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UNRESTRICTED

ECONOMIC AND SOCIAL CHANGE IN WENSLEYDALE AND SWALEDALE IN
THE NINETEENTH CENTURY.

CHRISTINE SARAH HALLAS B.A.

IN TWO VOLUMES

VOLUME I

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ABSTRACT

Although rural areas share certain common characteristics, individual districts and their communities exhibit many important differences. This study provides a detailed analysis of economic and social change in the nineteenth century in a specific rural upland area in the north Yorkshire Pennines. It is intended both to add to the limited body of detailed knowledge which already exists in respect of rural, and specifically upland rural, areas and to test generalizations concerning the economic and social structure of such areas against the individual experience of Wensleydale and Swaledale.

The major industries of the two dales in the nineteenth century, agriculture, mining, and textiles, formed the basis of the economy of many upland areas. The development and relative importance of these industries within Wensleydale and Swaledale is closely examined and compared with other areas in order to identify the uniqueness or otherwise of the extent and direction of change within the dales. The influence of local and non-local factors on the demise of two of these industries in the nineteenth century and on the structural changes in the third is also studied.

The survival of upland areas in an increasingly industrialized and competitive society was constrained by inaccessibility. The extent to which road and rail transport assisted the two dales to overcome the problems

of isolation is, therefore, examined.

Although the present work is an economic and social study, it concerns itself primarily with economic change since a healthy economy was essential for the maintenance of a viable local community. The social condition of the community is studied in the context of its response to the rapidly changing economy in the nineteenth century. In particular, a detailed analysis is undertaken of the extent to which population growth and decline, and attendant migration, affected the well-being of the local community.

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ABBREVIATIONS

AH	Agricultural History
AHR	Agricultural History Review
BPP	British Parliamentary Papers
CEB	Census Enumerator's Book
ECHR	Economic History Review
EJ	Economic Journal
HC	House of Commons
HL	House of Lords
HLRO	House of Lords Record Office
HMSO	Her Majesty's Stationary Office
JRASE	Journal of the Royal Agricultural Society of England
JRSS	Journal of the Royal Statistical Society
JTH	The Journal of Transport History
LGB	Local Government Board
LMNJ	Liverpool, Manchester and Newcastle Junction Railway Company
LMN	Liverpool, Manchester and Newcastle Railway Company
LNER	London and North Eastern Railway Company
LNy	Lancashire and North Yorkshire Railway Company
LPS	Local Population Studies
NER	North Eastern Railway Company
NRRS	North Riding Record Series
NYCRO	North Yorkshire County Record Office

MAFF Ministry of Agriculture, Fisheries and Food

O.S. Ordnance Survey

PRO Public Record Office

RC Royal Commission

Reg.Gen. Registrar General's Abstracts

SC Select Committee

S-K Skipton and Kettlewell (Aysgarth Extension)
Railway Company

S-C Midland (Settle-Carlisle) Railway Company

SWL Skipton, Wharfedale and Leyburn Railway Company

WPMS Wensleydale Pure Milk Society

WYAS/L West Yorkshire Archive Service, Leeds District
Archives

YAS Yorkshire Archaeological Society

Y-C Yorkshire and Carlisle Railway Company

YGU Yorkshire and Glasgow Union Railway Company

ACKNOWLEDGEMENTS

I am grateful to Dr Arthur Raistrick who, in 1977, suggested to me that the role of transport in Wensleydale and Swaledale would provide a fascinating subject for research. From that initial suggestion developed the ideas which have resulted in the present work.

I am indebted to the many people who have provided material for this thesis, particularly M.Hartley & J.Ingilby, J.L.Barker, K.A.Bell, the late T.C.Calvert, and D.Hall. In addition, I have been kindly assisted by the staff of the Public Record Office, the House of Lords Record Office, the North Yorkshire County Record Office, the West Yorkshire Archive Service, Leeds, Burnley Library, Nelson Library, the North Yorkshire County Library Headquarters, the Brotherton Library, Leeds, the North of England Newspapers Ltd, and Ackrill Newspapers Ltd. Further, I should particularly like to thank Marie Hartley and Joan Ingilby for their encouragement and advice throughout.

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Finally, my greatest debt is to my husband, George and two daughters, Joanna and Caroline. The thesis would not have been written without their considerable help; above

all my husband gave me unstinting support and also much of his time in reading the manuscript.

PREFACE

Although rural areas share certain common characteristics, individual districts and their communities exhibit many important differences. This study provides a detailed analysis of economic and social change in the nineteenth century in a specific rural upland area in the north Yorkshire Pennines. It is intended both to add to the limited body of detailed knowledge which already exists in respect of rural, and specifically upland rural, areas and to test generalizations concerning the economic and social structure of such areas against the individual experience of Wensleydale and Swaledale.¹

The major industries of the two dales in the nineteenth century, agriculture, mining, and textiles, formed the basis of the economy of many upland areas. The development and relative importance of these industries within Wensleydale and Swaledale is closely examined and compared with other areas in order to identify the uniqueness or otherwise of the extent and direction of change within the dales. The influence of local and non-local factors on the demise of two of these industries in the nineteenth century and on the structural changes in the third is also studied.

The survival of upland areas in an increasingly industrialized and competitive society was constrained by inaccessibility. The extent to which road and rail transport assisted the two dales to overcome the problems

of isolation is, therefore, examined.²

Although the present work is an economic and social study, it concerns itself primarily with economic change since a healthy economy was essential for the maintenance of a viable local community. The social condition of the community is studied in the context of its response to the rapidly changing economy in the nineteenth century. In particular, a detailed analysis is undertaken of the extent to which population growth and decline, and attendant migration, affected the well-being of the local community.

¹ Research on Wensleydale and Swaledale has been undertaken by other historians, notably by M.Hartley, J.Ingilby and R.Fieldhouse. However, their studies cover longer periods and adopt a less statistical approach.

² Most of the material used in this thesis concerning rail transport has been published in C.S.Hallas, *The Wensleydale Railway*, Clapham, 1984, and - 'The Social and Economic Impact of a Rural Railway: the Wensleydale Line', *AHR*, 34, 1986.

CHAPTER 1

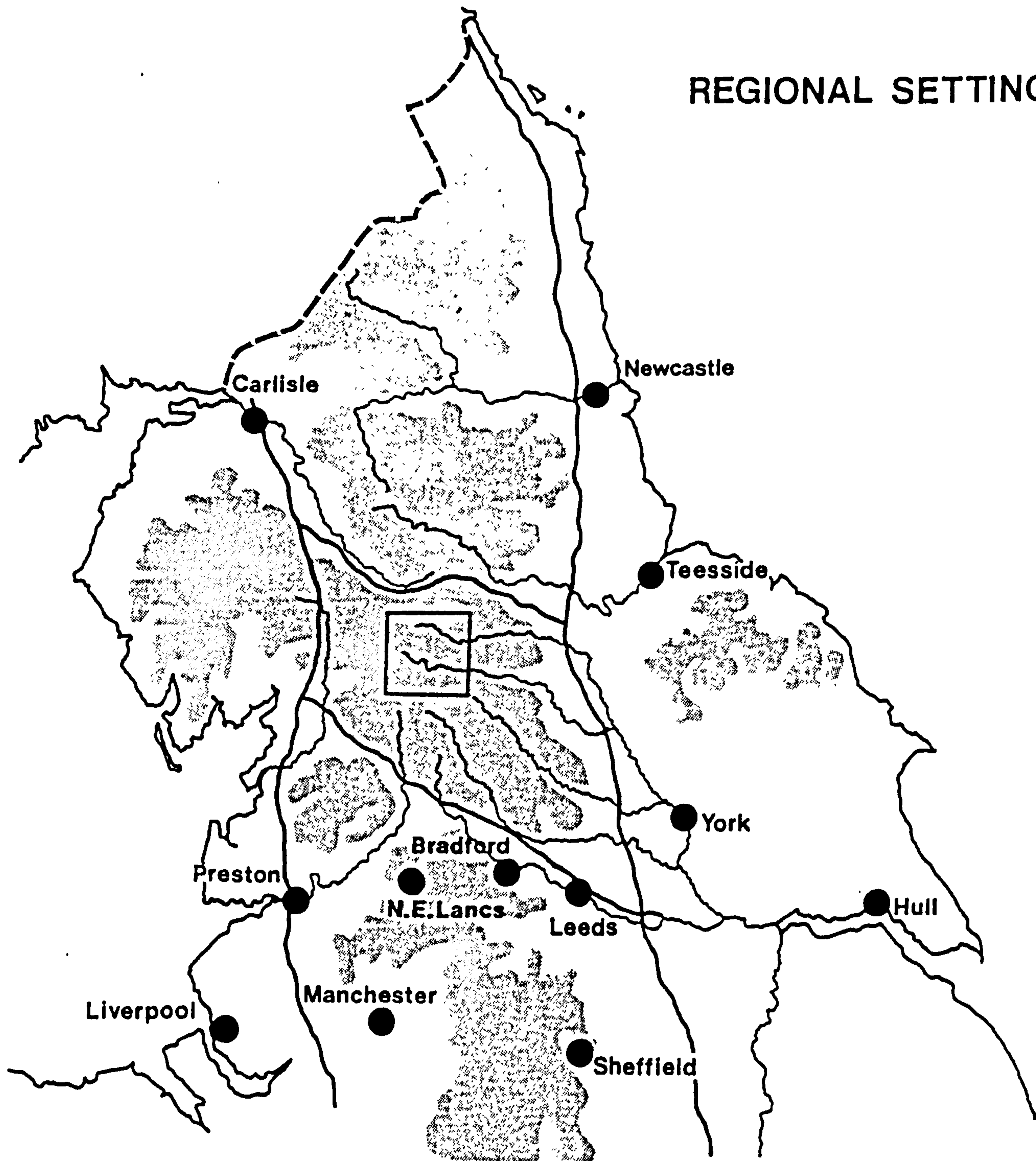
INTRODUCTION






The study area comprises the greater part of Wensleydale and Swaledale, two of the most northerly of the Yorkshire dales which lie on the eastern flank of the north-central Pennines. Wensleydale and Swaledale are at the heart of an extensive area of sparsely-populated rural upland lying between the industrial towns of west Yorkshire to the south; Lancashire to the south-west; and the Tees, Wear and Tyne estuaries to the north-east (see Map 1). The predominantly upland character of the two dales, with their relative isolation and difficult communications, has profoundly influenced the historical evolution and economic development of the area.

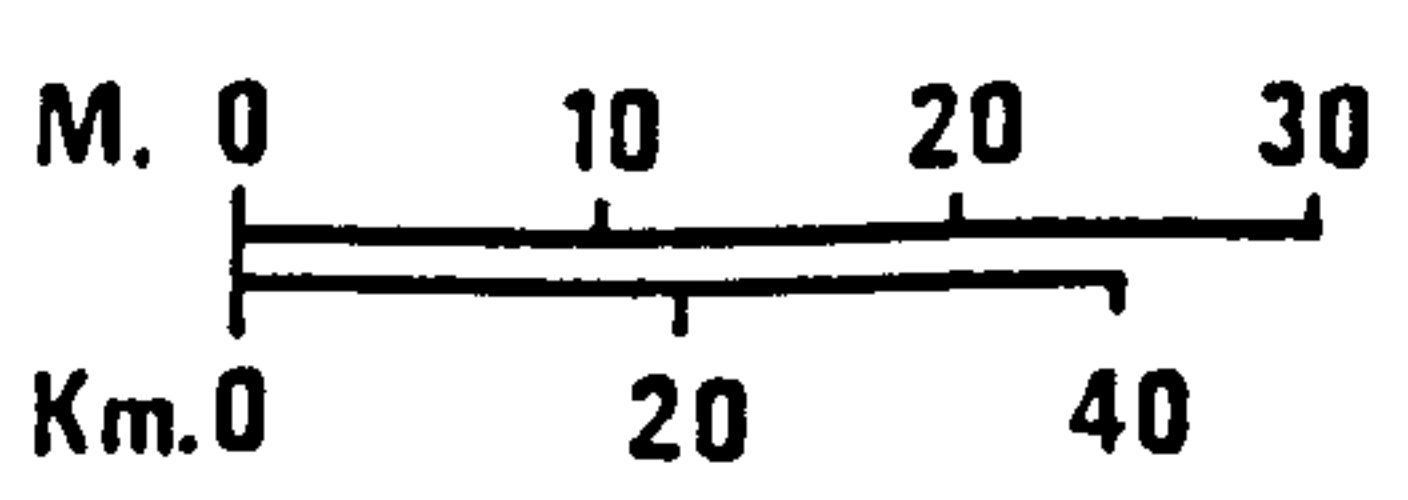
I

Structurally, the area comprises the northern half of the Askrigg Block, a rigid massif overlain with sedimentary rocks.¹ The whole forms a dissected plateau, declining in altitude from north-west to south-east. The fall of the land is reflected in the drainage pattern, with both the River Ure and the River Swale flowing in an easterly direction into the Ouse-Humber system (see Map 2). The Ure has created a generally broad and flat-floored valley (Wensleydale) whereas the Swale has carved a narrow and steep-sided valley.

REGIONAL SETTING

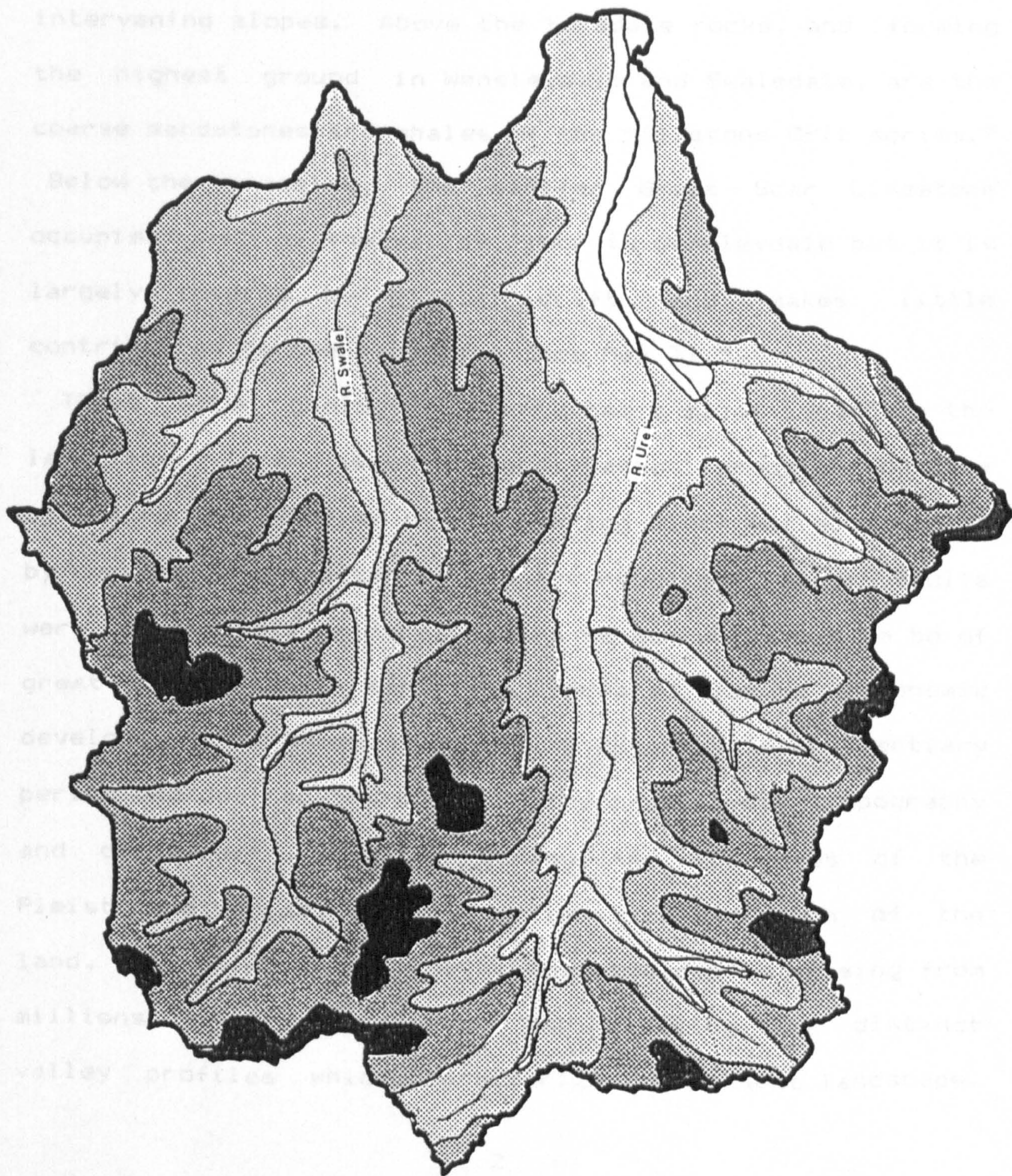
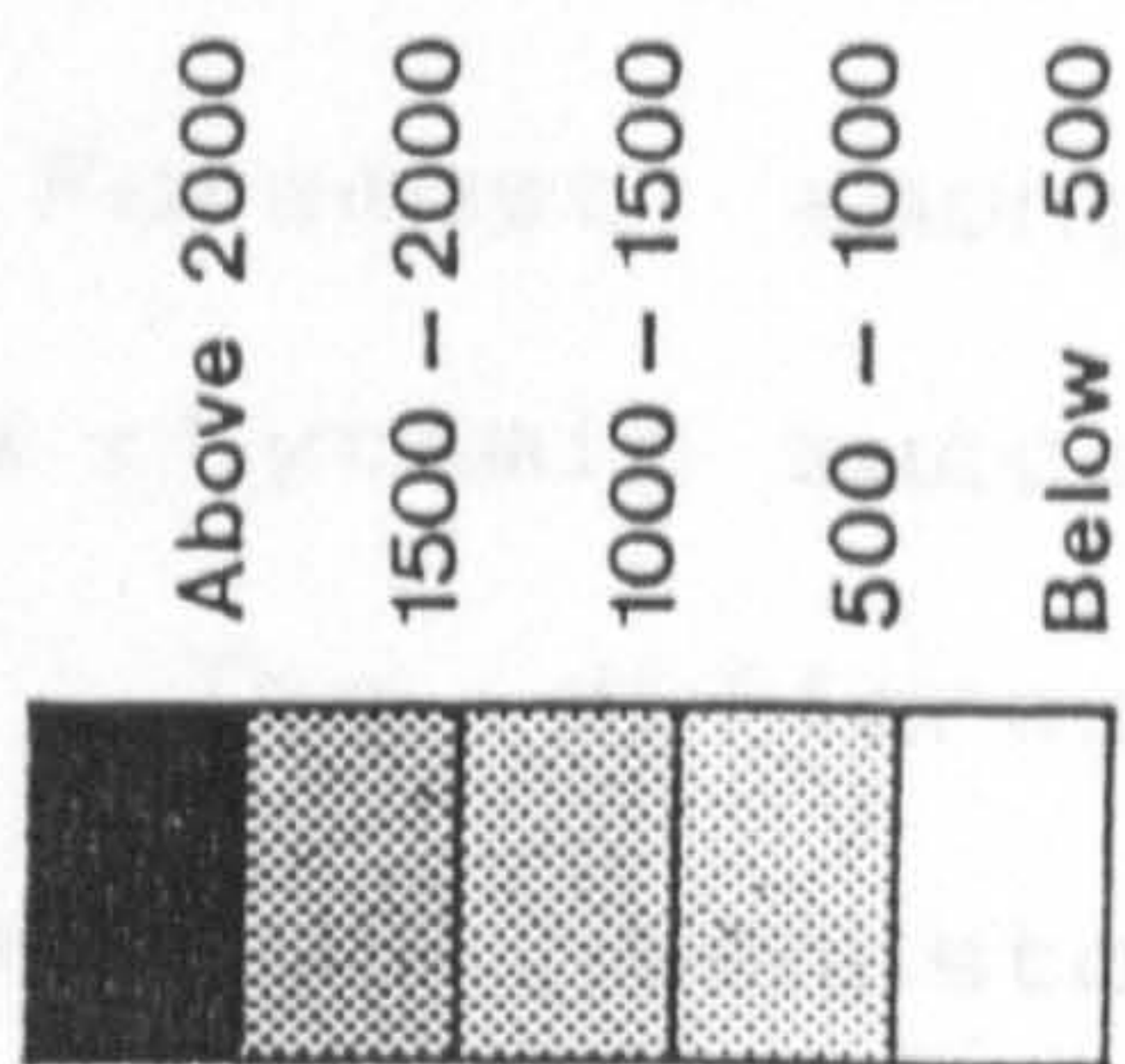


-  Study Area
-  Land over 600 ft
-  Main Urban Centres
-  Major Road Routes
-  Main Rivers



WENSLEYDALE & SWALEDALE: RELIEF AND DRAINAGE

Height in feet above mean sea level

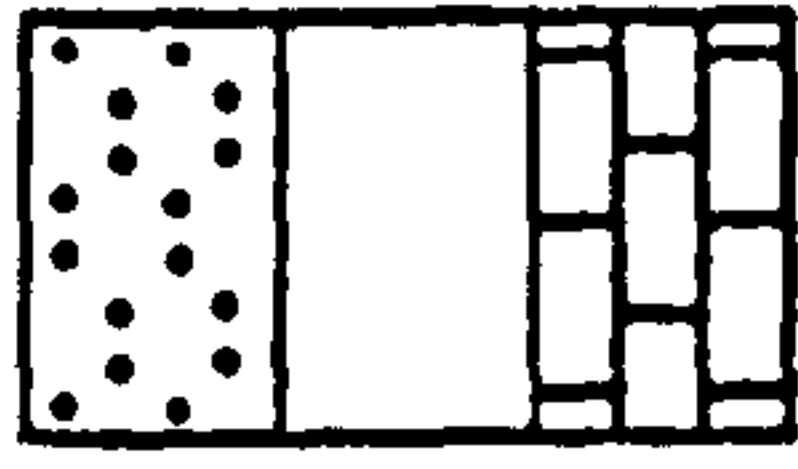


The surface geology of the area is formed entirely of rocks of Carboniferous age partly overlain by glacial drift. Foremost among these are rocks of the Yoredale series, a rhythmic succession of limestones, sandstones and shales.² The differential weathering of the hard limestones and sandstones, and the soft shales has given rise to the highly-distinctive topography of steep scars alternating with relatively wide 'benches' and narrow intervening slopes. Above the Yoredale rocks, and forming the highest ground in Wensleydale and Swaledale, are the coarse sandstones and shales of the Millstone Grit series.³ Below the Yoredales, the earlier Great Scar Limestone occupies much of the valley floor in Wensleydale but it is largely covered by glacial drift and makes little contribution to the landscape (see Map 3).⁴

Three later geological events had a major impact on the landscape. In the immediate post-Carboniferous period the uplifting and doming of the Askrigg Block was accompanied by considerable fracturing and the resultant minor faults were extensively mineralized, a factor which was to be of great significance for the area's future economic development.⁵ Renewed uplifting occurred in the Tertiary period and defined the basis of the present-day topography and drainage.⁶ Finally, during the ice ages of the Pleistocene period, glacial action scoured much of the land, stripping away the accumulated debris arising from millions of years of erosion and creating the distinct valley profiles which characterize the present landscape.

WENSLEYDALE & SWALEDALE:

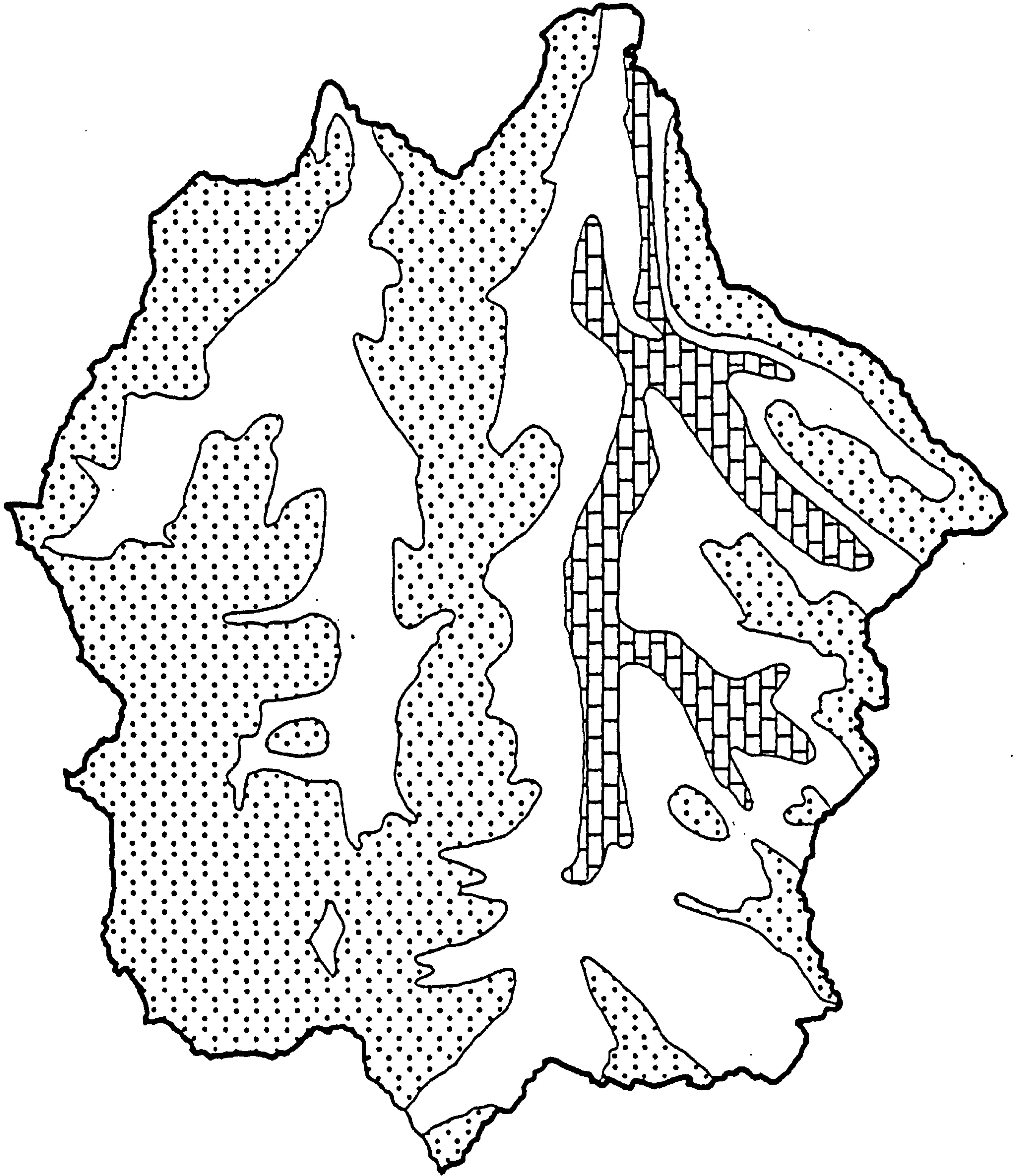
SOLID GEOLOGY



Millstone Grit Series

Yoredale Series

Great Scar Limestone



MAP 3



miles

0

5

Then, as the climate ameliorated, an extensive mantle of drift or boulder clay was deposited on the valley floors and over much of the valley sides.⁷

The present climate of the area is of the cool temperate, humid type which is typical of Britain as a whole. It is a climate, however, which is more extreme than the average due to the effects of altitude, distance from the sea and a situation on the lee side of the Pennines. The climate of the area in the nineteenth century would not have been very different from that of the present day. The area has a high rainfall which is well distributed throughout the year (see Map 4). Temperatures are substantially below the national average. January is the coldest month with a typical mean of 36°F and July the warmest with a typical mean of 58°F. The growing season, when temperatures are above 43°F, is correspondingly short, extending from the end of March to the middle of October (200-230 days).⁸ Exceptionally bad weather, with a combination of heavy snowfall and prolonged low temperatures, occurs at intervals and may have a severe impact on farming.

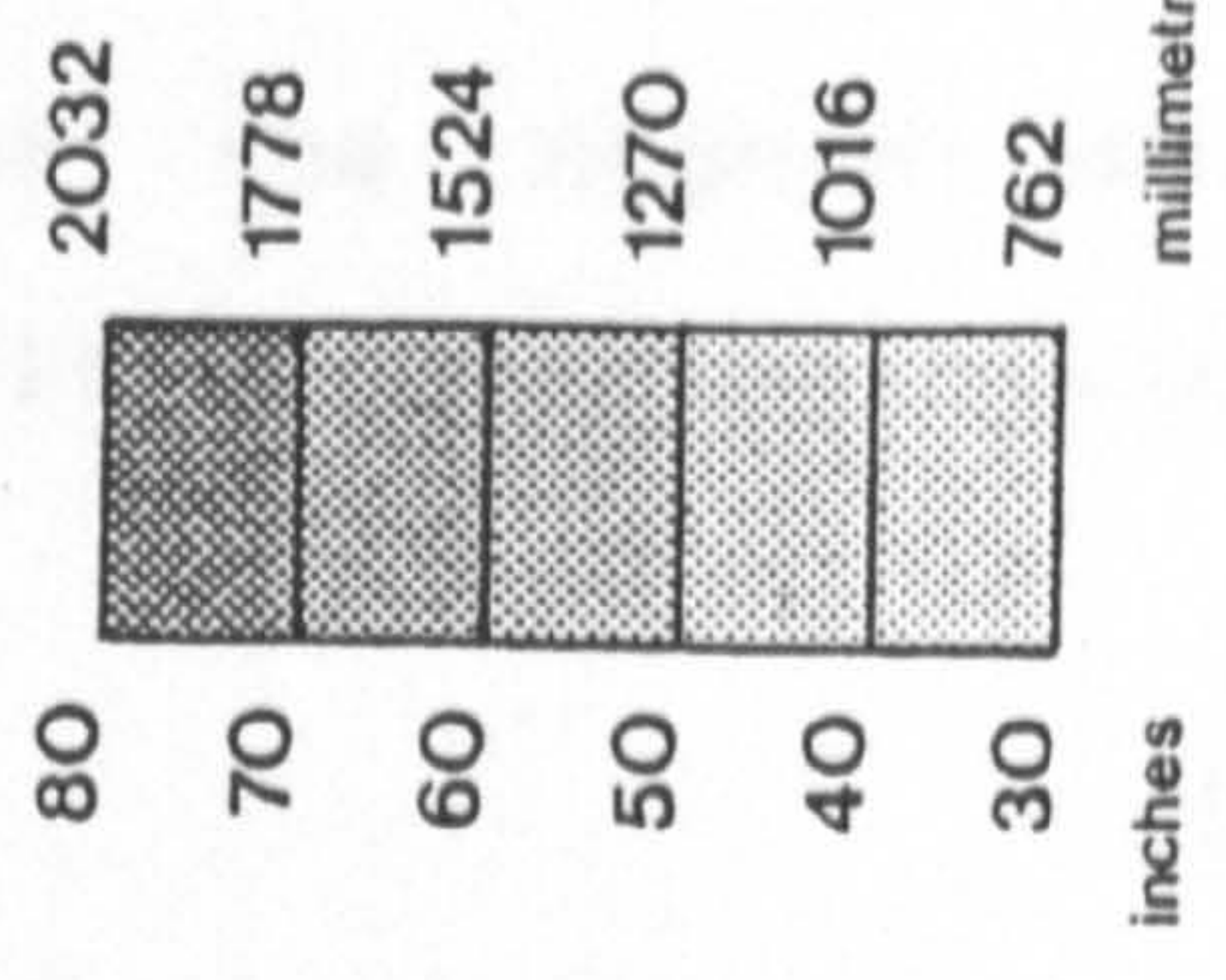
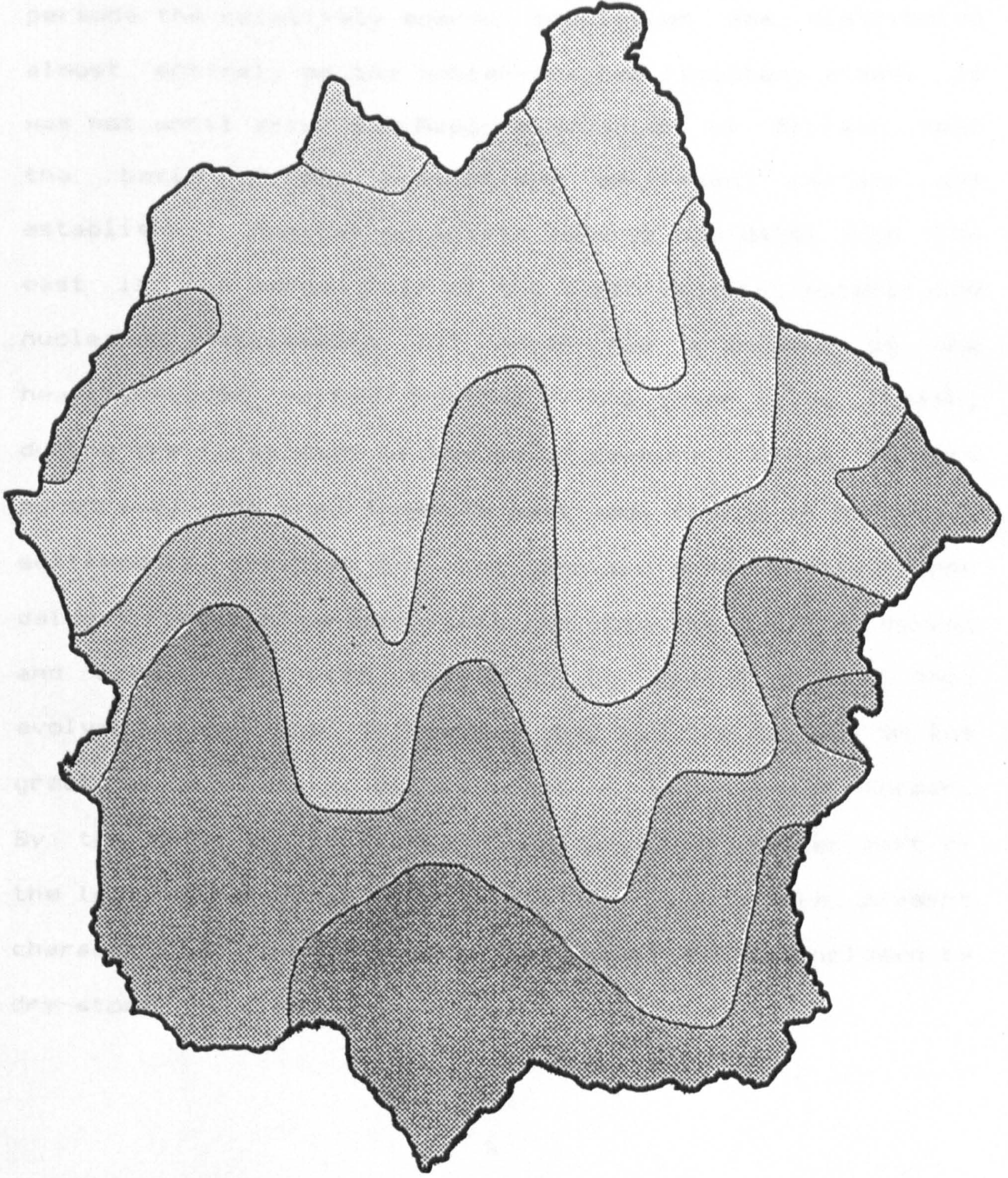
The soils of the area are the product of the underlying geology, glaciation, organic processes and the hand of man.

The upland soils are generally thin with light, free-draining, base-rich soils overlying the limestones and heavy, wet, acidic soils overlying the sandstones and shales. The soils on the lower ground comprise varying proportions of clays, sands and gravel, and are quite deep and capable of supporting meadow and improved grassland.

WENSLEYDALE & SWALEDALE:

RAINFALL

Annual average 1916 - 1950



On much of the highest ground peat produces distinctive organic soils supporting heather and grass moor.⁷

II

Settlement in the area dates from the period of climatic improvement which marked the end of the last glaciation. In the Mesolithic, Neolithic, Bronze Age and Romano-British periods the relatively sparse population was distributed almost entirely on the better-drained limestone areas. It was not until after the Roman evacuation of Britain that the basis of the present-day settlement pattern was established. Anglian colonists entered the dales from the east in the second half of the sixth century, established nucleated settlements and began the clearance of the heavily-wooded valley bottoms of the lower dales. Later, during the first half of the tenth century, Norse farmers penetrated the area from the west and, living in dispersed settlements, occupied the more open and more elevated upper dales. Forest clearance continued into the medieval period and accelerated with the changing social system that evolved under the Tudors and that saw the decline of the great feudal families and the rise of the yeoman farmer. By the end of the sixteenth century, the greater part of the lowland landscape had begun to assume its present character of irregularly-shaped small fields enclosed by dry-stone walls.¹⁰

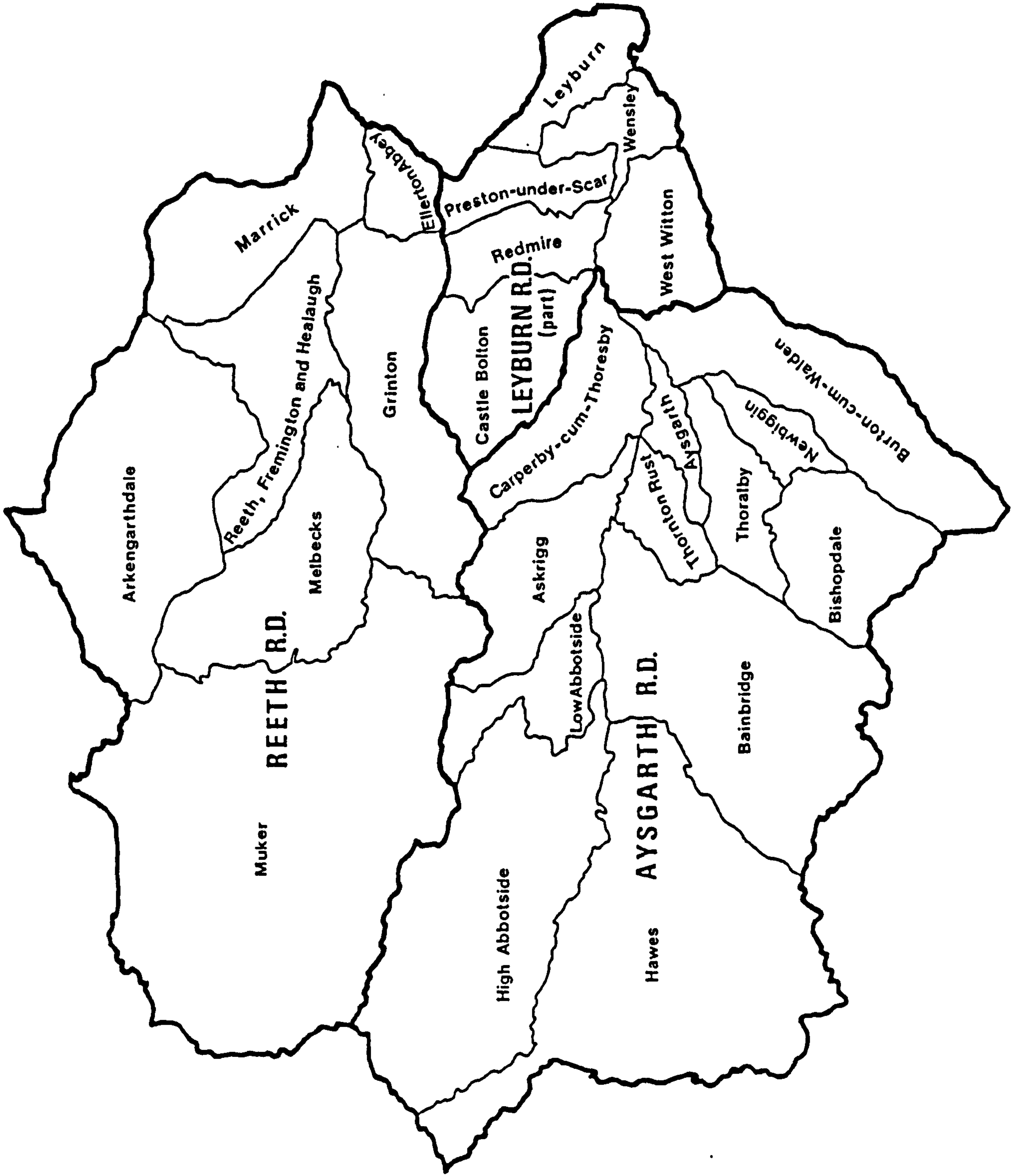
III

The boundaries of the area on which this study is based have been defined by reference to nineteenth-century townships. Wensleydale includes the whole of eighteen townships, ranging in size from Aysgarth (1214 acres) to Hawes (19,028 acres). Twelve of the Wensleydale townships constituted the whole of Aysgarth Rural District, which was conterminous with Askrigg Poor Law Union, and which, for the purposes of this study, is referred to as 'upper Wensleydale' (see Map 5). The other six townships in Wensleydale, which formed part of Leyburn Rural District, include the whole of Leyburn Poor Law Union Sub-District No. 2 with the addition of West Witton township. For the purposes of this study these townships are referred to as 'lower Wensleydale'. Swaledale includes the whole of seven townships, ranging in size from Ellerton Abbey (1674 acres) to Muker (30,205 acres). These townships constituted the whole of Reeth Rural District, which was conterminous with Reeth Poor Law Union. The study area extends to almost 174,000 acres, of which 81,000 are in upper Wensleydale, almost 18,000 are in lower Wensleydale and a little over 74,500 are in Swaledale (see Map 6).

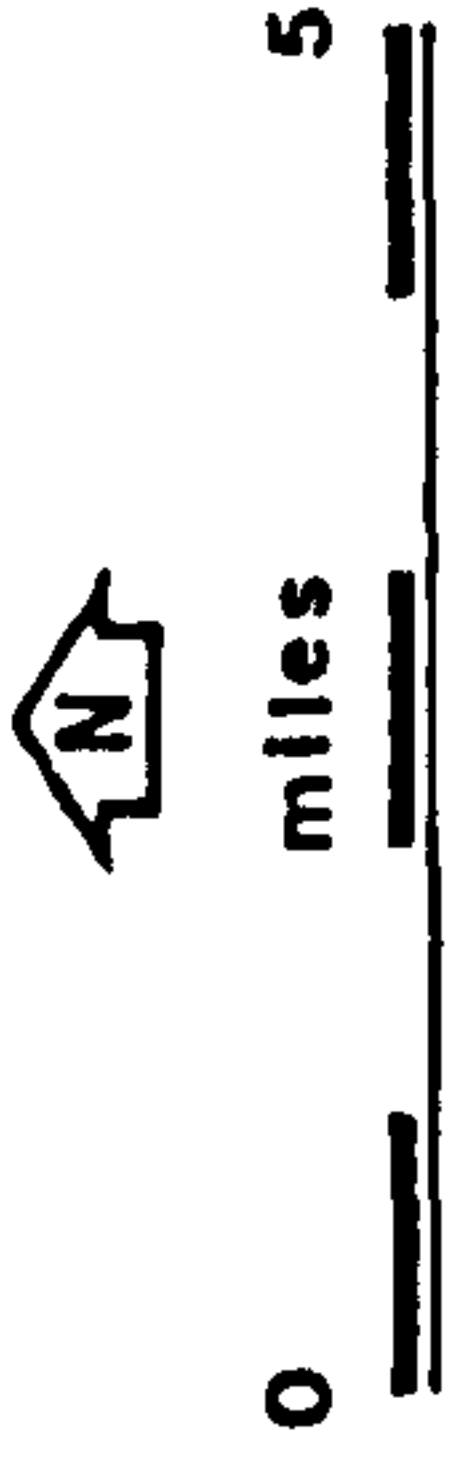
The boundary of the overall study area, although based on administrative units, reflects important physical distinctions. On all sides except the eastern, the boundary follows the watershed of the Ure and Swale. On the eastern side the boundary is a compromise between

WENSLEYDALE & SWALEDALE:

ADMINISTRATIVE AREAS

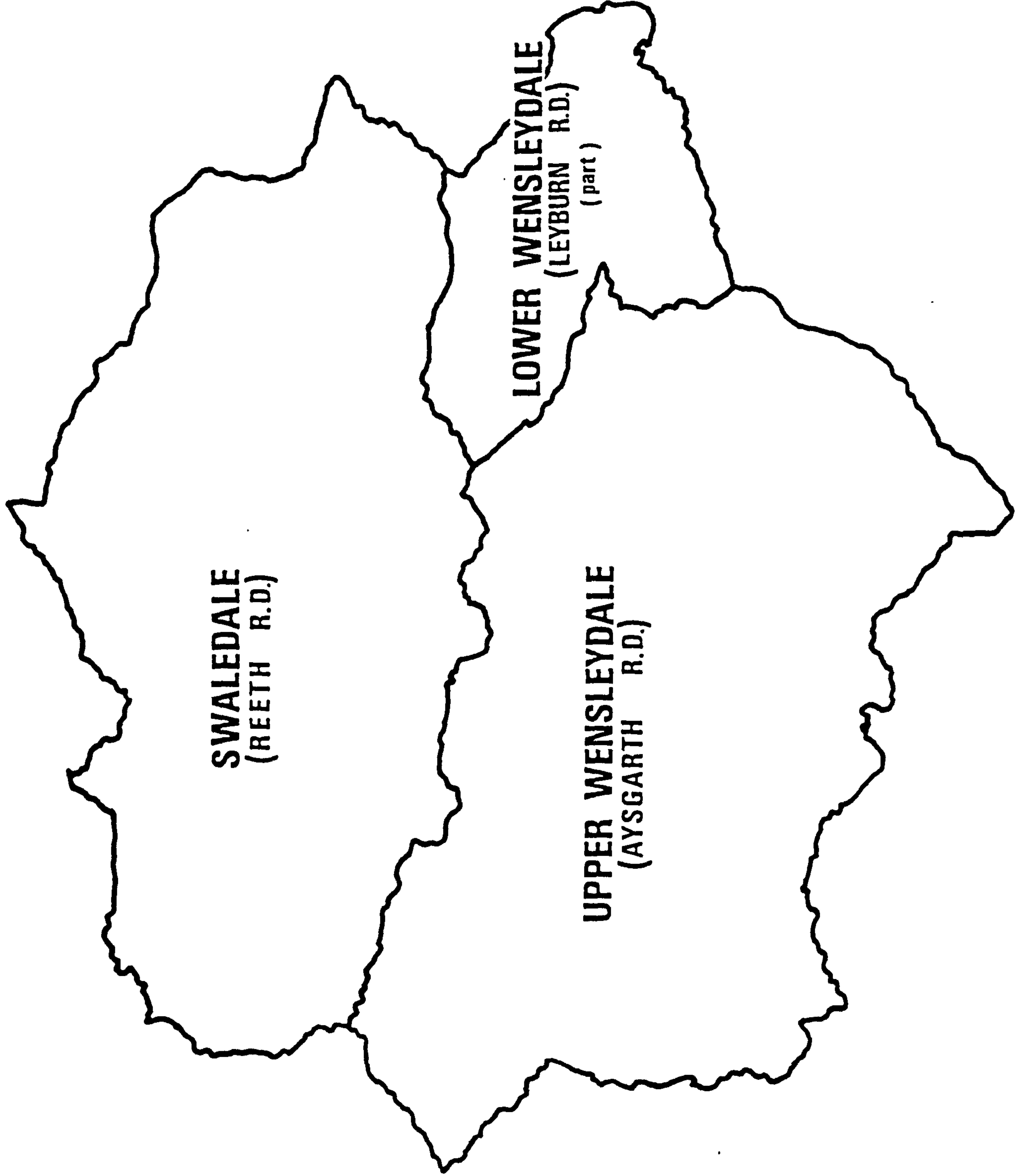


MAP 5

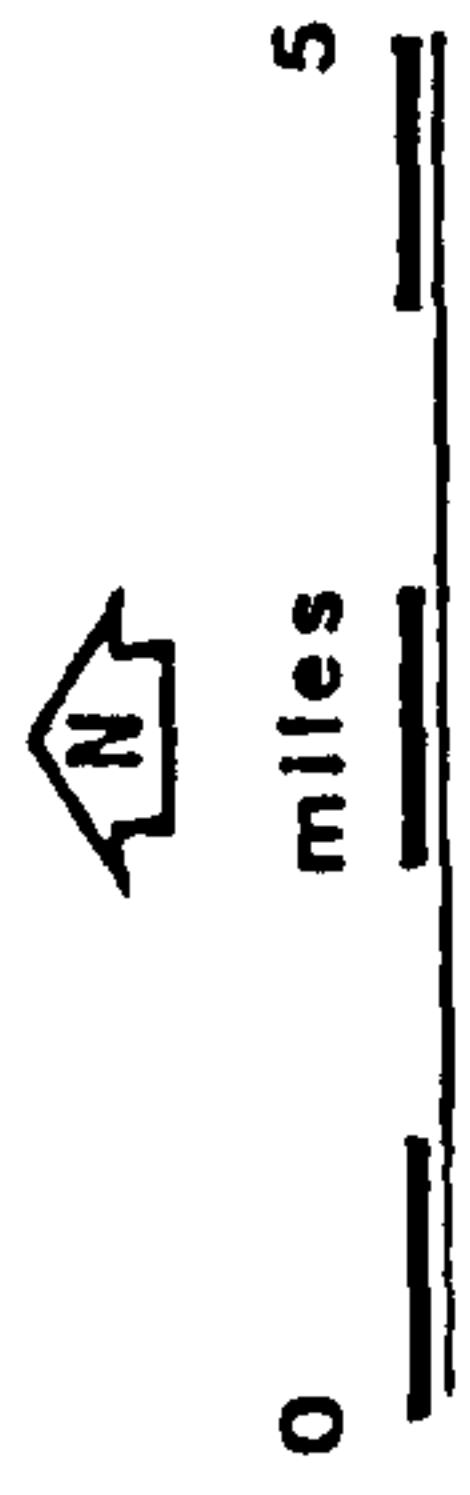


WENSLEYDALE & SWALEDALE:

MAJOR SUB-DIVISIONS



MAP 6



geographical and historical considerations. So far as the internal sub-divisions are concerned, the boundary between Wensleydale and Swaledale follows the watershed between the two dales and coincides with long-established historical boundaries. The sub-division of Wensleydale into 'upper' and 'lower' areas reflects both geographical and historic/economic distinctions. The result is an upper dale sub-division with a distinct geographical, economic and cultural character and a lower dale sub-division which, whilst not demonstrating any great unity of character, is distinct in a number of respects from the upper dale.

