brought about in Welsh patterns of land holdings and agricultural practices after the Normans and their allies moved in[1]. There is the added complication that there were large land holdings in the county belonging to the See of St. David's since before the Normans invaded. Although the Normans managed to place one of their own men as Bishop in the 12th century this did not mean that the underlying Welsh nature of that See and its tenants was easily submerged. This chapter will look at the evidence for the keeping of sheep in different and varied sources, for example the writings of Gerald of Wales, accounts from crown administrators, the *Taxatio Ecclesiastica* of 1291, and customs accounts from the various Pembrokeshire ports, and will argue that it is possible to gauge broadly the importance of sheep and the wool they produced to the people of Pembrokeshire.

3.1 Giraldus Cambrensis

Giraldus Cambrensis (also known as Gerald of Wales) lived from 1146 to 1223 and, during his career, was Archdeacon of Brecon as well as being, at one time, a candidate for the bishopric in St. David's. He wrote, among a multitude of other things, much on perceived misdemeanors and malpractices relating to the administration of the church in Wales. Occasionally this allows a glimpse into the running of the affairs of the Episcopal estates in the diocese.

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[1] See Chapter 2 for Welsh medieval patterns of land tenure.

In listing charges against Bishop Geoffrey of Wenlock (1203-15) Gerald shows how incoming Bishops could stock their demesne lands, providing food and income for his needs and those of his large household. This practice was often necessary as the administrators, who were responsible for the See during a vacancy, perhaps caused by death or removal of the Bishop for other reasons, often sold off much of the previous incumbent's stock to raise revenue, and left the new Bishop to restock when he took over. These administrators were notorious for failing properly to look after the affairs of lands in their charge[2].

Gerald accuses Geoffrey of exacting excessive tallages from the clergy of the diocese. When the clergy objected, Geoffrey persuaded them that the payment was for once only to enable him to stock his lands. They paid, but the following year they were asked for a further payment, this time directly in sheep, to stock his demesne. Gerald writes:

> The Bishop and his assessors answered that the promise of the previous year was made concerning money, not sheep or other things and possessions. ... The tallage was extorted anew. ... For he who had sheep gave sheep to the equivalent of the money given the previous year; who had lambs and no sheep [tithe lambs?] gave lambs to the value of the sheep; who had neither sheep nor lamb could not be excused. For he who had given money the previous year to buy sheep now had to give again what they could.[3]

Regardless of whether Gerald was correct in his accusations, or not, this extract shows that sheep were important to the Bishop, and his advisors, for the stocking of his own demesne lands. A substantial number of sheep must have been involved for their specific mention, and therefore they must have played an important role in the overall agricultural production on the demesne estates, at least during the lifetime of Bishop Geoffrey at the beginning of the 13th century.

This was a time when sheep and, primarily, the production of wool were becoming increasingly important in England, perhaps influencing Geoffrey in his choice of stock for his estates. It does point to a perception, at least on the part of ecclesiastical landlords, that sheep were an important part of the stock on a holding as early as the beginning of the 13th century. It also shows that some of the clergy of the church were also involved to some extent with sheep rearing apart from the collection of tithe lambs.

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[2] Stephenson, M J, 1986, p 13

[3] Davies, J C (ed), 1946, Vol I, pp 337-9

Gerald, as Archdeacon of Brecon, was also concerned at the non-payment of tithes of wool and cheese from Pembrokeshire and other areas. He obtained letters from the Archbishop of Canterbury threatening to place non-payers under an interdict. He failed to obtain these tithes from the Flemish[4] settlers in the areas in Ros and Daugleddau. They went directly to the King who granted them a relaxation of the interdict after payment had been made for that privilege[5]. This could be a pointer to the Flemings being sheep keepers on a large scale, whereby they would have been liable for large tithe payments. Payment to the King for relief from the interdict and the tithe payment must have seemed the lesser of two evils. Flemish settlers were also to be found in Angle, they too wishing to be relieved of the payment of tithes on their cheese and wool[6]. Some non-ecclesiastical farmers[7], therefore, also seemed to have had sufficient numbers of sheep that they must have been a major part of their agricultural organisation in the early 13th century. As these farmers were not Welsh there is no way of knowing if this phenomenon was an import or a situation taken over from existing practices in the area.

3.2 Crown Administrators

When a diocese became vacant[8] the Crown appointed administrators to look after the day-to-day running of the estates until a new Bishop was elected. This would have been very important in the See of St David's as the land holdings were extensive. These administrators needed to know the value of rents and services due from the tenants and also what could be expected from the demesne lands of the absent Bishop. They therefore drew up accounts of the revenues of the estates and these are an invaluable source of information to the researcher.

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[4] See 2.4.

[5] *Giraldus Cambrensis Opera*, De Jure (Rolls Series) Vol I, p 24 (cited in Davies, J C (ed), 1946, p 276-7)

[6] ibid, p 28 (cited in Davies, J C (ed), 1946, p 276-7)

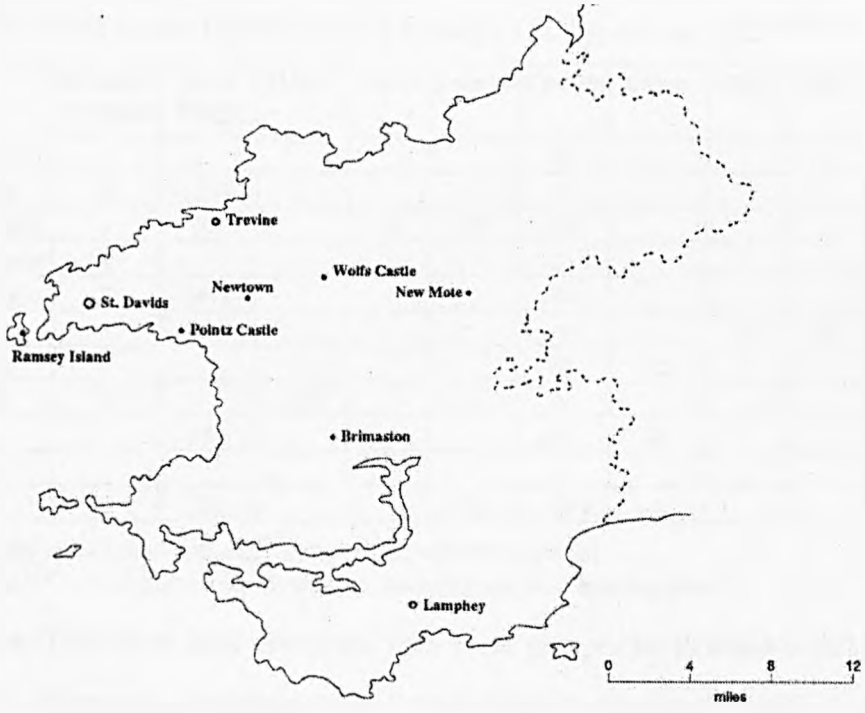
[7] The term 'farmer' has a precise meaning when used in literature referring to the medieval period - that of the person who is entitled to collect certain rents, and applied equally in contexts where land was not concerned and where it was. In the case here I have used the term in the modern context of a person who rents or owns land and uses that land for agricultural purposes. See Postan, M M, 1954, pp 10-12.

[8] See 3.1.

3.2 (1) Account of 1280

The account of Bogo de Cnoville for the See of St David's was produced from April 1 to June 10 in the eighth year of the reign of Edward I (1280)[9]. It is very limited, but shows that at least some of the rents in kind, being paid by the tenants of at least some of the manors, were sold to give a cash income to the Lordship. The individual manors involved are not listed. As only the total income from the sale is given, the value of the thirty-eight cows is indivisible from the twenty-three sheep sold. The cattle outnumbered the sheep and, as cattle were generally the more valuable of the two in any records that specify value, it appears that the sheep sold played a much less important part in raising revenue. It is not shown whether these were all the animals provided as rents or dues at the time, or just a selection that just happened to have been sold prior to the account. There is also no indication as to whether this was a normal sale or an exception, or the ratio between payment-in-kind to payment-in-cash.

Figure 3.1 Manors on the Demesne of the Bishop of St David's Keeping Sheep, 1293



The rents were due at Calemay (this is the Kalends of May[10] in the old Roman calendar that was still in use), a date which was commonly used in native Welsh custom

[9] Jones, F, 1964, p 15

[10] 15 May or May Day; this date was the traditional time when families moved to their *hafod* to use their summer pastures (Davies, E, 1973, p 13).

and practice for payment of certain dues or rents[11], indicating that some tenants may still have been following Welsh patterns of service.

3.2 (2) Inventory of 1293

In 1293 the goods of Thomas Beck, Bishop of St. David's, were noted in an inventory which was taken when the See was administered by Ralph de Broughton after Thomas Beck died. It covers only those estates and properties that were in the personal demesne of the Bishop and not tenancies in the Lordship as a whole. Only those estates in Pembrokeshire (see Fig. 3.1) will be examined here; those in other counties will be included as and where appropriate[12]. This inventory is much more detailed than the account of Bogo de Cnoville taken in 1280.

3.2 (2) (a) Stock Detail

Only six, out of a total of eighteen 'estates' in the inventory, have a record of sheep being present, but of those six most possess moderately sized flocks. Of the remaining twelve, six are listed as granges (barns) for storage of crops and animal carcasses.

Figure 3.2 Stock on the Demesne of the Bishop of St. David's in 1293 See Fig. 3.1

Manor	Draught Animals	Adult Sheep	Hogs*	Rams	Lambs	Cattle+	Calves	Pigs	Piglets	Other
Bewrwyk	2					12				
Bromaston	3	136#				8				
Wolf's Castle	3	200		10	140	10				
Castle Morris	2					15				
Pointz Castle	2	247#				26				
Lamphey	3					49		49	28	12 Horses
Llawhaden	5					52	12			
St David's	2		120			8				
Ramsey		44#				24	20			70 Goats
(Stud)										54 Horses
Trevine	3	166			88	28				

* Hogs refer to ewes and wethers of between one and two years old

'Muttons'[13], + Cattle are not divided into breeding and non-breeding stock

There may have been land associated with these granges let to tenants, but this is not recorded. (Certainly, according to an Extent taken in the See in 1326, the grange at Warren (*Woueran*) had land associated with it, which was leased to tenants who

[11] See the survey of 1326 (3.3) where this type of payment seems to be connected to the old native Welsh custom of *commorth*.

[12] PRO KR, Inventories, E 154/1/48 (cited in Jones, F, 1964, pp 16-20); references to places names have, where ever possible, been altered to their modern equivalents for ease of recognition. This applies also to all subsequent medieval references from other sources. Berwyck, however, is not a modern place name.

[13] Wethers, not meat sheep

included the chaplain of the parish. Also by 1326, that grange was in a position to be let along with a plot of land used as a haggard (a storage area) for 12*d* per year[14].) The remaining six entries include a stud for the breeding of horses, and also produce intended for the prebend of Brawdy stored in a variety of places in the parish of Brawdy and that of Hayscastle[15].

Where sheep are present it seems that they were kept in groups determined by age and sex. For example, at St. David's (*Menevia*) there appear to be only gimmers and hoggetts, respectively young ewes and castrated rams in their second year that have not yet been shorn. The lack of ewes of a breeding age, or any older wethers (castrated male sheep) or rams suggests that this flock was being kept separate to reduce the risk of breeding at too early an age. Their wool would have been an asset to the stock-keeper. Although not as fine as lamb's wool, the wool of shearlings (young sheep just prior to their first shearing at about a year old) is less likely to have faults in it due to breeding stress, and would therefore fetch a higher price than the wool of older sheep; even the wool of wethers gets coarser as the sheep gets older.

If wool had a very high priority in the eyes of the reeve or steward who ran the estates, this would encourage a delay in putting the young ewes to the ram and their segregation from the breeding flocks. Non-breeding sheep require less handling, lower levels of nutrition[16] and less specific care than a breeding flock, but there was a recognition that young sheep required more vigilance, as was noted in a treatise written around 1276 known as *Seneschaucy*. It stipulated that a shepherd of hogs should have to supervise no more than two hundred at a time, compared with four hundred wethers or three hundred ewes[17]. Segregation would also have had the added advantage of delaying the onset of breeding until the ewes had reached their full size in their third year, with a reduced likelihood of problems during pregnancy and birth. After shearing the gimmers probably would have been dispersed to a breeding flock while any hoggetts would either be sold or again dispersed to a suitable flock for wool production.

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[14] Willis-Bund, J W, 1902, p 193

[15] A Prebend was created to raise income to pay for a clergyman with specific duties in the cathedral, a canon.

[16] Owen, J B, 1976, p 228

[17] Oschinsky, D, 1971, p 276

Wool also appears to have been the purpose of keeping 'muttons' on Ramsey Island, Bromaston and at Pointz Castle (*Castrum Poncii*); these sheep would have been wethers or non-breeding ewes. Certainly there is no indication of lambs being present (lambs were still to be found in other flocks in this account), and so they could not have been kept for breeding or for the purpose of milk production (neither was meat regarded as a primary product of sheep at this time). The presence of seventy goats on Ramsey Island does suggest that these animals were kept to give milk, that being one major use to which goats were put in the medieval economy, apart from their hides[18].

Wolf's Castle (*Castrum Lupi*), on the other hand, definitely possessed a flock for breeding with ewes, lambs, and a sizeable ram herd; there were no hoggetts, gimmers or older wethers. Apart from rams, the same situation is found at Trevine (*Trefdyn*), the estate connected to one of the four official palaces of the Bishops. The ewes would have been associated with a dairy for the production of butter and cheese, ewes' milk being used for this purpose after the weaning of the lambs. The relatively large number of rams found at Wolf's Castle points to these being rams of more than one flock. Even in medieval flocks a single ram would be expected to cover thirty to fifty ewes over the breeding period[19], a figure similar to the performance of a modern ram. Wolf's Castle possessed 200 ewes, which would have required from four to seven rams; Trevine had 166 ewes needing three to five rams. It would be sensible to gather all the rams together after 'tupping'[20] to save on resources. The rams would have had to be isolated from ewes and also young sheep until the next breeding season as ewes that had not produced lambs that year can come into season at any time given the right circumstances; ewes being suckled would not be affected. Rams would be added to the appropriate flock, probably by the beginning of September at the latest, to give the next crop of lambs in January and February.

This segregation of the different types and ages of sheep on the demesne of the different manors belonging to the Bishop points to a well organised co-ordination of stock between those demesne lands in Pembrokeshire (and further afield if demesne

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[18] Trow-Smith, R, 1957, p 77

[19] Ryder, M L, 1983, p 448

[20] A ram is known as a 'tup'; the 'tupping' period is when the ram runs with the ewes for breeding.

land outside Pembrokeshire is taken into account), and therefore central control of agricultural policy. Inter-manorial organisation was certainly the case on many of the larger ecclesiastical estates in England, for example at Crowland Abbey and Canterbury Priory in the 14th century (both Benedictine foundations)[21]. Its presence in the demesne lands of the Bishop, therefore, suggests that these land holdings at least had been completely subsumed into the manorial organisation typical of Anglo/Norman settlement. This can be seen as a result of approximately 150 years of Anglo/Norman control at the head of this diocese. This record, unfortunately does not allow us to look at the holdings of the tenants on the Bishop's estates at this time, leaving open the question of the extent of 'Normanisation' elsewhere on the estates.

Further examples of this organisation can be seen when examining the varieties of stock kept on the demesne of different manors. It seems to be the case that, on the mainland where sheep were found in the largest numbers, the only other stock kept on those demesnes were concerned with arable cultivation, such as oxen and draught animals, the numbers reflecting the acreage of arable land on that demesne (at Wolf's Castle, however, there was one cow kept with the nine oxen). At Llawhaden, where cattle were present in significant numbers including cows and calves, there were no sheep. This appears to be the only place where a breeding herd of cattle was found on the demesne in Pembrokeshire (most breeding cattle were located on the demesne in Ceredigion, perhaps a reflection on the Welsh nature of the area and the seeming preference of the Welsh for cattle as opposed to sheep). The weaned calves, young bullocks and heifers, and young bulls seem to have been sent to Ramsey Island, again a separation of the ages and type of animal into different herds. Ramsey Island was atypical in that it was the only place where this mixture of sheep and non-working cattle were found in Pembrokeshire. Pigs were bred solely at Lamphey.

The presence of apparent inter-manorial organisation and co-ordination on the demesne of an ecclesiastical lordship found in an area which has been regarded as one resisting the influence of the Norman/English incomers, suggests strongly that similar conditions may have been found on other manors, secular as well as non-secular,

[21] Ryder, M L, 1983, p 449. See also Knowles, D, 1948, pp 32-63; also Smith, R A L, 1943 for details on Canterbury Cathedral Priory.

especially in the south of the county where the Normans and their allies had held sway for a longer period of time.

3.2 (2) (b) Health

Some indication of the health of a flock can be gained by looking at the number of lambs produced in a year as opposed to the number of breeding ewes. As, in 1293, the inquiry was carried out just before 'the Ascension of Our Lord' (in 1293 this festival fell on May 7th[22]), most of the lambs could already have been weaned from their mothers and may have been under the care of a shepherd brought in to look after the lambs[23].

At Trevine there were 120 ewes that had given birth to lambs, but only eighty-eight lambs at the time of the survey, an apparent loss of approximately twenty-seven percent if each ewe had only one lamb. This is a high rate of loss. Stephenson[24] found that, although the mortality rates in sheep flocks is, and always has been, higher than in other domestic animals (ten to twenty-five percent mortality of lambs before weaning is not uncommon even if undesirable), some medieval shepherds were very adept at keeping very low rates of mortality in the flocks under their care, in some cases a loss of three or four percent per year over a considerable span of years. Therefore the figure of twenty-seven percent loss must indicate a problem in the flock. Some of the Trevine lambs may already have been sold or moved out of the flock, but they would have been quite young for this to occur. Tithe lambs would not be an issue here as these were the Bishop's own lands.

At Wolf's Castle the ratio of lambs to ewes is 140:180, a loss of twenty-two percent, giving a figure not too far above those seen in modern hill flocks reared in an extensive rather than in an intensive regime[25], but still, by modern standards, on the high side. Mortality of lambs could fluctuate widely in a single flock from year to year, with only sixty per cent surviving in some years. This fluctuation was not necessarily an indication of a disregard of, or resignation to, the situation. When records at Wellingborough, a demesne farm of Crowland Abbey, showed major fluctuations in the

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[22] Cheyney, C R, 1970, table pp 98-99

[23] This was the state of affairs on the grange of Kingswood in the Earldom of Pembroke in 1326-8. See 3.5.

[24] Stephenson, M J, 1986, pp 73-4

[25] Owen, J B, 1976, p 154

mortality of lambs some action must have been taken as it was followed by a period of relative stability with a marked increase in the percentage of lambs surviving. This may have been a problem with the capability of the rams to service the flock[26]. As most flocks run with a number of rams problems should not have occurred, but the fewer ewes the ram is expected to serve, the higher the likely success rate; perhaps at Wellingborough a change in the management of the flock improved their well-being. It was also recognised that the quality of the rams could affect their offspring. As early as 1276 *Seneschaucy* stated: 'Bons chastriz e de bone leyn seyent od lez mereberbiz en la saison del cure'[27]. The translation runs: 'Good, gelded[28] sheep with good wool ought to be with the ewes in the mating season.' It seems to have been recognised that the quality of the wool of the ram affected that of its offspring, and therefore their value.

In both the breeding flocks there were a percentage of barren ewes. At any time, a certain number of the ewes put to a ram can fail to conceive. This does not necessarily mean that those ewes will fail to conceive the following year, and, where wool is also sought after, failure to conceive will not prove an economic disaster. The figures from Wolf's Castle show that exactly ten percent of the breeding flock failed to conceive or to give birth; Trevine had a much higher failure rate at about twenty-eight per cent of the total ewe flock, perhaps indicating that there was some problem with ram management here, or disease affecting the pregnant ewe.

Overall, the figures for the demesne suggest that, at least for the year 1293, there was some disease affecting the thriftiness of the lambs in these flocks, or problems during pregnancy leaving those lambs weak and vulnerable. The fact that at Trevine both the percentage loss of lambs and the number of barren ewes in the flock was higher than at Wolf's Castle suggests that there was a serious problem there. It was around this time that there were widespread accounts of a 'murrain' affecting sheep in England and

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[26] Trow-Smith, R, 1957, p 149

[27] Oschinsky, D, 1971, p 287

[28] Trow-Smith, R, 1957, p 149 (fn) is of the opinion that translators have mistranslated the word 'chastriz' into 'gelded' instead of 'whole'; however the practice of running a 'teaser' vasectomised ram with a flock just prior to tupping in order to bring the ewes into season is still practiced today.

Wales[29], thought to be sheep scab. This disease can decimate flocks and, once endemic, proves remarkably difficult to eradicate[30]. This may have been the problem at Trevine.

Only 120 'hogs' were listed at St. David's. There were 228 lambs born elsewhere on the demesne in 1293. The apparent increase in lambs over the previous year might indicate an expansion of the breeding flocks over the previous year, providing it was the policy that all surviving lambs (except perhaps the few destined to become rams) were taken to St. David's from the breeding flocks each year. On the other hand it might also indicate that there was on-going disease in the flocks with a greater mortality the previous year. It is also possible that there was some movement of lambs or 'hogs' off the demesne, perhaps sold to provide revenue, although there is no record of this.

3.2 (2) (c) Value of Stock

Figure 3.3 Value of Sheep on Various Manors in 1293

Manor	Hogs*	Muttons	Ewes	Barren Ewes	Rams	Lambs
Bromaston		8*d*				
Pointz Castle		10*d*				
Ramsey		10*d*				
St David's	4*d*					
Trevine			8*d*	6*d*		2½*d*
Wolf's Castle			8*d*	6*d*	6*d*	2½*d*

The 'muttons' of Ramsey and Pointz Castle were worth 10*d* in wool, while those of Bromaston (*Brimaston*) were only worth 8*d* in wool. Breeding ewes at both Trevine and Wolf's Castle were worth 8*d* with non-breeding ewes fetching only 6*d* each. Lambs were worth 2½*d*. Rams were worth the same as non-breeding ewes, 6*d*. If the 'muttons' were wethers as has been suggested above, their value over and above that of ewes on Ramsey Island and at Pointz Castle can only have been as a result of the wool that they carried, again pointing to wool being very important to the income for the See.

It is unlikely that the term 'mutton' referred to their use as meat animals. Treatises on medieval animal husbandry and estate management seem to point to culled animals being the source of any sheep meat rather than sheep grown specifically for that

[29] Stephenson, M J, 1986, p 6; Rees, W, 1924, p 196

[30] Note the modern use of sheep dipping to help in its eradication, a situation that is proving remarkably difficult to achieve even with modern methods, chemicals and equipment.

purpose[31]; wethers could be kept for at least five years before culling[32]. That hogs were immature sheep can be seen in the relatively low value of 4*d* per head. Sheep (especially older, un-modernised breeds) can take up to three years to reach their full potential growth and consequently their full value.

3.2 (3) Extent of 1326

After the stewardship of the See's estates by Ralph de Broughton, a new Bishop was enthroned. David Martyn (also a Chancellor of Oxford) was made Bishop in 1296 and towards the end of his time as Bishop he instituted the Extent of 1326. It is not known why the survey was commissioned, but it seems to have been a copy of other surveys taking place in England and Wales on crown estates[33]. In the survey the demesne lands of the manors of the Bishop are investigated, together with a record of the dues and services that his tenants should pay. It probably followed a format seen in certain treatises written for the benefit of estate lawyers on the proper procedures to follow when auditing the running of the estate. One of these treatises in particular, that written by Walter of Henley (thought to be in Hereford and Worcester, not London), was widely taken up by monastic estates. It is thought to have been written *circa* 1286[34].

3.2 (3) (a) Land Holdings

The term 'manor' must be used loosely here, as the survey does not specify a 'manor' in every instance of land holding recorded unlike the inventory of 1293. For example, the Welsh Hundred (Pebidiog[35]) has thirty places included in it giving services to the Bishop, but no mention of a 'manor'[36] even though they probably were manors. There is also no reference to the size or extent of the holdings overall. The whole of the original Welsh *cantref* of Pebidiog seems to have been ceded to the Welsh church in the 11th century (see 2.5), but this Extent does not state whether all of the land in Pebidiog still remained within the remit of the Bishop in 1326 (alienations by certain bishops may have reduced the holdings. David II was reported to have given land at Llawhaden to his

[31] Oschinsky, D, 1971, pp 275; 339; 423
[32] ibid, p 472
[33] Willis-Bund, J W, 1902, Introduction pp iii-iv
[34] ibid, pp 141-145
[35] See Figure 2.4
[36] Willis-Bund, J W, 1902, Introduction pp lvi-lx

daughter[37]). Pointz Castle (*Castle Poncius*) and Newtown (the two are recorded as a single entity in 1326 even though they were separated spatially - see Fig. 3.1) are the first in the survey to be called a manor, followed by Brawdy and Trevine, but how those manors were set out cannot now be discerned.

There are forty 'manors' mentioned in the *Black Book of St. David's* with nineteen of them having demesne lands. Ten of these were found in Pembrokeshire but were not identical to the stated demesne lands recorded in 1293. It may be that the Bishop had alienated some of the lands between the two dates, and perhaps been given others. The acreage of each demesne varies, as does the proportion of arable land to meadow and pasture within the demesne. The extent of common land relating to the demesne is not given. Individual plots of land making up the demesne may have been found in the same locality within the manor or they may have been scattered throughout the estate.

As with modern farms, the relative values of the soils supporting different types of agriculture is reflected in the rental values placed on the land. Meadow land was prized for its capability to produce hay for winter fodder, a very important part of the agricultural economy, whereas the value of arable land depended on its innate fertility (a problem on much of the marginal lands found in Wales). Permanent pasture was relatively cheap, and it was chiefly on this pasture that stock was kept. There are only occasional references to grazing on demesne fallow and meadow land after a hay crop had been taken[38]. This dearth suggests that it was not the common practice. The only reference to fallow land occurs on the manor at Lamphey in the more Normanised part of Pembrokeshire; its apparent absence in the north of the county was probably a reflection on the poorer arable land to be found there, and an absence of the field rotation systems common in England[39]. Common land was also frequently used, although the extent of that land is not well documented.

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[37] Willis-Bund, J W, 1902, p 139

[38] Willis-Bund, J W, 1902, p 173

[39] See Owen, G, 1603, for the methods used by the 'welsh' farmers to utilise their arable land; also Chapter 4 this thesis.

3.2 (3) (b) Land Values

The value of the pastureland is given as a letting rate per acre per year, but it is not stated whether the option to let was exercised or not. As some tenants were obliged to wash the Bishop's sheep[40], this indicates that the Bishop had kept sheep of his own on his demesne lands at one time; it is no guide as to whether he still did so in 1326. The value of pastureland throughout the demesnes varied from 12*d* per acre down to 2*d* per acre reflecting its quality and carrying capacity for stock. One of the most valuable was at Wolf's Castle which, although only a total of four acres, carried access to common land of unspecified acreage[41]. An acre of land at 'Thorris' in the manor of Lamphey had a value of 6*s* per year which was very high for pasture of such limited extent, but it seemed to be related to the number of 'great beasts' (oxen) which it could support, namely twelve.

The lowest values are found in conditions that were not conducive to good agriculture, such as in sand dunes and on Ramsey Island in the manor of St. David's, and on twenty acres of marsh in Castle Maurice. Also in Castle Maurice, woodland is used for grazing and here eighty acres was worth 2*s* per year for pasture. Land used for pasture included open fields, moor (Langerugge), woodland (Lloydarth forest, Kevyn; Castle Maurice; New Mote), marsh (Castle Maurice) and sand dunes (St. David's). Common land was also used in Wolf's Castle. Commons were usually extensive but were shared with other manorial tenants, and the lord had no more rights over them than other legitimate users from the manor. In the Pembrokeshire lands surveyed the maximum number of animals that the Bishop could put on the common land was not specified, but, on common land at Meydryn (in Carmarthenshire), he was limited to twenty-four sheep.

3.2 (3) (c) Stock

The figures in Figure 3.4 represent the maximum numbers of animals that the landlord was permitted to put on the land. They do not represent actual stocking levels although they probably come close to it. They do not indicate the distribution of stock over that

[40] Willis-Bund, J W, 1902, Introduction p cviii, Table I

[41] Acreages may have been calculated as customary acres rather than statutory acres. They varied from one to over two acres in the north of Pembrokeshire.

land. For each group of demesne lands bar one, the total numbers of the different types of animal permitted to use the pasture is given. There is unfortunately no breakdown of the sheep into sex or age groups because of the nature of the survey.

Figure 3.4 Stock Permitted to use the Demesne of the Bishop in 1326

Demesne	Sheep	Cattle	Horses	Other
Castle Maurice	100	24	3	
Kevyn	200	40	20 mares in foal	
Langerugge	200	30		
Lamphey	5-600	40		
Llawhaden Vill	200			
New Mote	140	16		
Pointz Castle*	500	24	7	
Ramsey Island**	300	100	10	500 rabbits ***
St David's	100	12		
Trevine	No stock recorded			
Wolf's Castle	200	16		

* Pointz Castle and Newtown
** Part of the demesne of the manor of St. David's
*** The number of rabbits that could be killed in a year

It seems unlikely that, in all cases, sheep and cattle could thrive equally on the same land. For example, the marshland to be found in Castle Maurice could have been far from ideal for sheep, which suffer from liver fluke and foot rot problems in wet conditions; if, however, the land was salt marsh, the sheep could have thrived as salt water actually helps with foot diseases and is inhospitable to the snail that carries the liver fluke, *Fasciola hepatica*, to its secondary host, the sheep. There is no indication which type of marsh this represented. The *Seneschaucy* states:

> He [the shepherd] ought to ...watch over them [his sheep] well ... that they do not pasture in forbidden moors, ditches and bogs thereby contracting illness and rot through lack of supervision[42].

Both liver fluke and foot rot affect the sheep's ability to thrive and increase mortality; cattle can survive in that type of environment much more readily.

The cattle were more likely to be found on the better land as they need greater quantities of, and better quality fodder. This can be seen at Lamphey, where cattle use meadowland after the crop of hay has been taken, and also the highly valued pasture at the field called 'Thorris'. Sheep at Lamphey used land left fallow, which apparently could support 300 sheep in winter and 200 in summer, presumably when more of the

[42] Oschinsky, D, 1971, p 287

plot was under arable cultivation. It has been estimated that two sheep would have needed a half a hectare of fallow land to support them for a year[43]. To support this number of sheep throughout the year the fallow would have had to extend over at least fifty hectares (approximately 125 acres). Sheep were also found at a place called 'Porthllu' in the manor of Lamphey which, although it was valued at the relatively high price of 20*s* per year, was of unspecified acreage, and, since it supported 300 sheep, was either an extensive plot or had a large area of waste or common land associated with it.

3.2 (3) (d) Stock Values

As well as giving the rental of the lands on a yearly basis, the survey also records the value of pasture per head of stock. For example, in Langerugge, 'great beasts' were valued at 1*d* per head for pasture, while sheep have a value of 1*d* for every ten head. As this ratio of 1:10 seems to hold for most of the examples given, it seems that a sheep was worth a tenth of an ox or a cow as far as use of pasture was concerned. In Lamphey the use of fallow land for grazing of sheep seems to have been esteemed significantly as the pasture of each head of sheep was given a value of 2*d*, ten to twenty times the usual rate.

Sheep could be run on the fallow the whole year, although the numbers dropped in the summer, and it may have been that the sheep were used here as a principle method of fertilising the ground with their dung, thus increasing their attractiveness to the user of the land. The area of land under cultivation can, of course, be increased if dung is used as a fertiliser. Cattle and sheep were often put to good use here: the sheep being folded onto the fallow land, and the dung and straw mixture from housed cattle and sheep also being added prior to ploughing and planting of crops. The area of the land under arable cultivation would be linked to the area of grassland available to feed the stock producing the dung[44]. Land that was good enough to bear crops on a regular basis would provide good fodder for sheep without it being too luxuriant (sheep capable of utilising mountain and other poor pasture generally find grassland suitable for cattle

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[43] Slicher van Bath, B H, 1963, p 183; this is backed up by a medieval treatise known as the Rules, written by Robert Grosseteste, Bishop of Lincoln. The twenty fourth rule states that each acre of fallow land can support at least two sheep for one year (Oschinsky, D, 1971, p 397).

[44] Slicher van Bath, B H, 1963, p 183

too rich and fattening). Lamphey was the only part of the demesne that appeared to rely heavily on feeding sheep on fallow arable.

3.2 (3) (e) Flock Sizes

By modern standards, the flock sizes recorded as being able to use individual demesne lands are not large for the acreages concerned, but the overall numbers provide a different picture. For the ten 'manors'[45] (total acreage unknown), a maximum of 2,540 sheep is given, the greatest concentration being at Lamphey where 600 in total could be kept. Even if this figure was not reached in practice, it was a potentially large flock when all the disparate segments were combined (the figure would not include unweaned lambs). If the survey reflected the actual numbers of sheep owned by the Bishop it would compare favourably with some of the flocks of the Cistercians as reckoned in the 1291 *Taxatio Ecclesiastica* of Pope Nicholas.

Figure 3.5 Comparison of Sheep on the Demesne of the Bishop, 1293 and 1326

Manor	Sheep in 1293	Sheep in 1326
Bromaston	136	No record
Castle Maurice	0	100
Kevyn	No record	200
Langerugge	No record	200
Lamphey	0	2-300
Llawhaden Vill	0	100
New Mote	No record	140
Pointz Castle	247	500
Ramsey Island	44	300
St David's	120 (young sheep)	100
Trevine	166+88 (lambs)	No record
Wolf's Castle	210+140 (lambs)	200

In 1291 even Strata Florida is only recorded as having kept 1,327 sheep; figures for Margam, Neath and Tintern were greater than at St. David's in 1326, but the other abbeys of the Welsh Cistercians had far fewer[46]. In fact the 1,100 sheep kept by Whitland Abbey in 1291 compared favourably with the figure of 900+ adult sheep kept on the Bishop's demesnes in 1293 and show that the Cistercians, long held out as the prime ecclesiastical sheep keepers of the time, were not alone in this endeavour. The number of sheep on the demesne seems to have increased between 1293 and 1326 if the

[45] Ramsey was part of the 'manor' of St. David's.

[46] Cowley, F G, 1977, p 88; see also Williams, D H, 1990.

maximum number in the later survey can be taken as a guide. In 1293 the total sheep population on the Pembrokeshire demesne lands was 923 (not including 228 lambs), under half the stated limit in 1326.

Bishops may have exercised some personal likes and dislikes when stocking their land, but a greater incentive would have been the value of the stock in providing an income. If the numbers of sheep had increased between 1293 and 1326 it is likely that this would only have occurred if the value of sheep had increased over that of other agricultural commodities, most likely because of the wool. It was in 1326 that the Staple was introduced to Wales, with Carmarthen being the chief Staple port of South Wales, in response to the economic success of English wool as an export commodity. In the years leading up to this wool must have been perceived as an increasingly good income earner. It was around the late-13th/early-14th centuries that wool in England was fetching the highest sustained prices compared with other periods before or after[47]. The supposed increase in the sheep population over the intervening twenty or so years up to 1326 would therefore point to an economic rationale behind the agricultural practices of the demesne, a not unreasonable supposition given the organisation and scale of the enterprise.

3.2 (3) (f) Inter-manorial Co-operation

There is no evidence in the 1326 survey of the co-ordination of activities between the different estates belonging to the Bishop, as is suggested by the account taken in 1293, and stems from the nature of the survey itself. It is unlikely that central control of sheep flocks would have ceased altogether in the intervening thirty three years unless the basis for the use of the demesnes had changed to an overall one of letting and leasing the land, thus providing an income, rather than management from the centre; the 'rules' as set out in the Extent governing agricultural production on the demesne could still apply even if the land was farmed out.

A trend towards farming the demesne is apparent in the emphasis on rates for letting pasture, and for pasturage on that land of stock owned by other tenants. This trend also occurred in England on large estates where the basic manorial system of

[47] Lloyd, T H, 1973, Table 2, pp 45-7; Table 1 pp 38-44

demesne and tenanted lands was gradually broken up by the use of more long term letting and leasing. It gained pace in the second half of the 14th century after the depopulation that followed the Black Death. The restrictions placed on the Bishop by his acceptance of Welsh strictures and controls appear to accommodate such manipulation, although changing to an economy based on rents would eventually dilute Welsh tribal and social structures.

3.3 Stock of Manorial Tenants[48]

If sheep were to be found in reasonable numbers on the demesne lands of the Bishop, it can be argued that it is likely that similar conditions were also to be found on the lands of his tenants. Evidence for the keeping of at least some sheep by the tenants is seen in the 'collection of sheep' that took place as part of the rental of land from the 'manor'. 'Collection of sheep' is almost universal throughout Pembrokeshire. At Kevyn, where Welsh tenure (with the use of *gavelkind* as a manner of inheritance) was still visible[49], 'collection of sheep' is missing, and the payment of a *commorth* of cows and calves appears instead. These two services may or may not have been directly equivalent. Willis-Bund, in his introduction to the *Black Book of St. David's*, says that the collection of sheep was likely to be a remnant of the practice of supplying food to the tribal chief as he made the rounds of his territory, but that the *commorth*, in contrast, was originally a method of raising funds for the tribe at times when they were needed (found only in South Wales[50]); in other words, *commorth* was originally used as a source of emergency provision whereas 'collection of sheep' was not. Even before the Normans came, *commorth* had become payable as a fixed amount, usually paid once every three years, but was still for the benefit of the whole tribe.

The Normans took over the service but kept it for themselves instead of using it for the good of the tribe as was the Welsh custom. However, it is worth remarking that there seems to be no area where the two types of dues are found together (except an ambiguous reference to 'Landenayth'teg', 'Presklegeyn', and 'Brymayloc' in the

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[48] Some manors were divided into demesne land exploited directly by the landlord for his own domestic use and other land occupied by tenants paying rents and doing services of various kinds.

[49] Willis-Bund, J W, 1902, pp 165-9

[50] Ellis, T P, 1926, p 300

Country of Lawhaden where records indicate 'collection of sheep' plus a *commorth* if they followed the services of Trefwynt[51]. This appears to be unlikely given that the two types of payment seem to follow a similar pattern and one would therefore duplicate the other. Together they would have placed a great burden on those who had to pay, so it is probable that only one of the two was payable). Willis-Bund does not seem to recognise the *commorth* paid here, as it is not named as such in his 'Table Showing Service Rendered By Tenants, Other than Agricultural'[52] even though it is recorded as such in the text of the survey[53].

The method of working out the numbers of sheep to be provided differs both within Pembrokeshire and, where it is present, outside the county. In Pembrokeshire the numbers of sheep required are calculated, in the main, on the basis of land. The land of an individual tenant was reckoned together with other holdings of tenants with similar obligations. The number of sheep was then reckoned from the total area of the holdings (the type of holding differed depending on the manner of tenure of the tenant). Outside Pembrokeshire a different system was in place.

In St. David's itself there was no 'collection of sheep', the principal land holding being the burgage tenement within the town. This is a change from the state of affairs in St. David's in 1293. Both the Pebidiog and Tydwaldy originally gave one sheep every third year for each carucate of land (eighty acres in this case[54]), but this had been commuted to a cash payment to be paid every year. The same applied to Castle Maurice. In Crughely, Pointz Castle and Newtown, Brawdy, Grandiston, Preseli and some tenancies of Wolf's Castle no cash payments are recorded, so perhaps the 'collection' was still paid in kind. All of these 'estates' paid once every third year. The survey of 'Maboris' and 'Vill Camerarium' failed to give the time period over which the 'collection' should be paid, but it was probably a similar three years. This time scale suggests similarities with the *commorth* of the Welsh areas.

Tenants of the Country of Llawhaden that held land under English law, namely

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[51] Willis-Bund, J W, 1902, p 167

[52] Willis-Bund, J W, 1902, p cvi

[53] ibid, p 167

[54] The size of the carucate seems to differ on different manors throughout England and Wales, but the general rule seems to be a measurement of between 120 and 100 acres, although it could be as low as 60 acres (http://netserf.cua.edu/glossary/h.htm). This reference to eighty acres is therefore on the low side.

that held indivisible (when inherited) knight's fees[55], paid ten sheep for every fee, the same as one sheep per carucate. It is interesting to note that those people holding knight's fees under Welsh law were obliged to provide sheep on the basis of the number of houses on the land so as to retain the original value of the service, even though the land had been divided between co-inheritors in the Welsh manner of inheritance. A third group of tenants in the Country of Llawhaden also gave a sheep for every house, but only if they had twenty sheep or more; if they possessed less they did not pay anything. This idea of limiting liability if fewer sheep were kept also applied to the vill of Lawhaden and at 'Lantefey', and removed the direct link between the 'collection of sheep' and the land. The copyholders (tenants for life only since the land was not inheritable) on the Trevine lands had to pay a total of ten sheep every third year even though they held only six and a quarter carucates, one bovate (seven acres). Note again the payment every third year.

Yet another factor seen in some tenancies is that payment was required on a particular day. The Kalends of May was the usual date specified. Perhaps originally the sheep were to be used for meat for the chief and his court as Willis-Bund suggested[56]. However May, at the beginning of summer, would not be a good time to slaughter a large number of animals given the problems of preservation and storage this would present. In the inventory of 1293 two places (Lamphey and Trevine, both palaces of the Bishop) did store carcasses of oxen and pigs, but there was no mention of sheep carcasses and sheep meat does not appear to have been used in any great quantity at this time. However, in the principality of Wales, the Kalends of May was used as the time to take the sheep and cattle onto the summer pasture grounds to free the winter lands for arable production where possible. It would therefore be an ideal time to separate out those animals that were required for rental purposes. It is probable that most of the sheep were either sold for money or included in other flocks. Sale of some sheep from rents in kind was certainly the case in the time of the stewardship of Bogo de Cnoville in 1280. Given normal circumstances, it is unlikely that a ewe that had just looked after

[55] A knight's fee here was 10 carucates (Owen, G, 1603, ii, p 368); usually 12 (http://netserf.cua.edu/glossary/h.htm).
[56] Willis-Bund, J W, 1902, p xci

lambs would have been given in the 'collection of sheep' as ewes were required to provide milk after the lambs had been weaned.

The use of the Kalends of May to regulate the 'collection' was found in both the vill and country of Llawhaden, and at Wolf's Castle, but it was also commonly used for the service of *commorth,* it being paid on some of the tenancies of the country of Llawhaden. It may therefore be that some of the 'collections of sheep' were also initially used as a *commorth* in the same manner as were cattle, and not just as a way of victualising the court of the chief. Whether this was an original practice, or whether sheep replaced cattle in those areas with the longest history of Anglo/Norman control (as these areas seemed to use it most) is a matter for conjecture. If sheep were the original basis for the service, it does point to sheep playing a greater role in early, as well as late, medieval Pembrokeshire than appears (at the moment) to be the case in other parts of Wales.

In areas outside Pembrokeshire, 'collection of sheep' is found only to a limited extent, and on a totally different premise. When recorded there, it was given as a payment to the Steward of the Bishop as he made his rounds of the Bishop's tenants, but only on his first visit. This service is a direct use of an old Welsh obligation on tenants to provide food or cash to the chief or his court as they moved around his territory (see 2.3). Unfortunately the basis for this type of 'collection of sheep' is not given, so the numbers of sheep involved cannot be ascertained. The number of estates involved is few and this gives the impression that sheep were not regarded in the same light outside Pembrokeshire as within.

3.4 Other Ecclesiastical Landlords

Apart from the See of St. David's there were other substantial ecclesiastical land holdings throughout Pembrokeshire, mainly established and supported by the Normans or their allies. Substantial grants and endowments of land were given to these mainly monastic organisations.

3.4 (1) St Dogmael's Abbey

In Cemais, St. Dogmael's Abbey possessed at least five carucates of land when the *Taxatio* was taken in 1291. The extent of any pasture was not recorded, nor if the abbey

possessed any stock. It has been suggested by Cowley[57] that the monks could have been influenced towards the keeping of stock by their possession of land (presumably pasture) on Mynydd Preseli, and by their proximity to the Flemings of Rhos (see Fig 2.3). This influence was more likely to have occurred on the lands run by the priory of Pill which were found scattered throughout Rhos and may well have covered 1300 acres in total area. Again, unfortunately, the 1291 *Taxatio* gives no acreage or stock numbers. There is, however, mention of the grant of common of pasture with the tenants of Adam de Roche, who first donated the land to the Tironians (he appears to have come from a Flemish family descended from Godebert, a 'Fleming of Roose') for as many animals 'as their said land requires according to the custom of the country'[58]. While not specifically indicating which sorts of animals the Tironians kept, it is likely that some sheep would have been among them, especially when taking the information in the *Taxatio* into consideration, giving one strong indication that there may well have been some interest in the keeping of sheep. It recorded the presence of a fulling mill belonging to the abbey at St. Dogmael's. It is unlikely that the monks would have gone to the bother of building a mill, one of the earliest recorded fulling mills in Wales[59], if there was no wool being produced from their lands, either by the monks themselves or by tenants renting those lands.

There is further indirect evidence pointing to the presence of sheep on their lands in earlier times in a grant, made by Henry VIII after the dissolution of the monasteries, to John Bradshawe from Radnorshire, of the lands belonging to the Abbey. The grant lists various parcels of land by name and two are of particular interest here. The grant stipulates:

> Una alia parcella terrae vastae vocatae The Abbots Parke, cum uno mesagio vocato The Darey, 3*s* 4*d*. Uno mesagio vocato The Nether Darey ac una clausa terrae arabilis vocata Varner Parke, continente iij. acres, 2*s* 8*d*.[60]

The presence of two dairies, even if in name only by this time, indicates at least a possible interest in sheep for their milk. Whether these names indicate monastic sheep

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[57] Cowley, F G, 1977, p 64

[58] Pritchard, E M, 1907, p 126; the phraseology suggests some comparison with the obligations laid out in the St. David's survey of 1326.

[59] Jack, I R, 1981, pp 71-130

[60] Dugdale, Sir W, 1846, Vol IV, p 131; (grant 35 Hen VIII, Augmentation Office).

husbandry from a much earlier date in the 12th to the 14th centuries is a matter for speculation.

3.4 (2) The Benedictines

Unlike the Tironians, it is clear that the Benedictine monks in Wales[61] did not regard the keeping of livestock as a major undertaking for their monasteries and dependencies. In Wales, where livestock was recorded, the small numbers of animals involved points to their use for domestic purposes only, for production to cover their own needs with nothing left over for sale to bring in an income[62]. On the whole, the Benedictine order appeared to have been closed to local Welsh people, or at least did not attract them because of their Anglo/Norman patrons, and they did not use lay brethren to work their land (as did the Cistercians in other parts of Wales), which would have allowed them to extend their agricultural procedures[63]. The only Benedictine priory in Pembrokeshire was in Pembroke itself, founded around 1098, but no figures are given regarding this priory in the *Taxatio,* so no inferences can be drawn. It is unlikely, though, that these Benedictines took part on any appreciable scale in the keeping of sheep and the handling of wool.

3.4 (3) The Augustinians

The Augustinian canons had much in common with the Benedictines in that they were closely connected to Anglo/Norman settlements and economic influences. In West Wales the Augustinians were represented by communities in Carmarthen and Haverfordwest, both of which were definitely urban in nature without extensive land attached. Haverfordwest, however, did possess lands in the *cantref* of Rhos and, as with the Tironians, may have been influenced by the presence of Flemish settlers and their agricultural practices in the area. Little is known about the temporal estates belonging to Haverford and there is no record of livestock in the 1291 *Taxatio*[64], although Carmarthen possessed at least eight carucates of arable land[65]. Taking Augustinian houses in Wales as a whole, sixty percent of revenue came from temporal possessions

[61] By the beginning of the fourteenth century the Benedictines were continuing to invest heavily in sheep, as is seen in their estates at Crowland and Winchester in England (Ryder, M L, 1983, p 449; Stephenson, M J, 1988, p 369)

[62] Cowley, F G, 1977, p 59

[63] ibid, p 46

[64] ibid, pp 65-7

[65] Taxatio Ecclesiastica p 277; Davies, J C, 1946, Vol I, pp 283; 290

(this figure had only increased to sixty-four percent by 1535)[66]. Evidence suggests that by 1535 less than thirty percent of the total revenue of the houses in Carmarthen, Haverfordwest, and a further Welsh house in Beddgelert, was derived from 'temporalities', unlike many other Augustinian houses that derived over seventy percent of their incomes from rents at that time[67]; this points to Carmarthen and Haverfordwest historically being relatively poor in land and consequently relatively uninterested in stock keeping.

3.4 (4) The Order of St. John of Jerusalem

The Order of St. John of Jerusalem had substantial lands in Pembrokeshire based at Slebech in Daugleddau. The demesne of the manor of Slebech itself appears to have been about fifty-three acres in extent, with at least some oxen and pigs kept there as is seen by the presence of a swineherd and his boy, and a cowherd. There is no mention of a shepherd on these demesne lands so the presence of sheep is unlikely at Slebech itself. This is detailed in a survey taken by Philip of Thame in 1338 who was Prior of England for Elian de Villanova, then Grand Master of the Order[68] describing all the estates of the Hospitallers in England, Wales and Scotland and showing the types of tenure and social conditions that prevailed at that time. Unfortunately the details of other Hospitaller manors in the vicinity are not so clear.

The Hospitallers were set up originally in the Holy Land in order to provide for the poor and the sick, and to give hospitality to travellers as they passed through the area. Other estates outside the Holy Land would have provided revenue to sustain that work in the Holy Land. However, it is likely that once the Holy Land was lost in 1291, these estates then ceased to provision the houses in the Holy Land and came to provide hospitals and hospitality similar to the function to the original foundations in the Holy Land. This would have required a tremendous amount of provisioning, and the lands around the 'hospital' would have serviced some of that need both in stock and in crops. As mutton was not a meat that was regularly used at this time, the lack of sheep on the lands in the immediate vicinity of the Commandery, the headquarters of the order in the

[66] Robinson, D M, 1980, pt i, p 273
[67] Robinson, D M, 1980, pt i, p 275
[68] Rees, W, 1947, p 20; Rees, J R, 1897, pp 277-82

district, would not be unusual. As far as the production of milk was concerned it may be that the greater volume of milk produced by cows over a longer period could have swayed the monks into keeping cattle close to the Hospital rather than large numbers of sheep.

There was a fulling[69] mill in the vill of Rosemarket which points to a local cloth industry. The vill with its church, mill and lands had been donated to the Knights about 1145[70]. The fulling mill must have been built under their auspices in the intervening period (it is recorded in 1338[71] but not specifically before that date) and therefore an appreciable number of the tenants of the Order must have kept sheep to supply the wool for the cloth in order, as with the Abbey of St Dogmael's, to give a reason for the construction of a mill. That the Order at Slebech had a large number of tenants can be seen in the rent roll of £33 per annum in 1338, but we know little more about them or their agricultural practices. It may be significant that the major supporters of the Knights of St. John were the Flemish community in Pembrokeshire with their expertise in wool and cloth making (see 2.4). There is, however, no direct evidence of sheep on the estates.

3.5 The Earldom of Pembroke

The Earls of Pembroke were among the most powerful Marcher Lords in Wales, owning land throughout Pembrokeshire and surrounding counties. The grange of Kingswood (*Kyngeswode*) was part of the demesne holdings of the Earls of Pembroke[72] and was situated close to the town of Pembroke itself. Ministers' Accounts produced by the reeve of Kingswood for the years 1326-28 give a breakdown of the numbers of sheep, their values for sale, the mortality rate, and the prices and quantities of the different products of the flock kept there. The fact that these documents cover the same time period as the survey of the Bishop of St. David's allows a glimpse at what may have been a situation comparable to the Church estates.

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[69] A fulling mill treated cloth once it had been woven. See 3.8.

[70] Rees, J R, 1897, p 206

[71] Jack, I R, 1981, p 121

[72] Ministers Account 1208/5 (cited in Owen, H (ed), 1911, Vol III, pp 116-9). The modern of version (Kingswood) will be used for all further references.

When the holdings of the late Countess of Pembroke, Joan de Valencia, were listed in an Inquisition Post Mortem[73] (IPM) in 1307, the grange of Kingswood as such was not mentioned, but agricultural land, noted as being part of the estate of the Countess, may have been regarded as part of the grange at a later date[74]. When Aylmer de Valence died in 1324 an IPM detailed the lands associated with the grange. It consisted of one messuage (size not known) worth 12*d*, two carucates worth 40*s* per year each, five acres of meadow at 12*d* per year and two acres of several pasture (pasture located in disparate blocks) at 6*d* per acre. Also listed as being part of the grange were the rents due from a ferry called 'Penebroke Fferre' which carried passengers from Pembroke to Burton across the Cleddau river. The value of the rent was 26*s* 8*d*, paid twice yearly at Michaelmas and Easter. The total size of the grange probably would not have changed much in the two years between this IPM and the reeve's accounts recorded in 1326.

3.5 (1) Stock

When the entire stock of the grange was sold[75] to R Beneger in 1328 it consisted of 203 sheep (ewes and lambs) worth in total £8 15*s*, six oxen and three 'affers' (work horses) worth in total £4 1*s*. The numbers of sheep in the flock on this one grange were of an equivalent size to those individual flocks present on the sheep keeping manors of the See of St. David's in 1293. Rees[76] cites the example of the Kingswood flock as demonstrating that flocks generally throughout Wales at this time were not very large. However, if the numbers in the flock are taken as part of a greater whole (as similar flocks would have been in 1293 or 1326 in St. David's) and not individually, the situation looks very different. This is the only part of the demesne of the lordship of Pembroke where the stock is detailed, and this means that the breeding flock recorded here could indeed have been part of a greater whole.

The stock was classified as rams, ewes, hogs (one year old sheep or shearlings of both sexes) and lambs[77]. There is no mention of wethers, and it seems that all hogs

[73] Inq Post Mortem, C Edward II, File 4 (I) (cited in Owen, H (ed), 1911, Vol III, p 81)
[74] Namely 2 carucates of land and 7 acres of meadow - see I P M. 1324
[75] Ministers Account 1208/5 m 2d (cited in Owen, H (ed), 1911, Vol III, p 116)
[76] Rees, W, 1924, p 197
[77] Ministers Account 1208/5 , m 3 dorse (cited in Owen, H (ed), 1911, Vol III, p 118)

retained from the previous year were ewes as they were included in the ewe flock. This points to the removal of male lambs out of the stock of the grange either for sale or to a separate flock, although it is by no means certain that all ewe hogs were retained. Other sheep sold from the flock in the period Michaelmas 1326 to Michaelmas 1327 included 'old' sheep (age unspecified but probably beyond another lambing season perhaps because her teeth had worn out), 'late' lambs (a term usually applying to lambs born in May or even later), and a barren ewe sold at the beginning of August. The price obtained for this ewe is a little anomalous in that it fetched 14*d* whereas, when the flock was sold as a whole (in 1328), the ewes only fetched 12*d* each even though apparently still capable of bearing lambs and of producing milk. These prices compare favourably with those of ewes sold from the manor of Crawley in Hampshire, one of the manors belonging to the Bishops of Winchester. The average price obtained for the sale of ewes from Crawley in the period 1315 to 1383 was 1*s* 1*d*[78]. The barren ewe may have been young (old sheep only fetched 10*d*), the price reflecting a belief that the infertility was of a temporary nature, or it may have been a reflection of the value of the fleece. The value of the ewe flock as a whole may have been a genuine reduction in the price of sheep in the market place, or the reduction may have been the result of bulk buying. If the sheep had been sheared prior to sale, this would also affect the price adversely. The lower price for the ewes contrasts with that of the lambs at 7*d* each in 1326-27, and at 8*d* each when the whole flock was sold, an increase in their value. Again, the price for lambs compares favourably with those sold from Crawley where the average price obtained for 1315 to 1383 was 6*d*[79].

3.5 (2) Disease

The effects of disease and the rigours of lambing took their toll on the sheep. In all twenty six sheep, eleven lambs, two hogs and both the rams of the flock died in the year Michaelmas 1327-28, a total of forty-one sheep. The lambs died of the murrain, an all-encompassing description for a multitude of diseases. That lambing is a time of hardship for the ewe is reflected in the relatively high numbers of ewes that died during the lambing period; disease was not necessarily the cause of this mortality. From an

[78] Gras, E C & Gras, N S B, 1930, p 64
[79] Gras, E C & Gras, N S B, 1930, p 64

initial ewe population of 156, 117 lambs were born, although twenty-four ewes died prior to lambing and three were barren. Therefore, 129 ewes gave birth to only 117 lambs. The shortfall of twelve lambs may have been an indication that they were stillborn and therefore not recorded. These figures do indicate that the normal lambing rate was around 100 percent (the modern ewe is expected to have lambing rate of 150 to 200 percent[80] or more, as the lamb is generally seen in terms of meat production only).

For medieval shepherds multiple births would have created problems particularly where the ewe was taken away for milk production as soon as possible. The *Anonymous Husbandry* treatise of *circa* 1300 states that a ewe should only have one lamb at a time[81]. The time before weaning would increase, causing greater stress to the ewe, a reduction in her later milk yield or even a reduction in her overall life span. Lambs that survived were usually used as a replacements for stock that had died or was too old, both ewes and wethers, but on this grange we only see ewe lambs being kept in the flock.

3.5 (3) Shepherding

This flock was looked after by one full-time shepherd, plus part-time helpers, before and after lambing. The helpers were given livery (food and clothing) of 3*d* per week while they were working, while livery of the full time shepherd was worth 4*d* per week. One of the helpers was specifically hired to be a shepherd of the lambs after the Kalends of May, suggesting that lambing had finished by that time and that the lambs had been weaned from their mothers. Many dairying accounts from English manors start at the end of April or the beginning of May, showing that the ewes were providing their milk for that purpose by that time[82].

3.5 (4) Dairying

The ewes produced milk as well as lambs and wool, and this was converted into cheese and butter. Milk production took place for twenty-one weeks in all, with ewes coming into the dairy after weaning. A dairymaid was hired specifically for this task and was paid 2½*d* pence a week for her livery, and a wage of 2*s* to cover that period. It is likely

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[80] A lambing rate of 200% would require all the ewes in the flock to have two lambs.
[81] Oschinsky, D, 1971, p 425 (c 17)
[82] Stephenson, M J, 1986, p 110

that it was the need to put the ewes to the ram for the next crop of lambs that curtailed the milk production. The *Seneschaucy* discusses this as part of the duties of the shepherd on an estate. It states:

> '... e nule mere berbiz ne seit trete outre la feste Notre Dame (de la nativite), car eles curent plus enviz un autre an, a lez ayneaux vaudrunt le meyns.'
>
> '... and no ewe ought to be milked after the feast of the Nativity of Our Lady (8 Sept.) because they are then slow to mate in the following year and the lambs will be worth less.[83]

The ewes would need some time to recuperate if they were to survive the winter and pregnancy.

Although there were oxen on the grange there is no indication of any calves being included. Oxen were probably brought in from outside, in which case the dairy was purely for the production of milk by the ewes, not by cattle. Milk production from sheep rather than cattle was very widespread in England in the 11th century and, although the use of cows for milk production was increasing, ewes would still have been a major source of milk for butter and cheese, contrary to the perceived common practice in the native Welsh areas of northern Wales[84].

Medieval English sheep are known to have provided between eight and twelve gallons (thirty-two to fifty-four litres) of milk during a single lactation[85], and, according to Walter of Henley in the 13th century, thirty ewes, if fed on green pasture and fallow, provided as much milk as three cows, which could make four pints of butter a week and 250 round flat cheeses (one stone of cheese)[86]. Much the same was probably true of the Welsh sheep of the time although if marginal land was used this could reduce the yield. It is likely that flocks used for dairy production on large estates would be kept on richer pasture than other sheep in order to increase milk yield.

3.5 (5) Sales

It is unusual to find the whole stock and produce of a grange being sold off, as appears to have happened in 1328. After the death of Aylmer de Valence, the Earldom was inherited by a minor, Laurence de Hastings. He became a ward of Hugh le Despenser

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[83] Oschinsky, D, 1971, pp 286-7
[84] See Chapter 5.
[85] Stephenson, M J, 1986, p 111
[86] ibid, p 335

who then looked after his affairs[87]. These arrangements did not always work out and estates were often allowed to run down under these circumstances, particularly when the wardship was a protracted one as in this case, with John de Hastings being only five years old when he inherited. The demesne may have been farmed out to tenants instead of being run by a servant of the lord of the manor, thus necessitating the sale of all the stock. When the wardship was given to Elizabeth de Burgh in 1331 Kingswood was still listed as a grange[88], but whether it was still part of the demesne is not stated. Later records do show that Kingswood was treated in the same manner as land leased out to tenants and no longer as part of the demesne[89].

3.6 Wool

Late medieval Welsh records relating strictly to wool are few and far between, but those records relating to the grange of Kingswood in the earldom of Pembroke are quite detailed. Not only do they give an indication of the prices that the fleeces could fetch, but also indicate how much wool was produced on the grange. There are no comparable records from the See of St. David's.

When wool was sold from the grange of Kingswood in 1326-8, the mechanism of sale is not stated[90]. It may have been sold direct from the grange to a dealer or a middleman, or it may have been taken to a local market. From the figures given in the accounts, wool fetched between 2⅓ and 2⅔*d* per pound, with a mature ewe expected to produce over three-quarters of a pound of wool at a shearing, which occurred twice a year (at least at Michaelmas; the 'Kallanmay' shearing produced less than half of this figure but may have involved fewer sheep). Wool taken from ewes, lambs and hogs and sold in 1326-7 provided forty-four percent of the total revenue from the grange, whereas cheese and butter sales only raised eighteen percent of the revenue, showing that wool was by far the greatest income producer even in a breeding and dairy flock where wool would be a by-product. Heavier fleeces would have been provided by wethers, which were not kept on this grange.

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[87] Close Roll, 18 Edward II, m.6 (cited in Owen, H (ed), 1911, Vol III, p 9-10)
[88] Fine Roll, Edward III, m 3 (cited in Owen, H (ed), 1911, Vol III, pp 14-15)
[89] I P M Lawrence de Hastings Edward III, files 91 and 92 (1348) (ibid, p 91)
[90] Ministers Account 1208/5 (ibid, pp 116-118)

In the year Michaelmas 1326 to Michaelmas 1327 wool from the grange sold for between 2*s* 8*d* and 3*s* a stone. The best price was obtained for lamb's wool, which tends to be the finest wool from any breed of sheep. The wool of the hogs would also usually be of better quality than that of the older ewes if not a heavier fleece. The account of Michaelmas 1326 to 1327 shows that the wool was graded into lambswool and two grades of the other wool. This value, when compared to the sorts of prices obtained by the wool of sheep from estates in England, can be used to give some idea of the standard of wool produced in this part of Wales.

Lloyd produced tables showing the movement of wool prices in medieval England[91]. He looked at the average prices found on the manors of several large estates from 1209 to 1494.

Figure 3.6 Average Wool prices 1326-8 (taken from Lloyd, T H, 1973)

Date	Annual Mean	No Manors	Annual Index*	13 Year Index
1326	5.01 shillings/stone	6	106	5.17 shillings/stone
1327	5.24 shillings/stone	7	111	5.00 shillings/stone
1328	4.84 shillings/stone	8	102	4.72 Shillings/stone

* Annual Index Number when average Price from1276-1325 = 100 One Stone = 14lbs

When these prices are compared to those from Kingswood it can be seen immediately that the English wool was commanding much higher prices. Whereas the average price for English wool varied between 4*s* 9½*d* and 5*s* 1*d* a stone, the maximum price for Pembrokeshire wool was 3*s* a stone at a time when wool was fetching relatively good prices. Although the weights of wool involved might not be strictly comparable (different places could use different measures[92]), that difference would have to be enormous to compensate for the contrast between the English and the Pembroke wool. (It must also be stressed yet again that the Pembroke account is one whilst the English accounts are many.) However, the glaring difference in the selling prices of the two groups of wools must be significant, and probably reflects a genuine difference in quality. It is also likely that this wool from what was a large and important lordship would have been at least representative of the wool of the area, and probably among the better wool produced.

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[91] Lloyd, T H, 1973, pp 37-51

[92] Northern Pembrokeshire used a stone of 17 lbs prior to and during George Owen's time.

3.7 Marketing and Export of Sheep and Wool

In the 1326 survey from St. David's certain tenants were recorded as liable to pay tolls when they took animals to market[93] or bought animals at the same market. Others were exempted from tolls as long as they used a particular market. These early tolls were very much a local concern and could vary from place to place. Many originated in charters granted to boroughs. Exemptions from tolls were also very common, in some cases leaving only peasants, 'foreigners' from outside the immediate locality and the poor to pay[94].

The quantities of commodities passing through the markets and fairs is not known from this time (14th century), but by looking at the type and quantities of stock to be found on the holdings some idea of the amounts of wool passing through such markets can be inferred. In England, wool was such an important earner of foreign revenue that the government imposed tight restrictions on its export. Customs accounts of the period are a valuable, and often the only, record of the amounts of wool traded in Wales, but they are not totally representative of all the trading that was taking place as many records are missing or damaged.

One important account that sheds light on the export of wool from Pembrokeshire is the account of Hugh of Northwood, receiver of the King's cocket customs[95] on wool and hides taken at Haverfordwest and adjacent ports over the period Michaelmas 1318 to the January 6, 1321[96]. The importance of Haverfordwest as a maritime trading port can be seen in the emblems found on the Common Seal of the Borough of Haverfordwest, which was granted to the town during the reign of Edward II in 1326. It bears the emblem of a sailing ship with its sails furled, a feature seen only on the seals of the Cinque Ports (Dover, Sandwich, Hastings, Hythe and Romney) and Beaumaris in North Wales, and which denotes maritime significance[97].

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[93] Trevine and at Wolf's Castle.

[94] Gras, N S B, 1918, pp 24-6

[95] The Collector of Customs kept a record of all shipments, collected customs and then gave the money to the exchequer. Collectors were given 'cockets' or receipts for money received sealed with a cocket for custom on exports (Gras, N S B, 1918, p 95).

[96] Customs Account (P R O) No 48/2 (cited in Lewis, E A, 1913, pp 153-5)

[97] James, G D, 1957, p 32

Between September 1318 and September 1319 twenty-four sacks of wool were recorded as being exported from Haverfordwest (1 sack = 364 lbs or 26 stones weight)[98]. This represents the wool of approximately 8,700 sheep (if each sheep gave on average a pound of wool per year, a not unreasonable assumption for the time). This may not be a complete rendering of exports as, during the following year, much greater quantities appear in the account, or perhaps trade in wool was picking up at this time.

Between 1319 and 1320 (to September) 119¼ sacks were exported through Haverford, representing approximately 43,500 sheep on the same premise as above. The area from which this wool originated cannot be determined exactly, but it is likely that a large percentage would have come from Pembrokeshire itself. Even if the wool collection had covered two seasons this figure still indicates a sizeable sheep population in a period when records are inconclusive. It is unlikely that the wool was stored for longer than two seasons, given that the damp conditions in Wales would have increased the possibility of wool rotting in its store. This putative figure for the sheep population does not take into account the amount of wool that would have been either used in a domestic environment or sold for local use. This may also have been a considerable volume, thus increasing the size of the sheep flocks yet again. There is no way of finding out the size or nature of that local trade as either no detailed records were kept, or none have survived the passage of time. However, it must have existed and would swell the figures by an appreciable amount. The volume of wool exported would have represented a valuable addition to the income of the area and to the people who owned the wool.

The next account that we have access to runs from May 1325 to Michaelmas of the same year[99] and records the export of sixty-four sacks of wool (23,396 lbs in total). As this was for only half a year, it may represent only part of the total export volume and seems to point to a level of exports similar to that found in 1318-19. Although Haverford is the port listed in the export returns, places such as Tenby, Milford and Pembroke were probably involved in the trade. Haverfordwest was the head port of the area at the beginning of the 14th century and so all trade from minor ports would have

[98] Stephenson, M J, 1986, p 121

[99] Customs Account (P R O) No. 48/3 (cited in Lewis, E A, 1913, p 156)

been recorded under its name. In 1326 Staple ports responsible for the control and taxing of wool exported from them were imposed nationally; Carmarthen and Cardiff were designated as the Welsh Staple ports. All Welsh exported wool had to pass through them to be taxed, and so exports specific to Pembroke were added to the general total and therefore lost to view.

3.8 Cloth Manufacture

While there were stringent duties applied to the export of wool, customs dues on the export of cloth were much lighter[100]. This was used as a device to increase the quantity of home-produced cloth by making it worthwhile to convert wool into cloth before export, so reducing the large amounts of cloth being imported into the country, and at the same time giving employment to a greater number of people. While cloth manufacture had always taken place on a small scale in the country areas, with spinning and weaving of wool being carried out in the home, it was the formation of the boroughs by the Normans that concentrated larger scale production in the new towns and encouraged the formation of groups of artisans into guilds and companies to improve product quality. It also had the effect of restricting membership of these guilds and companies to the favoured few who lived in the boroughs, the majority of whom were not Welsh.

Nearly all cloth needed to be 'fulled', a process that strengthens and cleans the cloth by beating and scouring it in the presence of a substance, usually urine or fuller's earth, to remove any grease. The presence, therefore, of fulling mills gives a good indication of the presence of an indigenous cloth-making industry and, certainly at this time when communications between different areas were difficult, the probability that local wool production was necessary. A cloth-manufacturing base implies the presence of wool and therefore sheep.

Originally, fulling of the cloth was done by workers who, literally, trod up and down on the cloth. In some places the hands were used, or the cloth was beaten by clubs. A revolution took place in the 13th century[101] when mechanical fulling was

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[100] Gras, N S B, 1918, pp 48-75

[101] Carus-Wilson, E M, 1941, pp 41-8

introduced from the continent. Mechanical mills were driven by water-power transmitted, as in water-driven corn mills, by a spindle to hammers that rose and fell on the cloth, so beating it. It removed the need for a large labour force, releasing the labourers for other work on the estate. As these mills were built and rented out they appear in the records of the time, and in the latter part of the 13th century there are indications that fulling mills were being built in Pembrokeshire. At first the building of mechanical fulling mills could only have been undertaken by the wealthy landlords or by burgesses in the towns as it would have been an expensive venture.

Monastic foundations as well as Norman secular estates realised the value of these mills. St. Dogmael's Abbey in Cemais is recorded in the *Taxatio Ecclesiastica* of 1291 as possessing one, while a late 13th century secular deed cedes a mill and one and a half acres of land at Gilbert's Ford (*Gibbricksford*) in Pebidiog to the lord of Roche[102]. As a fulling mill gave further means for increasing revenue on estates, the landowners had an incentive to build them for their own and their tenants' use. Their presence on secular estates indicates a thriving local cloth industry utilising local wool that was not destined to be exported.

Inferences drawn from instances of their presence in monastic records have to take into account the nature of that foundation. On Cistercian estates it is likely that, initially, a mill would be for internal use only, and not necessarily for the local lay populace to use as they were, by charter, essentially an order that was supposed to withdraw from the world[103]. The presence of a fulling mill in Llawhaden[104] in 1326 belonging to the Bishop of St. David's suggests that the local populace, the tenants of the Bishop, produced enough wool to make it viable. By 1337 the Bishop also possessed a mill at Narberth, which did not appear in the Extent of 1326. The same premise could be supposed of mills in Rosemarket (the Knights of St John) and St Dogmael's (the Tironian Abbey). The Earldom of Pembroke possessed several fulling mills during the 14th century, some apparently more successful than others, judging from their appearance and subsequent disappearance in various inquisitions. The fact

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[102] BL, Additional Charter, (cited in Scott, E J L, 1885, pp 171-2)

[103] Williams, D H, 2001, p 1. See also 5.2 (4) (a) & (b).

[104] Jack, I R, 1981, pp 70-130; this and subsequent references to fulling mills are taken from the same source.

that the Earldom was being administered as a wardship during much of the early part of the 14th century may have caused a certain amount of decay in property to take place (see 3.5 (5)). The mills were found at Camros, Cilgerran, 'Coed Rath, and Gilbert's Ford.

The early to middle of the 14th century appears to have seen the peak of building of these mills as later records show their decay or disappearance by 1400. The 14th century was, however, a time of change and upheaval. The early years of the century saw famine after a series of very wet summers, and it was followed by the ravages of the Black Death, which decimated the population both in town and countryside. Many tenants died or left holdings that became too difficult to work with a lack of available labour. The decay or disappearance of fulling mills may have been a cumulative result of the Black Death and famine. If the wool was not being produced the mills would have gone into a decline. There is also the possibility that the upheavals and destruction connected with the rebellion of Owain Glyndwr and his supporters in the closing years of the century may have resulted in the wholesale loss of records which could have shed further light on this subject.

3.9 Summary

Pembrokeshire of the 12th and 13th centuries fell between two main spheres of influence, Welsh and Norman/English, the boundaries fluctuating with the fortunes of war and immigration. By the 13th century Welsh influence was largely found in the north and east of the county, with the Norman/English/Flemish presence to the west and south. Although 12th century documentation is lacking, the evidence analysed and discussed in this chapter seems to suggest that, at least within Norman/English sphere of influence, and also within certain ecclesiastical establishments, sheep were present in significant numbers in the 13th century; it is by no means clear that the same could be said of those areas in the north and east of Pembrokeshire where Welsh society and law was still very much present and active.

At the end of the 13th century the flocks of the Bishop of St David's seem to rival those of the Cistercian monks in other areas of Wales. Sheep were important to the economy of the estate. The evidence discussed in this chapter suggests that the demesne

estates of the Bishops of St David's were run on an organized and integrated basis, with flocks of different age groups, sex and function being segregated on different demesne lands to increase the efficiency of the whole enterprise. All this points to these estates being run very much in the same way as larger manors throughout England at this time.

At the same time, tenants of the Bishops show a dichotomy as seen through their dues and taxes, with sheep being the basis for payment for tenants under English law, and cattle for tenants under Welsh law (some dues had been commuted to cash payment by this time, but the basis for those payments is still visible in some records). It could be postulated that this might be highlighting preferences in the agricultural practices of the two groups of tenants; it is clear that cattle were important to Welsh tenants and landholders in the 12th century and later throughout Wales (see Chapter 5 for an analysis of Welsh laws relating to sheep and cattle), but it remains a speculation as to whether this was still the case in the 13th century. It seems likely, however, that some vestige of this historical bias did remain in mainly Welsh areas of the Bishops' lands, the extent of that bias being a matter for conjecture.

Evidence analysed in this chapter also shows that interest in keeping sheep increased in some quarters in the 14th century. There appears to have been a substantial increase in the numbers of sheep on the demesne of the Bishop of St David's at this time (reflected in the maximum numbers of sheep that could be run on the land – up to 2000+ in 1326, up from around approximately 1000 in 1293). There is also evidence that this increased level of interest had spread to the demesne estates in the east of the county which had followed Welsh tradition and law. Sheep were noted as being present on the demesne at Llawhaden in 1326 (up to 200 in number, none having been recorded there at the end of the 13th century, only cattle and calves), but the types, ages or sex of sheep within the demesne was not recorded. This evidence argues for an increased interest in the keeping of sheep into areas previously thought to be more heavily biased towards cattle, continuing a trend seen in the more westerly demesne estates. It is still a matter of supposition as to whether this trend was to be found among smaller-scale landholders and tenants in those areas, but it is likely that it was mirrored to some extent here also.

In the first half of the 14th century, we have evidence, discussed above, to show that wool was being exported through southern Pembrokeshire ports in large quantities. Wool from approximately 43,500 sheep was exported through Haverford in one year in the early 14th century. As much wool would also have remained within the county for local use and textile production this evidence points to a much larger number of sheep in the countryside, many kept by the local peasant population. This wool from these sheep, however, may not have been of the best quality if the prices received for wool from the Earl of Pembroke's grange at Kingswood are taken as a local standard. If the local Earl with all his resources and manpower could not produce wool of high quality, other users would have been unlikely to have a product of much better standard. Much of this wool could have been channeled through the various markets in the locality, pointing to a sizeable local production by the populace at large, certainly in the south of the county. There is little evidence of the activity in Pembrokeshire of wool merchants such as Pegolotti as seen in north Wales (see Chapter 5), suggesting that much wool production was diverse, rather than being concentrated in one place or generated by a small number of large-scale producers such as the Cistercians of north Wales. This argues for much of the wool production to be spread throughout the countryside from smaller-scale local sheep keepers as well as the larger landlords, with wool collection and sale to take place through local markets or local middlemen.

Further evidence of the increased interest in sheep keeping and wool production, especially in the more easterly parts of the county is seen in the building of new fulling mills at Llawhaden and Narberth at the behest of the then bishop of St David's in the early 14th century. These new enterprises could be seen either as a response to increased textile production, and hence increased interest in sheep, or as a prod in that direction in order to increase revenue. It was probably a combination of these factors in the case of the Bishop, as sheep had played a significant part in the economy of his more westerly estates and also seem to have been increasing in the more easterly estates. Other large-scale landowners, such as the various ecclesiastical foundations, also seem to have been interested in fostering a textile industry, and built fulling mills for the treatment of cloth around the county. This did not necessarily mean that they kept sheep themselves, but

that they recognized that local cloth production could have advantages for them. Also, the building of these, then, modern appliances appears to show a recognition that local sources of wool would have been sufficient to justify the cost. Sheep and their wool were firmly placed within the agricultural economy of the whole county by the early 14th century.

CHAPTER 4. SHEEP AND WOOL IN PEMBROKESHIRE - 1400-1603

This chapter will examine the changes in local agricultural economy that have become manifest in the records available from the 15th through to the beginning of the 17th centuries. The records here are of a fundamentally different nature from those of the previous three centuries, comprising mainly of accounts from landholders and the contents of probate documents. They highlight the continued interest of Pembrokeshire farmers, both large- and small-scale, in the keeping of sheep and the production and sale or utilization of that wool. The Church and various ecclesiastical landlords do not feature here; indeed much of the land belonging to those organizations was in the process of being either leased out or sold.

4.1 The Land and Its Tenure

Although basic agricultural practices did not change to any great extent, there were changes in the availability and organisation of agricultural land during the 15th and 16th centuries. These changes were the result of a number of factors, including war, famine, and climatic evolution, that brought about a reduction in population in many parts of Wales, not only in Pembrokeshire, especially in the 14th century. This in turn affected the availability of land, allowing consolidation of individual plots into more compact, contiguous farms, which, in their turn, became fenced and hedged off from neighbouring properties[1]. Some enclosure was present from relatively early times where homesteads were gained from clearance of woods and waste for tillage; gaps between bushes and trees could be blocked with stakes and 'trowse', or wattle, giving more irregular shaping to field boundaries than was otherwise the case.

In Pembrokeshire this occurred particularly in the more easterly parts; the western areas were more open[2]. The enclosure described here was not the statutory enclosure of the 18th and 19th centuries, but a matter of expedience and convenience. The idea of ownership of land rather than renting began to increase although the majority of land was still in the hands of tenants of one sort or another. The manor was still alive but the demesne was often leased out rather than worked by servants of the

[1] Dicks, T R B, 1967, p 215; Howells, B, 1971, p 14
[2] Davies, W, 1815, pp 219-20

landlord, and was increasingly enclosed. The landscape of Pembrokeshire at the end of the 16th century was therefore an intricate mixture of demesne and field, both in various stages of enclosure, together with unenclosed waste and common land.

In Pembrokeshire the type of tenure depended to a large extent on whether the tenant lived in the north of the county or the south. The southern part of the county had far fewer freehold tenants (tenants with rights of inheritance over the land) than the north; this corresponded with the areas covered by English law as opposed to those areas where Welsh law had had its greatest influence. In the south the English law was based on the idea that the King was the arbiter over the disposition of land. Only he could decide who was given what land and he could take that land away at will. That idea, when filtered down to the tenants who actually worked the land, resulted in the imposition of tenure as their overlord decided. The tenant became a customary tenant and custom differed from manor to manor. The right of freehold tenancy was a privilege given to few tenants and was almost invariably conferred in return for military service[3].

In the north of the county, where Welsh law was more in evidence, the ancient rights of the 'kings' of Wales did not include ownership of the land; that land was held in trust and administered by the king for all the people and, once having been granted to a person or family, land could not be taken away from them at a whim. They were granted that land in perpetuity and therefore held it on a freehold basis as long as they paid the appropriate dues and services. As the Normans had not succeeded in displacing the Welsh population in the north of the county and often had merely usurped the political structures for themselves, freehold tenancies were already in place and so they continued through into the 15th and 16th centuries. Gradually other tenures became used, for example tenure by lease for a number of years or for the life of the tenant, or tenure at will where the tenant was liable to quit at each year's end[4]. Leasing became more common when a landlord wished to have a guaranteed cash rent rather than part of the agricultural produce, a less reliable method of payment.

Land ownership was given a boost with the dissolution of the monasteries, which occurred from 1536 onward, with much monastic land being released for

[3] Howells, B, 1955, p 320
[4] Davies, W, 1815, Vol I, pp 120-21

redistribution. Individuals were allowed to buy it, for example where John Bradshawe from Presteigne in Radnorshire became the owner of land belonging to St Dogmael's Abbey in 1544[5].

There are very few relevant records relating to Church and monastic lands from the 15th and 16th centuries. The dissolution of the monasteries brought to an end land ownership by these organizations, but a survey relating to ecclesiastical property ordered by Henry VIII in 1534-35 just prior to the dissolution, the *Valor Ecclesiasticus,* does give some information.

By the time of the reign of Henry VIII (1509 - 1547) the personal estates of the Bishop of St. David's (still a lord in his own right) were still extensive, but details in the *Valor Ecclesiasticus* show that rents could still be paid in kind in a few of the tenancies, and even where cash was demanded the amount was still reckoned on the basis of the amount of land or the number of cattle or sheep owned by the tenant. The *Valor* states:

> '... The same Bishop claims and holds to have ... the demesnes, manors, lands, tenements and possessions underwritten, namely, the castle and manor of Layhaden by the name of the entire barony of the tower of the city or town of St. Davids and the demesnes of Pebidiauke, Diffrentowy and Diffrenteivy[6] with the members as well as the manor of Lantefey [Lamphey] and the deer park there and also his palace embattled by his cathedral Church of St. Davids, ..."

It goes on to describe the various types of tenure, both Welsh and English, that existed on the estates and the dues and services expected of the different types of tenant. It is clear that, in both Welsh and English tenure, the stock held by the tenant was still important in the payment and adjudication of rent:

> 'And also the Bishop has from his said tenements a collection called a Comortha every third year, namely, from every carucate of English land one sheep price twelve pence or in money twelve pence, and from each tenant or inhabitant in Welsh land possessing one cow or ten sheep twopence in price, and the said collection is worth seventy-four pounds paid at the feast of St. Michael the Archangel only. And the said Bishop will have after the death of every tenant mere possession of the land of the possessor at the time of his death the best animal for heriot if it remain within the territory, otherwise five shillings. And if he shall have alienated the whole he shall pay the heriot as above[7].'

Here is recognition that the rent relating to sheep was regarded as a form of the ancient southern Welsh payment, the *commorth*; it still does not resolve the question of the origins of the use of sheep for the payment. Here is also the recognition that, in the past,

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[5] Dugdale, Sir W, 1846, Vol V, p 130

[6] 'Diffrentowy' and 'Diffreteivy' were in Carmarthenshire and Ceredigion respectively.

[7] Valor Ecclesiasticus, Henry VIII, p 379 (Liber Regis, fo 113) (cited in Roberts, R A (ed), 1920)

Welsh tenants (under Welsh tenure) were more likely to have possessed significant numbers of cattle rather than sheep than were tenants under English tenure, a feature borne out in the Extent of 1326 (see Chapter 3). The *Valor* from the early 16th century gives the value of an adult sheep as around 12*d*. The expected value of the 'best animal' for heriot, payment for when a tenant died, was 5*s*, and was therefore likely to be related to cattle rather than sheep. The payment of 2*d* by 'Welsh' tenants appears to be much less of a burden than the rent paid by 'English' tenants, but it is related to the division of land through inheritance in the 'Welsh' tenancies. The 'English' tenant paid a sheep or 12*d* for each carucate of land held; the 'Welsh' tenant would have had that carucate split between heirs in the manner of *gavelkind*[8] inheritance, and so there would be more tenants on the same area of land. This would reduce the payment for each tenant, but reach the same value when all tenants were taken into consideration. It is not clear whether any rent was still paid in kind at this stage or whether all the rents were commuted to money, only that the option to do so was there.

4.2 Sheep Husbandry

Information concerning sheep and sheep husbandry becomes more readily available than in records from the earlier period, and this is so especially from the 16th century, where the writings of George Owen, Lord of Cemais[9], on his native Pembrokeshire are invaluable. He discusses the organisation of agriculture in Pembrokeshire and gives examples of how he considers a model agricultural establishment should be set up and accounted for. In doing so he gives an indication of the place of sheep in the system. He lived at Henllys (in the manor of Coedywiniog and Bayvill[10]) near Newport in Pembrokeshire and died in 1613. The following sections, 4.2 (1) - (6) are based on the evidence of his writings.

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[8] See 2.3.

[9] See Figures 2.4 and 2.1 for Cemais and Newport respectively.

[10] 'The Lord holds in his own hands the chief mansion house of Henllys where he now lives, together with all barns, stables, granaries, chambers and other buildings and all the lands, meadows, pastures, woods and underwoods, ponds streams and fisheries of Henllys Issa, Henllys Ycha, Henllys Morgan, Melyndre, Dyffrin Dead, Castell Henllys, Park y Pistyll, Maes Morgan, Comeog, Pistill y Blaith, Pant y Llech and Keven Pant y Llech in the parish of Nevarne, and they are worth yearly £40.' (Howells, B E & K A, 1977, p 48).

4.2 (1) Communal Sheep Flocks

In the 'Welsh' areas of Pembrokeshire (mainly in the northern and eastern parts of the county), Owen gives the prevalence of *gavelkind* inheritance as the reason why sheep and other animals were allowed to roam freely over the land making the use of winter wheat as an arable crop virtually impossible[11]. Large areas were totally un-enclosed as the parcels of land belonging to different people were mixed up and intermingled with each other. The animals (sheep and horses) were not housed during the winter months, an option made possible by a relatively mild climate compared with inland and upland regions, and there was no way to stop them trespassing on a neighbour's plot of land when grazing. These sheep were not fed any hay during the winter; they had to get all their fodder by grazing the land[12]. After the winter the sheep were collected together and ear marks were used to identify the sheep of each owner[13]. There are two ways to mark sheep, using the ears, or marking or cutting the actual fleece. As the second method is easy to destroy or alter, cutting the ear is the best method of identifying sheep. Different owners would use their own patterns, which would be easily recognised by their fellow stockmen[14]. George Owen[15] petitioned Elizabeth I in an attempt to improve the marking of sheep and so stop unscrupulous people from removing sheep that were not their own. One example of ear marks being changed comes to light in the records of the Great Sessions[16] where Griffith Lloyd, a 'plowman', from Llandeloy was indicted for altering the ear mark of a sheep belonging to John ap Rice of Rickeston in Dewsland (Pebidiog) and then shearing the sheep. When caught he defended himself by saying that he had assumed the sheep was his as it was running in his flock, and when he discovered that the ear was bleeding, and the ear mark was not his own, he had tried to return sheep and fleece to the rightful owner. The outcome of this case is not known.

The sheep ran together during winter and were only collected and identified in the spring after lambing. This would facilitate the marking of the lambs before they

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[11] Owen, G, 1603, i, pp 61-2

[12] Owen, G, 1603, i, p 56

[13] Ear marks are still used today to distinguish sheep running on the Commons of Wales. It is illegal to sell a sheep without its ears as that presupposes that the sheep has been stolen.

[14] Peate, I C, 1929, pp 36-37

[15] Owen, G, *The Taylors Cussion*, pt I, fo 20

[16] Jones, F, 1966, p 23. The Great Sessions were courts set up after the Act of Union in 1536 to replace those of the marcher lordships.

became too independent from their dams and would lessen the risk that unprincipled owners could claim straying lambs as their own.

When cultivation of crops was imperative, folds were constructed of 'cloven oak' to retain animals on certain stretches of ground at night, so fertilizing it with their dung. The principal time for tillage of oats in many parts of Wales was in March and April[17]. It was therefore important that the animals were kept away from those arable fields at that time. In Pembrokeshire the problem would have been exacerbated by the lack of obvious non-arable areas, except for the Preseli Hills, making the typical practice of transhumance as happened in other more mountainous parts of Wales a less viable solution against destruction of growing crops. George Owen himself owned common land on the Preseli Hills where he kept about 300 sheep and lambs along with 120 horses and other cattle[18].

The combined flocks of the community were not separated until the time for weaning of the lambs had arrived, thus releasing the ewes for milking. The flocks continued to be run together, usually until April or May[19]. The hurdles were moved every few days to a new position. Over the period of the summer (from March to November), it was reckoned that two acres of land would require the dung of 200 sheep and twenty other (larger) animals to retain its fertility. This points to fairly large numbers of sheep being needed within a community to retain that fertility, particularly as oats, which the Welsh commonly planted as their staple cereal crop, deplete the fertility of the land fairly rapidly thus necessitating a long period of fallow. After six to ten years of continuous cultivation, which was the Welsh method of arable farming, a similar period of fallow was often required. In some other parts of the county, sheep were housed at night for protection and to provide dung. When combined with the straw used underfoot when housing animals, the dung from housed sheep was able to fertilize three times the area for the same number of animals as straight folding on the land was

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[17] Owen, G, 1603, iii, p 49. On p 85 George Owen draws attention to the large number of trespass cases going through the courts in summer presumably because the flocks and herds often escaped from control, damaging a neighbour's crop.

[18] Howells, B E & K A (eds), 1977, p 40

[19] Owen, G, 1603, i, p 150; this practice exacerbated the problem of identifying sheep belonging to different owners. Owen was of the opinion that several hundred sheep went astray every year because the onus was on the owner to recognize his own sheep mark. (See also *The Taylors Cussion* (Owen, George) pt I, fos 20-23.)

able to do[20]. Charles Hassel, in 1794, pointed out the practice of the use of 'night fields'[21] in some parts of Pembrokeshire where animals were 'folded' in enclosed fields at night-time only to help with their fertilization. This may well have been the practice for many years previously, particularly where enclosure had occurred from an early date.

4.2 (2) Island Sheep Pasture

The islands around the Pembrokeshire coast were not ignored when sheep pasture was required[22]. Although Caldey Island, near Tenby, appears to have been very fertile it was not noted for pasture of animals, particularly as it was frequently visited by pirates on the lookout for stock to replenish their food stores. It had been a dependency of St Dogmael's Abbey but at the dissolution had been bought privately. The other large islands were used frequently to raise stock, which often probably ran wild to a great extent. Skockholme and Skalmey Islands belonged to Sir John Perrot towards the end of the 16th century until he was accused of treason and put in the Tower of London, where he died in 1592. An inventory of his goods taken at his death noted sheep owned by him on 'the iland' in charge of Jenkin Llin; which of the two islands being referred to is not made clear (see 4.2 (7)). When George Owen wrote his '*Description of Penbrokeshire*' these islands were in the hands of the Queen and still being used, '... thoughe not inhabited, but serve onlye for feeding of sheepe, kyne, oxen, horses, Mares and great store of Coneys ...'[23].

Two smaller islands close to Skockholme and Skalmey (Midland Island and Gatholme) were used solely for sheep pasture. Ramsey Island was still in the personal ownership of the Bishop of St. David's and although it gave pasture for sheep and other cattle and horses, the sheep were apparently affected by the salt water that contaminated their wool so damaging it and making it coarse and of poor quality. This may have been the reason for the relatively poor value of sheep from the islands as seen in the inventory of the goods and stock belonging to Sir John Perrot at the time of his death (see later this chapter). The 'island' of Dinas was actually a peninsula, which was

[20] Owen, G, 1603, i, p 62
[21] Davies, W, 1815, Vol II, p 266
[22] Owen, G, 1603, i, pp 110-4
[23] Owen, G, 1603, i, p 111

considered to be good land for the cultivation of corn. However, sheep were also to be found there as a wall had been constructed, a 'stone hedge', to allow cattle and sheep to graze without damaging the tilled land. This wall had been built 'in Aunciente tymes' according to Owen, an early form of enclosure[24].

4.2 (3) Woodland Grazing

Sheep were also allowed to graze woodland as is seen in the forest of Pencelli (part of the demesne of the manor of Eglwyswrw in Cemais owned by George Owen) in 1594. The area of the wood contained approximately 1.8 square miles (500 acres) and was enclosed with a fence with the entrances locked to regulate the numbers of animals that could graze there. In the past it was probably kept as a deer park for hunting but that seems to have been superseded by 1594. The sheep could only use it in the winter.

> '... the same conteyneth ... about 500 acres of woodde and is enclosed with quickset and pale rounde about and under lock, and doth contyne in compasse ... about 4 myles and three quarters ... Yt is all growne with great okes of 200 yeres growth and more and some younge woodde of 60 yeres growth, and most of it well grown with underwoode as orle, hazell, thornes, willowse and other sortes ... the herbage whereof ... will somer 30 breeding mares, and winter 300 sheepe and 200 cattell well and sufficiently, besides swyne which may be kept there. ... the Herbage of the said woodde is very good for cattell, horses, mares, sheep and swyne ...' [25]

4.2 (4) Sheep Types

Owen describes the sheep of the county as being 'but small of bodie and the woolle courser then the englishe woolle and therefore yealdeth lesse price than most...' [26]. This would seem to describe the typical Welsh sheep; there are no descriptions of any other type of sheep that may have been found in Pembrokeshire such as the English and 'Mershe' sheep of Sir John Perrot (4.2 (7)). The Welsh sheep were apparently generally free from 'rot' and their flesh was sweet, but that did not stop their decimation during years when the 'murrain' was rife throughout Pembrokeshire (in 1815 'rot' was described as being caused by the liver fluke *Fasciola hepatica*[27]). The fact that sheep were allowed to run freely together during the winter months would have made the spread of some diseases easier[28].

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[24] Owen, G, 1603, i, p 115
[25] Howells, B E & K A (eds), 1977, p 63
[26] Owen, G, 1603, i, p 56
[27] Davies, W, 1815, p 261
[28] Owen, G, 1603, i, p 56

4.2 (5) Dairies

Even at the end of the 16th century sheep were still to be found associated with dairies, although cattle or 'milchkine' were becoming increasingly evident. However it is clear that dairies were often found as units within mixed farms. George Owen produced a census[29] covering the whole of Pembrokeshire concerning, among other things, the number of dairies to be found in the county. The figures have been transferred onto a map by Dicks[30], which shows the number of dairies per square mile. As has been demonstrated, sheep were still an important factor in the dairy industry of the time and so the presence of dairies probably gives an indication of the presence of dairying flocks. Large areas of the county appear not to have had any dairies at all and, therefore, no breeding ewes. The census, however, probably only covered the more permanent dairying facilities of the larger landowners; Owen would not have been able to count the dairying activities of the numerous smaller farmers, with relatively small flocks and a few milking cattle, who would have had temporary dairies set up in the summer months for the sheep and probably coped on a day-to-day basis with their cattle throughout the rest of the year. The census therefore gives a minimum rather than a definitive figure for sheep dairying activity in the county.

In *The Taylors Cussion*, Coorthall[31], part of the demesne of the manor of George Owen, was used as an example of the way in which accounting of the profits and losses of that farm should be set out[32]. There were 320 sheep at Coorthall of which 132 were reckoned to be part of the accounting of the dairy, 120 'milcke ewes' and twelve 'drie ewes yeldinge no profitt'. The fact that the unproductive ewes were still to be found in the dairy accounts suggests that the dry ewes were part of a separate dairy flock on the farm, but that they were barren or had lost their lambs before commencement of lactation. The dry ewes had not been placed with other non-milk producing sheep. This example in *The Taylors Cussion* referred to May 1593 and, although it included calves

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[29] Owen, G, *The Taylors Cussion*, pt II, fos 80-81

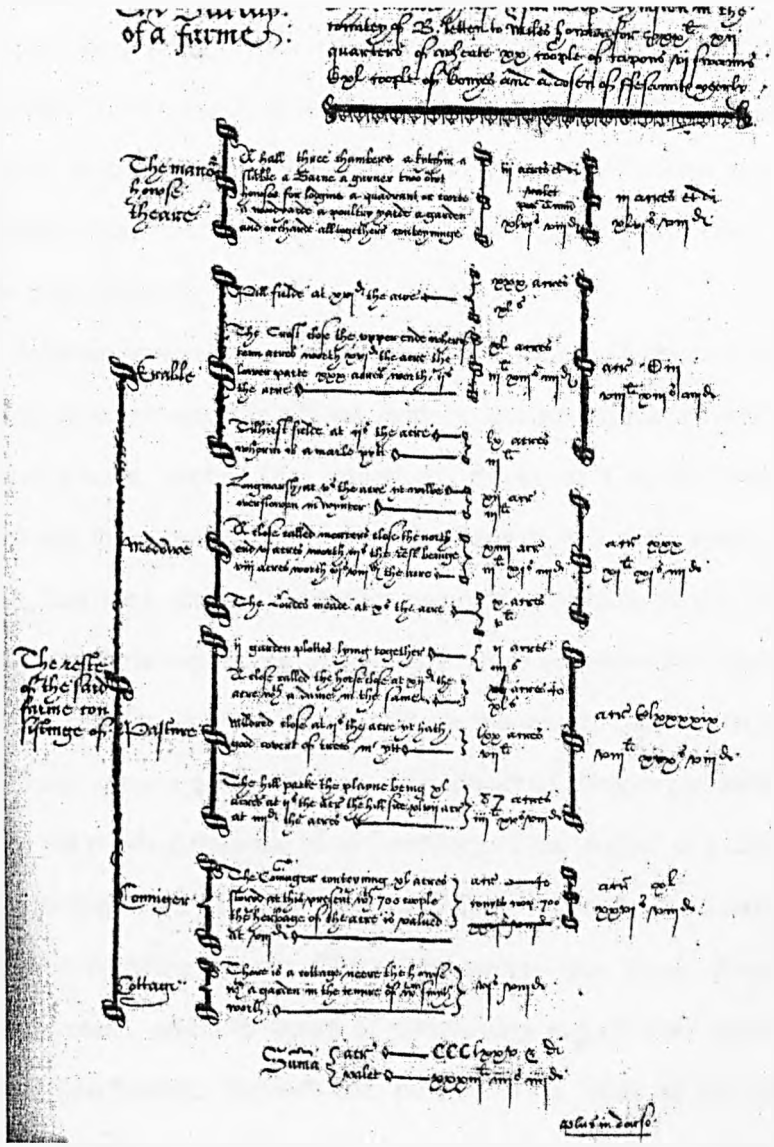
[30] Dicks, T R B., 1967, p 223

[31] 'Coorte Hall the manor house ... There was in owld tyme an anncient manor howse or castell called Coorte hall, nowe comonly called the Coorte, which was seated upon a faire plaine within a square mote standing very comodiously for wodde, water and other comodities. The howse is now utterly decayed and the lorde kepeth the demeynes in his owne handes.' (Howells, B E & K A (eds), 1977, p 63).

[32] Owen, G, *The Taylors Cussion*, pt I, fos 31; 33

belonging to cattle in the dairy, the lambs had been removed and only appear in the overall accounts of the whole farm for the end of the year[33]. The account of the dairy was to be taken monthly.

Figure 4.1 Part of '*The Taylors Cussion*'



4.2 (6) Accounts

The yearly account at Coorthall takes into consideration all the stock on the farm as a whole and suggests that there were 188 wethers present. (A small number of rams may have been included in this total as they are not specifically mentioned, but it is more likely that either they were kept separately on another farm altogether, or bought or

[33] In Cyprus, where sheep are still milked, lambs are allowed to stay with the ewes only for the first three or four weeks, after which time the majority are slaughtered, presumably for meat (Maule, J P, p 343). This does not appear to have been the case with George Owen's lambs as they do turn up in accounts for another part of the enterprise.

hired in when required.) One hundred and four lambs remained at the end of the year after removal of tithe and casualty lambs, each remaining lamb being worth 18*d*. What becomes clear from the 'deductions' part of the account is that the sheep here were rented from a third party for a sum of £8. George Owen, however, was of the opinion that renting sheep out oneself was not very profitable. He estimated that renting out 400 sheep would only bring in total of about £10, whereas that number of sheep on his own land would in turn bring in at least £33 when the wool, milk, lambs, and the folding of sheep onto arable land were taken into consideration[34]. This probably explains his willingness to rent from others as he felt that a sizeable profit could still be made even after the cost of renting.

Separate general accounts proposed by George Owen in 1593[35] show ewes and wethers in equal numbers in a flock, with no distinction made between the value of the two sexes (3*s*.4*d*. each). The 'supposed' flocks of George Owen (in *The Taylors Cussion*) and the actual flocks of Sir John Perrot[36] still show some of the separation of the flock functions seen in the earlier manorial examples of the 14th century, but to a lesser degree. This separation of function would not have been the case where flocks were much smaller as were the majority in the county (see 4.2 (8)); wealth and larger land holdings allow a greater degree of flexibility of stock organization.

In yet another example of an inventory of the 'cattle' in a dairy[37], Owen includes all the breeding stock of many types of animal within the accounting and, in addition, includes non-breeding animals. There were twenty-four 'kyne' (four of which belonged to the dairyman), and 140 sheep of which only eighty were milk ewes, but he also includes 'plowbeasts', 'swyne' and poultry. This leads to the conclusion that the remaining sheep were wethers and hogs (apart from perhaps a few rams) and that in this case the segregation was not so rigorous. Of the eighty lambs born (the figure corresponds to the number of ewes being milked, leading to the conclusion that each ewe usually only produced one lamb as in the 12th and 13th centuries), fourteen went as tithe lambs, eleven died and eleven were killed (for meat?). The dairyman took thirteen

[34] Owen, G, *The Taylors Cussion*, pt I, fo 35
[35] ibid, fo 35
[36] Anon, (*Archaeologia Cambrensis*) 1866, pp 339-358
[37] Owen, G, *The Taylors Cussion*, pt I, fo 5

presumably as part of the perks of the job as there is no record that the he was running his own sheep with the flock as was the case with his 'kyne'. The owner took the rest, which was less than half the original number, and added them to his flock as replacements. As the accounting took place in November, there is certainly no indication that any of the lambs were sold on before the winter to preserve the winter food supply. Where meat is the prime use for which lambs are bred, the farmer tries to sell as many as possible before winter to avoid the necessity of feeding them valuable hay, which might otherwise go towards feeding extra adult sheep. That lambs were largely used to replenish stock is seen in another of George Owen's statements[38]:

> ' The lambes of CC such ewes may be esteemed to be yeerly at Clx in good gronnde beside all casualty and tythe every lamb valued at xviij d. But most commonlye the lambs are allowed towards mayntenaunce of the stocke and it wilbe no more in most grownde.'

The total value of lambs was reckoned to be £12, but this can be seen as a paper value only as probably all of the ewe lambs and most of the wethers would not be sold but used as replacement stock. This could only be countenanced while a flock was being expanded, or if there was a high replacement rate in the flock as a general rule, as eventually the limit of pasture available would be reached, and then surplus stock would then have been sold perhaps in the fairs around the country. The use of lambs for replacement also means that it was usually adult sheep that were sold and used for meat, and not the fat lamb that we use today. The use of lambs from within the flock would also necessitate a frequent turnover of rams to avoid inbreeding. This may have been the reason for the relative non-appearance of rams in the accounts as rams could be bought in at the appropriate time or perhaps rented from a neighbour.

There is no doubt that the use of sheep as meat animals was increasing and it would be the wether that best fitted this role. However, whereas ewes would be used for milking and for internal replenishment of stock as well as for their wool, wethers would have been kept on beyond one or two years old only if the wool they could produce was still important. There is no advantage in the keeping of wethers for use as meat animals alone once fully grown, on the grounds of useage of valuable pasture alone. Even if the farmer were keeping some wethers back for his own consumption, the idea that a large

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[38] Owen, G, *The Taylors Cussion*, pt 1, fo 35

proportion of his flock was being kept for this purpose is hardly tenable. Wool production was probably the principal 'raison d'etre' of the male sheep, and meat still only of secondary importance.

4.2 (7) Sir John Perrot

The importance of the wether to the flock-master is highlighted in the make up of the flocks owed by Sir John Perrot[39]. When he died in the Tower of London in 1592 a detailed inventory was made of all his goods and chattels, including the type and value of stock to be found on his lands. (Prior to this Sir John had complained to Lord Burghley that, when his sheep and cattle had to be sold to pay for his trial and defense, they would only bring a small price as they were mainly of the Welsh breed[40]).

Figure 4.2: Sheep from the Inventory taken at the Death of Sir John Perrot

Name	Context	No	Type	Value
Jenkin Llin	'Iland'	495 132	Sheep Lambs	2*s* 1*s*
John ap Jenna'	Deryman, Folkeston	242 31 35	Sheep Yearling sheep Lambs	
	Weston or Yerbeston	300	Sheep	2*s*
Henry Mitchell	(lent to)	1 (1)	Ram *mort ex sacro* (bull)	23*s* 4*d* (16*s*)
Thomas Pricket	East Marshe	560 460 500	Welsh sheep (shorne) Marshe sheep Lambs	2*s* 6*d*
Edward Wynn	the Brooke	100 148	Mershe wethers Welsh wethers	5*s* 4s 9½*d*
Jenkin Dod	Llanstephan	476	Wethers	3*s* 2*d*
Tho. Dod (clerk)*	out of Laugharne	167	Tithe lambs	1*s* 4*d*
Morris Rawlyns	Marras	600	Sheep (lease expired)	2*s* 4*d*
Tho. Dawkins	out of Llanstephan	170	Tithe lambs	1*s* 4*d*
George Elliot	Carew demesne	120	English wethers	5*s*
(Donlee & Vaughn)	(sold)	40 400 60 20	culled Eng. wethers English ewes culled Eng. ewes English yearling sheep	5*s* 3*s* 4*d* 3*s* 4*d* 3*s* 4*d*+
(Mr Grafton)	(sold)	20 160	culled Eng. yearlings English lambs	3*s* 4*d* 2*s* 6*d*
(Donlee & Vaughn)	(sold)	20	culled English lambs	1*s* 8*d*
Phillips	Picton	4	Rams	5*s*

* Tho. Dod (clerk) & Jo. Bucket

+ Some of the ewes here may have been worth only 2*s* 11*d*

The actual sale shows that this estimation was only partially true.) The inventory even differentiates roughly between different types or 'breeds'[41] of sheep, and within those

[39] Anon, (*Archaeologia Cambrensis*), 1866, pp 339-358

[40] Cal State papers (Domestic) Vol 223. No 242, dated May 27th 1592 (cited in Evans, P C C, 1940, p 278n)

[41] Breeds of sheep from this period are almost unrecognisable compared to modern sheep after the breeding programmes of the 17th and 18th centuries to improve the meat producing capabilities of sheep generally.

'breeds' sheep were categorized into ewes, rams, wethers, yearling sheep and lambs (although some were just alluded to as sheep) and therefore gives a valuable insight into the constitution and organisation of flocks, the details of which are more often obscured. Some of the places mentioned in the inventory are not to be found in the Pembrokeshire of post-1542. The island mentioned in the original document is in the county, being either Skockholm or Scalmey Island[42]; Carewe, Yerbeston and Picton are certainly in the county; (Llanstephan and Laugharne are in Carmarthenshire at present, but when the original counties were arranged in 1536 both Llanstephan and Laugharne were in Pembrokeshire until the later reorganisation of 1542, when they were given to Carmarthenshire). East Marsh is in Laugharne, according to the inventory, and can still be recognized on modern maps of the area; Folkeston was probably in Pembrokeshire[43]. Although not designated as such, many of the places mentioned in the inventory were dairies or had dairies as an integral part. Although all the sheep at 'the Brooke' (also in Carmarthenshire) appear to have been wethers, Edward Wynn was a 'daryman' and kept thirty-one kine there, perhaps an example of cattle in a dairy rather than sheep; Carew would have had a dairy as part of the demesne.

From the Fig 4.2 it can be seen that the total numbers of sheep (excepting lambs) owned by Sir John Perrot was well over 3500. The breakdown into age and sex is as follows:

Rams: 5
Sheep: 2097
Ewes: 400 (+ 60 cull ewes)
Wethers: 844 (+ 40 cull weathers)
Yearling sheep: 203 (+ 20 cull yearlings)
Lambs: 827 (excluding 337 tithe lambs)

As it is likely that many of the 'sheep' were wethers and yearlings (and perhaps some rams) as well as ewes, this could bring the wether population close to half the total flock, a figure in line with information from other contemporary flocks. The presence of ewes in the 'sheep' group can be postulated where lambs are also recorded, for example as on the 'iland', but not with any certainty. Lambs may have been added to the flock after weaning, the evidence from the flocks elsewhere supporting this. The figures

[42] Owen, G, 1603, i, pp 111-2
[43] Charles, B G, 1992, pp 623; 625; 628

relating to ewes and lambs together are anomalous; at Carew the 400 ewes are accompanied by only 180 lambs including cull lambs, while, at Folkeston, the dairy had many sheep but only thirty five lambs. As the figures for yearling sheep at Folkeston was also very low, it is probable that they were kept elsewhere in a separate flock and perhaps became part of the 'sheep' numbers as was the case in the Coorthall dairy of George Owen (4.2 (5)).

Some 600 sheep had previously been leased to Morris Rawlyns of Marras (near Pendine, Carmarthenshire) along with some land. This was a common practice as it had the advantage that someone else took the risks with the sheep, but was still obliged to return a similar number of sheep at the end of the leasing period. George Owen was not averse to renting sheep in from others (see 4.2 (6)). The lease to Morris Rawlyns had expired and the land and stock restored to the estate. (The tithes on the offspring of leased sheep were the responsibility of the original owner, not the lessee. It was therefore important that any rental covered the cost of paying the tithe to the Church when it became due[44].)

It is also clear from the inventory that land around Carew was still in demesne at the end of the 16th century; the structure of the 'manor' remained and the stock on the demesne still belonged to the landlord. It is probably significant that the English sheep were kept solely on land on the demesne of Carew, which was the family home of Sir John Perrot. He may well have taken a keen personal interest in the breeding of these sheep as a method of increasing the quality and value of his flocks. The effort taken by Sir John, through his stockmen, becomes even more apparent when looking at the farming enterprises of his fellow wealthy landowners such as George Owen, and Griffith White of Henllan in the parish of Rhoscrowther[45]. The full extent of the farming enterprise of George Owen is not known (but was probably on a large scale) but the maximum price he quoted for his sheep was 3*s* 4*d* per head; Griffith White did farm on a large scale with 1100 sheep among his stock, but when he died in 1589-90 they

[44] Oschinsky, D, 1971, p 427

[45] Jones, F, 1975, p 66. Griffith White was a very rich man when he died. He had led an active life in the local political scene, having been High Sheriff of the county of Pembroke in 1561, 1570 and 1581. He was also a JP in 1575 and also before that time, and was one of the commissioners appointed in 1574 by the Council of the Marches in Wales to investigate the export of grain and victuals from Pembrokeshire. He was involved in some trouble concerning Sir John Perrot in 1582-3 over ownership of land in the parish of Rhoscrowther; for the son of Griffith White, ibid, p 71.

were valued at only 2*s* each. The fact that outside assessors (who did not have a history of amicable relations with Sir John Perrot) regarded his sheep so highly points to him having been extremely well regarded locally concerning his sheep, and he may well have been ahead of his time in placing such emphasis on the breeding of his animals.

On the 'Iland' there were nearly 500 sheep together with 132 lambs. These sheep (excluding the lambs) had an average value of only 2*s* which, when compared to the values of his other sheep, may have reflected the relatively poor pasture to be found there and the possible effects of the salt water. Even the lambs there were worth relatively little. The opposite is seen on the demesne at Carew where a similar mixed flock was of high quality English sheep. Even the culled lambs at Carew were worth more than the lambs of Ramsey Island. The value of the island sheep is brought into perspective, however, when compared with the sheep of Griffith White, which had exactly the same value in 1589-90 when he died.

There were apparently three 'breeds' of sheep mentioned in the inventory - English, Welsh and 'Mershe' (or 'marshe') sheep. It is interesting to note that Edward Wynn's Welsh wethers were of a similar value (at 4*s* 9½*d* each) to the English wethers worth 5*s* apiece. This goes against most of the evidence about the value of Welsh sheep in general. Most Welsh sheep in the inventory seem to have been worth an average value of between 2*s* to 3*s* 4*d* each[46], although whether these were wethers, ewes, or a mixed flock often is unstated. Further evidence concerning the relatively low prices achieved by Welsh as opposed to English sheep can be seen in the inventories of some of the small farmers of Pembrokeshire as recorded in the probate records of the See of St. David's[47] (see 4.2 (8)). Perhaps the Welsh sheep of Edward Wynn were a genuinely different variety from the sheep normally recognized as Welsh sheep[48]. It is generally considered that sheep did not develop significantly larger carcasses until there was improved selective breeding in the 17th and 18th centuries, in response to the needs of

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[46] Evidence from the toll books of 1603 gives a price of around 2s to 2s 6d for sheep sold there. See 4.3.

[47] See Appendix A.

[48] Walter Davies in his 'General View of the Agriculture and Domestic Economy of South Wales' (1815) refers to surveys taken at the end of the eighteenth century where the Glamorgan Vale sheep was reckoned to be the only breed in Wales 'not introduced in the memory of man' that produced good combing wool (p 250). If this sheep was an indigenous variety it may have been significantly better at producing wool than the normal mountain type Welsh sheep usually found and may therefore have been worth significantly more. Was this type the 'Welsh' sheep of Edward Wynn?

the meat trade, and an improved nutritional regime, made possible by the introduction of new foodstuffs. The premium on the 'English' sheep (and possibly the Welsh sheep of Edward Wynn) would not have been paid for improved carcass weight at this time[49]. The use of a 'better' sheep would probably have been a measure of an attempt to upgrade the quality of the wool and/or obtain a heavier fleece weight. That fleece weight of Welsh sheep was generally poor even by standards of the time can be seen in the assertion of George Owen[50] that on his own farms, fleeces of just one pound weight in total were all that could be expected.