NOTES - INTRODUCTION

- ¹ W.Edwards & F.M.Trotter, *The Pennines and Adjacent Areas*, 1954, p2.
- ² *Ibid*, p3.
- ³ Institute of Geological Sciences 1:250,000 maps, *Solid Geology: - Lake District*, 1980, - *Tyne-Tees*, 1981.
- ⁴ *Ibid*.
- ⁵ A.Raistrick, *The Pennine Dales*, 1968, pp42-3.
- ⁶ P.E.Kent, 'Structural History', in D.H.Rayner & J.E.Hemingway(eds), *The Geology and Mineral Resources of Yorkshire*, Leeds, 1974, pp25-6.
- ⁷ Edwards & Trotter, *op cit*, pp67-8.
- ⁸ North Riding County Council, *North Riding Pennines Study*, Northallerton, 1975, p8.
- ⁹ *Ibid*, pp8-9.
- ¹⁰ Raistrick, *op cit*, pp52-117, *passim*.

CHAPTER 2

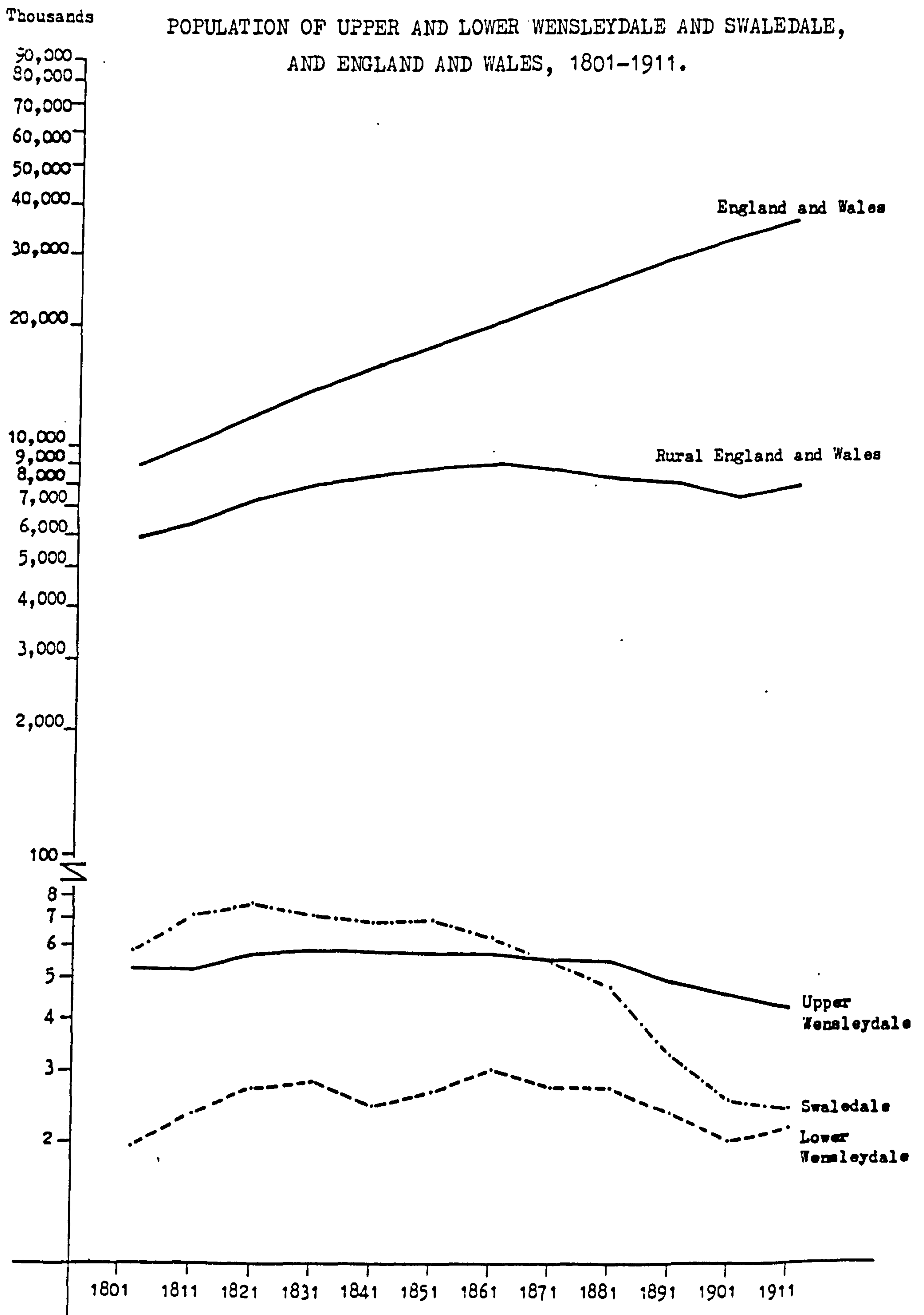
POPULATION

The rapid population growth which was a feature of England and Wales in the late eighteenth and nineteenth centuries was associated with a major movement of people from rural areas into the expanding industrial centres. The sustained drift of population from the countryside had become established by the beginning of the nineteenth century but initially the impact of out-migration was offset by a high rate of natural increase.¹ However, by the beginning of the third decade of the century the absolute growth of the rural population had slowed markedly as the outflow of population from the countryside quickened.² Most rural areas of England and Wales did not reach their peak population until the middle years of the nineteenth century but in declining mining areas of northern England a fall in population was evident by the 1830s and 1840s.³ Having reached their population peak, most rural areas subsequently experienced a pronounced and unremitting decline.

I

Figure 2.1 shows that population change in upper and lower Wensleydale, and Swaledale accords closely with the broad trend that is evident in the rural areas of England and Wales but which, predictably, differs considerably from

FIGURE 2.1



Source: see text.

the trend in England and Wales as a whole.⁴ The general pattern is one of population growth in the early years of the nineteenth century, with peaks between 1821 and 1861, followed by almost continuous decline into the twentieth century. However, this pattern varies substantially in detail between the three areas, reflecting differences in economic circumstances.

Table 2.1 shows decennial population change in the three areas, and in rural England and Wales. The population of Swaledale grew rapidly, by 30.3 per cent between 1801 and 1821, when it reached a peak of 7480. The ensuing decline was exceptionally severe, the dale losing more than two-thirds of its population by 1911. This trend reflects, primarily, the dale's dependence on the fluctuating fortunes of the lead industry. The link between the early onset of depopulation and lead-mining activity in Swaledale is confirmed by Lawton's wider study of the phenomenon.⁵ The rapid population growth in Swaledale in the period 1801-11, at a rate which was more than twice the average for rural England and Wales, and the considerably higher than average population loss in the period 1851-1901, particularly between 1881 and 1901, point clearly to dependence on a volatile industry.

The economy of lower Wensleydale, although more diversified than that of Swaledale, was also partly dependent on the lead industry. However, population change

TABLE 2.1

POPULATION CHANGE IN UPPER AND LOWER WENSLEYDALE AND
SWALEDALE, AND RURAL ENGLAND AND WALES, 1801-1911.

	Upper W/d	% ¹	Lower W/d	% ¹	S/d	% ¹
1801	5205	-	1951	-	5739	-
1811	5170	-0.7	2308	+18.3	7040	+22.7
1821	5621	+8.7	2701	+17.0	7480*	+6.3
1831	5796*	+3.1	2818	+4.3	7020	-6.1
1841	5725	-1.2	2463	-12.6	6758	-3.7
1851	5635	-1.6	2655	+7.8	6820	+0.9
1861	5649	+0.2	2999*	+13.0	6196	-9.1
1871	5473	-3.1	2703	-9.9	5370	-13.3
1881	5482	+0.2	2722	+0.7	4717	-12.2
1891	4742	-13.5	2337	-14.1	3217	-31.8
1901	4508	-4.9	1998	-14.5	2520	-21.7
1911	4262	-5.5	2058	+3.0	2396	-4.9
1801-1911		-18.1		+5.5		-58.3
Peak-1911		-26.5		-31.4		-68.0
		Rural E & W ²		% ¹		
1801		5.8		-		
1811		6.4		+10.3		
1821		7.3		+14.1		
1831		8.0		+9.6		
1841		8.6		+7.5		
1851		8.9		+3.5		
1861		9.1*		+2.2		
1871		8.7		-4.4		
1881		8.3		-4.6		
1891		8.1		-2.4		
1901		7.5		-7.4		
1911		7.9		-5.3		
1801-1911				+36.2		
Peak-1911				-13.2		

¹ Percentage change from the previous decade.

² In millions.

* Denotes peak year.

Source: NYCRO PP 19/1,3,5,8,10,17,22,23,24,30,34,37, *Census Enumeration Abstract for the County of York, 1801-1911*; England and Wales derived from R. Lawton, 'Rural Depopulation in Nineteenth Century England', in D.R. Mills (ed), *English Rural Communities: the Impact of a Specialized Economy*, 1973, p195.

in lower Wensleydale reflects the later development of the lead industry in that area (see Chapter 11). The population of lower Wensleydale grew by more than half between 1801 and 1861, a rate which approximates closely to the rate of increase of the population of rural England and Wales generally. However, in common with Swaledale, the most rapid growth occurred between 1801 and 1811, a decade earlier than for rural England and Wales. The population peak of 2999 which was reached in 1861, the year in which the national rural population peaked, was followed by a sharp fall of almost one-third by 1911, more than double the rate at which the national rural population fell over the same period. As in Swaledale, this decline was particularly severe in the period 1881-1901. Despite the much later peaking of population, the periods of greatest population growth and decline correspond closely to the Swaledale pattern, reinforcing the link between population change and the fortunes of the lead industry.

The pattern of population change in upper Wensleydale differs substantially from that of the other two areas. Population increased by a modest 11.4 per cent between 1801 and 1831, when it reached a peak of 5796. This was followed by a decline of 26.5 per cent by 1911. Population change in upper Wensleydale was much less extreme than in the other two areas, a feature which is well illustrated by the fact that decennial change exceeded 10 per cent only once in the period under review as compared with six times

in lower Wensleydale and five times in Swaledale. This difference can be explained by the fact that upper Wensleydale's economy was based overwhelmingly on agriculture rather than the lead industry.

The different patterns of population change in the three areas relative to the trend in rural England and Wales are apparent. It is significant that, despite the less extreme pattern of population change exhibited in upper Wensleydale, all three areas experienced substantially greater percentage losses of population from their peaks to 1911 than those experienced by the rural areas of England and Wales as a whole. This suggests that, in addition to the impact of the lead industry, other factors, such as remoteness and generally difficult physical conditions, contributed to overall rural depopulation.

The pattern of population change varied considerably from one township to another. The population peak in Low Abbotside occurred as early as 1801 whereas in Hawes, Aysgarth and Wensley it was not reached until 1881. Population growth between 1801 and the peak year ranged from an insignificant 0.5 per cent in Askrigg to a massive 124.9 per cent in Leyburn. Similarly, population decline between the peak year and 1911 varied from 17.0 per cent in Leyburn to 75.6 in Marrick. These variations are largely explicable in terms of the economic circumstances of the individual townships. The general picture which emerges is of the greatest growth in the early part of the century being experienced by townships with a substantial lead

industry and containing settlements with a significant market function. Conversely, the most severe losses following the peak year occurred in townships where the lead industry had been important and which suffered from particularly adverse geographical or physical difficulties.

II

All three areas were relatively thinly populated, as can be seen from Table 2.2. Both at the start of the period,

TABLE 2.2

POPULATION PER SQUARE MILE IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, THE NORTH RIDING, AND ENGLAND AND WALES, 1801-1911.

	1801	1821	1831	1861	1911
Upper W/d	41	44	46	45	34
Lower W/d	68	94	99	105	72
S/d	49	64	60	53	21
N.R.	79	93	95	114	197
E & W	152	203	234	354	618

Source: NYCRO PP 19/1,5,8,22,37, *Census Enumeration Abstract for the County of York, 1801,1821,1831,1861,1911*; England and Wales, B.R.Mitchell & P.Deane, *Abstract of Historical Statistics*, Cambridge, 1962, pp6,20.

in 1801, and at the end, in 1911, population densities in the three areas were considerably lower than the averages for the North Riding and for England and Wales. Even in their peak years the population densities of the three

areas compared unfavourably with those of the North Riding, and England and Wales, reflecting important differences in accessibility, land quality and diversity of economic opportunity.^e Although low in comparison with national and regional averages, population densities in lower Wensleydale, with its distinct geographic and economic advantages, were consistently higher throughout the period than in the other two areas.

Average densities, whilst facilitating comparisons, are not always helpful to an understanding of the spatial distribution of population. The physical characteristics of upland areas inevitably concentrate population in the valleys, a feature which is particularly true of the dales.

Within the valleys economic and social forces combine to concentrate population in small towns, villages and hamlets. The location, size and character of these communities is largely dictated by their specific economic function and this in turn is reflected in the occupational structure of the resident population. A detailed analysis of occupational structure is essential, therefore, if the economic forces which influenced population change in Wensleydale and Swaledale are to be understood.

NOTES - POPULATION

¹ J.Saville, *Rural Depopulation in England and Wales 1851-1951*, 1957, p5; R.Lawton, 'Rural Depopulation in Nineteenth Century England', in D.R.Mills(ed), *English Rural Communities: the Impact of a Specialized Economy*, 1973, p201.

² Saville, *op cit*, p5.

³ Lawton, *op cit*, pp201-2.

⁴ NYCRO, PP 19 /1,3,5,8,10,17,22,23,24,30,34,37, *Census Enumeration Abstract for the County of York, 1801-1911*; B.R.Mitchell & P.Deane, *Abstract of British Historical Statistics*, Cambridge, 1962, p6; Lawton, *op cit*, p195.

⁵ *Ibid*, pp201-2.

⁶ The dales are similar to other upland areas in being sparsely populated. For example, neighbouring Westmorland had a density of only 81 per square mile in 1891, J.D. Marshall & J.K.Walton, *The Lake Counties from 1830 to the mid-twentieth century*, Manchester, 1981, p18.

CHAPTER 3

OCCUPATIONAL STRUCTURE

One of the features of a rural society is the diversity of occupations to be found within the community.¹ The primary activity of agriculture, sometimes in association with extractive industry, required the support of a wide range of professions, trades and services. During the late eighteenth and nineteenth centuries as demand for agricultural products and other raw materials expanded rapidly and as output increased, rural areas experienced a significant growth in crafts and services.² In the late nineteenth century when demand for home produce fell due to cheap imports, many supporting services in rural areas declined. The survival of this secondary and tertiary employment in the nineteenth century provides a measure of the continuing viability of rural communities in a period when the centralization of manufacturing industry and improved transport was increasingly threatening the traditional way of life in the countryside.

I

Table 3.1 shows the economically-active population as a proportion of the total population of the three study areas and of Great Britain in the second part of the nineteenth century.

TABLE 3.1

OCCUPIED POPULATION IN UPPER AND LOWER WENSLEYDALE AND
SWALEDALE, AND GREAT BRITAIN, 1841-1911.¹

	1841	1851	1861	1871	1881	1891	1901	1911
Upper W/d	35.9	45.8	47.0	48.0	44.9	-	-	-
Lower W/d	36.1	45.1	41.3	43.4	42.6	-	-	-
S/d	32.7	40.0	42.6	43.1	43.9	-	-	-
G.B.	37.3	45.0	45.5	45.1	42.9	43.9	44.0	44.8

¹ As a percentage of the total population. Details of the occupied population of upper and lower Wensleydale and Swaledale are not available after 1881.

Source: PRO HO 107/1245-6, 1252-4, 2379-80, RG 9/3667-73, RG 10/4868-73, RG 11/4873-8, CEB, 1841-81, upper and lower Wensleydale and Swaledale; B.R. Mitchell & P. Deane, *Abstract of British Historical Statistics*, Cambridge, 1962, pp6,60.

The three areas exhibit marked differences from the national trend. In upper Wensleydale, with its predominantly agricultural economy, the economically-active proportion of the population was, from 1851, consistently higher than in the country as a whole or than in the other two areas, and rose steadily to 48 per cent in 1871. The activity rate in lower Wensleydale, which had a more mixed economy, shows no clear trend, peaking at 45.1 per cent as early as 1851. Swaledale, with its dependence on the lead industry, had the lowest activity rate overall, peaking at 43.9 per cent in 1881.

The unoccupied proportion of the population comprised primarily children, aged fourteen years and under, and housewives. The proportion of the total population which

these two categories constituted varied both between areas and over time without any clear pattern or trend being discernible. The proportion of children ranged from 32.6 per cent in upper Wensleydale in 1851 to 36.6 per cent in Swaledale at the same date. The proportion of housewives varied from 12.6 per cent in upper Wensleydale in 1851 to 15 per cent in Swaledale in 1871. The balance of the unoccupied population comprised: paupers, the proportion of which ranged from 0.5 per cent to 2.1 per cent; scholars over fourteen years of age; retired persons; those of independent means; and those with no occupation returned.³

II

The occupational structure of the three areas in the period 1801-31 is shown in Table 3.2.⁴

Upper Wensleydale, whilst clearly more reliant on agriculture than either of the other two areas, was less dependent on this source of employment and had a greater diversity of employment opportunity than later in the century. Conversely, in so far as the statistics can be interpreted, it appears that Swaledale was more heavily dependent on employment in the lead industry in this period than at any time in the century. Despite the obvious anomalies which are apparent in the lower Wensleydale statistics, it would seem that this area enjoyed the more diverse employment base that was to be characteristic throughout the century.

TABLE 3.2

OCCUPATIONAL STRUCTURE OF UPPER AND LOWER WENSLEYDALE AND
SWALEDALE, 1801-1831.

	1801 ¹	%	1811 ²	%	1821 ²	%	1831 ²	%
Upper W/d								
Agr.	1208	23.2	602	51.1	525	41.4	493	39.2
TMH.	1597	30.7	365	31.0	257	20.2	269	21.4
Oth.	2400	46.1	211	17.9	487	38.4	495	39.4
Lower W/d								
Agr.	372	19.1	241	46.4	176	31.7	161	29.1
TMH.	431	22.1	146	28.1	178	32.1	199	36.0
Oth.	1148	58.8	132	25.4	201	36.2	193	34.9
S/d								
Agr.	386	6.7	184	12.3	213	14.2	254	17.6
TMH.	523	9.1	1177	78.6	732	48.8	214	14.9
Oth.	4830	84.2	136	9.1	554	37.0	972	67.5

Agr. = Agriculture.

TMH. = Trades, Manufacturing and Handicrafts.

Oth. = Others.

¹ The whole population was placed in one of the three occupational categories.

² The chief occupation of the family was recorded.

Note: in 1801 some of the unoccupied members of the family were placed in the 'Others' category. Throughout the period there was confusion among the enumerators as to which category to assign those occupied in mining. The above Table would seem to suggest that in Swaledale in 1801, 1821, and 1831 the miners were placed in the 'Others' category whereas in 1811 miners were apparently placed in the 'Trades etc' category.

Source: NYCRO, PP 19/1,3,5,8, *Census Enumeration Abstracts for the County of York, 1801-31.*

The occupational structure of the three areas in the period 1841-81 is shown in Table 3.3. The statistics for 1841, although inferior to those for 1851-81, are included for purposes of overall comprehensiveness rather than detailed comparison.

TABLE 3.3

OCCUPATIONAL STRUCTURE OF UPPER AND LOWER WENSLEYDALE AND
SWALEDALE, 1841-81.

	1841	% ¹	1851	% ¹	1861	% ¹	1871	% ¹	1881	% ¹
Upper W/d ²	2053		2579		2647		2624		2471	
Agric.	990	48.2	1095	42.5	1218	46.0	1235	47.1	1213	49.1
Extr.	65	3.2	100	3.9	131	4.9	128	4.9	102	4.1
Text.	101	4.9	263	10.2	225	8.5	130	5.0	94	3.8
Cr.	281	13.7	353	13.7	347	13.1	329	12.5	304	12.3
Ser.	153	7.5	210	8.1	263	9.9	262	10.0	231	9.3
Non a.	53	2.6	94	3.6	80	3.0	182	6.9	102	4.1
P.M.M.	40	1.9	80	3.1	82	3.1	86	3.3	96	3.9
Serv.	348	17.0	418	16.2	383	14.5	354	13.5	356	14.4
Others	24	1.2	25	1.0	21	0.8	32	1.2	83	3.4
Tot. ³	2055		2638		2750		2738		2581	
Lower W/d ²	892		1195		1214		1173		1140	
Agric.	365	40.9	323	27.0	259	21.3	258	22.0	304	26.7
Extr.	58	6.5	207	17.3	239	19.7	128	10.9	103	9.0
Text.	-	-	1	0.1	2	0.2	-	-	-	-
Cr.	181	20.3	246	20.6	252	20.8	257	21.9	222	19.5
Ser.	82	9.2	121	10.1	124	10.2	114	9.7	120	10.5
Non a.	3	0.3	18	1.5	39	3.2	66	5.6	29	2.5
P.M.M.	30	3.4	34	2.8	43	3.5	48	4.1	61	5.4
Serv.	157	17.6	234	19.6	231	19.0	272	23.2	266	23.3
Others	18	2.0	33	2.8	57	4.7	67	5.7	78	6.8
Tot. ³	894		1217		1246		1210		1183	
S/d ²	2205		2718		2641		2323		2068	
Agric.	429	19.5	531	19.5	669	25.3	762	32.8	795	38.4
Extr.	1052	47.7	1343	49.4	1203	45.6	959	41.3	671	32.4
Text.	46	2.1	39	1.4	50	1.9	6	0.3	5	0.2
Cr.	238	10.8	263	9.7	277	10.5	204	8.8	201	9.7
Ser.	113	5.1	156	5.7	170	6.4	173	7.4	143	6.9
Non a.	16	0.7	40	1.5	30	1.1	33	1.4	34	1.6
P.M.M.	53	2.4	59	2.2	56	2.1	66	2.8	69	3.3
Serv.	250	11.3	368	13.5	310	11.7	302	13.0	283	13.7
Others	11	0.5	14	0.5	13	0.5	22	0.9	20	1.0
Tot. ³	2208		2813		2778		2527		2221	

Agric.= Workers in agriculture including adult members of

the farmer's family, farmer's children where they are returned as working on the farm but excluding the farmer's wife.

Extr.= Workers in the lead, coal and quarrying industries.

Text.= Workers in the textile industry (cottage and factory based).

Cr.= Workers in the craft industries.

Ser.= Workers in the service industries.

Non a.= Non-agricultural and unspecified labourers.

P.M.M.= Professional people, manufacturers and managers.

Serv.= Servants including both indoor and outdoor workers.

Others = Clerical and workers in miscellaneous occupations including railway employees and jockeys.

¹ Percentage of occupied population.

² Occupied population.

³ Total of occupations. Dual occupations have been assigned to both categories so the total number of occupations is greater than the total occupied population.

Note 1: where children (fourteen years and under) were returned as working they have been included in the relevant category.

Note 2: see Appendix I for occupational classification.

Source: PRO HO 107/1245-6, 1252-4, 2379-80, RG 9/3667-73, RG 10/4868-73, RG 11/4873-78, CEB, 1841-81, upper and lower Wensleydale and Swaledale.

The occupational structure of upper Wensleydale in the period 1841-81 was that of an area with a broadly typical rural economy, that is of agriculture being closely supported by crafts and services.³ In contrast, the percentage in agricultural employment in lower Wensleydale was less than half that of upper Wensleydale for much of the period. Conversely, the proportion of the population employed in both the extractive industries and in crafts and services in lower Wensleydale was substantially greater than in upper Wensleydale. In Swaledale nearly half the workforce was involved in extractive industry in 1851. This proportion declined progressively to a little under a

third in 1881, by which date agriculture had become the principal employer. The proportion of craft and service employment in Swaledale, predictably, was consistently lower than in Wensleydale with its agricultural predominance and important market towns.

A feature identified in some rural areas is the tendency for some occupations to cluster in specific communities.⁶

TABLE 3.4

CATEGORIES OF TOWNSHIP IN UPPER AND LOWER WENSLEYDALE AND

Type	SWALEDALE, 1841-1881.											
	Upper W/d				Lower W/d				Swaledale			
	1	2	3	4	1	2	3	4	1	2	3	4
1841	10	-	-	2b	4	-	1	1a	1	3	-	2a,1c
1851	9	-	2	1b	1	3	1	1b	1	3	-	2a,1c
1861	10	-	-	2b	-	2	1	1b,1c,1d	3	2	-	1a,1c
1871	10	-	-	2b	1	-	1	2b,1c,1d	4	2	-	1d
1881	11	-	-	1b	3	-	1	1b,1d	4	2	-	1b

Type 1: Townships where the greatest percentage (by a margin of more than 10 per cent from the next category) of the occupied population was in AGRICULTURAL occupations.

Type 2: Townships where the greatest percentage (by a margin of more than 10 per cent from the next category) of the occupied population was in the EXTRACTIVE industries.

Type 3: Townships where the greatest percentage (by a margin of more than 10 per cent from the next category) of the occupied population was in the CRAFT AND SERVICE industries.

Type 4: Townships where there is less than 10 per cent difference between the leading two or three occupational categories of Types 1-3.

The occupational categories involved in Type 4 are recorded as follows:-

- a. Agriculture and the Extractive industries,
- b. Agriculture and Crafts and Services,
- c. Extractive industries and Crafts and Services,
- d. Agriculture and Extractive industries, and Crafts or Services.

Note: where dual occupations are returned they are recorded in both categories, see also Notes, Table 3.3.

Source: see Table 3.3.

Table 3.4 shows townships categorized according to dominant employment type.

Despite the pre-eminence of agriculture in upper Wensleydale, it is clear that some communities were important centres of craft industry and service provision. The lower Wensleydale townships reflect the influence of the lead industry on their economy. They moved from an economy dominated by agriculture through to one dominated by lead mining in the mid-nineteenth century and then, in the last two decades of this period, returned to a more rural-based economy of agriculture and crafts. A majority of Swaledale's townships was dominated by the lead industry between 1841 and 1861 but by 1871 lead mining had lost its pre-eminence as a source of employment and four of the seven townships were predominantly agricultural.⁷

III

The rural craftsman was integrally associated with the relatively self-sufficient rural economy which persisted in England and Wales well into the nineteenth century.⁸ Continuing rural population growth to the mid-nineteenth century stimulated demand for the products and services of the rural craftsman in both local and regional markets.⁹ In consequence, the number and prosperity of rural craftsmen increased broadly in line with the growth of rural population. It has been observed that employment in

virtually all crafts dropped consistently from either 1861 or 1871 and that in many areas employment in country crafts per thousand of population fell from 1851.¹⁰ The causes of this decline have been the subject of much debate.¹¹ The link with declining rural population is inescapable but of comparable importance was the impact of industrialization and the competition from factory made goods which improved transport facilitated.¹² Nevertheless, the contraction of the rural craft industry was gradual and even at the end of the nineteenth century the rural craftsman remained an important figure in the life of the countryside.¹³

The place of crafts in the economic structure of a nineteenth-century community provides a useful guide to the degree of self-sufficiency and vitality of the community. Table 3.5 shows employment in craft occupations in the three areas in the period 1841-81.

TABLE 3.5

CRAFT OCCUPATIONS IN UPPER AND LOWER WENSLEYDALE
AND SWALEDALE, 1841-81.

	Upper W/d		Lower W/d		Swaledale	
	nos	% ¹	nos	% ¹	nos	% ¹
1841	281	13.7	181	20.3	238	10.8
1851	353	13.7	246	20.6	263	9.7
1861	347	13.1	252	20.8	277	10.5
1871	329	12.5	257	21.9	204	8.8
1881	304	12.3	222	19.5	201	9.7

¹ Percentage of occupied population.

Notes: see Table 3.3.

Source: see Table 3.3.

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1881	304	12.3	222	19.5	201	9.7

¹ Percentage of occupied population.

Notes: see Table 3.3.

Source: see Table 3.3.

The varying significance of craft employment in the three areas is immediately apparent. Craft employment, expressed as a proportion of the economically-active population, was twice as important in the relatively diverse economy of lower Wensleydale than in Swaledale, which was dominated by the lead industry. Upper Wensleydale, with its predominantly agricultural economy, had a substantially smaller proportion of its population in craft employment than lower Wensleydale. In all three areas the peaking of craft employment accords with the national pattern and closely follows the population peaks.¹⁴ What the statistics disguise is the extent to which the three areas were interdependent. The population of upper Swaledale made use of craftsmen in upper Wensleydale and, particularly in the second half of the nineteenth century, the population of upper Wensleydale made use of craftsmen in lower Wensleydale.¹⁵

Employment in the different crafts did not necessarily follow the same trend, as Table 3.6 shows by reference to blacksmiths, stonemasons and shoemakers. Although nationally there was not an absolute decrease in the number of blacksmiths until the end of the century, both in the North Riding of Yorkshire, where numbers peaked in 1851, and in the two dales there was a decrease in numbers from the mid-nineteenth century.¹⁶

TABLE 3.6

NUMBERS EMPLOYED IN SELECTED CRAFTS IN UPPER AND LOWER
WENSLEYDALE AND SWALEDALE, 1841 AND 1881.

	Pop.		Blacksm.		Stone M.		Shoem.	
	1841	1881	1841	1881	1841	1881	1841	1881
Upper								
W/d	5725	5482	32	20	39	53	63	43
Lower								
W/d	2463	2722	16	14	15	31	36	21
S/d	6758	4717	31	22	36	23	34	30

Note: includes masters, journeymen and apprentices.

Source: PRO, HO 107/1245-6,1252-4, RG 11/4873-8, CEB, 1841,1881, upper and lower Wensleydale and Swaledale.

The number of blacksmiths per thousand population (see Table 3.7) in upper Wensleydale and lower Wensleydale declined between 1841 and 1881 but in Swaledale, which lost almost one-third of its blacksmiths over this period, there was a small increase in numbers per thousand.

TABLE 3.7

BLACKSMITHS AND SHOEMAKERS PER THOUSAND POPULATION IN UPPER
AND LOWER WENSLEYDALE AND SWALEDALE, 1841 AND 1881.

	Upper W/d	Lower W/d	Swaledale
Blacksmiths			
1841	5.6	6.5	4.6
1881	3.6	5.1	4.7
Shoemakers			
1841	11.0	14.6	5.0
1881	7.8	7.7	6.4

Source: see Table 3.6.

As with crafts generally, the more diverse economy of lower Wensleydale is reflected in the fact that it had the highest number of blacksmiths per thousand. The proportion of blacksmiths in all three areas was consistently lower than in the North Riding. The 1881 North Riding figure of 6.2 compares with rates of 3.6 to 5.1 in the three areas.¹⁷

The incidence of shoemakers follows a similar pattern. The number of shoemakers per thousand population fell in both upper and lower Wensleydale between 1841 and 1881 whereas in Swaledale, although numbers declined, there was an increase in numbers per thousand. The number of shoemakers per thousand in the North Riding exceeded numbers in the three areas until 1881 when at a rate of 6.4 to 7.8 the local level overtook the county figure of 6.3.¹⁸ The comparatively high proportion of shoemakers per thousand in the two dales in 1881 was due to the relative isolation of the area and, consequently, its greater reliance on local craftsmen even after the coming of the railway.

In contrast to the trend with blacksmiths and shoemakers, the numbers of stonemasons, although declining in Swaledale, increased in both upper and lower Wensleydale between 1841 and 1881. While the increase in the number of stonemasons may conceal some incorrect recording of quarrymen, the growing export of dressed stone from several large quarries (see Chapter 12) and a rise in building activity within Wensleydale account for most of the increase. For example, eight of the fifteen stonemasons

recorded in Hawes in 1851 were born in Gilling, near Richmond. They may have been employed by a firm building the new Parish Church in 1850 or the new Independent Church which was completed in 1851.¹⁹

An indication of the incidence of different craft businesses may be obtained from the directories.²⁰ The numbers of blacksmiths', stonemasons' and shoemakers' businesses per thousand population are set out in Table 3.8. The number of blacksmiths' businesses per thousand was highest in lower Wensleydale, reflecting the importance of crafts in the area's mixed economy. The lower numbers of blacksmiths per thousand recorded in upper Wensleydale may point to the increasing reliance placed on the lower dale facilities, particularly in the latter part of the century. In Swaledale the directory information for 1893 would seem to imply an increasing demand for blacksmiths as dependence on agriculture superseded reliance on the lead industry. The number of shoemakers' businesses per thousand in Swaledale was consistently lower than in either of the two Wensleydale areas, possibly reflecting differences in standard of living and also the reliance of parts of Swaledale on Wensleydale craftsmen. As with blacksmiths and shoemakers, the number of stonemasons' businesses per thousand was highest in lower Wensleydale for most of the period but in 1872 and 1893 lower Wensleydale was second to upper Wensleydale and Swaledale respectively.

TABLE 3.8

SELECTED CRAFT BUSINESSES PER THOUSAND POPULATION IN UPPER
AND LOWER WENSLEYDALE AND SWALEDALE, 1823-1893.

Blacksmiths					
	1823	1840	1857	1872	1893
Upper					
W/d	2.8	2.6	2.8	2.9	2.1
Lower					
W/d	3.7	3.2	3.7	3.3	3.9
S/d	1.7	2.2	1.6	1.9	3.1
Stonemasons					
Upper					
W/d	2.0	3.3	2.7	4.0	3.8
Lower					
W/d	4.4	5.3	5.0	3.7	3.9
S/d	0.4	2.1	1.9	2.0	4.4
Shoemakers					
Upper					
W/d	4.8	5.6	6.5	5.5	4.2
Lower					
W/d	8.5	10.6	4.7	5.9	5.6
S/d	2.3	4.0	4.4	3.0	3.7

Source: E. Baines, *History, Directory and Gazetteer of the County of York*, Vol II, Leeds, 1823, passim; W. White, *History, Gazetteer and Directory of the East and North Ridings of Yorkshire*, Sheffield, 1840, passim; E. R. Kelly (ed), *Post Office Directory of the North and East Ridings, Yorkshire*, 1857, 1872, 1893, passim.

Some indication of the size of blacksmiths' and shoemakers' businesses may be obtained by combining elements of Tables 3.7 and 3.8, as shown in Table 3.9.²¹ Between 1841 and 1881 the size of blacksmiths' and shoemakers' businesses in upper and lower Wensleydale fell, matching the fall in the number of blacksmiths and

shoemakers per thousand of population. In Swaledale, although the number of blacksmiths per thousand increased slightly, the size of blacksmiths' businesses fell marginally whereas a marked increase in the number of shoemakers per thousand was translated into a significant increase in the size of shoemakers' businesses. The general pattern which emerges is one of the size of craft businesses falling in line with the fall in population. The increase in the size of shoemakers' businesses in Swaledale is an unexpected deviation from this pattern.

TABLE 3.9

SIZE OF BLACKSMITH AND SHOEMAKER BUSINESSES IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1841 AND 1881.¹

	Upper W/d			Lower W/d			Swaledale		
	a Empl.	b Bus.	a/b	a Empl.	b Bus.	a/b	a Empl.	b Bus.	a/b
Blacks.									
1841	5.6	2.6	2.2	6.5	3.2	2.0	4.6	2.2	2.1
1881	3.6	2.5	1.4	5.1	3.6	1.4	4.7	2.5	1.9
Shoem.									
1841	11.0	5.6	2.0	14.6	10.6	1.4	5.0	4.0	1.3
1881	7.8	4.9	1.6	7.7	5.8	1.3	6.4	3.4	1.9

¹ Per thousand population.

Note: the 1881 figure for businesses is derived from an average of 1872 and 1893, see Table 3.8.

Empl. = Employees.
Bus. = Businesses.

Source: see Tables 3.6 and 3.8.

The spatial distribution of shoemakers illustrates the concentration of some craft occupations in specific townships. Both Aysgarth and, to a lesser extent, Thoraby

specialized in shoemaking. In Thoralby the craft declined from four shoemakers in 1823 to three in 1840 and to one in 1893.²² The number of shoemakers in Aysgarth declined also, from nine in 1841 to six in 1871 and to four in 1881.

In Aysgarth, as Table 3.10 illustrates, the population threshold for shoemakers was much lower than in the three areas generally, indicating the extent of specialization in this craft in Aysgarth.

TABLE 3.10

THRESHOLD OF POPULATION AT WHICH SHOEMAKERS APPEAR IN AYSGARTH, AND UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1841, 1871, 1881.

	Aysgarth	Upper W/d	Lower W/d	S/d
1841	30	91	68	199
1871	38	93	169	298
1881	93	128	130	157

Source: PRO, HO 107/1245-6, 1252-4, RG 10/4868-73, RG 11/4873-8, CEB, 1841, 1871, 1881, upper and lower Wensleydale and Swaledale.

An Aysgarth shoemaker's account book for the years 1857 to 1873 provides an indication of the amount of business undertaken and confirms that local shoemakers served a wider area than their immediate village.²³ As with many other craftsmen, the shoemaker, Francis Thompson, followed more than one occupation and was returned as 'farmer and shoemaker' in a contemporary directory.²⁴ He does not appear to have employed labour in the business. The account book indicates that Thompson made all types of footwear. The business covered most of Wensleydale and substantial orders were taken from adjacent Coverdale and nearby

Richmond. Occasional orders came from Wharfedale to the south and from places further afield.

In 1861 Thompson achieved a peak of 237 orders and received payments of £296.11.6d. The following year his receipts of £308.14.2d. from 231 orders were the highest of the period. In that year fifty orders came from Aysgarth, 137 from elsewhere in Wensleydale, thirty-three from Coverdale (about six miles distant), two from Swaledale (about ten miles away), three from dales to the south (about nine miles away) and six from Richmond (about fifteen miles away). This shoemaker, therefore, was serving an area of up to twenty miles radius from his home. The mileage, however, does not give an indication of the difficult terrain which needed to be traversed to reach all the places outside Wensleydale (see Map 2). The shoemaker received some of his payment in kind, which suggests the continuing existence of a partial barter economy. Several of the individual accounts in each year were for sums in excess of five pounds, indicating that some of Thompson's customers were people of substance.

The business of another shoemaker, Robert Hunter of Askrigg, was neither as large nor covered such an extensive area as that of Francis Thompson.²⁵ Hunter's business rose to a peak in the mid-nineteenth century when in 1852 he took orders worth £103.11.10d. from 128 people. The business quickly declined and throughout the 1860s and 1870s he made shoes for less than ten people annually. In 1883 business revived slightly to a peak of thirteen people

but then declined and after 1884 he had fewer than ten customers annually. As with Thompson and in common with craftsmen and tradesmen elsewhere, Hunter also took some of his payments in kind.²⁶ Most of Hunter's customers were local but a significant proportion were from Swaledale. Of the 128 customers in 1852, at least twenty-four were from Swaledale, one lived in Northallerton, thirty miles away, and one came from Catterick Bridge, twenty miles away. All the others were from upper Wensleydale. Hunter made large quantities of clogs and, like Thompson, his main market was the local working man. Apart from the relatively buoyant 1850s, his customers rarely placed orders amounting to more than one pound.

The rise and fall in the fortunes of the local shoemakers was predictable. Although the footwear industry in Britain was developing into a large wholesale industry in specific locations from the early nineteenth century, concentration was not pronounced before the middle of the century. The increase in output was due to the expansion of the home market, to export demand, and to the requirements of the military for men fighting in the Crimea.²⁷ Even in 1851 only 6 per cent of the master manufacturers of footwear employed more than ten men, so the industry remained mainly in the hands of craftsmen.²⁸ However, increasing population coupled with the rise in the standard of living and the influence of fashion led to a growing demand for footwear and encouraged the adoption of technical innovations.²⁹ This speeded up the move into mass

production which eventually led to the demise of the craft shoemaker. Hunter and Thomson reached their peak of output in the 1850s and 1860s and although their decline may have been influenced by personal factors it coincided with the mass production of footwear and the arrival of the local railway, first to Leyburn in 1856 and then throughout the dale in 1878.³⁰ Perhaps the inevitable demise of the local craft industry was foreseen by the shoemaker who placed the following advertisement in a local paper in 1860:

to be disposed of, the old established business of a clog and shoemaker in a lead mining district which has been carried on with success by one family for fifty years, at present in full operation employing an average of four men.³¹

The census returns and the directories indicate that craft employment in Wensleydale and Swaledale followed the same broad trend that was evident regionally and nationally. Although craft employment may have delayed the consequences of industrialization and urbanization for much of rural England, it is widely accepted that by 1900 country crafts were everywhere in decline.³² This was the case in Wensleydale and Swaledale, although overall decline appears to have been deferred until the last quarter of the nineteenth century, somewhat later than in the country as a whole.³³ Lawton ascribed the rural exodus in the second half of the nineteenth century to the loss of rural

industry, much of it in crafts, due to the impact of mechanization.³⁴ A general exodus from crafts in the two dales in the second half of the nineteenth century is not discernible and, although in decline, craft employment remained an integral and important element in the economy throughout the century. As a rule, if a craft was in evidence in a township in 1823, it was likely to be present in 1872 and, most probably, still there in 1893, although in decreased numbers.³⁵ As Saville so appositely comments,

So long as village and parish populations did not fall markedly, and while the local and regional markets were still intact and under no serious pressure from national competition, the outlook for the rural craftsman was a secure one.³⁶

In addition to the impact of mechanization, improved transport has been regarded generally as one of the principal causal factors in the decline of rural crafts.³⁷ In Wensleydale and Swaledale this relationship is inconclusive. The isolation of the area, and the consequent high cost of importing factory products, enabled craftsmen in the two dales to continue in business long after their counterparts in more accessible parts of the countryside had succumbed to competition from mass-produced goods. It has already been noted that the number of craftsmen in lower Wensleydale increased, both absolutely and per thousand of population, after the arrival of the railway at Leyburn. The fact that the railway was not opened beyond Leyburn until 1878 and failed to penetrate Swaledale beyond Richmond may account, in some measure, for

the relatively later decline of crafts in the two dales (see Chapter 14). However, even after the arrival of the railway it would appear that the potential for receiving large quantities of mass-produced goods was not realized immediately and the rural craftsman was able to survive in the dales into the twentieth century.

IV

In England and Wales as a whole, employment in the service sector increased rapidly in the second half of the nineteenth century, in what has been referred to as the 'distributive revolution'.³⁸ The trend in the rural areas was less clear, being complicated by the opposing influences of falling population and rising living standards. Lawton and Mingay point to a general decline in the rural service sector in the second half of the nineteenth century whereas Chartres, although finding evidence for decline in selected North Riding villages, suggests that the overall national growth in services was mirrored in the countryside.³⁹

Throughout the nineteenth century, retailers were always less numerous than craftsmen in rural communities.⁴⁰ This holds true for Wensleydale and Swaledale and in no township was the service sector dominant over crafts. Overall, as shown in Table 3.11, the percentage of the economically-active population employed in the service sector increased in both dales between 1841 and 1871. By 1881 this percentage had declined in both upper Wensleydale

and Swaledale. The upward trend in the third quarter of the century follows the national increase in the service sector, which continued into the twentieth century, but is contrary to the trend in some rural areas, including selected North Riding communities.⁴¹

TABLE 3.11

SERVICE OCCUPATIONS IN UPPER AND LOWER WENSLEYDALE
AND SWALEDALE, 1841-81.