It is obvious, then, that there was wide variation in the value of sheep at this time, and a recognition that some types or 'breeds' of sheep were more valuable than others. The placing of a large number of apparently segregated English sheep at Carew was an attempt by the flockmaster to try to improve the quality of sheep in the locality and to improve revenue production. The highly expensive ram, on loan to Henry Mitchell at the time of the inventory, would definitely have been an attempt to improve local sheep breeding. The ram was obviously very special as its value was well above that of a bull, a most unusual occurrence. There has been some speculation as to the possible breed of this ram but the appellation '*mort ex sacro*' is very problematical. A direct translation would suggest that the ram had died, an extremely unlikely occurrence given the very high value placed on it; dead sheep of whatever breed would have had little intrinsic value. Laws[51] suggests that it may have been a merino ram from Spain, a breed famous then, as now, for their very fine and valuable wool. This is a possibility. Whatever the breed, it must have been worth the expense in the eyes of the owner.

Other rams actually mentioned (an unusual occurrence in itself) were valued at 5*s* each, a much more realistic figure for good but not spectacular rams. What is apparent is that rams were not often noted separately from other sheep. The large sizes of some of the flocks would have required several rams to service them; these 'disappear' in the inventory except for the five shown. Of particular interest is the apparent lack of English rams to cover the specialised flock at Carew. It may be that the

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[49] Trow-Smith, R, 1957, p 258
[50] Owen, G, *The Taylors Cussion*, fo 35
[51] Laws, E, 1888, p 291

five rams mentioned were used in that capacity, but even this number would not be sufficient for 400 ewes[52]. The four rams with Phillips of Picton may well have been itemised separately if they were regarded as being special, but without more extensive records it is impossible to be sure. It does appear that the rams had been lent to other large landowners of the area such as Phillips of Picton, who belonged to one of the foremost families in Pembrokeshire.

The type of sheep designated as 'marshe' or 'Mershe' sheep present more of a problem. If they were just sheep kept on marsh land there would be no apparent reason for their high value (on a par with the English sheep) as fresh water marshes encouraged disease and salt water marshes, although being more beneficial to the health of the sheep, perhaps carried a risk of damaging the wool through salt contamination; if the sheep were from the Marches of Wales, an important wool growing areas along the eastern borders of Wales and England, this might explain the situation. Evidence for this proposition is seen solely in the value of the 'Mershe' wethers kept by Edward Wynn. They were worth 5*s,* which is identical to the English wethers seen on the demesne at Carew. Sheep from the border area, especially on the English side, had long enjoyed a high status as fine wool producers and may have been imported into the area to improve the quality of the wool that the local sheep produced (supposedly notoriously poor)[53]. It is, however, impossible to come to any definite conclusion on this point.

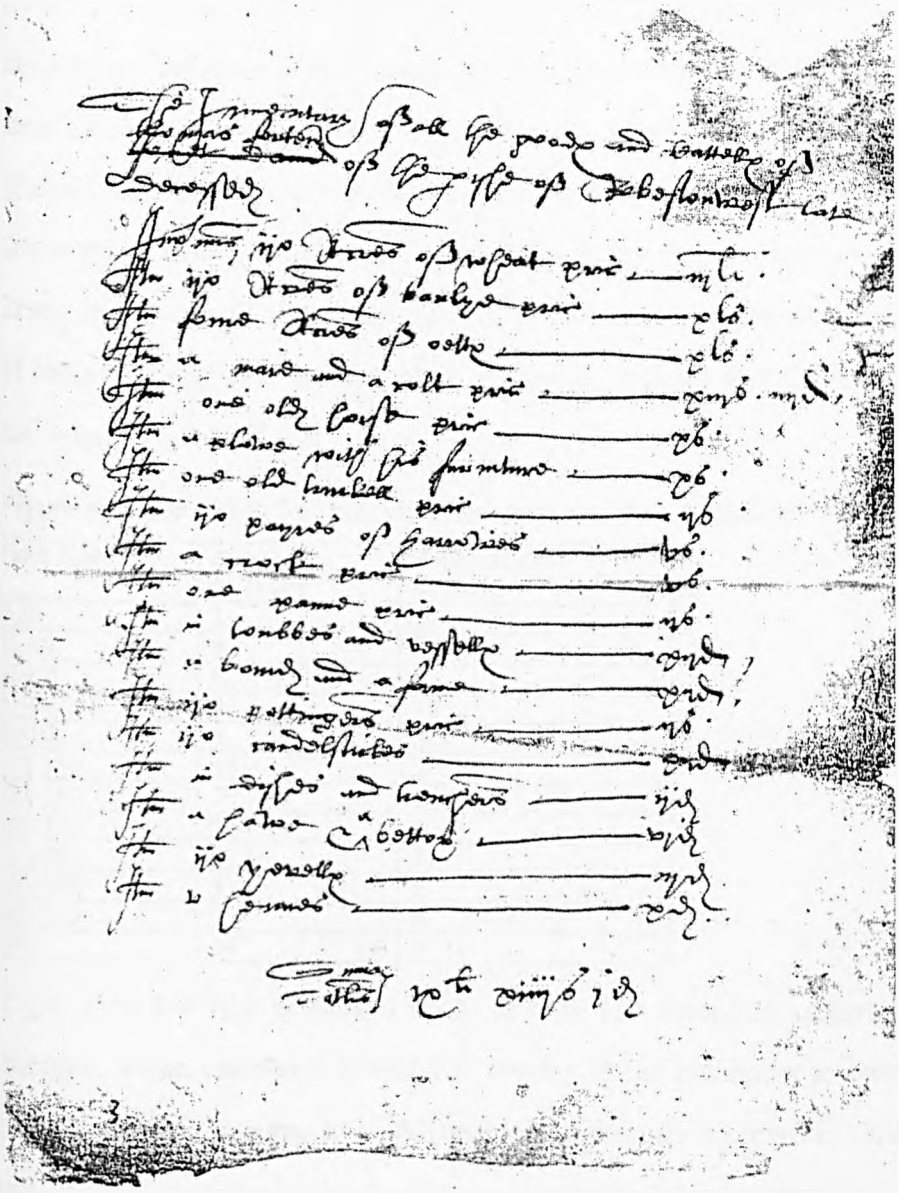
4.2 (8) The Small Landholder

The ability to improve a flock significantly would very much depend on the wealth of the individual landowner, and would thus have been outside the scope of many of the farmers of small landholdings. The sizes of flocks on some of these small farms are shown in probate inventories taken after the death of the landowner. The survival of this type of record increases markedly after the beginning of the 17th century. Yet, even when the date that the inventory was taken is ostensibly outside the parameters set for this thesis, later inventories are still useful as they can highlight the type of situation present during the relevant period. This representative sample of inventories, (see

[52] See 3.2 (2) (a).
[53] Rees, W, 1924, p 137, fn 3

Appendix A), show the presence of a mixed agriculture of arable and livestock including sheep, horses, pigs, and cattle. The original inventories also show poultry and indicate the presence of a certain number of goats and bees.

Figure 4.3 Example of Part of a Probate Record from Pembrokeshire[54]



Pembrokeshire at the end of the 16th century still had large areas unenclosed, particularly in the north where the complex nature of the land holdings produced problems, and most farmers were never far from the wasteland that they used to graze their herds and flocks[55].

[54] Taken from NLW probate records of the See of St David's around the beginning of the 17th century.
[55] Howells, B, 1955, p 321

The importance of the livestock side of their farming is reflected in the relative values of their livestock and their crop yield. This applied both to landholders living in and around the settlements that sprang up in the 12th and 13th centuries following the Norman invasion, as well as to farmers living in isolated farmsteads. Later maps, particularly in the south of the county, show the fields associated with settlements and the adjacent presence of the 'mountain' where livestock was allowed to graze. That this term could also apply to low lying areas was a result of a direct mistranslation of the Welsh term '*mynnyd*', which can mean pasture as well as a hill or mountain. George Owen stated that even at the end of the 16th century much of his part of Pembrokeshire in the north was still 'champion' (plain), and livestock roamed at will over it in the care of older children[56]. As far as stock is concerned, even the wealthiest of yeomen farmers had relatively small flocks[57].

Figure 4.4 Size of Flocks (Including Lambs) and Their Frequency[58]

Flock Size	England % Totals	Pembrokeshire % Totals
0-20	2	22
21-40	4	19
41-60	6	9
61-80	5	10
81-100	5	5
101-120	13	2
121-140	13	2
141-160	12	5
161-180	6	3
181-200	5	2
201-240	7	0
241+	16	9

There were few who possessed flocks of over 150 sheep, the majority being below a hundred. When compared to mid-16th century flocks belonging to farmers in England (details taken in response to a parliamentary request for a census of sheep in 1549[59]), it can be seen that there, also, a large percentage of flocks contained fewer than 150

[56] Owen, G, 1603, i, p 146

[57] See Appendix A.

[58] Taken from Appendix A. There are 58 records in total, of which 5 could not be used, (xxxi, xxxii, xli, and lviii), where no numbers or values could be seen on the inventory, and (lii), where Steven Thomas rented out all his sheep (over 100, but again the totals could not be estimated with any accuracy). Record (xlviii) has been used, with the flock size estimated as between 141 and 160 from the probable value of young sheep compared to others on the inventory, and their actual total value as seen on the inventory.

[59] The census of sheep was not carried out with enthusiasm in many of the places where it was taken. Some counties were conscientious but others were not. Therefore records are irregular both in content and distribution. Table 4.4 includes details from the following English counties - Huntingdonshire, Nottinghamshire, Oxfordshire and the three Ridings of Yorkshire (Beresford, M W, 1954, pp 22-5)

sheep[60], but that the distribution is slightly different. Figure 4.4 highlights one glaring difference between the two areas; in Pembrokeshire small flocks of below twenty sheep are relatively common compared to the English flocks; in England it is the flocks of between 100 and 150 sheep that are the most common. Absolute comparisons are not possible as the numbers of flocks involved are not the same but trends are visible. However this may be more a reflection on the sizes of the farms in those areas than an indication of the importance of sheep to the farmer. The density of sheep in the two areas could even have been the same. More research would be necessary to shed further light on the problem.

Even so, most Pembrokeshire farmers possessed some sheep, and the numbers seem to relate to the overall numbers of animals on the farm; in other words sheep were an integral part of the structure of the typical farm of the period. Generally there do not appear to have been any distinctly arable farms, the crop values tending to be lower than the value of stock on the holding. The probate inventories do not give any indication of the extent of pasture or waste available to the farmers but in some cases it must have been considerable. John Griffith of Treffgarne had ninety sheep in 1603 when he died, but had only six acres of sown arable listed; John Henry of Letterston had 150 sheep with just over twelve acres of sown arable.

The average values of the sheep vary tremendously. The 200 sheep of Richard Aydes were only worth on average 1*s* each in 1582, and his lambs 8*d* each. It is tempting to regard this price as reflecting those pertaining generally in the locality at that date, but even the poorest sheep of Sir John Perrot were worth twice as much only ten years later. Given that, in general, livestock values taken from a variety of contemporary sources usually did not increase dramatically over such a relatively short period of time, one can only conclude that his sheep were not in very good condition, notwithstanding that Richard Adye appeared on paper to be a relatively wealthy man with such items as silver spoons and a carpet appearing in his inventory. Unfortunately this inventory is damaged, and the overall values of much of the rest of his stock is not

[60] Trow-Smith, R, 1957, p 248; Beresford, M W, 1994, p 25

discernable for comparison. His seven pigs, at 1*s* each, do seem to have had a value that was normal even twenty years later.

Similar low prices for sheep were also seen in the stock of Lewis John ap Ieuan of St. David's in 1605 but here there is little doubt that the prices reflected accurately the quality of the animals. In every item the value of each of his animals was well below those values found on other farms of the same period and could only have come about if the animals were in relatively poor condition. This may have been due to the quality of the land which he had to farm or he may just have been a bad stockman. If he had been ill before he died his animals could possibly have been neglected, resulting in their deterioration. The highest average value recorded was 2*s* 5*d* in 1605 for a flock of 135 sheep which belonged to David Thomas ap Ieuanan of Cledey in Cilgerran.

All these flocks would have contained sheep of varying ages and condition and so the average value given would be a reflection of the overall quality of the flock rather than the maximum value of the sheep contained therein. The basis of selling sheep at market was that they were deemed to be of the same value if sold in the same group (see 4.3), and this is still to be seen where sheep are sold today.

Nowhere do the values of these small sheep flocks approach the worth of the best sheep of Sir John Perrot although some prices approach those of some of his Welsh sheep. The overwhelming impression is that many of these farmers kept flocks of low quality sheep on poor pasture and did not possess the means or knowledge (or perhaps the will) to improve them. It is probable that similar conditions applied in the sixteenth century before the inventories commonly survived. It was this quality of sheep that would have given Welsh wool its poor reputation.

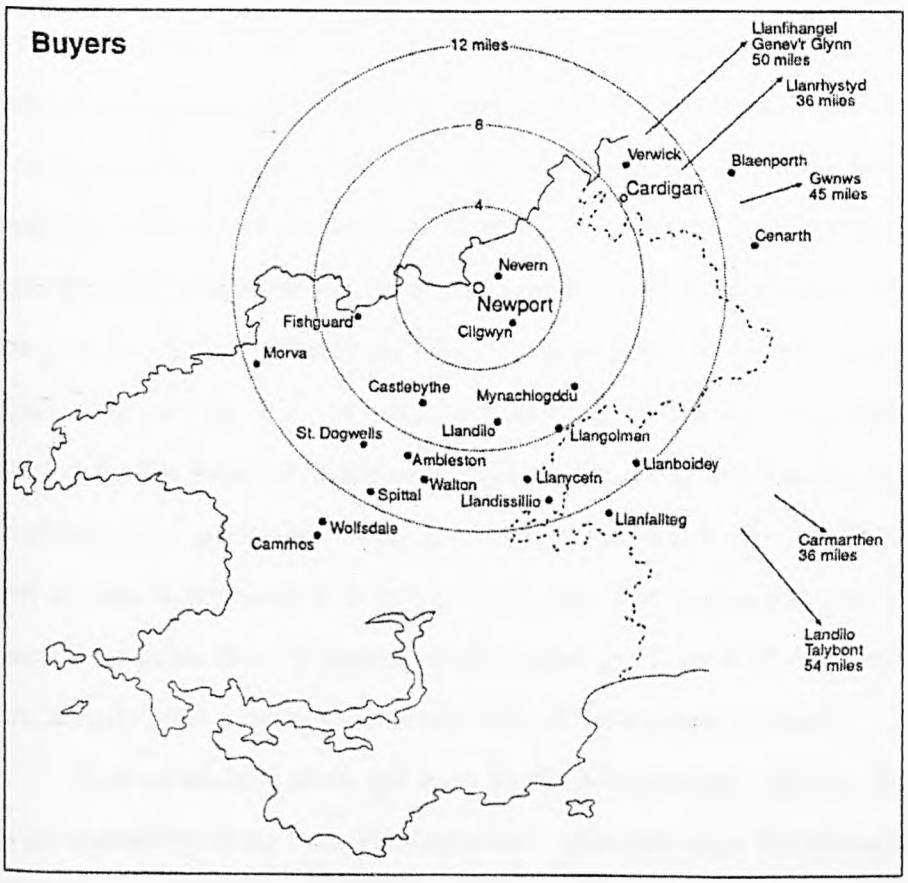
4.3 Marketing of Sheep

Haverfordwest, Pembroke, and Tenby were the three market towns of Pembrokeshire in the 16th and 17th centuries, but, although they were to be recommended for the 'plentie and goodness of victuells', there was no sale of live 'cattle' unlike at many markets in England[61]. Sales of live animals seemed to have been restricted to the summer fairs of

[61] Owen, G, 1603, i, p 140

the county; George Owen cited this situation as a problem for the poorer farmer who could not liquidate capital from sale of livestock except at these fairs[62].

Figure 4.5 Places of Residence of Buyers, Newport Fair, 16 June 1603



When looking at the marketing of goods through the various fairs and markets in Pembrokeshire it is extremely fortunate that a number of toll books recording transactions at fairs have survived. These are from fairs held at Eglwyswrw[63] and Newport[64], both in Cemais in the north of the county, around the beginning of the 17th century. Adult sheep and lambs were mentioned in the toll book for the Fair in Newport, Pembrokeshire on 16 June 1603. Young lambs would only have been weaned about a month and a half as the lambing season was from January to March, with weaning taking place in May to release the ewe for milking[65]. Twice as many lambs as adult sheep were sold at the Newport fair.

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[62] Owen, G, 1603, i, p 141; iii, pp 83-4
[63] Lewis, E A, 1935, pp 284-314
[64] ibid, 1935, pp 315-18
[65] Tusser, T, 1580, pp 35-8

The price per head that the lambs fetched at sale ranged from 1*s* 2*d* to the highest price of 2*s* 6*d*. This compares with prices of 2*s* 2*d* to 2*s* 6*d* for full-grown sheep at the same sale. The difference in price between the lambs must have reflected a genuine difference in quality and age; some 'lambs' may have been yearlings as there is no separate listing of sheep in this category. Some of the full-grown sheep may have been cull animals which would have depressed their price and allowed the better lambs to approach their value. When compared to the values of sheep from the probate inventories of the same period, both the adult sheep and the lambs appear to have had a higher general value at the fair, all the more problematic as some of the adult sheep may have been for culling. (There may have been a tendency to depress inventory values to avoid tax, or perhaps this was just a particularly good year for sheep sales. Also, stock recorded for the inventory were usually lumped together as a group). From the prices mentioned these adult sheep were probably of the Welsh type, as English sheep did seem to fetch a premium; it is interesting to note that the highest lamb prices reached those of Sir John Perrot's English lambs, although if some of the 'lambs' at the fair were actually older yearlings this would explain the apparent anomaly.

From an analysis of the toll book for the Newport fair it appears that most of the buyers and sellers were from Pembrokeshire, although some buyers came from as far away as Llanelli in Carmarthenshire, and Tregaron in Cardiganshire (see Figs 4.5 and 4.6). The sellers of sheep were principally from within the county, with the exceptions of Cardigan and a few surrounding villages (just over the border in Ceredigion) and Llanrhystyd (about thirty six miles away as the crow flies, up the coast). Within Pembrokeshire, as would be expected, most of the vendors were from the immediate locality of Newport, although some had travelled from the south of the county, a difficult journey with several rivers and the Preseli Hills to negotiate. Young lambs would have found such a long journey to market quite difficult, but there are no records concerning the mortality of animals during journeys, which could have taken several days in some cases.

Fewer of the Pembrokeshire buyers came from the extremities of the county, most being from within a twelve-mile radius of Newport, but there were a greater

number of buyers than sellers from outside the county, and five of these were from over thirty miles away. There is no record that any of the sellers or buyers were drovers as was often the case in the cattle sales at Eglwyserw, but it is possible that some of the out-of-county buyers may have been middlemen for drovers. The numbers of sheep or lambs sold by any one vendor at one time were not large, a batch of sixty being the greatest (probably tithe lambs as this seller was designated 'clerk').

Figure 4.6 Places of Residence of Sellers, Newport Fair, 16 June 1603

Most of the sheep were sold in lots of ten animals or less. Even the buyers did not generally buy large numbers of animals; thirty lambs from two different vendors were bought by Moris Jenkin of Gwnws, Cardiganshire, while Jenett William (a widow) of Fishguard, and Gr' William of 'Llandilo' bought forty-one lambs between them. There were a total of 167 'lambs' recorded as having been sold, compared to fifty-two sheep, presumably adult. Only two of these sheep were specifically recorded as being ewes, while seven were wethers. A comparison between the price fetched by these ewes

as opposed to the wethers is not possible as the toll record fails to give any price achieved by the sale of the wethers.

It appears that the mature sheep were not being sold as ewe and lamb couples as there are only two instances where this might conceivably have been the case, a buyer taking adult sheep and lambs together. However, as ewes were usually separated from their lambs at least a month before the date of the sale, 'couples' are not likely. The fact that the ewes were being sold without lambs suggests that they were not producing milk, were barren or were old, and therefore being sold on. Purely surplus ewes would possibly have been sold off after milking and prior to the 'tupping' season, or rented out to other farmers.

Although some cattle were also recorded as being sold at here at Newport, it seems that this fair was primarily for sheep. The toll books referring to the fairs at Eglwyswrw in 1599 and 1600 show that, there, cattle were the main commodity, and there were no records of live sheep being sold, although, as this fair took place in November, most sheep would have changed hands already to be ready for 'tupping'. Droves of wethers, young sheep and lambs were sold yearly from Pembrokeshire, some being driven to England[66], but certainly at the Newport fair there were no drovers recorded as having either bought sheep or lambs, or having brought them to the fair to be sold. If some of the buyers were acting for drovers the numbers of lambs involved was relatively small, thirty being the greatest number bought by any one person. Many lambs and sheep driven to England would have been sold for fattening for mutton, but others remaining in Wales would probably have been used to replenish stocks and to add to them, particularly if sheep rearing was on the increase. George Owen, writing in *The Taylors Cussion*, implied that many lambs were kept to replenish the flock, both wether and ewe lambs together. It would be the surplus stock that would be sold in fairs such as the Newport fair.

4.4 Wool

4.4 (1) Wool Quality

The wool from Welsh sheep had a poor reputation. When describing the local sheep

[66] Owen, G, 1603, i, p 57

George Owen makes a point of saying that the wool of those sheep was coarser than that of English sheep and therefore commanded a lower price (see 4.2 (4)). The wool of sheep found on the islands around the coast of Pembrokeshire was believed to be poorer than that of the mainland sheep, caused by the action of salt water. This wool must have been poor indeed. Notwithstanding this reputation, much of this Welsh wool from Pembrokeshire was turned into cloth which sold abroad as well as in the rest of Wales, and the wool itself had been sold to Flanders until the 14th century when the Flemish cloth making industry began to decline[67]. Certainly by the beginning of the 15th century, very little Welsh wool was being exported as it was being used by the local cloth-making industry[68].

4.4 (2) Wool Weights

Evidence from the Welsh Port Books[69] seems to show that shearing had started by May, or in some cases, June, when large quantities of wool start to appear on the inventories of the ships from Tenby and Milford. This would be a sensible measure as without modern remedies to combat fly strike, shearing as early as possible to remove contaminated winter grown wool would be a precaution and an advantage. Early shearing would also reduce the risk of the fleece being shed prematurely (although wool gathering became a recognized way for the poorer members of a society to obtain wool for their own purposes[70]). George Owen in *The Taylors Cussion* gives an example of the amount of wool to be expected from 400 sheep[71]: 'the woolle of CCCC such sheep allowinge xxx to make a stone of Cardigan weight wooll yield xiij stone every shearing & around xxvj stones every stone valued at xiij*s* iiij'.

The total value of wool for the year is recorded as £xvij vj*s* xiij*d*. If one stone of wool weighed 17lbs, the typical measure of a Cardigan stone, each pound of wool would have been worth about 9-10*d*[72]. Shearing took place twice a year. It is not know for certain if shearing twice a year was common practice throughout Wales at this time,

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[67] Jenkins, J G, 1966, p 49

[68] ibid, p 48

[69] Lewis, E A (ed), 1927. The Port Books show that the greatest volume of traffic in wool begins in May or, occasionally, June.

[70] Owen, T M, 1991, p 6

[71] Owen, G, *The Taylors Cussion*, pt I, fo 35

[72] With the value of Welsh sheep generally being between 2*s* and 3*s* 4*d* a fleece of a pound weight would be worth about a third to a quarter of the value of the sheep.

but, as George Owen does not mention it as being an unusual practice, it was likely to be in common usage in his own area. Walter Davies, in his survey of agriculture in South Wales in 1815, suggested that shearing twice was more common in the western areas where the climate was milder[73]. It certainly was the practice in 1326 on the grange of Kingswood in Pembroke[74], and it was also practiced in some other parts of Wales[75].

If at each shearing it took thirty sheep to produce that 17 lbs, then each sheep would only have yielded about half a pound of wool at a shearing, worth about five pence. The small amounts of wool being produced at a shearing may indicate that some of the dirty wool ('daggings' in modern parlance) was not being included in the recorded weights of fleeces. After washing, this would have been available for home use, if not for sale. Although the amount from one fleece would not have been significant, it would have added up to a respectable weight of wool when a whole flock was taken into account. The amount of waste wool under these circumstances would have been enough to be worth collecting and cleaning. Although the sheep were washed before shearing in places such as rivers and ponds, this would not necessarily have removed the heaviest soiling from the wool. Wool from the tail region, 'breech' wool, is among the coarsest found in the fleece, (the best being found around the shoulder) and would necessarily be the dirtiest.

4.4 (3) Wool Prices

In Owen's *Description of Penbrokeshire* [sic] published in 1603 the price of wool is given as 8 to 10*s* per stone, which is only 5½ to 7*d* per pound[76], a reduction of up to thirty per cent or even more compared to the price stated in *The Taylors Cussion* relating to 1593. This may be an indication of a real slump in the price of wool. However it must be taken into consideration that the figures given in *The Taylors Cussion* were given as examples of an ideal situation rather than the actual state of affairs on the ground; this drop in the price of wool may have had no substance other than on paper. On the other hand, if these figures did reflect prices close to reality, then the drop in price was real and may have been an indication of decline in the local cloth-

[73] Davies, W, 1815, Vol 2, p 266
[74] Owen, H, 1911, p 119
[75] Trow-Smith, R, 1957, p 167
[76] Owen, G, 1603, i, p 56

making industry. The lack of a local market for wool in the cloth industry could have caused a glut of wool, depressing the price, with only the best wool being taken up by merchants. George Owen states that sheep had increased in numbers in the latter half of the 16th century, this inevitably increasing the amount of wool on the market[77]. The lowering of the value of wool may also have stimulated the marketing of sheep for meat, so widening the gap between the value of the animal as a carcass and the value of its fleece. The fact that there was a thriving trade in sheep being taken out of the country could be an indicator of this trend. Sir John Perrot's apparent attempts to improve the general standard of his flock as far as wool was concerned could also have been an attempt to bolster the value of his wool and perhaps to revitalise a flagging industry.

Sir John Perrot had a ram valued at 23*s* 4*d* (see 4.2 (7)) which Laws believed could have been a merino sheep from Spain, even though it was a capital offence in Spain at this time to export the sheep[78]. Merino wool has long been known as an exceptionally fine wool, ideal for the production of high quality fine cloth (the Flemish weavers of the 12th and 13th centuries imported merino-type wool from Spain to use in their cloth-making industry). If this was the case, such a ram could only have been brought in as an attempt to improve the quality of the wool in the flock, and therefore raise its value and salability, and not to improve its carcass for the meat trade. Modern merino sheep have notoriously poor carcasses and are not normally recommended for use as meat[79], but their wool is so valuable that meat definitely comes second to wool. Even if not a merino ram, its value, which was greater than some bulls that Sir John Perrot owned, points to it being a very valuable animal bought in to improve breeding in the flock. When taken in conjunction with his English (and good quality 'Mershe') sheep, it seems likely that Sir John Perrot was indeed trying to enhance his flock through breeding for improved wool quality.

4.4 (4) Wool Colour

Wool was variously coloured, and the proportion of coloured to white wool from a flock may have been quite high. When discussing the marking of sheep, George Owen[80]

[77] Owen, G, 1603, i, p 56
[78] Ryder, M L, 1983, p 427
[79] ibid, p 430
[80] Owen, G, *The Taylors Cussion*, pt I, fo 2

drew a diagram showing the numbers of ewes and wethers of different colours. He showed 144 white sheep and 133 black sheep in a flock, an almost equal split between coloured and white, suggesting a large amount of black wool coming onto the market. In the toll books referring to the Newport Fair, it is apparent that there were many coloured lambs in the sale, often sold in mixed-colour lots. There seems to be a distinction made between sheep classified as 'b & w' (black & white - four in all), and those noted as being 'w & b' (eleven). This may have been a quirk on the part of the scribe, or it may have signified a difference in the relative numbers of black and white sheep in the group. It may also have signified sheep with both black and white wool such as is seen in such sheep as the present day Jacob sheep. In one instance where twenty-nine lambs were sold as a lot, some distinction was made between white lambs, a single russett lamb, and eleven 'sondry' lambs which must be presumed to be colours other than those already mentioned.

The value of wool from coloured sheep is not known, but it may not have fetched as high a price as white wool, because of its effect on the dyeing of cloth. Coloured wool would have been used in the making of the typical Welsh cloths; the records of the Shrewsbury Drapers Company mention sale of brown, pied and grey cloth as well as white[81], but generally little is known of the colours of Welsh cloths. The term Welsh Russetts is also used but this may have referred to a type of cloth rather than a colour as there are references to 'Whyte Russetts'[82]. If Welsh wool was being exported to supply the undyed broadcloth trade of Bristol and south-west England, it is likely that the wool taken was white. However, wool sold to North Wales could have been any colour even though white cloth from north Wales was being manufactured from north Pembrokeshire wool[83].

4.4 (5) Markets and Fairs: Their Importance in Wool Sales

Sales specifically for wool are not mentioned, but wool must have been sold at markets or through middlemen as wool was finding its way in relatively large quantities to the ports of Milford and Tenby as early in the year as May (see 4.4 (6)) from 1585 onwards,

[81] Mendenhall, T C, 1953, p 4
[82] Skeel, C J, 1922, p 229
[83] Owen, G, 1603, i, p 57

and there were no fairs in Pembrokeshire before the middle of June. There was wool sold at Cardigan market, on the border of Pembrokeshire with Ceredigion, to buyers supplying the weavers of north Wales, the cloth being subsequently sold in Shrewsbury[84]. Some of this wool would certainly have come from Pembrokeshire.

The toll books already mentioned give one or two examples of wool being sold at fairs. In the Newport fair of 1603 there is just one mention of the sale of wool. The name of the buyer is obscured (written as Ll[ewelin] gr') and neither the name of his home town , nor the name and place of residence of the seller is given, but he bought one stone of wool (probably Cardigan weight of 17 lbs.) and paid a toll of 1*d.* A small amount of wool was also sold at the St Meygan's fair at Eglwswrw in November 1600 but this was mainly a cattle fair and November was at the very end of the wool sale period. There, three stones of wool were sold along with two 'packs' of sheepskins together with a separate lot of eighteen skins that attracted the same toll as the 'packs' and which was probably of a similar size. The prices paid for these commodities were not recorded. Six sheepskins were also sold at the same fair in 1602. Because of the paucity of records relating to fairs and markets it is difficult to draw any relevant conclusions. However, it does appear that it was at the local market that much sale of wool took place, rather than at the fair.

4.4 (6) Export of Wool

Wool tends to be a seasonal commodity. Buyers came to Pembrokeshire in the sixteenth century from North Wales and over the Bristol Channel from Barnstaple, Bristol and Somerset[85] twice a year, presumably when the two shearing periods were at their peak. The records of the Welsh Port Books as transcribed by E A Lewis[86] show the type, and often the amounts, of various goods imported and exported into and out of Welsh ports between 1550 and 1603. These records are by no means complete as only a relatively small percentage have survived, but they do give an idea of trends and patterns in trading of certain articles of merchandise, with the destination of those goods shown, and often the merchants involved in the trade and their craft or guild.

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[84] Owen, G, 1603, i, pp 56-7
[85] ibid, p 57
[86] Lewis, E A, 1927

Figure 4.7 is a summary of all the recorded exports of raw wool from the port of Milford, Pembrokeshire, as shown in the Welsh port records. The initial amounts of wool exported are fairly modest and seem to reach a plateau around 8-900 stones a year to the port of Bristol. Cross channel traffic was also recorded between Milford and various ports in Somerset and Devon although, with the exception of Minehead, the sale of wool here was on a very small scale. Other commodities were the principal reasons for that trade.

Figure 4.7: Wool (in Stones[87]) Exported from the Port of Milford

YEAR	BRISTOL	MINEHEAD	BARNSTAPLE	DUNSTER	ILFRACOMBE
1565	9	0	0	0	2 fardels
1566	920	0	170	160	0
1567	878	0	180	90	0
1585	800	350	10 bags	0	0
1586	2740	1780	200	0	0
1587	2050	300	80	0	0
1592	1000	1600	0	0	0
1593	1970	1450	120	0	0
1602	2870	0	120	0	0
1603	2210	980	200	0	0

The inland waterway all the way up to the port of Haverfordwest would have provided an excellent way of transporting wool for export. It was easy, or easier, than transporting merchandise over land with its lack of roads. Therefore perhaps, in consequence, it was easier for the clothiers of Bristol to obtain the wool they needed from Pembrokeshire than closer Welsh counties such as Gwent.

Table 4.8: Wool (in Stones) Exported from the Port of Tenby

YEAR	BRISTOL	MINEHEAD	NORTHAM	OTHER PORT
1565	0	65	0	0
1566	30	0	0	0
1567	0	0	0	2
1585	200	0	0	0
1586	570	0	0	0
1587	900	0	0	10
1588	0	0	0	0
1592	600	300	0	0
1593	530	400	0	0
1598	0	0	0	0
1599	0	0	0	0
1601	0	0	0	0
1602	0	0	0	0
1603	540	0	28	0

[87] These stones could have contained 14 lbs not the Cardigan stone of 17lbs used in north Pembrokeshire.

The extracts from the port records of Tenby show an intermittent trade in wool. Tenby was obviously not a major port for exporting wool compared to Milford, and most of the records that survive show that, as far as wool and woollen goods were concerned, cloth had the greater prominence. However they do echo the trend seen in Milford of an increase in wool sales out of the county in the 1580's compared to the 1560's, and point to a reduced usage of the wool in Pembrokeshire itself. This ties in with the assertion by Jenkins[88] that there was very little export of wool from Pembrokeshire and other Welsh counties at the beginning of the 15th century; this state of affairs seems to have continued well into the 16th century before the circumstances change. The change seems to have been brought about by a collapse in the Pembrokeshire cloth-making industry for reasons that are not altogether clear.

Unfortunately, little evidence relating to any Pembrokeshire wool trade seems to have survived for the period between 1567 and 1585, although figures before and just after this time show a similarity in the Bristol trade. This similarity is probably a coincidence produced by the lack of complete records, as an examination of the actual times of year in 1585 when the shipments took place shows that they were all at the latter end of the year, October and November. No shipments are recorded for what would have been the principal trading time for wool - immediately after spring shearing. As later records show a continual trade from May or June through to October, and even later, it is likely that this was also happening in 1585. Trade was therefore probably greater in 1585 than in 1567.

This lack of records from the early part of the year occurs again in 1592 and in 1602, when it is likely that trade in wool also took place earlier in the year, with the volumes of wool shown being an underestimation of actual amounts sold. Trade with Minehead does seem to pick up significantly during the time of the break in records, while trading with Barnstaple is a constant presence, which never reaches a significant volume.

Weights of exported wool will reflect the numbers of sheep in the county concerned with the export trade. In 1586, for example, 3310 stones of wool were

[88] Jenkins, J G, 1969, p98

exported from Pembrokeshire ports to Bristol, and 1780 stones were exported to Minehead. This gives an estimated sheep population of around 46000 (servicing Bristol) and 25000 (servicing Minehead) if all their wool was sold (reckoned conservatively at 14 lbs per stone and each sheep producing a total of approximately one pound of wool per year). As these were sheep that maintained the seaborne export market alone, the numbers of sheep on the ground would certainly be greater and may even have been doubled or more when including the wool for domestic use and for sale to land-based merchants. An estimate of around 140,000 sheep in Pembrokeshire in 1586 might even be on the conservative side. Owen gives the human population of the whole of Pembrokeshire as approximately 20,000 in late Tudor times[89]. (Population densities of this period are difficult to estimate accurately but probably are not going to be much greater or fewer than that number. A figure of 6,539 calculated for the population of Pembrokeshire in 1588[90] is known to be erroneous. It was taken from the total number of men subject to service in the county militia, and drastically underestimated the actual population[91].) If the human population was around 20,000 then there may have been at least seven sheep for every person in Pembrokeshire.

There was obviously an export market in both Bristol and the southwest of England for Pembrokeshire wool. There were bound to be variations in quality between producers and the attempts of Sir John Perrot to improve his stock with English sheep (and possibly a merino ram - see above) may not have been an isolated instance. The type of grazing also affects the wool, although finer wool is produced when sheep are on restricted feeding, and it was probably attempts to fatten sheep for meat on better pasture that started the decline in the quality of wool in later centuries[92]. Certainly, at the present time, sheep found in the areas corresponding to the eastern Welsh marches, where the premium wool of England was found in the late Middle Ages, have wool that is too coarse to have had the reputation that it obviously merited in the past[93].

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[89] Owen, L, 1959, pp 112-3
[90] Dicks, T R B, 1967, p 218
[91] Howells, B & Davies, E (eds), 1987, Vol III, p 404, fn7
[92] Ryder, M L, 1983, pp 485-6; Trow-Smith, R, 1957, pp 161; 164
[93] Ryder, M L, 1983, p 464; there are many references to the quality of such wools as the 'Lemster Ore' and wool from the Hereford area.

4.5 The Cloth Industry

Cloth had been a major Welsh industry in the later Middle Ages and so it remained in Pembrokeshire up to the beginning of the 16th century. George Owen described a notable expansion in sheep-raising and wool production that had taken place during the 16th century, despite repetitive murrains, although this trend was accompanied by a decline in local weaving and a corresponding increase in the export of raw or un-worked wool[94].

The decline in the cloth-making industry was not, therefore, caused by a lack of wool as wool continued to be available and its production actually increased. Conversely, the expectation should have been that a decline in weaving would adversely affect wool production. Wool producers would only have continued to keep sheep in the numbers they obviously did if other markets opened up for them, or were already present. Wool could not have been exported from the area if there was no-one prepared to buy it at a reasonable price. Flocks would have been rapidly run down over a number of years in favour of other types of livestock (Wales was famous for its cattle and they were used widely for the production of cheese and butter, as were sheep, and also meat) instead of increasing as they obviously did.

J G Jenkins[95] puts down the decline in the textile trade to loss of interest in those goods by merchants who could get a greater return from the sale of coal, which also increased during this time. The flaw in this argument is that merchants do not readily give up one trade in favour of another unless one is already in decline and becoming less profitable for them. If possible they would do their best to accommodate both strands of business. There were theories of plague and disease affecting weavers (and presumably the rest of the population) throughout Pembrokeshire. Laws[96], Norris[97] and Fenton[98] all report that the discontinuance of weaving was the result of epidemics. Norris says it was reported that panic-stricken workmen fled from Tenby to Devonshire to escape from a plague, and Fenton asserts that about the beginning of the 16th century

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[94] Owen, G, 1603, i, p 56, p 156
[95] Jenkins, J G, 1969, p 107
[96] Laws, E, 1888, p 310, fn
[97] Norris, C, 1812, p 20
[98] Fenton, R, 1903, p 303

the manufacture of woollen cloth carried on in the town of Newport fell into decay owing to a great mortality, probably from 'the sweating sickness'[99].

Tenby[100] possessed great advantages in that it was an ideal place for a mart. There was a 'great wool manufactory' based there and Tenby carried on a flourishing trade with foreign parts, both in cloth and other goods. The pier, which was built during the 14th century, was not raised at the expense of foreign merchants, but it was certainly kept in good repair by their contributions, which were levied following a writ from the privy seal of Edward III[101]. This can be seen in the details of a by-law of the corporation, which, after referring to the decay of the foreign trade that enabled the pier to be kept in good repair, had to find other means to raise money for its upkeep, principally from their own resources. However by 1586 a survey showed evidence of burgages abandoned, houses in a state of ruin and such necessities as mills completely decayed[102]. The Port records do indicate a change in the type of goods carried by the ships that used Tenby, with an increase in wool exports in the 1580s as opposed to cloth but the amounts are not in the same league as those from Milford[103]. That they show a decrease in the cloth exported agrees with the trends seen from other sources.

In Haverfordwest, in 1557, ordinances were drawn up by the mayor and the council to try and restrict sales of wool and yarn to the town precincts[104].

> 'Before theis time the making of friezes and 'fullclothes' within the town has been not only a great commodity to the common wealth of the town but also of the inhabitants of times past have had their living thereby, which now is utterly almost decayed. The occasion of the decay is that burgesses and inhabitants covey and sell wool and woollen yarn out of the town to strangers and foreigners. For remedy thereof it is ordered that no burgesses or inhabitants shall sell or convey out of the town to any stranger or foreigner any kind of wool or woollen yarn except it be first be made into cloth. Offenders shall forfeit to the use of the chamber 6s 8d for every stone of wol or yarn so conveyed, and remain in the town gaol at the commandment of the mayor or the deputy with the assent of the council or the most part of them until the fine is paid.'

In 1607 local justices of the peace from Pembrokeshire tried to assert their authority over the marketing of wool to try to revitalise an obviously flagging local cloth making industry[105]. It is obvious that much wool was being sold, outside the auspices of the

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[99] Moore, J S, 1993, pp 280-301 describes various epidemics rife throughout England in the mid 16th Century.
[100] Fenton, R, 1903, pp 248; 303
[101] Harrison, W, 1966, p 66
[102] ibid, p 5
[103] Lewis, E A, 1927
[104] Charles, B G, 1967, p 29
[105] Howells, B E, 1955, p 242

local markets, to 'strangers', and that this form of sale had been a problem over a long period of time. The order, given following a petition by Pembrokeshire towns to the Privy Council, states:

> 'Their llps [lordships] have taken knowledge that the decaie of the said toune of Tenbye as of other townes in thies partes hath chiefelie growne by the losse and discontinuence of clothinge which proceedeth speciallye because the woll which hath usuallly heretoforth bin publiquelie soulde in the open marketts and faires is now by sinister practizes carried and conveyed into secreate and obscure places and there uttered and soulde underhand unto strangers who carrie and convaye away the same oute of the countrye so as the people and inhabitantes thereof and the townes therein are not imployed or sett on worcke therewithall as in former tymes they have bin, to the hinderance and decaie of the said townes.'

This seems to point to the growth in the marketing of wool direct from the producers in the countryside to people who were prepared to collect it from source, so avoiding the payment of tolls and taxes required at fairs and markets by both the seller and the buyer. This would also have been of advantage to the vendor as he would not have had the trouble of transporting the wool to the market in the first place. The money coming into the towns in the way of tolls and taxes from the sale of cloth and wool must have declined, causing the justices of the peace to try legal process to redress the balance. They must have been aware of a significant trade taking place in the countryside of which they were not the beneficiaries. George Owen[106] mentions the sale of wool to buyers from North Wales, coming to buy up wool for the developing cloth industry of that region. Middlemen of this type were well known in England. Buyers also came twice a year from Bristol, Barnstaple and Somerset. It would not be surprising if they began to pick up supplies of wool from the local landholders as they went on their travels, even if this was discouraged by local by-laws. Whether this was a cause of the decline in cloth making, as the burgesses of Tenby believed, or a result of a lack of a local market for the wool is a moot point. What happened was a weakening of the power of the town to dictate to whom the wool should be sold.

This attempt to regulate and regain control of the sale of wool was not, however, a new phenomenon. As early as 1554, Haverfordwest enacted statutes designed to keep trade in the town and away from 'foreigners' and 'strangers'. They were concerned about the sale of wool and sheepskins as well as corn outside the confines of the regular market and its re-sale in the market at inflated prices.

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[106] Owen G, 1603, i, p 57

xvii. An act that no foreigner shall buy corn or wool without licence of the mayor.

Where in time past foreigners and strangers used to buy corn in the market of the town, having sufficient corn of their own for the maintenance of their household and family, and bring it in the market at the great dearth and high price and also buy wool in the market and the precinct of the town to the great damages of the burgesses, and also where the burgesses and inhabitants used to buy corn and wool from the said foreigners to the loss of the rest of the burgesses, it is enacted that foreigners and strangers shall not buy corn in the market having sufficient corn of their own and as long as they have any corn of their own in their haggards until that corn be spent, and then to have licence to the maintenance aforesaid if they do lack, upon pain of forfeiture of the said corn and wool, one half to the seizer and the other half to the use of the chamber. The burgesses and inhabitants shall not buy corn and wool to the use above written, nor recieve corn or wool bought by the foreigners into their houses, upon pain of disgrading or a fine of 40s. to be levied on their goods and chattels, one half to the informer and the other half to the use of the chamber.

xxvi. An act for the continuance of certain acts and ordinances in the town.

... also, another act of the same date (24 May 1541) that no person dwelling within the town should buy hides or sheep skins by the way or at their doors or within their houses unless the same be brought to the market and remain their until nine o'clock and then every man to buy at his will and pleasure, upon the pain of 40s. the hide and 40s the skin [the which act was only made for the market day but is enacted that henceforth it should apply on other days of the week also *deleted*]; another act of the same date that no person shall buy any wool before 12 o'clock, upon pain of fine of 40s.; ... it is enacted that all these acts shall be revived and continued and shall be observed in all things contained in them...[107]

These may have been enacted when prompted by an awareness that the sale of wool to the cloth manufacturers of the town was already in decline, perhaps partly in response to the burgeoning growth of woollen manufacture in the north and west of Wales[108].

The figures showing the sale of wool through the port of Milford[109] (and others) do seem to demonstrate a threefold increase in overall sales in the period 1565 to 1603, while the amount of cloth moving out of the South Wales ports decreases markedly over this time. This is backed up by the lament of George Owen concerning the decline in the cloth making industry in Pembrokeshire over the previous forty years[110] coupled with an apparent increase in the number of sheep being kept in the county and the amount of wool being produced - a significant rise. There must have been a market for wool other than locally to cope with this increase. This therefore points to a decrease in the manufacture of, and an actual loss of trade in, cloth and not simply a decline in interest and movement away from sale of cloth as Jenkins suggests; the wool was still being produced, but it was just not being taken up by local weavers as would have happened

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[107] Charles, B G, 1967, pp 22-9

[108] See 6.2.

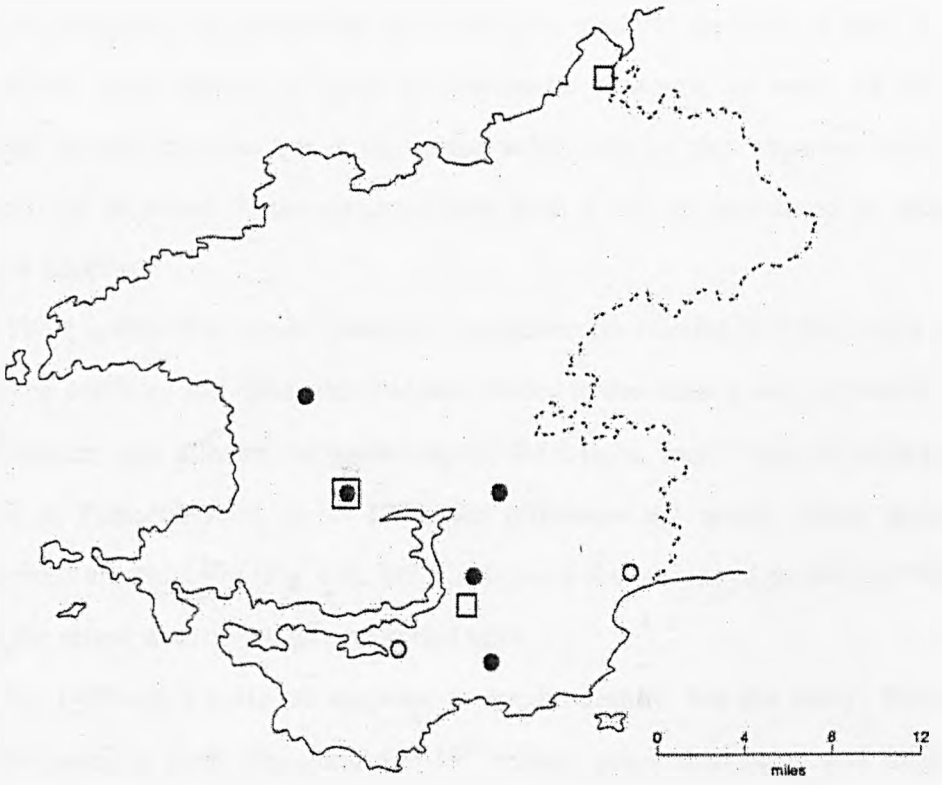
[109] See 4.4 (6).

[110] Owen, G, 1603, i, p 148

in the past. It was obviously still in demand elsewhere and continued to be sold to north Wales and to the southwest of England.

As wool was taken from Wales to Minehead, it must have been needed for a specific purpose. Welsh wool may have been cheaper and better for making relatively coarse, hardwearing broadcloths that were being produced in England. The wool from the south-west of England had as poor a reputation as, if not worse than, the wool of Wales[111]. Welsh wool could have been cheaper and easier to obtain, or, perhaps, the requirement for wool greater than the local area could supply. Bristol had been well known into the 15th century for the manufacture (including fulling) of undyed broadcloths, which were subsequently taken to London. They were then exported to France, Flanders and Holland where there was a flourishing trade finishing off and dyeing cloth, which could then be re-imported for sale in this and other countries.

Figure 4.9 Fulling Mills in Pembrokeshire 1400-1536[112]



○ Fulling Mills in 1450 ● Fulling mills in 1500 □ Fulling Mills in 1536

There were no fulling mills recorded in 1400

[111] Ryder, M L, 1983, p 463, fig 9.6. The prices fetched by the wool of sheep in Devon and Cornwall were the lowest in England.

[112] After Jack, I R, 1981

The production of this broadcloth required coarse wool. By the 16th century Bristol itself had declined in status through loss of guild monopolies and competition from local rural areas[113]. However, significant quantities of wool were still being exported to Bristol from Pembrokeshire ports[114].

Why then did cloth-making not flourish in Pembrokeshire? Was it because broadcloths were made on broad looms, but traditional Welsh cloth was made on the traditional narrow loom and the Pembrokeshire weavers were reluctant to change their practices? This did not apparently hinder cloth-makers from mid- and north Wales who did not make broadcloths either, although this remained largely a domestic industry there[115].

Un-dyed cloth was made from white wool to facilitate the dyeing process. Was the wool exported to Bristol and Minehead white? It does seem that Pembrokeshire cloth was so rough and drab that it was given to the poor on Ash Wednesday[116]. How much this reputation was due to the wool and how much to the skill, or lack of it, of many of the local weavers is open to conjecture. However, as much of the later broadcloth production was based on coarse wool without this apparent effect, the question must be asked. There seems to have been a lack of innovation or ability to adapt and develop.

There is little that can be gleaned from the records relating to fulling mills of the period. The conflicts and upheavals that contributed to the relative lack of records from the 15th century also affected our knowledge of these mills. Jack[117] lists all fulling mills recorded in Pembrokeshire up to 1536, but references are sparse. None appear to survive from around 1400 (Fig 4.9), but it is beyond the bounds of possibility that this reflects the actual state on the ground at that time.

By 1450 some mills are recorded in Pembrokeshire, but not many. Wool was being converted to cloth throughout the 15th century rather than being sold in its raw state, therefore there must have been the means to 'full' the cloth. By 1500 there was a

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[113] Ponting, K G, 1971, pp 16; 21
[114] See Figures 4.7 & 4.8.
[115] See 6.2.
[116] Howells, B E & Davies, E (eds), 1987, p 89
[117] Jack, I R, 1981, pp 70-130

definite re-vitalisation of the industry in the county, but it appears to have been short-lived as recorded fulling mills declined in number, together with an increase in those recorded along the Teifi valley and northwards. By the middle of the 16th century, cloth manufacture appears to have declined significantly.

4.6 Summary

Despite a general dearth of information from the 15th century concerning sheep husbandry, flock distribution or wool production, the survival of records greatly improves in the 16th and early 17th centuries, giving valuable details of both small- and large-scale landholders and tenants concerning the place of sheep in the local agricultural economy. George Owen, a prominent antiquarian and land owner, left a large number of writings, many of them relating to agricultural practice in general in the region and the local agrarian economy, particularly of his own estate farms. Accounts (some giving an idealized situation) from his own estate have been studied and analysed in detail here for the first time, to extract evidence of his attitude towards sheep, and their place in the economy of his own estate farms and in the wider locality. Further detail is provided in the survey taken of the livestock of Sir John Perrot of Carew in southern Pembrokeshire (another large-scale landowner) after he died in the Tower of London. Invaluable information concerning smaller-scale agricultural enterprise is found in detailed study of surviving wills and probate records from the end of the 16th and the beginning of the 17th centuries.

This chapter has argued that, by the end of the 16th century, sheep certainly were present on the majority of farms in Pembrokeshire whether large or small; they were regarded as an integral part of the local agricultural scene. They were allowed to roam freely in the winter, probably in flocks guarded and controlled by children, in the northern part of Pembrokeshire and probably also in many parts of the south, although some were housed at night in the southern areas. During the summer they were folded onto fallow land to fertilise it (a valuable and necessary adjunct on land that was not naturally very fertile) and to allow the growth of cereals on the sown arable without damage from straying animals. Sheep here still usually produced a single lamb, which would be weaned in late April/May. Ewes were still being used extensively in dairies

throughout the county for their milk, which would then be converted into cheese, although the use of cows as milk producers was increasing. They were still relatively small in stature compared to present-day sheep, and shearing was expected to produce around 1lb of wool per year. Even this small amount was worth a quarter to a third of the value of a sheep. Wool was therefore an important and increasing part of the agriculture and economy of the region.

Changes in the value of the sheep are difficult to gauge from the scanty evidence available. The work of Sir John Perrot in the field of sheep breeding must also be recognized as an undoubted contribution to efforts to improve the overall standard of sheep in the area. He does appear to have been in the forefront with his specialised flocks at the time of his death in 1592 (and appeared to be well aware that Welsh sheep could be of a lesser quality than some English breeds). It is unfortunate that we know so little about his farming enterprise and have no accounts relating to his farming activities.

Wool was still the principal product of the sheep. The wool was coloured as well as white, although the white wool would have been more in demand for the making of unfinished, un-dyed broadcloths. Much wool was also used for domestic purposes or was spun in the home for sale as yarn. Yarn production would have been dealt a blow when local large-scale cloth manufacture declined in Pembrokeshire at the end of the 16th century and did not recover. However, the production and sale of wool from both large and small producers continued to increase, it being taken up by other markets so supplying wool for export to other regions outside the county. At the beginning of the 17th century most wool seemed to be sold through the markets around the county rather than at the larger fairs. From here it could be taken to the ports for export, or to supply the expanding woollen textile industry of the west of England. It was also taken northwards to fuel the expanding cloth-making industry of the more northerly parts of Wales (see Chapter 6).

The problem of the decline and breakdown of the Pembrokeshire cloth making industry over a number of years was probably caused by a series of factors that came together during the sixteenth century. These included the movement of cloth production

from the town to the country, the increase in competition from mid and north Wales as the number of fulling mills built in those regions increased, and the lack of fast flowing rivers in the area to encourage the building of more mills in Pembrokeshire. Disease among the population at large also seems to have been instrumental in the decline, recovery within a reduced population being uneconomic. Sheep keeping on both large and small farms was continuing to grow, but the local textile industry was in terminal decline at the end of the 17th century.

CHAPTER 5. GWYNEDD SHEEP AND WOOL PRODUCTION

12TH –14TH CENTURIES

This chapter will analyse sources for the keeping of sheep in what was a large part of the Principality of Wales under the Welsh princes up to time of the Edwardian conquest at the end of the 13th century. The area is taken as being the county known as Gwynedd from 1972 until the local government re-organisation of 1994, and comprising the pre-1972 counties of Caernarvonshire, Anglesey and Meirionydd. The first section deals with pre-conquest Gwynedd which was Welsh governed, under Welsh law and which retained a degree of Welsh social organization largely untouched by Norman/English practices from over the border or elsewhere in Wales. The second section looks at post-conquest Gwynedd that fell under English control, and examines what the consequences of this takeover where for the patterns of farming in the region.

5.1 Gwynedd before the Edwardian Conquest of 1282

Gwynedd only came under English control at the end of the 13th century, unlike Pembrokeshire. This enables any differences between Welsh and English/Norman practices to be drawn out and examined. As will become apparent, the sources used for this chapter are essentially different in nature and context from those used for Pembrokeshire. Unfortunately the general overall dearth of extant records for Wales means that sources covering each of the two areas will not necessarily be directly comparable. It will be inference and impressions that will allow for conclusions to be drawn.

There are very few extant records relating to Welsh administration of Gwynedd before the conquest. Welsh kingdoms expanded and contracted as strong leaders emerged or died. There were three main centres of power in Welsh Wales prior to the Edwardian conquest of the 13th century, their power waxing and waning as political power shifted. These were at Aberffrau in Anglesey, Dinefwr in Deheubarth[1] and Mathraval in Powys. Consequently there was no central repository for any documents that might have been produced concerning the administrative realities of the day.

[1] See 2.3, p 13.

Repeated small wars and skirmishes resulted in the destruction or loss of many documents, and the laws codified by Hywel Dda in the tenth century may also show how documentation was destroyed as a matter of course. According to the *Blegywryd* version of the laws of Hywel Dda[2], the King's priest and his clerics were responsible for three types of service during court sessions[3] - to keep in writing details of cases before the court, to remove completed cases from the court roll, and also to write and read letters for the king. The second service of itself could mean that much interesting detail would have been expunged from court records if 'removal' was taken literally.

Most extant documentation from Gwynedd was produced as part and parcel of the administration of the area after it came under English control in 1282. Those records themselves fall easily into two categories, those which throw light onto pre-Edwardian Wales, and those that are definitely post-Edwardian in content and context. The former category includes extant versions of the laws of Hywel Dda, and documents called Extents, which were surveys of rents and services of the inhabitants of crown lands that used to belong to the princes of Wales[4]. The latter category includes accounts and details of taxation in Gwynedd after 1282.

The Church also produced documentation relating to its own administration. These records span both pre- and post-conquest periods but are generally concerned with church estates, which were independently run, and did not always follow the type of agriculture practiced by the local lay peasant farmer.

5.1 (1) The Laws of Hywel Dda

The general lack of sources relating to the native Welsh areas of Wales prior to the Edwardian conquest causes some problems in ascertaining the administration and organisation of everyday life under the rule of the Welsh princes. One avenue into viewing the possible circumstances there is to study the so-called Laws of Hywel Dda, believed to have originally been codified in the tenth century by Hywel ap Cadell when he ruled over all of Wales except the south-east[5]. After the original codifying of laws, which were probably mainly passed on verbally before the 10th century, there appear to

[2] Richards M, 1954, p 32
[3] Jenkins D, 1986, p 12
[4] Carr, A D, 1971-2, p 152
[5] Jenkins, D, 1986, p xii

have been two main periods of revision, one ending with the death of Llewelyn in 1282, and the second ending in the 16th century when the Acts of Union placed all of Wales under English law[6]. The earliest versions of the Laws are shrouded in mystery as no manuscript relating to them survives from the 10th century. However, by studying later extant versions, some idea of how those laws operated can be surmised. Problems do arise in that these laws were not static but developed as society changed over the centuries so that early laws were amended, and new material added, to cover the increasing sophistication of that society. Great care, therefore, has to be taken in extracting material from the laws and holding it out as a definitive example on a particular topic[7]. Three of the main texts of the laws show differing levels of sophistication, and differ also in the degree to which changes are apparent in those laws to fit in with the new circumstances of the time. For example, the *Llyfr Blegywryd* show very clearly an attempt to fit the laws into the Anglo-Norman legal framework, and there are also signs of the increasing influence of the church in legal affairs[8]. In looking for examples of newer structures, commentators have managed to produce a tentative chronology for the remaining material, which does allow a certain degree of chronological ordering. This is laid out in Figure 5.1.

In order of increasing sophistication (and, therefore, of probable temporal separation) are the three principal Welsh 'books' now known as the *Llyfr Cyfnerth* (Aneurin Owen's Gwentian code[9]), the *Llyfr Blegywryd* (Dimetian code) and the *Llyfr Iorwerth* (Vendotian code), the latter believed to have been revised during the time of Llewelyn ap Gryffydd in the 13th century and therefore pertinent to Gwynedd in particular[10]. The *Llyfr Blegywryd,* as mentioned above, is thought to have originated in

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[6] Jenkins, D, 1986, p xvii

[7] Jenkins, D, 1986, p xi. The introduction states 'Any Welsh law manuscript ... contains a good deal of material which is later than Hywel's time, and great care is needed before a Welsh lawbook is cited as evidence for tenth-century conditions. But lawyers were very slow to discard obsolete material: great care is therefore also needed before a Welsh lawbook is cited as evidence for conditions in the century in which it was written'. See also Richards M, 1954, p 9.

[8] ibid, pp xxv-xxvi

[9] Aneurin Owen (1841) was one of the first to attempt to rationalise the many different versions of the laws. He attempted to give them spatial rather than temporal grouping, placing them in south-east Wales (the Gwentian code), in North Wales (the Vendotian code) and in south west and central Wales (the Dimetian code). These groupings have since been superseded by division into the three main 'books described above, which actually do correspond closely in most detail to the three Owen codes, but which are separated by complexity and sophistication rather than spatially.

[10] Jenkins, D & Owen, M E (eds), 1980, p 69

South Wales in the 12th century when Rhys ap Gruffudd ruled there, with the Normans already having a strong foothold in the region[11], and it would not be surprising if local influences had played a part in the re-codifying of existing laws. Each 'book' is actually a representation of several manuscripts[12], the dates on which these manuscripts were written neither being the definitive date of the original text, nor giving their place in the hierarchy of sophistication, as they were copied and amended many times in their history. Only by studying the contents of the different versions of the laws can some idea of their place in the hierarchy be ascertained. Then, by examining the differences shown between less and more sophisticated texts, one can get some idea of the changes both socially and legally that were taking place in those areas that used the Welsh rule of law.

5.1 (1) (a) Women and Sheep

Some of these changes can be seen when contrasting the 'Laws of Women' from the three principal groups of texts[13]. The differences are not great but do show an increase in attention to the detail, if not a change in intent. For example, when looking at the division of goods between a husband and wife who were separating, sheep take a more and more prominent part in the operation the greater the sophistication of the text. In the *Cyfnerth* texts, sheep are not mentioned at all, neither are any animals. Given that later texts say that most animals, apart from sheep, go to the husband, it is possible that this text highlights a time when livestock was not seen as an important part of the wealth of women within the typical Welsh family. *Blegywryd* states that the wife gets the sheep

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[11] Jenkins, D, 1986, pp xxv-xxvi

[12] Jenkins, D & Owen, M E (eds), 1980, p 2; Jenkins D, op cit, p xxi states that there are around forty manuscripts written between the early 13th and the early 16th centuries when Welsh law was still extant in some regions of Wales, and about a further forty copied after that time.

[13] Jenkins, D & Owen, M E (eds), 1980, p 2; the Laws of Women constitute a separate section of laws in some of the versions sometimes clearly marked as containing *Cyfraith y Gwragedd.*
The references to the Laws of Hywel Dda which follow are taken from the sources listed below, unless otherwise stated:
a) Llyfr Cyfnerth, (Wade-Evans A W, 1909, Welsh Medieval Law, Clarendon Press, Oxford) taken from two main sources, Harleian MS 4353 circa 1285 (Lewis T, 1928, p 168) and Cotton MS Cleopatra XIV from the early 14th century (Lewis, T, 1928, p 167),
b) Llyfr Blegywryd, (Richards M, 1954), an English translation of the text in *Llyfr Blegywryd* (Williams S J, & Powell J E, (eds), 1942) based mainly on two Welsh manuscripts - Peniarth MS 36A and Trinity College Cambridge MS 1329.
c) Llyfr Iorwerth, taken from the English translation (Jenkins, D, 1986), of the Iorwerth Redaction, printed in Welsh in *Llyfr Iorwerth* (Wilian, A R (ed), 1960). The latter is taken from a variety of manuscripts written or copied from the 13th century through to the 18th, long after any changes would have been put into practice. See the introduction in Jenkins for a breakdown of the manuscripts used and their relationships.

and goats, while the husband gets all cattle, pigs and horses[14], indicating that sheep and goats were still not of a high status economically. They were the woman's property as she probably sheared them and processed any wool, did the milking[15], and made cheese from it (the usual process for dealing with sheep's milk as it is produced in relatively small amounts over a shorter period of time than that of cattle).

In the 13th century *Iorwerth* texts, if a household only had sheep, then they were divided equally, as were the pigs. However, if only sheep and goats were present, then, for the first time, the husband got the sheep while only the goats went to the wife; cattle are not mentioned as being divisible therefore probably all went to the man[16]. The increased level of visibility of sheep in the laws is also seen concerning their value (5.1 (1) d). Given that, by the 13th century, wool was important economically both in England and in some regions of Wales under monastic and Anglo/Norman influence, this increase in attention towards sheep should not come as a surprise. Concerning the separation of man and wife, both *Blegywryd*[17] and *Iorwerth*[18] agree that any cloth, woollen or linen, produced on a loom would be divided. It is clear from the mention of the presence of weaving women in the *Iorwerth* texts that not all households would have possessed a loom or would have done their own weaving[19]. In the early medieval period simple vertical looms may have been used by most households, but the more complex horizontal loom cited in the 13th century *Iorwerth* texts would have been too expensive for some households, and would have required a certain level of expertise to use. According to Jenkins[20] the type of loom described in *Iorwerth* did not appear to have been in general use until the 14th century, and the first known drawing of a horizontal loom is dated 1368[21]. However, the Welsh text seen in *Llyfr Iorwerth*[22] was taken from manuscripts believed to date from the 13th century (except Peniarth MS 40 dated as the

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[14] Jenkins, D & Owen, M E (eds), 1980, p 151; this differs from b) p 70 where only pigs and sheep are mentioned, the pigs to the husband and the sheep to the wife. Jenkins & Owen (p 132) take their text from Peniarth MS 28, also called 'Latin Redaction A' which is an antecedent of 'Latin Redaction D' from which the Welsh texts that comprise Llyfr Blegywryd are believed to have derived.

[15] Walter Map, 1933, p 46, on the Cistercians recognising milking as women's work.

[16] c) p 45

[17] b) p 70

[18] c) p 46

[19] c) pp 170, 193

[20] Jenkins, J G, 1969, p 99

[21] Endrei, W, 1968, p 68

[22] Wilian, A R (ed), 1960, p xlii

late 15th century), and, as parts of the loom are mentioned in various of those 13th century manuscripts, the loom must have been in use at that time. The weaving women, who, therefore, by the 13th century, could have handled a fair proportion of the weaving in an area, would have been a valuable and necessary part of the community.

Woven material was produced from both wool and flax. A weaving woman was responsible in her own establishment for the safe-keeping of yarns and 'webs'[23] belonging to others as they had been entrusted to her while she was working on them. Her frame (the loom for producing the cloth) was worth 24*d* (8*d* each for the reeds and plates, the heddles, and the beams, and the wheels and treadles)[24]. Although weaving seems to have been taking place increasingly away from the home, it is likely that woollen yarn was produced in most households using either homegrown wool or that procured from elsewhere; the yarn would then be taken to the weaving woman for cloth production. There is no indication in the laws that wheels were used for the spinning of yarn; it was probably produced on a hand-held spindle allowing the task of yarn production to take place anywhere including out in the fields, rather than have it restricted by the mobility of the wheel. The fact that women were recognised as having the task of weaving differs markedly from the perception in later centuries where weaving was definitely seen as a male preserve, with the production and sale of cloth governed by guild structures within towns[25]. This change from female to male weavers seems to have come about when there was a change in perception about the commercial advantages in cloth production and, consequently, weaving was seen as bestowing a higher status on the practitioner. It is also a reflection of the change that occurred when distinct 'urban' boroughs were created in England and in Wales, and restrictions were placed on the practices that had long taken place in the countryside in order to raise revenue for the inhabitants of those boroughs[26].

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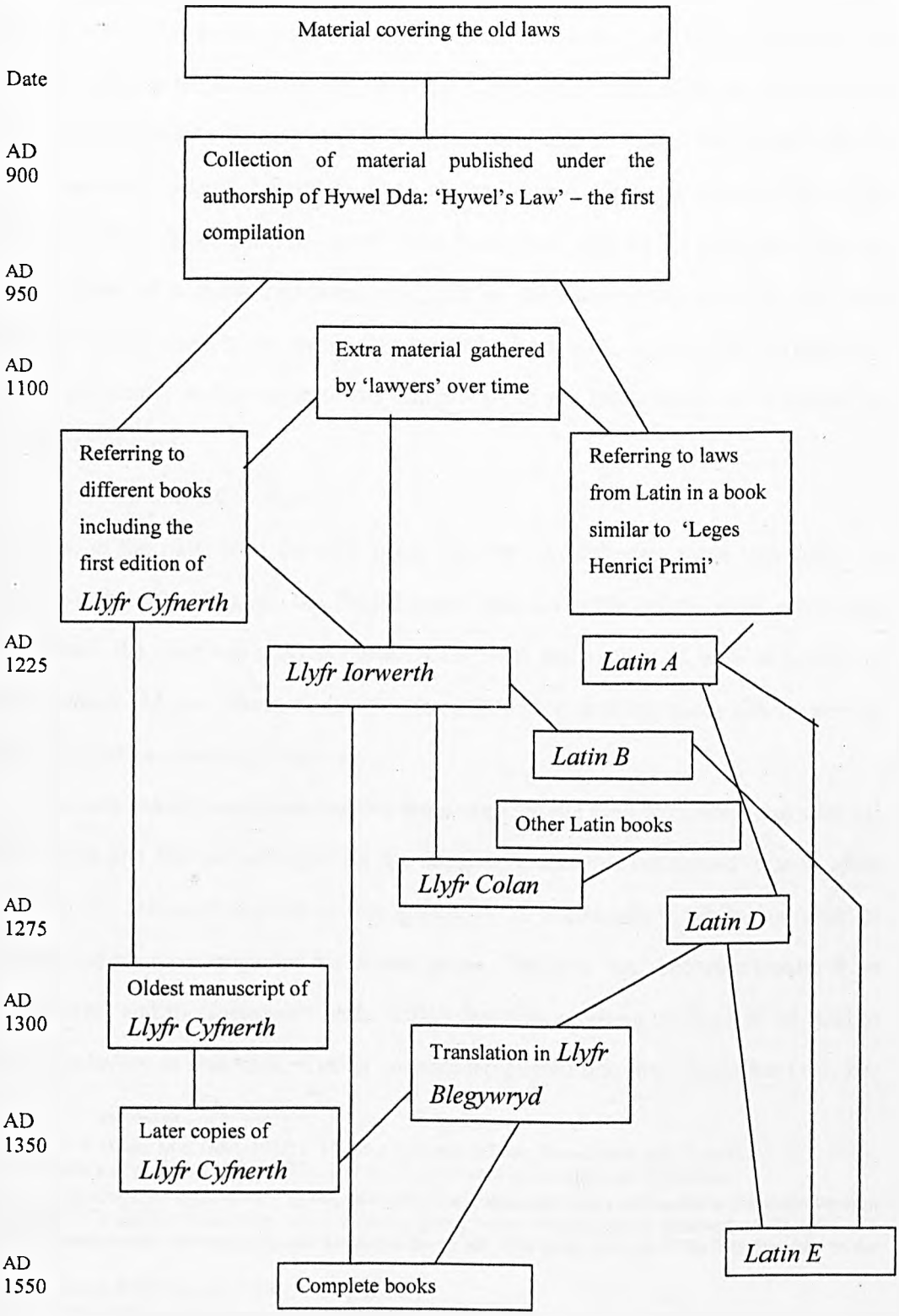
[23] Jenkins, J G, 1969, p 170 where webs are described as being characteristic of Denbighshire and Meirionydd, and comprised two pieces of coarse thick cloth made from two pieces of around 100 yards in length sown together. It is believed that the book of 'Iorwerth' was written with the region of Gwynedd very much in mind.

[24] Jenkins, D, 1970, pp 195-6

[25] Postan, M M, 1972, pp 241-43

[26] Dodd A H, 1972, pp 13-14; Davies R R, 1991, pp 371-373

Figure 5.1 The Relationship Between the Various Texts of Welsh Laws[27]



[27] Taken from Jenkins, D, 1970, p9. Translation from the original Welsh provided by Mrs Rosemary Morgan of Llandeilo, Carmarthenshire.

Changes in emphasis between the texts can also be seen when looking at the rearing of a child born after separation of a husband and wife. *Cyfnerth*[28] says that a cow should be given to the mother to help with the bringing up of the child, along with other goods; *Blegywryd* says that as well as a choice cow and its calf, a fat sheep, with its fleece intact and its lamb, should be given by the father[29]. However, *Iorwerth* loses the sheep but still includes a milch cow[30]. This latter case may be an indication that the inherent value of a sheep had risen, and that its inclusion along with the cow was thought to be too much to the woman's advantage. Both these texts exhibit advances of a money economy, in that some of the obligations of the father could be converted to cash instead of kind.

5.1 (1) (b) Sheep in the Community

There has, in the past, been the perception that the 'Welsh' were more 'interested' in cattle than sheep[31]; certainly the Welsh laws mention cattle much more often than sheep, where the cow was used as currency for fines and reward as well as having an intrinsic value and use. Sheep do have a place, however, and this place can be seen to change, albeit in a relatively small way.

In *Iorwerth* the laws state that the three 'nets' of the king were his horse stud, his herd of cows and his herd of pigs[32] (in the *Blegywryd* text 'his household' was in place of the pigs[33]); the same applied to the 'goodman' or *bonheddig*[34], while the *taeog* or bondman had his cows, pigs and his winter house. The term 'net' becomes clearer from the *Cyfnerth*[35] and the *Iorwerth*[36] texts, which describe a system of fines, to be paid to the king, *uchelwr*, or bondman, if other animals trespassed into their flock, herd etc. For

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[28] Jenkins, D & Owen, M E (eds), 1980, p 143; this reference is taken from Cotton MS Cleopatra A XIV, which, although used in part in a), was not used in its entirety. This reference is, therefore, not found in a).

[29] Jenkins, D & Owen, M E (eds), 1980, p 148, taken from Latin Redaction A; b) p 68 makes a distinction between the treatment of a child of a bondman where a cow is given, but no sheep, and the treatment of the child of a *bonheddig* where a milch cow and calf, and a sheep in fleece and with lamb, are part of the benefits given to the mother.

[30] c) p 51; Jenkins, D & Owen, M E (eds), 1980, p 169

[31] Pearsall, W H, 1971, p 262; Ryder, M L, 1983, p 498

[32] c) p 40

[33] b) p 101

[34] Sometimes used as an equivalent to *uchelwr*, a level of status as a freeman of known ancestry probably equivalent to the term gentleman in English (c), pp 318; 320; 389) but in court situations seemed to correspond to a special group of individuals concerned with court decisions (c) p 348).

[35] a) p 265

[36] c) p 40

example, if an animal was caught in the winter house of the bondman between the Kalends of May through to September, the bondman received four 'curt' pence from the owner, hence its inclusion in the 'net'. Sheep do not come into this equation and they, therefore, might be considered to have had a lower status than cattle and pigs, both of which commanded a higher monetary value than sheep.

Adult pigs were worth 30*d*, while a cow capable of producing calves and milk was valued up to 60*d*, as was an adult ox[37]. Sheep were generally worth 4*d* (see 5.1 (1) d)). Cows produce copious quantities of milk, while oxen were indispensable for working the land; both pigs and cattle were used frequently for meat, and this meat could be stored for long periods after salting, a process that does not appear to have been the case with sheep meat. Sheep meat was part of the diet as is seen in the fact that the King's cook was entitled to a third of sheep and lamb skins from animals killed for the kitchen,[38] but it did not appear to have been stored for any protracted length of time. This can also be seen when looking at the provisioning of castles by Edward's men in north Wales, where any mutton that appeared in the lists of provisions was quickly sold on[39].

Traditionally, therefore, sheep were not seen by the Welsh to have had as high a status as other livestock such as cattle, pigs or horses, and this can only have been because the production of wool was not given any degree of priority, as it appears to have been in Saxon and Norman England[40]; the emphasis would have been placed on those animals whose perceived uses were of the highest importance. It may well be that the mountainous and heavily forested countryside of medieval Wales was not suited to the raising of sheep. Wolves were known to roam the hills, making the protection of sheep more difficult[41]. Whereas the hills are, at present, seen as the natural home of the sheep, that was not the case in the 10th to 13th centuries.

If wool was not a high priority then the small carcass of the sheep would place it lower down the scale as a meat-producing animal, and its relatively low milk production

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[37] b) pp 87-8; 91; c) pp 176-9

[38] c) p 26; a) and b) state that he had all the sheep and goat skins.

[39] Griffiths J, 1952-4, p 145

[40] Ryder, M L, 1983, pp 184-188; 455-457

[41] Pearsall, W H, 1971, p 262

would always put it at a disadvantage to the cow if milk and milk products were a staple part of the diet[42].

5.1 (1) c) Wool

The apparent local Welsh view that sheep were relatively unimportant is difficult to reconcile with the fact that, although sheep themselves often were not mentioned, and even then their status was not high, woollen garments were rated highly. Woollen clothing was given by the king to the top twenty-four officers of his court three times a year as part of their 'salary' for the office[43]; this is mentioned in all three versions of the laws. The fact that it was woollen clothing that was provided by the king does show, not only that some woollen garments were used, but that the owning of woollen garments conveyed status, particularly if they were new. If the local sheep were not kept in great numbers for whatever reason, then woollen garments would not have been readily available, and could have been expensive. The woollen fleece from local sheep would have been low in weight (see chapter 4) and, if sheep were not numerous, extra wool would have had to be brought in from outside, or even the cloth or garment itself. *Iorwerth*[44] gives the value of some clothing, and distinguishes that which was made locally from town-made garments (this at a time when 'urban' centres were beginning to grow in Norman areas of Wales, along with the attempted control of manufacture of certain commodities such as cloth within those centres, particularly in 'English' boroughs). Every town-made garment was reckoned to be worth 24*d*, the same price as a very good sword or a weaving loom, while every homemade garment was thought to be worth only 8*d*, presumably on the grounds of quality of product. These distinctions were not stated in earlier texts as 'town-made garments' would not have existed to any degree in the eleventh and twelfth centuries, but the *Cyfnerth* text does state that a ready-made garment was worth twenty-four pence of silver, again prizing garments that were not of home manufacture[45]. If local wool was in short supply, it does explain why the *brychan*, a sort of blanket that acted as cloak, bed covering and even burial shroud

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[42] Andrew Boorde, writing '*The Boke of the Introduction of Knowledge*' in 1542 stated that '...there is much poverty ... for they do drink milke and whay, they do fare ful evel and theyr lodging is poore and bare'; Evans, D L, 1925-26, p 46, n 1

[43] c) p 5

[44] c) p 195

[45] a) p 255 (from Cotton MS Cleopatra A XIV)

was such a prized possession[46]; it was worth 60*d* when owned by an *uchelwr.*

Walter Map, while disparaging the habits of Cistercian monks in the late 12th century, described the Welsh as wearing, in general, no woollen garments except certain short cloaks, and going bare-legged and bare-footed. They appeared to wear no animal skins either, but seemed to rely heavily on linen for their main items of clothing[47]. If this was the case for the men and women outside the court of the prince, then the possession of woollen clothing would have been a prize indeed, and would have made the wearers of such garments easily recognisable.

The presence of the weaving women in the 13th century texts perhaps indicates a change in perception about wool and its uses in the normal daily lives of the Welsh, although one cannot say definitively that wool weaving had increased over the production of linen. However, the provision, by the prince, of woollen garments as a perk of the job, may well have become somewhat of an anachronism by the 13th century.

Wool in the raw is mentioned in a Latin text known as Latin Redaction B, related to both Latin Redaction A and *Llyfr Iorwerth* (See Fig 5.1), but not in the main texts described here. Processed wool is mentioned there also, but appears for the first time in *Iorwerth* where balls of woollen yarn were to be given to sons, if any[48]. Perhaps the inclusion, of wool, and the fact that for the first time the man seems entitled to some sheep for himself in some circumstances, points to an increase in the importance of production and use of wool in the 13th century.

5.1 (1) d) The Sheep

In the laws only ewes, rams and lambs are mentioned as having an intrinsic value in their own right, and this applies in all the texts used for this thesis. *Cyfnerth* mentions lambs and adult sheep while not specifying their sex. The adult was worth 4 'legal' pence (in silver), lambs 1*d* when suckling and then 2*d* until August (they would have been weaned in May to allow the ewe to be used for milk production). The adult sheep

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[46] Jenkins, D & Owen, M E (eds), 1980, p 193. Here a *brychan* is described as a dual purpose article used both as a cloak and a bed covering at night. It was also used as a shroud on burial and was regarded as one of the three indispensable articles of a 'goodman' or *bonhedig.*

[47] Walter Map, (James, M R (ed), 1983, pp 100-101)

[48] c) p 46. 'Latin Redaction B' (Cotton MS Vespasian E xi 1) written circa 1250 also mentions balls of yarn, as well as wool (Emanuel H D, 1967, p 225). Latin 'B' is believed to have been derived both from Latin 'A' and from *Llyfr Iorwerth* (Figure 5.1).

was seen to be worth its attributes, or *teithi,* set down as its teats (2*d*), tooth, and eye (1*d* each). These latter two attributes are still very important today because the older the sheep the more chance there is of them losing their teeth, so stopping them from grazing, which eventually results in debilitating weakness and death. A sheep that is blind is extremely difficult to control and ceases to run with the flock. The attributes, as written, clearly suggest that it was the female milk-producing sheep that was being described as the most valuable sheep; rams and wethers were not mentioned[49], and may even have been worth less, as dry sheep (sheep with no milk) were only reckoned to be worth 2*d*[50]. The same applies in *Blegywryd*, which again only gives the value of lambs and adult sheep (4*d* pence for the adult sheep, 1*d* for a suckling lamb, and 2*d* when it is weaned), and mentions teats as being one of the important attributes of a sheep.

But *Iorwerth*[51] goes further. For the first time rams are mentioned, and have double the value of the ordinary sheep, which was regarded as a ewe as its properties included having milk and a lamb. The value of un-castrated male animals was recognised from an early date as *Cyfnerth* says that there were three animals whose attributes (*teithi*) exceed their legal worth, the stallion, the bull of the *trevgordd* (settlement), and the herd boar as 'if the breed is lost they are lost'[52]. Rams are not mentioned in this context, again suggesting that sheep were not a major part of the agrarian economy at that time. Neither were wethers mentioned specifically in any text as having special value. However, *Iorwerth* states that if a ram (worth the value of two ordinary sheep) died while being castrated its worth was given as being that of three sheep. This cannot have been because the ram would not be able to function after death as the act of castration would have essentially had the same effect. It was probably that the castrated animal had value in its own right as a wether because of its wool[53].

That value, recognised for the first time in the 13th century texts, was more likely to have been for its wool, than for its meat (the earlier texts do not give the wether's meat value above other adult sheep), particularly in the light of the economic status of

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[49] a) p 221
[50] Wilian, A R, 1960, p 87 referring to the '*Iorwerth*' text.
[51] c) p 180
[52] a) p 282
[53] c) p 179-80

the sheep elsewhere at this time[54]. A similar valuation to this, but relating to pigs, is found in *Blegywryd*[55], probably because a castrated boar could maintain or even increase its value as a meat animal. That castration became a legal issue for sheep adds to the evidence that sheep were increasing in status and use, making a revision in the law necessary by the time that *Iorwerth* was written.

Wethers are mentioned (in *Iorwerth*) as being part of the food-gift or *dawnbwyd* given in summer by the men of the bond *maenolydd* (bond 'manors' which were part of a legal division of land which often did not correspond to actual structures on the ground)[56]. The three-year old wether was probably regarded as being relatively valuable as it is bracketed with other gifts such as 'a mass of butter as broad as the broadest dish in the townland, and so thick that there are two bare-fist breadths in it', twenty-six loaves of the best bread that the land could produce, and all the milk from one milking of all milk-beasts (presumably sheep as well as cows) of the township on one day. A wether would have been used for a summer foodgift as ewes would be producing milk, and obviously an old, dry sheep was not considered to be a viable option.

Rams were also mentioned in *Iorwerth* for the first time in the context of damage to crops. It had always been recognised that animals in the crops caused much economic damage and there was in place a system of tariffs for compensation if crops were spoiled[57]. The *Iorwerth* text alone mentions that it would be wrong to penalise the owner of a ram if it strayed onto crops between Michaelmas and 1 November (from the old style calendar. It corresponds to the 13 November on the modern calendar). It recognised that a ram would be bound to follow any ewes that strayed during that period as it covered the sheep-breeding season.

Rams would have been removed from flocks by 1 November to avoid the birth of late lambs that would effectively take a ewe from economic milk production until a later time the following year. Late births were also detrimental to the health of a ewe as it would have a shorter time to 'dry out' and gain condition before being returned to the ram the following autumn. This clause in the laws appears to show that rams could be

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[54] See Chapter 3.
[55] b) p 178-9
[56] c) pp 121; 363
[57] a) pp 228-9; b) pp 85-6

expected to roam freely during this period to cover as many ewes as possible, indicating that flocks were run on a community basis. This helped those owners with only a few sheep who would not necessarily expect to keep a ram. *Cyfnerth* mentions a 'settlement bull' (see earlier) that would have been kept in the community to service the cows of the community.

The laws of Hywel Dda, accordingly, contain much information to demonstrate the status of sheep in Welsh society, and to highlight how changes in the local economy affected their importance and their usefulness to society. Earliest references point to sheep being the preserve of women, who would have sheared them, spun and woven the yarn, and milked them during lambs had been weaned. This gradually changes and sheep become more visible in the laws, more important within the local economy.

5.1 (2) The Extents

When Edward I succeeded in conquering the territories of Llewelyn ap Gruffydd at the end of the 13th century, he began to take stock of his possessions by commissioning a series of Extents or surveys in his newly-won territories to ensure continuation and a smooth transition from one system of administration to another. Even though these Extents were taken after the conquest they do reflect the social and administrative conditions that were to be found in the region prior to that conquest, and so give an insight into pre-Edwardian Gwynedd[58]. Care has to be taken as the terminology used was drawn more from contemporary manorial and feudal models than that of the local area[59]. There are two early Extents available, those of Anglesey (1284)[60] and Meirionydd (written some time during Edward I's reign). There is also a later Extent from Caernarvonshire, but that was taken in 1352 and is therefore less useful in ascertaining conditions immediately before the conquest.

5.1 (2) (a) The Extent of Anglesey

This Extent covers crown lands in Anglesey in some detail. It deals with the four *maenor*s on Anglesey that contained the *llysiau* or courts of the princes of North Wales,

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[58] Seebohm, F, 1895, p 2

[59] Jones-Pierce T, 1941, p 104; Seebohm, F, 1895, p 3

[60] Seebohm, F, 1895, Appendix Aa. Seebohm dated this as 1294. However Stephenson, D, 1984, Appendix VI, puts forward cogent arguments to take the date back to 1284, the date which will be accepted here. The closer the date to the Conquest, the greater the likelihood that it reflects the pre-conquest conditions on the manors of the princes of Wales.

at Aberffrau, Rhosyr, Cemais and Penrhosllugwy, and also the commotal centre at Llanfaes, all of which were administrative centres with Aberffrau being the principal seat. Details of crown land within the *cantrefi* apart from the *maenors* are also given.

i) The Royal *Maenor*s

When the English administrators started to collate the details of the tenancies of the royal *maenor*s they tended to regard them as a direct equivalent of the English manor, and some of the terminology used was taken from that premise; in the Extent the *maenor* becomes a 'manor', but it is not a direct equivalent.

The Extent looks in some detail at the four *maenor*s, giving the dues and the services owed by free and bond tenants alike. In most cases some degree of commutation into cash-equivalent rents has taken place, but, especially with bond tenants, the basis for the commutation is still sometimes visible. The *maenor*s display distinctive agricultural patterns in their rents and services. Aberffrau is usually seen as the major *llys* or court of the princes, and while the princes and their entourage went on circuits of the other *llysiau*, those *llysiau* were not equal in staus to Aberffrau. The *maerdref* of a *maenor* (equivalent to the demesne land of a English manor) was usually found on the best agricultural land in the locality; the tenants were bond tenants charged with the upkeep of the *llys*. The tenants of a *maerdref* were typically the last to have their rents and dues commuted to cash as that would have resulted in the *llys* being less well cared for. It is therefore easier to see the type of agriculture practiced on the *maerdref*, and this also applies on some other bond tenancies. Set apart from the *maerdref* there were bond hamlets situated elsewhere on the *maenor*; these tenants also had to perform some services towards the upkeep of the *maerdref*, namely a set number of days work. This work was not as arduous as that of the tenants on the *maerdref* itself or those tenants living in what was basically the home farmstead of the *maerdref* at Trefcastell. According to Seebohm, this type of service from non-manorial tenants seems to have been restricted to Aberffrau[61].

The *maerdref* at Aberffau had five carucates (about 300 acres) of arable land on which were grown barley and oats, but must have also had extensive pasture. The

[61] Seebohm, F, 1895, p 26

presence of cattle is shown in the amount of butter and milk that had to be given; the hamlet of 'Dyncloydan'[62] had some tenants who paid 'merionuth', for pasture on the prince's vaccarium or cattle 'farm'. (This type of rental was very common in Meirionydd as will be seen in the Extent from that county). The bond tenants of this *maenor* also gave adult sheep as well as lambs, showing that the keeping of sheep was not unusual. The sheep are recorded as *multones* worth 6*d* and may well have been wethers which would probably have ended with the animal being killed for meat in the kitchens of the *llys*; lambs worth 2*d* each were also to be given (the price cited by the laws for lambs weaned but not yet a year old (see 5.1 (4)).

Depending on the time of year that the payment was to be made, ewes would probably either be giving milk, or, if lactation was over, would be ready to be put to the ram; they would have been too valuable as breeding stock to use for rental purposes. The killing of breeding ewes would have reduced the ability of tenants to provide the rent for the following year.

The nine tenants (a nominal number used to calculate dues and services as these remained the same regardless of how many inhabitants there were actually living there[63]) of the *maerdref* of Aberffrau kept cows in a *vaccarium*, and gave milk for the privilege, but they also kept sheep flocks as the *maerdref* gave a total of four-and-a-half wethers and nine lambs in rent. Sheep and lambs were also due from a group of six bond tenements that were empty when the Extent was made. Was the presence of these sheep on the *maenor* an attestation of the increased importance of sheep as seen in their higher profile in the *Llyfr Iorwerth* texts, supposedly written during the reign of Llewelyn ap Iorwerth, a moderniser who updated the laws in order to take into consideration trends in governance and fiscal affairs[64]. The laws specify that the *landmaer* was responsible for apportioning work on the *maerdref,* especially the ploughing; no ploughing could start until he had reassigned the work load to accommodate the numbers of villeins available from the *maerdref.* Was he also responsible for deciding what livestock was to be kept on the *maerdref*? If so he would

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[62] Near Llangadwaladr (Richards M, 1969, p 59).
[63] Seebohm, F, 1895, pp 16-18
[64] See Chapter 2, p 16.

have been directly responsible for deciding the extent to which sheep played a part there and would have been responsible for livestock strategy. The *dungmaer*, subordinate to the *maer*, organised the ploughing and the care of the prince's livestock suggesting that his overseer may well have had a responsibility for the type and number of animals kept there[65]. His name also suggests that he may have been responsible for fertilising the fields with the dung of the livestock, a practice seen in Pembrokeshire[66].

It is interesting to look in more detail at the types of livestock and their produce that had to be paid by the 'manorial' bond tenants, both on the *maerdref* and other outlying bond hamlets. This included milk, butter and eggs as well as sheep, lambs and hens. Wheat, oats and oatmeal, barleymeal and straw were also required, as were certain numbers of days work on the arable land of the *maerdref*[67]. On the face of it, much was produced by work believed to be the province of women. Historically, women were responsible for milking both sheep and cattle, and the production of butter and cheese from that milk; they also probably collected any eggs produced from poultry and looked after hens on a day-to-day basis even though hens were the property of the man of the household[68]. This would leave the men free to carry out any work needed on the arable of the demesne, and to look after most of the larger livestock. Women would have been invaluable to the running of the *maerdref* even though they are not specifically mentioned in the listing of a (male) villein's duties or rents. In the Pembrokeshire of the late 16th century, it was young adults and older children that kept an eye on the flocks and herds of the community as those herds were free to roam on the non-arable land without hindrance (see Chapter 4). Children of bond tenants would have been expected to play their part in the economy of the *maenor* and may have been used for similar roles.

Aberffrau can be seen to have had a mixture of arable and pastoral agriculture, but this cannot now be seen from the *maenor* of Cemais in the commote of Talbolion. There, arable agriculture is to the forefront as no livestock or livestock products are mentioned, not even from bond tenants. There were four carucates of arable land and a

[65] Jenkins, D, 1981, p 125
[66] See 4.2 (1).
[67] Seebohm, F, 1895, pp 16-20
[68] Jenkins, D, 1981, p 46

mill, and flour was part of the dues, but livestock has disappeared from view in the commutation process, which appears to be nearly complete on this *maenor*. It is impossible to discern whether the lack of livestock is because it played a very minor part of the economy and was therefore easy to subsume into the commutation process of services into rents, or if it was a thriving part of the agriculture of the *maenor* that has just vanished from view. The suspicion does remain that it was because livestock did not play a major role in the agriculture of the *maenor* of Cemais that it vanished so completely at this time. By 1291 the four carucates of arable, one area of waste, and some meadow on the demesne of the *maenor* had been farmed out to the value of £8[69].

Penros (Penrhosllugwy) again had four carucates of arable, but the impression here is that this *maenor* had extensive pastures, and was orientated more towards the keeping of livestock. Cows may have been numerous as there were payments of 'meryonnith' worth 8*s* 9*d* and butter worth 11*s* 7*d* by the tenants, substantial payments. Sheep were present but the only payment relates to lambs, which seem to be bracketed with chickens. In other parts of the Extent, fifteen chickens go with one lamb, therefore it is likely that the payment of 6*s*.9*d* is equivalent to seventy-five chickens (at 1*d* each) and five lambs (at 2*d* each)[70]. However, it may be significant that here adult sheep were not expected to be part of any dues as at Aberffrau, and therefore sheep would not have been kept in the numbers that they were at Aberffrau. Bond tenants also kept a certain number of horses as men and horses had to be provided for work on the demesne. *Potura* was also payable on the keeping of 402 horses. Jones-Pierce argues that *potura*, or *porthiant* as it also appears in the Extent, is the commutation of the *cylch* dues (dues paid to support the king and/or parts of his court as they made their rounds of the kingdom)[71]. This payment does suggest that there was ample pasture for these horses. Again, by 1291, the arable belonging to the demesne had been farmed out, this time for £5[72].

The *maenor* of Rhosyr in the commote of Menai had the largest arable acreage with ten carucates (about 600 acres), of which six were in the *maerdref*, and large

[69] Griffiths, J, 1937-9, pp 52; 68
[70] Seebohm, F, 1895, Appendix Aa, p 15
[71] Jones-Pierce T, 1941, pp 115-117
[72] Griffiths, J, 1937-9, pp 53; 69

payments of barley flour were made by the bond tenants. There were also three areas of meadow worth 5*s*, and pasture worth 20*s*. Oats were grown and, as well as making the oats into flour, some had to be provided for the upkeep of the prince's horses. The tenants kept their own horses as some had to be provided for day-work on the *maenor*. Cattle were present as 'albo et merionith' worth 6*s* 3*d* is mentioned, and there would have been oxen enough to cope with the large acreage of arable, the horses of the tenants notwithstanding. Lambs are mentioned, and from the valuation of 3*s* 4*d* it appears likely that twenty were required each year, suggesting a relatively substantial flock from the *maenor* but again no adult sheep were to be provided.

The Extent shows that agriculture from these four *maenors* was not standardised and that local conditions probably governed the general tenor of the agrarian practices. The *maerdref* was in decline in both Penrhos and Cemais even during the rule of the princes[73]. However, the *maenor*s still kept a certain proportion of livestock as well as arable land, although the Extent does highlight differences in the type and quantity of that livestock. Sheep seem to be more to the forefront at Aberffrau[74] than elsewhere, and only at Cemais is there no record or indication of them ever being present, a fate suffered by all livestock there as a result of commutation. Cemais was relatively close to the sea, and there may have been a concentration on reaping the benefits of the sea rather than of the land. There was certainly a *pisceria* or fish farm here. The fifth commotal centre of Llanfaes was an 'urban' centre even under the princes. A borough had been created here from the *maerdref*, with the inhabitants referred to as burgesses in the Extent. Its roots in trading had brought about this change, but the burgesses still were responsible for works on the old *maerdref*[75], and there were still thirteen carucates of arable associated with the maenor. Sheep were not mentioned.

ii) The *Cantrefi* of Anglesey

The effects of commutation can be seen throughout all the *cantrefi*, but particularly in

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[73] Stephenson, D, 1984, p 59

[74] Carr A D, 1982, p 96 suggests that the preponderance of sand dunes at Aberffrau would have made good grazing land. He also notes a lack of pigs and goats in the roll. This could have come about a) because woods were lacking on the island, which would make pigs less likely, and b) goats thrive on poor pasture, suggesting that the available pasture was more suited to sheep which provided wool as well as milk, rather than his suggestion that it was because they were not taxed.

[75] Stephenson, D, 1984, pp 58-9

the commote of Dindaethwy in the *cantref* of Rhosyr where all dues from bond and free tenant alike are shown as *redditus assise* and *potura*[76]. All rents appear to have been commuted to cash in the commote of Talbolion with an obvious *twnc* and *potura* element from villein tenants. This is entirely in accordance with the commutation at the *maenor* of Cemais in the same district which also had most of its rents commuted to cash when the Extent was taken, showing that, even under Llewelyn, the process of commutation must have been well under way. Limitations are therefore placed on the extent to which conclusions can be drawn.

In the *cantref* of Aberffrau, free tenants had had their dues commuted, but those of bond tenants still had to provide some dues in kind, as did the villeins of 'Tre Feibion Meurig' (Llechyled) who had to provide ground oats and flour, as well as a pig, and a chicken. 'Bodenaylwyn' also had to provide a pig; these are the only two references to pigs on the whole island, both being in the commote of Llifon, suggesting that in the 13th century de-afforestation was virtually complete on the island except for isolated pockets where pannage for pigs was still possible. No sheep or lambs are mentioned. This is surprising as the *maenor* of Aberffrau appears to have been at the forefront of sheep-keeping on the island.

In the commote of Twrcelyn dues of chickens and lambs are found as well as 'merionith' which was for winter pasture and milk. Many rents had been commuted but the bond tenants of Coedana, Bodafon (*Bodanau*), and a subsequently unidentified place (Bodenawyn), had to provide *potura* for the equivalent of keeping 350 men seventy-five dogs and seventy-five horses, as well as day works on the estate, and chickens and lambs. Those of Rhosmynach, (*Bodeuney*) Bodewyrd[77] and Deri paid 'merionith' worth £4 7*s* 1¾*d* suggesting large numbers of cattle were involved. Sheep were not visible to any extent in this commote. The *maenor* of Penrhosllugwy was situated in Twrcelyn, and the Extent concerning that *maenor* also demonstrated the extensive keeping of livestock and the importance of pasture to its economy, a circumstance which seems to be echoed in the crown lands throughout the commote.

In the commote of Menai the free 'vills' appear to have had their rents

[76] See Jones-Pierce, T, 1941, for an assessment of the meanings of *redditus assise* and *potura*.
[77] See Griffiths, J, 1937-9, pp 69-70 for some light on the names used here.

commuted but not so the bond 'vills', and it is from the bond vill of 'Tre Meibion Pyll' that adult sheep are once again seen as part of the rental. Two *multones* worth 8*d* each were to be given, as well as twenty lambs, worth in total 3*s* 4*d*. This would have been a large payment of lambs to absorb and must indicate a sizeable flock. 'Tregarwed' also paid the equivalent of two wethers but these were only to be worth 6*d* each. Lambs were included but the number not specified, although, from the value of 3*s* 4*d*, twenty appears to be likely, as at 'Tre Meibion Pyll'. The relatively large payments concerning sheep from non-manorial bond tenants in Menai is unusual, and does suggest a greater interest in sheep before the Edwardian conquest. The proportion of the total crop of lambs to be given as rent is a matter of speculation, but if the lambs were male lambs as would be the most economically viable likelihood, they must have been less than half the lambs produced in a year in order to keep the integrity of the flock. Some lambs would have been retained in order to produce wethers, or even the few rams that needed in the flock. As sheep of the time tended to produce only single lambs, the ewe flock alone must have numbered over forty, and was probably somewhat in excess of that figure.

5.1 (2) (b) The Extent of Meirionydd[78]

The shire of 'Merioneth', according to this Extent, contained four commotes - Talybont, Ystumanner, Penllyn and Ardudwy. It actually comprised the older commotes of Talybont and Ystumanner from the *cantref* of Meirionydd, the *cantref* of Ardudwy, and the commotes of Penllyn and Edeirnion[79]. When Edward took over the area he reorganised Llewelyn's lands into shires, and, although he kept many of the names and the organisations, he did extend the boundaries of the older *cantref* of Meirionydd, which originally contained the commotes of Talybont and Ystumanner only, to include Penllyn and Ardudwy (see Fig 2.5). This Extent draws a very different picture of the type of agriculture being practised in Meirionydd from that of Anglesey.

None of the 'manors' mentioned contain references to sheep; cattle and pigs are the only livestock. The cattle are kept in *vaccaria*, and it is the products of those *vaccaria* that are used for rental purposes. Pigs are mentioned from the vill of Pennal in Ystumanner, and from the vill of 'Pressor' (modern Trawsfynedd) in Ardudwy. But it is

[78] M C J, 1867, pp 183-92
[79] Richards M, 1969, pp 155-6

the *vaccaria* present on the manors and in the 'vills' that give the indication of where the main thrust of agricultural practice was in this area. Cattle appear to have been the mainstay in the agriculture of medieval Meirionydd; sheep did not come into the equation.

The importance of this extent is that it highlights an economy based almost entirely on the keeping of cattle; sheep have no place here in a part of the country that in later years would have sheep firmly in place within that local economy.

5.2 Gwynedd from the Edwardian Conquest of 1284 up to 1400

The principality of Gwynedd was not divided into Marcher lordships following the defeat of Llewelyn in 1282, but was taken over by the King as Crown land. Caernarvon became the administrative centre for what was termed 'the land of Snowdonia' or the 'principality of North Wales', covering the counties of Caernarvon, Anglesey and Meirionydd (excluding what was the commote of Mawddwy which was not added to Meirionydd until the Act of Union in 1535[80]), and run by officials who collected rents from the tenants, both free and bond, who had their own small flocks and herds.

Gwynedd after 1284 up to 1400 is marginally better served than the period preceding it in respect of documentation relating to the keeping of sheep and their uses. There are various accounts and Extents drawn up by administrators in the region, records relating to taxation in the region, and also details of the livestock found on ecclesiastical estates, particularly those of the Cistercians. As far as Extents are concerned, they are of mixed use. The earlier Extents indicate some use of payment-in-kind, or rents drawn up from that basis, and would seem to reflect the position as it was at that time; later Extents tended to be a re-drawing of earlier versions, to be used as a basis for working out money rents[81]. Payment in kind was rapidly disappearing, so consequently these later Extents did not reflect agricultural practice on the ground as did the earlier examples.

Of particular interest are the surviving Lay Subsidy rolls for certain parts of North Wales which show details of the livestock and crops of every lay person in the

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[80] Lewis, E A, 1921-3, p 256

[81] In discussing the Anglesey Extent of 1352 Carr points out that the Extent of 1294 is much more valuable in detail than that of 1352 which only records consolidated rents (Carr A D, (ed), 1971-2, p 156).

area, wherever the value exceeded 15*d*. The rolls were used to set the level of taxation paid by that person, in this case a 15th of the overall worth of the goods, providing those goods and chattels were worth 15*s* or over[82]. The basic rolls from which the tax was worked out also provide details of livestock belonging to people who fell below the taxable level. The lowest rate of tax (a 15th of 15*s* at 1*s*) could have been a difficult sum to find, particularly if wealth was wrapped up in goods and chattels. At this time the daily wage of a carpenter was about 3*d*[83].

5.2 (1) The Lay Subsidy Taxation of 1292-3[84]

Williams Jones, in his introduction to 'The Merioneth Lay Subsidy Roll 1292-3', gives details of all subsidy rolls surviving from Gwynedd, and gives a breakdown of the economic significance of sheep to the area. There have been many analyses of these surviving rolls as they give details of livestock held by many taxpayers and non-taxpayers alike. They give a rare insight into the lives of ordinary people of the time. The Meirionydd lay subsidy roll of 1292-3 is not of use in this context as it only gives the total valuation for each person, not a breakdown of that evaluation. The lay subsidy excluded clergy as an ecclesiastical taxation to raise a tenth had been carried out in 1291[85].

There are nineteen Welsh lay subsidy rolls[86], but only five rolls give detailed information about taxable moveables, all for areas in or adjoining Gwynedd[87]. Four of the latter are believed to date from 1292-3; those of Aberffraw in Anglesey[88], Cafflogion and Nefyn in Caernarvonshire, and Creuddyn (which is outside the chosen area for this thesis). The fifth roll is incomplete, and covers only part of the commote of Penllyn in Meirionydd. It is of a later date than the others, being probably from 1318, and it covers five townships (plus part of another unidentified township, perhaps Llanderfel)[89], Penaran (in the parish of Llanuwchllyn) Castell (Llanuwchllyn), Cyffty

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[82] Williams-Jones, K, (ed), 1976, p xvi

[83] Williams-Jones, K, (ed), 1976, p ci

[84] Cf. Strayer, J R & Ruishill, G, 1954, for a discussion on those who granted the tax to the King.

[85] *Taxatio Ecclesiastica Angliae et Walliae auct P.Nicholai IV*, London Record Commission, 1802

[86] Williams-Jones, K, (ed), 1976, pp ix-xi

[87] ibid, p cxiii

[88] Seebohm dates this one as 1320, a mistake (Lewis, E A, 1921-3, p 256). The Public Records Office gives a speculative date of 21 Edward I (1293).

[89] Williams-Jones, K, (ed), 1976, pp xi, fn 2; 96 fn5

(the parish of Llanycil), Bedwarian (Llanycil), and Streflyn (Llanycil).

The values given to the livestock collated through the taxation exercise of 1292-93 are set down as follows: ox 5*s*, cow 3*s* 4*d*, 3 year-old affer (*averia*) 2*s* 6*d*, 2 year-old affer (*averia*) 2*s*, horse 5*s*, mare 5*s*, ewe 6*d*, sheep 8*d*, crannock[90] of corn 2*s* 6*d*, of oats 6*d*, of ground oats 2*s*, of rye 16*d*, of barley and ground barley 16*d*, beans 2*s* 6*d*, peas 16*d*[91]. These same values appear to have been used in the roll from Penllyn even though it was taken twenty-five years later in 1318.

Williams-Jones argues that this subsidy was aimed directly at individual personal property and not at *gwelyau* or 'vills'[92], borne out by the preponderance of named individuals. On the whole, individuals seem to have been taxed separately, but probably were taxed as the heads of households unless individual members of that household were property owners in their own right. Occasionally groups of individuals appear to be taxed as a single person as is seen in Cafflogion where Angharet was named along with *filii sui* (her sons)[93].

With the threshold for paying tax at 15*s*, non-taxpayers could have owned several animals without crossing the boundary. It must have proved a temptation for those just on or over the threshold to try to avoid paying the tax It has been estimated that as many as a third of people in the areas did not appear on the rolls and so cannot be seen[94].

5.2 (1) (a) Aberffrau Lay Subsidy Roll[95]

This roll covers the vill of Aberffrau and its associated hamlets in the commote of Malltraeth. It does not cover Llifon, the other commote in the *cantref* of Aberffrau. There were sixty-eight taxpayers living there. There is no way to ascertain from this roll whether the taxpayers mentioned were bond or free tenants, both of whom would have owned their own livestock, as both are treated similarly. What is apparent is that all

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[90] Four bushels

[91] Williams-Jones, K, (ed), 1976, p xiv, (PRO E. 159/95 m 62)

[92] ibid, p xxiii

[93] See Appendix C

[94] cf. Willard, J F, 1934, p 75, on the assessment of moveables where he contends that only goods in excess of the taxpayers needs were counted even if their total value came above the lower limit reckoned for taxation. Moveables in rural districts usually covered the larger domestic animals, and grain of different varieties; geese chickens, farming implements, butter, cheese and other food were not usually included. Willard (p 174) also throws some doubts on the use of taxpayers as an indication of population.

[95] See Appendix B

those mentioned on this roll have goods and livestock valued at over the basic taxable threshold of 15*s*. As these rolls were expected to note all persons with goods and livestock worth over 15*d*, it shows the relative wealth of the Aberffrau tenants.

There is little variation in the value given to the sheep in this subsidy roll. Most are recorded giving a value per head for a certain number of sheep. In those circumstances, the value in this roll is invariably 6*d*. Only for six, out of forty-six entries mentioning sheep, do variations from this practice occur, and one of those gives no price whatsoever for the sheep (owner 1). The remainder of the exceptions return a value for the sheep as a group, instead of a value per capita. In one case two sheep are valued at 12*d*, and the per capita price works out at the standard 6*d* per head; the remaining four cases show above or below that standard rate when reduced to a per capita rate.

Owner 9 had fifteen *oves* worth in total 5*s* (4*d* per head)
Owner 10 had five *oves* also at 4*d* per head
Owner 67 had ten *oves* at 4*d* per head
Owner 15 had six *oves* at 7*d* each.

The use of a different notation to describe these variations in all cases bar one seems to suggest that they were not an aberration or misprint in transcribing, but were an attempt to include sheep that did not quite fit into the normal pattern. It demonstrates a sense of discrimination on the part of the original assessors and thereby begs the question of why they did not include any sheep at all at the higher rate of 8*d* that the original assessment rates allowed for.

There are a number of possible reasons for the lack of sheep valued at the higher rate, including the following suggestions.

1. The assessors were recording an actual lack of wethers in the stock. If wool was not regarded as an economic priority then the wether would not be kept for as long. It would be regarded as a source of meat, being killed when large enough, or sold. The assessment was supposed to be taken at Michaelmas, with winter to follow[96]. Over-wintering wethers would consume valuable fodder that could better be kept for the larger animals and the more useful breeding ewes. Younger sheep were not counted in the assessment so smaller wethers would not be visible through the rolls.

[96] Williams-Jones, K, (ed), 1976, pp xiii-xiv

2. The assessors were, in the main, valuing all adult sheep at the same rate, even though contemporaneous records from St. David's show that wethers were rated at a higher value (presumably because of their wool production) than breeding ewes, and that barren or non-breeding ewes had a lower value still (see Chapter 3). This may be because the Welsh were less interested in the wool than their English counterparts. If so, then there would not have been the inclination to value the main wool-producing sheep, the wether, higher than the breeding ewe. The assessors[97] were local Welsh men who may have used local standards to value the sheep. It would have had the added attraction that it would have reduced the overall tax burden on those paying the tax. As it was the English who were responsible for the detail of the assessment, the values used in that assessment would also have applied to sheep in regions other than North Wales, and where wool production was more important. The taxation officials themselves may have recognised that Welsh sheep here were not as valuable as wool producers as sheep from other areas, and may have accepted the lower valuations accordingly.

3. The assessors were trying to protect the people that they were assessing as much as possible, but the lack of sheep at the higher rate would presumably have been highly noticeable if altruism was the motive.

4. The sheep of a 'vill' would have run together as a communal flock, making the apportioning of worth more difficult; to achieve equity a compromise may have been sought. That this would be a universal occurrence is not probable.

Of the proffered options the third and fourth seem the least likely. This lack of sheep valued at the higher rate occurs also in other Welsh lay subsidy rolls (see 5.2 (1) (b) and (c)), although in that of Penllyn (5.2 (1) (d)) there is the occasional reference to more expensive sheep. It appears that the sheep kept principally for wool production was not retained as a matter of course.

The second problem is that of the under valued sheep which belonged to three people on the roll. Young sheep below breeding age (and usually valued at about 4*d*) do not seem to have been included in the statutory rates set out for the assessment, thus making the inclusion of significant 'flocks' of under-valued sheep difficult to explain.

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[97] Williams-Jones, K, (ed), 1976, pp xiii-xiv

For example, owner 9[98] had fifteen sheep with an average *per capita* value of 4*d*. Possible explanations of these occurrences that present themselves are:

1. The owner had a 'flock' of sheep just on the threshold of adulthood to the extent that the assessor could not ignore them. If that person was building up a new 'flock' then this is a distinct possibility. It may even signify the beginnings of a burgeoning interest in sheep in the area.

2. Sheep valued at 4*d* were older or barren, or sheep in poor physical condition (although how one person, who presumably ran his sheep with the communal flock, could have produced a group of such poor specimens is difficult to imagine).

3. The average *per capita* rate is masking a range of values within the 'flock'. If that is the case then some of the sheep in the assessment were valued even lower than 4d, even more of a problem to explain.

If young sheep of one or two years in age were excluded and could have represented between a quarter and a third of any flock, their absence means that overall sheep numbers would have been higher than is shown in the roll (see Chapter 3).

Out of a total of sixty-eight taxpayers on the Aberffrau roll, forty-six (about two thirds of households) owned between them 747 sheep, (a mean of just over sixteen sheep per owner, worth 8*s*). The largest number owned by an individual was fifty, but six owners altogether had forty or more. Taking the taxpayers as a whole, the mean comes down to about eleven sheep. When compared to the figures from other areas of north-west Wales, these will be seen to be on high side. (For reference a total of 267 cows were owned by taxpayers in Aberffrau, a mean of four cows per taxpayer worth 13*s* 4*d*. Only two had no cows. Cows were still a greater asset than sheep.)

Chart 5.1 compares the ownership of sheep and cows (livestock not connected to arable agriculture or draught work). The numbers of oxen and other draught animals can be related to the amount of arable to be cultivated and therefore distort livestock figures relating to breeding, dairying and wool production[99].