	Upper W/d		Lower W/d		Swaledale	
	nos	% ¹	nos	% ¹	nos	% ¹
1841	153	7.5	82	9.2	113	5.1
1851	210	8.1	121	10.1	156	5.7
1861	263	9.9	124	10.2	170	6.4
1871	262	10.0	114	9.7	173	7.4
1881	231	9.3	120	10.5	143	6.9

¹ Percentage of occupied population.

Notes: see Table 3.3.

Source: see Table 3.3.

The percentage of the economically-active population employed in the service sector in the period 1841-81 was generally highest in lower Wensleydale, reflecting its more diverse economic structure, and lowest in Swaledale, where the less-stable, primary economic base was probably not conducive to the development of a high level of service employment. The relatively-stable agricultural economy of upper Wensleydale was able to support a service infrastructure which, as a proportion of the economically-active population, approached that of lower Wensleydale, despite an element of competition from the

latter.

V

The open market had long been the principal commercial institution to which the farming community had recourse but increasingly during the nineteenth century the market came under pressure from other retailing outlets and from improved transport. However, the market was resilient and in many rural areas remained a centre for commercial and social intercourse throughout the nineteenth century. Centres where open markets were held frequently expanded into thriving towns, performing an important service to the rural hinterland.⁴² They provided a mart for specialist commodities such as corn and cattle, and general goods and produce; and they offered a variety of services and facilities which might not otherwise have been readily accessible to the surrounding communities.⁴³ The market presented opportunities both for the exchange of goods produced within the area and also for the sale of goods to, or purchase from, dealers from outside the area.

Although several villages in Wensleydale and Swaledale had market charters of ancient origin, the two Wensleydale towns of Hawes and Leyburn attained pre-eminence during the nineteenth century.⁴⁴ Hawes, which received its charter in 1700, expanded rapidly but did not achieve a dominant position in the upper dale until after 1795 when the Richmond-Lancaster turnpike road was diverted through the town.⁴⁵ A local newspaper in 1844 attests to the rapid

growth of Hawes:

There are few places... which have risen so rapidly from a state of obscurity to comparative respectability as the small market town of Hawes. Individuals are now living who can well remember its thatched cottages, and humble ... hearths ... when trade and commerce were scarcely known in its streets, and when few opportunities were afforded for the exchange of money or goods beyond the simple and ordinary wants of a primitive community, similar to what Hawes presented at that period.⁴⁶

The population of Hawes township rose from 1223 in 1801 to 1890 in 1881. However, the greatest growth in craft and service occupations, which were integrally related to its market function, took place between 1841 and 1861 when employment in these categories, as a percentage of the occupied population, increased by 9.7 per cent.⁴⁷

Leyburn was granted its market charter in 1684 and, capitalizing on its strategic position at the entrance to Wensleydale, it expanded rapidly.⁴⁸ The township population, which was concentrated largely in the town itself, rose from 446 in 1801 to a peak of 1003 in 1831 before settling at between 800 and 982 for the rest of the century.⁴⁹ The growth of Leyburn reflects the town's new-found position as an important market centre, as the developing economy looked beyond the supply of local and regional needs and demanded easier access to external markets.

Askrigg, five miles east of Hawes, had been the chief

market and service centre for upper Wensleydale prior to the ascendancy of Hawes. Although the market was abandoned in the middle of the nineteenth century and the population of the township declined rapidly from its peak of 765 in 1821, Askrigg retained a local importance as a centre for crafts and services.⁵⁰ Nevertheless, the proportion of the economically-active population employed in crafts declined from 18 per cent in 1851 to 16 per cent in 1881 whilst the comparable figure for services fell from 18 per cent to 14 per cent over the same period.⁵¹ Despite this decline, the township still exhibited a dual economy of agriculture, and crafts and services in 1871, and still served adjacent communities. The rivalry between Askrigg and Hawes continued until late in the century but after the opening of the railway to Hawes in 1878 the battle to re-establish Askrigg as the upper dale market centre was effectively lost.⁵²

Reeth was the market town for that part of Swaledale within the study area and its fortunes fluctuated with those of the lead industry. The township population rose from 1128 in 1801 to a peak of 1460 in 1821 before falling to 570 in 1901.⁵³ The importance of Reeth as a market centre declined in line with the lead industry and by 1893 the Friday market was stated to be 'nearly obsolete'.⁵⁴

The underlying movement in the economic base of the four market towns can be seen more clearly when the proportion of the population employed in crafts and services, and in the professional, manufacturing and managerial category

(PMM) are considered (see Table 3.12).²²

TABLE 3.12

TRENDS IN OCCUPATIONS IN THE MARKET TOWNS OF WENSLEYDALE
AND SWALEDALE, 1851 AND 1881.

	% in Cr. & Serv. ¹		% in P.M.M. ¹	
	1851	1881	1851	1881
Askrigg	35.7	30.7	6.3	2.3
Hawes	45.0	35.4	5.1	5.8
Leyburn	47.5	41.0	4.2	8.8
Reeth	31.7	31.4	3.7	3.3

¹ Percentage of occupied population.

Notes: see Table 3.3.

Source: PRO HO 107/2379-80, RG 11/4873-8, CEB, 1851, 1881, upper and lower Wensleydale and Swaledale.

The proportion of the economically-active population employed in the 'crafts and services' and 'PMM' sectors provides an indication of the significance of the four towns as market centres. Over the period 1851-81 both Leyburn and Hawes, with between 40 and 50 per cent, retained a higher proportion of their workforce in these sectors than Askrigg and Reeth, both of which had only about one-third of their workforce in these sectors in 1881.

Although during the second half of the nineteenth century Askrigg lost its market and Reeth was barely able to maintain its market functions, the markets of both Hawes and, particularly, Leyburn thrived and, together, played an important part in keeping intact the rural economy of

Wensleydale.⁵⁶

VI

The professional, manufacturing and managerial (PMM) class constituted only a small proportion of the economically-active population. In line with the trend in the country as a whole and in other rural areas, both the numbers and the proportion of the occupied population employed in this category in the two dales increased as the century progressed.⁵⁷ Predictably, such employment was concentrated primarily in the market towns and larger communities (see Table 3.13).

TABLE 3.13

PROFESSIONAL PEOPLE, MANUFACTURERS AND MANAGERS IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1841-81.

	Upper W/d		Lower W/d		Swaledale	
	nos	% ¹	nos	% ¹	nos	% ¹
1841	40	1.9	30	3.4	53	2.4
1851	80	3.1	34	2.8	59	2.2
1861	82	3.1	43	3.5	56	2.1
1871	86	3.3	48	4.1	66	2.8
1881	96	3.9	61	5.4	69	3.3

¹ Percentage of occupied population.

Notes: see Table 3.3.

Source: see Table 3.3.

The proportion of the workforce employed in the PMM sector was, from 1861, highest in lower Wensleydale, a

further indication of the more progressive economy of that area and of its role in servicing the wider hinterland.

VII

The servant category differed from other employment groups in that the labour was predominantly female (98 and 94 per cent in Wensleydale and Swaledale respectively in 1881). The proportion of servants in the workforce was lowest in Swaledale and highest in lower Wensleydale, reflecting differences in the dominant economy of the three areas (see Table 13.14).

TABLE 3.14

SERVANTS IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE,
1841-81.

	Upper W/d		Lower W/d		Swaledale	
	nos	% ¹	nos	% ¹	nos	% ¹
1841	348	17.0	157	17.6	250	11.3
1851	418	16.2	234	19.6	368	13.5
1861	383	14.5	231	19.0	310	11.7
1871	354	13.5	272	23.2	302	13.0
1881	356	14.4	266	23.3	283	13.7

¹ Percentage of occupied population.

Notes: see Table 3.3.

Source: see Table 3.3.

In the period 1841-81 the servant category was the second largest occupational grouping in upper Wensleydale, generally the second or third largest in lower Wensleydale and the third largest in Swaledale (see Table 3.3).⁵⁰ The

data in Table 3.3 may be interpreted as suggesting that lead miners were less likely to employ servants than farmers, and that those engaged in crafts and services, and in the PMM sector, were more likely to keep servants than farmers.

A significant proportion of servants were related to the head of the household in which they were employed (see Table 3.15). However, it was rare for a person recorded as a servant to be a member of the nuclear family; the relationship was generally not closer than niece or cousin.

TABLE 3.15

NUMBER OF SERVANTS RELATED TO HEAD OF HOUSEHOLD IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1851-1881.

	1851	1861	1871	1881
Upper W/d				
No. of Serv.	418	383	354	356
% of occ. pop.	16.2	14.5	13.5	14.4
No. rel. to head	97	78	72	75
% of cat. ¹	23.2	20.4	20.3	21.1
Lower W/d				
No. of Serv.	234	231	272	266
% of occ. pop.	19.6	19.0	23.2	23.3
No. rel. to head	26	19	32	18
% of cat. ¹	11.1	8.2	11.8	6.8
Swaledale				
No. of serv.	368	310	302	283
% of occ. pop.	13.5	11.7	13.0	13.7
No rel. to head	132	104	111	112
% of cat. ¹	35.9	33.5	36.8	39.6

¹ Percentage of servant category related to the head of the household.

Source: PRO HO 107/2379-80, RG 9/3667-73, RG 10/4868-73, RG 11/4873-8, CEB, 1851-1881, upper and lower Wensleydale and Swaledale.

In Swaledale, in the period 1851-1881, over one-third of servants were related to the head of household in which they served. The comparable proportions in upper and lower Wensleydale were approximately one-fifth and less than one-tenth respectively. Whereas the proportion of servants who were related to the head of household increased in Swaledale between 1851 and 1881, the proportion in upper and lower Wensleydale declined. The differences in the three areas may reflect differences in traditions as much as differences in economies. There are some indications that the pre-modern custom of sending children to relations to spend time in service was a strong tradition in Swaledale and, to a lesser extent, in upper Wensleydale.⁵⁹

VIII

There are two remaining categories of employment in Table 3.3, 'non-agricultural and unspecified labourers' and 'others'. There was an overall increase in employment in the non-agricultural and unspecified labourers sector in the two dales, influenced at least in part by the construction of railways, highways, sewers and other infrastructure works, with both the number of such workers and their proportion of the total workforce peaking in 1871. However, the relatively small proportion of the total workforce which this sector constituted, together with classification problems, makes it difficult to draw

conclusions concerning trends. The 'others' category includes such disparate groups of workers as clerks, workhouse staff, railway employees, and racehorse grooms and jockeys (see Appendix I for full list).⁴⁰ The relatively high figures for lower Wensleydale in the period 1861-81 and for upper Wensleydale in 1881 include railway employees. As this is a residual category and as the numbers involved are so low, it is again not possible to draw conclusions concerning employment trends.

IX

Although records of the number of children of fourteen years and under in employment may suffer from under-registration in the censuses, the number of children employed full-time in the area appears not to have been high.⁴¹ A report in 1843 noted:

[children] do not, in Yorkshire go out [to work] before 10 [years], except quite accidentally, to light work; about 13 [years] they begin to work regularly.⁴²

Many children, of course, were employed only part-time and are not recorded in the censuses. Most employed children worked either in the lead or textile industries and many farmers' children worked on the family holding. Table 3.16 shows that over the period 1851-81 the number of children in work fell consistently in all three areas. The peak of child employment clearly occurred earlier, probably in the first half of the nineteenth century. Predictably,

in the lead-mining communities of Swaledale children

TABLE 3.16

CHILDREN IN EMPLOYMENT IN UPPER AND LOWER WENSLEYDALE
AND SWALEDALE, 1851-81.

	1851	% ¹	% ²	1861	% ¹	% ²	1871	% ¹	% ²	1881	% ¹	% ²
Upper W/d	141	5.5	7.1	121	4.6	5.9	77	2.9	4.1	57	2.3	3.0
Lower W/d	69	5.8	7.3	51	4.2	4.7	41	3.5	4.2	25	2.2	2.6
S/d	243	8.9	8.9	203	7.7	8.3	118	5.1	6.1	71	3.4	4.1

¹ Percentage of occupied population.

² Percentage of all children.

Note: children up to and including fourteen years old.

Source: see Table 3.15.

constituted a higher proportion both of the occupied population and of the total number of children than in upper and lower Wensleydale. The use of child labour, in an area where there was generally no labour scarcity, demonstrates both the continuance of earlier traditions and the existence of occupations which could be undertaken easily by children. The decline in the number of children employed in Wensleydale and Swaledale reflects changes in tradition and attitudes, a rise in the standard of living, diminishing job opportunities for adults in some localities and, from 1871, the effects of the implementation of the 1870 Education Act.⁴³

X

A feature of Victorian rural England was the survival of the pre-industrial tradition of dual, or even triple,

occupations. While these occupations may have varied in importance, with one being subsidiary to the other, the second occupation provided an additional source of income which, in some cases, enabled families to subsist and, in other cases, provided a welcome supplement to an already adequate standard of living. Many occupations in upland rural areas could not be sustained full time due either to inclement weather or to paucity of local demand, creating a capacity to undertake additional work.⁴⁴ This was true of Wensleydale and Swaledale where, apart from miner-farmers, knitting, crafts and services were often combined with other activities.⁴⁵

The censuses provide the only statistical information on dual employment but need to be treated with caution as the returns may reflect the zeal of the enumerator as much as the incidence of dual occupations. Further, apart from the clue which acreage figures give to the viability of agricultural holdings, the censuses do not indicate the extent to which one occupation may have been subsidiary to another. Despite their limitations, however, the censuses do shed useful light on the incidence and type of dual occupations in the second half of the nineteenth century.

In both Wensleydale and Swaledale, as Table 3.17 shows, the proportion of the workforce with dual occupations doubled between 1851 and 1881.⁴⁶

TABLE 3.17

DUAL OCCUPATIONS IN UPPER AND LOWER WENSLEYDALE AND
SWALEDALE, 1851-81.

	1851	% ¹	1861	% ¹	1871	% ¹	1881	% ¹
Upper W/d	59	2.3	103	3.9	114	4.3	110	4.5
Lower W/d	22	1.8	32	2.6	37	3.2	43	3.8
S/d	95	3.5	137	5.2	204	8.8	153	7.4

¹ Percentage of occupied population.

Note: the dual occupation category includes all those who returned more than one occupation. A few people had three occupations listed.

Source: see Table 3.15.

In upper and lower Wensleydale the relative importance of dual occupations increased in each decade over the period but in Swaledale the proportion of the workforce in dual occupations peaked, at 8.8 per cent, in 1871. Nevertheless, the proportion of the Swaledale workforce which was still in dual occupations in 1881 was substantially higher than that of upper and lower Wensleydale. The absolute numbers in dual occupations were also considerably higher in Swaledale, exceeding in each decade the total for the whole of Wensleydale. Table 3.18 demonstrates that the incidence of dual occupations was not evenly distributed between the various categories of employment. The census returns suggest that dual occupations were virtually non-existent in the textile industry. At this time, however, the great majority of those employed in the textile industry were women

TABLE 3.18

DUAL OCCUPATIONS BY CATEGORY IN UPPER AND LOWER WENSLEYDALE
AND SWALEDALE, 1851-1881.

	1851			1861			1871			1881		
	Nos ¹	Dual	% ²	Nos ¹	Dual	% ²	Nos ¹	Dual	% ²	Nos ¹	Dual	% ²
Upper												
W/d												
Ag.	1095	46	4.2	1218	83	6.8	1235	98	7.9	1213	107	8.8
Ex.	100	4	4.0	131	3	2.3	128	13	10.2	102	3	2.9
Tex.	263	4	1.5	225	2	0.9	130	6	4.6	94	1	1.1
Cr.	353	20	5.7	347	39	11.2	329	28	8.5	304	38	12.5
Ser.	210	32	15.2	263	62	23.6	262	59	22.5	231	46	19.9
N-ag.	94	-	-	80	6	7.5	182	11	6.0	102	4	3.9
PMM.	80	6	7.5	82	8	9.8	86	6	7.0	96	11	11.5
Serv.	418	-	-	383	1	0.3	354	6	1.7	356	1	0.3
Oth.	25	6	24.0	21	2	9.5	32	1	3.1	83	9	10.8
Lower												
W/d												
Ag.	323	18	5.6	259	16	6.2	258	33	12.8	304	34	11.2
Ex.	207	-	-	239	6	2.5	128	11	8.6	103	4	3.9
Tex.	1	-	-	2	-	-	-	-	-	-	-	-
Cr.	246	9	3.7	252	8	3.2	257	3	1.2	222	15	6.8
Ser.	121	15	12.4	124	21	16.9	114	20	17.5	120	22	18.3
N-ag.	18	1	5.6	39	-	-	66	-	-	29	2	6.9
PMM.	34	-	-	43	9	20.9	48	5	10.4	61	6	9.8
Serv.	234	-	-	231	1	0.4	272	1	0.4	266	-	-
Oth.	33	1	3.0	57	3	5.3	67	1	1.5	78	3	3.8
S/d												
Ag.	531	83	15.6	669	125	18.7	762	181	23.8	795	142	17.9
Ex.	1343	71	5.3	1203	81	6.7	959	117	12.2	671	73	10.9
Tex.	39	-	-	50	-	-	6	-	-	5	-	-
Cr.	263	11	4.2	277	20	7.2	204	25	12.3	201	21	10.4
Ser.	156	22	14.1	170	33	19.4	173	66	38.2	143	52	36.4
N-ag.	40	-	-	30	4	13.3	33	2	6.1	34	3	8.8
PMM.	59	1	1.7	56	7	12.5	66	13	19.7	69	9	13.0
Serv.	368	-	-	310	-	-	302	1	0.3	283	4	1.4
Oth.	14	2	14.3	13	2	15.4	22	3	13.6	20	2	10.0

Ag. = Workers in agriculture.

Ex. = Workers in the lead, coal and quarrying industries.

Tex. = Workers in the textile industry.

Cr. = Workers in the craft industries.

Ser. = Workers in the service industries.

N-ag. = Non-agricultural and unspecified labourers.

PMM = Professional people, manufacturers and managers.

Serv. = Servants, including both indoor and outdoor workers.

Oth. = Clerical and workers in miscellaneous occupations including railway employees and jockeys.

¹ Numbers in the occupational category.

² Percentage dual of category.

Source: see Table 3.15.

outworkers, many of whom will have had unpaid employment on the family farm which would not have been recorded in the census. Another employment group which may appear somewhat anomalous is the PMM category. The unexpectedly high proportion of this category in dual occupations is due largely to the fact that it includes lay preachers, who will have earned their living by some other occupation.

In both dales the incidence of dual occupations in the period 1851-81 was generally highest in agriculture. It is significant that in lower Wensleydale and Swaledale, where a substantial proportion of the workforce was engaged in lead mining, the incidence of dual occupations in agriculture and extractive industry follow the same trend.

This pattern is most clear in Swaledale, with its simpler economy based largely on extractive industry and agriculture. Here, total employment in agriculture rose consistently from 1851 to 1881 as employment in extractive industry fell consistently over the same period. At the same time, this inverse relationship between employment in agriculture and extractive industry was accompanied by a sustained rise in dual occupations in both industries. The nature of the relationship between total employment and dual occupations in agriculture and extractive industry is complex and reflects primarily the economic changes which

were taking place in the lead industry rather than changes in agriculture.

Dual occupations were prominent also among workers in the craft and service sectors, although the incidence of dual occupations in both sectors shows no clear trend.

Table 3.19 provides an example, for 1881, of the 'pairing' of different occupations as dual activities. Although the interrelationship between occupational sectors is complex, the Table provides a fresh perspective on the available information. Most dual occupations in agriculture in upper and lower Wensleydale were paired with occupations in services and crafts while in Swaledale they were paired predominantly with lead mining followed by services. In upper Wensleydale a significant proportion of dual occupations in agriculture were where farmers of small plots of land also hired out their labour as agricultural workers; this occurred to a much smaller extent in lower Wensleydale and Swaledale. In both the craft and service sectors the 'greatest pairing in all three areas was with agriculture but in lower Wensleydale, predictably, there was also a significant proportion of pairing taking place between craft and service occupations. In Swaledale the high proportion (88 per cent) of pairing of dual occupations in lead mining with agriculture confirms that the tradition of miner-farmer was still strong even in the declining years of the lead industry.

The general growth in dual occupations in Wensleydale and Swaledale in the second half of the nineteenth century may

be seen as one of the means by which the economy of the

TABLE 3.19

DUAL OCCUPATION IN UPPER AND LOWER WENSLEYDALE AND
SWALEDALE BY OCCUPATIONAL SECTOR, 1881.¹

Upper W/d							
	Agr.	Crafts	Serv.	PMM	Oth. ²	Tot. ³	
Agr.	22.4 ⁴	24.3	35.5	8.4	9.3	107	
Crafts	68.4		15.8	-	15.8	38	
Serv.	82.6	13.0		-	4.4	46	
PMM	81.8	-	-		18.2	11	
Oth. ²	55.6	22.2	11.1	11.1		18	
Lower W/d							
	Agr.	Crafts	Serv.	PMM	Oth. ²	Tot. ³	
Agr.	11.8 ⁴	26.5	41.2	8.8	11.8	34	
Crafts	60.0		26.7	6.7	6.7	15	
Serv.	68.2	18.2	9.1 ⁵	4.5	-	22	
PMM	50.0	16.7	16.7		16.7	6	
Oth. ²	44.4	11.1	22.2	11.1	11.1	9	
Swaledale							
	Agr	Crafts	Serv.	PMM	LM	Oth. ⁶	Tot. ³
Agr.	7.0 ⁴	12.0	28.2	4.2	41.5	7.0	142
Cr.	76.2		19.0	-	-	4.8	21
Serv.	78.8	7.7		-	5.8	7.7	52
PMM	66.7	-	-		22.2	11.1	9
Oth. ⁶	40.0	6.7	33.3	-	20.0		15
LM	88.0	-	4.5	3.0		4.5	67

¹ By percentage of dual occupations in the category.

² Includes 'Other' category (see Table 3.3) and the extractive industries and textiles.

³ Total number of dual occupations in the category.

⁴ Includes people who have dual occupations of farmers and agricultural labourers.

⁵ Includes people who have dual occupations of innkeeper and tradesman.

⁶ As note 2 but does not include lead miners.

Source: PRO RG 11/4873-8, CEB, 1881, upper and lower Wensleydale and Swaledale.

area adjusted to meet changing economic circumstances.

Although it would be an over-simplification to suggest that

the increase in dual occupations was solely a response to a

harsher economic climate, it is significant that the

incidence of dual occupations in Swaledale, an area which suffered acutely from the volatility of the lead industry, was substantially higher than in either of the two other areas.

XI

John Saville has commented that the diversity of occupations within a rural economy, where decline was not catastrophic, enabled the community to survive throughout most of the nineteenth century.⁴⁷ This was certainly true of Wensleydale. Despite the decline of the lower dale lead industry, the economy exhibited a remarkable strength based on a healthy agriculture and supported by employment in the crafts and service sectors. This reliance on a traditional rural economy enabled the local community to remain largely intact, although somewhat diminished in size and with its centre of gravity shifted more towards the lower dale. Swaledale, with the almost total collapse of its lead industry late in the century, experienced much more severe difficulties. It lost a large proportion of its population through out-migration and by the end of the century formed a much depleted community despite a major growth in agricultural employment. In both dales, the resilience of agriculture was a major factor in enabling the two economies to survive in a rapidly changing world. However, the full onslaught of mass production coupled with the migration of crafts and retailing into large towns outside the area had been merely postponed not averted.

NOTES - OCCUPATIONAL STRUCTURE

¹ J.A.Chartres, 'Country Trades, Crafts and Professions, 1750-1850', pp1-2, transcript of chapter for inclusion in G.E.Mingay(ed), *Agrarian History of England and Wales 1750-1850*, VI, forthcoming.

² *Ibid*, p1.

³ PRO HO 107/1245-6,1252-4,2379-80, RG 9/3667-73, RG 10/4868-73, RG 11/4873-8, CEB, 1841-81, upper and lower Wensleydale, and Swaledale. For detailed list of the categories see Appendix I.

⁴ The material available for the study of the occupational structure of communities in the nineteenth century is to be found principally in the decennial censuses. Unfortunately, this is of variable quality. Prior to 1841 only the abstracts are extant and these record occupations solely under the categories - agriculture; trade, manufacturing and handicrafts; and others. In addition these returns suffer from the enumerators' confusion as to the category to which specific occupations should be assigned. From 1841 the detailed enumerators' books are available but the information collected in 1841 was substantially less detailed and, consequently, does not facilitate full comparison with subsequent returns. For a full discussion of the census data, see E.A.Wrigley(ed), *Nineteenth-century society*, Cambridge, 1972, *passim*.

⁵ S.W.E.Vince notes that in rural areas secondary occupations (i.e. those which involve serving the needs of

a primary rural population) form a ratio of about 2:1 to primary occupations, S.W.E.Vince, 'The Rural Population of England and Wales 1801-1951', PhD thesis, Univ. of London, 1955, pp504-13.

⁶ R.Hall, 'Occupation and population structure in the Derbyshire Peak District in the mid-nineteenth century', *East Midland Geographer*, 6, 1974, p69; although R.Lawton notes that in the Craven dales to the south of Wensleydale craft occupations were generally widely dispersed, R.Lawton, 'The Economic Geography of Craven in the Early Nineteenth Century', in D.R.Mills(ed), *English Rural Communities: The Impact of a Specialized Economy*, 1973, pp176-7.

⁷ The following sections of this chapter analyse all the occupations occurring in the study area apart from those in agriculture, the extractive industries and textiles, which are the subject of separate chapters.

⁸ J.A.Chartres & G.L.Turnbull, 'Country Craftsmen', in G.E.Mingay(ed), *The Victorian Countryside*, 1981, Vol I, pp314-5, Chartres and Turnbull comment that rural crafts reached their peak during Victoria's reign although at different times depending on technical innovations in the various industries and the ability to mass produce articles, *ibid*, p317.

⁹ *Ibid*; Chartres, forthcoming, *op cit*, p3; B.R.Mitchell and P.Deane, *Abstract of British Historical Statistics*, Cambridge, 1962, pp60, 366.

¹⁰ For example, in the North Riding of Yorkshire, Chartres

& Turnbull, *op cit*, pp319-20.

¹¹ P.Anderson Graham, *The Rural Exodus*, 1892, *passim*;
G.B.Longstaff, 'Rural Depopulation', *JRSS*, LVI, 1893,
passim; J.Saville, *Rural Depopulation in England and Wales*
1851-1951, 1957, pp20-30; Chartres & Turnbull, *op cit*,
pp320-1.

¹² Anderson Graham, *op cit*, pp30-2; Longstaff, *op cit*,
p414.

¹³ Chartres & Turnbull, *op cit*, pp314-5.

¹⁴ *Ibid*, pp319-20.

¹⁵ For example, there were several carrier routes
connecting the two dales, see Chapter 14; the Garth family
who lived in upper Swaledale record frequently using the
facilities of Wensleydale, Barker MSS, 2/5/1-6, Garth Day
Books, 1795-1936, *passim*.

¹⁶ Chartres & Turnbull, *op cit*, pp314-9.

¹⁷ *Ibid*, pp317-9.

¹⁸ *Ibid*, pp318-9.

¹⁹ PRO, HO 107/2380, CEB, 1851, Hawes; T.Whellan & Co.,
History and Topography of the City of York; and The North
Riding of Yorkshire, Vol II, Beverley, 1859, pp410-11.

²⁰ Directories usually record only the name of the
owner/manager of the business concerned and not names of
employees.

²¹ Stone masons have not been included in this Table. Some
of those enumerated in the census returns as stone masons
may have been quarry men.

²² E.Baines, *History, Directory and Gazetteer of the County*

of York, Vol II, Leeds, 1823, p564; W.White, *History, Gazetteer and Directory of the East and North Ridings of Yorkshire*, Sheffield, 1840, p612; E.R.Kelly, *Directory of the North and East Ridings, Yorkshire, with the City of York*, 1893, p27. Aysgarth village acted as a mid-dale service centre and throughout the century had a relatively high proportion of its occupied population in crafts and services.

²³ Hall MS, Francis Thompson, Shoemaker's Account Book, 1857-1871.

²⁴ E.R.Kelly, *Post Office Directory of Yorkshire: North and East Ridings*, 1857, p1164.

²⁵ Upper Dales Folk Museum MS, R.Hunter, Shoemaker's Day Book, Askrigg, 1845-1896.

²⁶ J.A.Chartres, 'Country Tradesmen' in Mingay, *op cit*, p310; Chartres & Turnbull, *op cit*, pp324-5.

²⁷ R.Church, 'Labour Supply and Innovation 1800-1860: The Boot and Shoe Industry', *Business History*, 12, 1970, p39.

²⁸ *Ibid*, pp25-6.

²⁹ *Ibid*, pp26,42. Church notes that technical innovation was also encouraged by a short supply of skilled labour in the localities which specialized in footwear manufacture, *ibid*, pp29-30.

³⁰ *Ibid*.

³¹ *Richmond and Ripon Chronicle*, 14 July 1860.

³² Chartres & Turnbull, *op cit*, p327.

³³ R.Lawton, 'Rural Depopulation in Nineteenth Century England', in Mills, *op cit*, p215; G.E.Mingay, *Rural Life in*

Victorian England, 1976, p177; Chartres and Turnbull, *op cit*, pp319-20.

³⁴ Lawton, *op cit*, p215.

³⁵ Baines, *op cit*, *passim*; E.R.Kelly(ed), *The Post Office Directory of the North and East Ridings of Yorkshire*, 1872, *passim*; *ibid*, 1893, *passim*.

³⁶ Saville, *op cit*, p209.

³⁷ *Ibid*, p22; Longstaff, *op cit*, pp414-5; Anderson Graham, *op cit*, p30.

³⁸ Saville, *op cit*, p148; Mingay, 1976, *op cit*, p177; Chartres, 1981, *op cit*, pp300-3.

³⁹ Mingay, 1976, *op cit*, p177; Lawton, *op cit*, p215; Chartres, 1981, *op cit*, pp300-3.

⁴⁰ C.W.Chalkin, 'Country Towns', in Mingay, 1981, *op cit*, p282.

⁴¹ Chartres, *op cit*, p301; Mingay, *op cit*, p177. Inn-keepers etc., who were part of the service sector in the two dales, as nationally, remained quite stable throughout the period, despite a strong temperance movement in the area from the mid-nineteenth century; *Wensleydale Advertiser*, 4 March 1845, 9 June 1846, 5 January 1847; *Bedale and Northallerton Times*, 4 June 1870, 5 July 1873; Chartres, 1981, *op cit*, p303.

⁴² Chalkin, *op cit*, p276.

⁴³ C.S.Orwin & E.H.Whetham, *History of British Agriculture 1846-1914*, 1964, pp23-4.

⁴⁴ According to C.W.Chalkin the population of a typical market town in the 1830s was between 1000 and 4000. Hawes

with a population between 1200 and 1890 in the nineteenth century fits this category. Leyburn for most of the nineteenth century had a population between 800 and 1000 and so was below the average threshold, Chalkin, *op cit*, p276.

⁴⁵ HLRO, Committee Books, Private Bills, HL, 6 & 15 May 1795, Richmond To Lancaster Road Amendment Bill; E. Page (ed), *The Victoria County History...Yorkshire, North Riding* (VCH), Vol I, 1914, pp202-3; M. Hartley & J. Ingilby, *Yorkshire Village*, 1953, p92.

⁴⁶ *Wensleydale Advertiser*, 12 March 1844.

⁴⁷ PRO, HO 107/1252, 2380, RG 9/3670, RG 10/4871, RG 11/4876, CEB, 1841-81, Hawes; NYCRO, PP 19/1, 3, 5, 8, 10, 17, 22, 23, 24, 30, 34, *Census Enumeration Abstract for the County of York, 1801-1901*.

⁴⁸ VCH, *op cit*, pp268-9.

⁴⁹ PRO HO 107/1254, 2379, RG 9/3669, RG 10/4869, RG 11/4874, CEB, 1841-81, Leyburn; NYCRO, PP 19/1...34, *op cit*, 1801-1901.

⁵⁰ Even as early as 1819 Askrigg was described as a market town which 'resembles a village', J. Bigland, *A Topographical and Historical Description of the County of York*, 1819, p287; VCH, *op cit*, Vol III, p514; E. Routh, *Wensleydale Rambles: A Guide to its Picturesque Scenery and Objects of Antiquity*, Leyburn, c1878, pp22-3. Routh states that Askrigg 'market has for a century or more been in decay, and for the last twenty years been entirely discontinued, having succumbed to Hawes'; PRO, HO

107/1252,2380, RG 9/3670, RG 10/4870, RG 11/4875, CEB,
1841-81, Askrigg.

⁵¹ Ibid.

⁵² Routh, *op cit*, p23.

⁵³ NYCRO, PP 19/1...34,*op cit*, 1801-1901.

⁵⁴ Kelly 1893, *op cit*, p239.

⁵⁵ The township has been used as the basis for calculation for Askrigg, Leyburn and Reeth as the population of these three townships was concentrated mainly in the market town. Hawes township, however, covered 16,000 acres and had three villages within its boundaries so only the returns for the town have been used.

⁵⁶ The growth of Hawes and Leyburn was contrary to that of many small towns in other areas, T.A.Welton, 'On the distribution of the population of England and Wales...1801-1891', *JRSS*, LXXVI, 1900, pp304-17, cited in Lawton, *op cit*, p215. However, Chalkin notes that many market towns thrived throughout the nineteenth century, Chalkin, *op cit*, *passim*.

⁵⁷ Mitchell & Deane, *op cit*, p60; Chartres,forthcoming, *op cit*, p1.

⁵⁸ Nationally, servants formed the second largest occupational class, Mitchell & Deane, *op cit*, p60.

⁵⁹ P.Laslett, *The World We Have Lost*, 1965, p12; R.Fieldhouse & B.Jennings, *A History of Richmond and Swaledale*, 1978, p450; additional information supplied by the late T.C.Calvert.

⁶⁰ Spigot Lodge in Wensley township, lower Wensleydale, was

a large racehorse stable. The numbers of jockeys and grooms employed at the different census dates are as follows: 1841-6, 1851-19, 1861-22, 1871-32, 1881-24, PRO, HO 107/1245,2379, RG 9/3668, RG 10/4869, RG 11/4874, CEB, 1841-81, Wensley.

⁴¹ Agricultural child labour was used only to a limited extent in pastoral areas, P.Horn, *The Rural World 1780-1850*, 1980, pp137-8

⁴² BPP, 1843, XII, *Reports of Special Assistant Poor Law Commissioners on the Employment of Women and Children in Agriculture*, p288.

⁴³ A.Wilson Fox, 'Agricultural Wages in England and Wales during the Last Fifty Years', *JRSS*, LXVI, 1903, p298; P.Horn, *Labouring Life in the Victorian Countryside*, Dublin, 1976, pp42-3.

⁴⁴ E.J.T.Collins, *The economy of upland Britain, 1750-1950: an illustrated review*, Reading, 1978, pp19-20.

⁴⁵ J.Thirsk, 'Industries in the Countryside', in - *The Rural Economy of England*, 1984, pp217-33. Dr Thirsk suggests that the common factors for rural handicraft industries to emerge alongside agriculture were 'a populous community of small farmers, often mainly freeholders ..., pursuing a pastoral economy', p231.

⁴⁶ This may be due partly to more detailed census returns.

⁴⁷ Saville, *op cit*, p209.

CHAPTER 4

LANDOWNERSHIP

The structure of landownership in nineteenth century England, and its consequent impact on rural society, has been the subject of considerable debate.¹ Contemporaries discussed the extent of landed estates, the degree to which the small landowner was being supplanted by the large landowner, and the influence of the landlord at local and national levels.²

The debate has continued into the twentieth century and it is now recognised that the wide regional variation in landownership patterns goes some way towards explaining the economic and social differences identified in individual areas of the country.³ In addition to studying the extent of landownership, historians have examined specific questions such as the nature and incidence of open and closed parishes; the respective influences of resident and absentee landowners; and the survival of the yeoman.⁴ In order to determine how far the landownership pattern in Wensleydale and Swaledale affected the local economic and social structure and the extent to which this differed from other areas, the size of estates and the influence of landowners is examined.

I

In the nineteenth century it was widely believed that

most of the land in the country was concentrated in the hands of a relatively small number of owners, who increasingly sought to extend their holdings at the expense of the small landowner.³ The 1861 census lent support to this view and suggested that the ownership of land was concentrated in the hands of 30,000 individuals. The census figures were viewed with scepticism in some quarters and there were calls for a national survey of landownership.⁴ In 1872-3 the *Return of Owners of Land*, known as the "New Domesday", was compiled and, whilst not wholly reliable, made available a wealth of information on landownership.⁷ However, the new survey did not solve the land question. The establishment took comfort from the fact that 269,547 people owned in excess of one acre, whilst radical opinion made capital of the fact that a large proportion of the nation's land was concentrated in the hands of a small number of individuals.⁸

John Bateman undertook a detailed analysis of the return and produced a categorization of landowners according to the size of their estate.⁹ This is shown, in simplified form, in Table 4.1.

Bateman's 'squirearchy' and 'greater landowners' categories, comprising estates of 1000 acres or more, represented 5408 individuals (0.6 per cent of all landowners) who together owned 56.6 per cent of the land of England and Wales.¹⁰ Large landowners, particularly the aristocracy, were less prominent in Wensleydale and Swaledale. Although there were some large estates in the

TABLE 4.1

LANDOWNERS BY SIZE OF ESTATE.¹

1	Greater Landowners ²	3000 & over
2	Squirearchy	1000-3000
3	Greater Yeomen	300-1000
4	Lesser Yeomen	100-300
5	Small Proprietors	1-100

¹ In acres

² If the rental reached £3000 per annum.

Note: Bateman placed peers in a separate category.

Source: J. Bateman, *The Great Landowners of Great Britain and Ireland*, 1876, 4th ed. 1883, repr. Leicester, 1971, p501.

two dales, only the 15,000 acre estate of Lord Bolton could be termed extensive.¹¹ The only other peer with a significant estate in the area in 1873 was Lord Wharnccliffe who owned, largely for shooting purposes, approximately 3500 acres in upper Wensleydale.¹²

In 1873 ten Wensleydale owners (3.2 per cent of all Wensleydale owners) each owned over 1000 acres and together held 33,678 acres (34 per cent) of Wensleydale.¹³ In Swaledale only four landowners (1.8 per cent of all owners) held acreage above Bateman's 'yeomen' classes and together these owned an estimated 8054 acres (11 per cent) of the dale.¹² So while the two dales had a higher proportion of owners with over 1000 acres than the national figure, the proportion of the area comprised in estates of 1000 acres or more was very substantially less than the national average. The two dales were not even typical of their region: in the North Riding 64.6 per cent of the land was owned by landowners with estates of 1000 acres or more who

comprised only 1.1 per cent of all owners.¹⁵ The landownership situation in the two dales, however, was not dissimilar from that of some other upland areas.¹⁶ The two dales were, therefore, neither under aristocratic influence nor dominated by large estates.

While some families, for example the Bolton family, had been in the area for several centuries, most of the larger estates were of more recent origin.¹⁷ Some of these estates were of secondary importance to the owner who had a main estate elsewhere or an occupation outside of agriculture.¹⁸ In the closing years of the century, when depression seriously affected landowners, some of the large estates in the area were broken up.¹⁹ For example, Lord Wharnccliffe sold approximately one-third of his upper Wensleydale estate in 1884 and disposed of further parcels of land in the early twentieth century.²⁰ Another estate of over 4600 acres in upper Wensleydale was divided among heirs in 1880 and parts were subsequently sold.²¹ Purchasers of these lands were local people with existing tenants being keen to acquire the freehold of the land they farmed.²²

II

If Bateman's scheme is followed, the predominant categories of landowner to be found in the dales in the nineteenth century were the yeomen and small proprietors. In 1873 owners in these categories held 59 per cent and 73

per cent, respectively, of the non-common land in Wensleydale and Swaledale.²³

Throughout the nineteenth century the title of yeoman, locally, was accorded to individuals, below the level of gentry, who owned all or part of their land and who farmed holdings with acreages well above subsistence level or held some other occupation which gave them yeoman status.²⁴ In the two dales many with an acreage in Bateman's category of small proprietors would have been regarded as yeomen. For example, in a directory of 1840 eleven of twenty-six farmers in Melbecks township were entered as yeomen. The eleven were also returned in the 1844 tithe award, where seven were shown as owning between five and forty-eight acres and of these six farmed all their own land and one farmed six of his fourteen acres. Of the remaining four, one was possibly a landowner, another farmed land which probably belonged to his mother, and two rented land.²⁵ A wide range of yeomen estate sizes still occurred in the late nineteenth century. A cross-matching of owners returned as yeomen in the directories of 1872 and 1890 with their entries in the 1873 Return shows the range of yeomen estates to be between 24 acres and 237 acres.²⁶

The status of the yeoman and the rate of his decline during the nineteenth century were part of the land question debate.²⁷ Many of the small yeomen and most of the owners of the tiniest plots in Wensleydale and Swaledale were similar in situation and outlook to the sociologists' 'peasants'.²⁸ Although contemporaries felt

there were no peasant proprietors in Yorkshire, it was acknowledged that:

the nearest approach to them is to be found in the small freeholders far up the dales.²⁷

These owners retained their tiny holdings even when they were non-viable and when they had little chance of either substantially improving the holding or extending their ownership.

Many observers felt that the yeoman as a class had almost disappeared during the nineteenth century. For example, the two dales, together with neighbouring Cumberland and Westmorland, were regarded by late nineteenth-century writers as being 'the last stronghold of the primitive statesman'.³⁰ A recent study of Cumberland and Westmorland notes that, although the yeoman as a class had survived in the area, many of those qualifying as yeomen by the size of their estates probably were not members of the traditional yeoman class but had recently become owners.³¹

This was also the case in Wales.³² The small yeoman managed to survive the late nineteenth-century depression by a willingness to accept a low income and use family labour.³³ The situation in Wensleydale and Swaledale supports the recent findings except that many of the yeomen (as distinct from the very small proprietors) appear to have been 'traditional yeomen' rather than recent owners.³⁴

Many dales' yeomen families survived throughout the century but there were significant changes in the number of

yeomen and in the size of holdings in both Wensleydale and Swaledale. As the population of the area declined and the impact of the national agricultural depression was felt, some yeomen and small proprietors sold their holdings. During the depths of the late 1820s and early 1830s depression, for example, there was an increased number of farm valuations and sales in Swaledale.³⁵ This situation occurred again during the depression of the 1880s and 1890s when the number of farms offered for sale increased and some remained unsold.³⁶

III

Apart from exogenous influences, the patterns of landownership within the dales were affected by such factors as traditions of inheritance, enclosures (see Chapter 8) and the different economies of the two dales.

The importance of primogeniture in maintaining and consolidating estates had long been recognised and by the nineteenth century it had become the dominant mode of inheritance in the dales.³⁷ In former times partigeniture had been prevalent in parts of the area, particularly in Swaledale, and, although the custom was dying out in the nineteenth century, there were still records of its occurrence.³⁸ Where a holding was already small, subdivision meant that, without a dual occupation, even subsistence farming was not viable and the inheritors of these holdings were sometimes obliged to sell their apportionment.³⁹ This influenced the movement towards consolidation which gained pace during the nineteenth

century. However, in the dales 'consolidation' entailed a move from tiny owned holdings to ones of moderate size rather than the concentration of land in large estates.

Although the data is intermittent and incomplete, available evidence demonstrates that the agricultural and lead-mining economies had a significant impact on landownership in Wensleydale and Swaledale. Tithe surveys and awards are extant for many of the townships in the area and provide invaluable information about landownership for the first half of the nineteenth century. These sources are used in conjunction with the later *Return of Owners of Land*.⁴⁰ Table 4.2 shows the changes in size of land holding which occurred in Swaledale between 1824, 1844 and 1873.

Most of the land in Swaledale in the nineteenth century was held by small owners, many of whom owned less than fifty acres. It appears that the number of small owners increased from the eighteenth century, probably until the late 1820s.⁴¹ Not only had the system of partigeniture contributed to the subdivision of owned holdings but during this period there was an influx of lead miners who were keen to establish a settlement and, if possible, to own a small holding as a buffer against difficult times in the mining industry. A decline in the number of owned holdings was established some time between 1824 and 1844 and affected mainly the lowest size categories. The immediate cause of this decline was not only the widespread general depression but also a chronic slump in the lead

TABLE 4.2.

NUMBER OF OWNED HOLDINGS BY SIZE, SWALEDALE, 1824, 1844
and 1873.¹

	Acres	1-10	%	11-50	%	51-100	%	101-500	%	over 500	Tot.
1824 ²	343	56.0	213	34.8	47	7.7	8	1.3	1	0.2	612
1844 ²	257	46.4	208	37.5	59	10.6	30	5.4	-	-	554
1873	77	34.7	91	41.0	22	9.9	26	11.7	6	2.7	222

¹ Above one acre.

² 1824 and 1844 - based on the returns of Grinton Ecclesiastical Parish. Grinton Ecclesiastical Parish, which comprises the townships of Grinton, Melbecks, Muker and Reeth, extends over 52,000 acres (70 per cent of the Swaledale study area) and in 1821 and 1841 contained 70.9% and 71.2% respectively of the total Swaledale population. These population percentages have been used to project the returns for the whole of Swaledale.

Note: size categories follow those used in the abstract of the *Return of Owners of Land*.

Source: Barker MSS, 7/5, Moduses in Lieu of Hay and Rent Tithes, Grinton Ecclesiastical Parish (GEP), 1824; 7/14, 16, 18, Valuation for Tithe Commutation, GEP except Muker, 1844; NYCRO, PR/T/Muker, Valuation for Tithe Commutation, Muker, 1844; LGB, 'Owners of Land' Return, York, North Riding, 1873.