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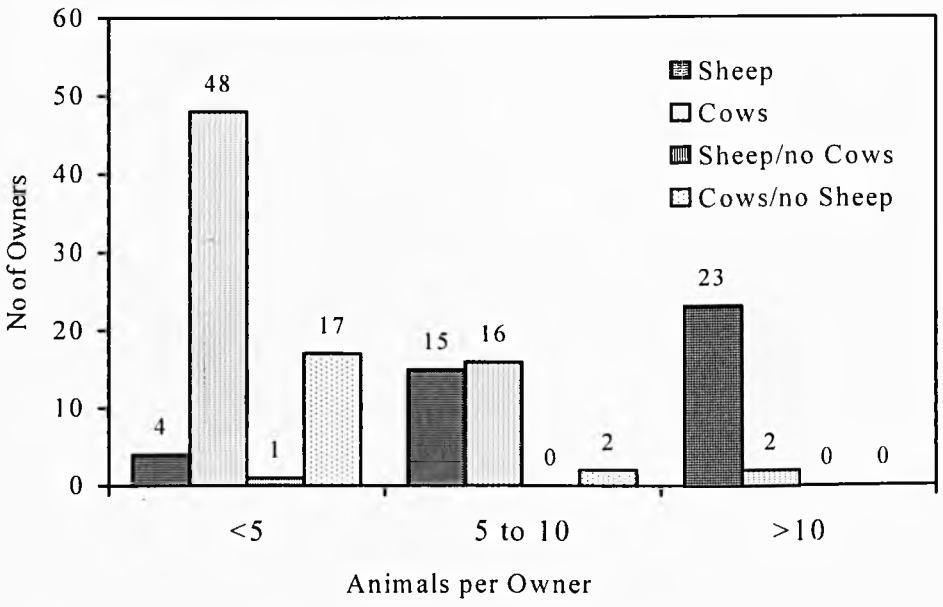
[98] Appendix B

[99] A decision has been made to exclude young cattle (*averia*) as they may have been used as draught animals, or they may have been part of beef production.

Chart 5.1 Livestock Distributed by Owner (Aberffrau)



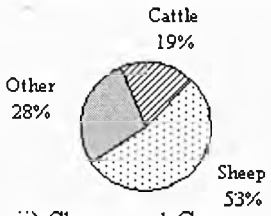
The chart shows that most owners of cows had fewer than five animals, whereas more than half the owners of sheep had more than ten. Only one taxpayer had some sheep but no cows, and the number of sheep involved was less than five. Thus if you had sheep you probably had many; virtually everyone had cows but no-one had many. Statistical analysis of the data from Aberffrau using Pearson Correlation tests[100] shows that there is a degree of significant positive correlation between the numbers of sheep kept by the taxpayers of Aberffrau, and the number of cows. There is no correlation between those figures and the crop values, or other types of livestock such as oxen, *averia*, or equine livestock, whether for breeding or for draught purposes. The interpretation put on this is that the more cows present the greater the number of sheep. Sheep were kept not as an alternative to cows, but in addition.

The set of Charts 5.2 i) - iii) all refer to Aberffrau on Anglesey, and display i) livestock numbers as a whole, regardless of the place of that animal in the local agricultural unit, ii) sheep and cows only, and iii) the value of sheep and cows as given in the Lay Subsidy.

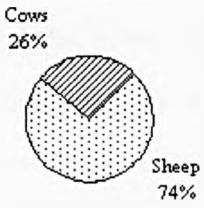
[100] See 1.4 and Appendix B.

Chart.5.2 Aberffrau

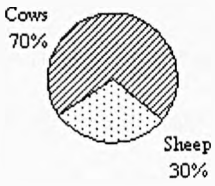
i) Total Livestock Numbers



ii) Sheep and Cows



iii) Subsidy Valuations



It can be seen quite clearly from Figure 5.3 that sheep were a significant proportion of livestock numbers in and around Aberffrau. Charts 5.2 ii) and iii) however, exclude all draught and non-breeding animals, and show that, though a quarter of the total number, cows were worth two thirds of the total value overall (using the figures given for the lay subsidy tax), the cows were worth over twice as much in total as any sheep kept. Thomas[101] states that the relative taxable values of the various types of stock show their importance in the economy of Wales, and that the relatively high values put on oxen and horses show how much they were prized 'in an area which was isolated and remote because of its few harbours and rugged land communications even in the sixteenth century'.

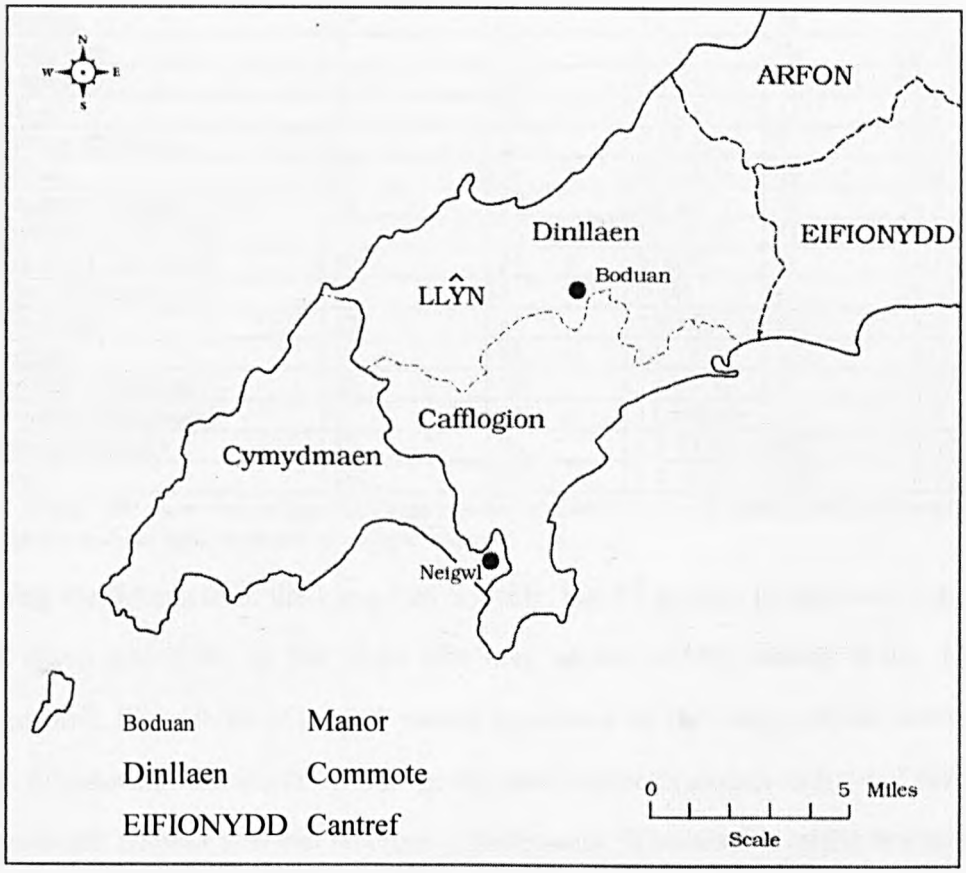
They may well have been prized greatly but neither the position of the settlements nor the economy of Wales had anything to do with their value; this was imposed by the Norman administration, not by local officials, and would have been standard throughout England and Wales. The valuations would have reflected the size of the animal and its use. Compared to modern sheep and cows, valuations show that the sheep was relatively better thought of in the 13th century than in the 20th. The lay subsidy valuation values the sheep at fifteen per cent of the value of a cow. Modern ratios can drop to less that ten percent.

[101] Thomas, C, 1968, pp 2-3

It must be borne in mind that this roll is very restricted in its geographical spread. It covers only the vill of Aberffrau and its associated hamlets, probably those connected to the *maenor* of Aberffrau. Neither the rest of Malltraeth and Llifon in the *cantref* of Aberffrau, nor any other *cantref* on Anglesey are covered. It is unwise to extrapolate these findings to other regions of the island, because, as has been seen with the Extent of Anglesey (5.1 (2) a), there were differences in agricultural emphasis from different parts of the island. The relatively large numbers of sheep owned by some taxpayers, together with the large mean flock size, may have been a result of the importance placed on sheep on the *maenor* of Aberffrau from earlier times, and not a blueprint for the rest of the island.

5.2 (1) (b) Cafflogion[102]

Figure 5.2 Administrative Divisions of the Lleyn Peninsula



The extant roll for Cafflogion, a commote in the *cantref* of Lleyn, is more detailed than that of Aberffrau as it covers several townships and allows a more comprehensive study

[102] Appendix C

of the preferences in different areas of the commote. Cafflogion was positioned on the southern part of that peninsula (see Figure 5.2). The location of the townships mentioned in the Lleyn subsidy roll is shown in Figure 5.4.

There were 200 people in the commote who owned more than the 15*d* worth of goods and livestock necessary to appear in the rolls, of which ninety-eight (about half of households) did not own sheep. Only twenty did not own a cow, and most of those did not own sheep either. The spread of sheep throughout the commote was not even, however, as some places showed a marked interest in sheep. Each vill or township had its own character, as is seen in Marchroes where sheep were twice as numerous as cows, and Botwael (Bodvel) where cows are three times as numerous as sheep.

Figure 5.3 Details from the Lleyn Lay Subsidy Rolls (see Appendix C)

Vill	Assessable Households	Sheep	Mean+	Cows	Mean+
Bottwnog	13	21	4.2 (1.6)	36	3.3 (2.8)
Llandinwael	8	24	8 (3)	40	5 (5)
Carnguwch	11	44	7.3 (4)	55	5 (5)
Bodvel*	21	30	6 (1.4)	117*	6.5 (5.6)
Penmaen (Deneio)	3	4	4 (1.3)	8	2.7 (2.7)
Pwllheli	21	44	6.3 (2.1)	64	3.2 (3)
Ystradgeirch (Llanbedrog)	18	67	6.7 (3.7)	62	3.8 (3.4)
Penyberth (Llanbedrog)	7	36	7.2 (5.1)	31	4.4 (4.4)
Caehwsin(Llanbedrog)	10	25	5 (2.5)	41	4.1 (4.1)
Bodwrog (Llanbedrog)	2	8	8 (4)	6	3 (3)
Bachellaeth	11	47	7.8 (4.3)	56	5.6 (5.1)
Llangyan	30	65	5.9 (2.2)	111	4 (3.7)
Marchros (Llanengan)	20	154	9.1 (7.7)	59	3.7 (3)
Bryncelyn (Llanengan)	8	69	11.5 (8.6)	31	4.4 (3.9)
Cilan (Llanengan)	17	75	6.2 (4.4)	42	3 (2.5)
Total	200	713	7.1 (3.6)	759	4.2 (3.8)

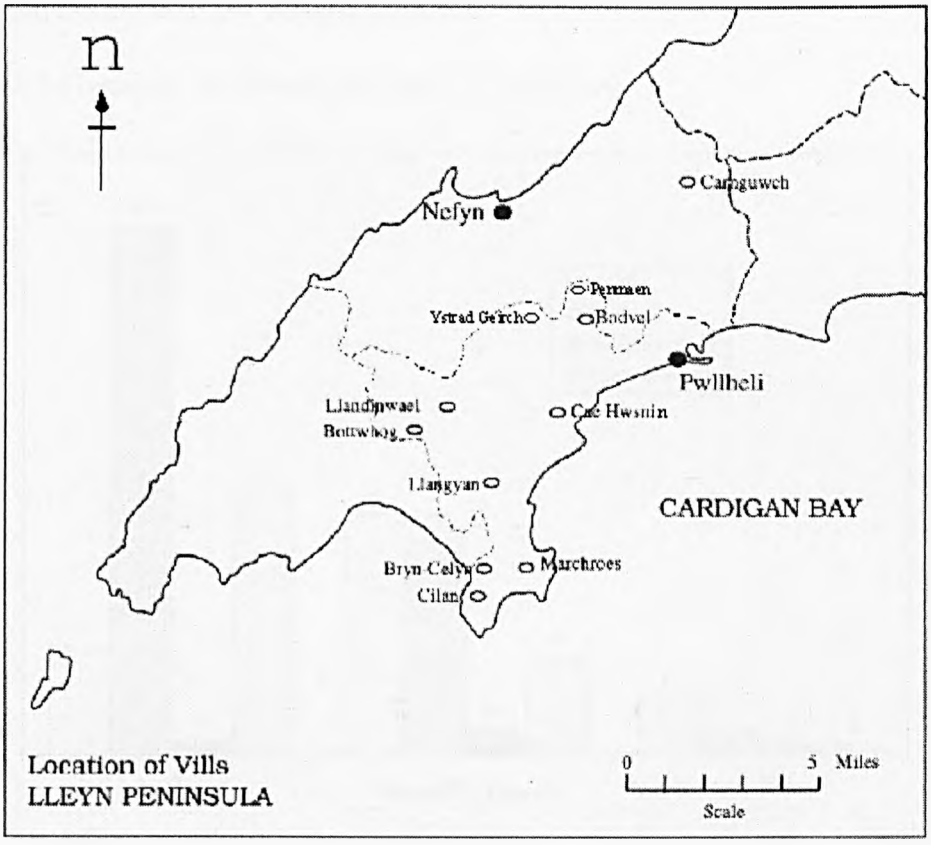
* In this 'vill' there was an unusually high number of cows and other livestock (but not sheep) owned by Angharet and her sons, assessed as a single taxpayer.

Using the figures from the Lleyn Lay Subsidy, Fig 5.3 gives a breakdown of the owners of sheep and cows in the order that they appear in the subsidy Rolls. Unlike in Aberffrau, thirty-three of the 200 people mentioned on the Lleyn roll fall below the 15*s* tax threshold in the worth of their goods and livestock (sixteen-and-a-half per cent). A significant number also had no crops to their name. Whereas this might be expected in a coastal centre such as at Pwllheli, inland townships also had individuals who kept livestock but possessed no crops of any description. It does point to a relative poverty in this region as opposed to Aberffrau. Animals possibly concerned with draught and the cultivation of arable land have not been included in the table. This includes horses, oxen

and *averia* which Thomas classes as draught animals[103] but may also have been in part young cattle being fattened for beef.

The means were calculated using only those of the populace that owned that type of livestock (mean figures in brackets were calculated from the whole population of a township regardless of livestock owned). These figures show that, when compared to Aberffrau, the mean number of sheep owned by sheep-keepers in Cafflogion as a whole was much fewer, with about seven compared to sixteen from Aberffrau. The mean number of cows owned, on the other hand, was about the same (4.1). This is not the complete picture, however, as there were marked differences in livestock numbers from different 'vills', and from groups of 'vills' in different areas.

Figure 5.4 Location of 'Vills' on the Lleyn Peninsula[104]



Three of the 'vills' in the parish of Llanengan in the south of Cafflogion (Marchroes, Bryncelyn and Cilan) showed a marked inclination towards the keeping of sheep compared with other parts of the commote. All three 'vills' also had some sheep

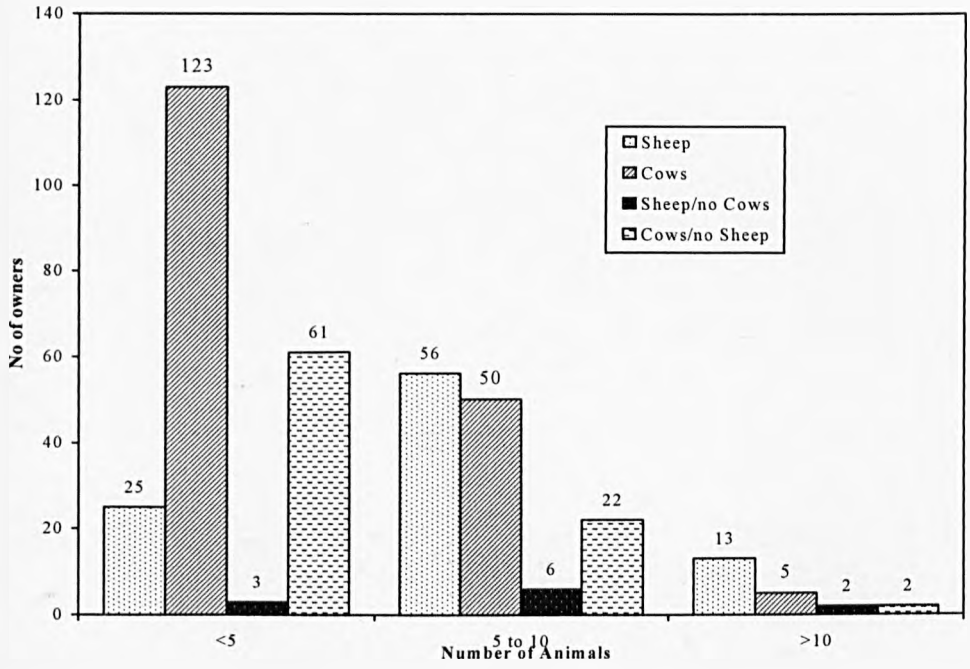
[103] Thomas, C, 1968, p 8 where he lists the type of animals kept by David Fychan of Marchros, translated from the Latin original. He describes the *averia* as draught animals.

[104] Taken from Thomas, C, 1968 p10

owners who were not owners of cows, with Marchroes having a fifth of its assessed households in that position, and Cilan having a sixth. In other parts of the commote a lack of cows usually was accompanied by a lack of sheep.

Bryncelyn comes the closest to the situation in Aberffrau with a mean of 11.5 sheep per sheep-owner (Marchros had a mean of 9.1, while Cilan had 6.2). Only in Bodvel does the mean number of cows exceed the mean number of sheep. The pie chart of Bodvel (Chart 5.4 iii) shows that cows were forty-one percent of the total livestock with sheep down to eleven percent. There was a high proportion of oxen here also, showing that there must have been much arable land connected to the township. In Bodvel there was an entry for Angharet and her sons who owned forty-six cows and forty-two oxen between them, but no sheep. It is significant that keepers of livestock on this scale did not own any sheep whatsoever.

Chart 5.3 Livestock Distribution by Owner (Cafflogion)



It becomes apparent from the Chart 5.4 (i-xv) that, although sheep are often in the majority, their nominal subsidy value rarely reaches the forty per cent mark. This does not necessarily reflect the true position economically of either animal. Sheep in both England and Wales were given the same nominal value regardless of where they came

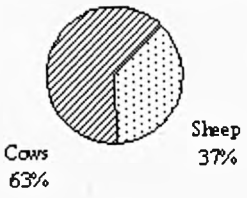
from[105]. However their wool could be worth widely differing amounts in different places and would contribute to widely different economic statuses for those sheep. The Welsh were well known for their use of milk and milk products from cows, whereas the English gave more emphasis at this time to sheep (see 5.1 (1) (b).

[105] See 3.5 (1) where there is a comparison between English sheep and Pembrokeshire sheep. It seems that prices for those sheep were comparable even when sold in the marketplace at this time. This may not have been the case with sheep from north Wales.

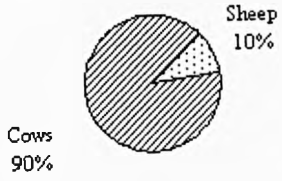
Chart 5.4(i - xv) Comparison of Sheep and Cows on the Lleyn Peninsula

i) BOTTWNOG

Numbers

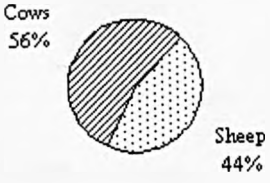


Value



ii) CARNGWCH

Numbers



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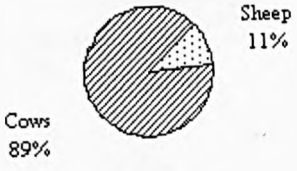
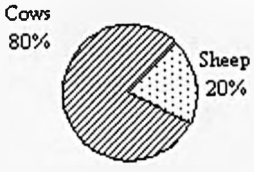


iii) BODVEL

Numbers



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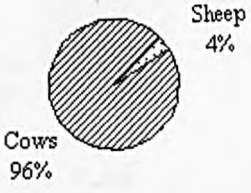
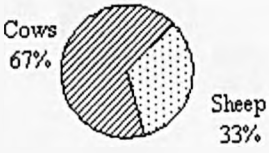


iv) PENMAEN

Numbers



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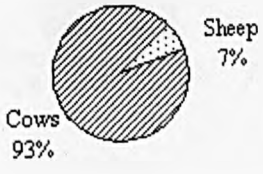
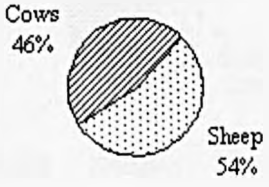


v) PENYBERTH

Numbers



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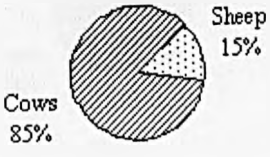
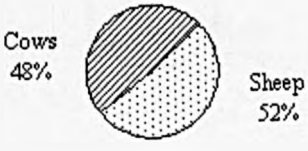


vi) YSTRAD GEIRCH

Numbers



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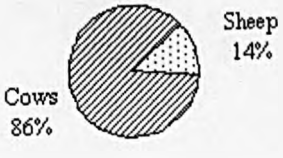
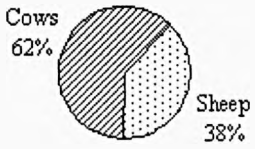


vii) CAE HWSNIN Numbers



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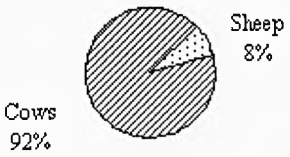
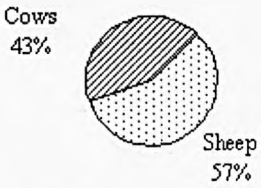


viii) BODWROG Numbers



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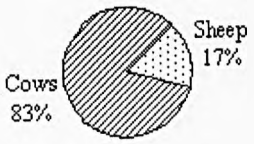
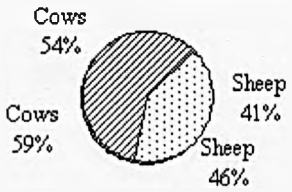


ix) BACHELLAETH Numbers



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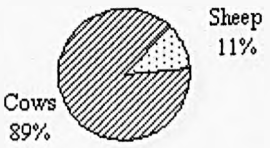
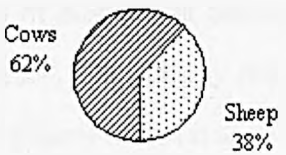


x) LLAN DINWAEL Numbers



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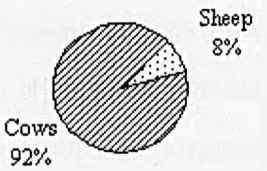
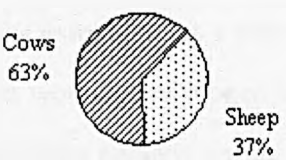


xi) LLANGYAN Numbers



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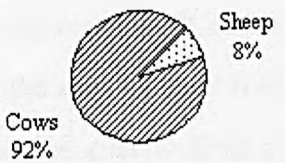
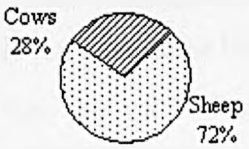


xii) MARCHROES Numbers



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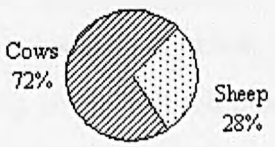
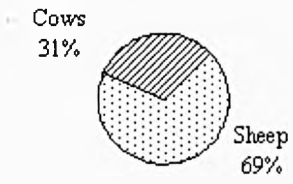


xiii) BRYNCELYN Numbers



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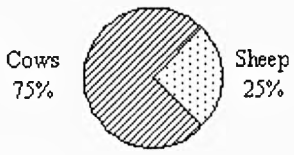
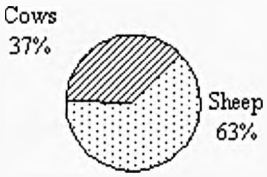
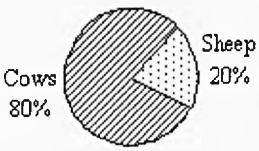


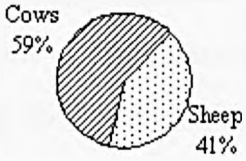
xiv) CILAN Numbers



Value



xv) PWLLHELI Numbers



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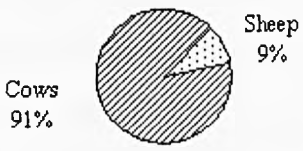


5.2 (1) c) Nefyn[106]

The borough of Nefyn was created directly from the old *maenor* of Nefyn under the Welsh princes[107]. The subsidy roll pertaining to Nefyn was atypical of assessments in Gwynedd in general in that it showed that Nefyn had a large population possessing very few assessable animals, and five that had no assessable livestock at all (only two of the five had any other assessable goods - crops worth 2*s*). As Nefyn possessed a natural harbour, it was recognised as a port even before the Edwardian conquest[108], and many of its population would have looked to the sea as well as to the land for their livelihood. Out of ninety-three persons on the roll, thirty-seven owned nets (nearly 40%) showing that catching fish played an appreciable part in their activities. Four people owned boats. Those with no animals normally would have been among the poorest in the areas and therefore would not have come into the assessment, but the possession of nets at 2*s* each pushed them onto the roll[109]. Forty-eight people (over 51%) on the roll fell below the

[106] Appendix D
[107] Lewis, E A, 1912, p 56
[108] ibid, p 7
[109] Appendix D

taxable threshold of 15*s* on the criteria of the taxation.

Nefyn in 1293[110], the *maenor* of the commote of Dinllaen, was the principal royal residence in Lleyn as well as being the centre of local government of Dinllaen. The return for Nefyn[111] is summarised in the following table.

Figure 5.5 Summary of Subsidy Returns for Nefyn

	Sheep	Cows	Sheep/no Cows	Cows/no Sheep	Sheep & Cows	No Sheep or Cows
Owners	26	74	5	54	21	13
% of households	28%	80%	5.4%	58%	22.6%	14%
Mean per Owner	7.9	2.7	8.8	2.4		

Nineteen per cent of all sheep owners did not possess any cows, and they had a mean of just under nine sheep each, whereas those owning cows as well as sheep kept a mean of just under eight sheep. Seventy-three per cent of all owners of cows had no sheep. Thirteen taxpayers owned some livestock but not including sheep or cows. Many people had just one or two cows, showing a more even distribution of cows than sheep; there were just less than 5½% of households with some sheep but no cows here, not a common occurrence generally in the region.

Chart 5.5 Livestock Distribution by Owner (Nefyn)

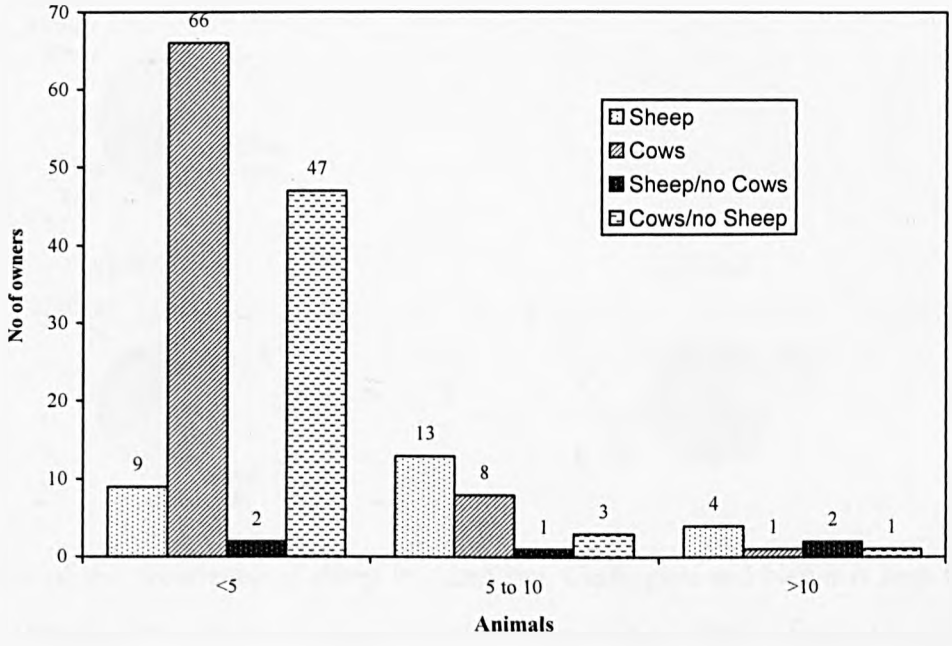


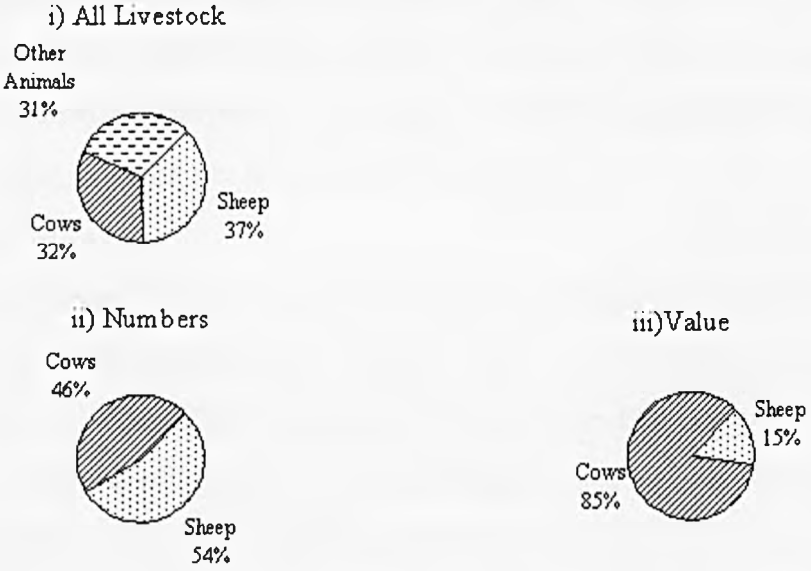
Chart 5.5 shows that far greater numbers of taxpayers owned cows, but that the majority

[110] Jones-Pierce, T, 1930
[111] Appendix D

of these owned less than five animals. Sheep owners, on the other hand, tended to keep between five and ten sheep, with 15% of sheep owners possessing more than ten animals. Madoc ap Einion owned the largest number of sheep, namely twenty, but did not own any cattle at all. Sheep tended (from the evidence of all these rolls) to be kept in addition to, rather than instead of, cows, and there were a significant number of households that owned cows but no sheep (58%). The nature of Nefyn as a significant centre of population, with ninety-three households on the roll, and its position as a port probably accounted for the high proportion of householders who owned no livestock at all (14%)).

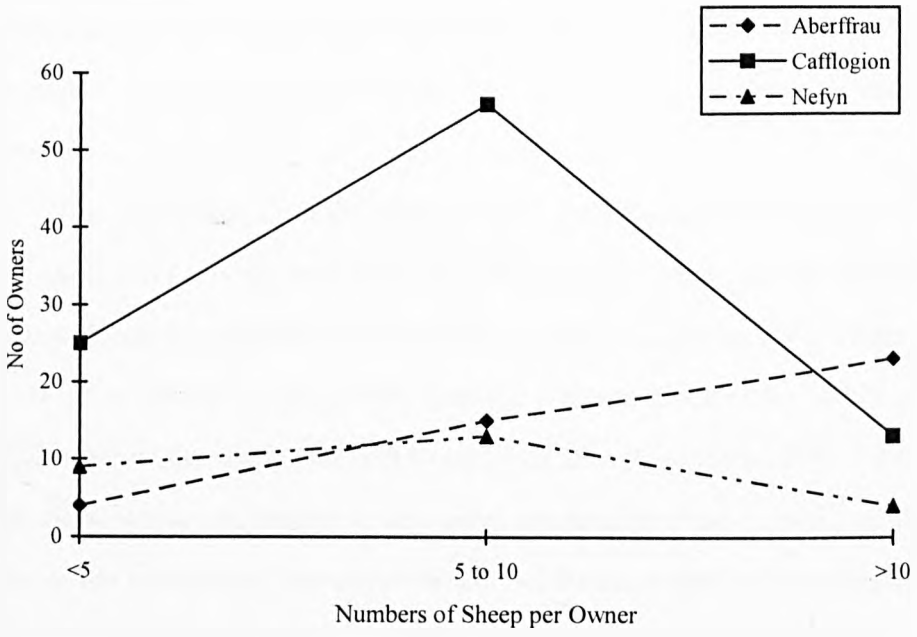
The non-arable/draught livestock are well outnumbered by sheep and cows taken together, again reflecting the nature of Nefyn and its environs. Charts 5.6 ii) and iii) show that, although cows and sheep were numerically very close, cows had a cash value far higher than sheep, representing a far higher investment. Chart 5.6 i) shows the relative numbers of animals kept in and immediately around Nefyn.

Chart 5.6 Livestock from Nefyn



Comparison of the occurrence of sheep in Aberffrau, Cafflogion and Nefyn is seen in Chart 5.7. Although the relative numbers involved vary widely, distinct trends become apparent.

Chart 5.7 Sheep Ownership in Aberffrau, Cafflogion and Nefyn



Both Cafflogion and Nefyn show the peak of sheep 'flock' size to be in the middle range of between five and ten animals inclusive. In Cafflogion that peak was very marked. Aberffrau, on the other hand, displays a steady increase with most 'flocks' comprising of more than ten adult animals. It tends to confirm the suspicion that agricultural conditions and practice were slightly different in and around Aberffrau, and cannot be taken as a blueprint for the region as a whole.

5.2 (1) (d) Penllyn

This lay subsidy roll is of a later date than those of Aberffrau, Cafflogion or Nefyn[112]. It refers to a lay subsidy taken in 1318, a time well into Norman occupation and rule of the northern parts of Wales. The instructions for taxing livestock in Gwynedd in 1294 still applied in 1318, and still gave two values for sheep, 8*d* and 6*d* as before (see 5.2 (1)). Penllyn covers the area around Lake Bala, and is very hilly and well wooded.

It is noticeable that the majority of sheep notified in the taxation rolls are *oves* worth 6*d*. This has not changed from the assessments of 1293 made in other areas. It is again remarkable that very few *mutones* indeed are mentioned on the fragment of roll (Ieuan Du of the vill of 'Kastel' in Llanuwchllyn had five *oves* and two *mutones*). The

[112] Williams-Jones, K, (ed), 1976, pp xi, fn 2; 95-102

circumstances that gave rise to the exclusion of sheep from the higher category of assessment in 1293 still seem to be applying in Penllyn in 1318. Possible explanations for the assessments in the rolls have been laid out in 5.2 (1)(a). If wethers were still low in numbers it suggests that wool still had not been accepted as a viable economic commodity.

This roll differs from the earlier ones in that, instead of giving the values of the livestock, it gives the numbers involved and the value of the fifteenth derived from the livestock. It can be assumed that the subsidy valuations used in 1292-3 were still in use in 1318. It is possible to work back from the fifteenth given in the roll to estimate the overall value of the stock, and then to try to fit the valuations of 1292-3 into that sum. Some discrepancies do become visible when the amount of tax is used as a check on the values of the animals each taxpayer owned, but the discrepancies are usually of a minor nature and can be catered for as mistakes on the part of the scribes. Eynon Loyd had the following livestock noted in his assessment:

1 ox
7 cows
1 mare
8 crannocks of oats
10 ewes.

The fifteenth was reckoned at 2*s* 6*d* and should therefore have been derived from an overall assessment of 37*s* 6*d*. Using the rates set out for 1292-3, the total comes to 42*s* 4*d*. This tax assessment is low considering the nominal value of his moveables.

Adaf Loyd had 9 *oves* (nominal value 4*s* 6*d*), which should have given a fifteenth of 3½*d*. The roll itself shows a fifteenth of 5*d*. Coincidentally, this is closer in value to the 4¾*d*, which would have been the tax on sheep estimated at the higher rate of 8*d* per head; it may have been a mistake. Such discrepancies do call into doubt the complete accuracy of this roll.

Relicta Iorward ap Tuder (his widow)
6 cows value 20*s*
4 *oves* value 2*s*
Total 22*s*

The fifteenth was assessed at17¾*d* which should have been derived from a value of 22*s* 2½*d*. The fifteenth is too high here, but only by a small percentage. Phelip Du had two cows and five ewes worth in total 9*s* 2½*d* giving a fifteenth of 7¼*d*. The actual fifteenth

was 7*d*, lower but reasonably close. Willard recognises that small inaccuracies would occur in calculations, especially when those doing the calculations were working under pressure. A few mistakes were always likely[113].

What does become apparent from this roll is that fifteenths were being worked out on sums lower than the 15*s* used as a benchmark in 1292-3 (see 5.2 (1)). In the vill of Pennaran Guenllian filia Guion, Phelip Du, Guenllian filia Eynon, Meilyr ap Ithel, Hagrat Wastat, Madoc ap Yago Voel, and Iorword ap Yago all were assessed as due to pay tax of under 1*s*. Madoc ap Yago Voel was assessed as low as 2½*d*. These figures were then included into the sums due from each vill. It is not clear whether these 'taxes' of under 1*s* would then be weeded out at the county roll level or if the parameters had changed. Castell had two people in this situation, as did Cyffty, while Bedwarian had one.

Figure 5.6 Livestock Ownership in Penllyn - 1318

Vill	Owners	Sheep	Mean+	Cows	Mean+
Llanderfal (possibly)	9	38	6.3 (4.2)	47	5.2
Pennaran	27	166	7.9 (6.1)	157	6.0 (5.8)
Kastel	18	62	5.6 (3.4)	97	5.4
Kefdu (Cyffty)	13	60	6.7 (4.6)	56	4.7 (4.3)
Bedouoran (Bedwarian)	5	17	5.7 (3.4)	31	6.2
Lestreflyn (part only)	5	51	12.75 (10.2)	66	13.2
Total	77	394	(5.1)	454	(5.9)

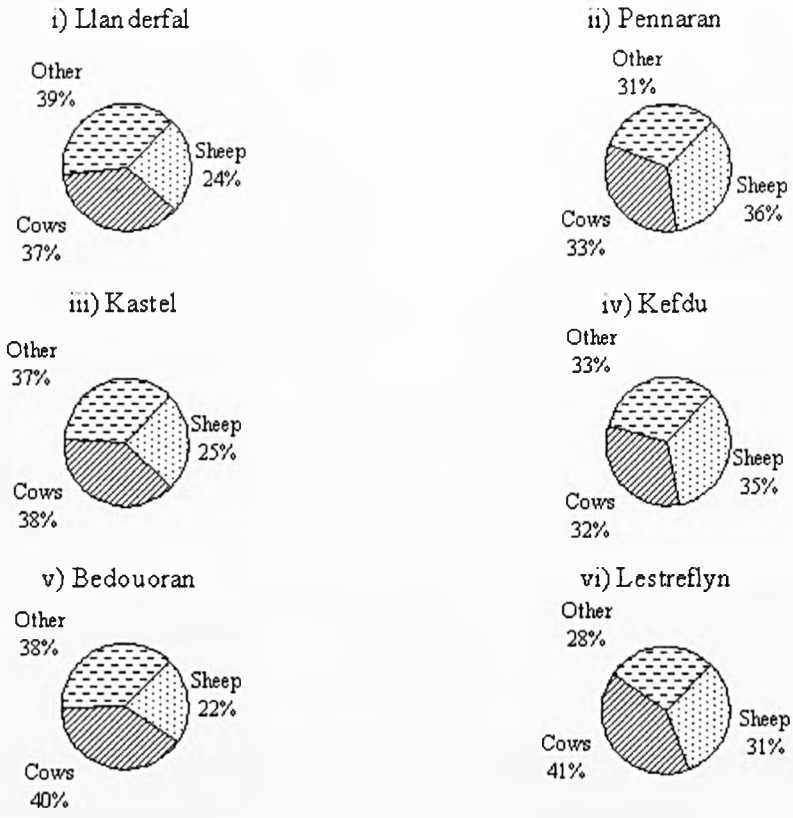
The mean is taken first from those who own sheep or cattle and then (in brackets) for all taxpayers. The figures from Lestreflyn could well be anomalous, or they could be an indication of greater wealth for that township. However, as most rolls include the most affluent at the top and this roll is partial, the figures probably display a distortion of the overall picture in that township. The graphs below give an indication of the proportions of livestock kept in each township. It will be seen that for Lestreflyn the livestock proportions fall within percentages from the other townships. Therefore, although actual numbers of households may be distorted through the partial nature of the roll for that township, the proportions appear to remain much as in other townships.

The pie charts in Chart 5.8 below show the proportions of all livestock found in individual townships. It is apparent from these charts that sheep did play a significant part in the agriculture of the area, with none of the townships displaying a marked

[113] Willard, J F, 1934, p 142

preference for either cows or sheep.

Chart 5.8 (i-vi) Livestock in Penllyn



Sheep do not fall below 22% of the total livestock of a township, but neither do they rise above 36%. This compares with a minimum of 11% and a maximum of 56% in Cafflogion[114], a total figure of 37% for Nefyn, and of 55% in Aberffrau. Sheep, at least in these Penllyn townships, seem to be a relatively stable component of the livestock.

Chart 5.9 puts the sheep ownership in Penllyn in context with that of the other three areas. The pattern of flock sizes in Penllyn is remarkably similar to that found in Cafflogion twenty-five years earlier, but unfortunately there is no way of directly comparing like with like because of the time gap and the lack of earlier similar rolls from Meirionydd. There is also no corresponding evidence in 1318 for changes to agriculture in the other areas covered by the 1293 rolls.

[114] Appendix C

Chart 5.9 Distribution of Sheep by Owner

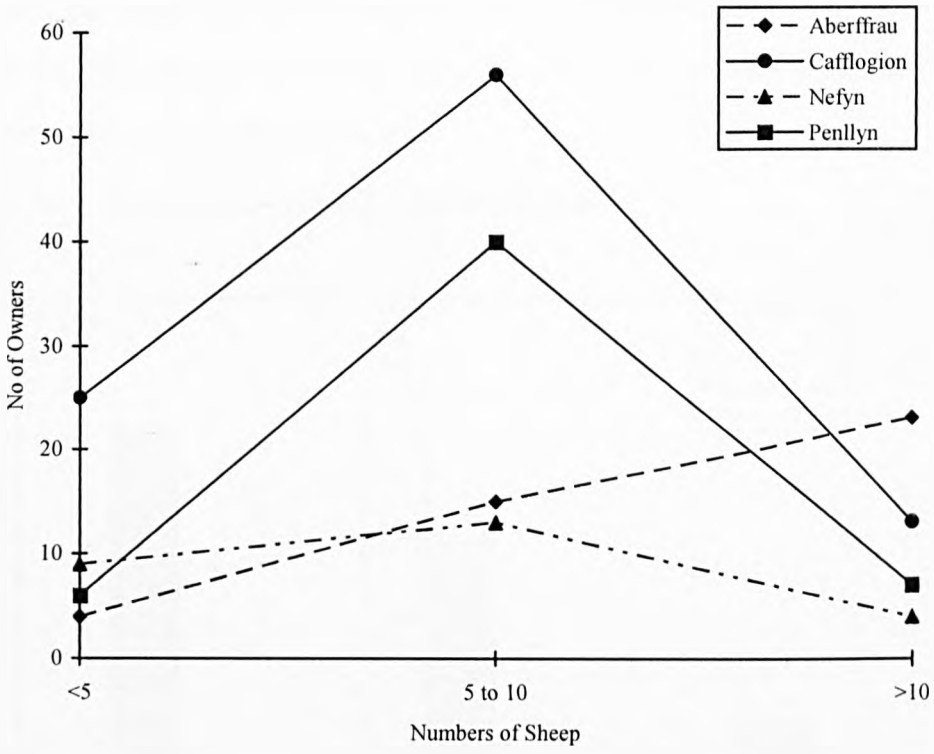


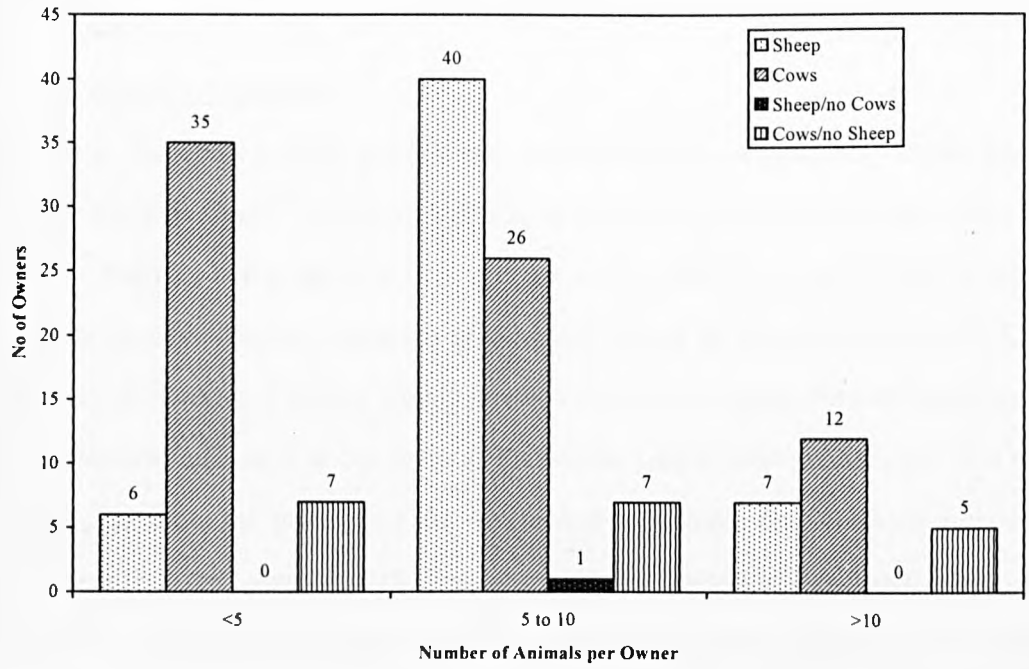
Chart 5.10 highlights significant differences in the pattern of livestock ownership from that shown in Aberffrau, Cafflogion or Nefyn. Although owners of cows still tend to have fewer than five animals, the number owning cows from the middle range is significantly greater than in other areas. This is probably a reflection of the history of ownership and importance of cattle to the people of Meirionydd carried on from earlier times, and hinted at from the earlier Extents (see earlier this chapter).

A significant number owned sheep and had 'flocks' of between five and ten animals inclusive. Fewer individuals kept cattle alone, which, from a distinctly cattle-orientated area, displays an unexpected interest in sheep. Only 13% of livestock-owning taxpayers kept no sheep at all compared to 58% in Nefyn, 23% in Cafflogion as a whole, and 16% in Aberffrau. As Aberffrau showed a marked preference towards sheep-keeping, the figure of 13% from Penllyn is all the more meaningful.

This visibility of sheep would, perhaps, not be expected based solely on the evidence from the Extent of Meirionydd (see 5.1 (2) (b)). Much could have changed in the intervening years from that date to 1318. Does this roll show that there was a burgeoning interest in sheep, perhaps as the advantages of the wool trade become

apparent? Unfortunately earlier rolls from this area are not available to settle this matter. However, the extant roll for Meirionydd from 1293, showing the names of taxpayers and the amounts that they had to pay, is available and gives some interesting detail as to the trades of those mentioned on the roll.

Chart 5.10 Livestock Distribution by Owner (Penllyn)



Penllyn had four weavers among its taxpayers, Ardudwy twelve, Edeirnion six, Tal-y-Bont five, and Ystumaner two (all are commotes in Meirionydd (see Fig 2.5). However, in the whole county of Meirionydd there were only two fullers mentioned - one in Ardudwy and one, again, in Edeirnion[115]. This hardly suggests a thriving cloth making industry, although Williams-Jones finds that weavers came ninth highest out of thirty-seven in an assessment of tax paid by practitioners of different occupations in the region[116]. Weavers come second only to clergy in the commote of Ardudwy at twenty-one per cent of professions mentioned (a total of twenty-one professions altogether in Ardudwy). In Edeirnion they are second again (also to clergy) at fifteen percent (out of seventeen professions), and feature strongly in the other commotes. It is likely that much of the cloth-making that went on in the countryside was home-spun and home-woven,

[115] Williams-Jones, K, (ed), 1976, p cii for table
[116] ibid, pp ci-ciii

and was probably fulled in the traditional manner without the aid of the (then) new and expensive fulling mills. Linen was often used as a clothing material and weavers may have been involved in production of linen cloth rather than wool. A fulling mill would have represented a large investment, and, without sufficient wool being produced in the region, would not have proved a viable proposition. Some sheep were obviously being kept in Meirionydd in 1293, but it is unlikely that they were of great importance agriculturally.

5.2 (2) Ministers' Accounts

Ministers' Accounts usually provide only negative evidence pertaining to the general attitude towards sheep. The Accounts look at the income from the old *maenor*s of the princes of Wales before the conquest, and use information from the Extents or surveys of those estates. The only mention of livestock found in the accounts relates to the *vaccaria*, or *havotteria* as they are often referred to, in the region. Edward took over the royal *vaccaria* and, at first, ran them as part of the administration. Accounts had to be provided to show the produce of the *vaccaria*. For example one Ministers Account[117] gives details of the livestock in the *vaccaria* under the control of Rerid ap Cadugan (sic) in the new county of Caernarvon in 1291 (21 Edward). Remaining from the previous accounting were one affer (a workhorse) and one young horse. There were also fourteen oxen and seventy-five cows; of those cows fifty-five were pregnant and the remainder were sterile. There were eight two-year old oxen and eighteen young female cows. Of the year-old cattle, there were three female and five male, and there were twenty-eight younger calves. The account also gives the income from the *vaccaria* through the sale of oxen, carcasses and skins, butter and '*pasturis*'.

A similar account for the same year from Anglesey[118] as a whole shows the presence of three work horses and a total of thirty-three cattle; thirty-three had been left over from the previous year and four bought in during the year, perhaps to replace four that had died. None appear to have been sold or killed as in the previous account, and there is no way to distinguish oxen from cows. The whole enterprise appears to be on a smaller scale than in Caernarvonshire, giving the impression that *vaccaria* on Anglesey

[117] Griffiths, J, 1937-9, pp 62-3
[118] ibid, p 54

were not as important as on the mainland. A later Sheriff's account taken in 1302 from the *maenors* of Aberffrau and Penros does not show any *vaccaria* at all by name in either *maenor*[119]. (The Minister's account from Aberffrau for 1351[120] shows that rents were worked out on the details from the Extent commissioned in 1284; *vaccaria* are not specified although the production of butter and milk is farmed out. This may also have included the production of milk from ewes. The Extent had become the standard by which rents were worked out. It would no longer bear any necessary relationship to actual practices on the ground; it cannot be taken as an indication of the agriculture on Anglesey in 1351.) None of the extant accounts for Meirionydd give details on the numbers of cattle kept there, but the account for 1291 throws some light on the conditions that the royal tenants in Meirionydd found themselves. They were not able to fulfill their obligations owing to the fact that the land was waste and the tenants poverty stricken (... *terre sunt omnino vaste et quidam tenentes non possunt respondere propter pauperatumet* ...)[121].

The Lleyn Minister's Accounts for 1350-51[122] give some indication of the agriculture of the area but again tend to emphasise large-scale farms, of *vaccaria* or *havoteria*. By this time, the running of the *vaccaria* had been 'farmed' out for a rental and much of the detail of the livestock present has been lost. In contrast to the use of an old Extent to determine rents, the practice of 'farming' out of certain agricultural institutions such as *vaccaria* probably indicates that the local agriculture was still supporting that institution, and can be taken as an indication of underlying agricultural practice. In the commote of Dinllaen (see Fig.5.1) the *maenor* of Boduan produced rent from the 'farm' of several *vaccaria*, some in the hands of villein tenants as at Bleiddiog and Gwynnys. From the same *maenor* comes the only mention of sheep in these accounts. It is found in the rents due from the 'abb'(ey?) and the villein tenants of Saint Beunoni of Llanaur and Pistyll (Buan) in lieu of *multonis*, butter, harvest work, chickens and oats. Provisions for the castle of Caernarvon were restricted to two oxen and two cows because of the scarcity of animals and the poverty of the tenants. Poverty is also

[119] Seebohm, F, 1895, Appendix Ab, p 26
[120] ibid, Appendix Ag, p 46
[121] Griffiths, J, 1937-9, p 60
[122] Jones-Pierce, T, 1931-33, pp 255-275

mentioned, along with the presence of a 'pestilence', in the accounts for the commote of Cymydmaen for the tenants of the 'manor' of Newgale. These accounts were drawn up in the period shortly after the Black Death which swept through England and Wales in 1348-9, and which killed so many that villeins were not able to fulfill their obligations. Bond tenants usually had set rents per village or hamlet, which were due regardless of the number of tenants actually living there. The death toll from the Black Death was so high that surviving tenants often fled rather than be held responsible for those obligations[123].

5.2 (3) Records from the Courts

Records of court proceedings sometimes throw up cases that have a bearing on the agricultural life of the region. By 1326 the *vaccaria*[124] mentioned in the Extent of Meirionydd were farmed out. This is seen in the proceedings of the Small Hundred Court of Ardudwy in Meirionydd held in Harlech, where Nest, the daughter of Madoci (sic) ap Howel was convicted of withholding 3*s* from the farm (a term basically meaning rental) of the *frid* (pasture on 'waste' land ie not cultivated) of Veidiok[125]. The actual process of farming out the *vaccaria* began to gain ground after the rebellion of Madog in 1297, which wreaked such damage on the area.

The same court in February recorded that a lawyer (*advocarius*) had no property except six sheep worth 8*d* each when he died[126]. In June two men were fined for letting their animals trespass, one for trespass on communal land after the villagers had moved to their summer pastures[127], and in July one Ieuan ap Iorwerth ap Meilir was summoned to the next court for selling a sheep outside the specified local market[128]. He failed to appear and was summoned again in August[129] eventually being convicted on September 8th. The sale of certain goods outside the town markets was forbidden at this time, even

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[123] See also Williams-Jones, K, 1976, pp lvi-lviii, for the effects of war and pestilence on populations in north Wales; Seebohm, F, 1895, p 17 for tenants' obligations.

[124] See Griffiths, J, 'Early Accounts relating to North Wales temp Edward I', *BBCS* XIV 1950-2, (pp 235-41; pp 302-12) for accounts relating to various of the King's *vaccaria* in north-west Wales from 1287 to 1294 when Madoc ap Llewelyn's followers attacked Caernarvon castle and destroyed many records. Accounts for 1296-7 are found in Griffiths, J, 'Early Accounts relating to North Wales temp. Edward I (continued)', *BBCS* XV 1952-4, pp 126-156

[125] Lewis, E A, 1928, p 157

[126] ibid, p 159

[127] ibid, p 162

[128] ibid, p 164

[129] ibid, p 165

though the local populace, living in the country, was unhappy about it, and in some cases it caused real hardship as the market could be some distance away from their homes. David ap Kend (sic) seems to have been a particular offender against authority. He was summoned for selling carcasses and cheeses outside the market in July, convicted of selling one beef carcass in August, and also convicted of felling and carrying away the King's wood in September[130]. Controls on the weavers and brewers were in place by 1346 as is seen in the rolls of the Hundred Court of the commote of Turkelyn in Anglesey held at Trefvarth on the 5th May[131]. They had to attend the next court with their measures and yardsticks to make sure that they complied with regulations. They failed to do so and were requested to attend the following proceedings.

The Sheriff's Turn (*sic*) (Court)[132] dealt with more serious cases, and travelled around the region to hear the cases. The great T(o)urn of the commote of Talybont held on the 12th march 1326 recorded that at Cregannan[133] David ap Adaf stole a sheep worth 8*d*, as did Oweyn in Dolgellau[134]. In 1346, when David Gogh of Rhosmor in the commote of Malltraeth in Anglesey was robbed of two sheep (*amisit duas oves furtive*), the value was again given as 8*d* but in total, not as a value for individual sheep[135]. The Great Tourn of the commote of Dindaethwy, held at Betws Geraint (Pentraeth) in September of 1346, records the stealing of wool valued at 8*d*, the theft of two sheep valued at 10*d* and another sheep valued at 4d[136]. If the sheep from the 1346 Court proceedings were not young sheep then the general values of sheep must have declined since 1326. This is upheld in that a similar valuation was given to stolen sheep in the September proceedings of the Great Tourn in Lifon where five sheep were valued at a

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[130] Lewis, E A, 1928, pp 164-165

[131] Jones, G P, 1932, p 42

[132] From the 'Extent of Anglesey 1352', Carr A D, *TAAS*, Footnote p 160. The Sheriff's Tourn was another of the courts set up by Edward I under the Statute of Wales 1284 and followed English practice. It was held twice a year, Easter and Michaelmas in each commote by the Sheriff. No one, however important, was excused attending and representatives of each township were questioned on oath about breaches of the law, which had occurred there during the past 6 months.

[133] Waters, W H, 1931-33, p 356

[134] ibid, p 357

[135] ibid, p 357

[136] Jones, G P, 1932, p 46

total of 20*d*[137]. The reason for this apparent decline between 1326 and 1346 in the value of sheep in this region is not immediately discernible.