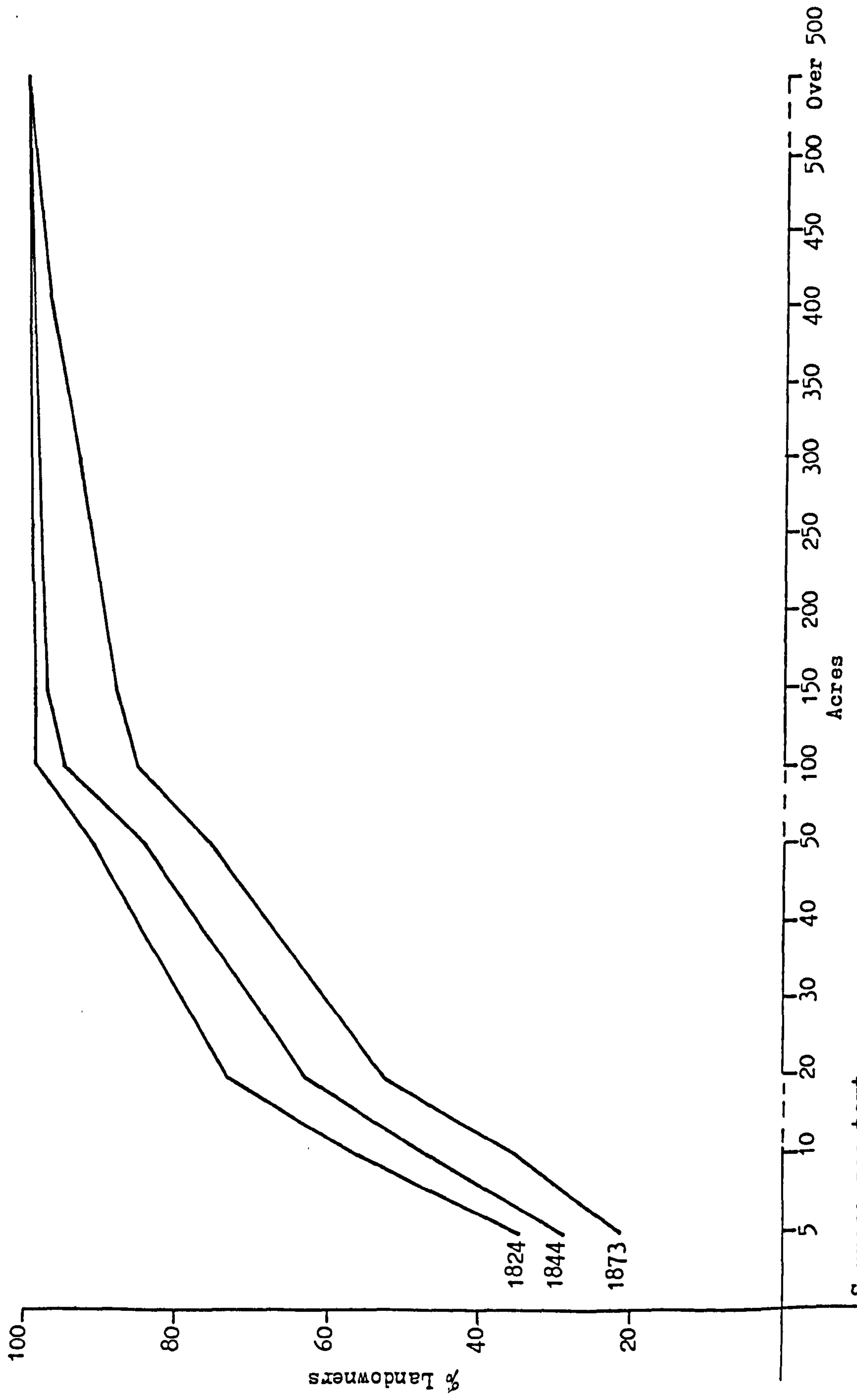
industry in the late twenties and early thirties. This led to a fall in population in Swaledale from the 1821 peak as lead miners, some of whom owned plots of land, sold their holdings and left the area. It is probable that the French wars and the stimulus for enclosure contributed to this decline, as some small owners were involved in additional outlay in the early years of the nineteenth century. This rendered them more vulnerable in the subsequent depression. Between 1824 and 1844 it was the small but substantial yeoman who was able to expand his holding, leading to a major increase in the number of owned

holdings of between 51 and 500 acres. These owners of medium-sized estates frequently let some of their land as, despite the depression, rents in the area, remained relatively high (see Chapter 5).⁴² Further, although the population was declining, there was still a fair degree of agricultural autarky and a substantial non-agricultural workforce in the area, with a consequent high local demand for agricultural produce.

Although between 1844 and 1873 the lead industry had recovered from some of its earlier setbacks, the organization of the industry had changed and by the 1870s the total workforce was reduced (see Chapter 11). This encouraged the owners of small holdings either to move more fully into agriculture or to sell their holdings and, as Table 4.2 suggests, during the third quarter of the century many chose the latter course. As the century progressed this led to fewer owned holdings but proportionately more holdings in the larger size categories.

The cumulative frequency distribution of Swaledale landowners by acreage is presented in Figure 4.1 and provides a further breakdown of size of holdings. This demonstrates that between 1824 and 1844 the owners at greatest risk were those with holdings of between eleven and twenty acres, followed closely by those with holdings of six to ten acres. These were the categories which suffered the greatest proportional decline over the period, falling by 10.3 and 9.5 per cent respectively. From 1844 to 1873, when the total number of owners had declined by 60

CUMULATIVE FREQUENCY DISTRIBUTION OF LANDOWNERS BY SIZE CATEGORY, SWALEDALE, 1824, 1844, 1873.



Source: see text.

per cent from 554 to 222, the owners most at risk were in the six to ten acre category, followed closely by those in the 11-20 acre category. Interestingly, owners of holdings of less than six acres were slightly less vulnerable throughout the period than owners in all other categories up to fifty acres. Over the whole period 1824-1873, as Figure 4.1 shows, the trend was towards a slightly more even distribution of land between the various size categories of owned holdings in Swaledale.

The profile of landownership in Wensleydale differed both from that in Swaledale and also between the upper and lower dale. In Wensleydale as a whole there was a higher proportion of owners with holdings of more than 50 acres but, as Table 4.3 indicates, there were significant differences between the predominantly agricultural upper dale and the economically more diversified lower dale. In 1844 upper Wensleydale had a smaller proportion of owned holdings of less than fifty-one acres than either lower Wensleydale or Swaledale. At this date Swaledale had 83.9 per cent of landowners with under fifty-one acres, lower Wensleydale 77.9 per cent and upper Wensleydale 66.4 per cent. An explanation of these variations can be found in the impact of the different economies of the three areas. As would be expected, the proportion of owned holdings in the smallest size categories was markedly lower in upper Wensleydale, with its primarily agricultural economy, than in lower Wensleydale or Swaledale where the potential for

dual occupations was greatest.

TABLE 4.3

NUMBER OF OWNED HOLDINGS BY SIZE, UPPER AND LOWER

WENSLEYDALE, 1844.¹

Acres	Upper Wensleydale ²		Lower Wensleydale ³	
		%		%
1-10	242	33.8	38	49.4
11-50	233	32.6	22	28.6
51-100	111	15.5	14	18.2
101-500	94	13.1	-	-
over 500	35	4.9	3	3.9
Total	715	99.9	77	100.1

¹ Above one acre

² Based on returns from five of the twelve upper dale townships; Askrigg, Bainbridge, Bishopdale, Carperby and Newbiggin. These townships comprised over 40 per cent of the area of upper Wensleydale and, in 1841, 36.8 per cent of the total upper dale population. The population percentage has been used to project the returns for the whole of the upper dale.

³ Based on returns from three of the six lower dale townships; Preston-under-Scar, Redmire, and Wensley. These townships comprised over 36 per cent of the area of lower Wensleydale and, in 1841, 36.9 per cent of the total lower dale population. The population percentage has been used to project the returns for the whole of the lower dale.

Note: size categories follow those used in the abstract of the *Return of Owners of Land*.

Source: Ellis MSS, Tithe Commutation Award, Askrigg, 1839; WYAS/L, RD/RT 15, 24, 45, 171, 195, Tithe Awards, Bainbridge, Bishopdale, Carperby, Newbiggin, Redmire, 1844, 1839, 1840, 1839, 1843; NYCRO, T(ZBO) PUS, T(PR) WEN, Valuation for Tithe Commutation, Preston-under-Scar, Wensley, 1841.

Unfortunately, Wensleydale cannot be split into upper and lower divisions for the purpose of the 1873 return, as some of the estates were situated in both areas and the acreage in each subdivision cannot be distinguished.⁴³ Table 4.4 indicates that the pattern of landownership which existed

in Wensleydale in 1873 was similar to that which had existed in 1844. Between 1844 and 1873 the total number of landowners in Wensleydale fell from 792 to 296, a fall of 63 per cent. Although this fall was comparable to the 60 per cent decline which occurred in Swaledale over the same period, the losses in Wensleydale were more evenly distributed between the different acreage categories (see Figure 4.2). Despite the fact that the decline in the number of owned holdings of less than 20 acres was not as steep as in Swaledale, in both dales it was the owners of the larger holdings who were most likely to survive.

TABLE 4.4.

NUMBER OF OWNED HOLDINGS BY SIZE, WENSLEYDALE, 1844 AND 1873.

	Acres 1-10	11-50	51-100	101-500	over 500	total
1844	280	255	125	94	38	792
%	35.4	32.2	15.8	11.9	4.8	100.1
1873	84	106	46	41	19	296 ¹
%	28.4	35.8	15.5	13.9	6.4	100.0 ¹

¹ The final total is 311, fifteen landowners had an unspecified acreage in Wensleydale as they had estates elsewhere in the North Riding.

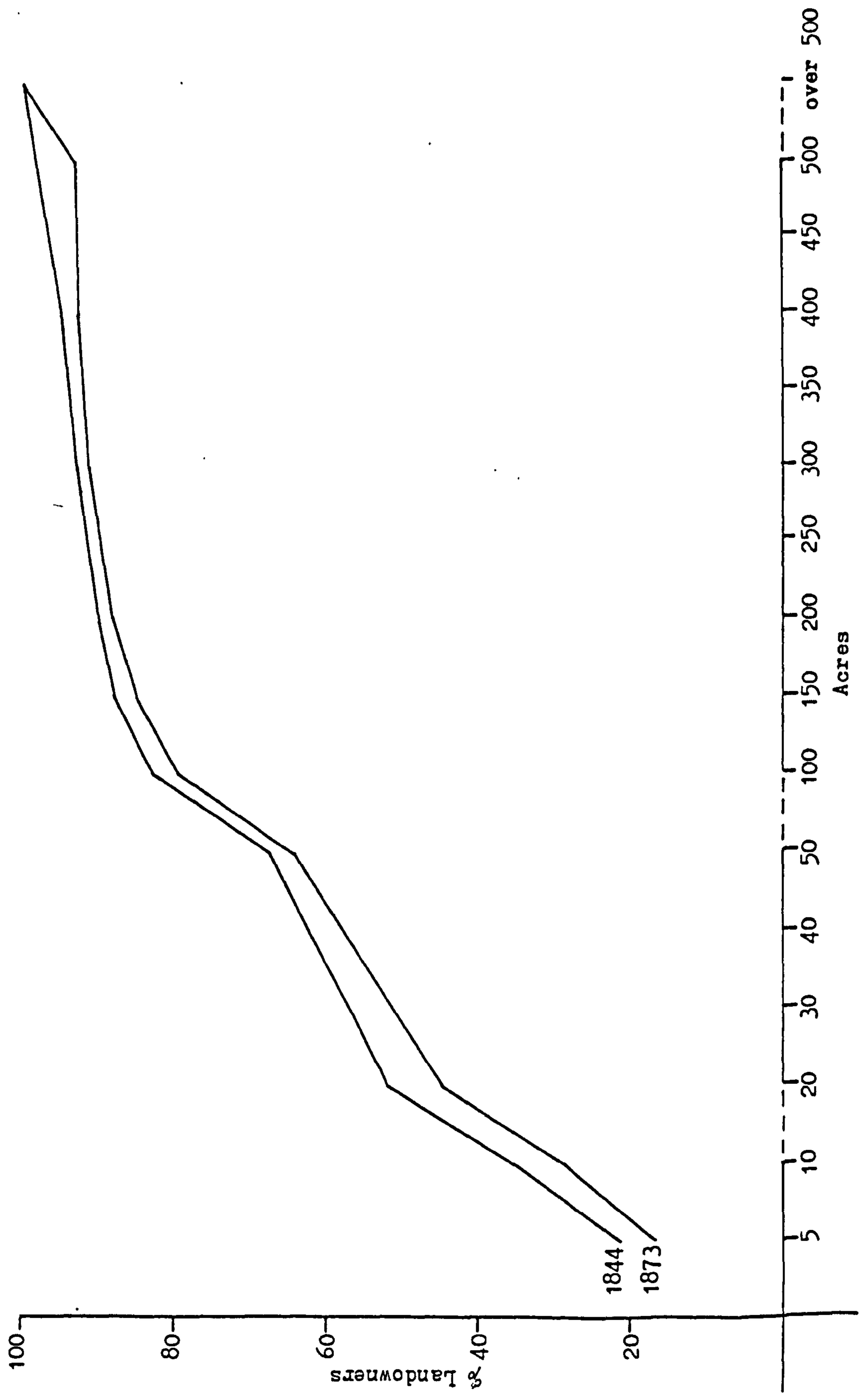
Note: size categories follow those used in the abstract of the *Return of Owners of Land*.

Source: see Table 4.3 and LGB, *op cit*.

In 1873, as in 1844, the differences in the landownership profile of Wensleydale and Swaledale were the result of the different economies, particularly the different role of agriculture, in the two dales. In Swaledale for most of

FIGURE 4.2

CUMULATIVE FREQUENCY DISTRIBUTION OF LANDOWNERS BY SIZE CATEGORY, WENSLEYDALE, 1844, 1873.



Source: see text.

the nineteenth century agriculture was subsidiary to the lead industry but in most of Wensleydale farming was the main industry. Where the lead industry predominated, both in Swaledale and in parts of lower Wensleydale, small holdings were popular as a secondary source of income. As soon as lead mining declined the number of small owned holdings decreased in both dales.

A comparison of all categories of landownership in the two dales and in England and Wales in 1873 reveals marked differences at local and national levels (see Table 4.5).

TABLE 4.5

OWNERS OF LAND, WENSLEYDALE AND SWALEDALE, AND ENGLAND
AND WALES, 1873.¹

Acres	1-10	11-50	51-100	101-500	500+	Total
W/d	28.4	35.8	15.5	13.9	6.4	100.0
S/d	34.7	41.0	9.9	11.7	2.7	100.0
E&W ²	45.3	26.9	9.6	12.0	3.8	97.6

¹ By percentage, excludes commons and waste.

² No rental or area given for 2.4 per cent.

Note: size categories follow those used for England and Wales in the *Return of Owners of Land*. The categories in that return state "owners of 1 acre and under 10 acres, owners of 10 acres and under 50 acres" etc so there is a slight discrepancy between the England and Wales figures and the local figures which are in categories 1-10 acres, 11-50 acres etc.

Source: LGB, *op cit*, passim; BPP, LXXX, *Owners of Land, Great Britain, 1876*, p21.

Both Wensleydale and Swaledale had a lower proportion of landowners with holdings in the 1 to 10 acre category than the substantial 45.3 per cent of all landowners in England

and Wales. Owned holdings in the 10 to 50 acre category were the most common in Wensleydale and Swaledale. The 'primitive statesman' of this category survived in substantial numbers until at least the third quarter of the century. Wensleydale also had a higher proportion of owned holdings of more than fifty acres than nationally whereas Swaledale had a slightly higher proportion than England and Wales in the 50 to 100 acre category, and a lower proportion above 100 acres.

By 1873, therefore, contrary to the national pattern, the majority of owners in Wensleydale and Swaledale owned moderate-sized holdings of between 10 and 100 acres. These owners generally survived the late nineteenth-century depressions but as Assistant Commissioner Coleman noted in 1881:

[Their] position ... was in many cases a shade worse than the occupiers of small holdings.⁴⁴

Despite Coleman's pessimistic diagnosis, the dales' freeholder continued to survive. In his report to the 1890s Royal Commission, Hunter Pringle noted that in Swaledale 'the bulk of the farmers ... are freeholders.'⁴⁵

The dales, therefore, provide an example of a region where circumstances, mainly endogenous, favoured the survival of the small, although not the smallest, owner.

IV

Although the small landowner was typical of the area, in terms of total holdings the owner-occupier was not

dominant (see Table 4.6).

TABLE 4.6

OWNER-OCCUPIED AND RENTED HOLDINGS IN SELECTED TOWNSHIPS IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1844 AND 1895.¹

	O-O		Rented		R & O		Total
	Nos	% ²	Nos	% ²	Nos	% ²	
1844							
Ask.	17	21.8	56	71.8	5	6.4	78
Red.	6	9.8	52	85.2	3	4.9	61
Melb.	23	15.4	113	75.8	13	8.7	149
1895							
Ask. ³	8	15.7	40	78.4	3	5.9	51
Red.	6	13.0	40	87.0	-	-	46
Melb.	9	11.4	63	79.7	7	8.9	79

¹ Upper Wensleydale = Askrigg, lower Wensleydale = Redmire, Swaledale = Melbecks.

² Percentage of total holdings.

³ The return for Askrigg in 1895 is estimated as Low Abbotside township was included in the same return.

O-O = owner-occupied.

R&O = rented and owned.

Note: the 1895 return has been used as this was the first mid-decade point after these returns were first enumerated in 1887. The calculations include only those holdings over one acre.

Source: Barker MSS, 7/16, Valuation for Tithe Commutation, Melbecks, 1844; Ellis MSS, Tithe Commutation Award, 1839; WYAS/L, RD/RT/195, Tithe Awards, Redmire, 1843; PRO MAF 68/1579, MAFF Parish Summaries of June Returns, 1895, Askrigg, Redmire, Melbecks.

If the three townships are taken as representative of their areas, Table 4.6 suggests that the trend from owner-occupancy of small holdings to tenanted larger holdings during the nineteenth century, which has been identified nationally, did not occur to any great extent in upper and lower Wensleydale and Swaledale.⁴⁶ The number of farms, both owner-occupied and rented, declined in the

course of the century but there was only a slight decline in the proportion of owner-occupied to rented holdings. However, from at least as early as the 1840s over 70 per cent of the holdings in the three townships were farmed by tenants. Predictably, there was an even higher proportion (more than 85 per cent) of tenants at both dates in the lower Wensleydale township where Lord Bolton owned about 1800 of the 2313 acres.⁴⁷

In the late nineteenth century, when upper and lower Wensleydale and Swaledale can be considered in greater detail, as the number of holdings continued to fall the proportion of those who owned all or part of their holdings increased (see Table 4.7).

Nationally, one of the problems besetting landlords during the depression was the difficulty in retaining good tenants.⁴⁸ While Wensleydale and Swaledale were not as badly affected as other areas, it is clear that in the depths of the 1890s depression more dalesmen were farming their own land.⁴⁹ Some of these were tenants who had purchased their farms from their landlord.⁵⁰ This situation was not new, earlier depressions had had a similar effect. In Sedbergh, some ten miles west of Wensleydale, a correspondent in 1822 noted that:

the farming trade in this Country is very Bad, the most of the farmers is broke up, my Landlord has sold up to his Tenants and he likely to keep some of the Farms in his own hand as he cannot get it let... .⁵¹

Although the owner-occupier appears to have shown a high

degree of resilience in confronting the initial impact of the late nineteenth-century depression, the protracted nature of the depression eventually took its toll. An increasing number of owner-occupiers was forced to sell their land so that by 1915 the proportion of dalesmen renting their holdings exceeded the high levels of 1887.

Table 4.7.

STATUS OF OCCUPIERS, 1887, 1895, 1915.¹

	Rent	%	Own	%	R & O	%	Total
U W/d							
1887	486	91.7	29	5.5	15	2.8	530
1895	459	88.4	38	7.3	22	4.2	519
1915 ²	458	96.0	19	4.0			477
L W/d							
1887	243	95.3	9	3.5	3	1.2	255
1895	202	91.4	13	5.9	6	2.7	221
1915 ²	174	95.1	9	4.9			183
S/d ³							
1887	478	93.7	15	2.9	17	3.3	510
1895	366	85.3	40	9.3	23	5.4	429
1915 ²	368	96.6	13	3.4			381

¹ The earliest MAFF return containing details of tenure was 1887.

² In 1915, no 'rent and own' category was included. The first two categories were reorganized to include those who rented or mainly rented and those who owned or mainly owned their land respectively.

³ Returns for some of the townships are estimated.

Source: PRO, MAF 68/1123,1579,2719, MAFF Parish Summaries of June Returns, 1887,1895,1905, upper and lower Wensleydale and Swaledale.

Many of the medium-sized owners who survived bought additional land from their less-fortunate neighbours but devoted this to the enlargement of their own holdings rather than renting it out as separate small holdings.⁵²

This is supported by the decline in the number of both owned holdings and all farm holdings (see Chapter 6). The limited impact that owner-occupiers had on the farming landscape is shown when the extent of acreage farmed by owners and tenants in upper and lower Wensleydale and Swaledale is examined. As Table 4.8 shows, the proportion of the total acreage which was farmed by owner-occupiers in the three areas in the late nineteenth century was not high. The proportion was highest in lower Wensleydale which was the least isolated, the most economically diversified and had the most large estates of the three areas.³

TABLE 4.8

OWNER OCCUPIED AND RENTED LAND, UPPER AND LOWER WENSLEYDALE
AND SWALEDALE, 1887-1915.¹

	1887	1895	1905	1915
Upper W/d				
Acres ²	43,624	42,894	44,474	42,036
O-O ³	3	5	3	3
Rented	97	95	97	97
Lower W/d				
Acres ²	10,104	10,187	10,103	10,235
O-O ³	16	18	15	13
Rented	84	82	85	87
Swaledale				
Acres ²	18,198	18,479	18,985	19,421
O-O ³	4	9	4	2
Rented	96	91	96	98

¹ By percentage.

² Acreage under crops and grass.

³ O-O = Owner-occupied.

Source: PRO MAF 68/1123,1579,2149,2719, MAFF Parish Summaries of June Returns, 1887, 1895, 1905, 1915, upper and lower Wensleydale and Swaledale.

The generally low level of owner-occupancy in Wensleydale and Swaledale, which is evident from Tables 4.7 and 4.8, indicates that although the two dales were a stronghold of yeomen in the nineteenth century these men farmed only a small proportion of their own land. For example, one Swaledale family in 1835 owned forty-four acres but farmed only six acres and let the remainder to six different occupiers.⁵⁴ The small owners in the dales found it more lucrative to let at least part of their land and engage in other activities such as lead mining or the textile industry.⁵⁵ However, the picture is complicated because yeomen themselves sometimes rented land and tenants often rented from several people in order to build up a viable holding.⁵⁶

V

Despite the decline in the number of owners and the relative shift towards larger holdings between the 1840s and 1870s, in 1873 most of the owners in Wensleydale and Swaledale held estates of less than fifty acres. The large number of landlords did not necessarily result in open parishes where people could easily gain a settlement. For example, during the 1780s residents of Muker township in upper Swaledale sought to exclude immigrants who had been attempting to qualify for a settlement by occupying a holding worth £10 a year.⁵⁷ In order to protect the poor rate the 'Owners and Occupiers of Messuages and Tenements

of Muker' drew up an agreement not to let to anyone without a settlement in the parish any holding with a rent of £10 unless it was in excess of £50 a year. In 1771, the average rent per acre in Swaledale was 25s (see Table 5.1).

If this still pertained in the 1780s it effectively meant that only farms of over 40 acres were deemed substantial enough to support a farmer and his family without their needing recourse to another occupation or becoming liable to poor relief. The Muker residents further agreed not to let any extra land to anyone who already had land worth less than £10 rent in order to prevent them accumulating a holding worth £10 a year. The problem was regarded as serious and anyone who broke the agreement was liable to a fine of £100. The agreement was to operate for fourteen years and, although it appears to have lapsed for a time, in 1815, when there was still concern about settlement, the agreement was renewed for a further twenty years.²⁸ There is no other evidence of closed parishes operating in the area. However, where there was a volatile industry and a consequent demand for small plots of land, as in Swaledale, there may have been other closed parishes. In lower Wensleydale the lead industry was concentrated largely on Lord Bolton's estate and, therefore, it is probable that a closed parish system operated. In contrast, in upper Wensleydale, where in the absence of large-scale lead mining there was less pressure for small plots of land, it is probable that the parishes were more open.

The resident owners of small estates were the landlords of

the majority of tenants in the area. This led to a close relationship between landlord and tenant, sometimes with little difference in social status within the community.⁵⁹ Rather than engendering the deferential atmosphere frequently found where large estates dominated an area, this encouraged the independence of spirit which some saw as epitomizing the dalesman. The close relationship between landlord and tenant often led to a more flexible approach to tenurial agreements.

By the nineteenth century the system of tenure in the area was usually that of yearly leases.⁶⁰ When tenure and tenant right became an issue nationally in the mid-nineteenth century, reports from the dales were overwhelmingly in favour of yearly leases, demonstrating a satisfaction with the system already in existence.⁶¹ It was noted that such leases did not give rise to insecurity and it was commonplace for farms to be tenanted for several generations by the same family.⁶² Indeed, contrary to the practice in many other places, both landlord and tenant frequently shared in the improvements effected on the farm.⁶³ Further, where there were cropping restrictions these were not regarded as onerous because of the inherent flexibility of the arrangements and a feeling of mutual trust which this fostered.⁶⁴

Although the freeholder survived in Wensleydale and Swaledale until the twentieth century, to picture the area as one where there were clearly defined yeomen estates, each with their owner-occupier, would be misleading. The

small freeholder survived during the century because he had increased his ownership of land at the expense of the owner of tiny plots and while occupying part of his estate had let the rest at high rents.⁴⁰ While there may have been little opportunity for the smallest or 'peasant' owners to improve or extend their holdings into a viable enterprise, the yeoman owner was more likely to be concerned with improving his land and encouraging his tenants to farm progressively. The fact that most of the owners were resident enabled them to closely supervise their land and to be an integral part of the local community.

NOTES - LANDOWNERSHIP

¹ Contemporary literature on the debate is extensive but, for example, see G.C.Brodrick, *English Land and English Landlords*, 1881; J.Caird, 'General View of British Agriculture', *JRASE*, 1878, pp293-5, 299-300; for a discussion of the historiography of the debate see J.V.Beckett, 'The Pattern of Landownership in England and Wales, 1660-1880', *ECHR*, 2nd ser., XXXVII, 1984, pp1-7.

² *Ibid.*

³ J.V.Beckett, 'The Decline of the Small Landowner in Eighteenth- and Nineteenth-Century England: Some Regional Considerations', *AHR*, 30, 1982, pp97,110-1.

⁴ F.M.L.Thompson, *English Landed Society in the Nineteenth Century*, 1963, pp180-3; - 'Landowners and the Rural Community', in G.E.Mingay(ed), *The Victorian Countryside*, 1981, Vol 2, pp471-3; D.W.Howell, *Land and People in Nineteenth-Century Wales*, 1977, pp33-46; B.A.Holderness, '"Open" and "Close" Parishes in England in the Eighteenth and Nineteenth Centuries', *AHR*, 20, 1972, pp126-39; Beckett, 1982, *op cit*, pp97-111.

⁵ Beckett, 1984, *op cit* pp1-7; Brodrick, *op cit*, pp56-7; Thompson, 1963, *op cit*, p27.

⁶ Brodrick, *op cit*, pp156-7; Beckett, 1984, *op cit*, p1.

⁷ BPP, 1876, LXXX, *Accounts and Papers, Owners of Land, Great Britain.*

⁸ *Ibid*, p21.

⁹ J.Bateman, *The Great Landowners of Great Britain and*

Ireland, 1876, 4th ed.1883, repr.Leicester, 1971.

¹⁰ BPP,1876, *op cit*, p21.

¹¹ LGB, "*Owners of Land*" Return, York, North Riding, 1873, *passim*.

¹² *Ibid*, p39. Earl de Grey (Vyner estate) had large estates in the North Riding. In 1839 the Vyner family owned over 600 acres in Wensleydale and it is assumed that this acreage remained the same in 1873, Ellis MSS, Tithe commutation Award, Askrigg, 1839, LGB, *op cit*, p37.

¹³ LGB, *op cit*, *passim*. Two other landowners with estates elsewhere in the North Riding of Yorkshire owned over 1000 acres but the extent of their estates in Wensleydale was probably less than 1000 acres. Although the proportion given relates to the total land area of Wensleydale, a large acreage in Wensleydale was common land and, therefore, not included in the *Return of Owners of Land*. Common land in Wensleydale comprised at least 17.1 per cent of the total area, W.G.Hoskins & L.Dudley Stamp, *The Common Land of England and Wales*, 1963, pp341-2. If the common land is deducted from the total land area, Wensleydale owners with estates of over 1000 acres owned 40.9 per cent of non-common land.

¹⁴ LGB, *op cit*, *passim*, one of the four owners was Reeth Moor Trustees who held 1400 acres. The estate of another Swaledale owner has been estimated as his return included land outside the study area. Common land in Swaledale comprised at least 60.3 per cent of the total area, Hoskins & Stamp, *op cit*, pp340-1. If the common land is deducted

from the total land area, owners with estates over 1000 acres owned 27.2 per cent of non-common land.

¹⁵ BPP, 1876, *op cit*, p16.

¹⁶ J.D.Marshall & J.K.Walton, *The Lake Counties from 1830 to the mid-twentieth century*, Manchester, 1981, p114.

¹⁷ E.Page(ed), *The Victoria County History ... Yorkshire North Riding*, (VCH), Vol I, 1914, *passim*.

¹⁸ Lord Wharnccliffe's main estate was in south Yorkshire, the Charlesworth family who held an estate in Swaledale owned coal mines in the West Riding, the Pilkington family who held land in lower Wensleydale owned the famous glass firm in Lancashire, Bateman, *op cit*, pp85, 473; VCH, *op cit*, p239; *Bedale and Northallerton Times*, 12 June 1875; T.Whellan & Co, *History and Topography of the City of York and the North Riding of Yorkshire*, Vol II, Beverley, 1859, p461.

¹⁹ The selling off of part of large estates was a national phenomenon in the 1880s and 1890s, Thompson, *op cit*, p319.

²⁰ VCH, *op cit*, p208; part of the Wharnccliffe estate was sold earlier in the century, R.T.Fieldhouse, 'Agriculture in Wensleydale from 1600 to the Present Day', *Northern History*, XVI, 1980, p174.

²¹ Barker MSS, 2/5/4-5, Garth Day Books, 1880-1903; additional information supplied by the late T.C.Calvert.

²² Information supplied by R.Fawcett and the late T.C.Calvert. The tendency of tenants to purchase their holdings has been noted in other areas, Thompson, (1963) *op cit*, pp318,323; Howell, *op cit*, p28.

- ²³ LGB, *op cit*, passim; Hoskins & Stamp, *op cit*, pp340-2.
- ²⁴ A similar use of the title occurred in Cumbria, Beckett, 1982, *op cit*, p100.
- ²⁵ W.White, *History, Gazetteer and Directory of the East and North Ridings of Yorkshire*, Sheffield, 1840, p649; Barker MSS, 7/16, Valuation for Tithe Commutation, Melbecks, 1844.
- ²⁶ E.R.Kelly(ed), *The Post Office Directory of the North and East Ridings of Yorkshire*, 1872, passim; T.Bulmer & Co., *History, Topography and Directory of North Yorkshire*, Preston, 1890, passim; LGB, *op cit*, passim.
- ²⁷ Beckett, 1984, *op cit*, pp1-7.
- ²⁸ For a discussion of the term 'peasant' see J.V.Beckett, 'The Peasant in England: A Case of Terminological Confusion?', *AHR*, 32, 1984, pp113-23; Howell, *op cit*, pXIV; M.Turner, *Enclosures in Britain 1750-1830*, 1984, pp74-5; F.A.Graham, *The Rural Exodus*, 1892, pp137-47.
- ²⁹ BPP, 1881, XVI, *RC on ... Agricultural Interests, Reports of the Assistant Commissioners, Mr. Coleman's Report*, p178 and see p138.
- ³⁰ Brodrick, *op cit*, p169.
- ³¹ Marshall & Walton, *op cit*, pp112-4; and see Turner, *op cit*, p75.
- ³² Howell, *op cit*, p28.
- ³³ BPP, 1895, *op cit*, p567. This occurred elsewhere, Marshall & Walton, *op cit*, p64; Howell, *op cit*, p34.
- ³⁴ Some were owners of small acreage who bought more land as the century progressed and so joined the ranks of

yeomen, for example, the Garth family were not publically referred to as yeomen until 1890, Bulmer, *op cit*, p443.

³⁵ Barker MSS, 2/5/2, Garth Day Book, 1833.

³⁶ *Bedale and Northallerton Times*, 3 July 1886, 2 June 1888; *The Richmond Observer*, 14 May 1887; *Darlington and Stockton Times*, 6 April 1895, 31 August 1895, 14 December 1895.

³⁷ For a discussion of primogeniture see Brodrick, *op cit*, pp89-100; Thompson, 1963, *op cit*, pp64-70.

³⁸ R.Fieldhouse, 'Farming and the Landscape in 17th Century Wensleydale', *NYCRO Journal*, 6, 1978, pp50-1; - & B.Jennings, *A History of Richmond and Swaledale*, 1978, pp135-40; LGB, *op cit*, *passim*.

³⁹ For example, a tiny estate near Reeth of four acres one rood was equally divided into two estates, LGB, *op cit*, p11. It would appear that locally the minimum acreage for a farm to be viable was forty acres. A similar size has been identified elsewhere. Bateman claims that the minimum acreage for a single occupation small freehold farm in the wet high pastoral areas was forty-five to fifty acres, Brodrick, *op cit*, pp194-5; in Cumberland and Wales it was suggested in 1852 that farming was not viable below forty acres, Dickenson cited in Beckett, 1982, *op cit*, p102; Howell, *op cit*, p69. See Chapter 6 for a full discussion of farm sizes and viable holdings.

⁴⁰ For a discussion on the deficiencies of the Return see Brodrick, *op cit*, pp158-63.

⁴¹ Although there is no concrete evidence for this

assumption, the population was expanding and contemporary evidence points to an increased number of holdings, some of which will have been purchased. Cooper MSS, (copy of) Agreement Regulating Settlement in the Township of Muker, 1780; J.Harland, *A Glossary of Words Used in Swaledale, Yorkshire*, 1873, p2; Fieldhouse & Jennings, *op cit*, pp135-40. The initial effect of enclosure in increasing the number of small owners has been noted elsewhere, Turner, *op cit*, p67; Beckett, ECHR, 1984, *op cit*, p17.

⁴² For many examples of small owners letting land see Tithe Awards for the area.

⁴³ For example, Lord Bolton owned land in (among others) Carperby township, upper Wensleydale, and in adjacent Castle Bolton township, lower Wensleydale.

⁴⁴ BPP, 1881, *op cit*, p178 and see p138.

⁴⁵ BPP, 1895, XVI, *RC on the Agricultural Depression, Report by R.Hunter Pringle, Assistant Commissioner, on South Durham and Selected Districts of the North and East Ridings of Yorkshire*, p547.

⁴⁶ W.E.Bear, 'Our Agricultural Population', *EJ*, 4, 1894, pp320-1; Graham, *op cit*, pp125-7; Chambers & Mingay, *op cit*, p173. It is possible, however, that the number of owner-occupiers in some parts of Swaledale was significantly higher in 1844 than in 1895. A recent study shows that in 1844 owner-occupiers in Grinton Township, Swaledale farmed 52 per cent of their land; D.Hall, 'Landlord and Tenant in Swaledale 1844/5', unpubl. article, 1974, p1. In 1895 owner-occupiers in Grinton farmed only

21.9 per cent of their land; PRO MAF 68/1579, MAFF, Parish Summaries of June Returns, Grinton, 1895.

⁴⁷ WYAS/L, RD/RT/195, Tithe Award, Redmire, 1843.

⁴⁸ P.J.Ferry(ed), *British Agriculture 1875-1914*, 1973, pXXVII.

⁴⁹ This situation supports the view that one of the effects of the depression was initially to favour the expansion of the owner-occupier rather than tenants. A similar situation occurred in Wales, Howell, *op cit*, pp33-4.

⁵⁰ This situation occurred elsewhere in the country, Thompson, 1963, *op cit*, p323; Howell, *op cit*, p34; and see Graham, *op cit*, p127.

⁵¹ Letter of J.Dover, 22 November, 1822, quoted in M.Hartley & J.Ingilby, *The Old Hand-Knitters of the Dales*, Clapham, 1978, pp 111-2.

⁵² The Barkers and the Garths, both yeoman families who survived into the twentieth century, were buying land from their neighbours throughout the period, Barker MSS, 5/8, Barker Account Book, 1870; 2/5/5-6, Garth Day Books, 1900, 1911.

⁵³ The percentage of owner-occupancy in lower Wensleydale corresponds closely to the national average of about 15 per cent in the late nineteenth century, MAFF, *A Century of Agricultural Statistics, Great Britain, 1866-1966* 1968, p24.

⁵⁴ Barker MSS, 5/8, *op cit*, 1835.

⁵⁵ *Ibid*, *passim*; - 2/5/1-5, Garth Day Books, *passim*. A

- similar situation occurred in Wales, Howell, *op cit*, p33.
- ⁵⁶ The Tithe Awards provide many examples of this phenomenon, for example see, Ellis MSS, *op cit*, Askrigg, 1839. For similar situation in Wales, see Howell, *op cit*, p33.
- ⁵⁷ Cooper MSS, *op cit*, 1780.
- ⁵⁸ E.Cooper, *Muker: The Story of a Yorkshire Parish*, Clapham, 1948, p92; see Holderness, *op cit*, pp131-2, for a discussion on the definition of 'open' and 'closed' parishes.
- ⁵⁹ Howell, *op cit*, p34.
- ⁶⁰ M.M.Milburn, 'On the Farming of the North Riding of Yorkshire,' *JRASE*, XXVI, 1848, p206.
- ⁶¹ *Ibid*; BFP, 1848, VII, *Report from the SC on Agricultural Customs with Minutes of Evidence*, evidence of J.Outhwaite, p154.
- ⁶² For example, one farm on Lord Bolton's estate had been in the tenancy of the same family for 200 years and a family on another farm on a nearby estate had been tenants for seventy years, J.H.Dugdale, 'Select Farms in the Darlington District', *JRASE*, 3rd ser., VI, 1895, pp486, 525. The Barker family let all their land on a yearly tenancy and many of the tenants held land for most of the period covered by the account books. However, where individual fields were let, these changed hands more frequently, Barker MSS, 5/8, 5/8/1-2, 5/9, Barker Account Books, 1819-91, 1788-35, 1823-55, 1855-85. See also Thompson, 1963, *op cit*, pp76-7 on tenure and improvements.

⁴³ WYAS/L, Vyner MSS, VR 5521, 5444, Account Books of Rents..., 1802-13, 1842; BFP, 1848, *op cit*, pp152-3.

⁴⁴ *Ibid*, pp154-5; Dugdale, *op cit*, pp523,525. However, agreements were often quite detailed even for meadow and pasture: 'Let to James Harker the Meadow and Pasture land at Thwaite ... the Meadow land not to be eat by Horses or Sheep and all the produce of the Land to be consumed upon the Primises', Hartley and Ingilby MSS, James Burton Lodge, Account Book, Askrigg, 1840.

⁴⁵ The Barker and Garth families record many purchases of land, particularly during periods of depression when neighbours were selling their land to leave the area; Barker MSS, 5/8, 5/8/1-2, 5/9, 2/5/1-6, *op cit*, *passim*.

CHAPTER 5

LAND VALUES

The value of land in England and Wales during the nineteenth century provides a useful barometer of the fortunes of the local community. The major factor in determining the price of land and rental values in an area is demand. While the demand for land is undoubtedly influenced by the state of the agricultural industry nationally, the principal determinants of demand may be considerations which are essentially non-agricultural. In some areas the demand for land may be more a reflection of factors such as population pressure, proximity to towns, a tradition of dual occupations or a desire for status.¹ Within an area the price or rental value of individual farms and fields may be less a measure of the general demand for land in the locality and more an indicator of the quality of that land, the extent and nature of improvements and its usage. M.M. Milburn clearly demonstrated this point in 1848 when he valued an area of hill land in the dales. Part of the land was in its 'natural' state, part was drained, and part was drained and limed. The values of these three different types of land were 2s 6d per acre, 5s and 20s per acre respectively.² It is difficult, therefore, to generalize about the value of land. If the endogenous factors are sufficiently strong, local land prices and rental values may deviate markedly

from the national trend.

Land prices in the country as a whole rose from the late eighteenth century through to the end of the Napoleonic wars and, after some decline in the immediate post-1815 period, rose almost continuously to the mid-1870s.³ After this date prices fell steeply and continued to be depressed until the early twentieth century.⁴

I

Despite the difficulty of assessing values, analysis of extant data does allow some conclusions to be drawn about the price of land in Wensleydale and Swaledale. Land prices in the dales followed a similar, although not identical, movement to that of England and Wales but throughout the period the price of land in both Wensleydale and Swaledale was probably higher than the national average. Milburn commented that land in the area was very valuable and even in the latter part of the century, when land prices were falling elsewhere, prices in the two dales remained relatively high.⁵ The high price of land in the two dales reflected demand, the limited acreage under cultivation (see Chapter 8) and the quality of improved land. Wensleydale land prices were further enhanced in the latter part of the century when the local railway was opened in 1878. This encouraged prices to move contrary to the national trend and remain buoyant in the short term.

One local owner stated that his land was worth between £20 and £200 an acre and another owner stated that land adjacent to the railway was worth between £50 and £500 an

acre.⁶ However, resistance to the general fall in prices was short-lived and the increasing problem of falling land prices from the mid-1880s is charted in the local newspapers. For example, in 1886, a 371 acre farm in upper Wensleydale was withdrawn from sale at £4800 (£13 per acre), having failed to reach the reserve price, and a decade later it was sold for only £4010 (£11 per acre).⁷ Another farm of 60 acres near Hawes, which included some rich meadow, was valued at £1800 (£30 an acre) in 1895 but failed to find a buyer at that price.⁸

In 1895 the local newspaper reported on the 'Great Depression in the value of property' in Swaledale and although the reference is to housing rather than farmland the problem of falling prices affected both:

the closing of the lead mines and the agricultural depression which has been greatly felt in the Yorkshire dales above Richmond has driven an enormous number of residents to the manufacturing districts of Lancashire... In consequence of the great exodus of residents the dales' property has depreciated to a great extent. In most villages many homes are standing empty ... Recently five lots of copyhold property were offered at auction of these one lot was sold.⁹

The situation improved and later in 1895 sales were reported to be taking place again although at relatively low prices.¹⁰

II

In England and Wales rents followed a similar pattern to

land prices, although frequently there was a time lag and a difference in the magnitude of the movement. Rents rose rapidly during the Napoleonic war, followed by a period of declining rents in the post-Napoleonic war depression.¹¹ An upward movement in rents occurred from the mid-1830s, gathered pace in the 1850s and continued until 1879, after which there was a continuous decline until the end of the century.¹² As with land prices rents in the dales were affected by local factors which meant that rent movement followed a slightly different pattern from the national trend.

Arthur Young, writing in 1771, noted that near Reeth in Swaledale:

the vales are all grass inclosures, rich and let very high... from 20s to 40s an acre: these grass farmers occupy from £5 to £60 a year.¹³

He added that there were many holdings which let at between £10 and £200 a year indicating the existence of some substantial tenant farmers.¹⁴ Young encountered a similar situation when he visited the Aysgarth area of Wensleydale where enclosed land let at an average of 20s an acre.¹⁵ Farm rents varied from £5 to £100 but in general holdings were let at about £20 or £30.¹⁶ The rents of four farms in each dale visited by Young are presented in Table 5.1. The narrow valley of Swaledale, with the demands of the lead-mining community, was commanding higher rents per acre in the late eighteenth century than neighbouring

Wensleydale. In Wensleydale it was the all-grass farm for which the highest rent per acre was paid confirming the importance of livestock farming in the area at this date. When John Tuke visited the area in 1794 he found that little had changed since Young's visit. Tuke noted that farms in the dales were small with few worth more than £100 and most let at £5 to £40 per annum.¹⁷

TABLE 5.1

RENTS¹ OF SELECTED FARMS IN WENSLEYDALE AND SWALEDALE,
1771.²

	Total	Arable	Grass	Rent	Rent per acre
	acreage	acreage	acreage	£	s
Wensleydale					
1	100	4	96	80	16
2	75	5	70	76	20
3	160	55	105	135	17
4	35	-	35	42	24
Average	92.5	16	76.5	83-5s	19
Swaledale					
1	55	-	55	52	19
2	40	-	40	49	25
3	20	-	20	35	35
4	55	-	55	60	22
Average	42.5	-	42.5	49	25

¹ To the nearest shilling.

² Farms visited by Arthur Young. He appears to have chosen farms near Reeth in Swaledale and Aysgarth in Wensleydale. The farms are not necessarily typical of the two dales.

Source: A. Young, *A Six Months Tour Through the North of England*, Vol II, 1771, pp192,425-6.

During the Napoleonic wars farm rents, which were advancing nationally, increased equally dramatically in Swaledale.¹⁸ Table 5.2 shows that the rental value of two meadows almost doubled during the war and remained high

after 1815. Although this example does not necessarily reflect the general level of rents for agricultural land, it is likely to be indicative of the broad trend.

TABLE 5.2

RENT PER ACRE OF SELECTED MEADOWS NEAR REETH IN SWALEDALE,
1795-1819.

	1795	1798	1808	1812	1819
Howe. ¹	53s3d	61s9d	74s	-	94s 3d
West. ²	46s4d	-	67s4d	80s	80s11d

¹ Howe Close and Pots Close Meadows = 3 acres 2 roods 29 perch.

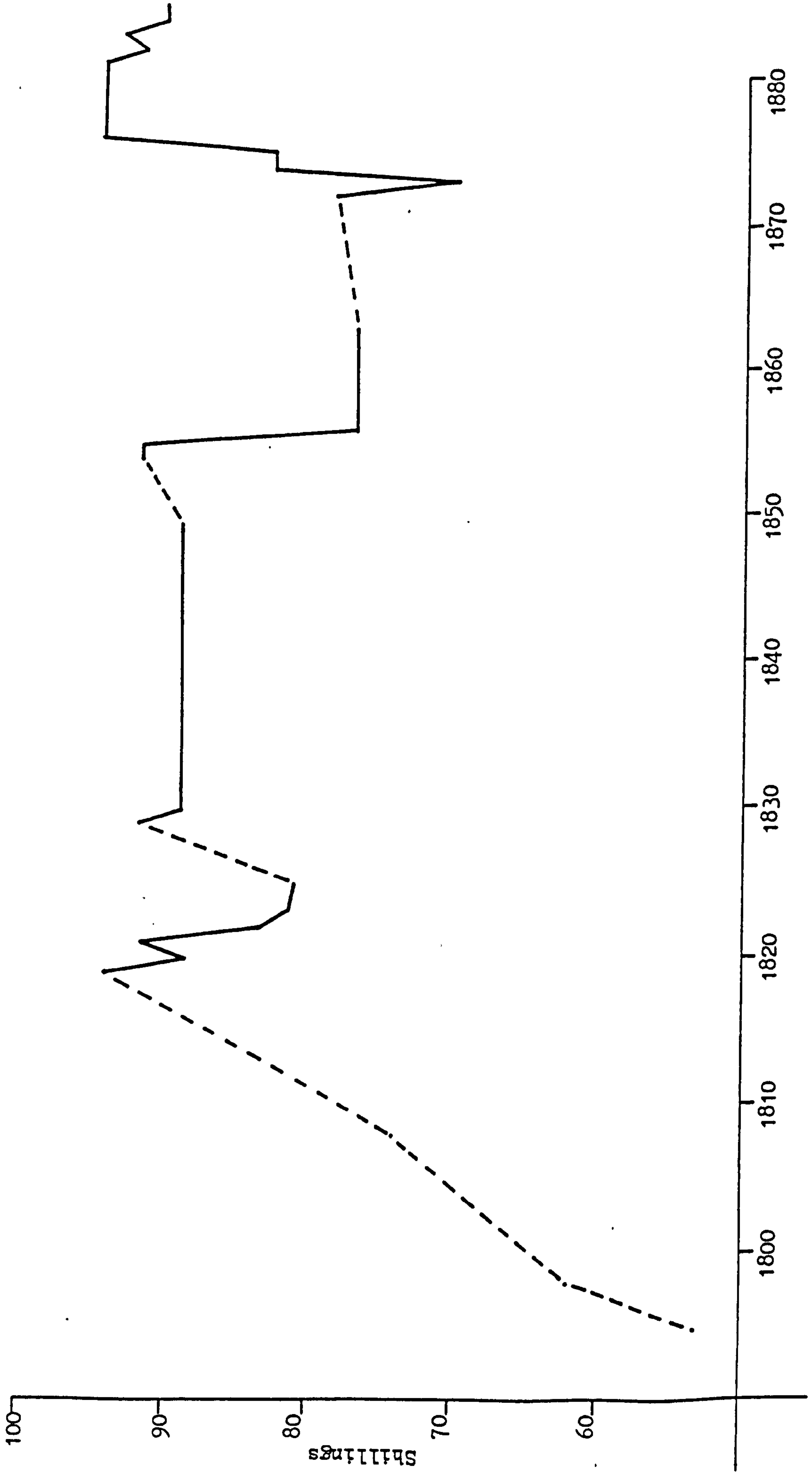
² Great West Close Meadow = 3 acres 1 rood 24 perch.

Source: Barker MSS, 5/8/1, Barker Account Book, 1788-1835.

As the century progressed Swaledale rents were affected by local demand which depended to a large extent upon the fortunes of the lead industry. Figure 5.1 plots the rent movement of one meadow throughout the nineteenth century. The decline in the rental value of the meadow in the early 1820s was to be expected as the effects of the post-war depression reverberated through the area. This was followed by a sharp recovery and the depression which hit both lead mining and agriculture in the late twenties and early thirties is reflected in a reduction of only 3s from 91s 11d in 1829 to 88s 10d in 1830. This lower rent was maintained throughout the 1830s and 1840s. Nationally, for the majority of landlords, this was a period of declining rents to 1835 and rising rents thereafter. In Swaledale, however, the lead miners' demand for small holdings

FIGURE 5.1

RENT PER ACRE OF ONE MEADOW IN SWALEDALE, 1795-1885.



Source: see text.

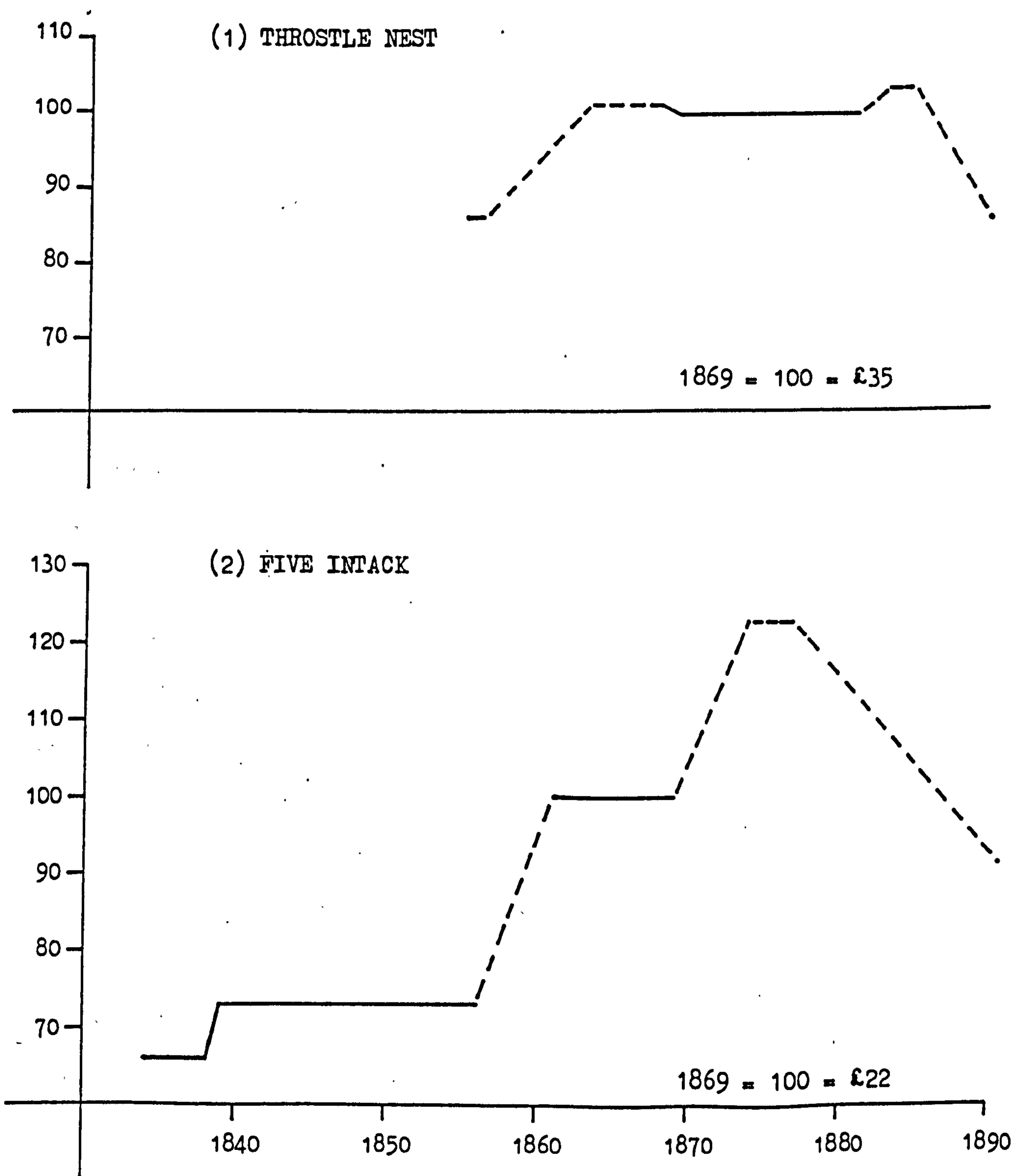
sustained rentals which remained high despite the depression of the early 1830s.¹⁹

After the national agricultural depression of 1848-51 the rent of the meadow rose briefly and then fell sharply in 1856. It remained stable from that date and probably for most of the 1860s. After a steep fall and even more dramatic recovery in the 1870s the rent settled at between 90s and 95s per acre until records end in 1884. This meadow yielded the lowest rents after the Napoleonic war, in the period of high farming when nationally rents were rising. The high rent achieved in 1876 was maintained until after 1879 when nationally rents declined. This reflects the increased demand for land in Swaledale when the lead industry finally began to run down from the 1870s.

Not all rents in the area followed identical trends. Owners took various measures to avoid reducing rents such as receiving payment in kind or in work or by giving temporary rebates.²⁰

Figure 5.2 plots the rent movement of two small holdings in Swaledale from the 1830s to the 1890s and illustrates the difficulties, in the form of falling rents, that were beginning to affect owners in the latter part of the century. The graph shows that although the two holdings followed approximately the same trend, the rent of Five Intack was proportionately higher than that of Throstle Nest in the 1870s. It is possible, however, that some of this rental difference may be attributable to improvements undertaken by the owner. The peak rentals registered by

INDEX OF RENT OF TWO HOLDINGS IN SWALEDALE, 1834-91.



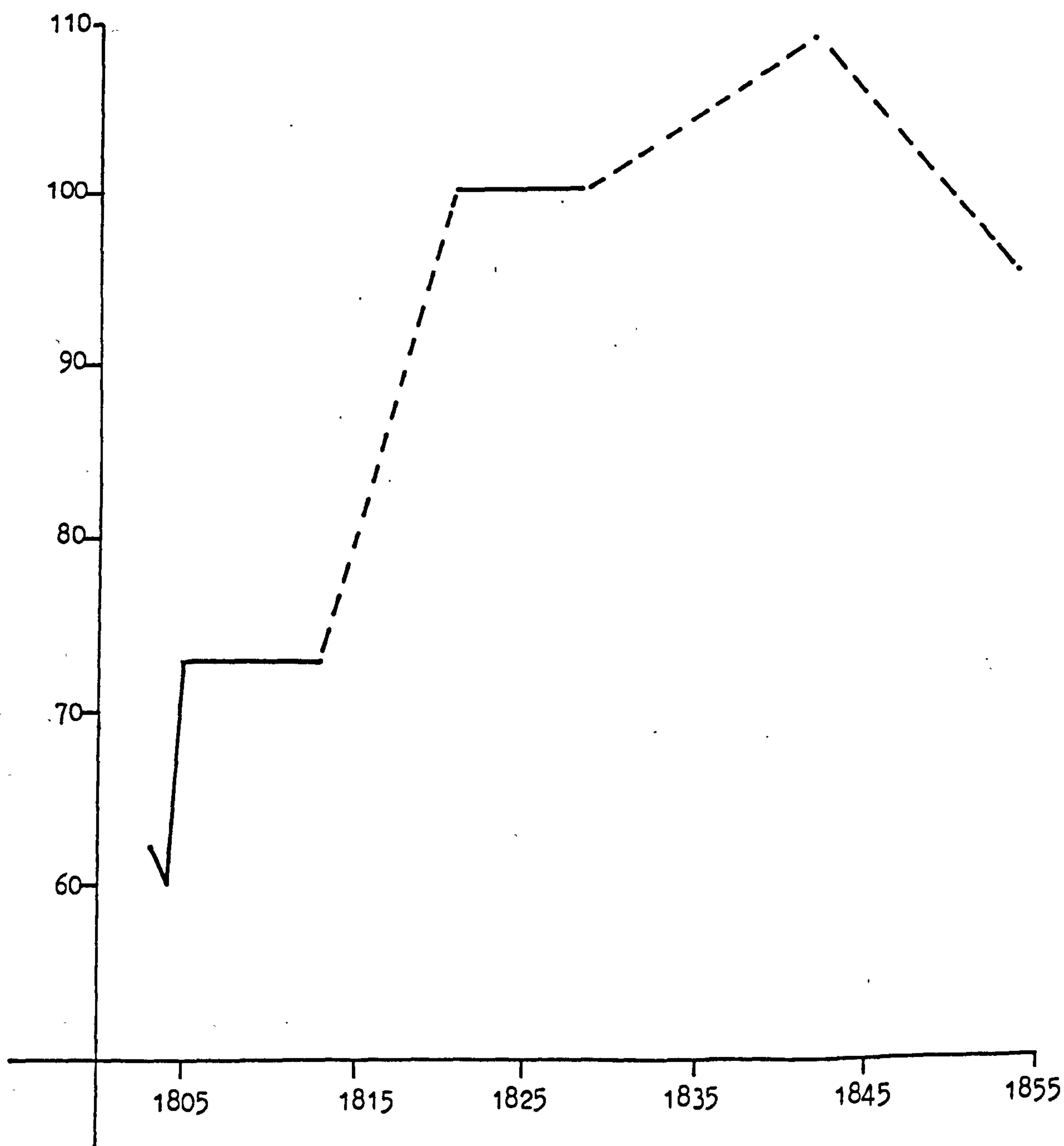
Source: see text.

both holdings in the late 1870s and 1880s correspond to a similar peak rental recorded at Howe Close meadow (see Figure 5.1) and coincide with the national peak identified as occurring in 1879.²¹ However, the detailed movement of rents at Five Intack and Throstle Nest differs markedly from that at Howe Close meadow further illustrating the problems of generalizing about land prices and rents in an area on the basis of limited information.²²

Analysis of the data available for Wensleydale suggests that at least until the 1870s land did not enjoy the same high value as in Swaledale. In 1846 land in Wensleydale was let at an average of between 20s and 25s per acre, only a little higher than Young had found in the 1770s (see Table 5.1).²³ The richest areas in Wensleydale in 1846 were let at between 60s and 70s an acre (the Swaledale meadow was let at nearly 89s at the same date, see Figure 5.1) but the poorer hill areas which required improvement were let at only 10s per acre and in some parts were let at as little as 4s per acre.²⁴

Rents on farms forming part of an estate of over 600 acres in upper Wensleydale give an indication of rent movement in the first half of the nineteenth century (see Figure 5.3).²⁵ Predictably, rents on the Vyner estate, after a dip in 1804, increased during the Napoleonic war but, unlike the national pattern, appear to have been unaffected by the post-war depression. On the contrary, rents in the 1820s were substantially higher than those in

INDEX OF AVERAGE RENTS ON THE VYNER ESTATE IN WENSLEYDALE,
1803-54.



Source: see text.

the latter part of the war. Part of this increase may have been due to improvements, although improvements were undertaken throughout the period 1808-54.²⁶ Possibly due to the increases in rent which had occurred by the 1820s, some tenants were experiencing difficulties and, from the mid-1820s, several were in arrears with their rent. Between 1825 and 1828, when this run of accounts ends, 10 per cent of the annual rent was returned to some of the tenants.²⁷ The next extant record, in 1842, shows a rise in rent, although this probably occurred in the late 1830s during the recovery from the late 1820s and early 1830s depression. The lower rents returned in 1854 were probably in response to the depression of 1848-51.

Although Figure 5.3 represents an index based on an average of the indices of the rents of up to seven farms, there were marked differences in the movement of rents on the individual farms.²⁸ Table 5.3 shows the range of these changes and demonstrates that, as in Swaledale, rent movements could vary significantly from one farm to another. Contrary to the national downward trend, rents in Wensleydale in the 1880s and early 1890s remained fairly stable and where there were reductions these were usually not steep (see Table 5.4).²⁹ The estate cited in Table 5.4 is atypical in that the farms are larger than the average for the area (see Chapter 6) and, as larger farms commanded less rent per acre than smaller farms, the rents shown are lower than the average for the dale.³⁰ Also this estate had four mixed farms whereas most of the farms in the two

dales were grass farms (see Chapter 8).

TABLE 5.3

RENT MOVEMENT ON THE VYNER ESTATE, UPPER WENSLEYDALE,
1803-1854.

1803-4	stable ¹
1804-5	increases ranging between 13.8% and 35.7%
1805-13	stable
1814 & 1820	stable on 2 farms at both dates but a 126% increase on another
1821-8	stable
1829 & 1841	increases between the two dates ranging between 18.2% and 23.4%
1842 & 1854	decreases between the two dates ranging between 15.3% and 24.8%

¹ Apart from one farm which experienced a temporary decline in rent of 12.7 per cent.

Source: WYAS/L, Vyner MSS 5521, 5495, 5444, 5529, Account Books, 1802-13, 1821-28, 1842, 1854.

The rents on individual farms varied and some moved contrary to the overall trend within the dale.³¹ The six grass farms provide an example of differential rent movements in the late nineteenth century. The rent on three of these farms remained stable between 1879 and 1894; the rent on two others, which had been enlarged, increased by 2.0 per cent and 9.6 per cent respectively; and the rent on the remaining farm was reduced by 11 per cent. The landlord had been involved in some capital outlay on all the farms since 1879.³² The rent reductions recorded in Table 5.4 are lower than the average for Wensleydale as a whole which was calculated at between 15 and 20 per cent.³³

TABLE 5.4

RENTS ON A DALES ESTATE, 1879 and 1894.¹

	No. of Farms	Acres	Av. acres	Rent per acre ²		% reduction
				1879	1894	
All Grass	6	1396	233	16s10d	16s10d	-
Mainly Grass	6	6842	1140	8s10d	8s	-9.4
Mixed	4	1024	256	26s8d	22s9d	-14.6
Total	16	9262	579 ³	12s ³	11s ³	-8.3 ³

¹ The estate was not identified but probably belonged to Lord Bolton.

² Figures are to the nearest pence.

³ Average of the three types of farm.

Source: derived from BPP, 1895, XVI, *RC on Agriculture, Report by Mr. R. Hunter Pringle, Assistant Commissioner, South Durham and Selected Districts of the North and East Ridings of Yorkshire*, pp582-3.

As in Young's day, the type of farm had a major bearing on the rent paid. Table 5.4 shows that in the latter part of the nineteenth century the mixed farms were commanding the highest rent but were suffering the greatest rent reductions. The mixed farms had received the greatest input of improvement capital by the landlord (a total of £3 per acre over the period 1879-94) and showed the poorest return on that capital outlay. Rent reductions elsewhere in the two dales at this time tended to be greatest on those farms yielding the highest rents per acre.³⁴

In an attempt to cushion the impact of the depression and to avoid permanent rent reductions, the estate cited in Table 5.4 returned some rent to its tenants in most of the years during this period (see Table 5.5). The rebates of

17.5 per cent in 1892 and 15 per cent in 1893 indicate that, as elsewhere in the country, these were the most difficult years of the whole period, 1879-93, for the dale's farmer.³⁵

TABLE 5.5

RENTS RETURNED TO TENANTS ON A DALES ESTATE, 1886-1894.¹

	%		%
1886	10	1891	5/7.5 ²
1887	10	1892	10
1888	10	1893	17.5
1889	8.25	1894	15 ³
1890	5/7.5 ²		

¹ By percentage. Percentage based on a full year's rent. No rents were rebated in the years 1879-1885.

² 5 per cent on 2 farms and 7.5 per cent on 2 farms.

³ Based on the first half year's rent as the second half year's rent had not been collected when this return was submitted.

Source: see Table 5.4.

Despite the decline in land prices and rents in the latter part of the nineteenth century, the dales did not suffer as badly as some other parts of the country. On the contrary, between 1882 and 1892 'a fair amount of prosperity was enjoyed' in the dales and even after 1892, when farmers in the dales were clearly suffering the impact of the depression, the fall in rents was a 'gentler decline' than even in nearby Richmond.³⁶ Even at the time of the late nineteenth-century depression, rents in both Wensleydale and Swaledale remained substantially higher than the national average.³⁷ For example, in 1874, the eight acre Intack Farm in Swaledale let for 63s 6d per acre

compared with an estimated average of 29s 8d per acre for England and Wales, and in 1891 for 47s per acre, compared with an estimated average of 23s per acre for England and Wales.³⁸ W.Livesey, in 1878, commented of Wensleydale,

The small farms in this locality are let at very high rents; indeed, compared with those of large arable farms in counties favoured with a milder climate the rent per acre appears enormous.³⁹

From the material available, the total rent of land in the two dales in the depths of the 1890s depression can be estimated. In 1895 40,804 acres of farmland were rented in upper Wensleydale, 8388 acres in lower Wensleydale and 16,795 in Swaledale.⁴⁰ It is estimated that in 1894 a representative rent was 30s per acre.⁴¹ Assuming this estimated 'average' rent to be broadly correct, in 1894 the total rental value of the three areas would have been as follows: upper Wensleydale - £61,206, lower Wensleydale - £12,582, and Swaledale - £25,193. Although specific information on landlord's expenditure is not available for the two dales, Hunter Pringle in 1895 noted that landlord's outgoings in Yorkshire were between 40 and 63 per cent of gross income.⁴² On this basis the Wensleydale landlord in 1895 was probably receiving a return on capital of between 2.8 and 4.5 per cent.⁴³

As noted earlier, Hunter Pringle estimated that between 1879 and 1894 the average fall in rents in the Wensleydale district was between 15 and 20 per cent. This would mean

that the returns to landlords prior to 1880 would have been even greater than those cited above. As the rent reductions experienced between 1879 and 1894 were steepest on smaller holdings the impact of the rent losses will have been suffered mainly by the owners of the small estates.

The scale of losses to the local landlords, however, was not nearly as severe as in other parts of the country. Most landlords, apart from those owning the smallest holdings, appear to have survived the worst years of the 1890s depression, although in somewhat straitened circumstances.⁴⁴

III

Contemporary writers and extant statistics suggest that land prices and rents in both Wensleydale and Swaledale were relatively high for most of the nineteenth century. Even during the late nineteenth-century depression, although there is evidence of a fall in land values, both prices and rents remained high relative to national averages, reflecting continuing demand for the limited acreage of good land. The high land values in the dales were not exclusively the result of either exogenous or endogenous factors. The dales were predominantly pastoral and for most of the nineteenth-century dales' landlords and farmers were less exposed to the worst effects of the successive agricultural depressions than their arable counterparts. As noted earlier, good land was in short supply and it had a disproportionate value to the farm

holding because it was this land which provided winter feed for the stock. In parts of the area, particularly in Swaledale, the value of the better quality land was further inflated by demand from a primarily non-farming population keen to rent small plots. Demand remained high in the late nineteenth century because farming in the two dales continued to be profitable. This was particularly the case in Wensleydale where farmers moved more fully into liquid milk production.

The evidence suggests that the local landlord enjoyed a better return on his capital than landlords in other parts of the country. Most of the Wensleydale and Swaledale landlords owned small estates and lived locally. They did not follow 'habits of conspicuous consumption' and it was their modest life style, coupled with the reasonable return on capital, which enabled them to survive the periods of depression.

NOTES - LAND VALUES

- ¹ F.M.L.Thompson, *English Landed Society in the Nineteenth Century*, 1963, p285; J.V.Beckett, 'The Pattern of Landownership in England and Wales, 1660-1880,' *ECHR*, XXXVII, 1984, pp11-16; J.Caird, *English Agriculture in 1850-1*, 1852, p287.
- ² M.M.Milburn, 'On the Farming of the North Riding of Yorkshire', *JRASE*, XXVI, 1848, p202.
- ³ Thompson, *op cit*, pp212-3,317-8; Chambers & Mingay, *op cit*, pp117-8; D.C.Moore, 'The Landed Aristocracy', in G.E.Mingay(ed), *The Victorian Countryside*, 1981, Vol II, p374.
- ⁴ P.J.Perry, *British Farming in The Great Depression 1870-1914*, Newton Abbot, 1974, pp77-8.
- ⁵ Milburn, *op cit*, p182, Milburn also comments that he believed Wensleydale to be the most fertile valley in the North Riding, Milburn, *op cit*, p202; W.Livesey, 'Wensleydale and its Dairy Farming', *Journal of the British Dairy Farmers Association*, 2, 1879, p50.
- ⁶ HLRO, Minutes of Evidence, HC, 1881, Vol 47, S-K Railway Bill, evidence of R.Lodge and C.Other, pp43,100.
- ⁷ *Bedale and Northallerton Times*, 3 July 1886; *Darlington and Stockton Times*, 25 May 1895.
- ⁸ *Ibid*, 6 April 1895.
- ⁹ *Ibid*, 31 August 1895.
- ¹⁰ *Ibid*, 14 September 1895.

- ¹¹ J.D.Chambers and G.E.Mingay, *The Agricultural Revolution 1750-1880*, 1966, pp117-8,129.
- ¹² *Ibid*, pp167-8; H.A.Rhee, *The Rent of Agricultural Land in England and Wales 1870-1943*, Oxford, 1949, pp44-5.
- ¹³ A.Young, *A Six Months' Tour Through the North of England*, Vol II, 1771, p189.
- ¹⁴ *Ibid*, p190.
- ¹⁵ *Ibid*, p422.
- ¹⁶ *Ibid*, pp422-3.
- ¹⁷ J.Tuke, *General View of the Agriculture of the North Riding of Yorkshire*, 1794, p32.
- ¹⁸ Chambers & Mingay comment that generally rents rose by 90 per cent during the war period, *op cit*, p118 .
- ¹⁹ *Ibid*, p167, 1815-1835 was a period of declining rents and 1835 to 1879 was a period of rising rents.
- ²⁰ Barker MSS, 5/8, 5/8/1-2, 5/9, Barker Account Books, 1819-91, *passim*; BPP, 1895, XVI, *RC on the Agricultural Depression, Report by R.H.Pringle, Assistant Commissioner, South Durham and Selected Districts of the North and East Ridings of Yorkshire*, p582.
- ²¹ Chambers & Mingay, *op cit*, p167.
- ²² For a further discussion on the difficulties inherent in generalizing about rents in the area, see W.H.Long & G.M.Davies, *Farm Life in a Yorkshire Dale*, Clapham, 1848, pp57-8.
- ²³ HLRO, Minutes of Evidence, HC, 1846, Vol 70, LMNJ Railway Bill, Evidence of W.Lodge, p187.
- ²⁴ *Ibid*.

²⁵ WYAS/L, Vyner MSS, 5521, 5495, 5444, 5529, Account Books of Rents on the Wensleydale Estate, 1802-13, 1821-8, 1842, 1846-93; rent details are not available for every year covered by the rent books up to 1854 and for no years after 1854. The rental information is not consistent for all farms throughout the period 1803-54. The rental of only two farms is returned without a break throughout the period. The rents of each farm have been calculated as an index on the basis of 100 in 1821 when the rents of the seven farms are available, and an average index (Figure 5.3) has been constructed from the individual indices of those farms for which data is available at the different dates. The number of farms for which information is available is as follows: 1803-13 - three farms, 1821-8 - seven farms, 1842 - four farms, 1854 - six farms.

²⁶ WYAS/L, Vyner MSS, 5521, 5495, 5444, 5529, *op cit*, 1808-54.

²⁷ WYAS/L, Vyner MSS, 5495, *op cit*, 1821-28.

²⁸ Information available for Vyner estate rents in 1842 highlights the problems of discussing 'average' rents. A thirteen acre field was valued for rent as follows: 2 acres 2 perches at 30s, 1 acres at 5s, the rest, 'a great part wet' at 7s per acre; WYAS/L, Vyner MSS, 5444, Earl de Grey, Valuation of... Wensleydale, 1842.

²⁹ Rhee, *op cit*, pp41-2, 47.

³⁰ BPP, 1895, *op cit*, p561; Long & Davies, *op cit*, p57.

³¹ Further, changes in rent frequently took place only when there was a change of tenant, Barker MSS, 5/8, 5/8/1-2, *op*

cit, 1788-1855. For example, a farm in Muker township was let for an annual rent of £65 in 1846, in 1857 this had risen to £95, and in 1865 to £98 per annum. All the increases occurred when there was a change of tenant, M.Hartley & J.Ingilby, *A Dales Heritage*, Clapham, 1982, p20; this trend was noted elsewhere in the country, Thompson, *op cit*, pp219-20.

³² BPP, 1895, *op cit*, p582.

³³ *Ibid*, p554.

³⁴ For example, the rent on Intack Farm, Swaledale, (see Figure 5.2) declined by 26.0 per cent between 1874 and 1891; Barker MSS, 5/8, *op cit*, 1874-1891.

³⁵ BPP, 1895, *op cit*, p553; Thompson, *op cit*, p308; Perry, *op cit*, p37.

³⁶ BPP, 1895, *op cit*, p553; BPP, 1894, Vol XVI-iii, *RC on the Agricultural Depression*, evidence of T.Hutchinson, p347.

³⁷ Rhee, *op cit*, pp41-5.

³⁸ *Ibid*, pp42,44; Barker MSS, 5/8, *op cit*, 1818-91, *passim*; a 180 acre farm in lower Wensleydale let at 30s an acre in 1895, Dugdale, *op cit*, p525.

³⁹ Livesey, *op cit*, p50.

⁴⁰ PRO, MAF 68/1579, MAFF, Parish Summaries of June Returns, upper and lower Wensleydale and Swaledale, 1895.

⁴¹ Based on 30s an acre for the lower Wensleydale farm in 1895, see note 38. Although this farm was larger than the average for the area it was situated in a very fertile part of lower Wensleydale and, therefore, was likely to command

a higher rent than was general for its size. The figure of 30s can provide only a rough guide to the average level of rents due to the enormous variation in rents locally. For example, the eight acre Intack farm was let at 47s an acre in 1871 while a farm in upper Wensleydale was let at 11s an acre in 1886, Barker MSS, 5/8, op cit; *Bedale and Northallerton Times*, 3 July 1886.

⁴² BPP, 1895, op cit, p565.

⁴³ It is possible to undertake this exercise only for upper Wensleydale as there is no information concerning farm sales in lower Wensleydale and Swaledale in the mid-1890s. It has been estimated that land sold at an average of £20 per acre; this is based on the sale of a remote 371 acre farm in upper Wensleydale at £11 an acre in 1895 and the withdrawal of a sixty acre farm from auction when bidding stopped at £30 an acre, also in upper Wensleydale. The figure of £20 an acre, therefore, seems a reasonable compromise. The return on capital has been calculated as follows: if the 40,804 rented acres of upper Wensleydale were worth £20 an acre they would have had a total value of £816,080. The return from rents after allowing for outgoings of 40 per cent of rental receipts would have been £36,724 (£61,206 minus 40%) representing a 4.5 per cent return on capital. The return from rents after allowing for outgoings of 63 per cent of rental receipts would have been £22,646 (£61,206 minus 63%) representing a 2.8 per cent return on capital. The three major variables, the average rent, land value, and outgoings per acre, are all

estimates and, particularly in combination, leave considerable margin for error. However, from the data it would appear that in the two dales, as in Lancashire, the landlord was still receiving some return on his capital, T.W.Fletcher, 'Lancashire Livestock Farming during the Great Depression', in P.J.Ferry(ed), *British Agriculture 1875-1914*, 1973, pp94-99.

⁴⁴ It would appear that generally local landlords did not over invest during the period of high farming as occurred in other areas in the country, Chambers & Mingay, *op cit*, p168.

CHAPTER 6

FARM HOLDINGS

A characteristic of farming in England and Wales in the nineteenth century was the high proportion of small holdings. However, such farms formed a relatively small proportion of the total cultivated acreage. In 1851, for example, farms of 100 acres or less, although constituting two-thirds of the number of holdings, occupied less than one-quarter of the farmed landscape.¹ Although the desire to increase the efficiency of farms led to some consolidation of holdings as the century progressed, particularly during the period of high farming, the small farm continued to predominate.² The MAFF Returns, which commenced in 1866, show that the number of farm holdings reached a peak when the cultivated area was near its maximum extent in 1885.³

During the late nineteenth-century depression the respective merits of large and small farms were the subject of considerable debate.⁴ However, the debate was inconclusive and had little impact on farm structure.⁵ The size of farm holdings in a locality was determined by other considerations. Although some of these were agricultural, it was often non-agricultural factors such as landownership patterns, population pressure, proximity to markets and incidence of dual occupations which were the main determinants.⁶

I

The number and size of holdings in Wensleydale and Swaledale in the latter part of the nineteenth century follow a similar trend to the national pattern although with the peaks in the number of holdings occurring in the 1870s, a decade earlier than nationally. However, extant local data for earlier in the century demonstrate that the move towards the 1870s peaks was not the result of a steady increase but a series of fluctuations which had included a higher peak much earlier in the century. Table 6.1 provides useful information on trends but, as the statistics derived from the different sources are not mutually consistent, comparisons between the sets of data must be treated with circumspection.⁷

During the early part of the nineteenth century the number of holdings in Swaledale increased rapidly. The peak in the number of holdings coincided both with a period of general prosperity in agriculture and lead mining, and with the dale's population peak in 1821. The effect of the 1830s depression is reflected in the decline in the number of holdings recorded between the 1833 and 1839 tithe returns and between the 1824 and 1844 tithe awards. The number of holdings in Wensleydale follows a rather different course. Only a slight increase in the number of holdings occurred during the Napoleonic war and this was followed by a small fall in the post-war depression. However, as the 1839 return suggests, Wensleydale was less

affected by the late 1820s and early 1830s depression and there was a significant recovery to a peak in the number of holdings in 1839.

TABLE 6.1

NUMBERS OF HOLDINGS IN SWALEDALE, 1795-1915,
AND WENSLEYDALE, 1803-1915.¹

Swaledale							
1795 ²	1823 ²	1824 ³	1833 ²	1839 ²	1844 ⁴	1851	1861
196	275	664*	335	304	603	300	355
1870	1871	1875	1881	1885	1895	1905	1915
578	414	611	420	543	429	378	381
Wensleydale							
1803 ⁵	1811 ⁵	1819 ⁵	1839 ⁶	1851	1861	1870	
787	792	782	1026*	551	572	905	
1871	1875	1881	1885	1895	1905	1915	
598	840	613	826	740	686	660	

* Denotes peak year

¹ Includes all holdings over one acre whether owner-occupied or rented.

² Based on the tithe returns for Grinton Ecclesiastical Parish. On average for the four years 1874-7 (the returns for this period are generally agreed to be the earliest reliable MAFF statistics) Grinton Ecclesiastical Parish comprised 74.6 per cent of the total number of holdings in Swaledale. This percentage has been used to project the number of holdings for the whole of Swaledale.

³ Estimated on the basis of holdings of tithe proprietors in 1844 being 90.9 per cent those of tithe proprietors in 1824. Details of all holdings in Grinton Parish are not available in 1824. Data, however, exist for Melbecks township at both dates. The figure, therefore, is derived from the 1844 Melbecks return being 90.9 per cent of the 1824 Melbecks return.

⁴ Based on tithe returns for Melbecks. In 1844 Melbecks had 149 owner-occupied and rented holdings over one acre. In 1874-7 Melbecks comprised 24.7 per cent of total Swaledale holdings. This percentage has been used to project returns for the whole of Swaledale in 1844.

⁵ Based on tithe returns of four of the twelve upper dale townships; Bainbridge, Hawes, High Abbotside, and Low Abbotside. In 1874-7 holdings in these four townships represented 38.0 per cent of the total number of holdings

in Wensleydale. This percentage has been used to project the returns for the whole of Wensleydale.

Ⓔ Based on the Valuation for Tithe Commutation for Askrigg. In 1874-7 Askrigg contained 7.6 per cent of the total number of holdings in Wensleydale. This percentage has been used to project returns for the whole of Wensleydale.

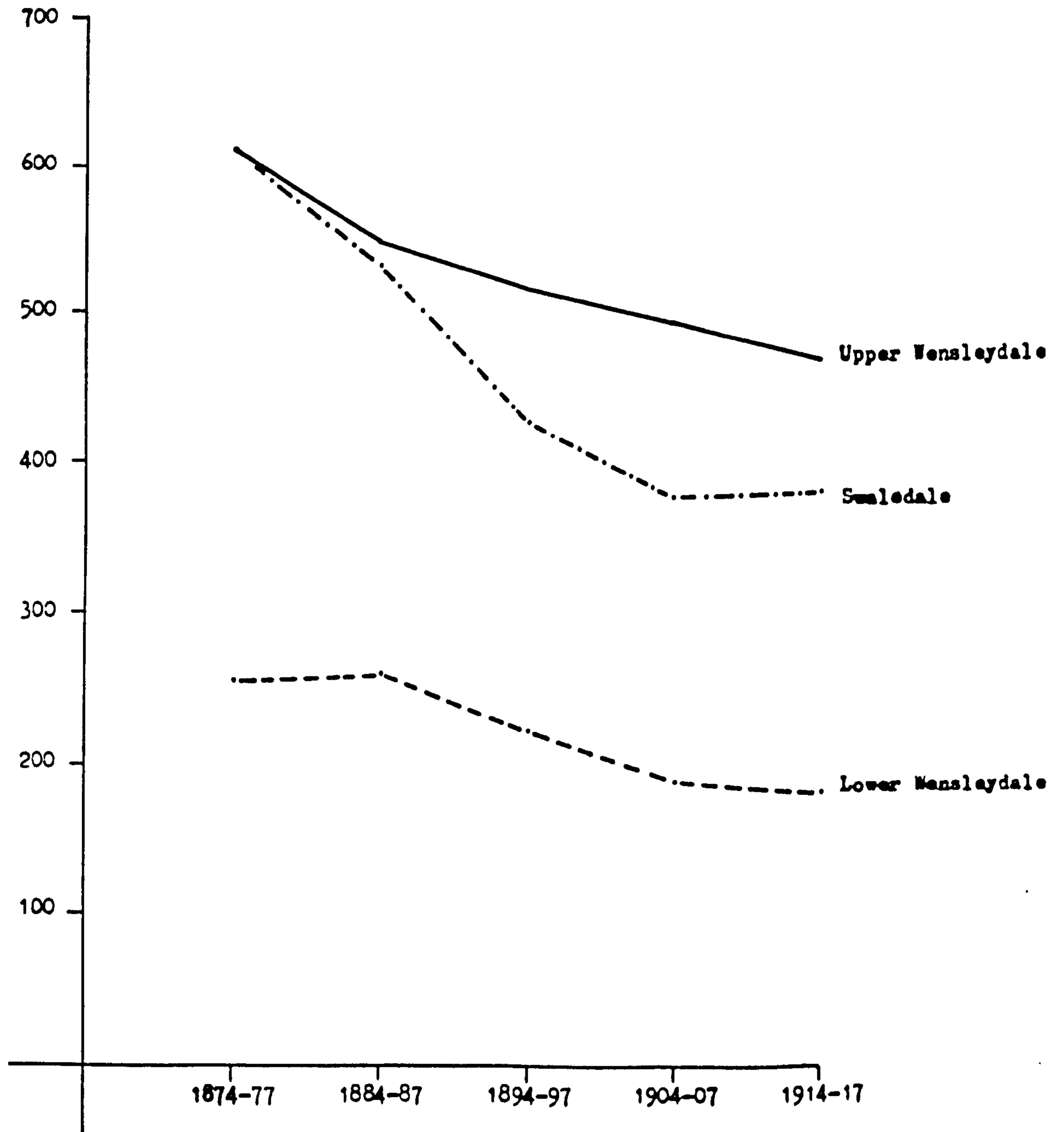
Source: Barker MSS, 7/3,5,6,10,12,16, Account of Grinton Tithes, 1795-6, Tithe Collection Records, Grinton Parish, 1823, Grinton Parish Tithe Collection, 1833, 1839, Moduses in lieu of Hay and Rent Tithes, Grinton Ecclesiastical Parish, 1824, Valuation for Tithe Commutation, Melbecks, 1844; Calvert MSS, Tithing Books for the Constabulary of Bainbridge, (upper Wensleydale), 1803, 1811, 1819; Ellis MSS, Tithe Commutation Award, Askrigg, 1839; PRO, HO 107/2379-80, RG 9/3667-73, RG 10/4868-73, RG 11/4873-8, CEB, 1851-81, Swaledale, upper and lower Wensleydale; PRO, MAF 68/268, 439, 1009, 1579, 2149, 2719, MAFF Parish Summaries of June Returns, 1870, 1875, 1885, 1895, 1905, 1915, Swaledale, upper and lower Wensleydale.

Although the census returns from 1851 to 1881 must be treated with caution as they seriously understate the number of holdings, they indicate that there was an increase in the number of farm holdings in both Swaledale and Wensleydale in every decade over this period. In Swaledale the increase was 40.0 per cent and in Wensleydale the increase was 11.3 per cent. The most reliable information is that which is available for the last quarter of the century. The number of holdings in Swaledale rose by 5.7 per cent from 1870 to a late nineteenth-century peak of 611 in 1875 and then declined by 37.6 per cent to 1915. The number of holdings in Wensleydale peaked at 905 in 1870 and then fell steadily by 27.1 per cent to 1915. The decline in the number of holdings in both dales in the last quarter of the century mirrors the national decline at this time and, in part, reflects the impact of the late

nineteenth-century depression.

As is apparent from Figure 6.1, the three areas present slightly different patterns in the decline in number of holdings in the late nineteenth century. The peak in numbers of holdings in upper Wensleydale and Swaledale occurred a decade earlier than in England and Wales. Lower Wensleydale, with its more diverse economy, was able to defer the fall in the number of its farm holdings for a decade longer than the other two areas. However, the decline in the number of holdings experienced in all three areas between 1885 and 1915 was much greater than the national decline of 9 per cent. The fall in the number of holdings in Swaledale was at four times the national rate. The fall in the number of farm holdings in the three areas was not merely a symptom of agricultural depression, local factors, including the run down of the lead industry and relative geographical isolation, encouraged a greater rate of decline. In Swaledale it appears that, progressively from the 1860s, those who formerly had been lead miners attempted to remain in the area by moving into farming. This, and the growing demand nationally for holdings, particularly in pastoral areas, resulted in the number of holdings increasing to the 1875 peak. There was a similar increase in demand in upper Wensleydale and, as more people sought to farm their own holding, the number of holdings rose to a peak in 1875. The first phase in the depression of the early 1880s had an impact on the area and both Swaledale and upper Wensleydale suffered a slight decline

FARM HOLDINGS IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE,
1874-7 TO 1914-7



Source: MAFF June Returns

in the number of holdings by 1885. The onset of the second phase of the agricultural depression in the 1890s coincided with the terminal decline of the lead industry and forced many small holders to leave the area. This resulted in a steep fall in the total number of holdings which continued until the early twentieth century. Then, as population numbers in the area stabilized and farming nationally enjoyed something of a revival, there was a slight recovery in the numbers of holdings in the two dales.⁷ Wensleydale did not suffer to the same extent as Swaledale as it had relatively fewer very small holdings, the lead industry was not so dominant and the railway had enabled the dale's farmers to move into liquid milk production in the 1890s when other sectors of the dairying industry were affected by the depression (see Chapter 10).

II

In Wensleydale and Swaledale, as in many upland areas, the recorded size of holding does not always indicate the full extent of the farm.¹⁰ Some farmers recorded only their acreage under crops and grass, known as 'inland' acreage, and not the extent of their 'mountain land'.¹¹ Many of the farms in Wensleydale and Swaledale also carried common grazing rights, usually in the form of sheep or cattle gaits on stinted pastures or moorland. These rights were a valuable element of the farm and enabled an increased number of stock to be carried.¹² Stinting was

important as a means of regulating the number of stock on common land and preventing overgrazing.¹³ The grazing rights often covered large areas. For example, in 1844 in Newbiggin Township, 506 acres of moorland carried 500 sheep gaits and, at the same date in neighbouring Bishopdale, two large pastures totalling 916 acres carried 650 sheep gaits.¹⁴ The grazing rights conveyed by gaits varied in detail from township to township but followed a similar pattern. For example, in Swaledale ownership of one gait generally gave right of grazing for four geld ewes or three ewes and lambs or three tups of any description.¹⁵ Originally the number of beast gaits allotted to each holding varied according to the value of the enclosed land of each farm and the amount of fodder produced. By the nineteenth century these rights, in many cases, had been detached from the original holding and were sold separately or with other holdings.¹⁶ This led to inconsistencies as Table 6.2 demonstrates.¹⁷

TABLE 6.2

EXAMPLES OF HOLDINGS AND NUMBER OF SHEEPGAITS ON ASKRIGG

COMMON, ASKRIGG TOWNSHIP, 1839.

Size of holdings ¹	1	47	13	102	140	14	529	60	18
Number of gaits	3	26	7	38.5	43	4	150	10.5	0.5
Acres per gait	0.33	1.8	1.9	2.6	3.3	3.5	3.5	5.7	36.0

¹ In acres.

Note: Askrigg Common comprised 1693 acres and carried 534 gaits.

Source: Ellis MSS, op cit, Askrigg.

One of the features of farm holdings, excluding common grazing rights, in Wensleydale and Swaledale was their relatively small size. The predominance of 'little farmers' was noted by Arthur Young when he visited the district in 1771.¹⁸ The acreages of the farms cited by Young are shown in Table 6.3

TABLE 6.3

FARMS VISITED BY ARTHUR YOUNG IN WENSLEYDALE AND
SWALEDALE, 1771.¹

Farm	1	2	3	4	average acreage
W/d	100	75	160	35	92.5
S/d	55	40	20	55	42.5

¹ The farms visited appear to be near Reeth in Swaledale and Aysgarth in Wensleydale, and are not necessarily typical of the two dales.

Source: Arthur Young, *A Six Months' Tour Through The North Of England*, vol II, 1771, pp192,425-6.

The average size of the Wensleydale farms was more than twice that of their Swaledale counterparts and, as will be seen, this size difference remained throughout the century.

John Tuke, in 1794, also commented that there was a predominance of small farmers in the area, particularly near the towns and large villages.¹⁹ Edward Baines in 1823 noted that the land in the Swale valley west of Reeth was

fertile and divided into small lots for the accommodation of miners.²⁰ The miners, particularly in the late eighteenth and early nineteenth centuries, were anxious to have a small holding to supplement their erratic earnings in the lead industry. Some bought land but most rented their holdings from small landowners (see Chapter 4).

As the nineteenth century progressed, following the trend in the rest of the country, Wensleydale and Swaledale lost some of their small holdings. Locally, however, the categories of farm size where most of the changes were experienced and the dates when the incidence of these changes was greatest differed markedly from the national pattern. As Assistant Commissioner Hunter Pringle noted, the small holder was still in evidence in the final decade of the century:

Among the mines and pits to the extreme west of the district, many of the holdings are under 60 acres in extent, with "stintage" or commonage on the hill added.²²

Table 6.4 shows that the structure of holdings in Swaledale remained intact until at least 1870, after which rapid change seems to have ensued. The fall in the number of holdings in the two smallest categories took place after 1870 but the decline was probably not significant until after 1885 (see Table 6.1). By 1890, as opportunities for dual occupation diminished with the decline of the lead industry and the loss of by-employment (see Chapters 11-13), the number of small holdings under fifty acres had

fallen substantially.

TABLE 6.4

SIZE OF HOLDINGS IN SWALEDALE, 1844-1915.¹

	Acres	1-5	%	6-50	%	51-100	%	101-300	%	over 300	%	Total
1844 ²	163	27.0	346	57.4	47	7.8	42	7.0	5	0.8	603	
1870	150	26.0	338	58.5	45	7.8	40 ³	6.9	5 ³	0.9	578	
1890 ⁴	106		225									
1905	29	7.7	220	58.2	81 ⁵	21.4	45 ⁵	11.9	3	0.8	378	
1915	37	9.7	210	55.1	82	21.5	46	12.1	6	1.6	381	

¹ Above one acre.

² The size of holdings in 1844 is estimated from Melbecks township. For details of calculation see Appendix II.

³ The categories 101-300 acres and over 300 acres are estimated. In 1870 the returns recorded only a category of 'over 100 acres'. The same proportion as was returned in 1915, when the categories were separately defined, has been used in order to establish the number of holdings in each category.

⁴ A special return of holdings of under fifty acres was made in 1890. The total of all holdings was not given in the return.

⁵ The categories, 51-100 acres and 101-300 acres are estimated. The comparable MAFF category for 1905 was 51-300 acres. The same proportion as was returned in 1915, when the categories were separately defined, has been used in order to establish the number of holdings in each category.

Note 1: the size categories used here follow those used in the 1915 MAFF return.