The Coroner of Penllyn and Edernyon in Meirionydd in 1329 recorded the handing over of the goods and chattels of Ieuan ap Ririd after he killed his brother, Madoc, and fled. His livestock was noted as being one calf of over one year (12*d*), two cows valued at 40*d* each, and four sheep worth 6*d* each[138].

5.2 (4) Ecclesiastical Agriculture

Monastic landlords are regarded as being in the forefront of sheep-keeping in the late medieval period, with the Cistercians at the top of the list[139]. The two Cistercian Monasteries wholly found in Gwynedd were at Cymer and at Aberconway, although both Strata Marchella and Basingwerk also had some upland territory in Penllyn in Meirionydd.

5.2 (4)(a) Cymer Abbey

The amount of documentation directly concerning Cymer is limited. In 1291 the *Taxatio Ecclesiastica*[140] of Pope Nicholas gives the total value of Cymer for taxation purposes as being £11 14*s* 11*d*, with a total sheep population of twenty-five animals (*multones*), with sixty cows (*vaccas*), and it does appear on first sight that this record shows cattle taking a greater precedence in the economy of the monastery than sheep[141]. However, the use of the term *multones*, which are usually taken to be wethers or castrated male sheep, suggests that this was not the total sheep population at Cymer at the time. These are wool-producing sheep. It is unlikely, given the reputation of the Cistercians for their sheep enterprise, that this was the sum total of their flock. As wethers were not for breeding and there were no ewes recorded, they would have had to be brought in from outside. This would be a possibility if the original flock had been wiped out for any reason, such as disease, or accident. However, even then it is unlikely that replacements would have been brought in without natural flock increase in mind. Bischoff[142], in

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[137] Jones, G P, 1932, p 49

[138] Waters W H, 1931-33, pp 48-50

[139] For a comprehensive study of the Cistercians in England and Wales see Donkin, R A, 1978. (See also Williams, D H, 1990, Atlas of Cistercian lands in Wales).

[140] *Taxatio Ecclesiastica Angliae et Walliae auct. P.Nicholai IV*, London Record Commission, 1802

[141] Williams D H, 1981, p 36

[142] Bischoff, J P, 1983, p 149

looking at fleece weights from medieval English flocks, points to the fact that purely grazing flocks concerned solely with wool production were found, although generally only on centrally and commercially organised demesne estates. They relied on replenishment from breeding flocks belonging to the same lordship, or on purchase from elsewhere (see Chapter 3 for organisation on the demesne estates of the bishop of St David's).

The overall number of animals supposedly owned by the Cymer monks needs careful consideration as it appears to be a little on the low side, considering the area of land that was under their control. Some of this land would have been for arable, the Abbey possessing at least nine carucates of land, that particular measurement usually being applied to arable land[143], but that still leaves a large area of pasture and 'waste'. A large proportion of the lands available for the abbey was found on land above the 250 metre contour[144] which in the 13th century was probably still fairly inaccessible during the winter and would be used as summer pasture. Cattle may well have been regarded as a better risk in the conditions prevailing there, this region probably having a high rainfall even in the 11th and 12th centuries when the climate was thought to have been milder than in later times. The sixty cows mentioned in the *Taxatio* are also not a large herd. However in 1291 this area was still trying to recover from the conquest, and we have no way of knowing how the monks had fared during the previous seven or eight years. The Welsh background of the monks at Cymer (and presumably their *conversi*) could have predisposed them towards a Welsh way of agriculture at that time. There appears to have been a greater reliance on cattle, especially on the more hilly parts of the country, than was the case elsewhere in those areas of Wales that came heavily under English influence (see Chapter 3) as is seen in the Extent of Meirionydd [145] *c*1284. Cymer had large land holdings in Meirionydd in just those areas.

On the other hand, figures for the number of sheep apparently kept by the monks

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[143] Stephenson, M J, 1986, p 245 makes the point that before 1350 the demand for meat and dairy products was limited, and cattle breeding was aimed primarily towards producing draught animals. This may have been the case on English estates, but did it also apply to Gwynedd where the presence of '*vaccarria*', presumably for dairying purposes, are well documented in Caernarvonshire (see Extent of Meirionydd)? On the other hand is it safe to assume that apart from this isolated incidence that all Gwynedd followed the same pattern?

[144] Williams D H, 1981, p 50 (map)

[145] M C J, 1867, pp 183-192

early in the 14th century (see below) show that the keeping of sheep on these lands was not impossible; in fact they would seem to have thrived. That larger flocks were kept at Cymer at some time appears to be borne out by one of the few references to wool that is known from extant records, that of the number of sacks of wool produced for sale annually by the Abbey in Pegolotti's list of wool sales from Britain, believed to have been written between 1310 and 1340[146]. If his reference to 'Chinna' can be taken to mean Cymer, then the annual output that Pegolotti[147] knew about amounted to some eight sacks. This may not appear a significant amount, but, with each sack probably containing between 336-364 lbs (see 5.2 (4) (b)), the total output must have been in the region of 2700-2800 pounds of wool. Using the known approximate amount of wool produced by a single medieval sheep in Wales at that time (approximately one pound of wool per animal per year[148], although the 'breed' of sheep used by the Cistercians cannot be ascertained), the number of animals needed to produce this must have exceeded 2500. Indeed, this may estimate may have been at the lower end of sheep numbers as there would have been a certain amount of wool produced for internal consumption. Also these records are from one merchant only; others may well have been involved in the purchase of wool from individual houses.

It is not even clear whether this amount of wool was the total production from the Abbey or just that which Pegolotti or his agents handled. It is therefore possible that by the beginning of the 14th century there were significant numbers of sheep kept at Cymer, even if earlier records throw some doubt on the scale of sheep keeping there. The wool from Cymer was sold, according to Pegolotti, in three grades suggesting an efficient collection and handling system in place there and not one that could be put into

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[146] Pegolotti, Francesco Balduci, *La Pratica della Mercatura*, (Evans, A, (ed), 1936), Medieval Academy of America, Publication No. 24

[147] Pegolotti was a wool merchant from Bardi, in Italy, and resided in England from 1318 to 1321. During that time, while representing the interests of his merchant house, he compiled the list found in his '*La Pratica della Mercatura*' (see fn 145). (Lloyd, T H, 1973, p 100).

[148] Stephenson, M J, 1986, p 123 gives the following generalised figures for proportional fleece weights taken from various manorial accounts - 1.85 lbs per wether : 1.25 lbs per ewe : 0.95 lbs per hog. This is approximately a ratio of 2:1.5:1, and gives an average weight for English fleeces of about 1.35 lbs. It is known that Welsh fleeces were lighter in weight than their English counterparts and therefore an average of about a pound per Welsh fleece is not impractical. It must however be borne in mind that the type of sheep kept by the Cistercians is not known, and some may well have been more in line with their English counterparts. Bischoff, op cit, p 145 states 'Given the consensus concerning average fleece weights for the thirteenth century, it is somewhat surprising that a considerable difference of historical interpretation has arisen concerning the existence of various sheep breeds during the same period'. He is of the opinion that there were distinct regional variations in the 'types' of sheep from different areas.

place overnight.

5.2 (4)(b) Aberconway Abbey

In the *Taxatio Ecclesiastica* of 1291, Aberconway is recorded as being worth £26 2*s* 4*d*, and having 560 sheep (*oves*) and 106 cows (*vaccas*). The numbers of recorded animals, as at Cymer, appear a little on the low side considering the 43,000 acres owned by the Abbey at this time. It may be that the census was only taken on the 1000 acres actually around the Abbey[149] itself, situated at Maenan at the time of the *Taxatio*, it having been moved there in 1284 by Edward I to make way for the building of Conway castle[150].

An early reference to the wool enterprise of Aberconway comes in 1277 when Edward I gave safe-conduct to an Italian merchant, Orlandinus de Podio, carrying twenty sacks of wool from Aberconway to Chester[151]. Using the same method of calculation as above, this gives about between 6800-7200 lbs of wool per year from approximately 7000 sheep. Pegolotti also records the sale of wool from Aberconway. Again, twenty sacks per annum were recorded as being produced for sale, giving a similar population of 7000 sheep. This is second only to Margam in the whole of Wales, with twenty-five sacks in 1291. In both cases, even if the amount of wool taken from each sheep rose to 1.5 pounds (an exceptional average for any region at this time[152]) this would still require a sheep population of around 5,000 overall. (Knowles suggests 10,000 animals per 45 sacks - a figure suggesting about 4500 sheep at Aberconway; Jones suggests 200 fleeces per sack - about 4000 sheep at Aberconway[153].) These figures, obtained from dates (1277 and 1310) on either side of the date of the *Taxatio* (1291), throw into some doubt the total of 560 sheep taken from that source. Either the census was wrong, incomplete or restricted, and did not correctly enumerate the total number of animals on Aberconway's lands, or the upheavals of the conquest and the subsequent disaffection of the populace in that region had drastically affected the monks over many years. The answer may lie somewhere between these two extremes. The fact that Aberconway was functioning as a wool producer of substantial stature in North

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[149] Elfyn Hughes, R et al, 1973, pp 114-5
[150] Williams, D H, 1990, p 37
[151] Hays, R W, 1963, p 112, quoting Cal Pat Rolls, 1272-1281, p 235
[152] Bischoff, J P, 1983, p144
[153] Elfyn Hughes, R et al, 1973, pp 115-6

Wales prior to the *Taxatio* suggests that a similar state of affairs may have existed at Cymer, although there is no direct evidence either way on this point.

The possession of a fulling mill at Rhedynog Felen, as recorded in the *Taxatio*[154] is indirect evidence to suggest that some in-house cloth production was taking place. It may be significant that the mill was at Rhedynog Felen, as that was the initial site chosen by the monks for their Abbey, however short-lived (they had moved to Aberconway by 1190). Hays suggests that the lands retained by the monks before the conquest were still worked in the Cistercian ideal, whereas lands given to them after that time were likely to retain their tenants who then provided rents for the monks. The mill was probably, therefore, run for the monks themselves, although Hays is of the opinion that it may not have played an important role[155]. Donkin is of the opinion that there is little evidence that Cistercian houses were important centres of cloth manufacture[156]. However, as suggested in Chapter 3, fulling mills were advanced technology for the time and would not have been built unless volume of work made it an economic proposition, especially as the Cistercian code emphasised self-sufficiency, at least in the beginning. It also points to some local use for the wool, showing that not all wool produced by the monks went out of the area, and that Pegolotti's twenty sacks may not have been the total output of Aberconway. If that is so, then sheep numbers could have been even higher. There is, unfortunately, no record of the prices received for Aberconway's wool in Pegolotti's accounts, but, as with Cymer, that amount of wool would need a very well co-ordinated enterprise to handle and market it.

One circumstance seems to challenge a substantial local use for the wool. Cistercian monasteries often traded their wool in advance and would have to keep as much as possible in order to cover their debts. It is unlikely that they would have risked large-scale local use of their own wool[157]. Changes in the circumstances concerning the running of the granges by *conversi* could have played a part, as the practice of leasing out these granges to tenants for rent was increasing. This, however, only gained pace towards the end of the 14th century and was therefore unlikely to have had much of an

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[154] *Taxatio Ecclesiastica,* p 293; Hays, R W, 1963, p 113
[155] Hays, R W, 1963, pp 108-9; 113
[156] Donkin, R A, 1957, p 110
[157] ibid, p 192

impact around the end of the 13th and the beginning of the 14th century[158].

5.2 (4) (c) Other Ecclesiastical Institutions

The Augustinian Abbey of Bardsey, situated on an island two miles in circumference off the tip of the Lleyn peninsula (see Figure 5.3), was worth £16 2*s* 0*d* in the *Taxatio* of Pope Nicholas IV of 1291, more than the Cistercian abbey of Cymer. It owned 'vills' and what are described as granges, although these are regarded as typical of Cistercian agricultural units. They owned twenty four cows and 120 ewes (*oves*), the sheep producing greater revenue, at £1 13*s* 0*d*, than the cattle. An interesting (and valuable) sideline in rabbits is also seen here; the income from the animals and their skins was reckoned at £1 15*s* 0*d*, greater than that of the 120 sheep. The Augustinians are not generally reckoned to have been very interested in agriculture in the way that the Cistercians were[159]. It is interesting to note, therefore, that far more sheep were supposedly kept by the Augustinians of Bardsey than by the monks of Cymer according to the *Taxatio*, perhaps giving weight to the suspicion that the *Taxatio* totals for Cymer do not tell the whole story.

The *Taxatio Ecclesiastica* stated that the Augustinian Priory of Penmon on Anglesey had forty four sheep[160]. The priory itself was situated near Llanfaes and had lands in the commotes of Dindaethwy (the church lands of Llandona and Llanfaes, and land at Crymlyn and Pentir), Twrcelyn (church land at Penrhos), Menai (church land at Llangwyllog) and Talybolion (church land at Bodewyrd). Originally Penmon had a *clas* structure, the typical Celtic church organisation, but in the 12th century had re-organised into the typical European monastic system[161].

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[158] Donnelly, J S, 1954, pp 449-450-

[159] See 2.4 (4) (a).

[160] *Taxatio Ecclesiastica*, 1802, p 273 (ref Prioris de Iskelenant). As an Augustinian foundation it was awarded certain churches, the tithes of which then went to the foundation rather than the incumbent parson. Such appropriated churches were found at Bodewyrd, Penrhos, Llandona, Llanfaes and Llangwyllog. The *Taxatio*, while giving an insight into agriculture as practiced by ecclesiastical establishments, does raise certain suspicions that the whole story is not being told, and, that to use the numbers as the sum total of stock on any one estate will lead to a distorted picture of conditions at the time. (See Graham, R, 1908, pp 434-54). That fact notwithstanding, the *Taxatio* is invaluable in that it gives some idea of the agriculture of the monasteries at a time when other sources are rare.

[161] Richards, M, (ed), 1972, p 43

5.3 Summary

The records for this region, which have been described and analysed in this chapter, can be roughly divided into those relating to the pre-Edwardian conquest era, which ended at the close of the 13th century, and those that definitely deal with post-conquest matters. This distinction is important as pre- and immediately post-conquest materials give an insight into a distinctly Welsh society with Welsh laws, practices and economy; records from the later period show a gradual erosion of this 'Welshness' and its replacement with a more English style of governance. Certain practices found in Welsh law did remain and only altered gradually, such as those governing the inheritance and sale of land.

Alterations to Welsh laws were recorded throughout their history, and this continued to be the case even after the Edwardian conquest. If these records are then studied with careful regard to the time periods that the various versions were in use, any changes in the status of sheep within society as compared to other livestock can be highlighted. The earliest records show sheep and their wool to have had a relatively low status, but the evidence discussed here argues that this slowly changes as they become of some value economically. Sheep become visible through the rights of women to inherit goods, or to receive compensation after divorce, and they become more and more the preserve of men rather than women as their value and status improves.

Surveys (Extents) of the estates of Llewelyn taken immediately after the conquest show that sheep were present on some of the estates belonging to the Prince of Wales in Gwynedd just prior to the Edwardian Conquest, but their presence was patchy, with regions of Meirionydd seemingly with no sheep at all. Here cattle were all important. On Anglesey, sheep were found on some *maenor*s but not on others, and, even where present, the scale of the enterprise seems to have varied.

These surveys also seem to indicate that there was no all-encompassing strategy for running the various *maenor*s as an integrated unit, even on Anglesey where the four *maenor*s found there existed in relatively close proximity. The practice of running demesnes as single entities was found in Pembrokeshire, as it was on many estates in England; In Gwynedd, in contrast each *maenor* demesne, or *maerdref*, seems to have

been entirely independent of any other; they were not regarded as being part of a greater whole.

The bond tenants on the *maerdref* of Aberffrau had to provide adult sheep as part of their dues, so hinting that sheep were perhaps a well represented in the livestock on the *maerdref*. This was not the case on other *maenor*s where at Rhosyr and Penros some lambs had to be given showing that sheep were present, but in the case of Cemais there is no evidence that sheep ever played a part in the *maenor* economy. Therefore, even if the economy was changing on some estates to include a greater use of sheep and their products, it did not necessarily follow that this would produce a coordinated response elsewhere on other *maenor*s.

Non-commuted dues from the population at large also give a snapshot of the presence or lack of livestock. Strangely, sheep do not appear in dues for bond tenants in the *cantref* of Aberffrau, but do appear as payments of lambs on other parts of the island. In the commote of Menai adult sheep along with lambs are part of the payment for bond tenants, suggesting a sizeable sheep population among that group of tenants.

The lay subsidy taxation of 1293 gives a better view of actual agricultural activity. Aberffrau, the principal *maenor* of the Princes of Wales in Gwynedd on Anglesey, generally showed a higher percentage of sheep in the livestock of those on the rolls than in any other region for which the rolls survive, so echoing the situation suggested in the earlier surveys of the *maenor*s. Only in Aberffrau did the did most owners keep more that ten sheep; in all other regions covered by the rolls the peak number of animals kept was between five and ten. Unfortunately the rolls for Meirionydd, do not give a breakdown of the antecedents of the taxation, but the likelihood is that they show a similar lack of interest in sheep as found in the Extents of Edward I taken after the conquest of the region. A similar roll from thirty years later does show some sheep in the flocks of the general population of Meirionydd, but they remain relatively small in number. This roll records relatively few wethers in the flocks, sheep which would have been at the forefront of a wool–producing enterprise.

This seems to mirror a similar lack of wethers in flocks recorded in the earlier taxation rolls from outside Meirionydd. If this was the case then, even where sheep were

present in larger numbers, they were kept for milk, meat, some wool and for sale to boost income. Wool production was not the primary reason for keeping sheep here.

The only large-scale sheep keepers were the ecclesiastical estates of the Cistercians and the Augustinians, although even here there is some doubt as to actual numbers of sheep on Cistercian estates of the region if the figures from the *Taxatio Ecclesiastica* of 1291 are to be take at face value. The impression given is that, prior to the 14th century, sheep in Gwynedd did not have the pre-eminence given to them in England at that time.

The Cistercian monks were heavily involved in keeping large-scale sheep farming in the 14th century as details of wool sales from the region show. If the amounts of wool collected by the Italian merchant, Pegolotti, are used to calculate a rough sheep population, then Cymer[162] and Aberconway kept about 7000 sheep between them in the early 14th century, and that may be on the low side if local usage is taken into account. This number of sheep belonging to the Cistercian Abbeys does suggest that figures taken from the *Taxatio Ecclesiastica* in 1291 may be erroneous or incomplete.

It took large estates to make the handling of all that wool feasible; without well-organized markets, or collection systems, the local populace could not hope to emulate this. It may be that a certain amount of local wool was included with wool bought from the Cistercians, but it is doubtful if this was in any way a well-organized practice off these Cistercian estates, if the of evidence non-Cistercian farming practice from this region is examined. These estates were originally meant to be founded in remote sites away from populated areas, and Gwynedd certainly fulfilled these criteria. The agricultural work was mainly carried out by lay brothers (*conversi*), with a little extra labour being brought in. The enclosed nature of these enterprises seems to give little indication that there was any cooperation with the local populace, certainly of the sort required to collect very disparate, and probably small, amounts of wool that would have been produced from the local small flocks in Wales.

It was likely that the lack of an organised system for dealing with wool was one of the reasons that wool production was not a primary economic practicality in much of

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[162] The reference to Cymer is problematical – see page 162.

Gwynedd. After the conquest the creation of towns and markets and fairs, where wool producers could come to sell their wool, began to enable a more coherent system to be put in place. Local producers generally were encouraged (or forced) to bring goods for sale into a centralized (and more easily regulated) market place, although local resistance to English rule meant relatively slow progress in enforcing this. Although sheep seemed to be more visible within the local economy in the 14th century, they were not to the forefront. Gwynedd was not wholeheartedly embracing the wool and cloth-making industry that was the driving force of the English economy at this time.

CHAPTER 6. SHEEP AND WOOL IN GWYNEDD 1400 - 1603

This chapter will examine in detail the farming practices relating to sheep of Gwynedd estate farmers in the 15th and 16th centuries. Gwynedd of this period is represented by a variety of sources, only some of which are comparable with those of Pembrokeshire. This chapter looks at those sources available and, as well as analysing them in depth, shows how they may usefully be compared to Pembrokeshire sources of the same period. Estate accounts, court records and some information gleaned from Port books have been used, but the major source for this chapter is a set of interesting accounts produced over three years from an estate covering a number of farms. These accounts have been discussed by others, and an attempt has been made to show both the limitations and the strengths of these earlier analyses. At the same time, work has been done to draw additional information from the records, throwing more light on farming practices and problems of the time.

Information gleaned from local court records is limited in its use for this thesis, while traffic in goods related to wool through the local ports of Gwynedd appears to have been on a small scale. One significant difference between Gwynedd and Pembrokeshire is the lack of probate records for this period in Gwynedd, hence the lack of comparable details from the smaller landholder as seen in Pembrokeshire. This precludes any reference to general farming practice as opposed to estate farming in the area.

6.1 Morus Wynn of Gwydir

Accounts from large landowners are an important resource throwing some light on contemporary farming practice. In Gwynedd one such landowner was Morus Wynn of Gwydir who has been compared to Sir John Perrot of Carew in Pembrokeshire (see 4.2 (2)) in his land holdings and his position in society. Gwydir, on the Caernarvonshire - Denbighshire border, was the centre of an estate consolidated by the Wynn family during the 16th century[1]. The estate also included a number of major farms and smaller

[1] Jones, J G, 1995, pp 1-2

holdings in 'Dolwyddelan[2], an upland parish of 15,000 acres centred on the River Lledyr, and including the massif of Moel Siabod (2860')'[3]. Documentation relating to rentals, along with accounts detailing stock kept on the estate for the years 1569 to 1571, have survived in a diary[4], and are discussed below. The accounts were produced by various bailiffs in 1569 through to 1571, and include details of stock rented out to other individuals. The detail of the parts of the accounts has been examined by Roberts (1959)[5], Emery (1965[6], 1967[7]) and by Elfyn Hughes *et al* (1973)[8]. Emery was the first to point out that, contrary to previous opinions, sheep outnumbered cattle in this area in the 16th century. Elfyn Hughes *et al* also did a detailed analysis of the accounts in the diary, and that analysis is discussed later. The accounts were written in a mixture of Welsh, Latin and English, the language related to its usage. Latin is the language of the standardised parts of the account, for example details of the date and the writer of the accounts are laid out in a recognised legal form of words (often with standard contractions of words e.g. a° [anno] precedent' ... nono die Julij). Welsh is used to detail the stock numbers and the stock losses (which include sales of stock out of the system as well as stock that died, were slaughtered or were lost) on the individual farms in the group, and is the working language of the accounts. English appears rarely, but interestingly, in details of bargains struck, or as interjections that diverge from the normal layout. As with most documents of the time, spelling differed with each author of the accounts. This difference also occurs in the naming of the farms[9]. The layout of the accounts also changes from author to author.

The estate itself was widespread, but four of the major farms mentioned in the accounts were to be found in the *ffriddoedd* of Dolwydelan, 'rough pastureland, exposed moorland and waste suitable only for stock rearing'[10].

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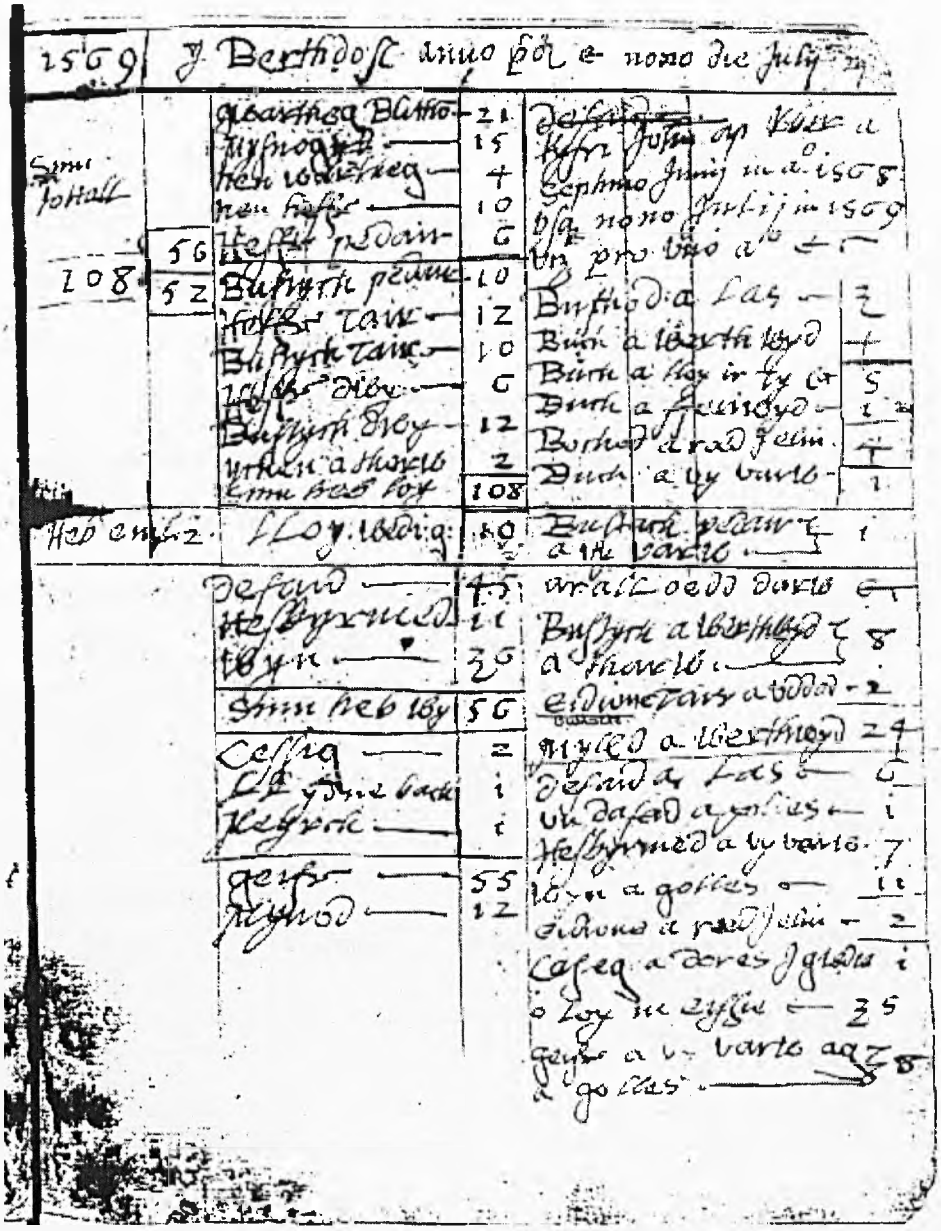
[2] Dolwyddelan parish contained the site of a Welsh medieval castle of the same name, one of the few built by Llewelyn ap Gruffydd.
[3] Emery, F V, 1965, p 54
[4] NLW MS Llanstephan 179
[5] Roberts, R A, 1959, pp 317-23
[6] Emery, F V, 1965
[7] Emery, F V, 1967, pp 113-60
[8] Elfyn Hughes, R et al, 1973, pp 113-131
[9] Naming of the farms has been updated to modern spelling as used by Jones, J G, 1995, p 47.
[10] For more detail see Jones, J G, 1995, pp 44-52.

Figure 6.1 Part of the Accounts of Gwydir[11]



The tenancy of these *ffriddoedd* was shared between Morus and his brother Robert, with Morus occupying Bertheos, Hafod Boeth, Gorddinan, and Coetmor. Morus also had use of the lands owned by Richard Mytton, lord of Mawddwy until the coming of age of the heir to those lands, Edward Mytton; and stock was moved between these two venues. Lands in Shropshire also owned by the Myttons at Halston were used for cattle rearing (see 6.1 (5))[12]. Therefore, as well as being local in character, the estate had connections to the outside world and did not hesitate to use those connections. This use of outside

[11] NLW MS Llanstephan 179, p29

[12] ibid, pp 46-47

grazing is still practiced today, where sheep from upland areas may be sent to over-winter in areas with less harsh winter conditions.

6.1 (1) Sheep

A mixture of sheep and cattle were kept on the farms, along with a few goats and horses. In the accounts, sheep were grouped into ewes, yearlings (both male and female), lambs and wethers. Mature rams were not apparently included, a position found also in Pembrokeshire on the farms of Sir George Owen (see 4.2 (6)).

Figures 6.2 (i-viii) indicate the numbers of sheep kept on each farm including losses (which included sheep rented out to other individuals as well as those sold, slaughtered or that died in other circumstances (see Figures 6.5 (i-viii)).

Figure 6.2 (i) Bertheos [13] (Farms are listed in the order that they first appear.)

Year	Ewes	Yearlings	Wethers	Lambs	Total
1569	45	11	0	36	92
1569+ losses	52	18	24	47	130
1570	44	9	0	33	86
1570+ losses	48		8	65	113 (146?)
1571	51	13	23	38	125
1571+ losses	54	46			161

Figure 6.2 (ii) Hafod Boeth[14]

Year	Ewes	Yearlings	Wethers	Lambs	Total
1569	38	15	1	35	89
1569+ losses	45	17	2	38	100
1570	42	35	0	44	121
1570+ losses	44		11		134
1571	51	19	20	32	122
1571+ losses	68	44			163

Figure 6.2 (iii) Gorddinan[15]

Year	Ewes	Yearlings	Wethers	Lambs	Total
1569	44	18	2	31	95
1569+ losses	52		21	44	135
1570	46	9	2	44	101
1570+ losses	53	31	11		139
1571	51	25	15	35	126
1571+ losses	54	76			186

[13] NLW MS Llanstephan 179, pp 29; 75; 141

[14] ibid pp 30;76; 142

[15] ibid, pp 31; 77; 143

Figure 6.2 (iv) Coetmor[16]

Year	Ewes	Yearlings	Wethers	Lambs	Total
1569	73	30	0	60	163
1569+ losses	77		49		216
1570	82	24	0	70	176
1570+ losses	92	60	13		235
1571	101	12	26	65	204
1571+ losses	111	65			267

Figure 6.2 (v) Llanbair [17]

Year	Ewes	Yearlings	Wethers	Lambs	Total
1569	39	35	11	36	121
1569+ losses	51	40	35		161
1570	31	5	14	1	51
1570+ losses	35	27	24		87
1571	43	0	7	36	86
1571+ losses	49	1			93

Figure 6.2 (vi) Gwastadannas [18]

Year	Ewes	Yearlings	Wethers	Lambs	Total
1569	35	22	0	22	79
1569+ losses	76	28	35	73	207
1570	45	15	1	37	98
1570+ losses			11		108
1571	43	0	7	36	86
1571+ losses	47	7			97

Figure 6.2 (vii) Gwydir & Tydyn Goch [19]

Year	Ewes	Yearlings	Wethers	Lambs	Total
1569	107	23	19	96	246
1569+ losses				156	306
1570	145	32	0	110	287
1570+ losses			72		359
1571	146	30	34	110	320
1571+ losses	150	33	51	221?	451

Figure 6.2 (viii) Dan y Castell [20]

Year	Ewes	Yearlings	Wethers	Lambs	Total
1569	39	13	0	34	86
1569+ losses					
1570	40	22	5	44	111
1570+ losses					
1571	48	28	9	37	125
1571+ losses	54	44			147

It becomes apparent when following the patterns of stock retention on the farms that either sheep were moved from farm to farm within the estate, or that sheep were bought

[16] NLW MS Llanstephan 179, pp 32; 78; 144

[17] ibid, pp 33; 80; 146-7

[18] ibid, pp 34; 79; 145-6

[19] ibid, pp 35-36; 81; 148-9

[20] ibid, pp 35 (seen as part of the Gwydir accounts); 82; 147-80

in or rented from elsewhere. On some farms sheep numbers do not tally from year to year. For example, Gorddinan produced thirty-one lambs in 1569, which became thirty-one yearlings in 1570 which would be expected.

An extract from Figure 6.2 (iii) Gorddinan below shows the numbers involved.

Year	Lambs	Yearlings	Wethers
1569	31	18	2
1569+ losses	44		21
1570	44	9	2
1570+ losses		31	11
1571	35	25	15
1571+ losses		76	

Yearlings would have been both male and female sheep. When the accounts were taken in 1570 only nine of those yearlings were kept on the farm, the rest removed were sent elsewhere. There is no way to know how many of the nine were male or female. Probably, females would have been added to the ewe flock, while male yearlings would mainly go to the wether flock if castrated.

However, by 1571, there were fifteen wethers in the wether flock. Even if all the 1570 yearlings had become wethers, when added to the wether flock of the previous year (two in all), the total would have been less than fifteen; some of those wethers must have been brought onto that farm from elsewhere, either from the estate or bought in.

Similar discrepancies also occur at Llanbair and at the home farm of Gwydir itself. It is also apparent that lambs were taken from farms, as Bertheos, Llanbair, Gwastadannas and Gwydir had either far fewer lambs when accounting took place than had been born, or the number of yearlings did not match the number of lambs the previous year even taking losses into account.

Figure 6.3 Maximum % Increase in Ewe Numbers 1569 to1571

Location	Percentage increase (maximum ex losses)
Bertheos	16%
Hafod Boeth	34%
Gorddinan	16%
Coetmor	38%
Llanbair	39%
Gwastadannas	29%
Gwydir & Tydyn Goch	37%
Dan y Castell	23%

It is impossible to speculate on ewe movements from the information given as the male/female ratio of the yearlings was not recorded. However from the Figures 6.2

(i-viii) it can be seen that ewe numbers did fluctuate, all showing an increase over the three years, half of the farms with increases of over 30% (Figure 6.3). The accounts also include details of sheep kept at other locations or placed with other people. That stock is then included in the Gwydir accounts under the names of the places or persons who hold the sheep.

Figure 6.4 sets out the distribution of these sheep. Note that wethers generally do not figure in these totals. The specific records for 1570 are set out in a table[21] in the accounts. The sheep recorded as being with individuals may have been leased out (see 6.1 (4)). This practice is noted in the accounts (written in English[22]). In adding the leased sheep to the overall totals, account must be taken of the fact that some may have been included in losses of other farms (see Figure 6.4 showing that Jeny Teg received sixty lambs from Gwydir; also Howell ap Guto, who had forty-eight yearlings sent to him from Coetmor and Gorddinan in 1570 which were recorded in the losses from those farms).

Figure 6.4 Sheep at Locations other than Major Farms

Year	Location	Ewes	Yearlings	Lambs	Wethers
1569	T Llyn Cowlwyd	93	7	75	
1570	T Llyn Cowlwyd	95	36	27	
1571	T Llyn Cowlwyd	90 (+16)	(+4)	64 (+61)	11* (+12)
1569	Crafnant	15	7	11	
1570	Crafnant	23	8	19	
1569	Tegwin y Bettws			34	
1570	Tegwin y Bettws			40	
1569	Tegwin Dolwyddelan			40	
1570	Tegwin Dolwydelan			50	
1569	Evan Teg		55		
1570	Evan Teg	40	66	27	
1569	Howell ap Guto	16		15	
1570	Howell ap Guto	16	53	10	
1569	John ap W...	38	22	15	1
1570	John ap W...	4	22		
1569	Jeny Teg			80	
1570	Olben ap John		21	(24)?	
1570	Maurice ap Rydderch		36	4	
1570	J Byrd		28		
1571	W? ap Ferb? ap Guto	22	9	8	3
1571	Robert ap Th. Vaughn	3	2	5	

* Of these wethers, nine were later sold, one was killed, and one went to Gwydir. Losses incurred during the previous accounting year are listed separately (in parentheses).

Problems in stock estimation arise when sheep recorded in losses as having been sent to

[21] NLW MS Llanstephan 179, p 83

[22] ibid, p 83

a particular person do not tally with those recorded as being with that individual. Olben ap John appears to have had twenty-one yearlings only, but Bertheos sent him twenty-four lambs in that year which do not appear in the table for 1570 in the accounts[23]. This raises doubts as to whether the sheep sent to Jeny Teg and Howell ap Guto (and recorded as losses at other farms) actually were included in their overall total as set out in the 1570 table, or were added in at a later date. This would reduce the problem of the counting of those sheep and lambs twice. There is no record of stock being bought in. All animals appear on the surface to have been bred within the system; some of the figures show that stock must have been moved between particular farms, as the numbers do not tally (see Figures 6.2 (i-viii)). Movement of sheep between the farms of the estate, and to named individuals, shows that each farm was not seen as totally separate; however there appears to have been the full range of activity associated with sheep on each of the major farms even though the balance of the flocks changed during the year. There was no attempt to designate one farm to be the main repository of, say, wethers, or ewes as found on the manors of the Bishop of St David's in Pembrokeshire in the 13th century (see 3.2 (2) (a)). The main difference between the farms seems to have been in the matter of the scale of the sheep keeping as opposed to the keeping of other animals, particularly cattle.

6.1 (2) Losses

The tables below indicate the types and number of 'losses' of sheep from the farms during the three years covered by the accounts. Losses are defined as those animals leaving the immediate system for whatever reason, although some may surface as animals rented to named individuals. Elfyn Hughes *et al* argue that losses should not be included when calculating the stock on the ground. They state that: '[t]hese statistics are unequivocal since there are no clear grounds for adding, as Emery has done, further numbers of sheep, i.e. animals sold, dead, rented to other farms etc'[24]. Elfyn Hughes *et al* were looking at sheep actually grazing per acre.

Emery was looking at the total sheep to cattle ratio and was therefore working to somewhat different parameters. Although there are some problems with the wholesale

[23] NLW MS Llanstephan 179, p 83

[24] Elfyn Hughes, R et al, 1973, p 121; Emery, F V, 1965

incorporation of these 'extra' sheep, their presence is important to give both an idea of the overall scale of the farming enterprise, and also some indication of the levels of stock that the farm was expecting to carry. Consequently, in this thesis, losses have not been dismissed out of hand, but have been taken into consideration (Figure 6.5 (i-viii)).

Figure 6.5 (i) Bertheos (stock numbers underlined denote animals sold in all tables)

Year	Killed	Strayed	Died	Sold/given	'Yn Eissie'[25]
1568-1569	6 ewes	1 ewe 11 lambs	7 yearlings	24 wethers	
1569-1570	3 ewes		1 ewe	8 wethers 24 lambs	11 lambs
1570 - 1571	1 ewe	1 ewe	1 ewe 3 yearlings	30 yearlings	

Figure 6.5 (ii) Hafod Boeth

Year	Killed	Strayed	Died	Sold/given	'Yn Eissie'
1568-1569	5 ewes	1 ewe 1 yearling	1 ewe 1 wether 1 yearling		3 lambs
1569-1570	2 ewes			11 wethers	
1570-1571	3 ewes	1 ewe	25 yearlings 12 ewes*		

*The large numbers of ewes and yearlings that died this year may have been the result of adverse weather conditions (see Llanbair (Fig. 6.15) where sheep were lost in the snow).

Figure 6.5 (iii) Gorddinan

Year	Killed	Strayed	Died	Sold/given	'Yn Eissie'
1568-1569	2 ewes		6 ewes	19 wethers	13 lambs
1569-1570	5 ewes 1 yearling*	1 yearling	2 ewes	9 wethers 20 yearlings**	
1570-1571	3 ewes		7 wethers 7 yearlings	44 yearlings***	

* 'a lladod yr eryr' killed by a hawk or eagle[26]
** Went to Howell ap Guto *** Went to Mawddwy

Figure 6.5 (iv) Coetmor

Year	Killed	Strayed	Died	Sold/given	'Yn Eissie'
1568-1569	4 ewes		9 wethers	40 wethers	
1569-1570	6 ewes 2 ewes*	8 yearlings	1 ewe	13 wethers 1 ewe 28 yearlings	
1570 - 1571	3 ewes**	1 ewe	6 ewes 3 yearlings	50 yearlings ***	

*These ewes appear to have been slaughtered at Dan y Castell but are accounted for here.
**These ewes were killed at Gwydir. ***Yearlings sent to Howell ap Guto

[25] Yn eissie - Lambs lost. In present day Welsh - yn esiau - wanting or missing.
[26] Llanstephan MS 179, p 77

Figure 6.5 (v) Llanbair

Year	Killed	Strayed	Died	Sold/given	'Yn Eissie'
1568-1569	4 ewes		2 ewes 5 yearlings	21 wethers 3 wethers 5 ewes	
1569-1570				4 ewes 22 yearlings 10 wethers	
1570 - 1571	3 ewes		3 ewes* 1 yearling		

* The ewes 'aeth dan yr eira' - went under the snow.

Figure 6.5 (vi) Gwastadannas

Year	Killed	Strayed	Died	Sold/given	'Yn Eissie"
1568-1569		2 ewes	6 yearlings	39 ewes* 34 lambs* 35 2 and 3 year old wethers	12 lambs
1569-1570				10 wethers	
1570 - 1571	4 ewes**			7 yearling	

* These ewes and lambs were given to Tydyn Coch (part of Gwydir).
** The ewes were killed at Gwydir.

Figure 6.5 (vii) Gwydir

Year	Killed	Strayed	Died	Sold/given	'Yn Eissie'
1568-1569	yes?			yes? 60 lambs	yes?
1569-1570	30 wethers 22 wethers			20 wethers	
1570 - 1571	17 wethers 1 ewe 7 lambs	1 ewe	2 ewes 3 yearlings 14 lambs	100 lambs	

Figure 6.5 (viii) Dan y Castell

Year	Killed	Strayed	Died	Sold/given	'Yn Eissie'
1568-1569					
1569-1570					
1570 - 1571	**2 ewe**	**2 ewes***	**2 ewes** **16 yearlings**		

The returns from Dan y Castell are confusing as they appear at first to have been included under Gwydir, and only later does it rate full accounts in its own right. Consequently there are no details of losses from Dan y Castell for 1569. Even though separate accounts are provided in 1570, there were still no losses recorded for Dan y Castell that year. T Llyn Cowlwyd also falls into this category, but here fuller accounts are included in the Gwydir accounts for 1571.

Figure 6.5 (ix) T Llyn Cowlwyd

Year	Killed	Strayed	Died	Sold/given	'Yn Eissie'
1570 - 1571	7 ewes 3 wethers		9 ewes	9 wethers 4 yearlings 61 lambs	

All the figures above have been incorporated into the stock figures detailed in Figures 6.2 (i-xiii).

It is very difficult to use figures relating to stock numbers to estimate the detail of movements of stock either between farms on the estate or outside, only to show that some sort of movement has taken place. The presence of yearlings gives no indication of the ratios of males to females. In an ideal world, equal numbers of male and female lambs are born in a year, but this is not always the case. Therefore, estimations of how many yearlings would have been added to the ewe flock become a matter of supposition. The transition from lamb to yearling, however, is a matter of growth and these figures can give some idea of what is happening within a flock.

It is clear when looking at lamb to yearling development that some movement was occurring. At Gorddinan in 1570 (Figure 6.2 (iii)), for example, there were forty-four lambs born to the flock; the following year there were fifty-one yearlings accounted for in the losses as well as a further twenty-five remaining on the farm. Even if all forty-four lambs survived to become yearlings, there is still the presence of another thirty-two yearlings to explain. They may have been bought in as weaned lambs the previous year after the date of the accounting, or have been moved in from other locations to overwinter until the following year. Without more details it is impossible to estimate where all the extra sheep came from.

At Bertheos (Figure 6.2 (i)) in 1571, wethers must have been brought in from other farms as the previous year's yearlings were not sufficient in number to have developed into those wethers recorded. It is not possible to decide whether all came from within the estate or if some were brought in from outside. The rental of lambs, and the return of some the following year, is mentioned in bargains written in English in the diary (see 6.1 (3)). This probably accounted for at least some of the anomalous figures.

6.1 (3) Lambing

An indication of the success or failure of a flock is seen when taking into account lambing percentages. A lambing percentage of 100% supposes that all ewes have had one lamb each. (Modern lowland sheep farming generally has close to 200% lambing percentage as ewes are expected to produce at least two lambs per year for the meat

trade.) In the 16th century, sheep were still generally only producing one lamb (see 4.2 (6)); those lambs would have been relatively small and slow growing compared to modern sheep. This tendency to single births is reflected where figures below 100% are commonplace. Any lamb losses before or during birth, or if a ewe had proved to be barren that year, would then produce percentages below 100%. Farmers would expect to produce at least one lamb per ewe every year, or to achieve a figure close to that ideal.

Figure 6.6 Lambing Percentages (Figures in brackets are loss adjusted figures)

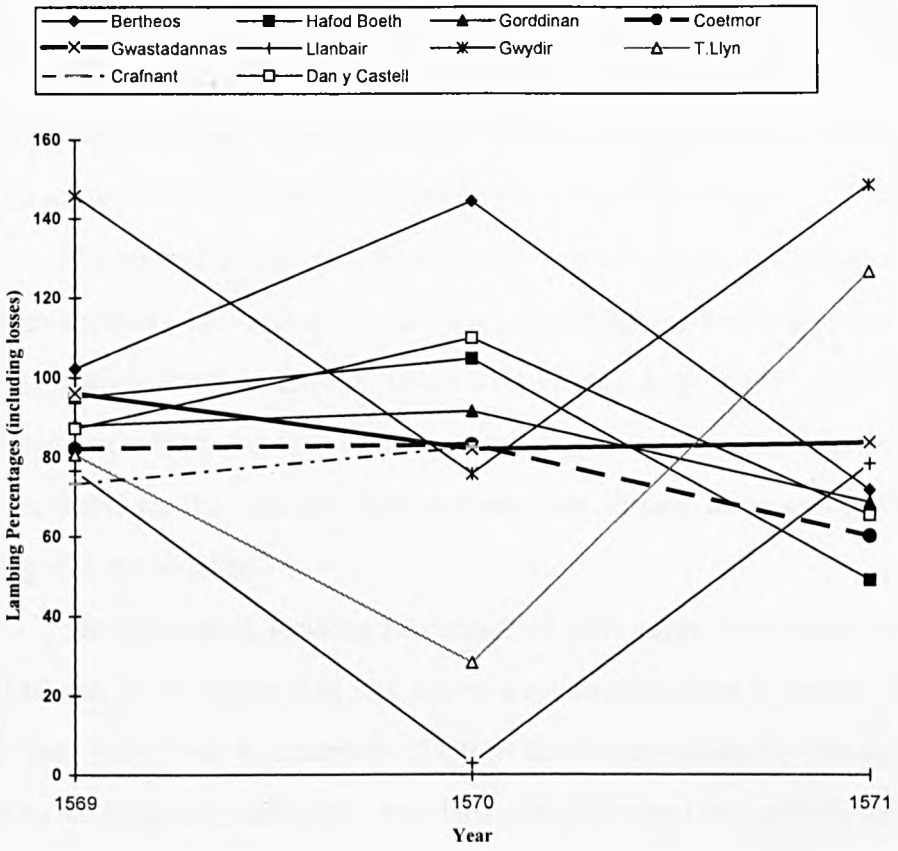
Location	Year	Ewes	Lambs	%	% incl loss
Bertheos	1569	45 (46)	36 (47)	80	102.2
Bertheos	1570	44 (45)	33 (65)	75	144.4
Bertheos	1571	51 (53)	38	74.5	71.7
Hafod Boeth	1569	38 (40)	35 (38)	92.1	95
Hafod Boeth	1570	42 (42)	44	104.8	104.8
Hafod Boeth	1571	51 (65)	32	62.7	49.2
Gorddinan	1569	44 (50)	31 (44)	70.5	88
Gorddinan	1570	46 (48)	44	95.7	91.7
Gorddinan	1571	51 (51)	35	68.6	68,6
Coetmor	1569	73 (73)	60	82.2	82.2
Coetmor	1570	82 (84)	70	85.4	83.3
Coetmor	1571	101 (108)	65	64.4	60.2
Gwastadannas	1569	35 (76)	22 (73)	62.9	96.1
Gwastadannas	1570	45	37	82.2	82.2
Gwastadannas	1571	43 (43)	36	83.7	83.7
Llanbair	1569	39 (47)	36	92.3	76.6
Llanbair	1570	31 (35)	1	3.2	2.9
Llanbair	1571	43 (46)	36	83.7	78.3
Gwydir	1569	107	96 (156?)	89.7	145.8
Gwydir	1570	145	110	75.9	75.9
Gwydir	1571	146 (149)	110 (221?)	75.3	148.3
T Llyn Cowlwyd	1569	93	75	80.6	80.6
T Llyn Cowlwyd	1570	95	27	28.4	28.4
T Llyn Cowlwyd	1571	90 (99)	64 (125)	71.1	126.3
Crafnant	1569	15	11	73.3	73.3
Crefnant	1570	23	19	82.6	82.6
Dan y Castell	1569	39	34	87.2	87.2
Dan y Castell	1570	40	44	110	110
Dan y Castell	1571	48 (52)	34	70.8	65.4

When compiling the table it has not been assumed that all ewes lost for whatever reason could have, or did, give birth to a lamb. Ewes that were recorded as being slaughtered were probably old, ill, or had proved to be barren, as most ewes remain in a flock as long as they can produce lambs[27]. The slaughtered ewes have therefore not been included in the ewe figures in Figure 6.6. The figures in brackets are adjusted to include other losses only.

[27] Some sheep fail to produce lambs for one year. This is not an indication that they will not be viable the following year. Sheep slaughtered for barrenness would probably have proved to be so for a second year.

Chart 6.1 shows lambing percentages (including losses) from the accounts. It is important to remember that the chart displays success or failure in lambing for the years displayed; the size of ewe flocks involved from each farm is irrelevant.

Chart 6.1 Lambing Percentages



Whereas most of the lambing percentages differ only to a small degree between basic figures and those adjusted for loss, some show marked differences. Gwydir in 1571 shows a rise of fifty-five percentage points when losses are taken into account (including 100 lambs sent elsewhere), while Bertheos in 1570 shows a doubling of its percentages when twenty-four lambs that died and eleven that were '*yn eisse*' (missing) are taken into account. It is the loss-adjusted figures that are likely to be most relevant to showing lambing success. These adjusted figures show 17% of lambings were over the 100% rate, suggesting that some ewes were now producing two lambs as a matter of course.

The farms seem to fall into two distinct groups. Gwydir, Llanbair and T Llyn Cowlwyd all show marked drops in lambing rates in 1570, but recover the following

year to show lambing back to its previous high in 1569 or even better. Gwydir is particularly interesting as the lambing percentage starts at a much higher rate than at other farms and returns to that level after the drop of 1570. These figures point to a fair proportion of Gwydir ewes producing two lambs as a matter of course (could they have been a different breed?). T Llyn Cowlwyd figures are suspect in that losses could not be included for 1569 or 1570, but the fall in lambing percentage is so large that it has been included in this group. Gwastadannas also exhibits a fall between 1569 and 1570, but it is not so marked as the others. The recovery is also not as marked.

The second group consists of the other six locations (including Crafnant even though there are no records for 1571), all displaying increases in lambing percentage (some quite marked) to 1570, followed by a distinct drop to 1571. That the trends fall into two such distinct groups would seem to suggest factors other than the management of the farms for the rises and falls in production, disease being an obvious candidate, along with the weather.

The anomalous lambing percentage of well under 10% found on the farm at Llanbair in 1570 (Figure 6.6) was due to a catastrophic drop in actual lamb births for one year only. This is extremely likely to have been caused by disease in the ewes during the pregnancy rather than a problem with the rams (it is unlikely that all rams put to the flock would have proved infertile that year). There are several diseases causing premature abortion or the birth of weak and unthrifty lambs[28] and this may be borne out by the loss of the sole surviving lamb as a yearling the following year (see Llanbair 1571, Figure 6.5 (v)). The trend displayed by Llanbair is mirrored in two other farms, Gwydir and T Llyn Cowlwyd, and may well have had the same cause. In 1571 Gwydir noted the death of fourteen lambs and the slaughtering of seven more. The slaughter of lambs was an unusual practice and may have indicated the birth of yet more sickly lambs making them susceptible to other diseases. Perhaps the same problem was still in evidence, although ewes can develop resistance to some abortive diseases with the

[28] There are several different causes of abortion: a) those caused by specific bacteria or organisms such as Enzootic Abortion, Vibrionic Abortion, Salmonella Abortion, and Toxoplasmosis, and b) non-specific abortions not associated with microbes. Pregnancy toxaemia associated with poor nutrition can cause premature abortion or the birth of dead or weakened lambs. However, this also leads to a high mortality rate in the ewes unless very close to lambing. (The TV Vet, 1984, pp 13-15; 91-93)

consequence that lambs are not killed in the womb, but may still not be very robust. Gwydir also noted that three yearlings died in 1571, perhaps also a legacy of the previous year.

It is possible that the drop in fertility in 1571 displayed by the second group of farms may also have been caused by disease. If disease was the cause, then it did not have such an overall devastating effect. Lambing percentages dropped, generally, by less than was observed on Gwydir, T Llyn Cowlwyd and Llanbair the previous year. However, Bertheos and Hafod Boeth both display drops of over fifty percent (see Figure 6.6 and Chart 6.1). At the same time, in 1571, greater than normal numbers of yearlings, wethers and ewes were recorded as having died, but not lambs (Figures 6.5 (i-ix)).

Perhaps there was a combination of disease and weather effects that brought about the decline in lambing success in the second group of farms. The extreme drops seen by Bertheos, Hafod Boeth, and, to a certain extent, by Dan y Castell in 1571, may have had a similar cause to the three farms in the first group. The remaining farms, with a relatively lower drop, could also have been affected by other problems, including the weather.

A severe winter in 1570-1 could have disrupted lambing on the five farms which make up the second group and caused heavier than usual losses; the accounts for Dan y Castell mention ewes lost in the snow for the winter of 1570-71[29]. All five farms in the second group (Bertheos, Hafod Boeth, Gorddinan, Coytmor, and Dan y Castell) had sheep that died in greater numbers than usual (see Figures 6.5 (i-ix)), which could be weather related, or possibly disease controlled, or both. As no lambs are recorded as dying, the problems probably occurred before the lambing took place, i.e. during the winter months. Bad weather during the period that the rams were running with the ewes could have resulted in poorer fertility, as well as higher sheep mortality. If the weather was severe it could also have reduced the feed available to the sheep resulting in pregnancy toxemia (see footnote 28, this chapter). It may be significant that this group of farms were in or close by the *ffriddoedd* of Dolwyddelan and would have been in close enough proximity to have been affected by localised weather patterns.

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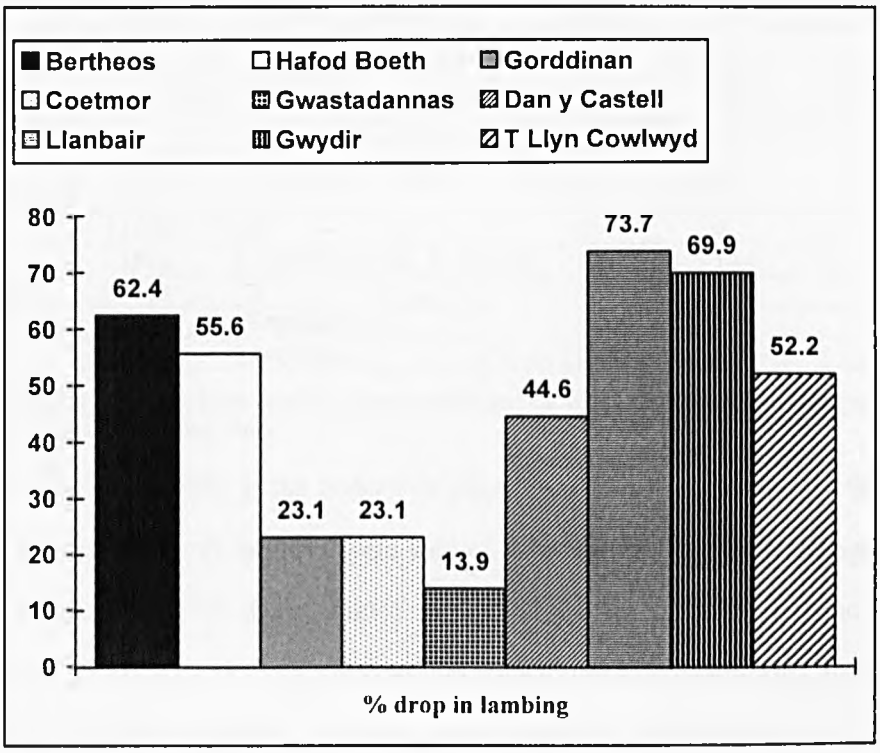
[29] Llanstephan MS 179, pp 147-8

The drop in fertility in 1571 does not occur in the first group of farms (Gwydir, T Llyn Cowlwyd and Llanbair), which managed to regain fertility in 1571 to the same level as in 1569 or with an improvement. Location may have played a part here in mitigating the effects of weather as they are not in the same locality as the other group of farms. Also, extra care may have been taken on farms that had had such a severe problem the previous year, whether disease or weather was the controlling factor. Chart 6.2 gives some idea of the magnitude of the drop in lambing success on the various farms.

Wild fluctuations can occur from year to year on any farm, mainly owing to disease and weather. It shows that, without comprehensive year-on-year records, it is extremely difficult to gain a full picture of the aspirations of the farmer as far as stock levels are concerned. Lambing failure not only jeopardises the economic success of the farm for that year, it has effects that can last for several years, with the probable need to obtain stock to cover the shortfall from outside the system, especially if the farming enterprise is on a small scale. The Gwydir farms benefited from what appears to have been a somewhat integrated system allowing movement of stock internally.