Note 2: the 'size of holdings' category was not included in the 1875 and 1885 annual MAFF Parish Summaries and the 1885 Parish Summary suffers from confused registration of size of holdings.

Source: Barker MSS, 7/16, op cit, Melbecks; PRO MAF 68/268, 2149, 2719, op cit, 1870, 1905, 1915, Swaledale, MAF 68/8201, MAFF Parish Summaries of June Returns, including areas of Allotments and Small Holdings, 1890, Swaledale.

Although holdings of between six and fifty acres, which required only family labour to farm, were declining in number, in percentage terms this category remained stable throughout most of the period. The larger categories of

holding increased in number and in proportion of total holdings both during the period of high farming and through the ensuing depression, demonstrating that a positive trend towards consolidation was taking place in Swaledale. The increase in the number of holdings and in the proportion of total holdings was greatest in the 51-100 acre category.

When the size of holdings in upper and lower Wensleydale is examined differences and similarities in all three areas can be identified (see Table 6.5). Upper Wensleydale displays a similar trend to Swaledale, with the loss of by-employment and the desire to consolidate leading to a decline in the number of 1-5 acre holdings. Both areas lost over 75 per cent of holdings in the 1-5 acre category between 1844 and 1915. However, upper Wensleydale appears to have suffered its worst losses in this category by 1890 and there was a slight recovery by the early twentieth century. In contrast, in Swaledale, the heaviest fall came after 1890, reflecting the collapse of the lead industry. In lower Wensleydale small holdings of 1-5 acres predominated to a much greater extent than in the other two areas and remained proportionately much more important up to 1915. As a consequence, by 1915 lower dale holdings in the three categories above fifty acres formed only about half the proportion found in the same categories in upper Wensleydale. Although the number of holdings up to 50 acres in size fell between 1844 and 1915, the proportion of the total holdings constituted by these categories remained virtually unchanged over this period at about 75 per cent.

The different situation pertaining in lower Wensleydale

TABLE 6.5.

SIZE OF HOLDINGS IN UPPER AND LOWER WENSLEYDALE,
1844-1915.¹

	Acres	1-5	%	6-50	%	51-100	%	101-300	%	301+	%	Tot.
Upper W/d												
1844 ²	221	29.7	298	40.0	87	11.7	116	15.6	22	3.0	744	
1870	138	21.0	299	45.6	111	16.9	88 ³	13.4	20 ³	3.0	656	
1890 ⁴	41		240									
1905	52	10.6	185	37.8	100 ⁵	20.4	124 ⁵	25.3	29	5.9	490	
1915	53	11.4	174	37.3	95	20.4	118	25.3	26	5.6	466	
Lower W/d												
1844 ²	106	37.6	109	38.7	26	9.2	32	11.4	9	3.2	282	
1870	87	34.9	124	49.8	17	6.8	17	6.8	4 ³	1.6	249	
1890 ⁴	87		120									
1905	50	26.7	92	49.2	18 ⁵	9.6	23 ⁵	12.3	4	2.1	187	
1915	53	29.6	79	44.1	18	10.1	24	13.4	5	2.8	179	

¹ Above one acre.

² The figures for upper and lower Wensleydale are estimated from Askrigg and Redmire townships respectively. For details of calculation see Appendix III.

³ See Table 6.4, footnote 3.

⁴ See Table 6.4, footnote 4.

⁵ See Table 6.4, footnote 5.

Note: holdings comprised solely of rough grazing are excluded from the 1905 return. In the 1915 return 'rough grazing' category there are eleven holdings in upper Wensleydale and four in lower Wensleydale. These are not included in the size of holdings categories. This accounts for the slight discrepancy between totals here and those in Table 6.1.

See also notes 1-2, Table 6.4.

Source: Ellis MSS, op cit, Askrigg; WYAS/L, RD/RT/195, Tithe Award, Redmire, 1843; PRO MAF 68/268,8201,2149,2719, op cit, 1870,1890,1905,1915, upper and lower Wensleydale.

compared with the other two areas reflects both the relatively small total number of holdings involved and the

fact that the occupiers of these holdings were often able to maintain dual occupations to the end of the period. Assistant Commissioner Coleman in 1881 gave a description of one of these small lower Wensleydale tenants:

a shoemaker by trade, he has six acres of meadow...has gates for six cows, and 18 acres of moor...declares he could not get a living on the land but enjoys the occupation.²²

The lot of the small tenant was seldom easy but many exhibited such a strong attachment to their land as to suggest a 'peasant' mentality. Coleman observed:

families stick too close to home and so nearly starve before they will sever the connexion; in some cases the tenants are not in such a good position as labourers.²³

The problems of the small tenant were also highlighted by a newspaper report in 1887 which commented that the proposed reopening of Keld Heads lead mine in lower Wensleydale would provide employment:

to a large number of men in the district, who have been up to now dependent upon agriculture, which has barely yielded them a living.²⁴

As with landownership, the variation in size of holdings in the three areas in the last quarter of the nineteenth century reflects the different emphases within the three economies. There is a clear contrast between 'real' farms where farming was carried on as a business and small holdings which could not provide a reasonable subsistence. In 1870 67 per cent of the holdings in upper Wensleydale were of less than 51 acres in size and 17 per cent were

51-100 acres in size whereas in lower Wensleydale and Swaledale 85 and 84 per cent of holdings respectively were less than 51 acres and 7 and 8 per cent respectively were 51-100 acres in size. The correlation between small holdings and other non-agricultural activities, particularly lead mining, is clear.

The decline of the small holder is further shown in the fact that all three areas almost doubled the proportion of holdings of over 100 acres between 1870 and 1915. Upper Wensleydale increased from 16 to 31 per cent, the lower dale from 8 to 16 per cent and Swaledale from 8 to 14 per cent. By 1915 the profile of holdings in Swaledale was beginning to show similarities with upper Wensleydale: holdings of less than 51 acres formed 65 per cent and 49 per cent respectively and holdings of 51-100 acres formed 22 per cent and 20 per cent respectively of total holdings.

In contrast, in lower Wensleydale, where crafts and services probably still dominated in the early twentieth century, the emphasis on the smaller sizes of holdings was maintained.

The census enumerators' books, although less than satisfactory, provide some information as to the size of holdings in the third quarter of the nineteenth century, where otherwise there is a lack of data. This information can be used in relation both to the earlier tithe awards and to the later MAFF returns presented in Tables 6.4 and 6.5 to give an indication of the trends over the whole

period.²⁵

The census information presented in Table 6.6 confirms that between 1851 and 1881 there was not a general decline in the number of small holdings in either Wensleydale or Swaledale.²⁶ Rather than a reduction in the number of small holdings, which some observers claimed took place in the period of high farming, lower Wensleydale and Swaledale enjoyed a slight increase in the number and percentage of holdings of less than 51 acres between 1851 and 1881.²⁷ In upper Wensleydale the proportion of holdings with less than 51 acres fell by 13.0 per cent between 1851 and 1881.²⁸

Tables 6.4 to 6.6 demonstrate that in Wensleydale and Swaledale between the 1850s and the 1880s there was general stability in the size of holdings. After the early 1880s there was an increase in the proportion of larger holdings and a corresponding decrease in the proportion of the smallest holdings, reflecting a change in the structure of farming in the two dales. As has been noted, however, within this general pattern there were differences in the three areas.

Throughout the last quarter of the nineteenth century and up to 1915 the farm of between 100 and 300 acres dominated the countryside in England and Wales as a whole and accounted for over 40 per cent of the acreage under cultivation.²⁹ Table 6.7 shows the distribution of the cultivated acreage of upper Wensleydale, lower Wensleydale and Swaledale by size category of farm holding for 1870 and

1915.

TABLE 6.6

SIZE OF HOLDINGS IN UPPER AND LOWER WENSLEYDALE
AND SWALEDALE, 1851-1881.

	1851	1861	1871	1881
Upper W/d				
% of tot. fmrs. ¹	82	72	93	96
No of hldgs. ²	366	354	460	469
Acres	% ³	% ³	% ³	% ³
1-50	54	44	47	47
51-100	20	28	26	24
101-200	16	15	14	18
201-500	9	11	11	8
over 500	2	2	2	3
Lower W/d				
% of tot. fmrs. ¹	82	56	66	79
No of hldgs. ²	88	45	66	94
Acres	% ³	% ³	% ³	% ³
1-50	62	64	50	64
51-100	13	7	17	13
101-200	15	16	17	13
201-500	9	11	15	7
over 500	1	2	2	3
Swaledale				
% of tot. fmrs. ¹	93	90	88	67
No of Hldgs. ²	279	318	366	282
Acres	% ³	% ³	% ³	% ³
1-50	72	73	75	76
51-100	14	15	12	14
101-200	11	8	10	7
201-500	3	3	2	2
over 500	0.4	1	0.3	0.4

¹ Farmers who returned their acreage as a percentage of total farmers returned at the census.

² Number of holdings with acreage returned.

³ By percentage of number of holdings with acreage returned.

Source: PRO HO 107/2379-80, RG 9/3667-73, RG 10/4868-73, RG 11/4873-8, CEB, 1851-81, upper and lower Wensleydale, and Swaledale.

Following the national pattern, in upper Wensleydale in both 1870 and 1915 farms of 101-300 acres dominated the landscape with farms of over 300 acres making the next biggest contribution to the rural scene. The proportion of the cultivated acreage of upper Wensleydale in the two largest categories of farm size increased substantially between 1870 and 1915. In lower Wensleydale the situation was less clear cut. In 1870 the 6-50 acre and 101-300 acre categories of farm size were almost equally significant. By 1915, however, the 101-300 acre farm had become dominant and farms of over 300 acres had become the second largest category. The proportion of the cultivated acreage in the three smallest sizes of holding either fell or remained static. In Swaledale the situation was different again. In 1870, as in lower Wensleydale, the 6-50 acre farm was the most significant, followed by the 101-300 acre category.³⁰ By 1915 farms in the 101-300 acre category contained the highest proportion of the cultivated acreage.

The main difference between Swaledale, where the lead industry was dominant for most of the nineteenth century, and the two Wensleydale areas was that the smallest farms, in the three categories up to 100 acres, were relatively more important in both years and, conversely, farms of over 300 acres occupied a considerably lower proportion of the cultivated acreage.

TABLE 6.7

ACREAGE DISTRIBUTION BY SIZE OF HOLDING IN UPPER AND LOWER
WENSLEYDALE AND SWALEDALE, 1870 AND 1915.¹

	1870		1915	
	Acres	%	Acres	%
Upper				
W/d				
1-5	414	0.9	159	0.3
6-50	8372	18.7	4872	10.0
51-100	8381	18.7	7173	14.7
101-300	17,644	39.4	23,659	48.4
Over 300	10,000	22.3	13,000	26.6
Total acreage	44,811	100.0	48,863	100.0
Lower				
W/d				
1-5	261	2.5	159	1.4
6-50	3472	33.3	2212	20.0
51-100	1284	12.3	1359	12.3
101-300	3409	32.7	4812	43.6
Over 300	2000	19.2	2500	22.6
Total acreage	10,426	100.0	11,042	99.9
S/d				
1-5	450	1.9	111	0.5
6-50	9464	39.7	5880	24.1
51-100	3398	14.3	6191	25.4
101-300	8020	33.7	9223	37.8
Over 300	2500	10.5	3000	12.3
Total acreage	23,832	100.1	24,405	100.1

¹ The median average of the size groups has been used and this gives some distortion. For example, in the average of the four years 1874-7 (acreage figures for 1870 are not available) agricultural holdings in upper Wensleydale, lower Wensleydale and Swaledale actually comprised 40,944 acres, 8958 acres and 17,268 acres respectively. When these returns are compared with the Table above the implication is that the average size of holdings in all three areas was lower than the median. This should not affect the proportional significance of the various size categories.

Note 1: 1870 has been used because of inadequate returns in other years examined in the nineteenth century.

Note 2: the table is calculated using the following acreage (which is the median for each category) and multiplying

this with the number of holdings in each category (see Tables 6.4-6.5): -

1-5 acres = 3 acres
6-50 acres = 28 acres
51-100 acres = 75.5 acres
101-300 acres = 200.5 acres
Over 300 acres = 500 acres.

Source: PRO MAF 68/268,2719, op cit, 1870,1915, upper and lower Wensleydale, and Swaledale.

Although averages can be misleading, the analysis of average farm size provides a further means of examining and comparing farm structure. Table 6.8 shows that between 1875 and 1915 the average size of farm in upper Wensleydale was consistently above the national average whereas in lower Wensleydale and Swaledale it was consistently below the national average. Until the 1890s the average farm size in upper Wensleydale was more than double that of its Swaledale counterpart, a characteristic which echoes Young's findings a century earlier (see Table 6.3). The rate of change in the structure of farm size was clearly much quicker in the two dales at this time than in England and Wales as a whole. Between 1875 and 1915 the average farm size in upper Wensleydale, lower Wensleydale and Swaledale increased by 29 per cent, 51 per cent and 82 per cent respectively, compared with an increase of 9 per cent nationally. The rapid increase in the average size of farm in lower Wensleydale and, particularly, Swaledale is striking and indicates that, in the last quarter of the nineteenth century and in the early twentieth century, the two areas were in a period of transition as lead mining declined and as agriculture became a more dominant element

in the overall economy.

TABLE 6.8

AVERAGE FARM SIZE IN UPPER AND LOWER WENSLEYDALE AND
SWALEDALE, AND ENGLAND AND WALES, 1875-1915.¹

	Upper W/d	Lower W/d	Swaledale	E & W
1875	68	37	28	57
1887 ²	82	40	36	58
1895	83	46	43	63
1905	90	53	50	3
1915	88	56	51	62

¹ In acres above one acre.

² The relevant information is not provided in the 1885 return for the dales; 1887 is the nearest return in which the information is included. The return for England and Wales is for 1885.

³ Information for England and Wales is not provided for 1905.

Note: The average farm size is calculated by dividing the number of holdings (excluding 'rough grazing only' holdings) into the total acreage under crops and grass.

Source: PRO MAF 68/439,1123,1579,2719, Parish Summaries of June Returns, 1875,1887,1895,1905,1915; MAFF, *A Century of Agricultural Statistics, Great Britain, 1866-1966*, 1968, pp19-20.

III

For the small holder, whether owner or tenant, a significant factor in his ability to maintain the holding was the availability of a second occupation. Many contemporaries felt that it was the loss of dual occupations that caused the exodus from rural areas from the mid-nineteenth century.³¹ Dual occupation had

traditionally been an important element in the dales' economy but, in common with other districts, the opportunities for by-employment had diminished during the century. However, although dual occupations probably reached a peak prior to 1851, they were still much in evidence until the late nineteenth century. Between 1851 and 1881, as Table 6.9 shows, many small holders with less than 50 acres, and especially those with between 1 and 10 acres, recorded dual occupations.³²

TABLE 6.9

SIZE OF HOLDINGS AND INCIDENCE OF DUAL OCCUPATION, UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1851-1881.

	1851		1861		1871		1881	
	Hdgs	Dual	Hdgs	Dual	Hdgs	Dual	Hdgs	Dual
Upper W/d								
Acres								
1-10	47	3	32	15	54	16	58	24
11-50	133	1	115	23	161	33	162	46
Lower W/d								
Acres								
1-10	26	1	10	5	15	8	27	7
11-50	29	1	19	2	18	6	32	13
Swaledale								
Acres								
1-10	67	39	92	51	120	84	89 ¹	54 ²
11-50	134	22	140	47	154	65	135 ³	40 ²

¹ Includes five miner-farmers who did not return acreages.

² Includes six miner-farmers who did not return acreages

³ These figures are low because the enumerator for Grinton and Reeth townships did not return acreages.

Source: PRO HO107/2379-80, RG9/3667-73, RG10/4868-73, RG11/4873-8, CEB, 1851-81, upper and lower Wensleydale and Swaledale.

The incidence of dual occupations was consistently higher in Swaledale, where many lead miners supplemented their

incomes by farming small holdings, than in Wensleydale. The proportion of farmers in Swaledale with holdings of 1-10 acres who had dual occupations ranged from 55.4 per cent in 1861 to 70.0 per cent in 1871. Discounting the exceptionally low 1851 figures which appear to suffer from under-recording, the comparable proportions varied in lower Wensleydale from 25.9 per cent in 1881 to 53.3 per cent in 1871 and in upper Wensleydale from 29.6 per cent in 1871 to 46.9 per cent in 1861. It is significant that the number of holdings where the farmer had a dual occupation increased consistently over the period 1851-81 in both upper and lower Wensleydale suggesting that the traditional rural economy survived in Wensleydale until at least the early 1880s. In Swaledale, although the proportion of holdings where the farmer had a dual occupation remained high as late as 1881, the number of such holdings peaked a decade earlier and in the period 1871-81 fell by 36.9 per cent. This may point to the fact that the economy of Swaledale was already beginning to experience significant change.

IV

The lack of comparability in the data makes it difficult to draw firm conclusions concerning trends in the number of farm holdings over the nineteenth century as a whole. Nevertheless, the evidence suggests that, even during the period of high farming and contrary to the trend which has been identified as occurring elsewhere in the country,

overall the number of holdings in the two dales remained high until at least the 1870s.

Throughout the greater part of the nineteenth century in Wensleydale and, particularly, Swaledale small holdings of 50 acres or less constituted, both numerically and proportionately, the most important category of farm size. It was not until the last two decades of the century that major structural changes in farm holdings occurred. From the 1880s it was agricultural, rather than non-agricultural, factors which determined the number and size of farm holdings. The number of small holdings declined rapidly and the larger sizes of farm became relatively more numerous. It was the farm of over 50 acres in size (and other sources would suggest over 40 acres) that had the flexibility to withstand successive depressions and survive throughout the century.³³ By the end of the century these relatively remote rural dales were moving more fully into an agricultural economy not geared to self sufficiency, part-time farming or to servicing a local industrial population but which was directed to efficiently producing those products which were in demand in the wider regional and national markets.

NOTES - FARM HOLDINGS

- ¹ J.D.Chambers & G.E.Mingay, *The Agricultural Revolution 1750-1880*, 1966, pp93,132-3; D.W.Howell, *Land and People in Nineteenth Century Wales*, 1977, p68.
- ² Chambers & Mingay, *op cit*, p173.
- ³ MAFF, *A Century of Agricultural Statistics, Great Britain 1866-1966*, 1968, pp18-19.
- ⁴ BPP, 1895, XVI, RC on the Agricultural Depression, report by R.Hunter Pringle, Assistant Commissioner, South Durham and Selected Districts of the North and East Ridings of Yorkshire, pp61-2; *ibid*, 1897, XV, Final Report, pp39-42; P.A.Graham, *The Rural Exodus*, pp125-36; C.S.Orwin & E.H.Whetham, *History of British Agriculture 1846-1914*, 1964, pp284-5, 330-5; P.J.Perry, *British Farming in The Great Depression 1870-1914*, Newton Abbot, 1974, pp101-4.
- ⁵ *Ibid*, pp101-4; Orwin & Whetham, *op cit*, pp334-5.
- ⁶ *Ibid*, pp284-5; Perry, *op cit*, pp103-4; G.E.Mingay, *Enclosure and the Small Farmer in the Age of the Industrial Revolution*, 1968, p13.
- ⁷ The Tithe Awards and Tithe Returns are not strictly comparable as each type of source had different criteria for enumeration. Similarly, the MAFF and decennial census sources used for the second part of the century are not directly comparable. An examination of the MAFF 1870 returns and the census 1871 returns highlights this problem. Many small holders with dual occupations presumably had only their primary occupation recorded in

the census. The date groupings of the different types of sources are as follows: - Tithe Returns, 1795, 1823, 1833, 1839, (Swaledale), 1803, 1811, 1819, (Wensleydale); Tithe Awards, 1844 (Swaledale), 1839 (Wensleydale); Census, 1851, 1861, 1871, 1881; MAFF, 1870, 1875, 1885, 1895, 1905, 1915.

The 1795 Tithe Return differs so markedly from the later 1823-39 Returns that the data presented there must be treated with particular caution. However, the increase in the number of holdings between 1795 and 1823 may have been of the magnitude indicated.

⁹ The peak in Wensleydale may have occurred in the 1820s at the same time as Swaledale; unfortunately this cannot be verified due to lack of data. Other historians have noted that holdings probably continued to increase to 1830; Mingay, *op cit*, pp22-4, small owners probably increased to about 1832 in some areas; Chambers & Mingay *op cit*, pp91-2, note that the decline of small holders probably commenced after 1815 but was not significant until the 1830s; see also M. Turner, *Enclosures in Britain 1750-1830*, 1984, pp64-76, *passim*, for a fuller discussion.

⁷ The stabilizing of the rural population in the early twentieth century was a common phenomenon, J. Saville, *Rural Depopulation in England and Wales 1851-1951*, 1957, pp135-6.

¹⁰ BPP, 1895, *op cit*, p547.

¹¹ For example, in 1851, the census enumerator recorded sixteen holdings in part of Burton-cum-Walden township which apart from 716 acres 'inland' had 'mountain' land of

1367 acres, PRO, HO 107/2380, CEB, 1851, Burton-cum-Walden.

¹² BPP, 1844, V, *Report from the SC on Commons Inclosure with Minutes of Evidence and Index*, evidence of R. Rayson, Q 4771-3.

¹³ *Ibid*, Q 4809-10.

¹⁴ WYAS/L, RD/RT/24,171, Tithe Awards, Bishopdale, Newbiggin, 1839. In Bishopdale, the twenty-one holdings were in the following size categories: - eleven in the 1-100 acres, seven in the 101-300 acres and three holdings were over 300 acres.

¹⁵ W.H. Long & G.M. Davies, *Farm Life in a Yorkshire Dale*, Clapham, 1948, p27.

¹⁶ BPP, 1844, *op cit*, Q 4773; Barker MSS, 5/8, Barker Account Book, 1819-91; between 1866 and 1870 Barker let 1 3/4 gaits on Reeth Moor at 17s per gait.

¹⁷ The relationship is not quite as inconsistent as it might at first appear. Linear regression analysis shows that there is a reasonable relationship between the size of holding and the number of gaits.

¹⁸ A. Young, *A Six Months' Tour Through the North of England*, Vol II, 1771, pp191-2.

¹⁹ J. Tuke, *General View of the Agriculture of the North Riding of Yorkshire*, 1794, p32.

²⁰ E. Baines, *History, Directory and Gazetteer of the County of York*, Vol II, Leeds, 1823, p452.

²¹ BPP, 1895, *op cit*, p547.

²² BPP, 1881, XVI, RC on the Depressed Condition of Agricultural Interests, Reports of Assistant Commissioners,

Mr Coleman's Report, p138.

²³ *Ibid.*

²⁴ *Richmond Observer*, 12 November 1887.

²⁵ The census figures must be treated with circumspection for, although farmers were requested to return their acreage from the 1851 census onwards, as Table 6.6 demonstrates, many did not; D.B.Grigg, 'The Changing Agricultural Geography of England: a Commentary on the Sources Available for the Reconstruction of the Agricultural Geography of England, 1770-1850', *Transactions of the Institute of British Geographers*, XLI, 1967, p88.

²⁶ Fewer farmers returned their acreages in Swaledale in 1881 and, therefore, figures relating to this return must be treated with caution.

²⁷ Chambers & Mingay, *op cit*, p132. Unfortunately relatively few farmers in lower Wensleydale in 1861 and 1871 returned acreages and the information shown for the different sizes of holding must be treated with caution.

²⁸ There was a decline between 1851 and 1861 in the numbers of farmers returning acreages. The farmers of the smaller holdings, where perhaps farming was not the main occupation, were less likely to have returned their acreage, and this may account for the apparently steep fall in 1-50 acre holdings between the two dates, see Grigg, *op cit*, p88.

²⁹ MAFF, *op cit*, pp18,20.

³⁰ It is probable that this was the most common size of farm in terms of acreage earlier in the century as well;

Barker MSS, 7/14,15,16,17/1-2, Valuation for Tithe
Commutation, Grinton, Reeth, Melbecks, Muker, Angram, 1844.

³¹ G.B.Longstaff, 'Rural Depopulation', JRSS, LVI, 1893,
pp414-5.

³² The evidence must be treated with circumspection as not
all dual occupations will have been recorded.

³³ Cooper MS, (copy of) Agreement Regulating Settlement in
the Township of Muker, 1780.

CHAPTER 7

AGRICULTURAL LABOUR

The farm population of England and Wales comprised farmers, their families, farm servants and agricultural labourers. The size and composition of this labour force was determined largely by the type and acreage of farm, and the cost of farm labour relative to agricultural output and profitability.

The agricultural labour force of England and Wales reached a peak in 1851 when agricultural employees totalled some one and a quarter million. At the same date there were almost a quarter of a million farmers, giving a ratio of five labourers to one farmer.¹ Over the next half century this ratio decreased by almost a half as the number of people in agricultural employment fell by over 40 per cent and the number of farmers fell by only 10 per cent.² A high proportion of labourers in this period was employed on large arable farms whereas in pastoral areas, where farms were on average smaller, the holding was generally worked with family labour.³ In the mid-nineteenth century the labour requirement of pastoral farming was half that of arable farming, averaging one man to every 50 or 60 acres.⁴

The wage rates of agricultural labourers varied considerably from one area to another. Although wages were generally higher in the north of England than in the south, even in the north wages were substantially lower away from

the industrial towns.³ While wages did not increase significantly in the first half of the nineteenth century, thereafter they increased steadily to the early 1890s when they declined slightly.⁴ By the end of the century wages had recovered and they increased into the twentieth century.⁷ The fact that farm workers' wages held up so well in the last quarter of the nineteenth century, when agricultural prices were falling, was claimed to be a cause of the depression.⁸ The high wages during this period meant that farmers who used family labour were in a more favourable position than those farmers who hired labour.⁹ One response of farmers to high wages at a time of falling profitability in agriculture was to dispense with hired labour.¹⁰ However, this type of economy resulted in less efficient farming.¹¹

I

The generally small size of farm holdings in Wensleydale and Swaledale in the nineteenth century meant that usually the farmer was a 'working man'.¹² Even the substantial farmer, with a holding in excess of 300 acres, was to be found in the fields during busy times of the year.¹³ The dales' farmer also sought to farm more cost-effectively by using family labour rather than hiring servants.¹⁴ In this way he could make an accounting profit due to the 'free' input of family labour although this practice did not always make strict economic sense. By employing family labour, however, the farmer was in a better position to

survive periods of depression:

Small farmers engaged in dairying ... have held their own so long as they work ... with unpaid family labour. But the moment the children go, and hired servants are employed, profit vanishes.¹⁵

Some farms were large enough to require additional assistance for at least part of the year. Three types of agricultural labour were employed in the dales; farm servants, who were hired by the year or half year and who lived on the farm, either in the farmhouse or in a cottage; labourers, who were hired by the day or week and lived in nearby villages; and migratory workers, predominantly Irish, who were employed during harvest time. Where paid labour was employed, because of the demands of livestock farming, the farm servant was preferred:

With the exception of a few men employed in drainage, there are no labourers, properly so called - the house servants of each farm being sufficient to accomplish all that is requisite.¹⁶

The tradition of living-in servants persisted in the dales well into the twentieth century when improved transport meant that most workers could live in nearby villages.¹⁷

Arthur Young, in his analysis of eight farms in the two dales in 1771, showed that where regular labour was employed it was, with one exception, in the form of farm servants (i.e. men, boys and maids).

TABLE 7.1

LABOUR ON SELECTED FARMS IN WENSLEYDALE
AND SWALEDALE, 1771.¹

	Acres	Men	Boys	Maids	Labourers
W/d					
1	100	2	2	2	-
2	75	1	-	1	-
3	160	2	1	2	1
4	35	-	1	1	-
Average		1.25	1	1.50	0.25
S/d					
1	55	-	1	1	-
2	40	1	-	-	-
3	20	-	-	-	-
4	55	-	1	1	-
Average		0.25	0.50	0.50	-

¹ Farms visited by Arthur Young. The farms visited appear to be near Reeth in Swaledale and Aysgarth in Wensleydale. The farms are not necessarily typical of the two dales.

Source: A. Young, *A Tour Through the North of England*, Vol II, 1771, pp191-2,425-6.

It has been estimated that in England and Wales in 1871 and 1881 employed non-family labour formed 64.6 and 62.5 per cent respectively of all workers in agriculture.¹⁰ As Table 7.2 demonstrates, non-family labour constituted a much smaller proportion of the total agricultural workforce in Wensleydale and Swaledale than it did nationally. Also, it is clear that there were significant differences between the three areas.

Upper Wensleydale exhibits the greatest balance and stability in the composition of its agricultural workforce.

The proportions of farmers, family workers and farm labourers come closer to parity than in the other two areas

and the proportions remained relatively unchanged over the period. Family labour constituted a consistently higher proportion of the workforce in upper Wensleydale, with its simpler, agriculturally-orientated economy, than in the other two areas.

TABLE 7.2

FARM EMPLOYMENT, UPPER AND LOWER WENSLEYDALE AND
SWALEDALE, 1851-1881.

	1851		1861		1871		1881	
	Nos	%	Nos	%	Nos	%	Nos	%
Upper W/d								
Farmers	443	40.5	491	40.3	498	40.3	492	40.6
Family ¹	327	29.9	366	30.0	408	33.0	401	33.1
Ag.Lab. ²	325	29.7	361	29.6	329	26.6	320	26.4
Lower W/d								
Farmers	108	33.4	81	31.3	100	38.8	121	39.8
Family ¹	54	16.7	42	16.2	66	25.6	61	20.1
Ag.Lab. ²	161	49.8	136	52.5	92	35.7	122	40.1
Swaledale								
Farmers	300	56.5	355	53.1	414	54.3	420	52.8
Family ¹	91	17.1	172	25.7	248	32.5	249	31.3
Ag.Lab. ²	140	26.4	142	21.2	100	13.1	126	15.8

¹ Members of the farmer's family (i.e. any relative of the farmer, although usually it was a member of the nuclear family) over fourteen years old including those who were not given any occupation in the census returns. In addition a few children (fourteen years and under) are included where the enumerators specifically noted that they were working on the farm. Many more children will have been involved in farm work at least on a part time basis. Farmer's wives are not included.

² The agricultural labourer category in this Table includes all hired agricultural workers, skilled and unskilled. It is not possible to distinguish between living-in servants and out-door labourers.

Source: PRO HO 107/2379-80, RG 9/3667-73, RG 10/4868-73, RG 11/4873-8, CEB, 1851-1881, upper and lower Wensleydale and Swaledale.

Lower Wensleydale, with its greater diversity of employment opportunity, presents a more complex picture. Reflecting the presence of several large estate farms, the proportion of labourers in the agricultural workforce was high and, although declining over the period, was consistently above that of the other two areas. The peaks in the number and proportion of farm labourers in lower Wensleydale occurred in 1851 and 1861 respectively, in a period when nationally writers were complaining about a decline in the agricultural population.¹⁷

Throughout the period 1851-1881 farm labourers were relatively less important in Swaledale than in Wensleydale.

As in Wensleydale, the proportion of labourers in the agricultural workforce in Swaledale declined over this period but the fall was steeper than in either of the two Wensleydale areas. There was a corresponding, but even sharper, increase in the proportion of family workers. The proportion of farmers, who accounted for over 50 per cent of the agricultural workforce throughout the period, was substantially higher in Swaledale than in Wensleydale, a fact which is clearly attributable to the much higher incidence of small holdings.

The main requirement for casual labour was for the hay harvest. An indication of the size of the labour force is provided by the records of the Garth family which contain details of labour employed on the hay harvest between 1824 and 1900. In 1844 the Garths owned sixty-four acres of

meadow and in 1873 they owned an estimated ninety-five acres of meadow.²⁰ Table 7.3 shows the decennial average of numbers employed in the hayfield.

TABLE 7.3

HAYTIME WORKERS ON A SWALEDALE FARM, 1824-1900.¹

1824-30	14	1861-70	22
1831-40	19	1871-80	24
1841-50	20	1881-90	21
1851-60	27	1891-1900	14

¹ Average per decade. These were the numbers on roll; numbers working in the fields varied enormously from day to day.

Source: Barker MSS, 2/5/2-5, Garth Day Books, 1824-1900.

The haytime roll was at its greatest in 1856 when thirty-four people were employed. Not all the labourers on roll worked in the fields at the same time; the most working at any one time was twenty-five in 1855. It was only after the mid-1840s, when Garth's meadow acreage was probably at its greatest extent, that the number on the haytime roll began to increase noticeably, although there were still wild fluctuations after that date. From the 1880s the numbers employed declined rapidly. This may have been due to the exigencies of the depression, the greater use of machinery or the more consistent use of fewer people but the most likely explanation is that Francis Garth was ageing (he was seventy-five years' old in 1892) and, with no son to take over his holding, was farming a smaller acreage.

II

Wages received by agricultural labourers are difficult to calculate as some labourers were employed only seasonally and others received part of their pay in kind.²¹ While casual labour was hired by the day or week, the system of employment of farm servants was through the annual or biannual hiring fairs.²² As in many other northern areas these fairs persisted in Wensleydale into the twentieth century.²³ This system of employment was mutually beneficial, affording both the farmer and the servant stability and continuity. As far as can be ascertained, farm wages in the two dales, other than those paid at harvest time, were lower for most of the nineteenth century than those paid in rural areas near the industrial towns of the West Riding.²⁴ The comparison is not straightforward, however, as it was common practice in the dales for part of the farm worker's wages to be paid in kind:

The men in the house get four meals a day, a good fire at night, and are provided with newspapers to read....The hinds get...[a] house, unlimited potatoes and one pint of milk.²⁵

The questionable evidence of Arthur Young notes that in Swaledale and Wensleydale in the 1770s the head man's wages were £8 10s and £10 10s a year respectively, and the next man's wages were £7 in both dales.²⁶ He estimates that the weekly pay of casual labourers was 6s 1d in Swaledale

and 7s 1d in Wensleydale.²⁷

During the Napoleonic wars agricultural labourers' wages in the dales rose rapidly in line with the national trend.

At the turn of the nineteenth century a year's hiring locally was £7 16s while in 1810 a farmer was paying an annual wage of £10 10s and a few years later, in 1817, this had risen to £15 12s per annum.²⁸ By the early 1870s the best labourers were receiving annual wages of between £20 and £28 at the hiring fair in nearby Richmond and between £16 and £22 10s at Bedale some ten miles east of Leyburn.²⁹

Following the national trend, agricultural wages in the dales reached a peak in the late 1870s and early 1880s when it was reported that labourers were receiving wages 30 per cent higher than a few years previously.³⁰ As was the case nationally, wages appear to have slipped in the mid-1880s as the labour available exceeded demand.³¹ By 1895 wages had recovered and in Wensleydale annual wages were £24 whereas a few years previously they had been £17-18.³² However, wages varied within the dales and in the early twentieth century the Garths in Swaledale were still paying less than £20 per annum at a time when, at the hirings in Bedale, living-in foremen were receiving between £20 and £30 per annum.³³ Table 7.4 presents the living-in wage paid by the Garth family at different times over the period and demonstrates that, as nationally, wages rose to a peak in the early twentieth century.³⁴ An annual wages bill for the three areas, based on the rates paid to Garth's living-in labourer and the number of farm labourers

returned in the censuses (see Table 7.2), can be estimated for the early 1880s. In 1882 farmers in Swaledale would have paid an estimated total wages' bill of £2394, in upper Wensleydale £6080 and in lower Wensleydale £2318.

TABLE 7.4

AGRICULTURAL SERVANT'S LIVING-IN WAGES, SWALEDALE,
1809-1907.¹

	£	s
1809	10	10
1817	15	6
1882	19	0
1906	19	10
1907	18	0

¹ The annual wage of a farm servant hired for the half year by the Garth family in Swaledale.

Source: Barker MSS, 2/5/1-6, Garth Day Books, 1795-1936, *passim*.

Nineteenth-century sources indicate that, consistent with Young's earlier findings, wages in Wensleydale were slightly higher than in Swaledale so the Wensleydale figures quoted above are probably an under-estimate.³⁵ In respect of neither Swaledale nor Wensleydale do these calculations include wages paid to casual workers. Even allowing for wages paid to casual workers, the enhanced total wages bill for each of the three areas would not have reflected the true cost of labour. As already noted, labourers received food and lodging in addition to cash. Further, members of the farmer's family who provided labour were also supported by the produce of the farm. However,

the above figures, whilst tentative; provide some indication of the relatively small amounts of money being absorbed by labour costs and this gave farmers a greater flexibility in terms of cash flow in times of depression.

As few small farms employed labour, the impact of escalating labour costs in the final years of the nineteenth century was restricted mainly to the larger farms. The cost of labour, as a proportion of all outgoings, on one 500 acre dales' farm rose from 11.2 per cent in 1880-1 to 16.7 per cent in 1892-3.³⁶ Small farmers encountered these rising costs in recruiting labour to cut hay, which for many constituted the greatest, perhaps the only, cash outlay on wages. The Garth family kept details of their haytime labour force and, intermittently, of wages paid for the period 1824 to 1900. The haytime labour force was paid at a premium rate as it was vital for the farmer to take advantage of the brief periods of fine weather to gather in the crop which would sustain his stock over the winter. A shortage of labour, such as that commented upon in the 1840s, may also have resulted in high wages.³⁷ Table 7.5 presents the wages for men in the hay harvest between 1823 and 1901. As with farm servant's wages, the peak for hay wages occurred in the 1870s and early 1880s, after which they stabilized at a lower level. Despite reports of increases in the general agricultural labour rate in Wensleydale and Swaledale in the early 1880s and 1890s, hay wages appear to have remained constant in Swaledale in the final two decades of the nineteenth

century. This suggests that, although a large proportion of the lead-mining workforce had left the area, sufficient casual labour was available and that it was not necessary to raise wages in order to attract hayfield workers.

TABLE 7.5

HAY HARVEST WAGES PER DAY, SWALEDALE, 1823-1901.¹

	s	d
1823	1	9
1825	1	
1836-37	1	6
1875-78	4	
1879-84	3	6
1885-87	3	
1892	3	
1897-98	3	
1901	3	

¹ Wages per man paid by the Garth family. Mowers received higher wages and women and children received a proportion of the men's wage. For example, in 1837 mowers = 2s 6d, men = 1s 6d, women = 1s, children = 6d.

Source: see Table 7.4.

III

Non-family agricultural labour in the two dales, while important on larger farms, was employed on small farms only during harvest time and, on a casual basis, for other specific, labour-intensive activities such as walling and drainage. These activities could be easily curtailed during periods of depression when it was necessary for farmers to make economies. The larger farms also employed additional labour for maintenance and haytime tasks.

However, these farms required permanent additional help and, therefore, were more sensitive to rising wage levels in the period of declining prices from the 1870s. The dales' area, with its high proportion of family holdings and relatively small outlay on wages, was not as badly affected as other parts of the country, which relied more heavily on paid labour and suffered when wages rose and prices of agricultural products fell.³⁰

NOTES - AGRICULTURAL LABOUR

- ¹ W.A. Armstrong, 'The Flight from the Land', in G.E. Mingay (ed), *The Victorian Countryside*, Vol I, p118; - 'The Workfolk', in Mingay, *op cit*, Vol II, pp493-4.
- ² *Ibid*, p494.
- ³ J.D. Chambers & G.E. Mingay, *The Agricultural Revolution 1750-1880*, 1966, p133.
- ⁴ *Ibid*, pp133-4.
- ⁵ J. Caird, *English Agriculture 1850-1, 1852*, pp510-13.
- ⁶ Armstrong, II, *op cit*, p497; A.L. Bowley, *Wages in the United Kingdom in the Nineteenth Century*, Cambridge, 1900, p130; MAFF, *A Century of Agricultural Statistics, Great Britain 1866-1966*, 1968, p64.
- ⁷ *Ibid*.
- ⁸ BPP, 1897, XV, *RC on the Agricultural Depression, Final Report*, p93.
- ⁹ P.J. Perry, *British Farming in The Great Depression 1870-1914*, Newton Abbot, 1974, p102.
- ¹⁰ BPP, 1895, XVI, *RC on the Agricultural Depression, Report by R.H. Pringle, Assistant Commissioner, South Durham and Selected Districts of the North and East Ridings of Yorkshire*, p569; BPP, 1897, *op cit*, p94.
- ¹¹ W.E. Bear, 'Our Agricultural Population', *EJ*, 4, 1894, p324; Perry, *op cit*, p129.
- ¹² BPP, 1895, *op cit*, pp547-8.
- ¹³ *Ibid*, p547.
- ¹⁴ *Ibid*.

¹⁵ *Ibid*, p567.

¹⁶ BPP, 1843, XII, *Reports of the Special Assistant Poor Law Commissioners on the Employment of Women and Children in Agriculture*, p295; and see J.H.Dugdale, 'Selected Farms in the Darlington District', *JRASE*, 3rd ser., VI, 1895, p525.

¹⁷ Information supplied by the late T.C.Calvert, farm worker and D.Middleton, farmer. This practice has more affinity with Northumberland and Durham than with other parts of the North Riding.

¹⁸ Derived from Bear, *op cit*, p321. Bear gives figures for farmers, resident male relatives and non-family agricultural labourers. Resident female relatives, other than farmers' wives, have been estimated as Bear does not include female relations.

¹⁹ Anon, 'Changes in the Agricultural Population, 1830-61; Illustrations of the Census Returns', *JRSS*, XXIV, 1861, p411; G.B.Longstaff, 'Rural Depopulation', *JRSS*, LVI, 1893, p381; Bear, *op cit*, p324.

²⁰ Barker MSS, 7/14, Valuation for Tithe Commutation, Grinton, 1844; LGB, 'Owners of Land' Return, York, North Riding, 1873, p14. Haytime usually took place between July and late August, the earliest start recorded by the Garths was 19 June 1889 and the latest finishing time was 11 October 1890 - that year also saw the longest haytime of eleven weeks, Barker MSS, 2/5/1-6, Garth Day Books, 1795-1936, *passim*.

²¹ F.Purdy, 'On the Earnings of Agricultural Labourers in

England and Wales, 1860', *JRSS*, XXIV, 1861, p329; A.Wilson Fox, 'Agricultural Wages in England and Wales during the Last Fifty Years', *JRSS*, LXVI, 1903, p274.

²² A.Howkins, 'In the Sweat of thy Face: The Labourer and Work', in Mingay, *op cit*, Vol II, pp508-9.

²³ *Ibid*, p508; for example, *Darlington and Stockton Times*, 23 November 1907, 21 November 1914; T.C.Calvert, *Kit Calvert of Wensleydale*, Clapham, 1981, p13; and local oral sources.

²⁴ A.L.Bowley, 'The Statistics of Wages in the United Kingdom during the last Hundred Years; Agricultural Wages', *JRSS*, LXI, 1898, pp707,720; Caird, *op cit*, p511.

²⁵ Dugdale, *op cit*, pp525-6.

²⁶ A.Young, *A Six Months' Tour Through the North of England*, Vol II, 1771, pp190,426.

²⁷ *Ibid*, Vol IV, pp303-4.

²⁸ M.Hartley & J.Ingilby, *A Dales Heritage*, Clapham, 1982, p58; Barker MSS, 2/5/1, Garth Day Books, 1809, 1817.

²⁹ *Bedale and Northallerton Times*, 30 November 1872, 12 November 1874.

³⁰ BPP, 1881, XVI, *RC on the Depressed Condition of Agricultural Interests, Reports of the Assistant Commissioners, Mr. Coleman's Report*, p215; A.L.Bowley, *Wages in the United Kingdom in the Nineteenth Century*, Cambridge, 1900, pp 131-3; Board of Trade, *Census of Wages*, 1906, p67

³¹ *Ibid*; *Richmond Observer*, 16 July 1887, 19 and 26 November 1887, 'good men' at Bedale and Richmond were hired

for between £16-18 and £20-23 per annum respectively.

³² Dugdale, *op cit*, p526.

³³ Barker MSS, 2/5/6, *op cit*, 1906-7; *Darlington and Stockton Times*, 23 October 1907. This may have been higher than the Swaledale rates because some of the farms in the Bedale area were large arable farms.

³⁴ Board of Trade, *op cit*, p67.

³⁵ Young, *op cit*, Vol II, pp190,426; *Richmond Observer*, 16 July 1887, reports that hay wage bargains struck at Hawes hiring were between £3 and £6 per man per month (15s-30s per week), at the same date Garth was paying 3s and 3s6d a day (18-21s per week), Barker MSS, 2/5/4, *op cit*, 1887.

³⁶ BPP, 1895, *op cit*, p600.

³⁷ *Wensleydale Advertiser*, 4 August 1846, 6 July 1847.

³⁸ P.J.Perry, *op cit*, p64. Those areas adversely affected by higher wages will also have suffered from higher poor rates when the surplus labour force was thrown onto poor relief in periods of depression.

CHAPTER 8

LAND USE

Professor Mingay has suggested that, 'in the nineteenth century the English countryside saw more rapid and remarkable changes than had been wrought in perhaps all the preceding centuries'.¹ The rapid growth of population in the late eighteenth and early nineteenth centuries placed unprecedented pressure on the agricultural sector to respond to increased demand by expanding output. The success of English agriculture in responding to the rapid increase in population is well documented.² During the French wars the impact of increased demand was reinforced by the incentive of high prices and by the proselytizing of the publicists of 'improvement', encouraging a major expansion in cultivation. The war years of 1793 to 1815 witnessed the last great phase of enclosure when almost 2000 Acts resulted in the enclosure of some 2.9 million acres or 8.9 per cent of the land area of England.³ Most historians agree that enclosure, whilst not the only factor at play, facilitated the more rapid spread of improved farming and greatly assisted in meeting the food requirements of the expanding population.⁴ For much of the nineteenth century agricultural output rose almost as fast as population, so that by as late as 1868 no less than 80 per cent of the nation's food consumption was still home produced.⁵

I

Farmers in Wensleydale and Swaledale followed their counterparts elsewhere and in the eighteenth and early nineteenth centuries there was an intensification of farming activity in the two dales. This was epitomized by the increasing numbers of enclosures, the adoption of new forms of husbandry, and the introduction of improved breeds of cattle and sheep.⁶

Enclosure was not a new phenomenon in the dales in the eighteenth and nineteenth centuries; arable land and much of the good meadow and pasture land had been enclosed from the medieval period.⁷ However, it was not until the eighteenth and nineteenth centuries that the enclosure of common cow pastures and extensive tracts of moorland took place. While most of the enclosed common pastures were subdivided into fields, the enclosed moorlands generally remained as large tracts of extensive grazings with ring fences and were regulated by conservators who organized their stinting and management. Although it is not possible to calculate the extent of the eighteenth- and nineteenth-century enclosures in Swaledale, it is clear that a substantial proportion of the dale was enclosed during the period.⁸ However, an analysis can be undertaken for Wensleydale and this provides an indication of the importance of enclosure in the area. Of the 99,332 acres which comprise the whole of Wensleydale, at least 59,389 acres (59.8 per cent) of pasture (17,161 acres) and

moorland (42,228 acres) were enclosed between 1762 and 1881.⁷ No arable was enclosed in Wensleydale during this period. Over 95 per cent (56,721 acres) of the acreage enclosed between 1762 and 1881 was as the result of parliamentary legislation.¹⁰

TABLE 8.1

ENCLOSURE OF COMMON AND WASTE IN WENSLEYDALE¹ AND ENGLAND²
IN THE EIGHTEENTH AND NINETEENTH CENTURIES.

	W/d Agr. ³		W/d Act		% ⁴ Eng.
	Acres	% ⁵	Acres	% ⁵	
Pre 1793	627	0.6	2,963	3.0	2.2
1793-1815	1611	1.6	9,192	9.3	2.8
1816	-	-	20,789	20.9	0.4 ⁶
1817-29	430	0.4	9,833	9.9	
Post 1830	-	-	13,944	14.0	1.7
Total	2668	2.7	56,721	57.1	7.1

¹ Enclosure by act and agreement.

² Common and waste enclosure by act.

³ Extant enclosure agreements for Wensleydale.

⁴ Percentage of total land area of England enclosed.

⁵ Percentage of total land area of Wensleydale

⁶ For the period 1816-29.

Source: NYCRO, I/Abbotside, 1851,1881, /Askrigg, 1763, 1819, 1821, /Aysgarth, 1778, /Bainbridge, 1762, 1797, 1810, 1816, 1844, 1850, 1859, /Bishopdale, 1797, /Carperby, 1819, /Hawes, 1847, 1859, /Leyburn, 1785, /Newbiggin, Bishopdale and Burton, 1816, /Redmire with Preston, 1819, /Thoralby, 1814, 1863, /Thornton Rust, 1855, /Walden, 1807, /Wensley, 1814, /West Burton, 1805, /West Witton, 1781, Enclosure Acts, Agreements, and Awards; M. Turner, *English Parliamentary Enclosure*, Folkestone, 1980, pp188-9.

As Table 8.1 demonstrates, although there was an increase in the acreage enclosed during the French wars, 1816 was the year of most intense enclosure activity in Wensleydale.

During that year enclosure acts were passed in respect of

a fifth of the dale's acreage. This date was slightly later than the national peak in the acreage of common and waste enclosed by parliamentary legislation which occurred between 1793 and 1815.¹¹ Although 1816 was a year of depression generally, the zenith of enclosure in Wensleydale was probably a response to the same factors as had led to the national peak.¹² In the period 1817-29 acts for the enclosure of a further tenth of Wensleydale were passed. The 57 per cent of Wensleydale enclosed by parliamentary acts, was, predictably, a much higher proportion than the comparable 7.1 per cent for the whole of England. This reflects the extensive common and waste in the dales which had been virtually unaffected by earlier enclosures. The area enclosed in Wensleydale was also proportionately much higher than in the North Riding where the enclosure of common and waste accounted for 12.6 per cent of the total land area.¹³ The level of enclosure in the dales was closer to, but still significantly higher than, that in the neighbouring upland counties of Cumberland and Westmorland, where the enclosure of common and waste accounted for 26.5 per cent and 20.8 per cent respectively of the total land area.¹⁴ As Michael Turner noted:

Parliamentary enclosure was possibly the largest single aggregate landscape change induced by man in an equivalent period of time.¹⁵

Recent research has demonstrated that the costs of

enclosure were probably higher than was formerly believed.¹⁶ However, despite the high outlay, the potential returns acted as an incentive to enclose. Further, enclosure tended to aid the local economy, generating additional employment in the area as the experience in Wensleydale demonstrates.¹⁷ For example, in 1824 the act for enclosing land in High Abbotside township included division of a 930 acre pasture and two rough grazing areas of 4280 and 5316 acres.¹⁸ The total walling required for the enclosure was 4717.5 chains.¹⁹ The local rate for walling in the early nineteenth century was 3s 3d per rood of seven yards.²⁰ On this basis the total bill for walling the above enclosures would have been £2,409 (£1 4s per acre for the pasture which was divided into small fields and 3s per acre for the moorland).²¹ At an annual wage for labourers of about £15 per annum this would have generated work for about 160 labourers for a year.²² If the estimates for High Abbotside are projected to all of Wensleydale affected by enclosure the total wages bill for walling would have been £26,927.²³ At the same average wage of £15 per annum for labourers this would have provided work for one year for 1795 men.²⁴ The wages would have been paid primarily by the landlords of the larger estates and, indirectly, in the form of higher rents, by tenants. However, much family labour will have been used on the numerous, small, owner-occupied farms.

Fencing was, of course, only one element of total enclosure costs and the final cost to owners will have been

much higher.²⁵ Estimates of the total cost of enclosure have varied significantly from the traditional 'up to £3 an acre' to a recent estimate of £12 an acre.²⁶ This latter figure takes into account the fact that the private costs of immediate post-enclosure fencing and improvements were probably double the public costs of the enclosure.²⁷ As has been noted, due to the use of family labour, readily-available local materials such as stone and lime, and the fact that the extensive tracts of moorland required less fencing per acre than small fields, total costs in Wensleydale were probably lower than elsewhere. Even at a conservative £6 per acre, the total enclosure costs for Wensleydale may have been as high as £350,000.

There is no indication locally of the extent to which the private costs of enclosure were paid out of owners' existing capital or from loans.²⁸ What the local enclosure activity does reflect is a high level of confidence in agriculture, particularly in the early nineteenth century. After a brief set back in the late 1820s and 1830s, this optimism would appear to have been justified until at least the last quarter of the century.

The local people had been encouraged to enclose their lands by contemporary writers who insisted that benefits would accrue to landlord and tenant if both enclosure and improvement were undertaken. Arthur Young visited the area in the 1770s and entreated landlords to enclose the moorland and divide it into 'proper fields, broke up, limed and laid down well with grasses'.²⁹ Enclosure was vitally

important, Young maintained, as it had been noted by a local farmer that any improved land without enclosure 'must be languid and of a short existence'.³⁰ John Tuke in 1794 also extolled the advantages of enclosure and improvement.

He cited a moorland farmer who had received 300 acres in the 1770s as part of an enclosure award. The land was enclosed by a ring fence and was worth under £10 a year but the farmer subdivided it into fields of about fifteen acres each which he proceeded to improve. By 1794 the farmer had improved about 200 acres which he let at a rent of £120 a year.³¹

Based on the details in Tuke's example, a rough estimate of the impact of enclosure in terms of return to landlords can be made.³² In Wensleydale, 17,161 acres (29 per cent) of the land enclosed in the late eighteenth and nineteenth centuries was pasture. If, say, half of this area (8581 acres) had been subdivided and improved in the manner described in Tuke's example and let to tenants, this would have represented total rents of £5149 per annum as opposed to £300 per annum if the enclosed pasture had been left in its former state. The level of profit cannot be calculated as some of the increased rent would have reflected the additional outlay of the landlord.³³ The main significance of these tentative rents and the earlier outlay figures is in demonstrating that the impact of enclosure on the broader economy of the dales, an upland area which might have been considered unpromising, was substantial and must have affected all facets of life.

As was shown in Chapters 4 and 5, most of the increased rents were being paid to owners of small acreages. These owners lived locally and, therefore, apart from any borrowings which they may have incurred to finance enclosure, will have injected some of the money back into the local economy, either into agriculture or possibly into lead mining or textiles (see Chapters 11 and 13). These enclosures and improvements enabled increased numbers of superior stock to be carried and, in a time of rising food prices, this will have generated further wealth in the area.³⁴

As has been seen, the post-enclosure improvements were an important factor in raising the value of land.³⁵ Limestone was in ample supply in the dales and the improvement of acid soils through liming was a widespread local activity in the nineteenth century. During this period many farmers constructed permanent, stone-built, field limekilns.³⁶ In the 1840s when Peel offered the first government drainage loans and when, due to improved production, drainage tiles were more efficient and cheaper, farmers in the two dales undertook drainage schemes.³⁷

Guano and superphosphate were widely used as fertilizers in the country from the 1840s and there are records of both these products being used by dales' farmers in the second half of the nineteenth century.³⁸ Enclosure provided the first step towards efficient farming but it was the implementation of other capital improvements, such as drainage and new buildings, and the use of manures and

fertilizers that enabled the dales' farmers to increase the productivity of their land.

II

A high proportion of the total land area of Wensleydale and Swaledale is unsuitable for cultivation due to the elevated and rugged nature of much of the terrain. Apart from physical constraints, economic and other factors influenced the acreage of land which was cultivated in the nineteenth century.

From extant Tithe awards it has been estimated that in the early 1840s 43,305 acres were under crops and grass in upper Wensleydale, 14,332 acres in lower Wensleydale and 19,867 acres in Swaledale.³⁷ When these estimates are compared with the MAFF returns for the late nineteenth and early twentieth centuries (see Table 8.2) it would appear that a diminution in cultivated acreage in the three areas had taken place in the third quarter of the nineteenth century.⁴⁰ However, it is apparent from Table 8.2 that, if there had been a decline in the mid-nineteenth century, this was followed by a recovery during the last quarter of the century. Between 1874-7 and 1914-7 the acreage under crops and grass rose by between 3.7 and 17.0 per cent in the three areas.

TABLE 8.2

LAND UNDER CULTIVATION¹ IN UPPER AND LOWER WENSLEYDALE AND
SWALEDALE, 1874-7 TO 1914-7.²

	1874-7	1884-7	1894-7	1904-7	1914-7
Upper W/d	40,944	42,068	43,668	44,241	42,449
Lower W/d	8958	10,025	10,290	10,177	10,484
S/d	17,268	18,500	18,646	18,946	19,232

¹ In acres.

² Average of four years in each decade.

Source: PRO MAF 68/382, ...2833, MAFF Parish Summaries of June Returns, upper and lower Wensleydale and Swaledale, 1874-7 to 1914-7.

Table 8.3 shows the proportion of crops and grass to total land area in the three study areas and in England and Wales. Predictably, the profile of the two upland dales is different from that of England and Wales but there are also significant differences within the two dales. While both upper and lower Wensleydale had over half their area (apart from lower Wensleydale in 1874-7) under crops and grass, Swaledale, with its narrow valley floor and steep hill sides, had only about one-quarter of its total area under cultivation.⁴¹ Over the last quarter of the nineteenth century the proportion of the land area under crops and grass increased in all three areas due to an extension of permanent pasture, and in lower Wensleydale and Swaledale this increase continued up to the First World War.⁴² The greatest increase occurred in lower Wensleydale where land

under crops and grass rose from 48.9 per cent to 57.2 per cent of the land area.

TABLE 8.3

PERCENTAGE OF CROPS AND GRASS TO TOTAL LAND AREA, UPPER AND LOWER WENSLEYDALE AND SWALEDALE, AND ENGLAND AND WALES,

1874-7 TO 1914-7.¹

	1874-7	1884-7	1894-7	1904-7	1914-7
Upper W/d	50.5	51.9	53.9	54.6	52.4
Lower W/d	48.9	54.7	56.2	55.5	57.2
S/d	23.2	24.8	25.0	25.4	25.8
E & W	72.1	74.3	74.1	73.8	72.9

¹ Average of four years in each decade for Wensleydale and Swaledale. The years for England and Wales are as follows: 1876, 1886, 1896, 1906, 1916. The total area includes inland water.

Source: PRO MAF 68/382, ...2833, op cit; NYCRO, PP19/1, Census Enumeration Abstract for the County of York, 1801; MAFF, *A Century of Agricultural Statistics, Great Britain 1866-1966*, 1968, p6;

The peak in the proportion of land under cultivation in the three areas occurred in the early twentieth century, between two and three decades later than the national peak, which was reached in 1886.⁴³ This late peak was partly a response to the decline of the lead industry and a consequent reversion to farming, and was probably also indicative of the under-utilization of the potential agricultural resource earlier in the century. Also, particularly in Wensleydale, the impetus given by the

liquid milk trade encouraged the improvement of additional land to permanent pasture.

III

Farming in the upland dales was always predominantly pastoral. However, prior to the industrial revolution, arable crops, mainly for local use, had been widely cultivated where conditions permitted. Although no farms in the two dales were solely arable, crops continued to be grown during the nineteenth century as long as demand, price, and weather were favourable. Arthur Young, in his analysis of four farms in Wensleydale, points to the existence of arable and its minor role in the dales' economy when he included two predominantly grass farms with less than six acres of arable each and one mixed farm with fifty-five acres of arable and 105 acres of grass (see Table 5.1).⁴⁴ Table 8.4 gives estimates of arable acreage in the three areas during the nineteenth century. Due to paucity of data and problems of comparability the figures for the first half of the century must be treated with caution.

The 1801 returns were taken as a result of concern about food supply at a time when the population was expanding rapidly and the country was at war with France. It appears that Wensleydale had already responded to the increased demand in 1801 as the notes accompanying the returns state that arable crops in the area were one-fifth higher than average.⁴⁵ After the war the extent of arable land in

TABLE 8.4

ARABLE ACREAGE IN UPPER AND LOWER WENSLEYDALE AND

	SWALEDALE, 1801 to 1914-7. ¹		
	Upper Wensleydale	Lower Wensleydale	Swaledale
1801 ²	353	1489	-
1819, 21 ³	310	-	413
1844 ⁴	245	1927	725
1874-7	162	626	175
1884-7	121	489	142
1894-7	149	571	98
1904-7	130	277	74
1914-7	129	207	76

¹ For selected years.

² The upper Wensleydale figure is the complete return for Aysgarth Parish which was conterminous with upper Wensleydale. The lower Wensleydale figure is estimated from West Witton Parish which was the only lower Wensleydale parish to feature in the return. The estimate was calculated on the basis of West Witton arable acreage comprising 25.5 per cent of all lower Wensleydale cereal crops and 20.2 per cent of all lower Wensleydale non-cereal crops in the average of the years 1874-7. The 1801 crop returns do not include any parish in Swaledale.

³ Part of upper Wensleydale is available only for 1819 and the remaining part of upper Wensleydale is available only for 1821. The sum of the arable acreage at these two dates is presented here. Swaledale estimated from the 1823 tithe records for Grinton Ecclesiastical Parish (GEP). In 1874-7 GEP had 20.6 per cent of the total arable acreage in Swaledale.

⁴ Estimated from extant tithe valuations for townships in the three study areas, based on the proportion which these townships constituted of the whole of their study area in the average of the years 1874-7.

Source: F.M.L.Thompson & M.E.Turner, A Study of the 1801 Crop Returns for England, unpublished SSRC Final Report, HR 5560/1, 1978, pp 576,583-4,594; Calvert MSS, Tithing Book for the Constabulary of Bainbridge, upper Wensleydale, 1819, Low Dale Tithing Book, upper Wensleydale, 1821; Barker MSS, 7/6, Tithe Collection Book, Grinton Parish, 1823; 7/14,15,16,/17/1-2/18, Valuation for Tithe Commutation, for five Swaledale townships, 1844; WYAS/L, RD/RT/15,24,45,171,195,244, Tithe Awards for six Wensleydale townships, c1844; NYCRO, T/ARK, /PUS, /MAR, /WEN, Valuation for four Wensleydale and Swaledale townships, c1844; Ellis MSS, Tithe Commutation Awards, West Burton and Askrigg, c1844; PRO, MAF 68/382,...2833, op cit, 1874-7 to 1914-7.

upper Wensleydale declined but this was followed by an increase in the 1840s. Lower Wensleydale, which predictably had the highest arable acreage of the three areas, and Swaledale both reached recorded peaks in 1844. In the last quarter of the nineteenth century all three areas follow the well-documented national decline in arable acreage as cheap corn imports increased dramatically from the 1870s.⁴⁶

The dales' farmer by reducing his arable acreage was recognizing Caird's dictum that greater profits lay in pastoral farming.⁴⁷ Caird had noted that farms which in 1770 had yielded £100 in meat and wool or butter would in 1851, without further improvement, yield £200. Conversely, wheat, which had earned £100 in 1770, provided no greater return in 1851.⁴⁸ Later in the century it was observed that in Wensleydale and Swaledale 'the land is so profitable in grass that there is little inducement to withdraw it from that mode of production'.⁴⁹ In the early twentieth century, according to one commentator, no land in Swaledale or in Wensleydale west of Aysgarth was under the plough.⁵⁰ One of the contributory factors in the decline of arable land in the dales was the railway. This had affected marketing and, whereas formerly it was profitable to send local corn by wagon to some areas immediately to the south of Wensleydale, this trade had ceased with the development of the railway system and the advent of falling prices.⁵¹

IV

The arable acreage figures include both grain (oats, wheat and barley) and other crops (peas, potatoes, turnips, mangold, rape, lucerne and vetches). Most of the arable acreage in the dales was under oats, potatoes or turnips (see Table 8.5).

TABLE 8.5

CORN AND OTHER ARABLE CROPS IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1801 TO 1914-7.

	1801 ¹		1874-7		1894-7		1914-7	
	C	O	C	O	C	O	C	O
U W/d	259	94	89	73	81	68	74	55
L W/d	984	505	364	262	362	209	128	79
S/d	-	-	100	75	46	52	38	38

¹ No information available for Swaledale.

Note: C = corn, O = other arable crops.

Source: see Table 8.4.

Generally, as the above table shows, cereal crops accounted for a majority of the arable acreage in the dales. The difficulties of growing corn in the area were frequently commented on and the yield per acre was never high. In the 1770s the yield of oats in Wharfedale, immediately south of Wensleydale, was 40 bushels per acre whereas the average in Wensleydale and Swaledale in the early nineteenth century appears to have been between 28

and 35 bushels per acre.⁵² The cereals grown in Wensleydale and Swaledale did not satisfy local demand, although up to the 1840s small quantities of flour and oatmeal were sometimes sent to neighbouring dales, and, increasingly from the 1840s, the markets of Richmond and Leyburn were supplied with corn from the Vale of York.⁵³ In times of crisis Hawes also imported corn (maize). For example, American corn was sold at Hawes in the famine year of 1847.⁵⁴ It was sold as meal by the barrel at Hawes market for several weeks during that year and, although it did not continue to be quoted in the market lists in the 1840s, this presaged its permanent arrival, by at least the 1860s, as animal fodder.⁵⁵

Oatmeal was the staple diet of the dales' people, at least for the first half of the nineteenth century.⁵⁶ The crop was hardy and could be grown more easily in the upland areas than other cereal crops. For example, in 1819 some eighteen acres of oats were grown at an altitude of 750 feet in upper Wensleydale.⁵⁷ Oats continued to be the most popular crop in the two dales to the end of the period, although by this time it was used primarily for fodder. In 1915 oats comprised 96 per cent of all corn acreage in upper Wensleydale, 72 per cent in Swaledale and 61 per cent in the lower dale where the lower lying land enabled more wheat and barley to be grown.⁵⁸

Wheat was never grown in large quantities in the area and was not recorded in upper Wensleydale from the mid-1870s or in Swaledale from the mid-1890s.⁵⁹ However, some wheat

was grown throughout the nineteenth century in the lower dale and this continued into the early twentieth century when twenty-three acres were grown in 1915.⁴⁰

Barley was apparently not grown in Wensleydale and Swaledale in the early part of the nineteenth century, the earliest record dating from the 1840s.⁴¹ The acreage of barley in the two dales followed the national pattern and reached a nineteenth-century peak in the mid-1870s.⁴²

As has been noted, the non-cereal crops grown in the two dales were principally turnips and potatoes. The turnip, which was an important fodder crop, was more widely grown than potatoes but, in common with other crops, the acreage under turnips generally declined in the latter part of the period.⁴³

The records of a Swaledale farming family provide a case study of the changes which took place in arable farming during the nineteenth century.⁴⁴ The Garths farmed land lying between 650 feet on the valley floor and 1300 feet on the upper valley slopes. The fields under tillage were those situated in sheltered areas on the low-lying, rich loam. Oats, turnips and potatoes were grown on the farm from at least 1795 when records commence. The earliest records which show the Garths growing wheat date from the early 1830s when the national wheat price, which was in the region of 66s, was high.⁴⁵ Wheat was grown for only about a decade and after 1842, when the price of wheat had fallen to 57s, the family concentrated on the three traditional crops of oats, turnips and potatoes. The family did not

always act in response to national fashions and, for example, even though the price of potatoes nationally was high in the early 1850s, the Garths stopped growing potatoes and put their land to other use.⁶⁶ Potatoes were not grown again except for a short period during the 1880s and 1890s.

Apart from the price of commodities and the effects of disease, weather conditions dictated the types of crop grown. In 1848-9 Francis Garth noted that the vulnerable turnip crop had failed and, temporarily, rape was grown. The summer of 1859 in England had been extremely hot and was followed by an extended winter and a wet spring.⁶⁷ The dales did not escape and Francis Garth recorded in April 1860:

the long continuance of severe weather ... [after] a long drought [last] summer everything was cut up with frost on the 20th of October and has remained till now and is likely to continue.⁶⁸

The difficulties in cultivating marginal land for arable purposes, falling grain prices and rising demand for animal products provided the impetus for dales' farmers to move out of arable farming. Further, from the 1840s Swaledale people made increasing use of the railway even though they had to travel some distance to the nearest railway station, first at Richmond and later to stations in Wensleydale. Garth grew his last crop of oats in 1862 after which the farm was wholly pastoral apart from the potatoes grown for

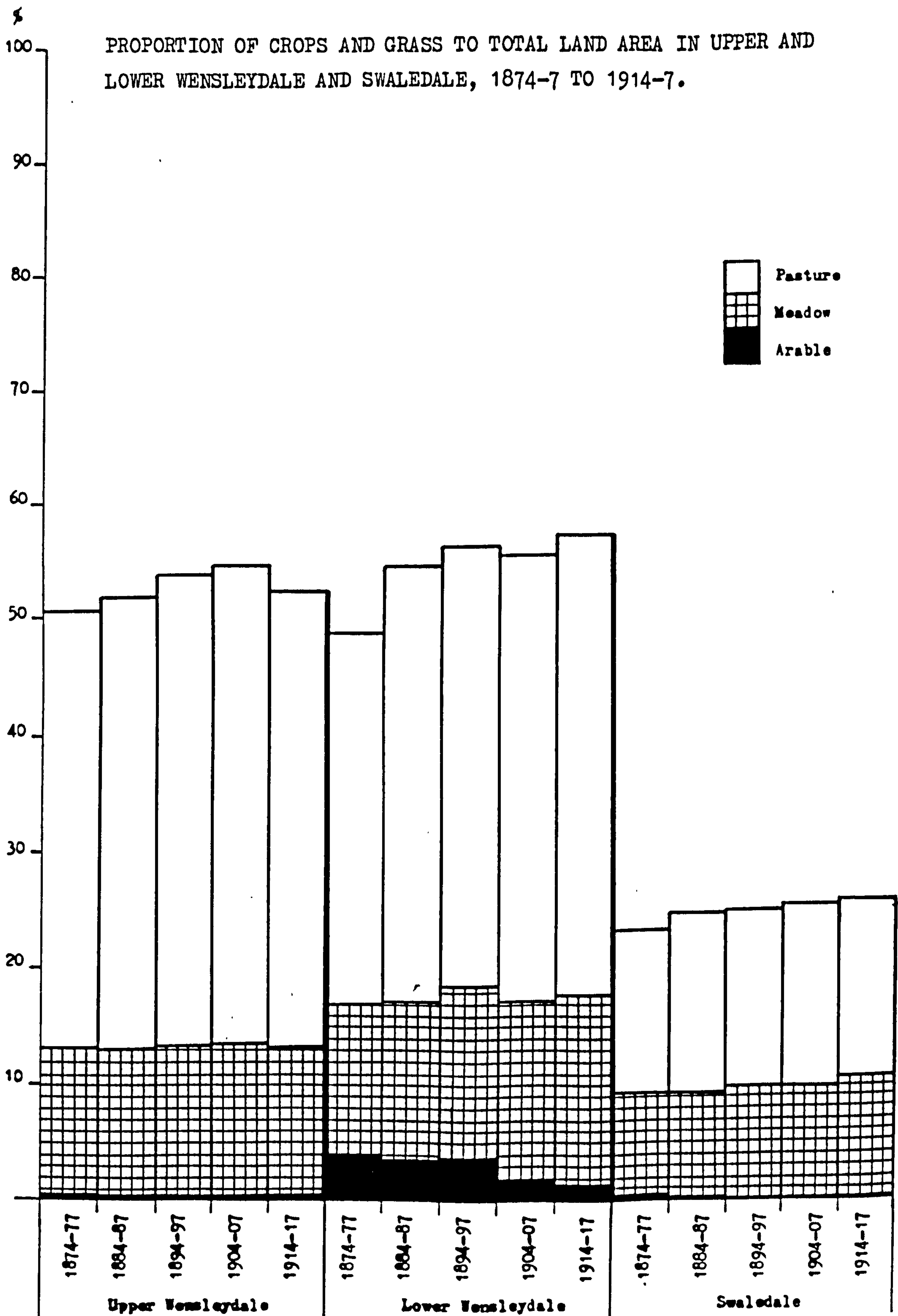
a few years in the latter part of the century.⁶⁹ The records of the Garth family reinforce information from other sources and point to the 1840s and 1850s as being the period when the arable acreage in the dales was at its greatest extent.⁷⁰

V

During the nineteenth century, as land was being withdrawn from arable cultivation, the acreage under meadow and pasture increased (see Figure 8.1).⁷¹ As noted earlier, only about half the total land area in Wensleydale and one-quarter in Swaledale was under cultivation. The steep valley sides in Swaledale dictated that the land available for meadow and pasture was very limited. In Wensleydale, the geological structure of the Yoredale rocks meant that the broad valley floor and the valley sides, which rose in a series of steps, enabled more land to be utilized as both meadow and pasture. In the latter part of the nineteenth century, meadow in upper and lower Wensleydale constituted about one-quarter of the cultivated land while in Swaledale, which had proportionately more meadow than pasture, about two-fifths of the cultivated land was meadow. The proportion of meadow and pasture in the three areas remained relatively stable throughout the period 1874-7 to 1914-7.

The meadow was the most productive land on the farm, providing both the vital hay crop for winter eatage and rich grazing for cattle and sheep in the spring and late

FIGURE 8.1



Source: see text.

summer. The pasture areas situated on the higher ground provided additional, although less rich, grazing for the livestock and enabled the meadows to be kept clear of stock during the peak growing times of June and July in preparation for cutting for hay.⁷² The high moorlands were also an important part of the farm and were used to graze sheep for much of the year. The proportion of meadow to total farm acreage dictated the number of livestock which could be carried on the farm over the winter months.⁷³ Although increasingly as the nineteenth century progressed local farmers purchased additional fodder, the relatively high cost of imported feedstuffs dictated that the dales' farmer had to be self-sufficient for most of his fodder requirements.⁷⁴

A combination of physical factors, particularly heavy soils, steep slopes, high rainfall and relatively low mean temperatures, dictate that farming in Wensleydale and Swaledale will always be predominantly pastoral. During the course of the nineteenth century the small proportion of arable land declined further as transport improvements eliminated the need for self-sufficiency in basic foodstuffs and opened up access to regional and national markets for the livestock products which the dales were best equipped to produce. At the same time the considerable increase in the extent of enclosed land encouraged grassland improvement and a consequent increase in the carrying capacity of the land. It was the balance between the different types of land, meadow, pasture and

moor, and the productivity of that land as a result of enclosure and improvement, that largely determined the type of livestock farming that took place in the two dales in the nineteenth century.

NOTES - LAND USE

¹ G.E.Mingay, *Rural Life in Victorian England*, 1976, p9.

² E.L.Jones, 'Agriculture, 1700-80', in R.Floud & D.McCloskey(eds), *The Economic History of Britain since 1700*, Vol 1, 1981, p68.

³ M.Turner, *English Parliamentary Enclosure*, Folkestone, 1980, p69.

⁴ The enclosure movement has been the subject of much debate as historians have tried to unravel its complexities. It is not the intention here to become involved in the intricacies of that debate but merely to identify the situation in the dales and assess how far it fits the pattern established by recent research. For a fuller discussion of the enclosure movement see M.Turner, *op cit*, - *Enclosures in Britain 1750-1830*, 1984, - 'The Cost of Parliamentary Enclosure in Buckinghamshire', *AHR*, 21, 1973, pp35-46; J.Chapman, 'The Chronology of English Enclosure', *ECHR*, 2nd ser., 37, 1984, pp557-9, - 'The Extent and Nature of Parliamentary Enclosure', *AHR*, 35, 1987, pp25-35; M.Reed, 'Enclosure in North Buckinghamshire 1500-1750', *AHR*, 34, 1984, pp133-44 draws attention to the importance of pre-parliamentary enclosure; J.R.Wordie, 'The Chronology of English Enclosure, 1500-1914', *ECHR*, 2nd ser., 36, 1983, pp483-505, - 'The Chronology of English Enclosure: A Reply', *ECHR*, 2nd ser., 37, 1984, pp560-1; B.J.Buchanan, 'The Financing of Parliamentary Waste Land Enclosure: Some Evidence from North Somerset, 1770-1830',

- AHR, 30, 1982, pp112-126; A.G.Parton, 'Parliamentary Enclosure in Nineteenth-Century Surrey—Some Perspectives on the Evaluation of Land Potential', AHR, 33, 1985, pp51-58.
- ⁵ J.D.Chambers & G.E.Mingay, *The Agricultural Revolution 1750-1880*, 1966, pp207-8.
- ⁶ G.Hueckel, 'Agriculture during industrialisation', in Floud & McCloskey, *op cit*, Vol 1, pp184-7. See Chapter 9 for the adoption of improved breeds of sheep and cattle in the dales.
- ⁷ A.Raistrick, *The Pennine Dales*, 1968, p110; R.T.Fieldhouse, 'Agriculture in Wensleydale from 1600 to the Present Day', *Northern History*, XVI, 1980, p171.
- ⁸ There is no information for three of the seven Swaledale townships and extant data for the four other townships is sparse. This may be due to loss of data or to the fact that enclosures in Swaledale were not as extensive as in Wensleydale at this time.
- ⁹ NYCRO, I/Abbotside.../West Witton, Enclosure Acts, Agreements and Awards for Wensleydale, 1762-1881, for full list of data used see Table 8.1.
- ¹⁰ Ibid.
- ¹¹ Turner, 1980, *op cit*, p195.
- ¹² Turner, 1984, *op cit*, pp36-52, *passim*.
- ¹³ *Ibid*, p181; details of Wensleydale and Swaledale enclosures are also given in W.E.Tate & M.E.Turner, *A Domesday of English Enclosure Acts and Awards*, Reading, 1978, pp295-300, although some of the information presented there is incorrect. For a recent discussion on the extent

of pasture and waste enclosure and the reliability of the data, see Chapman, *op cit*, pp25-35. Chapman notes that some acreages returned in enclosure acts and awards are inaccurate. While the estimates given for Wensleydale appear to be broadly accurate, they may, nevertheless, contain some errors.

¹⁴ Turner, 1980, *op cit*, pp180-1.

¹⁵ *Ibid*, p33.

¹⁶ Turner, 1984, *op cit*, pp53,73-4.

¹⁷ *Ibid*, p78.

¹⁸ Many assumptions have been made in the following exercise. The award for High Abbotside was not made until 1837 and some of the enclosures took place even later when pay per rood of walling and annual wages will have been different from the early nineteenth century. The fact that enclosures generated work for the labourers does not mean that these men were unemployed prior to the award; *Enclosure Act: Abbotside (High and Low)*, 5 Geo IV, c15, 1824; plan of Abbotside commons, 1835; two plans of pasture allotments, copies in my possession.

¹⁹ Calculated by measuring the field boundaries on the enclosure award maps, *Ibid*.

²⁰ M.Hartley & J.Ingilby, *A Dales Heritage*, Clapham, 1982, p63; oral evidence, H.Kirkbride, local farmer.

²¹ The cost of fencing estimated here might be on the low side, see Turner, 1984, *op cit*, pp56,59-62, Buchanan, *op cit*, *passim*.

²² Barker MSS, 2/5/1, Garth Day Book, in 1817 a living-in

labourer received £15 6s per annum, see Table 7.4.

²³ This is, of course, an under-estimate as not all the details of enclosure are extant. The figure of £26,927 was calculated as follows: £1.2 times 17,161 acres pasture - £20,593, 3s times 42,228 acres moorland - £6334.

²⁴ This is a rough estimate which merely gives an indication of the scale of the operation.

²⁵ For details of other enclosure costs see Turner, 1984, *op cit*, pp53-63; Buchanan, *op cit*, p126.

²⁶ Turner, 1984, *op cit*, p59.

²⁷ *Ibid*.

²⁸ Although local banks were in existence, there is no information available concerning loans for enclosure, W.C.E.Hartley, *Banking in Yorkshire*, Clapham, 1975, pp10,12. The Swaledale and Wensleydale Banking Company was not formed until 1837, Calvert MSS, Swaledale and Wensleydale Banking Company Deed of Settlement, 1837. Reeth Savings Bank was in existence in 1839, Barker MSS, 2/5/2, Garth Day Book, 1839.

²⁹ A.Young, *A Six Months' Tour of the North of England*, 1771, Vol II, p188.

³⁰ *Ibid*, p194.

³¹ J.Tuke, *General View of the Agriculture of the North Riding of Yorkshire*, 1794, pp117-8.

³² While the figure quoted by Tuke may be an exaggeration, it provides a basis for estimating the return to landlords from enclosures.

³³ It is not possible to calculate the increased returns to

owners due to enclosures with any degree of accuracy. At a very rough estimate, if all the pasture had been improved and commanded higher rents on the basis of Tuke's example the estimated cost (£350,000) would have been recouped in about thirty-five years. If the enclosed moorland also commanded higher rents the cost would have been recouped significantly earlier.

³⁴ Tuke, *op cit*, p118.

³⁵ On the Vyner estate in 1842 rent ranged from 60s for best meadow to 4s per acre for poor quality unimproved land, NYCRO, Vyner MSS, 5444, Earl de Grey, Valuation ...of Wensleydale, 1842; Milburn estimated that if unimproved land in Wensleydale was drained and limed it would increase eightfold in value. While this may be over-optimistic, improvements did lead to both a rise in the value of the land and increased output (see Chapter 8), M.M.Milburn, 'On the Farming of the North Riding of Yorkshire', *JRASE*, XXVI, 1848, p202.

³⁶ Barker MSS, 2/5/1-6, Garth Day Books, *passim*, Tuke, *op cit*, p51.

³⁷ C.S.Orwin & E.H.Whetham, *History of British Agriculture 1846-1914*, 1964, pp100-1; Barker MSS, 2/5/3, *op cit*, 1854; BPP, 1843, XII, *Reports of Special Assistant Poor Law Commissioners on the Employment of Women and Children in Agriculture*, p295.

³⁸ Chambers & Mingay, *op cit*, pp170,174-5. Barker MSS, 2/5/2-4, *op cit*, *passim*; Milburn, *op cit*, p202; J.H.Dugdale, 'Select Farms in the Darlington District',

JRASE, 3rd ser., VI, 1895, p523.

³⁹ Barker MSS, 7/14,15,16, 7/17/1-2,18, Valuation for Tithe Commutation, Grinton, Reeth, Melbecks, Muker, Angram, 1844; Ellis MSS, Tithe Commutation Award, Askrigg, 1839, (transcript); WYAS/L, RD/RT/15,24,45,171,195,244, Tithe Awards Bainbridge, Bishopdale, Carperby, Newbiggin, Redmire, West Witton, 1839-44; NYCC, T/ARK, /PUS, /MAR, /WEN, Valuation for Tithe Commutation, 1841-51, Arkengarthdale, Preston-under-Scar, Marrick, Wensley, (hereafter Tithe Awards).

⁴⁰ This is not uncommon, P.Dodd in his study on the 1854 returns suggests that in Norfolk a fall in total acreage under crops and grass occurred between 1854 and 1866, although there was then a slight rise to 1870, P.Dodd, 'The Agricultural Statistics for 1854: An Assessment of their Value', *AHR*, 35, 1987, p163.

⁴¹ An average of four years in each decade has been used where possible for the MAFF returns in order to even out fluctuations. The years 1874-7 have been used as the returns from 1866 to the early 1870s are less reliable than the later returns, J.T.Coppock, 'The Agricultural Returns as a source for Local History', *Amateur Historian*, 4, 1958/9, p55. The extensive moorlands in the two dales were important in the local economy as they yielded fuel in the form of peat for domestic, agricultural and industrial purposes and, as has been discussed in Chapter 6, provided grazing for sheep.

⁴² The lower Wensleydale figure must be treated with

caution as the returns for the 1870s show much lower figures than later returns. This may have been due to the enumerator misunderstanding the categories in the return.

⁴³ MAFF, *A Century of Agricultural Statistics, Great Britain 1866-1966*, 1968, p6.

⁴⁴ Young, *op cit*, pp425-6.

⁴⁵ F.M.L.Thompson & M.E.Turner, 'A study of 1801 Crop Returns for England', SSRC, Final Report, HR 5560/1, 1978, pp576, 584. However, 1801 was a bumper harvest year nationally, see Turner, 1980, *op cit*, pp67-8.

⁴⁶ MAFF, *op cit*, p94; C O Grada, 'Agricultural Decline 1860-1914', in Floud & McCloskey, *op cit*, Vol 2, p180; B.R.Mitchell & P.Deane, *Abstract of British Historical Statistics*, Cambridge, 1962, pp98-9.

⁴⁷ J.Caird, *English Agriculture 1850-1*, 1852, pp482-3, 485.

⁴⁸ *Ibid*, p485.

⁴⁹ T. Baines, *Yorkshire Past & Present*, Vol I, 1875, p152.

⁵⁰ J. Morris, *The North Riding of Yorkshire*, 1906, p12.

⁵¹ H.Speight, *Romantic Richmondshire*, 1897, p366.

⁵² Young, *op cit*, Vol II, p193; Fieldhouse, *op cit*, pp179-80. However, in lower Wensleydale in the late 1870s the yield of oats per acre was 64 bushels, BPP, 1881, XVI, *RC on the Depressed Condition of Agricultural Interests, Report of Mr Coleman*, p215. The national average for 1885-94 was 38.2 bushels. Parts of lower Wensleydale, therefore, were fertile enough to support a high yield, Orwin & Whetham, *op cit*, p381.

- ⁵³ HLRO, Minutes of Evidence, HC, 1866, Vol 30, S-C, evidence of C.Other, p25; Minutes of Evidence, HC, 1846, Vol 70, YGU, evidence of P.Buck, p10.
- ⁵⁴ *Wensleydale Advertiser*, 17 August 1847.
- ⁵⁵ *Ibid*, 12 October 1847; Barker MSS, 2/5/3, *op cit*, 23 September 1860 onwards, *passim*.
- ⁵⁶ BPP, 1843, *op cit*, evidence of W.Balderston, p348.
- ⁵⁷ Calvert MSS, Tithing Books for the Constabulary of Bainbridge, upper Wensleydale, 1819.
- ⁵⁸ PRO, MAF 68/2719; MAFF Parish Summaries of June Returns, upper and lower Wensleydale and Swaledale, 1915.
- ⁵⁹ *Ibid*, 68/439, 1009, 1579, 2149, 2719, 1875-1915.
- ⁶⁰ *Ibid*.
- ⁶¹ Calvert MSS, *op cit*, 1803-21; Tithe Awards, *op cit*, 1839-44.
- ⁶² MAFF, *op cit*, p35; PRO MAF 68/439, *op cit*, 1875.
- ⁶³ PRO MAF 68/439-2719, *op cit*, 1875-1915.
- ⁶⁴ Barker MSS, 2/5/1-6, *op cit*, *passim*.
- ⁶⁵ Mitchell & Deane, *op cit*, p488.
- ⁶⁶ Orwin & Whetham, *op cit*, p96.
- ⁶⁷ J.M.Stratton, *Agricultural Records A.D. 22-1977*, 1978, p111.
- ⁶⁸ Barker MSS, 2/5/3, *op cit*, 23 April 1860.
- ⁶⁹ *Ibid*, 1862.
- ⁷⁰ Tithe Awards, *op cit*, *passim*.
- ⁷¹ PRO, MAF 68/439-2719, *op cit*, 1875-1915. A small acreage in the three areas was cultivated land in rotation under clover, sanfoin, etc. The greatest extent of this

acreage occurred in 1874-7 when upper Wensleydale returned 104 acres, lower Wensleydale 114 acres, and Swaledale 184 acres.

⁷² W.M Long & G.M.Davies, *Farm Life in a Yorkshire Dale*, Clapham, 1948, pp26-7,33.

⁷³ Transhumance of sheep was practised in the dales, Long & Davies, *op cit*, p42; and for a full discussion see M.Hartley & J.Ingilby, *Dales Memories*, Clapham, 1986, pp71-83.

⁷⁴ BPP, 1895, XVI, *RC on the Agricultural Depression, Report by Hunter Pringle, Assistant Commissioner, on South Durham and Selected Districts of the North and East Ridings of Yorkshire*, p547.

CHAPTER 9

LIVESTOCK

The rapid increase in the population of England and Wales in the eighteenth and nineteenth centuries was accompanied by a growing demand for meat, dairy produce and other animal products.¹ Home supplies of beef and mutton did not keep pace with demand, particularly after the mid-nineteenth century when per capita consumption rose dramatically.² The increased demand was accompanied by a rise in prices which escalated during the French wars.³ Although there were periods of falling prices after 1816, for most of the nineteenth century prices rose steadily and in the 1870s, when agricultural prices suffered a major decline, livestock prices generally were not as badly affected as cereal prices.⁴ It was only after 1883 that livestock prices underwent a sustained fall, which was not halted until the end of the century when prices recovered slightly.⁵ The increased demand and attendant rising prices encouraged livestock farmers to raise their output by rearing more animals and improving the breeds.⁶

Demand and prices did not always follow an identical pattern for both sheep and cattle, and the relative importance of each type of animal varied at different times throughout the period. While sheep numbers appear to have increased in the 1740s and 1750s when cattle numbers were declining, in the latter part of the eighteenth century sheep and cattle numbers in the country probably increased

at about the same rate.⁷ In the early nineteenth century demand for mutton and wool led to sheep numbers increasing more rapidly than those of cattle.⁸ However, for most of the nineteenth century sheep were relatively less important than cattle and after the mid-1870s the number of sheep declined into the twentieth century.⁹ As the nineteenth century progressed cattle increased their dominance over sheep and numbers rose, with fluctuations, into the twentieth century.¹⁰ Apart from demand and price, disease also affected numbers of livestock and at times, throughout the period, both sheep and cattle suffered severe losses due to disease. For example, cattle were badly affected during widespread outbreaks of rinderpest and pleuro-pneumonia in both the mid-eighteenth century and during the latter part of the nineteenth century.¹¹ Sheep also suffered from severe attacks of liver rot and other diseases throughout the period.¹² For example, it is estimated that 10 per cent of the sheep population died in the outbreak of liver rot in 1879.¹³

Not all stages of livestock farming took place in the same area. Cattle and sheep raised for lamb or mutton were often moved several times between birth and slaughter. Generally, livestock were bred in the upland zone; reared and kept for store in an intermediate area; and fattened in the lowland zone, in proximity to their final market.¹⁴ Depending on the resources of their area, some livestock farmers were involved in just one of the stages of meat production while others were involved in several of the

stages. Animals raised for their produce (that is, calves, lambs, dairy or wool) were often kept by the farmer for several years while those raised for meat were frequently bought and sold several times as they moved from area to area. As livestock farmers were frequently involved in the production of both meat and produce they often carried two distinct types of livestock. Where conditions were favourable a farmer might have both a pure bred 'resident' flock of sheep and a dairy herd, and a flock of sheep and a beef herd bought and sold for rearing, store or fattening.

I

The Wensleydale and Swaledale area in the nineteenth century was referred to as 'one large grazing and breeding farm'.¹⁵ Farming in the area centred upon sheep and cattle and the two dales were involved at different times and to different degrees in all stages and types of livestock farming. Charles Fothergill writing in 1805 commented:

The Farms in this part of [upper] Wensleydale are Dairying & Grazing. Where the farmer is any way substantial these always go, at least generally go together, but there are cases where the Dairy is alone, the farmer selling his stock fit for feeding.¹⁶

The relative importance of cattle and sheep in the two dales varied over time in response to both local and national factors. These affected the proportion of sheep to cattle in the dales and the form of livestock husbandry practised. Table 9.1 presents the varying proportion of

sheep to cattle in the two dales between 1771 and 1914-7.

TABLE 9.1

NUMBERS OF SHEEP PER COW, WENSLEYDALE AND SWALEDALE, 1771
TO 1914-7.

	1771	1874-7 ¹	1884-7 ¹	1894-7 ¹	1904-7 ¹	1914-7 ¹
Upper W/d	- ²	6.8	6.9	7.8	8.0	8.3
Lower W/d	- ²	4.5	4.0	4.4	5.1	5.2
Total W/d	8.3	6.4	6.1	7.0	7.4	7.6
S/d	26.7	10.7	10.7	12.4	11.8	11.4

¹ Average of four years.

² Details available for the whole of Wensleydale only.

Source: A. Young, *A Six Months' Tour Through the North of England*, Vol II, 1771, pp192,425-6; PRO MAF 68/382, 439, 496, 553, 952, 1009, 1066, 1123, 1522, 1579, 1636, 1693, 2092, 2149, 2206, 2263, 2662, 2719, 2776, 2833, MAFF Parish Summaries of June Returns, upper and lower Wensleydale and Swaledale, 1874-7 to 1914-7.

W.H.Long and G.M.Davies calculate that in the 1940s in Swaledale a conversion factor of ten sheep to one cow could be applied in order to determine whether sheep or cattle farming was predominant.²⁷ Applying this factor to the data in Table 9.1 it would appear that sheep were always more important than cattle in Swaledale, although their relative dominance declined from being over twice as important in 1771 to a little above parity with cattle in the 1870s and 1880s.²⁸ Cattle were always more important than sheep in both upper and lower Wensleydale but it was particularly on the fertile pastures of the lower dale that cattle were most dominant.

The factors influencing the predominance of one type of animal over another can be identified when cattle and sheep farming in the two dales are examined in detail.

II

The longhorn breed of cattle had traditionally been reared in Wensleydale and Swaledale but the shorthorn became increasingly popular from the late eighteenth century.¹⁷ In 1771 Young reported that only shorthorn cattle were to be found in Swaledale and both long- and shorthorn in Wensleydale.²⁰ This was not entirely accurate as longhorns were recorded in Swaledale in the 1790s.²¹ For a time in the late eighteenth century the dales' farmers interbred long- and short-horned cattle. This gave a slightly heavier beast than the true longhorn and one which grazed 'more kindly' than the pure shorthorn.²² However, references to longhorn cattle cease shortly after the 1790s and some dales' farmers established substantial herds of the pedigree, improved, dual-purpose shorthorn as the nineteenth century progressed.²³

Total numbers of cattle in upper and lower Wensleydale and Swaledale are not available prior to the last quarter of the nineteenth century. However, contemporary comments indicate that cattle numbers were generally increasing in all three areas from the late eighteenth century. There were occasional setbacks and cattle in the two dales succumbed at different times to disease which affected numbers. However, although the area was infected during

the outbreak of rinderpest in the 1860s, contemporary evidence suggests that the two dales were not ravaged by the disease; possibly the isolation of the area worked to its advantage on this occasion.²⁴

Details of total cattle numbers are available from the latter part of the nineteenth century. Table 9.2 shows that between 1874-7 and 1914-7 cattle numbers in the three areas followed different trends.