Chart 6.2 Maximum % Drop in Lambing Regardless of Year



6.1 (4) Sales and Rentals

The diary makes it very clear that the only sheep recorded as being sold were wethers. The numbers kept on each farm were, in most cases, small. George Owen, writing at the end of the 16th century, felt that half the adult flock would be made up of wethers because of their valuable wool, and Sir John Perrot also valued wethers (see 4.1 (2) and 4.2 (2)). This is clearly not the case here in the Dolwyddelan area as can be seen in the table below. The lowest ewe to wether ratio is 2:1 found on three farms, but even these do not come close to the ideal situation as set down by George Owen in Pembrokeshire.

Figure 6.7 Ewe/Wether Ratios

Location	Year	Wethers	Ewes	Ratio Ewes/Wethers
Bertheos	1569	24 sold, 0 remain	52	0
	1570	8 sold, 0 remain	48	0
	1571	23 remain	54	2:1
Hafod Boeth	1569	1 remained, 1 died	45	45:1
	1570	11 sold, 0 remain	44	0
	1571	20 remain	68	3:1
Gorddinan	1569	19 sold, 2 remain	52	26:1
	1570	9 sold, 2 remain	53	27:1
	1571	26 remain	54	2:1
Coetmor	1569	40 sold, 9 died, 0 remain	77	0
	1570	13 sold, 0 remain	92	0
	1571	26 remain	111	4:1
Gwastadannas	1569	35 sold, 0 remain*	76	0
	1570	10 sold, 1 remains	45	45:1
	1571	7 remain	47	7:1
Llanbair	1569	21 sold, 11 remain	51	5:1
	1570	10 sold, 14 remain	31	2:1
	1571	7 remain	43	6:1
Gwydir	1569	19 remain	107	6:1
	1570	20 sold, 52 killed, 0 remain	145	0
	1571	34 remain, 17 killed	150	4:1
T. Llyn Cowlwyd	1569	0	93	0
	1570	0	95	0
	1571	3 killed, 9 given, 11 remain	106	10:1
Dan y Castell	1569	0	39	0
	1570	5 remain	40	8:1
	1571	9 remain	54	6:1

* The wethers that were sold were labeled as two- and three-year olds, some therefore were probably to be found on the farm the previous year.

There is a note in English, at the bottom of page 75 of the diary relating to the farm of Bertheos, that ninety-three wethers were sold to John ap Thomas for 4*s* 6*d* apiece. This is the only indication of sheep values in the whole set of accounts and therefore invaluable as an indicator for comparison with sheep elsewhere in Wales. It is not clear whether the wethers came from this farm, or from several, with the note just happening to appear on this account. Certainly stock numbers as indicated in this account would

seem to preclude them from coming solely from Bertheos. The price as noted was very good for the time and compared well with sheep owned by Sir John Perrot in 1592 (see Figure 4.2.).

The sales of wethers for good prices does show that someone was interested in acquiring them. Were they part of the droving trade, or were some local farmers interested in keeping them? The prices achieved probably rule out the sale of the wethers solely for meat. Only Gwydir and T Llyn Cowlwyd are recorded as killing wethers for meat. What is clear is that the Gwydir farms seemed to be more interested in breeding wethers than exploiting them themselves. This may have been about to change with the retention of more wethers in 1571 than had previously been the case.

There are also two references to bargains struck between farmers for the rental of sheep[30]. One written in 1570 (in English) states 'the lambes went to Mowthwy xiiith day of July & delyvryd to [...] by Morris ap Rytherch ...'. A total of 241 lambs were sent to seven individuals. '[T]he Bargaen is as [...] bargen was excepte as they have y^{e} whole woole y^{e} firyst yere'

The wording of this transaction suggests that this was an ongoing situation and that the named individuals were in the habit of receiving lambs every year, and perhaps retaining the sheep for more than one year. The second bargain was written in 1571 and states:

> 'delivyd unto Robert ap Howell ap [...] six and thyrtie lambes out of Coyttmor apon this bargaen . that he shall redelyvd [*sic*] me agene at maij in a^{o} 1572 thyrte of the best of the same if they be lyve & if not xxx made up to me of yerelyngs of Mowthwy sheep & in ther whole woole. [D]elyvyd unto Thomas as Moris ap [...] other six & thyrtie on the same bargin of thyrtie lambes of [...]'

These bargains make it clear that lambs were sent away from farms to be reared elsewhere, to be returned the following year as yearlings, with six of the lambs being retained as payment for their keep. It may have been that the farm in question, Coetmor, was not in an ideal situation to aid the rearing of lambs over the winter, but took them back the following year when they were older and stronger. This may also have been the basis on which the lambs in the 1570 bargain were leased out. This type of bargain also negated the need for money to change hands, the bargain being for payment in kind.

The return of leased yearlings would also help to explain some of the anomalous

[30] NLW Llanstephan 179, p 83

figures for yearling numbers. The lambs from Coetmor in the second bargain are not recorded in the losses, therefore the transaction must have taken place after the accounting date of 16 May 1571. It is not clear in the first bargain if yearlings were intended to be returned, or even where they would be returned to, therefore it has proved impossible to trace them in the accounts.

The accounts also show a list of 241 lambs sent in 1570 to seven individuals not named in the accounts proper, each receiving about thirty lambs each apart from Evan ap Gruff. of Pennant who received sixty. It appears that these lambs were from several farms, those involved not being recorded[31].

These bargains do not appear to be of the same type as practised by George Owen, where he rented in some adult sheep as he believed he could get a better economic return from them than from renting out sheep to others (see 4.1.2). This also highlights the fact that the two estates seem to have been running to different agricultural parameters enforced partly by geographic necessities, but also by historical bias.

6.1 (5) Wool Production

The extent to which wool played an economic part on the estates is difficult to judge. Wool production and collection obviously took place as wool was sold in 1571 and 1572. In 1571 thirty-three 'pounde's' of wool was sold for 19*d* a pound, and twenty pounds for 20*d* a pound[32]. The same vendor was involved in both sales, so was selling wool of differing qualities. In 1572 22*d* per pound was achieved for twenty-six pounds of wool[33]. These figures give no idea of the scale of wool sales from the farms or its production. One of the rents noted in the diary was 13*s* 8*d* paid 'de Pandy y Garth' at Foynhir, so wool may have been processed to a certain extent within the estates (see 6.2).

The role of the wether in the wool trade is important (see Chapters 3 & 4), and the Gwydir farms did not seem to keep their wethers, particularly in 1569 and 1570. All the sheep mentioned as being sold in these accounts are wethers, whereas George Owen

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[31] NLW MS Llanstephan 179, p 83
[32] ibid, pp 126-7
[33] ibid, p 131

looked for a wether to ewe ratio of 1:1 to give him the maximum wool production from his flock (see 4.2 (6)). Wether wool is better quality from that of ewes, which suffer from stresses during pregnancy and suckling that can be detrimental to wool quality. The lack of wethers on the farms in the early years of the accounts points to an ambivalent attitude towards the production of wool as a major sheep enterprise. However, there may have been a significant change in policy on some of the farms in the group in 1571 (see Figures 6.5 (i-ix)). In 1569 and 1570 Bertheos, Hafod Boeth, Gorddinan, Gwastadannas, and Coetmor did not appear to keep their wethers; they were nearly all sold on. But in 1571 significant numbers remained on the farms, in complete contrast to previous years. Were these changes in response to a change in economic emphasis with wool playing a greater part? Unfortunately, without accounts from later years, it is impossible to say whether these increases were transient or of a more permanent nature.

Records produced at Gwydir in the time of Sir John Wynn, the son of Morus, show that wool production was of some importance to the estate by that time. In 1623 John Wynn had a scheme to house up to 300 Irish workers within a mile of Gwydir to produce cloth. He states, in a letter, that wool is abundant and cheap in the neighbourhood[34]. This may point to the fact that sheep had become more plentiful towards the end of the 16th century and the beginning of the 17th. He also stated that prices were very low and that the scheme was intended to use local wool to try and stimulate a local industry. Unfortunately when he died three years later, the scheme had not been implemented.

6.1 (6) Sheep as part of the non-arable enterprise

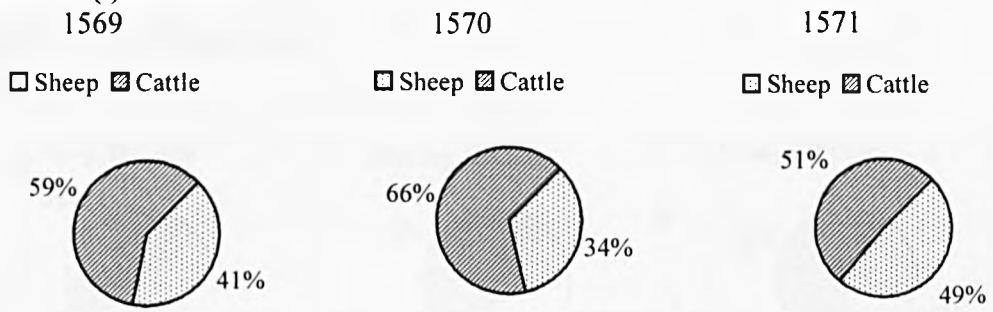
Together with sheep, cattle played a significant part in the farming enterprise of the estate. They were generally divided in to those of breeding age and those cattle that did not breed, the latter category including young heifers and calves as well as bulls, bullocks and oxen (older bullocks). Bullocks do not appear to have been kept past five years of age, and were then probably sold for beef. Cattle matured more slowly in the sixteenth century than do modern breeds, and this appears to have been the case as late

[34] Skeel, C J, 1922, p 234

as the eighteenth century[35]. Heifers appear to have been used for breeding when they were four years of age as they appear in the breeding section of the accounts at that time. Gwydir appears to have been the only farm in the group that kept oxen for ploughing, sixteen in total[36]. These oxen may well have been used by other farms on the estate to plough, whatever land was being used for crops. The overall impression given by the accounts in the diary is one of farms dedicated to breeding rather than to arable concerns.

Charts 3 (i-viii) show the ratios of sheep to breeding cows and younger steers and bullocks. Emery (1965) used the losses to estimate the total stock including lambs and calves from the Dolwyddelan farms for 1570, and arrived at totals for sheep of 2114 and for cattle of 1209. Elfyn Hughes *et al* state that losses should not have been included[37]. However, in order to give a fuller picture of stock production in total, as opposed to actual stock numbers at a single point in time, losses have been included in the creation of Charts 6.3 (i-viii), but not lambs and calves as they can be regarded as a function, unless bought in, of the ewe or cow numbers on a farm. Neither are older oxen included, as their numbers depend on the amount of arable on the estate not on the relative merits of keeping sheep or cattle. All the charts use the adjusted figures including losses as they give a truer picture of the whole enterprise, and counteract anomalous numbers produced by disease, weather and decisions as to sale or slaughter, which can vary wildly from year to year.

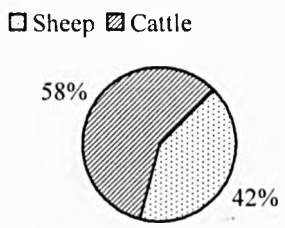
Chart 6.3 (i) Bertheos



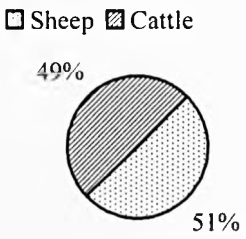
[35] Trow-Smith, R, 1957, p 239
[36] Emery, F V, 1965, p 141
[37] Elfyn Hughes, R et al, 1973, p 121

Chart 6.3 (ii) Hafod Boeth

1569



1570



1571

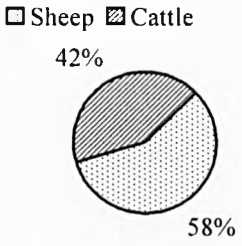
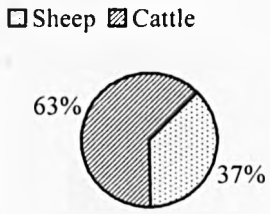
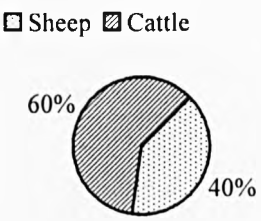


Chart 6.3 (iii) Gorddinan

1569



1570



1571

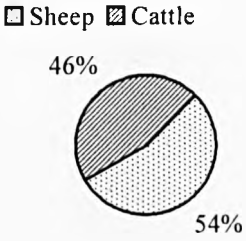
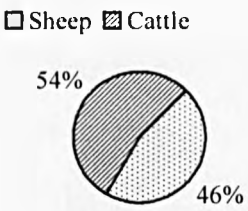
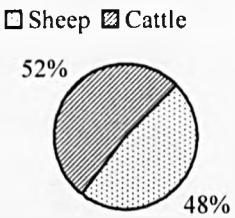


Chart 6.3 (iv) Coetmor

1569



1570



1571

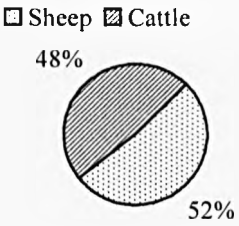
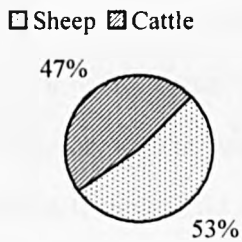
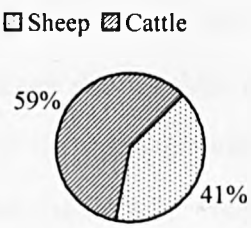


Chart 6.3 (v) Gwastadannas

1569



1570



1571

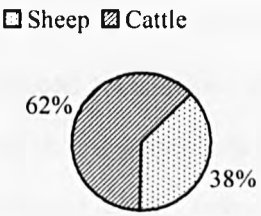


Chart 6.3 (vi) Llanbair

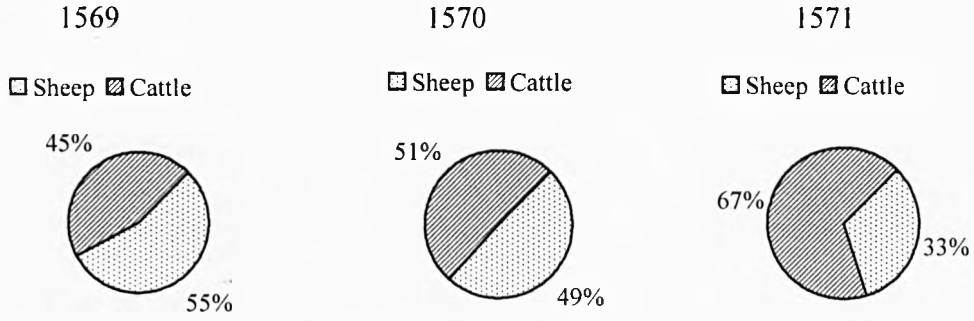


Chart 6.3 (vii) Gwydir

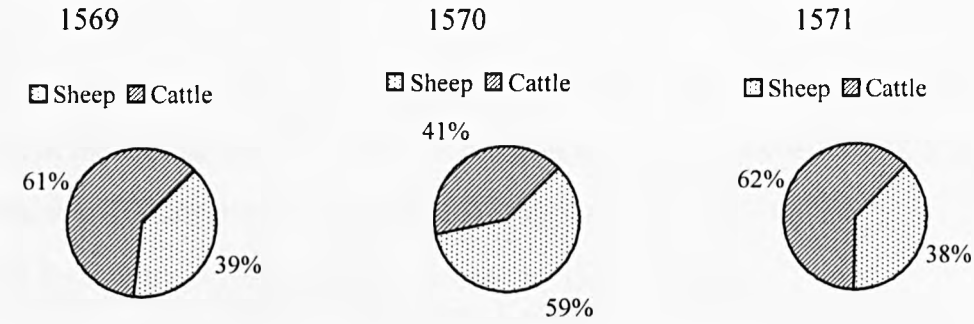
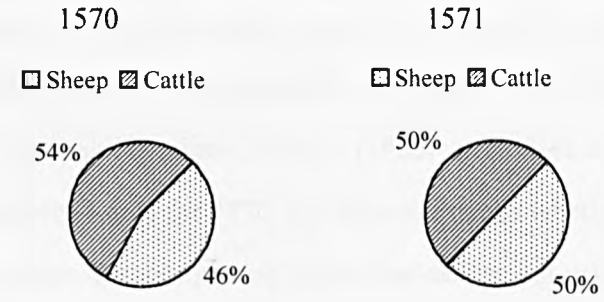


Chart 6.3 (viii) Dan y Castell



On an individual basis it appears that some farms were actively altering the balance between sheep and cattle in favour of sheep, while some appear to have been looking more towards cattle. Gwastadannas and Llanbair show reduced proportions of sheep from over 50% to under 40% of the stock, notwithstanding that the numbers of ewes were still increasing overall (see Figure 6.3). Gwydir fluctuated wildly from 39% to 59% to 38% of sheep over the three years. The causes of this fluctuation are a matter for speculation, but may have been an indication that Gwydir was used as a central point to absorb stock from other farms and then to redistribute it. All the other farms in the

estate, apart from those mentioned, were steadily increasing sheep as a percentage of stock.

Figure 6.8 Sheep Numbers Excluding Lambs

Year	Main Estate	T Llyn Cowlwyd	Crafnant	Total	Rentals	Total + Rentals
1569	817	100	22	939	132	1071
1570	809	131	31	971	286	1257
1571	1002	135		1137	40	1177

Regardless of the supposed bad winter of 1570-1 and the lack of figures from Crafnant, the total sheep population on the main farms of the estate was still rising when accounting took place in 1571, although there was an apparent drop in 1571 if rented sheep are included.

The only location in the accounts not including sheep was Halston (see 6.1), and most of those cattle were accounted for in losses elsewhere (see Gwydir 1571). Only six cattle from Halston need be added to total cattle numbers for 1571.

1569 Total Cattle = 1024 (no cattle recorded for Dan y Castell)
1570 Total Cattle = 1058 (including Dan y Castell)
1571 Total Cattle = 1141 (including Dan y Castell and Halston)

On the main farms of the estate, cattle still outnumbered sheep, but when rented sheep are added into the picture sheep overtake cattle in actual numbers. Sheep numbers were rising more quickly than those of the cattle up to 1570 but dropped again in 1571, while still remaining ahead. Emery (1965) arrived at a sheep to cattle ratio of nearly 2:1 (actually 1.8:1) for 1570, but included lambs whether on the farms, rented or loaned out to others. By discounting lambs and calves, but using the same criteria that Emery used in his calculations, this ratio falls to 1.1:1 for 1569, but is only up to 1.2:1 by 1570. Elfyn Hughes *et al*, using only the stock present at the time of accounting, and excluding all losses in their calculations, found a sheep to cattle ratio of 1.5:1 in 1569, and 1.6:1 in 1570[38]. The ratios produced by Elfyn Hughes included all lambs and calves reduced to ewe units where lambs and calves are counted as being the equivalent of half a ewe or cow.

The problems caused by the use of slightly different criteria for measuring animal numbers notwithstanding, an increase in sheep numbers compared to those of cattle is seen over those two years. There was still growth in the keeping of sheep, and

[38] Elfyn Hughes, R et al, 1973, p 121

there were still more sheep than cattle in this area. When compared to the type of agriculture practiced in this area pre-1400 it will be seen that, even in this stronghold of Welsh cattle farming, conditions were changing and sheep were beginning to figure in economic thinking to a greater degree than was the position previously.

6.2 Cloth Production

The cloth production industry of Gwynedd and the rest of north Wales was helped greatly partly by the exemption of Welsh cloth from early Parliamentary legislation as it was coarse and the control of its manufacture was difficult, and partly by the more settled environment that followed on from the Act of Union in 1536[39]. In the 16th century, and continuing into the 17th, the local cloth production largely took over from that of south Wales (see 4.5), but it remained the largely unorganised and scattered business that it had been when it was based in the home for home consumption. The growth of the fulling mills on the fast-flowing streams of the area, one of the advantages that north Wales had over the south, did nothing to co-ordinate the industry, and the production from the region remained poor and ill-thought of[40].

The cloth-producing industry in the western areas of Wales had to contend with a damper climate than that found further east. Wool must be kept dry, or it rots and degrades, producing inferior yarn and therefore inferior cloth. This was one of the reasons for the woollen industry of the 19th century being based in Yorkshire on the drier side of the Pennines, while the cotton industry flourished in the west where conditions suited the handling of cotton.

The lack of co-ordination and poor product did not stop the local inhabitants from using cloth production as a method of enhancing their income. The mountain regions of Gwynedd were really only good for stock rearing and should have proved ideal for sheep, but as has been shown, cattle were still the mainstay of the region, with sheep only beginning to become more evident towards the end of the 16th century. The growth in cloth manufacture and the growth in sheep numbers probably went hand-in-hand.

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[39] Jenkins, J G, 1969, pp 108-9
[40] ibid, pp 114-5

It was in Meirionydd that cloth production flourished in Gwynedd, and became second only to Montgomeryshire (in Powys) as the main textile manufacturing centre in Wales. Even by the late 16th century, some weavers were dependant on their skill for their livelihood; prior to that it was practised as an adjunct to farming[41].

There are references to *pandai* (fulling mills) in several locations in the county before 1600. Tal-y-llyn, Mallwyd, Maentwrog, Gwyddelwern and Dolgellau all possessed a fulling mill in the locality. The use of an industrial process to handle finished cloth did not mean that all parts of the process were 'industrialised'. Carding wool and spinning were still basically domestic tasks, as was, for the most part, weaving. However, there was a distinct gender segregation of work; preparation of the wool was a task for women and children, while weaving was definitely a male preserve[42]. Contrast this to the place of weaving as seen in the Welsh Laws, where weaving women are often mentioned.

Anglesey was the least well-developed county in Gwynedd as far as a textile industry was concerned. This does not mean that cloth was not produced there, only that it was more for domestic consumption. The earliest recorded 'pandy' was at Llanfechell in 1430[43].

Caernarvonshire had a larger share of cloth manufacture than Anglesey, with domestic carding, spinning and weaving being important. Production did not become as important as was the case in Meirionydd. Although there are references to *pandai* in the 15th century, it isn't until the late 16th century that an increase is perceived[44].

6.3 Court Records

The records pertaining to the courts of the region give a restricted view of agriculture, but do give some idea of the values given to sheep that appear within the system[45]. Unfortunately the ages of the sheep in question or their condition are not usually stated, so care must be taken in using the data as presented.

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[41] Jenkins, J G, 1969, pp 170-1
[42] Jenkins, J G, 1969, p 178
[43] ibid, pp 230-1
[44] ibid, p 238
[45] Williams, W O, 1956

In 1548, a lamb worth 12*d*[46] and a sheep worth 2*s*[47]were mentioned as being stolen, while in 1550 two sheep worth 3*s* 4*d* each[48] were stolen. In 1552 mention is specifically made of a sheep of 'white colour' worth 22*d*[49], this indicating that sheep did not necessarily have white wool at this time (see 4.4 (4) for the colours of sheep sold in fairs in Pembrokeshire). Forty-five sheep worth 12*d* each were stolen in 1554[50].

It is not clear if the value of sheep was dropping, but in 1556 the only sheep mentioned were worth 10*d*[51] and 6*d*[52] respectively, and in 1557 two sheep were stolen worth 10*d*[53] each. If these were fully grown sheep, then values do appear to be less than those mentioned prior to 1554.

The court records also show that attempts were being made to stop the sale of goods outside the recognised markets, and some prosecutions were brought. In 1542 Richard ap John Wyn of Bodfaen was indicted for selling untanned leather, wool and corn outside the markets of the towns of Criccieth, Nefyn and Pwllheli[54]. Gilbert Pedlar of Chester was pardoned for selling goods outside the markets, but also for selling in the towns, but not through the recognised channels[55]. These practices reduced the revenues owed to the burgesses of the towns, who had a monopoly on the sale of goods in the district. Hywel ap Gutyn Lewis of Oswestry bought and sold wool in Llanbedrog outside the markets of the aforementioned towns, but was also accused of using fraudulent weights when selling the wool[56].

One individual, John Thewles, a shearman (responsible for clipping the surface of cloth) appears in the court records on both sides of the law. In 1549 someone had stolen from him forty-one yards of woollen cloth worth 36*s*, while in 1555[57] he was accused of allowing his mastiff to kill sheep in Llanbeblig on two separate occasions,

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[46] Williams, W O, 1956, p 48
[47] ibid, p 54
[48] ibid, p 60
[49] ibid, p 93
[50] ibid, p 131
[51] ibid, p 149
[52] ibid, p 150
[53] ibid, p 152
[54] ibid, p 22
[55] ibid, p 26
[56] ibid, p 26
[57] ibid, p 143

the dog killing eleven sheep on one occasion, and seventeen on another[58].There are no records giving any indication of the value of sheep for the years covered by the Wynn accounts (6.1) so a direct comparison is not possible.

6.4 North Wales Ports

Figures 6.9 and 6.10 show the imports and exports from the two main North Welsh ports (Beaumaris on Anglesey, and Caernarvon on the mainland) of goods relating to wool or its preparation before its use in the manufacture of cloth or other woollen goods. The records relating to these two ports fall into two main time periods, 1526-7 (limited in nature) and 1565 onwards. Imports were by far the greater part of the maritime traffic of these two ports, but they did not have the volume of traffic seen in the Pembrokeshire ports. By far the greatest volume of imports was taken into Beaumaris. There are only two references to Caernarvon being used for imports after 1585, one in 1597 when some madder was imported from Biddeford in Devon (volume unknown), and the second where eighty stone of wool was imported. After 1585 wool is almost absent from surviving records of imports. Wool mostly appears in imports from Ireland before 1585, either as wool or woolfells. Caernarvon was used mainly as a port for exporting.

Figure 6.9 Wool and Related Materials Imported into Beaumaris[59]

Date	From	Wool	Skins	Madder	Alum	Wool cards
1565-66 July	Ireland		400 fells 57 c fells			
1577-78 July	Ireland	1 pack (11st)				
1583 March	Ireland		100 (sheep) 100 (codlamb)			
1584 August	Isle of Man	4 st				
1585 March	Isle of Man	1 st				
1592 October	Chester			2 cwt		1 brl[60]
November	Chester			2 cwt		
1593 February	Chester			3 cwt	5 cwt	
March	Chester			3 cwt		3
June	Chester			3 cwt	6 cwt	4 brls
July	Chester			3 cwt	1 cwt	1 brl

[58] Williams, W O, 1956, p 58

[59] Lewis, E A, 1927, pp 236 - 301

[60] A Barrel, size unknown.

August	Chester			1 cwt	2 cwt	2 brls 2 bunches
October				2 cwt	4 cwt	
1594 January	Chester			1 cwt		4 brls
July	Chester			3 cwt 2 bags	3 cwt	6 bunches
1595 May	Chester			3 cwt		4 brls 1 fardel
July	Chester			2 cwt	2 cwt	2 brls
August	Chester			1 cwt	1 cwt	
September	Chester			2 cwt	4 cwt	2 brls
1596 April	Chester			4 cwt	4 cwt	5 brls
May	Chester			3 cwt	3 cwt	
July	Chester			4 cwt 2 bags	2 cwt 1 bag	11 brls 2 bundles
August	Chester			1 cwt	5 cwt	
September	Chester			3 cwt	3 cwt	2 brls
1598 May	Chester			2cwt	2 cwt	100
	Barnstaple	5 hampers felt				
	Fowey				2 t	
June	Chester			10 cwt	10 cwt 3 brls	12 brls
1599 October	Chester			6 cwt	4 cwt	
December	Chester			3 cwt	1 cwt	4 brls
1600 February	Fowey	6 bags 14 roves Spanish			2 t	
	Chester			4 cwt	4 cwt	9 brls
May	Chester				3 brls	10 brls
July	Chester			5 cwt	3 cwt	4 brls
1602 October	Chester	1 pck (400 yds) cloth		6 brls (2 cwt)	3 cwt	8 brls
1603 February	Chester			5 packs (3 cwt) 5.5 cwt	5 cwt	4 brls
March	Chester					7 brls
April	Chester					4 brls
June	Chester			4 packs (3 cwt) 1 dry vat 3 cwt)		
July				3 cwt	4 cwt	14 brls new

Before 1530 the only goods connected to the wool trade mentioned are the export of some lengths of *pannus wallie* (welsh cloth) and kersey[61] along with 1200 lambskins, destination unknown. Even up to 1584 there was relatively little activity associated with wool apart from the import of sheepskins (woolfells) from Ireland or small quantities of wool from the Isle of Man or Ireland. Then, from 1592 onwards, there is a noticeable change in the type of goods being imported. At Beaumaris alum (potassium aluminium

[61] Jenkins, J G, 1969, p 111 states that these were just two of the types of coarse Welsh woollen cloth to be found, along with Friezes, wadmolls and brecknocks (the later coming from Breconshire). In the sixteenth century cottons started to appear, woollen fabrics that had been 'cottoned', the nap being raised to give a soft fluffy appearance similar to true cotton fabric.

sulphate), madder (*Rubia tinctorum*) and wool cards start to come into the port in large quantities (see Figure 6.9). Prior to that there is no record of these goods arriving into the area by this method. They were imported from Chester.

The wool cards were, and still are, used to prepare wool prior to spinning. They are used to tease out the fibres, making the wool easier to handle in the spinning process. The cards were covered with the heads of the teasel plant (*Dipsacus fullonem*) which have many hooks on the surface that are used to straighten the mass of tangled fibres that are found in a fleece. Woolcards were also used to fluff up the surface of woollen 'cottons' which could then be sheared to produce a better finish. Woolcards were an expensive commodity. They were worth 6*s* 8*d* per dozen[62], according to the Port Books, and came into the ports in large quantities (although the exact number is not always possible to ascertain from their descriptions in the Port Books). A Tudor 'Book of Rates'[63] of 1582 gives two values for woolcards; new cards were 10*s* a dozen, but old were only worth 5*s*[64].

The association of madder with alum strongly suggests that these commodities were destined for the dyeing industry in the region, and, although there is no guarantee that this was necessarily intended for woollen cloth alone, it is probable that some was so destined. Alum acts as a mordant[65], or fixative, for the dye, while madder[66] gives brown and red colouring of various shades depending on the actual dyeing process. Dyeing was not very apparent in the types of cloth exported from Wales[67] but some did occur. Grey, brown, russet and pied cloths are mentioned. It is possible that the red or brown shades were produced using madder.

Alum was reckoned to be worth 33*s* 4*d* per hundredweight (containing 112 lbs.) in the Port Books. This price was set down in a Book of Rates first revised in 1558 and

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[62] Lewis, E A, 1927, p xlvi. Prices were fairly standard throughout later sixteenth century (with reservations).

[63] Books of Rates began as lists of the values of goods in order to assess the *ad valorum* duties that were payable on many imports and some exports. *Ad valorum* duty usually came to five percent or 1s in the pound of the value of those goods, therefore it was useful to have some idea of the values of any goods that were imported. Once committed to paper the values of goods tended to be fixed for duty purposes. There was no uniform system of valuation applying to the whole country before 1536, and it wasn't until the middle of the 16th century that it developed into a printed handbook. (Willan, T S, 1962, pp xviii - xxiii)

[64] Willan, T S, 1962, p 65

[65] Wickens, H, 1983, p 34

[66] ibid, p 58. Madder has been used as a dyestuff since pre-Roman times.

[67] Skeel, C J, 1922, p 232; Jenkins, J G, 1969, p 113

later updated in 1582. However no effort seems to have been made to update prices in the meantime, therefore some commodities became overpriced. Alum was one such commodity, its real price being more in the region of 22*s* 8*d* per hundredweight[68]. No price was given for madder in the Port records, but in a Tudor 'Book of Rates' madder was worth 13*s* 4*d* for a hundredweight of 112 pounds. The poorest quality of Dutch madder of the same weight was worth only 2*s* 6*d*.

The noticeable increase in the importation of commodities associated with woolen textile manufacture would tend to uphold the impression that north Wales was turning to the manufacture of woollen products as a commercial enterprise, even though this was still based in the home.

Figure 6.10 Wool and Related Materials Exported from Gwynedd

Date	To	From	Wool	Skins	Cloth
		Beaumaris Caernarfon		1200 lambskins	16.5 pw 83 pk 7.5 pw
1527-28 July		Beaumaris			7.5 pw
1583 June	Barnstaple	Caernarfon	300 st		
1585 August	Scotland	Beaumaris			
1593 July September	Biddeford	Caernarvon	120 gullet wool 200 st		
1598 May	Barnstaple	Beaumaris	5 cwt felt wool		
July	Portsmouth	Caernarvon	2 st (5 cwt?)		60 yds Welsh Frise
1599 October	Barnstaple	Beaumaris	7 sacks Welsh wool		
1600 July	Barnstaple Rochelle	Caernarfon Beaumaris	200 st, every stone of 18 lbs		 Various cloths
1602 October	Bristol	Beaumaris	10 packs		
November		Caernarvon	6 packs (820 lbs)		
1603 September	Bristol	Caernarvon	18 packs (18 cwt)		

As can be seen from Figure 6.10 there was only limited activity in the export of goods associated with the wool trade, be it wool or cloth. Exports were very spasmodic, and

[68] Willan, 1962, pp xxvi-xli. Proposed changes to the 'Book of Rates' were noted in a memorandum of 1594. One set of commodities was reckoned to be overvalued and this included alum, which was of economic importance. There is no evidence that this was acted upon until a revised 'Book of Rates' was issued by James I in 1604.

even though the cloth-making industry was improving in north Wales, very little cloth went through ports in the north. Any cloth being sold from Wales must have been carried mainly over land to its markets. Wool was equally limited although the quantities tended to be more substantial.

6.5 Summary

As in Pembrokeshire, relevant records for Gwynedd of the 15th century are few and far between, but there is an improvement in the survival of records from the 16th century. Despite the relatively sparse documentation surviving from Gwynedd this chapter has been able to demonstrate that sheep had a prominent part to play in the agricultural economy of the larger landlord (unfortunately there do not appear to be records that can give a direct insight into the livestock, or the attitude, of the small-scale landholder as probate records start later in the 17th century).

In the main this chapter deals with agricultural accounts that have survived from the estate of Morus Wyn of Gwydir over three consecutive years in the later 16th century, a fortuitous and rare occurrence in Wales. There is some evidence from Port Books of the later 16th century giving detail of import and export of wool related products into and out of Gwynedd, but this only throws only a little light onto the subject. Court records of the time similarly give a very limited view of agricultural practice relating to sheep. On the whole Gwynedd is poorly furnished with evidence relating to the keeping of sheep and their presence or absence in the local economy. The Gwydir evidence is localized and can only produce a snapshot of conditions. Nevertheless it is a rich source of detail from one of the larger estates in this part of Wales.

The Gwydir estate included several farms in the region. These farms ran a substantial number of sheep along with other livestock, but did not appear to concentrate on the wool production. Wethers on the farms tended to be sold, even though they would have been kept within the system to increase wool supplies. They were not usually killed on the farms for meat and were obviously in demand, interest either coming locally from farmers who were perhaps more interested in wool production, or perhaps coming from dealers or farmers from further afield. It is

impossible to say whether these sheep were sold for wool or for meat. This appears to have changed in 1571 when wethers began to be retained on the farms in greater numbers, but it is not clear if this was a permanent change or just an anomaly for one year. As it happened on all the farms involved it may have been a genuine change of direction. Certainly there is evidence that there was abundant wool in the region in the early 17th century with the son of Morus Wyn contemplating importing cloth workers from Ireland to take advantage of this. Analysis of all livestock associated with the estate does indicate a small, but consistent increase in the numbers of sheep compared to cattle over the three years for which the accounts for these farms have survived regardless of the method used to calculate livestock balances.

The farms did not appear to be run in a truly coordinated fashion although there is evidence that stock was moved between farms on a regular basis, and also that there was some renting out of lambs for short periods with their return as yearlings. However, each farm seemed to be run as a complete unit with all types and ages of livestock to be found coexisting. The balance between sheep and cattle did differ between farms (perhaps a terrain related factor as those cattle associated with arable farming had been excluded from the figures). There was no segregation of ages or sexes of sheep as found in the estates of the Bishops of St David's in the 13th century; the farms did seem to be run on a similar basis to those in the 16th century estate of George Owen in Pembrokeshire, with each agricultural unit being essentially separate (but without George Owen's attention to wool production, or ideas about the rental of adult ewes into the system). These accounts do provide interesting (and previously unexplored) detail about lambing rates, successes and failures of lamb production within the flocks and also possible disease found on the estates. They also point to the system being basically closed with very few animals being bought in, but with movement of stock between farms, which would presumably have kept inbreeding of such stock to an acceptable level. The impression given is that sheep farming was run on a somewhat different basis from that of Pembrokeshire, perhaps reflecting the different histories of agriculture in the two regions.

Cloth production was increasing, but may have been largely for the local market, or for sale locally. Certainly cloth was not exported in any quantity from the local ports; any cloth movement outside the region must have taken place largely overland. Some wool was exported, mainly to the West Country and Bristol, but records show that there was a substantial import of products associated with the dyeing of cloth, madder and alum, at the end of the 16th century, together with the import of wool cards for treating wool and cloth. This points to a burgeoning of the local textile industry on the eve of the 17th century, but also to an increase in wool production at the same time. This can only have come about if small producers as well as larger concerns were also becoming interested in wool production to supply the growing need for the local textile industry and perhaps to counteract the influx of wool from other areas such as Pembrokeshire. Thus the chapter has demonstrated the increasing importance of sheep to the developing economy of late medieval and early modern Gwynedd.

CHAPTER 7. CONCLUSION

Throughout this thesis an answer to the question of why Wales seemingly lagged economically behind its English counterpart has been sought. England thrived economically on the wool trade in the 13th and the 14th centuries, and, in subsequent times, the production and sale of textiles could also be described in terms of a successful economic enterprise. This thesis has demonstrated that, in the two areas of Wales investigated, Pembrokeshire and Gwynedd, this example was not followed with such success, although, at times, attention has been drawn to examples of individuals, or groups of individuals attempting to take advantage of the riches to be gained. Furthermore, these two areas present differing socio-economic backgrounds that affected the local agricultural environment, and which also divided Wales along boundaries dictated by the local political climate. The reasons for this apparent failure to engage fully with this English economic achievement are a complex mixture of these political, social and geographic circumstances, together with the underlying logistics of collection, and sale, of wool, and problems associated with textile manufacture. The thesis has also focussed attention on the way that the presence of sheep can be used as an indicator of the extent to which outside influences penetrated and altered perceptions about agriculture within the native Welsh populations of both areas. The thesis, therefore, is concerned with two main strands. Firstly, it has demonstrated that the study of sheep farming has illuminated the whole subject of the medieval and early modern Welsh economy. Secondly it has thrown light onto the reception of outside influences into medieval Welsh society.

7.1 The Impact of Political, Social and Economic Differences

The importance of sheep to the Welsh economy must be viewed in context with the political, economic and social climate prevailing throughout the period covered by the thesis. During the 12th and 13th centuries Wales was divided politically between Norman/English and Welsh controlled areas, the boundaries fluctuating as one group or another gained ascendancy for a while. Over this period Pembrokeshire and Gwynedd followed distinctly different political, economic and social tracks, and this division is

mirrored in other areas of Wales. Pembrokeshire was largely under the control of Normans from an early stage, aided by immigrants, both English and Flemish, a state of affairs also to be found in the south and east of the country. Gwynedd, on the other hand, was largely under the control of native Welsh princes until the end of the 13th century, as were large areas of west and mid Wales. This represented a distinct dichotomy in attitudes towards political, social and economic practice between the two areas, which, in turn, allows an insight into what impact these differences would have had on the economy of Wales as a whole.

The Welsh laws provide ample evidence that Welsh society was well organised with complex law and governance. However, prior to the Norman invasions, it was only very rarely under the control of a single individual, and that control was looser and less institutionalised than in England. The size and number of rival kingdoms fluctuated through dynastic and political differences. This lack of a unifying political structure enabled the Normans, initially, and the English later on, to invade and take over parts of the country in a piecemeal fashion. The physical structures of Welsh society were not dissimilar to those of the invading Normans and English, in that there were estates (*maenors*) supported by demesne lands (the *maerdref*) that were worked by bond tenants who had particular labour services to provide. Bond tenants also lived in hamlets that had certain fixed dues to pay regardless of the numbers of people living there. There were also an increasing number of freemen, who held land in perpetuity for their descendants. The courts of the lords or princes moved around between the estates, the circuit giving a cohesive social, political and economic strength to the society. There was a principal *maenor*, but it was only used as part of this circuit. The native Welsh agricultural economy was heavily involved with the keeping of cattle that had high status; sheep were present, but seemed mainly to be kept for their milk and for meat. Wool was largely a by-product. The nature of the terrain put limits on the amount of cereal that could be grown, but movement of stock to summer pastures provided further room for crops. The economy as a whole was based on this agriculture.

Norman manors were physically similar, but they were more heavily controlled than their Welsh equivalents. The demesne could be split between different, and often

well-separated, sites. The nature of the obligations of the manorial tenant meant that the landlord could guide and control the agricultural production, and so maximise profit. In southern Pembrokeshire the large numbers of immigrants were able to bring in their own agricultural ideas and systems as the original population seems to have either been moved out, or was missing, to a large extent. In the north of the county, large church estates came under the control of Norman bishops who were able to dictate policy to their demesne estates. It was the institutions put in place by the Normans that allowed sheep and their wool to come to the forefront; cattle remained the mainstay of the native Welsh farmer, particularly in the northern and eastern parts of the county.

Various ecclesiastical organisations such as the Cistercians and other monastic institutions settled in both regions. Already in place was the Celtic church in Wales. The monastic organisations tended to act independently, their political allegiances taking into consideration the ruling powers of the areas into which they became established. Some were involved in agriculture, the extent of that involvement depending on the initial basis of their foundation and the economic underpinning of the order. They did have an effect on the local and on the whole Welsh economy, but only on the periphery.

7.2 The Effects of Invasion and Immigration

Although the Normans were the instigators, and in charge of the incursions into south Wales, the settlers themselves were largely English and Flemish. They would have brought with them ideas about the way agriculture should be organised, and what was needed for a successful enterprise. Even before the Normans invaded England in the 11th century sheep had played a dominant role in agriculture there. This had continued and wool sales abroad were of high economic benefit in 13th century England. The Flemish settlers also came from a country that valued wool, and which had a very successful textile industry based on the import of good quality wool, and the export of its cloth. These ideas would have been transplanted into the local economy of Pembrokeshire wherever possible. Evidence presented in this thesis from primary sources show that, surprisingly perhaps, Welsh law and practice did not vanish altogether in Pembrokeshire when it fell under Norman rule. The presence of the estates of the bishop of St David's acted as a buffer against change, but only in certain areas.

This is seen particularly well in records that highlight the organisation of the demesne estates of the Bishops of St David's. Here Welsh and English legal structures were still visible, even by the end of the 13th century. There seems to have been a reluctance on the part of the hierarchy to impose English law unilaterally; Welsh law still survived in Welsh dominated areas.

Even though the church had Celtic roots, it had a succession of Norman bishops who tried to impose organisation on the scattered demesne of the church estates with varying success. Following an economic trend seen on English manors in the 13th century, the bishop's demesne lands on the various manors in the northern and western part of Pembrokeshire were used to co-ordinate the sheep flocks and other livestock. Sources presented in this thesis demonstrate for the first time that advanced techniques in animal husbandry were practised in Pembrokeshire. The segregation of sheep into flocks of different ages and sex was used to control the breeding and the quality of the stock on the demesne. The presence of distinct flocks of wethers points squarely at wool production. However, on demesne lands in the east of the county, this sheep were not part of this organisation. Cattle were kept on these demesne lands; sheep were not present on these manors at the end of the 13th century. These eastern manors exhibit a remnant of the historical basis on which taxes and rents were to be paid which had a distinctly Welsh aspect with cattle being important in this area. Welsh traditions were still visible. In the west circumstances had already changed and sheep were very much part of the taxation system. This thesis highlights the way that the political takeover of Pembrokeshire was producing differences in the agricultural ethos of the two communities, Welsh and English, in the 13th century. This state of affairs in the east of the county, however, did appear to be changing.

By 1326, sources show that sheep were reckoned on the estate rolls of Llawhaden in eastern Pembrokeshire, a distinctly Welsh manor; previously there had been none. Sheep were also present on other distinctly Welsh manors, such as Llangerugge and Kefyn, also in the east. These sources also show that the numbers of sheep on the manors of the bishop taken as a whole seemed to have practically doubled since the end of the 13th century. Therefore it has been demonstrated that sheep were

becoming more important to the manorial economy here. Anglicisation of the whole Pembrokeshire economy appears to have been proceeding to the detriment of traditional Welsh practices.

7.3 The Role of Sheep in the Agricultural Economy to the Mid 14th Century

7.3 (1) Pembrokeshire

The co-ordination and organisation of flocks was important because of the way that wool had to be handled. Records have been used in this study to highlight that most sheep produced only about a pound of wool per year, a very small amount by modern standards. However, it was, and still is today, the wether that is the principal wool-producing sheep, and is only kept for long periods for that purpose alone. In order for production of wool to be economically viable, regardless of its value, even such small amounts must be collected and transported to a market, either within the country, or abroad. Only those enterprises with good organisation could have hoped to benefit economically to any extent. The management of wether flocks meant that this process of wool collection could be streamlined and made more efficient. The manorial demesne structure aided this process and made the whole wool-based enterprise economically feasible.

Having collected the wool, access to markets was vital. The Normans and the English believed in the use of local markets to control the flow of goods and merchandise, and records show that some of the earliest were set up in Pembrokeshire to do just this. It was the presence of markets that would have enabled the local population at large to benefit from their wool production. Wool could be collected from a widely scattered local populace at designated points, and shipped out in bulk. Good communications would be vital to this trade. Cross-country roads that would have allowed access to England were not good; it was access to the ports along the Bristol Channel that made Pembrokeshire wool economically viable in the 13th and 14th centuries. This aided the trading of local wool giving contact with Bristol, south-west England, or even to the continent. The flow of wool out of the county has been examined using local port records, such as the accounts of customs on wool from Haverfordwest. These show that significant amounts of wool seemed to be passing

through that port at the beginning of the 14th century. The amount of wool being exported through those ports suggests that the local population of southern Pembrokeshire was also involved in sheep-keeping and wool production. Unfortunately, the creation of Carmarthen and Cardiff as Staple ports through which all Welsh wool had to pass for taxation purposes, made such exports 'disappear' from sight towards the end of that century. Those early records studied in this thesis, however, do point to significant numbers of sheep being present in the hinterland of Haverfordwest by the early 14th century, and those sheep producing significant quantities of wool.

At the same time, there is evidence for a fledgling textile industry that was being developed in Pembrokeshire. Mechanical fulling mills for the treatment of cloth appear in the 13th and early 14th centuries. This local cloth would probably have been woven from local wool. There is no evidence in the records to suggest that there was significant movement, if any, of wool into the county from elsewhere. Again, it was the larger landholders that had the means and the money to build what was a new technology, such as the monks of St Dogmael's Abbey, or the Order of St John of Jerusalem (the Hospitallers), immigrant institutions with links to England and elsewhere. These mills were often built more with added revenue in mind than with a need by the organisation to provide for its own requirements. However, where this was the case, their presence does suggest that cloth was being produced locally in sufficient quantities for the mill to provide revenue. This again points to the importance placed on wool production within the local population, a distinctly non-Welsh concept.

The quality of the wool from Pembrokeshire does not appear to have been of the highest. Records presented show that prices fetched by wool produced on the grange of Kingswood, part of the manor of the Earl of Pembroke, could only reach about two thirds of the price of English wool, at a time when wool prices were relatively high. If wool produced by one of the greatest estates in the region could not sell as well as English wool, that of other local producers is hardly likely to have bettered the quality. This fact notwithstanding Pembrokeshire seems to have been tapping into the economic advantages of production and trade in wool and cloth certainly in the early to mid 14th century. It was possibly only the quality of wool at this time that would hold it back.

7.3 (2) Gwynedd

Compared to the relative stability of Pembrokeshire, Gwynedd was in political turmoil in the 12th and 13th centuries. Internal, as well as external, strife must have disrupted the normal way of life, giving little incentive for change or innovation. The central part of the region is mountainous and inaccessible, and, apart from Anglesey, not very conducive to agriculture except in limited strips along the coast and along valleys stretching inland. Communications within the region were difficult. There were small ports along the coasts, but the variable political atmosphere between Welsh Wales and England would have made trading links to markets in England a very chancy business. These ports were also at a disadvantage in that they were more distant from continental trading points than were Pembrokeshire ports. Port records are, unfortunately, not available from Gwynedd for this period.

The agricultural economy was based on cattle, which were used for meat, milk, for ploughing the ground, and for leather; they were also traded. Cattle were much prized. That sheep were not prized can be seen in detailed research into the Laws of Hywel Dda, the legal framework of Welsh society. The various versions of the Laws give a picture of sheep on the margins of village life. Sheep management, yarn production and the weaving of cloth were the domain of women, an indication that at this time economic advantages to be gained from sheep based products was not recognised by the society at large. Sheep did seem gradually to increase in importance, as seen when versions of the laws are studied chronologically (indicated by the gradual intrusion of men into the women's sphere of influence).

However, even if sheep had been present in larger numbers, the collection and distribution of any wool for trade would have been difficult. It seems probable that it was only the presence of Cistercian monasteries, and those of other religious orders, with their extensive and well-organised agricultural bases, that encouraged wool merchants such as the Italian, Pegolotti, to travel to this region to collect what seems to have been a significant amount of wool. Even he travelled overland to reach the monasteries, showing that sea travel between England and Gwynedd was not a regular occurrence.

Under the Welsh system, farming practice aimed at wool production would start at a definite disadvantage, in that the underlying co-operation of the manorial regimes, as practised by the Normans and English, was not present. Neither was there the degree of commercialisation necessary for small producers to exploit the sale of wool. Evidence examined suggests that Welsh *maenor*s did not co-ordinate their demesne lands; each *maerdref* and associated land was independently run. Coupled with a tradition of agriculture that placed sheep at the periphery, this acted against much of the co-operation necessary for a successful wool enterprise. That wool was not a major part of the economy is highlighted in evidence taken from the taxation rolls of the late 13th and early 14th century. These rolls highlight a distinct lack of wethers within the flocks of the local populace. There was no indication that the small-scale farmers were involved in anything other than collection and use of wool for domestic or purely local purposes. Even in areas of Gwynedd that had shown some sheep as part of a local Welsh taxation system (such as Aberffrau on Anglesey) they were not found in significant numbers. Certainly, pre-conquest Extents, taken by Edward I to describe the holdings and practices on the *maenor*s of Llewelyn following his defeat at the end of the 13th century, give no indication that wool was seen as having great importance. These sources highlight the fact that some sheep were to be found, but that they were not a dominant part of the taxation system. Records from Meirionydd show an agricultural bias towards cattle, with very little other livestock mentioned. Even thirty years later, sheep were still very much in the minority there.

A further problem that would have made a strong wool-based trade more difficult, and which continued even into the 15th century, was the practice of division of land between descendants of freemen. The Welsh practised partible inheritance, or *gavelkind*, where, when a landholder died, his estate was split up between his closest relatives. After generations of this practice, the land became much divided, with holdings intermingling with those of others. This would not have been a problem if land could be transferred to another person through sale, but this was illegal. The practice of *pridd* did allow for leasing of such land, but it was very difficult for any one individual, unless very fortunate, to consolidate his holdings and practise economies of scale. It

would have needed a large degree of co-operation between producers to make the enterprise economically viable at this time. As has been demonstrated a successful wool trade is very dependant on that organisation and co-operation. Pre-conquest Gwynedd did not appear to exhibit such prerequisites for such a wool trade, or even to regard wool as anything other than a local and domestic product. Its agricultural economy was built on other strong and well-rooted foundations; it was, however, a poorer and less diverse economy than that of England or even Pembrokeshire, with much less commercialisation and with only a limited amount of actual money in circulation.

English governance followed the Edwardian conquest at the end of the 13th century. The boroughs set up by Edward around his castles in north Wales were initially to consolidate the conquest and to protect any gains from Welsh retaliation. They would only slowly be accepted as centres of commerce in this region, and remained a contentious issue. As in Pembrokeshire, the market and the system of regulations put in place within the boroughs were essential to the development of more widespread economic control and also gave more opportunities for trade to the population living in the surrounding countryside. This opportunity for trade and an increase in the amount of money available did present problems, with increased production needed to convert agricultural surplus into cash for taxation demands. The conquest was bound to influence the direction of that development as those early boroughs were populated by a further immigrant influx from England. They would control trade and ultimately alter local perceptions of economic values. The speed and the nature of this alteration would depend on the political stability of this region, to what extent the ideas of the wave of immigrants was absorbed in to the local population, and certainly on the willingness of local farmers to change the practices of generations. The social cohesion of the local population in this region was much stronger than that of 12th century Pembrokeshire, and would therefore be more resistant to change.

7.4 The Role of Sheep in the Agricultural Economy Post-Mid 14th Century

The middle of the 14th century proved to be somewhat of a watershed with massive rural and urban depopulation caused by the Black Death and other epidemics. Both Pembrokeshire and Gwynedd were affected. Population depletion had long-term

consequences for the ancient Welsh social systems. The nature of bond tenancies was such that obligations had to be met even if only one person remained to fill the vacant holdings. Many bond tenants simply abandoned their land and fled, leaving vacant fields and vills. The older method of redistribution of land became untenable, and there followed an increase in leasing and, eventually, sale of land, allowing the rise of larger farms and enterprises. In Pembrokeshire there is evidence of the abandonment of some new settlements that had sprung up to accommodate population increases of the early 14th century. Local economies in both regions were adversely affected in the immediate aftermath of the epidemic; at the same time, there would have been opportunities to develop in new directions if the local impetus was present. There were still widespread political upheavals, which affected both Pembrokeshire and Gwynedd, not all purely local events. The Welsh population of Gwynedd still demonstrated an independence of spirit and a wish to cut ties with England, culminating in the unsuccessful rebellion of Owain Glydŵr whilst the relative stability of Pembrokeshire was damaged by the same rebellion, affecting trade. Both areas were also much affected by the Wars of the Roses in the late 15th century.

7.4 (1) Pembrokeshire

Sources referring to sheep and wool are limited in the 15th century, but do point to some important changes in the local economies of the two regions. In Pembrokeshire, textile manufacture seems to have been in decline, as records of fulling mills appear to show a reduction in their numbers. The relatively flat topography and slow running rivers were not ideal for water-driven mills; it was to north Wales that the majority of production of textiles eventually moved. The great monastic estates were gradually delegating responsibility for working their lands to tenant farmers, leasing out large most of their agricultural holdings. The dissolution of the monasteries in the 16th century completed this process of releasing land into the hands of other landlords. Sheep and wool virtually vanish from sight in extant records for both Pembrokeshire and Gwynedd until the 16th century.

The nature of evidence showing the impact of sheep farming on the economy has changed radically by the 16th century. Yeoman farmers in control of their own land

become more visible, adding much needed depth to evidence from the great estate landlords, particularly in Pembrokeshire. One such was landlord was George Owen, a prominent northern Pembrokeshire landowner and antiquarian, who recorded agricultural practice both on his own estates in Cemais, and further afield. His accounts are an invaluable source, detailing his methods of increasing the economic worth of the farms through good practice and a close eye on the money. He did possess the main wool-producing sheep, the wether. However, the thesis demonstrates that there is no impression given of any attempts to improve his sheep for wool or milk production. He extols the virtue of renting sheep rather than owning them, not the viewpoint of someone using breeding to improve stock on a long-term basis. In southern Pembrokeshire, however, records show that Sir John Perrot seems to be making every attempt to improve his stock, using different 'breeds' and buying in expensive rams. He was well aware that Welsh breeds of sheep were reckoned to be inferior and that, to improve the stock and therefore the wool, certain changes in strategic planning within the farming enterprise were necessary. There are overtones, within the flocks of his Carew estates, of the typical 13th century Anglo/Norman inter-manorial co-operation. One could surmise that this difference in attitude was a product of a different attitude to farming in the English dominated southern part of Pembrokeshire compared to the northern part with stronger Welsh connections, but without further records to back this up, it remains an intriguing possibility only. Whatever the reason, Sir John Perrot was an example to others of his time.

Sheep were also very visible in the livestock owned by the small-scale landowner as seen in probate records of the late 16th and early 17th centuries. However, when these records are compared to similar records taken from English livestock owners, the relative numbers of sheep were lower. Sheep flocks in the general population seem to have been generally smaller than those from England, even in southern Pembrokeshire. The quality of those flocks also seems to have inferior as seen in the general valuations given to those sheep in the probate records. This may have been a construct of the probate process, but is likely to have had resonance with the

actual state of those flocks. Even so, prices fetched in two fairs in northern Pembrokeshire were generally higher than most of those taken from probate records.

The records of George Owen show that wool was being produced in greater and greater quantities in Pembrokeshire. Port records show that wool exports can again be seen travelling through the ports of Pembrokeshire in relatively large amounts, to fuel the production of textiles in England and elsewhere, and these exports increase markedly towards the end of the 16th century. The textile industry in Pembrokeshire seems to have collapsed by this time, being helped on its way by disease which ravaged the towns, the final straw in a process that had begun when fulling became easier in the north of the country. As well as being exported through the ports, wool was also sold through markets and fairs in the towns, and, increasingly, through the auspices of wool buyers who contacted producers directly, so circumventing the system of taxation that was in place when selling through those organised markets. Much of this non-market wool seems to have gone to the north.

Pembrokeshire therefore still had sheep as a large part of its agricultural economy, and wool was a very important aspect of this trade in terms of quantity. The quality of this wool was, however, not of the highest and most farmers seemed to lack the will, ability or foresight to try to improve this situation. Apart from a small amount of local use, Pembrokeshire was relegated to supplying the raw materials for an expanding textile industry in other parts of Britain, without being able to utilise those materials itself. It had ceased to be innovative in this respect.

7.4 (2) Gwynedd

Sixteenth-century Gwynedd, on the other hand, was showing signs of new attitudes in agriculture and the economy. Morus Wyn of Gwydir owned a number of farms, the accounts of which are a valuable and significant source that make interesting reading and provide an exceptional insight into the organisation of 16th century Welsh agriculture. They are the only set of records available from either of the two regions that show farming year-on-year, in this case for a three-year period. What they provide is evidence of an outlook not unlike that of George Owen – great attention to detail, but, again, no indication that breed improvement was a priority. These farms are mainly

found on upland areas, areas not known historically for sheep-keeping. Sheep feature to a significant degree on these farms, in itself is a noteworthy change from the situation seen in earlier centuries. Between the 14th and 16th centuries farmers in the uplands seem to have changed their priorities.

The sheep were bred and kept within the system. They were moved about from farm to farm, but only as a method of keeping the balance within a particular agricultural unit. Very few sheep came in from outside, and they tended to be replacements for leased sheep that had died during their period away from the farms. However, the analysis of the accounts shows that, on the whole, the percentage of sheep were rising when taking the livestock enterprise as a whole. Evidence from the accounts has also been used in this thesis to highlight expected lambing rates and the presence of diseases affecting lambing. There is no indication of any attempt towards flock improvement through the addition of sheep from the outside. These farms were very self-sufficient. The one significant change that is visible through these farm accounts is seen in the attitude of the farm managers towards wethers, the prime wool producing sheep. For the first two years of the accounts most wethers were sold out of the system, probably for meat; the third year sees those wethers being retained, and this can only be because of their wool. Later sources suggest that the Wyns of the early 17th century were becoming interested in using the wool locally, of which there did not seem to be a shortage, by setting up a group of weavers based on the estate. Nothing seems to have come of this enterprise, however.

It is not altogether clear to what extent the Gwydir accounts show farms typical of Gwynedd. Certainly the agricultural antecedents of the Lleyn peninsula and Anglesey point to a greater realisation of the value of sheep to the economy. That the Gwydir estate showed a significant reliance on sheep in conjunction with cattle suggests that this was not an isolated occurrence. Likewise, the lack of probate records for the late 16th and early 17th centuries in Gwynedd do not allow for the attitudes of the small-scale farmer to be clarified, but the increasing presence of an increasingly active textile industry would suggest that some at least were able to supply the basic materials.

Textile production increased in Gwynedd throughout the 15th and 16th centuries, but was largely un-organised and home-based. Its position in the west of the country, where communications were difficult owing to the mountainous terrain, and its distance from larger markets further east, placed great obstacles in the way of success. Even so, Meirionydd did manage to become the second largest textile-manufacturing centre in Wales in the 16th century. However, the quality of the cloth was not of the best and it was ill-thought of. Imports into the Gwynedd ports show the presence of quantities of dyestuffs and mordants for treating cloth, but very little export of cloth or wool. The rise in interest in the wether and the manufacture of cloth probably went hand in hand. However, it is probable that much of the production was for domestic consumption, rather than export, at a time when the major export from England was in finished cloth.

7.5 Conclusion

The overall picture presented in this thesis, then, is of a country that seemed to be following trends in agricultural economy, never setting those trends. The thesis has demonstrated that, initially, Pembrokeshire seems to have tried to orientate itself towards the successful English economy, and to take advantage of the wool-based export market of England. Gwynedd was following its own individual economic pathways, which were well suited to the region with its difficult terrain and poor communication links. Therefore, a distinct difference in the approaches to agriculture can be seen between Pembrokeshire and Gwynedd in the early period up to the end of the 14th century. This was a situation that would probably have been manifest to some degree in those areas of Wales where there was Norman or English as opposed to Welsh control, coupled with extensive immigration to aid an infusion of different ideas and perspectives on agriculture. During the medieval period the presence of sheep in large numbers and a significant production of wool is a pointer to this outside influence, whatever its source. In southern Pembrokeshire this process of change from local Welsh agrarian practice was aided by the relative depopulation of southern Pembrokeshire prior to the Norman invasion. This allowed a significant penetration of agricultural ideas and practice from both England and Flanders at an early stage in the settlement process. Much of northern Pembrokeshire was heavily influenced by the presence of

extensive estates owned by the See of St David's. Although these estates had many Welsh tenants, the widespread demesne was run following manorial practices similar to those in England, with an agrarian bias towards that of England. Sheep therefore played a significant part in the agricultural economy of most of Pembrokeshire from early settlement. Anglicisation of the countryside was advancing; Welsh influence on agriculture was in retreat.

Throughout the thesis it has been shown that the situation in Gwynedd was completely different. Gwynedd managed to retain a relatively independent status up until the end of the 13th century, and with that independence it retained self-determination in political, social and economic matters. Cattle were the mainstay of the agricultural economy here. They played a very important role throughout this region, sometimes to the exclusion of other livestock. Where sheep were found, they were relatively few in number, and wool was a certainly not significant element in the economic hierarchy. Even though sheep did gradually gain in economic value, they did not begin to approach the influence that they had in Anglicised regions. The Welsh were following their own paths to economic success. This began to change after the conquest of Wales by Edward I. New settlement and fresh immigration were bound, eventually, to alter local traditions, although the local populace resisted the imposition foreign governance as long as they could, a measure of their independent character. Welsh agricultural practice would be hard to change in this region, but slowly it did begin to absorb outside influences. The process was, however, going to be relatively slow.

Ecclesiastical settlement outside the diocesan structure also influenced agriculture, and but even these settlements were not entirely independent of the local political situation. The Cistercians were renowned for their agriculture and were well known for the quality and volume of wool that they had to trade. They did seem to follow their own precepts wherever they settled, and set up distinctive agricultural holdings, which supported large numbers of sheep and cattle. Although their lay labourers were often drawn from the local population, the Cistercians still followed the practices to be found throughout the rest of Britain and the continent. It is likely that their influence did eventually percolate into surrounding areas to some extent. In

Pembrokeshire other monastic organisations, such as the Tironians and the Knights Hospitallers took advantage of the local wool production and set up fulling mills to encourage the processing of local cloth. These early mills were a manifestation of the direction of the local agricultural economy in Pembrokeshire. However, one factor would to prove to be distinctly disadvantageous to the fledgling wool-producing industry of Pembrokeshire. The relatively poor quality of wool produced would eventually become a serious drawback to the success of the venture, and would hold back the development of a successful wool-based industry.

By the 15th and 16th centuries, the initial dichotomy in agricultural practice and livestock preferences had become somewhat blurred. By the 16th century, even those farmers from areas with distinctly Welsh antecedents were keeping sheep as a matter of course. Gwynedd was distinctly Welsh in the early period, with sheep coming low down in the economy of estates, as well as that of the small farmer. This did not change greatly until the 15th and 16th centuries, and even then it was probably in response to a burgeoning cloth-manufacturing industry. In Pembrokeshire sheep were initially, and continued to be, a very important part of the economy. However, circumstances led to the textile industry dying out, leaving the area dependant on the production and trading of wool alone. Neither of the two areas were able, at any time, to grasp fully the scope of the rewards that could have been available. The same could also be said of much of the rest of Wales.

Sixteenth-century farmers throughout Wales were now in a position to take control of their own farming practices, and to try to govern their own future prosperity at a local level through taking advantage of market trends. But Wales as a whole would always have been at a disadvantage in trying to gain economic success through the farming of sheep and the production of wool. The initial political divide, with a local Welsh economy based on entirely different parameters, the poor quality of the majority of its wool, and the necessity to shift the agricultural practices of the majority of its citizens away from the practices of generations would all play a part in frustrating that goal. The fact that the majority of Wales was difficult to access would also play a significant part.

It can therefore be demonstrated that the study of the place of sheep within the agriculture of two distinct Welsh regions can be used as a proxy of the development of the agricultural economy of Wales as a whole. The presence of distinct groups of immigrants did significantly affect the local economy of an area, but only if the local Welsh society was submerged and subsumed into the newer structures. The longer Welsh tradition and social cohesion held out against the incomers, the slower the diffusion of different agricultural ideas would be. The thesis has also shown that even the relative success of the Pembrokeshire economy could not be sustained, with the poor quality of wool and the advances in the technology of cloth production that were better suited to the environment of north Wales. It highlights the conclusion that, once Wales went down the route of trying to emulate an English system that had profitably developed from an agriculture heavily involved with sheep, and away from its own economic roots, it would always be in the position of trying to catch up with trends in the largely successful economy of England, its much larger neighbour.

Appendix A

Details of stock shown in a sample of Pembrokeshire wills and inventories as tabulated by Howells[1], and from the probate records in date order of the See of St David's held at the National Library of Wales in Aberystwyth[2].

i) Manorbier Griffith Philip 1602

Stock	Nos	Value	Avg	Land	Value
Sheep	16	£1 6s 0d	1s 7d	10 acres	£1 8s 0d
Horses	3	£3 0s 0d	£1 0s 0d	(sown)	(crop)
Cattle	11	£8 0s 0d	14s 6d		
Pigs	5	10s	2s		

ii) Lamphey Lewis Povner 1603

Stock	Nos	Value	Avg	Land	Value
Sheep	70	£7 5s 0d	2s 1d	12.5 acres	£12 10s 0d
Horses	5	£3 6s 8d	12s 1d	(sown)	(crop)
Cattle	13	£7 2s 0d	10s 11d		
Pigs	9	£1 0s 0d	2s 2½d		

iii) Pembroke St Mary Richard Frover 1603 Husbandman

Stock	Nos	Value	Avg	Land	Value
Sheep	52	£4 0s 0d	1s 6d	10.5 acres	£7 18s 0d
Horses	3	£2 0s 0d	13s 3½d	(sown)	(crop)
Oxen	2	£2 13s 4d	£1 6s 8d		
Cattle	6	£3 5s 4d	10s 11d		
Pigs	11	11s	1s		

iv) St Florence John Gibbon 1605

Stock	Nos	Value	Avg	Land	Value
Sheep	68	£3 9s 0d	1s	19.5 acres	£7 3s 8d
Horses	5	£3 6s 8d	13s 3½d	(sown)	(crop)
Oxen	2	£4 0s 0d	£2 0s 0d		
Cattle	27	£15 15s 4d	11s 8½		
Pigs	11	11s	1s		

v) Warren Joan Codd 1601

Stock	Nos	Value	Avg	Land	Value
Sheep + Lambs	40 + 20	£3 0s 0d			
Horses	3	40s	13s 4d		
Oxen	2	£4 0s 0d	£2 0s 0d		
Kine	4	£2 13s 8d	13s 4d		
Steers (2 yr)	1	13s 4d	1s		
Heifers	4	26s 8d	6s 8d		

vi) Bosherston Johns Reliffe 1600

Stock	Nos	Value	Avg	Land	Value
Sheep	150	£12 10s 0d	1s 8d		
Lambs	28	£2 0s0d	1s 5¼d		
Kine	10	£6 13s 8d	13s 5d		
Steers	3				
Bull	1				
Bullocks	7	£2 6s 8d	6s 7d		
Calves	5	15s 0d	3s 0d		
Assorted Horses		£2 5s 0d			

vii) Castlemartin David Roger 1582

Stock	Nos	Value	Avg	Land	Value
Sheep	4				
Cattle	4	£3 4s 0d	16s 0d		
Steers	1				

[1] Howells, B, 1955, pp 248-9

[2] NLW St David's Probate Index, 1556-1699

viii) Pembroke Harry Browne 1603

Stock	Nos	Value	Avg	Land	Value
Sheep	43	£4 0s 0d			
Lambs	23	incl above			
Horses	3	£3 0s 0d	£1 0s 0d		
Kine + Heifers	2 + 2	£3 0s 0d			
Bullocks (2yr)	1	10s 0d			
Bullocks (1yr)	2	10s 0d	5s 0d		
Hogs (pigs?)	2	2s 0d	1s 0d		

ix) Dale John White 1602 Yeoman

Stock	Nos	Value	Avg	Crop	Value
Sheep	60	£4 10s 0d	15s 0d	2 acres Wheat	13s 4d
Mares + (colt)	2 (1)	£2 0s 0d		Barley + Oats	£4 0s 0d
Heifers	2	£1 0s 0d	10s 0d		
Steer + Bull	1 + 1	£1 0s 0d	10s 0d		
Goats	4	6s 0d	1s 6d		

x) Castlemartin Elizabeth Greene 1602

Stock	Nos	Value	Avg	Land	Value
Kine	3	£3 0s 0d	£1 0s 0d		
Heifers	5	£2 10s 0d	10s 0d		
Horses	2	£1 6s 8d	13s 4d		

xi) Clarebeston Griffith Robin 1604 Husbandman

Stock	Nos	Value	Avg	Land	Value
Sheep	80	£8 0s 0d	2s 0d	9.25 acres	£4 6s 0d
Horses	5	£2 10s 0d	10s 0d	(sown)	(crop)
Oxen	1	£1 0s 0d			
Cattle	19	£11 18s 8d	12s 8d		
Pigs	5	5s 0d	1s 0d		

xii) Mathry Philip John 1600

Stock	Nos	Value	Avg	Land	Value
Sheep	14	£1 11s 0d		7 acres	
Lambs	3	Value incl above		(sown)	

xiii) Bletherston Marie Evnon 1606 Widow

Stock	Nos	Value	Avg	Land	Value
Sheep	46	£5 0s 0d	2s 2¼d	4.9 acres	£4 6s 0d
Horses	1	£1 0s 0d		(sown)	(crop)
Cattle	12	£6 5s 4d	10s 5d		

xiv) Talbenny Robert Roche 1601 Husbandman

Stock	Nos	Value	Avg	Land	Value
Sheep	6	10s 0d	1s 8d		£1 10s 0d
Horses	2	£1 6s 8d	13s 4d		(crop)
Cattle	2	£1 6s 8d	13s 4d		
Pigs	2	2s 6d	1s 3d		

xv) Camros Howell ap Rees 1600

Stock	Nos	Value	Avg	Land	Value
Sheep	24	£2 8s 0d	1s 0d		
Lambs	6	6s 0d	1s 0d		
Horses (working)	2	10s? 0d	5s 0d		
Horses	6	£2 0s 0d	6s 8d		
Cattle	4	£4 0s 0d	£1 0s 0d		
Steers	4	£2 0s 0d	10s 0d		
Pigs	6	8s 6d	1s 5d		

xvi) Martltwy Morgan Picton 1604

Stock	Nos	Value	Avg	Land	Value
Sheep	80	£4 10s 0d	1s 1½d		£14 15s 0d
Horses	9	£7 0s 0d	15s 8d		(crop)
Cattle	35	£20 14s 0d	11s 9½d		
Pigs	15	£1 0s 0d	1s 4d		

xvii) Bletherston Anne Rees 1603

Stock	Nos	Value	Avg	Land	Value
Sheep	23	£2 8s 0d	1s 7d		
Lambs	5	1s 8d	4d		

xviii) Treffgarne John Griffith 1603 Clerk

Stock	Nos	Value	Avg	Land	Value
Sheep	90	£7 10s 0d	1s 8½d	6 acres	
Horses	6	£2 13s 4d	8s 11d	(sown)	
Oxen	2	£2 0s 0d	£1 0s 0d		
Cattle	18	£9 19s 8d	11s 1d		
Pigs	8	8s 0d	1s 0d		

xix) Lampeter Velfrey David Lewis Roberts 1610

Stock	Nos	Value	Avg	Land	Value
Sheep	156	£17 0s 0d	2s 2½d	33.5 acres	£39 1s 6d
Horses	11	£15 0s 0d	£1 7s 4d	(sown)	(crop)
Oxen	12	£20 0s 0d	£1 13s 4d		
Cattle	57	£55 1s 4d	19s 4d		
Pigs	13	£1 2s 0d	1s 8½d		

xx) St David's Lewis John ap Ievan 1605

Stock	Nos	Value	Avg	Land	Value
Sheep	103	£4 13s 0d	11d	13.5 acres	£5 7s 0d
Horses	5	£2 0s 0d	8s 0d	(sown)	(crop)
Oxen	5	£1 9s 0d	5s 9½d		
Cattle	5	£1 18s 0d	7s 8d		
Pigs	3	2s 0d	8d		

xxi) Letterston John David Philip Henry 1605 Husbansman

Stock	Nos	Value	Avg	Land	Value
Sheep	150	£13 10s 0d	1s 9½d	12.25 acres	£8 16s 6d
Horses	12	£6 10s 0d	10s 9½d	(sown)	(crop)
Oxen	3	£3 0s 0d	£1 0s 0d		
Cattle	16	£9 6s 8d	11s 8½d		
Pigs	3	3s 4d	1s 1¼d		

xxii) Mathry David Rees 1602

Stock	Nos	Value	Avg	Land	Value
Sheep	200	£20 0s 0d	2s 0d		
Horses	5	£4 11s 4d	18s 3d		
Oxen	8	£10 13s 4d	£1 6s 8d		
Cattle	15	£15 0s 0d	£1 0s 0d		
Steers	3	15s 0d	5s 0d		
Pigs (incl 3 Hogs)	10	12s 10d	1s 3½		

xxiii) Letterston David Thomas Kronne 1602

Stock	Nos	Value	Avg	Land	Value
Sheep + lambs	13	£1 3s 0d			
Horses	1	16s 8d			

xxiv) Nevern David Thomas ap Ieuan 1609

Stock	Nos	Value	Avg	Land	Value
Sheep	80	£9 6s 8d	2s 4d		
Horses	2	£1 6s 4d	13s 2d		
Oxen	2	£2 10s 0d	£1 5s 0d		
Cattle	4	£2 10s 0d	12s 6d		

xxv) Moylgrove Owen Gwyn 1610 Gent

Stock	Nos	Value	Avg	Land	Value
Sheep	82	£7 10s 8d	1s 9½d		£7 0s 0d
Horses	5	£3 10s 0d	14s 0d		(crop)
Oxen	2	£2 0s 0d	£1 0s 0d		
Cattle	4	£3 6s 8d	16s 8d		
Pigs	5	2s 6d	6d		

xxvi) Cledy David Thomas ap Ieuan 1605

Stock	Nos	Value	Avg	Land	Value
Sheep	135	£16 10s 0d	2s 4¾d		£21 10s 0d
Horses	6	£5 13s 4d	18s 11d		(crop)
Cattle	18	£16 10s 0d	18s 4d		

xxvii) Bridell William ap Richard 1611

Stock	Nos	Value	Avg	Land	Value
Sheep	38	£3 9s 4d	1s 9½d		£4 0s 0d
Horses	4	£3 3s 4d	15s 11d		(crop)
Oxen	2	£1 13s 4d	16s 8d		
Cattle	5	£3 17 8	15s 6d		

xxviii) Boulston Richard Adye 1582 Yeoman

Stock	Nos	Value	Avg	Land	Value
Sheep	200	£10 0s 0d	1s 0d		
Lambs	52	£1 10s 0d	8d		
Mares + Colt	2 + 1	£2 2s 8d			
Geese + Ducks	22 + 6	4s 0d			
Pigs	7	7s 0d	1s 0d		
Kine	13	Inventory			
Calves	4	damaged			
Steers	6				
Heifers	4				
Horses	4				

xxix) Ambleston David Symmins 1602

Stock	Nos	Value	Avg	Land	Value
Sheep + Lambs	31	£3 0s 0d			£12 10s od
Sheep + Lambs	27	10s?			(crops)
Horses	4	£3 0s 0d	15s 0d		£2 0s 0d
Kine	10	£12 0s 0d	£1 4s 0d		(crops)
Oxen	7	£6-0s 0d	17s 1¾d		
Calves	3	6s 0d	2s 0d		
Mares	2	£1 0s 0d	10s 0d		
Colts	4	£1 0s 0d	5s 0d		
Sheep	220	£12 0s 0d	1s 1d		

xxx) Jeffreston David Roger 1591

Stock	Nos	Value	Avg	Land	Value
Sheep	30	£1 12s 0d	1s 1¼d		
Lambs	11	4s 0d	4½d		
Heifers	2	£1 10s 0d			
Bulls	2	icl with above			
Steers	2				
Yearlings	2				
Heifers (3yr)	4				
Bull	1				

xxxi) Penally Richard Cole 1594

Stock	Nos	Value	Avg	Land	Value
Kine	6	£2 6s 10d	2s 4¾d		
Heifers (1yr)	3	incl with above	18s 11d		
Horses	4	£2 0s 0d	10s 0d		
Pigs	13	13s 0d	1s 0d		

xxxii) Carew John Thomas 1603

Stock	Nos	Value	Avg	Land	Value
Cows	1	£1 6s 8d			£2 10s 0d
Heifers	1	incl with above			(corn)
Horses	2	£1 0s 0d	10s 0d		
Calves	2	11s 8d	5s 9d		

xxxiii) Begelli Thomas Botterell 1601

Stock	Nos	Value	Avg	Crop	Value
Sheep	15	£1 6s 8d	1s 7¾d	2 acres Wheat	£1 6s 8d
Lambs	9	9s 0d	1s 0d	10.5 acres Barley	£2 0s 0d
Steers	2	£1 6s 8d	8s 4d	0.5 acres Rye?	10s 0d
Kine	3	6s 8d	£1 0s 0d	Oats	£1 0s 0d
Horses	2	£1 10s 0d	15s 0d		
Pigs	4	4s 0d	1s 0d		

xxxiv) Hubberston Phillip Allen 1602

Stock	Nos	Value	Avg	Land	Value
Sheep	33	£3 0s 0d	1s 9¾d		
Kine (+Bull)	6 (1)	£4 13s 4d			
Horses	2	13s 4d	6s 8d		
Oxen	5	£6 0s 0d	£1 4s 0d		

xxxv) Rhoscrowther Richard Macken 1602

Stock	Nos	Value	Avg	Crop	Value
Sheep + Lambs	14 +(5)	£1 10s 0d		Wheat	
Oxens	2	£2 4s 0d	£1 2s 0d	Barley	
Bullocks	2	12s 0d	6s 0d	Peas	
Kine	4	£2 8s 0d	12s 0d	Oats	
Horses (+Colt)	2 +(1)	£1 0s 0d			

xxxvi) Llanstadwell John Crowther 1602

Stock	Nos	Value	Avg	Crops	Value
Sheep	30	£2 0s 0d	1s 4d	2 acres Wheat	£1 0s 0d
Heifers	2	£1 0s 0d	10s 0d	3 acres Oats	£1 0s 0d
Horses	1	£1 0s 0d			
Kine	2	£1 10s 0d	15s 0d		

xxxvii) Haroldston West Watkin Ferfote 1600

Stock	Nos	Value	Avg	Crops	Value
Sheep	15	£1 10s 0d	2s 0d		
Horses	2	£2 0s 0d	£1 0s 0d		
Pigs	2	5s 0d	2s 6d		

xxxviii) Pembroke William Dallen 1601

Stock	Nos	Value	Avg	Crops	Value
Sheep	1	1s 8d		2 acres Wheat	£1 0s 0d
Steesr	1	6s 8d		2 acres Barley	14s 0d
Horses + Colts	1 + 1	13s 4d		3 acres Oats	15s 0d
				1 stang Rye	2s 6d
				1 stang Peas	1s 8d

xxxix) Neverne Mathias Mendus 1602

Stock	Nos	Value	Avg	Land	Value
Sheep	60	£6 0s 0d	2s 0d		
Lambs	21	£1 0s 0d	11½d		
Sheep	42	£4 0s 0d	1s 10¾d		
Lambs	28	£1 8s 0d	1s 0d		
Sheep	70	£7 5s 0d	2s 0¾d		
Lambs	40	£2 2s 0d	1s 0½d		
Sheep	42	£4 0s 0d	1s 10¾d		
Lambs	42	£2 0s 0d	11½		
Kine + (Bull)	9 + (1)	£10 0s 0d			
Heifers (4 yrs)	2	£1 4s 0d	12s 0d		
Heifers (8? yrs)	1	13s 4d			
Heifers (2 yrs)	2	£1 0s 0d	10s 0d		
Heifers (1 yr)	4	£1 0s 0d	5s 0d		

xl) Begelly David Jenkin 1601

Stock	Nos	Value	Avg	Crops	Value
Cows + Bullocks	1 + 1	£1 6s 8d		1 acre Oats	
Mares + Colt	2 + 1	£1 0s 0d			
Pigs	1	1s 0d	2s 6d		

xli) St Ishmaels Laurence Brown 1601 Husbandman

Stock	Nos	Value	Avg	Goods	Value
Sheep	65	£6 10s 0d	2s 0d	1.5 stone Wool	£1 0s 0d
Lambs	22	£1 13s 0d	1s 6d	20 yds Woolen Cloth	£1 0s 0d
Kine	7?	£7 0s 0d	£1 0s 0d		
Oxen	3	£3 0s 0d	£1 0s 0d		
Steers	8	£4 0s 0d	10s 0d		
Steers	3	£1 10s 0d	10s 0d		
Bulls (small)	1	10s 0d			
Calves	4	£1 0s 0d	5s 0d		

xlii) Pembroke William Chever 1601

Stock	Nos	Value	Avg	Crops	Value
Cows	1	18s 0d			
Pigs	2	3s 4d	1s 8d		

xliii) St Elvis Lewis Storke 1601

Stock	Nos	Value	Avg	Crops	Value
Sheep	26	£2 3s 4d	1s 8d		
Kine	2	£4 0s 0d			
Steers	2	incl above			
Horses	2	incl above			

xliv) Uzmaston Lewis Gibbon 1601

Stock	Nos	Value	Avg	Crops	Value
Sheep	16	£1 1s 4d	1s 4d	3 acres Wheat	£3 0s 0d
Kine	1	£1 0s 0d		2 acres Barley	£1 0s 0d
Steers + Heifers	3	£1 0s 0d	6s 8d	3 aces Oats	£1 0s 0d
Horses	3	£2 0s 0d	13s 4d		
Geese	8	8s 0d	1s 0d		

xlv) Newton Elizabeth Powell 1601

Stock	Nos	Value	Avg	Crops	Value
Sheep	6	12s 0d	1s 0d		
Heifers	2	£1 6s 8d	13s 4d		
Horses	1	12s 4d	1s 8d		

xlvi) Gumfreston Robert Hems alias Moris 1601

Stock	Nos	Value	Avg	Crops	Value
Sheep	30	£2 0s 0d	1s 4d		
Lambs	10	8s 0d	9½d		
Kine + Bull	7 + 1	£6 0s 0d			
Calves	4	9s 0d	2s 6d		
Geese	4	12d	3d		

xlvii) Walwyn's Castle Peter Cheare 1601

Stock	Nos	Value	Avg	Crops	Value
Sheep + Lambs	44 + 20	£8 15s 0d			
Sheep	44	£7 0s 0d	3s 2¼d		
Young Sheep	?	£3 13s 4d			
Kine + Bull	8 + 1	£14 5s 0d			
Kine	?	£9 15s 0d			
Kine	5	£3 15s 0d	15s 0d		

xlviii) New Moat David Griffith 1602

Stock	Nos	Value	Avg	Goods	Value
Sheep	(farm)	£5 6s 6d			
Sheep	4	10s 0d	2s 0d		
Lambs	20	£1 0s 0d	1s 0d		
Kine	6	£2 0s 0d	6s 8d		
Heifers?	4?	10s 0d?			
Heifer	1	5s 0d			
Heifers (1 yr)	1	3s 8d			
Steers	2	13s 4d	6s 8d		
Steers (1yr)	4	6s 8d	2s 8d		
Mares + Foals	2	£1 0s 0d			

xlix) St Davids Owen Williams 1601

Stock	Nos	Value	Avg	Crops	Value
Sheep	7	11s 8d	1s 6½d	2 bushells Barley	6s 0d
Lambs	3	3s 0d	1s 0d		
Heifers (3 yr)	1	14s 0d			
Heifer (2 yr)	1	8s 0d			

l) Llanstadwell John Crowther 1602

Stock	Nos	Value	Avg	Crops	Value
Sheep	30	£2 0s 0d	1s 4d		
Kine	2	£1 10s 0d	15s 0d		

li) Robeston Steven Thomas 1601

Stock	Nos	Value	Avg	Crops	Value
Sheep (2 yr)	50	(rented out)			
Sheep	80	(rented out)			
Sheep	?	(rented out)			
Goats	4	(rented out)			
Oxen	2	(rented out)			
Kine	2	(rented out)			
Great Horse	1	(rented out)			

lii) Henllan, Rhoscrowther Griffith White 1590[3]

Stock	Nos	Value	Avg	Crops	Value
Sheep	1100	£110 0s 0d	1s 0d	24 acres	
Kine	96	£100 0s 0d	£1 0s 9½d		
Bulls	7	£7 0s 0d	£1 0s 0d		
Oxen	36	£72 0s 0d	£2 0s 0d		
Heifers + Steers	53	£35 0s 0d	13s 2½d		
Calves	24	£2 8s 0d	1s 4d		
Pigs	36	£6 12s 0d	3s 8d		
Work Horses	9	£9 0s 0d	£1 0s 0d		
Mares	4	£4 0s 0d	£1 0s 0d		
Colts + Young Horses	4	£4 0s 0d	£1 0s 0d		

liii) St David's Richard Edwards 1600 Chancellor of St David's Cathedral Church

Stock	Nos	Value	Avg	Crops	Value
Oxen	5	£10 0s 0d	£2 0s 0d		
Heifers	4	£1 3s 8d	5s 11d		
Kine + Bull	19 + 1	£18 0s 0d			
Assorted Horses		£7 0s 0d			

liv) Camrose John Summer 1603

Stock	Nos	Value	Avg	Crops	Value
Sheep + Lambs	8 + 4	£1 0s 0d			
Horses	2	£1 0s 0d	10s 0d		

lv) Henry White 1613[4]

Stock	Nos	Value	Avg	Crops	Value
Sheep + Lambs	800	£50 0s 0d			
Kine	50	£60 0s 0d	£1 4s 0d		
Bulls	4	£4 0s 0d	£1 0s 0d		
Oxen	25	£40 0s 0d	£1 12s 0d		
Heifers + Steers	46	£23 0s 0d	10s 0d		
Calves	20	£3 0s 0d	3s 0d		
Pigs	20	£2 0s 0d	2s 0d		

lvi) Narberth John Vaughan 1582

Stock	Nos	Value	Avg	Crops	Value
Sheep					
Lambs					
Kyne	2				
Bullocks	2				
Heifers (2yr)					

lvii) Camrose Howell ap Rees 1600

Stock	Nos	Value	Avg	Crops	Value
Sheep	24	£1 4s 0d	2s 0d		
Lambs	6	6s 0d	1s 0d		
Kyne + Oxen	3 + 1	£4 0s 0d			
Steers (2yr)	4	£2 0s 0d	10s 0d		
Horses (working)	2	10s 0d	5s 0d		
Horses + Mares	5 + 1	£2 8s 0d			
Pigs + Hogs	5 + 1	8s 6d			

lviii) Cosheston Richard Roblyn 1600

Stock	Nos	Value	Avg	Crops	Value
Sows + young Pigs	1 + 4	5s 0d		Wheat, Rye	
				Barley, Oats	

[3] Jones, F, 1974, p 66
[4] Jones, F, 1974, p 71

Appendix B

Taken from Aberffrau Lay Subsidy Roll (Seebohm, F, 1895, Appendix Af)

Owner	Sheep	Horses	Oxen	Cows	Mares	*Averia*	Value	Crops
1	20	5	20	18		8	£10 6s 4d	£6 18s 0d
2	23	6	3	9		5	£4 12s 6d	£2 4s 10d
3				3			14s 6d	2s 0d
4		1	3	4			£1 13s 4d	6s 6d
5	12	3	3	3		2	£2 10s 0d	17s 0d
6			1	2	1	2	£1 1s 2d	8s 6d
7		1	2	2			£1 1s 8d	7s 3d
8		2	1				15s 0d	5s 3d
9	15	6	16	15		12	£11 6s 6d	£6 6s 0d
10	5		3	4	1	1	£1 17s 0d	8s 6d
11			1	2	1	2	£1 0s 8d	2s 0d
12		3	2	5			£2 5s 8d	18s 4d
13			1	3	1		£1 0s 0d	7s 3d
14	9		1	4	1	3	£1 13s 10d	8s 6d
15	6	1	2	4			£1 11s 10d	17s 0d
16				5			16s 8d	
17	14	2	6	5		3	£3 11s 8d	£2 15s 0d
18			2	2	1		£1 1s 8d	5s 3d
19		1	1	1		2	17s 4d	6s 6d
20	7	2	4	4		3	£2 11s 4d	£1 15s 6d
21				4		3	19s 10d	6s 6d
22		1		2		2	15s 8d	5s 0d
23	12	1	1	4			£1 9s 4d	6s 6d
24				4	2	1	£1 0s 4d	3s 0d
25	14		1	4	1		£1 11s 4d	4s 6d
26	13	3	1	2		2	£1 18s 2d	9s 3d
27	2			3	2	4	£1 10s 0d	6s 9d
28	3		1		1	4	19s 6d	8s 6d
29	15	2	1	5		3	£2 5s 2d	8s 6d
30	23		1	5	1	3	£1 14s 2d	15s 6d
31				2	1	3	13s 8d	2s 6d
32				2	1	1	13s 8d	1s 3d
33	24		2	3	2	4	£2 9s 0d	12s 6d
34	30	2	2	5			£2 11s 8d	12s 6d
35	10	3	4	6		2	£3 4s 0d	2s 8d
36	10		2	2	1	3	£1 12s 8d	4s 0d
37		1		3			15s 0d	6s 0d
38	5		2	5	1		£1 13s 2d	9s 4d
39	9		2	8	3	1	£2 16s 2d	16s 4d
40	5			2		13	£1 15s 2d	3s 0d
41	46		1	5	2	1	£2 16s 8d	14s 10d
42	50	2	1	8			£3 6s 8d	12s 5d
43	20	1	3	4		2	£2 8s 4d	13s 10d
44	44		2	8	3	3	£3 19s 8d	11s 10d
45	20		2	5	1		£2 1s 8d	9s 3d
46	7			2		1	12s 8d	5s 7d
47	20		1	4		3	£1 14s 4d	8s 6d
48	40		1	4	1	2	£2 7s 4d	15s 4d
49	20			4	1	3	£1 14s 4d	9s 4d
50	20	2	2	3		3	£2 6s 0d	£1 1s 6d
51	4			2	1	3	19s 8d	6s 6d
52		1	2	1			18s 4d	
53	8			5		2	£1 4s 8d	2s 6d
54	5		2	2	1		£ 11s 6d	10s 6d
55	8		1	3		2	£1 3s 0d	5s 10d
56	25			4	1	3	£1 16s 10d	2s 6d
57	40	3	3	4		3	£3 10s 10d	£1 3s 8d
58	4	1	1	2			18s 8d	16s 3d
59	9	3	5	4		2	33 2s 10d	19s 8d
60			3	2	2		£1 11s 8d	11s 8d
61	40	4	1	4		3	£3 4s 4d	15s 2d
62		2		2			16s 8d	

63	6	1	3	2		3	£1 17s 2d	£1 2s 2d
64	5	3	6	7		4	£3 18s 10d	£1 6s 4d
65		1	1	2			16s 8d	2s 0d
66	10	2	3	3		1	£2 2s 0d	14s 2d
67	10			3		1	17s 0d	2s 6d
68				2	1	2	15s 8d	2s 0d
Total	**747**	**72**	**136**	**267**	**36**	**139**		

Appendix C

PRO Lay Subsidy 242/50 A Commote of Cafflogion, Lleyn, Caernarvonshire (Jones-Pierce, T, 1929)

1. Bottwnog (Villa Bottvwvnawc)

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Madoc vawr			3	2		£1 0s 0d	6s 8d
Merwyt			2	1		11s 8d	
Map Jevan	2	2	6	2	4	£2 11s 0d	15s 0d
Jevan ap David		1	2	1		16s 8d	4s 0d
Filii Symwen		2	2	1		£1 1s 8d	11s 4d
Jevan Goch		4	3	2		£2 0s 0d	15s 0d
Filia Ydem	3	1	3			16s 6d	4s 0d
Ada ap Evnion	6	1	6	1		£1 13s 0d	15s 0d
Jevan ap Evnion				1	2	10s 0d	2d
Madoc Uthyr		1	3	1		£1 0s 0d	6s 8d
Jevan Glof	6		3			13s 0d	
Philip ap Jevan				1	2	10s 0d	
Evnion Boly	4		3			12s 0d	
Total	**21**	**12**	**36**	**13**	**8**		

2. Carnguwch (Villa Cangwyc)

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Melyr	8	4	9	2		£3 4s 0d	£1 0s 0d
Joc' ap Ada	6	1	3			£1 1s 0d	4s 0d
Madoc ap Melyr	10	2	9	2	2	£3 0s 0d	10s 0d
Ioar ap Seysll		3	9	1		£2 10s 0d	£1 0s 0d
Jorwerth ap Madoc		1	3		2	£2 0s 0d	6s 4d
Jevan ap Jevan			1			3s 4d	1s 0d
Jevan ap Melyr	10	2	6	2	2	£2 10s 0d	10s 0d
David ap Kenric	8	2	3			£1 4s 0d	8s 0d
David ap Melyr		4	3		2	£1 14s 0d	10s 0d
David Varch	2		3	1		16s 0d	4s 0d
Jevan ap Gwyn		2	6		2	£1 15s 0d	10s 0d
Total	**44**	**21**	**55**	**8**	**10**		

3. Bodvel (Villa Botwael)

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Ada ap Madoc		3	6	1	2	£2 5s 0d	15s 0d
Ydei Duy		5	6	2	4	£3 5s 0d	10s 0d
Ydr Llovt			6	2	2	£1 15s 0d	5s 0d
Ada Goch			1	1		8s 4d	
Maredith ap Madoc		1		1		10s 0d	
Ypegor		5	9	1	4	£3 10s 0d	16s 0d
Gikvon			2			6s 8d	3s 4d
Jorwerth ap Howa					4	10s 0d	
Ymoeld			2			6s 8d	
Evnion Du			2	1		11s 8d	
Angharet filia Ada et filii sui		42	48	6	12	£21 4s 0d	£2 16s 0d
Ypengoc	10	2	6	1		£2 0s0d	10s 0d
Evnyn				1	2	10s 0d	
Ada ap Howel	2	5	6	1		£2 11s 0d	6s 4d
Ada ap Kenric	8		3	1		19s 0d	6s0d
David ap Jorwerth	6	1	6			£1 8s 0d	2s 4d
Cad' ap Gruffith	2		2	1		12s 8d	
Jorwerth ap Ycryp		3	6	2	4	£2 15s 0d	13s 0d
Gor' Wilim	2		2		1	10s 2d	
Uxor Pendew			1		2	8s 4d	1s 4d
Gwyn ap Cad'		3	3	2	2	£2 0s 0d	10s 0d
Total	**30**	**70**	**117**	**24**	**39**		

4. Penmaen (Villa Penmaen)

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Teg' ap Philip	4	2	6			£1 12s 0d	
Jorwerth Goch			1	1		8s 4d	2s 10d
David Llevn		1	1			8s 4d	3s 8d
Total	**4**	**3**	**8**	**1**	**0**		

5. Villa Penvberth

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Keynerch ap Ypalla	3		1	1		10s 0d	2s 2d
Ievan ap Jorwerth	10	4	9	2	2	£3 10s 0d	£1 12s 0d
Howa ap Jok'		1	3	1		£1 0s 0d	8s 0d
Jok' ap Ada	11	3	6	2	2	£2 15s 6d	19s 0d
Kenric ap Madoc							
Jevan ap Jevan	2	2	5	2	1	£1 13s 4d	11s 8d
uxor Madoc Goch			3		2	15s 0d	
Total	**36**	**11**	**31**	**10**	**7**		

6. Ystrad Geirch (Villa Nantkeyrch)

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Kenric ap Ygowny	4				2	7s 0d	4s 0d
Yparlla	5			1	2	12s 6d	
Madoc ap Ririt		1	3	1		£1 0s 0d	5s 0d
Yewa Gwyth		1	3	1	2	£1 4s 0d	6s 0d
Riris ap Car'	6	4	3	2	4	£2 13 0d	10s od
Ririt Goch		2	2			16s 8d	
Jevan ap Madoch	8	2	3	2		£1 14s 0d	10s 0d
Evnion Bach			3	1	2	£1 0s 0d	2s 0d
Pocvbret		3	6	2	2	£2 10s 0d	12s 0d
Kenric Vyr	10	5	12	2	2	£4 5s 0d	5s 0d
Jevan ap Ririt			3		2	15s 0d	5s 0d
Jorwerth ap Ygowni	7	2	3			£1 3s 6d	12s 8d
Madoc ap Ada	5		3	1		17s 6d	4s 2d
Cad' ap Jorwerth	10	4	6	3	4	£3 10s 0d	£1 10s 0d
Jevan ap Kenric	4		3		2	17s 0d	4s 0d
Ada Duy			3	1	2	£1 0s 0d	6s 0d
Jok' ap David			3		2	15s 0d	
Ywvr Duy	8	3	3		2	£1 14s 0d	14s 0d
Total	**67**	**27**	**62**	**17**	**30**		

7. Cae Hwsin (Villa Wystuvn)

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Evnion Llovt		4	6	2		£2 10s 0d	15s 0d
David ap Teg'	4	1	3	1		£1 2s 0d	8s 0d
Map Ycorpin	6	2	3		4	£1 13 0d	£1 12s 0d
Gwvn ap Kenric		4	9	3	4	£3 15s 0d	£1 7s 0d
David ap Kenric			3	1		15s 0d	
Jevan Pvn			2	1	1	13s 8d	
Evnion Penwraf	3		3	1		16s 6d	4s 4d
David ap Gwvn	6	2	3		4	£1 13s 0d	
Llewelyn ap Yrig		1	3	1		£1 0s 0d	8s 0d
Jorwerth ap Yrig	6	1	6			£1 8s 0d	8s 0d
Total	**25**	**15**	**41**	**10**	**13**		

8. Llan Dinwael (Villa Llwyndvnwal)

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Cad' Goch			3	1	2	£1 0s 0d	7s 0d
Jevan ap Jorwerth		2	6	1		£1 15s 0d	12s 0d
Ada ap Ithel	7		3			13s 6d	4s 0d
Jevan ap Evnion	3	2	3			£1 1s 6d	8s 6d
Thomas		3	2		3	£1 9s 2d	7s 10d
Filia Hawerit		2	3		2	£1 4s 0d	6s 0d
Ririt ap Ithel		1	8			£1 11s 8d	4d
Jok' Crwm	14	5	12	2	4	£4 10s 0d	£1 10s 0d
Total	**24**	**15**	**40**	**4**	**11**		

9. Bodwrog (Villa Botwrawc)

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Jevin		1	3	1		£1 0s 0d	6s 0d
Madoc ap Ithel	8	2	3		2	£1 9s 0d	4s 0d
Total	**8**	**3**	**6**	**1**	**2**		

10. Bachellaeth (Villa Bachalet)

Taxpaver	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Uxor Jorweth Ririd		2	6			£1 10s 0d	5s 0d
Jorwerth ap Ybally	6	2	6	2		£2 3s 0d	10s 0d
Gwyn ap Ririt	20		11			£2 6s 8d	3s4d
filia David ap Run			4			13s 4d	
Jorwerth ap Teg'	5	1	6			£1 7s 6d	6s 0d
filia Map Ycar	5		2		3	15s 2d	4s 10d
Gocholyn				1	2	10s 0d	
Madoc Duy	6	3	6	1		£2 3s 0d	12s 0d
Jorwerth ap Jorwerth		2	6	1	2	£2 0s 0d	12s 6d
Davis ap Ririt	5		3	1	4	£1 7s 6d	9s 0d
Adaf ap Jorwerth		2	6			£1 10s 0d	12s 0d
Total	**47**	**12**	**56**	**6**	**11**		

11. Villa Llangvan

Taxpaver	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Evnion		3	4	1		13s 4d	13s 8d
Ada ap Madoc			3		1	12s 0d	
Gweyrwyl			3			10s 0d	
Gor' ap Madoc		1	3	1	2	£1 5s 0d	5s 0d
Map Ycorpin		1	4	1	2	£1 7s 4d	2s 8d
uxor Ycunnogvc			2		1	9s 2d	
Gwyn Goch		3	6	2	2	£2 10s 0d	£1 0s 0d
Melyr	2		3		2	16s 0d	4s 0d
Jevan ap Gwyn			3		2	14s 0d	
Evnion ap Gwyn			2		3	12s 8d	2s 4d
Ada ap Gwyn			3	1	2	£1 0s 0d	2s 0d
Jevan ap Gor'	4		6	1		£1 7s 0d	
Eva filia Ygof			5	1	2	£1 6s 8d	5s 4d
Gwyn Grach	2		7	1		£1 9s 4d	6s 8d
Kenric Goch Ykeul	12		3	1		£1 1s 0d	9s 0d
Jevan ap Jorwerth	5		3		2	17s 6d	
David Duy	10	1	3	1		£1 5s 0d	6s 0d
Ada Duv		1		2	4	£1 5s 0d	6s 6d
Madoc Wynen		4	9	1	4	£3 5s 0d	18s 0d
uxor David ap Madoc		1	3	1	2	£1 5s 0d	
Ithel ap Gor'			2	1	2	16s 8d	5s10d
Jorwerth ap Howel	10	1	9	1		£2 5s 0d	10s 0d
Jevan ap Jorwerth	1		2	1	2	17s 2d	5s 4d
Philip Ycwta	5		3	2	2	£1 7s 6d	8s 0d
Kenric ap Cad'		5	6	1		£2 10s 0d	15s 0d
Jorwerth Llovt	6	1		1	2	18s 0d	4s 0d
Gwyn ap Ada	8	2	6			£1 14 0d	8s 0d
David Duv			2			6s 8d	1s 3d
Ybyllum			3			10s 0d	
Philip Duy			3	2		£1 0s 0d	13s 0d
Total	**65**	**24**	**111**	**24**	**39**		

12. Villa Marchroes

Taxpaver	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
David ap Ithel	8	2	6	2	2	£2 9s 0d	14s 0d
Phylipoc	8	1	3			19s 0d	4s 0d
Evnion ap Madoc	4	2	4			£1 5s 4d	6s 0d
Kenric ap Ygwvdd	16	2	9	2		£1 5s 4d	6s0d
Jevan ap David	2	1	2			12s 8d	3s 4d
Erdylac	4	1			2	12s 0d	4s 0d
Jevan ap Kenric	16	1			2	18s 0d	2s 0d
Ithel Duy	8	1	3	1		£1 4s 0d	11s 0d
Gor'ap Griffith	10	4		2	4	£25s 0d	10s 0d
Gwyn Goch	9		1	1	3	18s 10d	6s 2d
Evnion Llovt		1	2	1		16s 8d	
David Vichan	20	4	6	2	4	£3 10s 0d	£1 0s 0d
Gwenwyna	12	1			2	16s 0	
Evnion Goch	11	2	6	1		£2 0s 6d	10s 6d
David ap Gor'	8	1	2			19s 0d	
Nest	11		2			14s 2d	
Ybarch		1	3	1		£1 0s 0d	8s 0d

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
uxor Gor' ap Jorwerth	5	1	3	1		£1 2s 6d	4s 0d
Ygorlewyn		2	3	1		£1 5s 0d	10s 0d
Jevan ap Kenric	2	2	3	1		£1 6s 0d	12s 0d
Total	**154**	**30**	**59**	**16**	**19**		

13. Brvncelvn (Villa Prinkelvn) * owns a boat ! owns nets

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Teg' ap Evnion	12		3	1	2	£1 6s0d	8s 0d
Gwas Mvagel	8			2	2	19s 0d	6s 0d
Madoc ap Gwvnon	11	3	5	1		£2 0s 2d	8s 0d
Seysill			3			10s 0d	
David ap Madoc	8		2	1	1	19s 2d	4s 2d
Jorwerth Duy * !	20		3		1	£1 2s 0d	6s 6d
David Duv	10		3	1		£1 0s 0d	2s 0d
Evnion Voel		6	12	2		£4 0s 0d	£1 2s 0d
Total	**69**	**9**	**31**	**8**	**6**		

14. Cilan (Villa Cyllan)

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Jorwerth Of			3	1		15s 0d	
David Tew			2	1	1	14s 2d	2s 0d
Map Yplymtanc	6	1	3			18s 0d	4s 6d
filii Yplymac	5		3			12s 6d	
Ada Goch	10	2	3	1		£1 10s 0d	10s 0d
David Cryg	7		3		1	16s 0d	
Eynion ap Jorwerth Voel		1	3	1		£1 0s 0d	8s 0d
Ypengalot	10		4			18s 4d	
Jevan ap Ada	3		3	1		16s 6d	2s0d
Evnion ap Jorwerth	8	1		1	3	19s 0d	6s 0d
Ycapan	6		3	1		18s 0d	4s 0d
Jevan ap Yllal	6	3	6	1		£2 3s 0d	12s 0d
Jevan ap Jok'	6	1		1	2	18s 0d	4s 0d
Teg' Of	4	1	2	1		18s 8d	6s 6d
Gwvn ap Ybrawt		3	1			15s 0d	6s 0d
Madoc ap Jevan		1	3	1		£1 0s 0d	5s 0d
Total	**75**	**15**	**42**	**12**	**8**		

15. Pwllheli (Villa Pwllhely) * owns a boat ! owns nets

Taxpayer	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Thoams ap Robin *!		1	6	2		£1 15s 0d	8s 0d
Jorwerth Permis		3	9	2	4	£3 5s 0d	£1 2s 0d
David ap Jok' !			3	1		15s 0d	5s 0d
Jevan Nawyn		1	3	1		£1 0s 0d	4s 0d
Gor' ap Cuda *!	6		3	2		£1 3s 0d	6s 0d
Eva uxor Gayn			4			13s 4d	
Dvtgu			2			6s 8d	
Gwladus Goch	10		3	1		10s 4d	2s 0d
Jevan ap Dwn !	4		1	1		10s 4d	2s 0d
Ada ap Ithel !		1	6	1	2	£1 15s 0d	12s 0d
Ybarrech !			2	1		11s 8d	4d
Ada ap Gwyon !	2		3	1		16s 0d	
Jorwerth Duv			1	2		13s 4d	3s 9d
Madoc ap Llewellyn	4	4	6	2		£2 12s 0d	17s 0d
Madoc ap Evnion !	10	2	3	1	2	£1 15s 0d	11s 0d
Madoc Cawres !		1		2	2	£1 0s 0d	6s 0d
Gwerwyl filia Kwel'!	8	1	3			19s 0d	
Jok' Bol			3	1		15s 0d	
Gwyn ap Howa			1			5s 0d	
Yrhechvnwr		3	1			15s 0d	
Hendvlac			1			7s 0d	
Total	**44**	**17**	**64**	**21**	**11**		

Appendix D

Lay Subsidy 242/50 B (Nefyn) (Jones-Pierce, T, 1930)

* Owns a boat ! Owns nets

Taxpaver	Sheep	Oxen	Cows	Horses	*Averia*	Value	Crops
Einion ap Adaf !	20	9	6	3	3	£4 16s 0d	14s 6d
Adaf ap David	5	8	5			£2 19s 2d	14s 4d
Adaf ap Ypuys !	10	6	7	3	2	£3 17s 4d	4s0d
David ap Madoc !	10	5	8	1		£3 1s 8d	8s 0d
Ginawr !		6	5	2		£2 16s 8d	9s 10d
Thomas ?			12		2	£2 4s 0d	6s 6d
David ap ?			6		3	£1 6s 6d	6s 6d
Jevan ap Madoc * !		4	1	1	1	£1 10s 10d	10s 4d
Madoc clericus !		4		1		£1 5s 0d	4s 0d
David ap Ypenwyn !		2	1	1		18s 4d	7s 10d
Ygathir !		3	6	1		£2 0s 0d	13s 8d
David ap Yguestur !		2		1		15s 0d	10s 0d
Madoc ap Einion	20			1		15s 0d	9s 7d
Einion ap Ygof	10		3	1		£1 0s 0d	3s 4d
Jevan ap Madoc Da !	3	3	3	1	5	£2 4s 0d	8s 4d
Tangwistil uxor David ap Adaf		2		1	5	£1 7s 6d	10s 4d
Llewelyn ap Cad' !			2		2	10s 8d	11s 3d
Nesta filia Madoc Da			4			13s 4d	2s 0d
Helin ap Llywelyn !	4	1	2	1		18s 8d	5s 10d
Adaf ap Ygof	10		2	1		16s 8d	5s 10d
Thum !			3		1	12s 0d	2s 3d
David ap Thum * !			2			6s 8d	
Bleddyn Vychan * !		6	3	2		£2 10s 0d	7s 3d
Gwyn ap Yanto	5	1	3	1	2	£1 6s 6d	5s 3d
David ap Adaf !		2	1			15s 0d	4s 7d
Sencu' filius Philpi		1	1			8s 4d	
Einion Llovt !	5	2	3	1		£1 2s 6d	3s 6d
David ap Ypuys * !		1	2	1		15s 0d	1s 0d
Yguestur	20	4	5	2	2	£3 0s 8d	8s 8d
Einion ap Yguirion		1	2	1		16s 8d	
Perwenr' fil' Guassyn	8		4			17s 4d	
Bleddyn ap David	12	2		1		£1 1s 0d	
Einion Gyflym		1	2	1		16s 8d	2s 0d
Ydaio			1		1	5s 4d	2s 3d
Ydu Horbr			2			6s 8d	
Tangwistil uxor Adaf !			2	1		14s 2d	3s 3d
Ydai Du			2			6s 8d	
Jorwerth ap Lleupart			2		1	8s 8d	1s 4d
Jevan ap Einion !			2	1		11s 8d	3s 4d
Adaf Luvt !			2		1	8s 8d	1s 11d
Jochyn ap Ygof	10		1	1		13s 4d	6s 7d
Eva Du			2			6s 8d	
Kyfuer !		1		1		10s 0d	8s 7d
Ithel ap Philip !	10	2	11	1	2	£1 7s 4d	6s 6d
David fil' Yporthmon			3			10s 0d	
Strai			2			6s 8d	2s 0d
Kynwr ap Ypuys !		1		2		15s 0d	2s 0d
Tangwistil Vaur			2			6s 8d	2s 6d
Philip ap David !		1	2	1	1	18s 8d	3s 4d
Iowar			1			3s 4d	
Nestor uxor Adgyn		1		1		10s 0d	
Dai Bach !	2		2		1	6s 4d	1s 8d
Kynwr Maelaur				1		5s 0d	2s 11d
Guenllian filia Jevan	4		2			8s 8d	1s 3d
Llywarch Crwm !			1			3s 4d	
Jevan ap Meilir			2			6s 8d	
David Pilis !			1			3s 4d	
Teg' Pils	4		2			10s 8d	
Madyn Hagyr	2		1			4s 4d	3s 4d

Jorwerth ap Philip !	4		2			8s 8d	
Madoc ap Adgyn		1	2	1	1	18s 8d	2s 0d
Philip ap Guallter			1	1		8s 4d	2s 0d
David ap Jorwerth	9	2	3	2		£1 14s 6d	
Meiriam			2			6s 8d	3s 4d
David ap Jevan			1			3s 4d	2s 8d
Madoc ap Einion			2	1	2	16s 8d	2s 0d
Ymab Ruth	6		1	1	1	13s 10d	3s 4d
Huwa ap Adgyn !		2	1			13s 4d	2s 0d
David Wychan !			1			3s 4d	3s 3d
Jorwerth Du !		1		1	1	12s 0d	2s 0d
Davis ap David !			1			3s 4d	2s 0d
Guas Dewi			2			6s 8d	1s 4d
Tegerin			1			3s 4d	1s 3d
Davis Aurifaber			2			6s 8d	
Gwenllian Wedes			1			3s 4d	
Lleucu' fil' Guestur	5					2s 5d	
Gwenllian filia Cad'			1			3s 4d	
Dai ap Arthur			1			5s 0d	1s 4d
Adaf ap Arthur	3					1s 6d	1s 0d
Angaret filia Madyn	4					4s 0d	
8 others			10			£1 13s 4d	1s 0d
Ynyr !							
Thomyn !							
Einion ap David !							2s 0d
Yporthmon !							2s 0d
Jevan ap Llywarch !							
Total	**205**	**88**	**187**	**47**	**40**		

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