TABLE 9.2

TOTAL CATTLE IN WENSLEYDALE AND SWALEDALE, 1874-7 TO

	1874-7	1884-7	1914-7. ¹		1914-7	% Change ²
			1894-7	1904-7		
Upper W/d	9876	8501	8729	9178	9123	-7.6
Lower W/d	2331	2963	2677	2529	2600	+11.5
Total	12,207	11,464	11,406	11,707	11,723	-4.0
S/d	4381	4279	4164	4460	4622	+5.5

¹ Average of four years.

² Percentage change 1874-7 to 1914-7.

Source: see Table 9.1.

In upper Wensleydale the number of cattle fell from a peak in 1874-7 to a low point a decade later, before recovering to 1914-7. Over the period as a whole the number of cattle fell by 7.6 per cent. Conversely, the number of cattle in lower Wensleydale was at a low point in 1874-7 and at a peak in 1884-7. In contrast to upper Wensleydale the numbers of cattle increased over the period

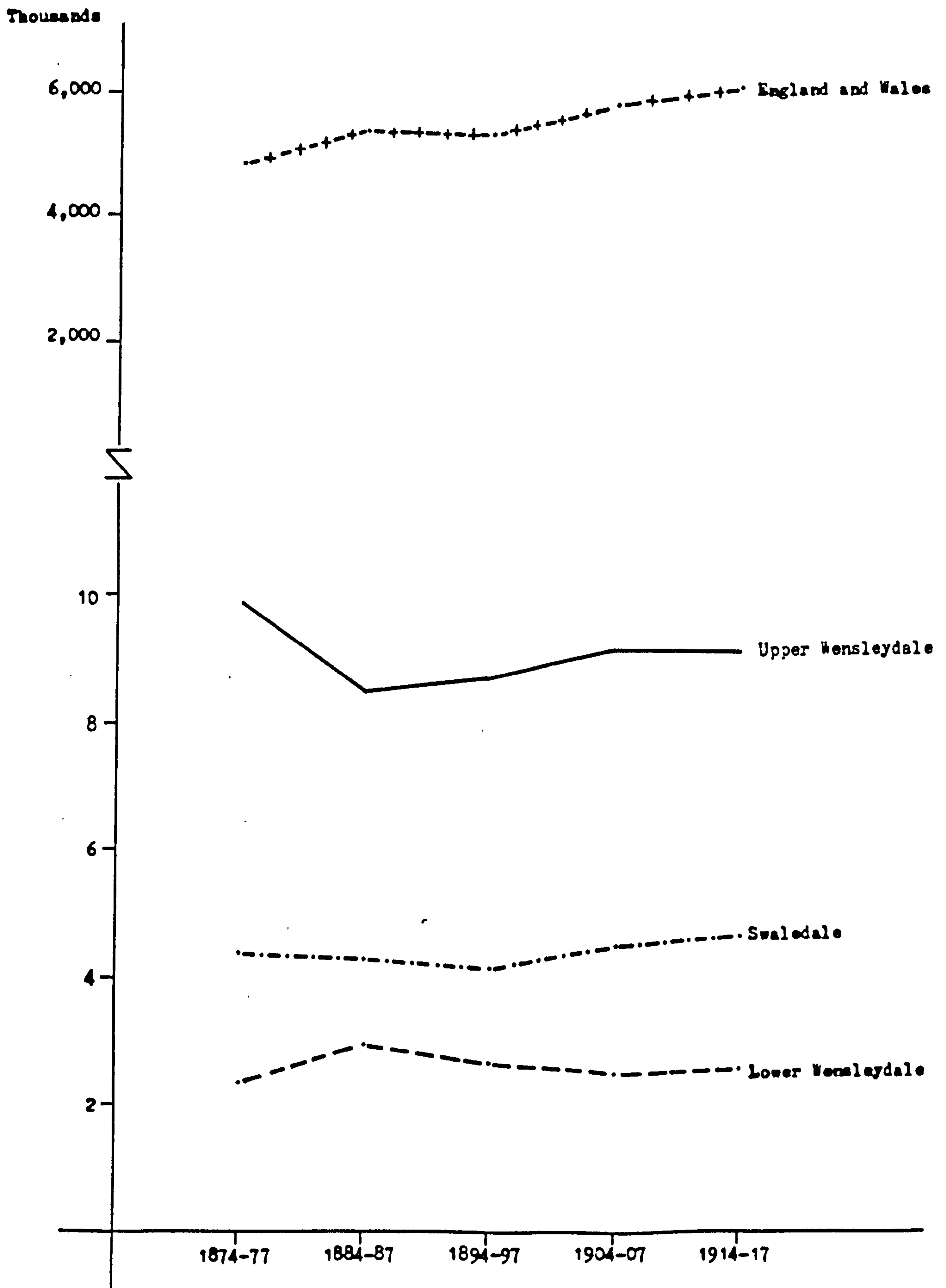
as a whole by 11.5 per cent. In Swaledale the number of cattle fell from 1874-7 to a low point in 1894-7 before rising to a peak in 1914-7. Over the period as a whole numbers increased by 5.5 per cent. The overall increase in cattle numbers in lower Wensleydale and Swaledale was substantially less than the 27.3 per cent by which cattle numbers in England and Wales increased over this period (see Figure 9.1).

The average size of cattle herd in Wensleydale and Swaledale was small. Figure 9.2 shows the average size of herd for the three areas between 1874-7 and 1914-7. The average herd size was largest in upper Wensleydale, where farming was the principal economic activity, and smallest in Swaledale, where for most of the period farming played a subsidiary role to lead mining in the local economy. In all three areas the average herd size increased over the period at a broadly comparable rate.

As has been noted, Wensleydale was more favourably endowed with good land than Swaledale and this is confirmed when the ratio of cattle to both crops and grass, and the ratio of cattle to total land area is examined. In 1874-7 Wensleydale and Swaledale had a similar ratio of cattle to crops and grass (1 cow to 4.1 acres in upper Wensleydale, 3.8 acres in lower Wensleydale and 3.9 acres in Swaledale) but in terms of total land area the difference between the two dales was marked. There was an average of 8.2 acres to one cow in upper Wensleydale, 7.9 acres to one cow in lower Wensleydale and 17.0 acres to one cow in Swaledale.²⁰

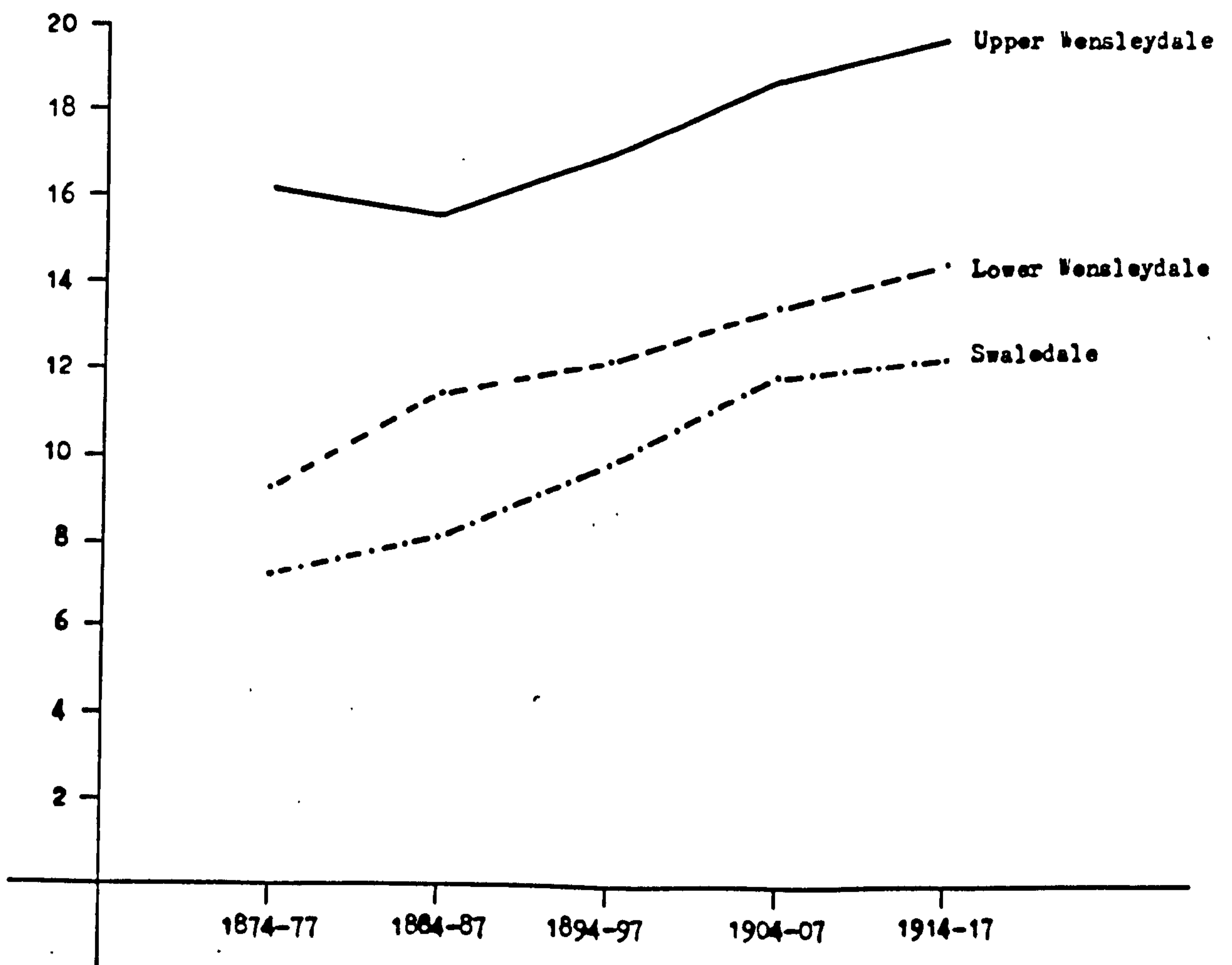
FIGURE 9.1

CATTLE IN UPPER AND LOWER WENSLEYDALE, SWALEDALE, AND ENGLAND AND WALES, 1874-7 TO 1914-7.



Source: see text.

AVERAGE HERD SIZE IN UPPER AND LOWER WENSLEYDALE AND
SWALEDALE, 1874-7 TO 1914-7.



Source: see text.

The overall increase in the number of cattle in Swaledale in the last quarter of the nineteenth century can be partly attributed to the end of the lead mining industry when, in response to changing local circumstances, there was an adjustment in the type of farming undertaken as a greater emphasis was placed on agriculture. The increase in cattle numbers in lower Wensleydale may have been in response both to the decline of lead mining and to the expansion of the Leyburn cattle market after the opening of the railway in 1856. The overall decline in cattle numbers in upper Wensleydale reflects structural change in the type of cattle farming undertaken. A further indication of why overall cattle numbers changed can be found by examining the different types of cattle (dairy and beef) farmed in the three areas.

III

In the absence of detailed statistical data for the late eighteenth century, Arthur Young's analysis provides a useful, if not totally reliable, picture of the types of cattle farmed in the two dales. As Table 9.3 shows, Swaledale farmers at this time concentrated on small dairy herds which were used mainly to supply liquid milk to the local lead-mining population (see Chapter 11). In Wensleydale cattle farming was more varied and, in addition to the dairy herd, beef cattle were kept. The young cattle were those born to the dairy herd. Most of these, apart

from herd replacements and some kept for rearing, were sold for rearing elsewhere.²⁴ Beef cattle for store or fattening were purchased annually.

TABLE 9.3

CATTLE ON SELECTED FARMS IN WENSLEYDALE AND SWALEDALE,

	1771. ¹		
	Cows ²	Beasts ³	Cattle ⁴
Wensleydale			
1	6	16	20
2	5	10	13
3	15	6	20
4	3	-	6
Average	7.25	8	14.75
Swaledale			
1	7	1	3
2	6	-	2
3	3	-	-
4	8	-	-
Average	6	0.25	1.25

¹ Farms visited by Arthur Young. The farms he chose appear to have been near Reeth in Swaledale and Aysgarth in Wensleydale. The farms are not necessarily typical of the two dales.

² Dairy cows.

³ Beef cattle for store or fattening.

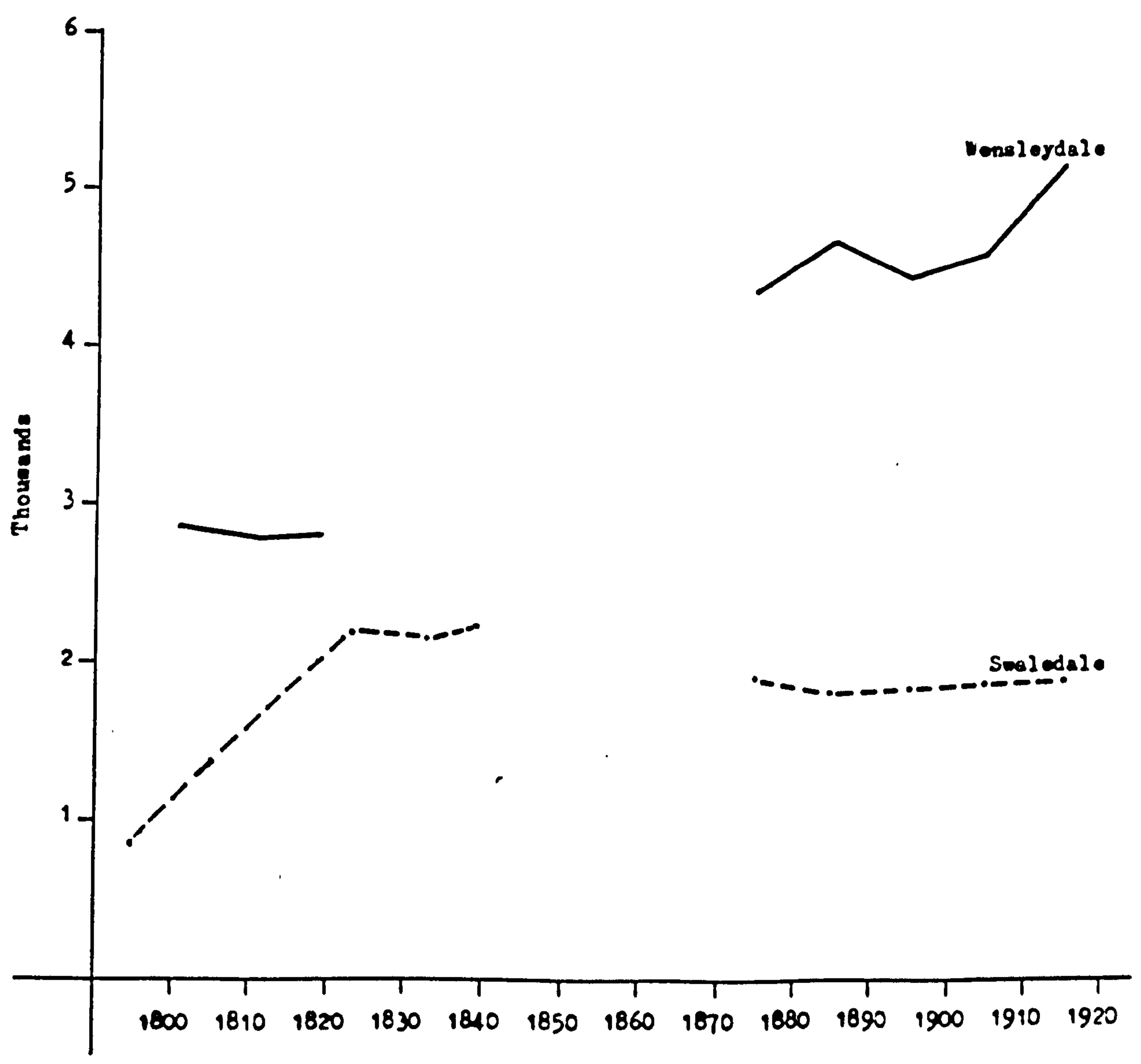
⁴ Young cattle.

Source: Young, *op cit*, pp192,425-6.

Figure 9.3 shows the size of the dairy herd in Wensleydale and Swaledale in the late eighteenth and early nineteenth centuries and in the period 1875-1915 (see Appendix IV for details of the calculation). The data suggest that there were always more dairy cattle in

FIGURE 9.3

COWS AND HEIFERS IN MILK OR IN CALF IN WENSLEYDALE AND SWALEDALE, 1795-1915.



Source: see text.

Wensleydale than in Swaledale and that the difference in numbers between the two dales increased as the century progressed. Following the national trend in the increase of the nation's meat supply, the number of dairy cattle increased rapidly in Swaledale between 1795 and 1823.²⁷ Thereafter they remained relatively stable although with a slight increase to 1839. Figure 9.3 suggests that dairy cattle numbers in Wensleydale remained stable between 1803 and 1819. Although there is a gap in the data in the mid-nineteenth century, contemporary writers noted the intense dairying activity taking place during this period.²⁸ This is reinforced by the data available from the 1870s. It is clear that dairy cattle numbers in Wensleydale rose significantly between 1819 and the early 1870s whereas in Swaledale dairy cattle numbers fell between 1839 and the early 1870s. The decline in Swaledale was due to a fall in the demand for liquid milk and other dairy produce as lead miners left the area. The tradition of keeping one or two cows for family use is indicated by the number of people in the late eighteenth and early nineteenth centuries who paid milk tithes only as a proportion of all agricultural tithe payers (see Table 9.4). The Table shows that over half the people engaged in agriculture were concerned solely with the production of milk. Most of the people paying milk modus tithes paid on only one or two cows.

TABLE 9.4

TITHE PAYERS PAYING MILK MODUS ONLY AS A PROPORTION OF ALL AGRICULTURAL TITHE PAYERS IN GRINTON ECCLESIASTICAL PARISH, 1795-1839.¹

	1795	1823	1833	1839
Milk modus only	162	312	308	303
All agr. tithes	309	488	485	477
% milk modus ²	52.4	63.9	63.5	63.5

¹ Grinton Ecclesiastical Parish comprised four (Grinton, Melbecks, Muker, Reeth) of the seven townships in the Swaledale study area.

² Percentage paying milk modus only.

Source: Barker MSS, 7/3,6,10,12, Grinton Parish Tithe Collection Records, 1795,1823,1833,1839.

Table 9.5 presents the numbers of dairy cattle and the proportion to total herd in the three study areas and in England and Wales. While the number of dairy cattle (cows and heifers in milk or in calf) rose steadily in England and Wales between 1874-7 and 1914-7 the proportion of dairy cattle to the total herd peaked in 1894-7. The situation in upper and lower Wensleydale and Swaledale differed from the national pattern.

The numbers of dairy cows in both upper and lower Wensleydale increased between 1874-7 and 1914-7. This was due almost entirely to the development of rail-borne milk traffic from the 1890s (see Chapter 10). As noted in Figure 9.3, the number of dairy cattle in Swaledale declined sometime between the 1840s and 1870s. This

decline continued to 1894-7 before numbers rose slightly to 1914-7.

TABLE 9.5

COWS AND HEIFERS IN MILK OR IN CALF AS A PROPORTION OF TOTAL CATTLE IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, AND ENGLAND AND WALES, 1874-7 TO 1914-7.¹

	1874-7 %	1884-7 %	1894-7 %	1904-7 %	1914-7 %
Upper W/d					
C&H ²	3567 36.1	3533 41.6	3481 39.9	3713 40.5	4124 45.2
Tot. ³	9876	8501	8729	9178	9123
Lower W/d					
C&H ²	763 32.7	1120 37.8	929 34.7	862 34.1	996 38.3
Tot. ³	2331	2963	2677	2529	2600
S/d					
C&H ²	1893 43.2	1794 41.9	1711 41.1	1746 39.1	1781 38.5
Tot. ³	4381	4279	4164	4460	4622
E & W ⁴	1812 37.8	1953 36.6	2127 40.7	2189 38.2	2385 39.1
Tot. ³	4788	5341	5222	5736	6096

% Change⁵

Upper Wensleydale = +15.6
 Lower Wensleydale = +30.5
 Swaledale = -5.9
 England & Wales = +31.6

¹ Average of four years in each decade for upper and lower Wensleydale and Swaledale. Average of five years (1871-5 etc) in each decade for England and Wales.

² Cows and heifers in milk or in calf.

³ Total cattle.

⁴ England and Wales in thousands.

⁵ Percentage change in numbers of cows and heifers in milk or in calf, 1874-7 to 1914-7 for upper and lower Wensleydale and Swaledale and 1871-5 to 1911-5 for England and Wales.

Source: see Table 9.1 and MAFF, *A Century of Agricultural Statistics, Great Britain 1866-1966*, 1968, p123.

Between 1874-7 and 1914-7, therefore, upper Wensleydale

experienced an increase in dairy cattle but a decline in total cattle numbers; lower Wensleydale increased in both dairy and total cattle numbers; and Swaledale declined in dairy cattle but increased in total cattle numbers. These changes demonstrate the move from beef to dairying in Wensleydale and a contrary movement in Swaledale over this period.

Despite the fact that Young's analysis of cattle on selected farms (see Table 9.3) implied that there were hardly any beef cattle in Swaledale in the late eighteenth century, there were probably some Swaledale farmers at that date who were quite extensively involved in beef farming. There is evidence in the early nineteenth century of Swaledale farmers purchasing cattle for store and fattening.²⁷ Wensleydale, and particularly fertile lower Wensleydale, was regarded as ideal for fattening stock. In 1771 Young noted that beef cattle fattened in Wensleydale reached an average of fifty stone on the summers' feed.³⁰ Twenty years later, in 1794, Tuke commented that farms in the lower parts of the dales were generally well-stocked with young cattle which were being fattened to be sold later in the year.³¹ In 1846 a contemporary noted that the richness of the improved grassland was such that beef cattle reputedly got 'so fat in Wensleydale that they thrive and never go away lean'.³² Table 9.6 shows the composition of the cattle herd in the latter part of the period under study.

In Swaledale the emphasis in 1895 was on dairying and

rearing with only a small proportion of cattle being fattened. This had changed little from the early nineteenth century. In 1837 it was noted:

The principal dependence of the occupiers is on their milch cows for the making of butter ... The calves of the cows kept are reared and a considerable number brought in for rearing as store cattle.³³

TABLE 9.6
TYPES OF CATTLE IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1895¹ AND 1915.²

	1895	1915
Upper Wensleydale		
C&H ³	39.9	43.8
2 yr ⁴	14.2	13.9
1-2 yr ⁵	23.4	21.2
-1 yr ⁶	22.5	21.1
Lower Wensleydale		
C&H ³	38.2	38.1
2 yr ⁴	19.1	19.2
1-2 yr ⁵	21.2	21.1
-1 yr ⁶	21.5	21.6
Swaledale		
C&H ³	42.1	37.9
2 yr ⁴	7.3	6.0
1-2 yr ⁵	20.1	22.8
-1 yr ⁶	30.5	33.3

¹ 1894 is the earliest date when all the above categories are returned.

² Percentage of total cattle in each category.

³ Cows and heifers in milk or in calf.

⁴ Other cattle above two years.

⁵ Other cattle between one and two years.

⁶ Other cattle less than one year.

Note: the figures in the Table are for single years and are not four year averages. This accounts for the slight discrepancy between this Table and Table 9.5.

Source: PRO, MAF 68/1579,2719, op cit, 1895, 1915, upper and lower Wensleydale and Swaledale.

The decline in the proportion of dairy cattle and cattle for fattening in Swaledale between 1895 and 1915 was offset by an increase in the proportion of calves and young cattle

of 1-2 years. In lower Wensleydale the proportions of different types of cattle were more evenly spread and these proportions remained virtually unchanged between the two dates. In the upper dale the proportion of dairy cattle rose whilst the proportion of other cattle above one year declined. Upper and lower Wensleydale placed less emphasis on breeding than Swaledale. The differences in the type of cattle in the three areas demonstrate the different resources and transport facilities available in each area and the response to local demand.

IV

The ability to market cattle influenced the types and stages of cattle production undertaken in the dales. In the eighteenth and early nineteenth centuries Wensleydale was on one of the main droving routes from the north. Scotch cattle were driven via Carlisle and Northumberland through Wensleydale to Skipton which was the major market for the West Riding and Lancashire.³⁴ Cattle kept in Wensleydale and Swaledale for store over winter or for fattening on the summer grass were usually Scotch cattle which were purchased either in the autumn (store) or early summer (fattening) from fairs in the north and driven along the established drove route to the dales.

The beef cattle farming noted by Tuke in 1794 had changed little in Wensleydale and Swaledale by the mid-nineteenth century. Cattle for fattening continued to be purchased by

dales' farmers from fairs to the north of the dales, or from fairs in Wharfedale, Wensleydale and Swaledale selling lean cattle which had come from the north.³⁵ Once fattened the cattle were still driven southwards to Skipton where they were sold for the West Riding and Manchester markets.³⁶ Although the practice of fattening cattle remained the same, from the mid-nineteenth century the method of marketing underwent a structural change. By the 1840s the growth of the trunk system of railways had an impact on the movement of stock in and out of Wensleydale and Swaledale and led to changes of route and destination of the locally-fattened cattle. Increasingly from the 1840s, Liverpool and other Lancashire towns were receiving cattle by rail from areas other than those serving Skipton market.³⁷ The farmers in the dales looked for new outlets for their cattle, and stock from Wensleydale were driven eastward to to the nearest railway station, at Bedale, where they were entrained and whence they were sent both to northern industrial areas and to London.³⁸ After the opening of the railway to Leyburn in 1856 many of the fattened beasts were sent from Leyburn station to the industrial West Riding and to the mining areas of Durham rather than to Skipton and Manchester.³⁹ Initially the railway did not totally supplant the droving trade and even in the 1860s an average of about 100 head of cattle per fortnight were driven from Wensleydale to Skipton market.⁴⁰ After the railway reached upper Wensleydale in 1878 the market at Hawes increased in importance. In

response to the changing pattern of cattle markets, auction marts were established at Hawes and Leyburn in the late nineteenth century.⁴¹ Although there were initial difficulties in both ventures, by the early twentieth century these marts were expanding rapidly.⁴² The centres for purchasing cattle also changed as markets became established at railheads. By the 1860s Scotch cattle for fattening were being bought by dales' farmers at Leyburn, Appleby and Skipton markets.⁴³ In addition, Irish cattle, which were first mentioned in Swaledale in 1818, were increasingly being purchased at these markets.⁴⁴

The day books of the Garth family provide an illustration of beef cattle marketing in Swaledale in the nineteenth century.⁴⁵ In addition to carrying a dairy herd, the Garths also bought and sold Scotch cattle. They usually purchased the stock in late spring or early summer and sold in autumn. For example, in June 1864 thirty two-year-old cattle were purchased at Appleby Fair. These were probably sold later in the year at Brough Hill Fair or Middleham Moor Fair, both of which Garth attended. In 1864, 1883 and 1884 Garth records selling ten, forty and twenty Scotch heifers, respectively, at the annual November Middleham Moor fair. Occasionally cattle were bought in autumn for keeping over winter as store cattle. In November 1890 Garth bought six Scotch cattle at Middleham and four at Hawes. The Garths were not exceptional, other local records demonstrate a similar method of farming.⁴⁶

Dairy cattle played an important role in the dales, not only as part of the farm economy but as an additional food resource for the non-farming population. Reflecting both the high proportion of small farms and the local tradition of cottagers keeping a dairy cow, the average size of dairy herd was small. In Swaledale the average size of dairy herd in the early nineteenth century varied, being 2.0 in 1795, 4.0 in 1833 and 3.4 in 1839.⁴⁷ Upper Wensleydale followed a similar pattern; in selected townships the average herd size was 4.1 in 1803, 3.9 in 1811 and 3.7 in 1819.⁴⁸

Table 9.7 shows that between 1874-7 and 1914-7 the average dairy herd increased from 5.8 to 8.8 in upper Wensleydale, from 3.0 to 5.5 in lower Wensleydale, and from 3.1 to 4.7 in Swaledale. In each case the rise in the average size of dairy herd was substantially greater than the increase in the number of cows and heifers in milk or in calf, reflecting a decrease in the number of holdings. Averages, however, are often misleading and there were, of course, some farmers in all three areas who built up sizeable dairy herds. For example, in the early 1820s the Garths of Swaledale had a substantial pedigree shorthorn dairy herd of twenty-two cows including heifers and calves. Between 1819 and 1874 360 shorthorns passed through the farm as the family bought and sold in order to improve and expand their dairy herd. When Francis Garth retired and sold the dairy herd in 1904 there were fifty-nine

shorthorns.⁴⁹ The increase in the average size of dairy herd in the two dales in the last quarter of the nineteenth century reflects the move into dairy farming on a commercial scale.

TABLE 9.7

AVERAGE DAIRY HERD SIZE IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1874-7 TO 1914-7.¹

	1874-7	1884-7	1894-7	1904-7	1914-7
Upper Wensleydale					
Holdings	612	548	515	490	466
C&H ²	3567	3533	3481	3713	4124
D. herd ³	5.8	6.5	6.8	7.6	8.8
Lower Wensleydale					
Holdings	254	260	221	189	181
C&H ²	763	1120	929	862	996
D. herd ³	3.0	4.3	4.2	4.6	5.5
Swaledale					
Holdings	611	531	424	377	380
C&H ²	1893	1794	1711	1746	1781
D. herd ³	3.1	3.4	4.0	4.6	4.7

¹ Average of four years in each decade.

² Cows and heifers in milk or in calf.

³ Average dairy herd.

Source: see Table 9.1.

During the nineteenth century the provision of facilities to enable the worker, whether agricultural labourer, lead miner or craftsman, to keep cattle was regarded as important in the two dales.⁵⁰ Many people who had other employment kept one or two cows either on rented land or on common cow pastures.

Although, as has been noted, enclosure was extensive,

several common cow pastures survived in both Wensleydale and Swaledale.²¹ An extant account book, covering the period 1821-57, for the common cow pasture in the lead mining township of Preston-under-Scar in lower Wensleydale shows clearly how cow pastures were administered.²² This pasture carried a maximum of forty-eight gaits (in this case one gait per cow) but between 1821 and 1857 the number of gaits let varied between thirty-one and thirty-eight. Throughout the period it was those with just one cow who rented most of the gaits annually. Between 1821 and 1857 the number of people holding one gait ranged from eighteen to twenty-nine; the number of people holding two gaits ranged from six to ten; and the number of people holding three gaits ranged from one to four. In only three years between 1821 and 1857 were more than three gaits held by one person and in each case it was the same person, who was also responsible for letting the gaits. A small by-laws committee was appointed which arranged for the common bull to be purchased, a cowherd to be employed and the fences and walls to be maintained. The annual rent of the gaits varied enormously from 3d in 1833 (when a profit from the previous year was carried over) to a maximum of 6s 4d in 1819. Occasionally a surcharge had to be made: for example, in 1820 the gaits were let initially at 3s 6d each but at the end of the year a deficit meant that gait-holders were liable for a surcharge of 2s 3d per gait. In most years the rent was between 1s 6d and 3s 8d. The common pasture was in use only from spring to October,

when the grass was growing, but during that season provided the cottagers with a place to safely graze their cows.⁵³

Where there was no common cow pasturage available many of the small cattle-owners rented summer pasture from their farmer neighbours. For example, in October 1808 a farmer near Reeth let meadow fog (new grass after mowing) to an owner of one cow for four weeks at a rent of 5s per week, followed by a two-week let at 4s per week. Later in the autumn of 1808 the rent fell to 3s as the grass growing season came to an end.⁵⁴ In November 1814 fog grass was again let for 5s but by autumn 1815 the rent had risen to 7s per week.⁵⁵

The cow was an important asset to the cottager and, in order to provide insurance against the loss of their cows, cottagers in several townships established cow clubs. That formed by gaitholders at Preston-under-Scar in 1835 appears to have been the first in the area.⁵⁶ In 1859 this club was developed into a general cow club with a committee formed to inspect the health of each cow at the time of entry.⁵⁷ New members paid 2s 6d per cow on entry and a further 2s 6d four months later. Two-year-old heifers were eligible for admission to the club but no cow was allowed to remain in the club for longer than ten years.⁵⁸ Payment due to a club member on the death of a cow varied from club to club. For example, Redmire Cow Club, which was formed in 1859, paid £10 to the owner on the death of a cow.⁵⁹ The popularity of these clubs can be seen from an analysis

of the membership of Reeth Cow Club. In 1858 there were forty-seven members and 102 cows which were valued at £982.

The funds of the club at that date were £52 17s 1 1/2d.⁴⁰ The existence of these clubs further illustrates the importance to the local working man of his cow as a source of food and additional income.

VI

John Tuke identified two types of horned sheep which were bred in Wensleydale and Swaledale in the late eighteenth century.⁴¹ One of these breeds, which was kept on the moors, had a grey face and leg, and a coarse, open fleece. The other breed, which was kept on enclosed pasture, had a white face and a coarse, thick-set fleece which weighed between five and six pounds. However, the sheep which predominated in Wensleydale and Swaledale at that date was the Short Scots or Linton, a hardy, black-faced breed with a coarse, short-stapled fleece, which was generally bred in Scotland (although some were indigenous to the dales) and was bought by the dales' farmers in midsummer to fatten for sale either the same autumn or the following spring.⁴² These black-faced sheep were improved through breeding (possibly with the indigenous, moorland, grey-faced sheep) and in the nineteenth century were registered as a separate breed, the Swaledale, which produced good mutton and a fleece of about four pounds in weight.⁴³ Like its predecessors the Swaledale was hardy enough to be kept on

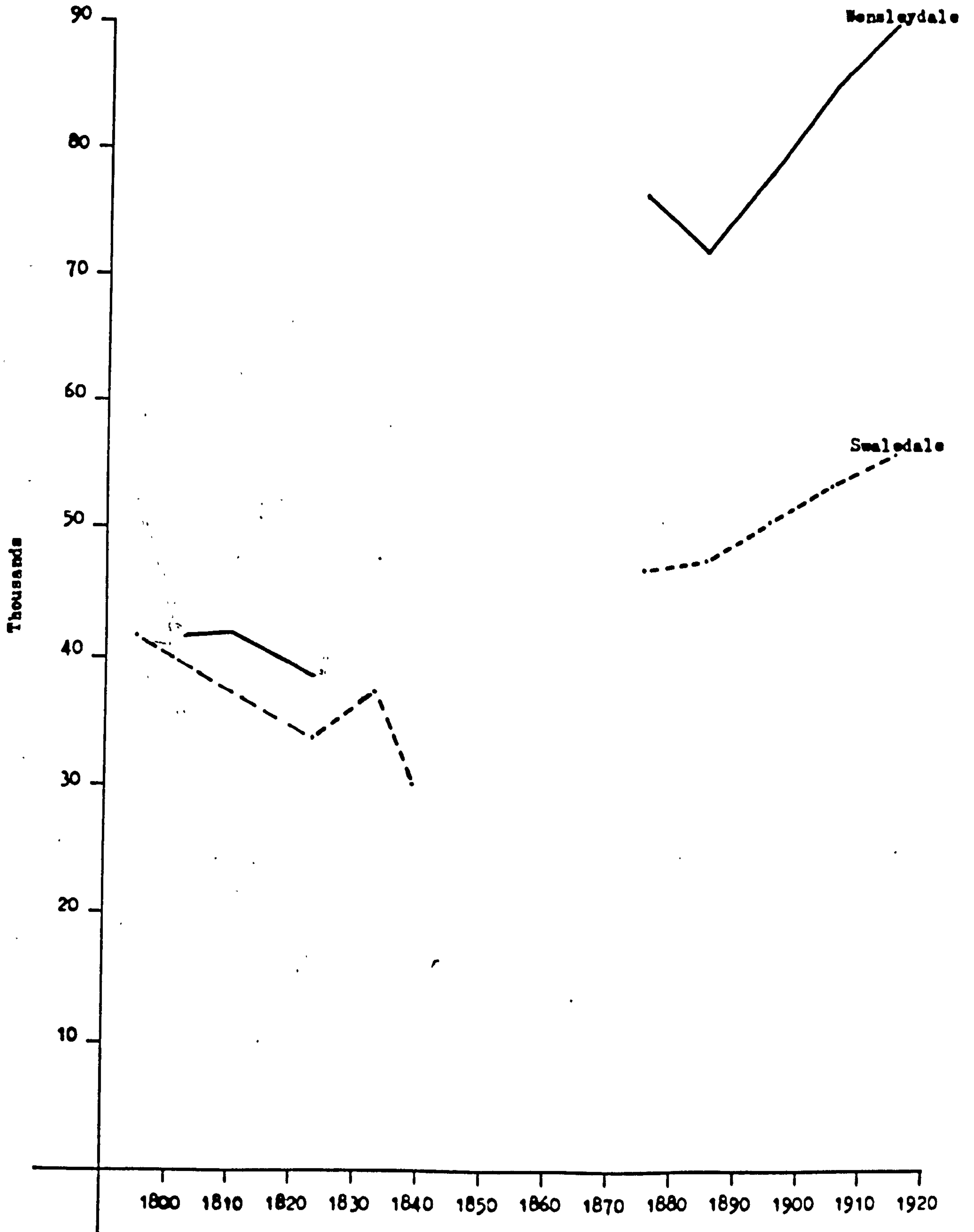
the moors throughout the winter, requiring supplementary feeding only during periods of prolonged bad weather.⁶⁴

The less hardy, white-faced breed to which Tuke referred was probably the forerunner of the Wensleydale sheep, which was derived by crossing a Leicester ram and a Teeswater ewe to produce a large-framed, long-wooled sheep with a fleece weighing about nine pounds and which had a tendency to produce twin lambs.⁶⁵ The Wensleydale sheep was introduced in the 1830s but did not become established until the 1860s.⁶⁶ The Wensleydale breed became increasingly popular in the latter part of the century, particularly in lower Wensleydale where the more fertile land was well-suited to the breed. In 1895, for example, a farm situated on low land near the River Ure in Castle Bolton township carried eighty Wensleydale sheep.⁶⁷ At the same date Hunter Pringle commented that Wensleydale sheep were held in high esteem and fetched good prices when sold for breeding purposes.⁶⁸ Although the price of mutton and wool was depressed in the late nineteenth century, as was the case with all livestock products, by the early twentieth century prices had recovered and, due to the much improved mutton quality and the rise in the price of wool which favoured the breed, the Wensleydale prospered.⁶⁹

VII

Numbers of sheep have been calculated for part of the period (see Figure 9.4 and Appendix V). While there are some similarities with the national pattern there were

SHEEP IN WENSLEYDALE AND SWALEDALE, 1795-1915.



Source: see text.

times when Wensleydale and Swaledale moved against the national trend.

Throughout the period Wensleydale consistently had more sheep than Swaledale and by the third quarter of the nineteenth century the difference between the two dales had widened. From the material available for the late eighteenth and early nineteenth centuries it appears that the total Swaledale flock declined from a peak in 1795 to a low point in 1823. There was a recovery to 1833 but this was followed by a steep decline in numbers to 1839. In Wensleydale the earliest statistical data available are for 1803 and from this date the size of the dale's flock rose slightly to 1811 before declining quite steeply in the post-war years to 1819. Sources relating to national mutton and lamb prices for the period of the French wars indicate that there was an increase in prices but that it was not as steep as the upward movement of beef prices.⁷⁰ In the immediate post-war years, the price of wool and sheep fell dramatically.⁷¹ There are indications that nationally livestock production was adjusted accordingly. It may be that the general decline of sheep numbers locally was partly in response to the trend in the national market and the relative profits to be gained from sheep and cattle but other factors were at play.⁷² For example, the decline registered in the early part of the century was possibly due to inclement weather which resulted in outbreaks of sheep rot.⁷³

As Table 9.8 demonstrates, apart from 1795, the number of

sheep per dairy cow was higher in the last quarter than in the early decades of the nineteenth century.

TABLE 9.8

RATIO OF SHEEP TO COWS AND HEIFERS IN MILK OR IN CALF,
WENSLEYDALE AND SWALEDALE, 1795-1915.

	1795	1803	1811	1819	1823	1833	1839
Wensleydale	40.5	14.4	14.9	14.1	11.5	13.0	11.2
Swaledale	49.5	18.9	19.9	18.9	15.4	17.4	13.5

	1874-7 ¹	1884-7 ¹	1894-7 ¹	1904-7 ¹	1914-7 ¹
Wensleydale	17.6	15.5	17.7	18.6	17.5
Swaledale	24.7	23.5	29.5	30.4	31.3

¹ Average of four years in each decade.

Note: for details of calculation see Appendices IV and V.

Source: Barker MSS, 7/3, 6, 10, 12, op cit, 1795, 1823, 1833, 1839; Calvert MSS, Tithing Books for the Constabulary of Bainbridge, upper Wensleydale, 1803, 1811, 1819; PRO MAF 68/382...2833, op cit, 1874-7 to 1914-7.

Although local data are not available for the period from 1839 to the beginning of the MAFF records, contemporary writers attest to the importance of sheep farming and there was clearly a substantial rise in sheep numbers in both dales in the mid-nineteenth century.⁷⁴ Wensleydale experienced the greatest increase and the early MAFF records suggest that a peak in the number of sheep in the dale may have occurred prior to the 1870s.⁷⁵ As with the ratio of sheep to total cattle (see Table 9.1), sheep were relatively more important in Swaledale than in Wensleydale throughout this period. The decline in the relative

importance of sheep in both dales in the 1820s and 1830s was probably a response to the better return on dairy cattle at that time. From the 1850s the rearing of cross-bred lambs for market was widely adopted and the price of lambs rose accordingly.⁷⁶

Whereas sheep numbers in Great Britain in the last quarter of the nineteenth century peaked in the 1870s and then suffered an uneven decline into the early twentieth century, numbers in the two dales rose substantially over the period as can be seen from Table 9.9.⁷⁷ Although all three areas moved contrary to the national trend, the rates of increase varied with upper Wensleydale and Swaledale registering similar increases of 13.2 and 12.5 per cent respectively while lower Wensleydale had a more dramatic increase of 29.0 per cent. The increase in lower Wensleydale was probably due partly to the growing popularity of the Wensleydale breed of sheep.⁷⁸

TABLE 9.9

SHEEP IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1874-7
TO 1914-7.¹

	1874-7	1884-7	1894-7	1904-7	1914-7
Upper W/d	67,261	58,379	68,091	73,181	76,125
Lower W/d	10,421	11,744	11,728	13,012	13,445
W/d	77,682	70,123	79,819	86,193	89,570
S/d	46,689	45,696	51,617	52,825	52,509

¹ Average of four years in each decade.

Source: see Table 9.1.

Upper Wensleydale and Swaledale followed the national trend in experiencing a decline in the sheep population in the early 1880s. This decline followed a series of cold springs and wet summers in the late 1870s which had led to severe outbreaks of liver rot and resulted in a decline of almost four million in the national sheep population.⁷⁹

Sheep farming in the dales embraced two distinct activities: the production of lambs and wool from the 'resident' flock, and the fattening of sheep purchased outside the dale. It is not possible to draw the same fine distinction between types of sheep as was made with cattle.

The only distinction which it is possible to make with sheep for most of the period is between lambs and other sheep. The proportion of sheep and lambs (calculated on the basis of fleeces) in Wensleydale in the early nineteenth century is presented in Table 9.10 and shows the greater emphasis which was placed on wool/mutton than on lambs.

TABLE 9.10

NUMBERS OF SHEEP AND LAMBS IN WENSLEYDALE, 1803-19.

	1803	%	1811	%	1819	%
Sheep	33,810	81.9	30,918	74.1	29,431	74.2
Lambs	7,452	18.1	10,803	25.9	10,236	25.8
Total	41,262		41,721		39,667	

Note: for details of calculation see Appendix V.

Source: Calvert MSS, op cit, 1803, 1811, 1819.

The lower proportion of lambs to sheep in 1803 probably reflects the lower price nationally of lamb to wool at that

date. The increasing proportion of lambs in 1811 and 1819 shows the positive move into lamb production even though cross-breeding to produce more and quicker-fattening lambs was not widely adopted at that time.¹⁰

In the mid-nineteenth century the structural changes which had begun towards the end of the French wars continued and by the 1870s over 36 per cent of the flock in all three areas was lambs. Table 9.11 shows that the proportion of lambs to sheep increased in all three areas between 1875 and 1915. The proportion of lambs to sheep in upper Wensleydale and lower Wensleydale was almost identical and, throughout the period, was substantially higher than in Swaledale. The higher proportion of lambs in upper and lower Wensleydale reflects the greater proportion of enclosed grassland to moorland in the two areas as compared with Swaledale. From the mid-nineteenth century, many of the lambs produced were the result of crossing black-faced sheep with Leicester rams. The resultant offspring were quickly and easily fattened on both lowland pastures and on arable crops. These lambs were much sought after and, consequently, commanded good prices.¹¹

It has been estimated that, nationally, sheep numbers probably increased by about 22 per cent between 1856-7 and 1867.¹² As Figure 9.4 implies Wensleydale and Swaledale farmers responded to the rising profitability of sheep in the mid-nineteenth century by increasing the size of their flocks but, contrary to the national trend, the local

farmers continued to increase their sheep numbers into the twentieth century. Flock size in upper and lower Wensleydale and Swaledale varied from only a few sheep to several hundred. The size of flock was determined by the stints on the moors and the acreage of hay which the farmer could produce.²³

TABLE 9.11

SHEEP AND LAMBS IN UPPER AND LOWER WENSLEYDALE AND
SWALEDALE, 1875-1915.

	1875	1885	1895	1905	1915
Upper W/d					
Sheep	38,712	34,370	36,395	39,069	41,162
%	58.4	56.4	54.9	54.4	54.0
Lambs ¹	27,609	26,592	29,853	32,808	35,013
%	41.6	43.6	45.1	45.6	46.0
Lower W/d					
Sheep	5791	6245	6655	6927	7157
%	58.0	56.9	56.5	53.0	53.0
Lambs ¹	4190	4729	5123	6155	6343
%	42.0	43.1	43.5	47.0	47.0
S/d					
Sheep	29,574	28,083	30,092	31,283	33,051
%	63.3	59.5	59.6	58.9	59.3
Lambs ¹	17,139	19,121	20,390	21,841	22,686
%	36.7	40.5	40.4	41.1	40.7

¹ Lambs less than one year.

Note: the figures are for single years only and are not four year averages. This accounts for the slight discrepancy between this Table and Table 9.9

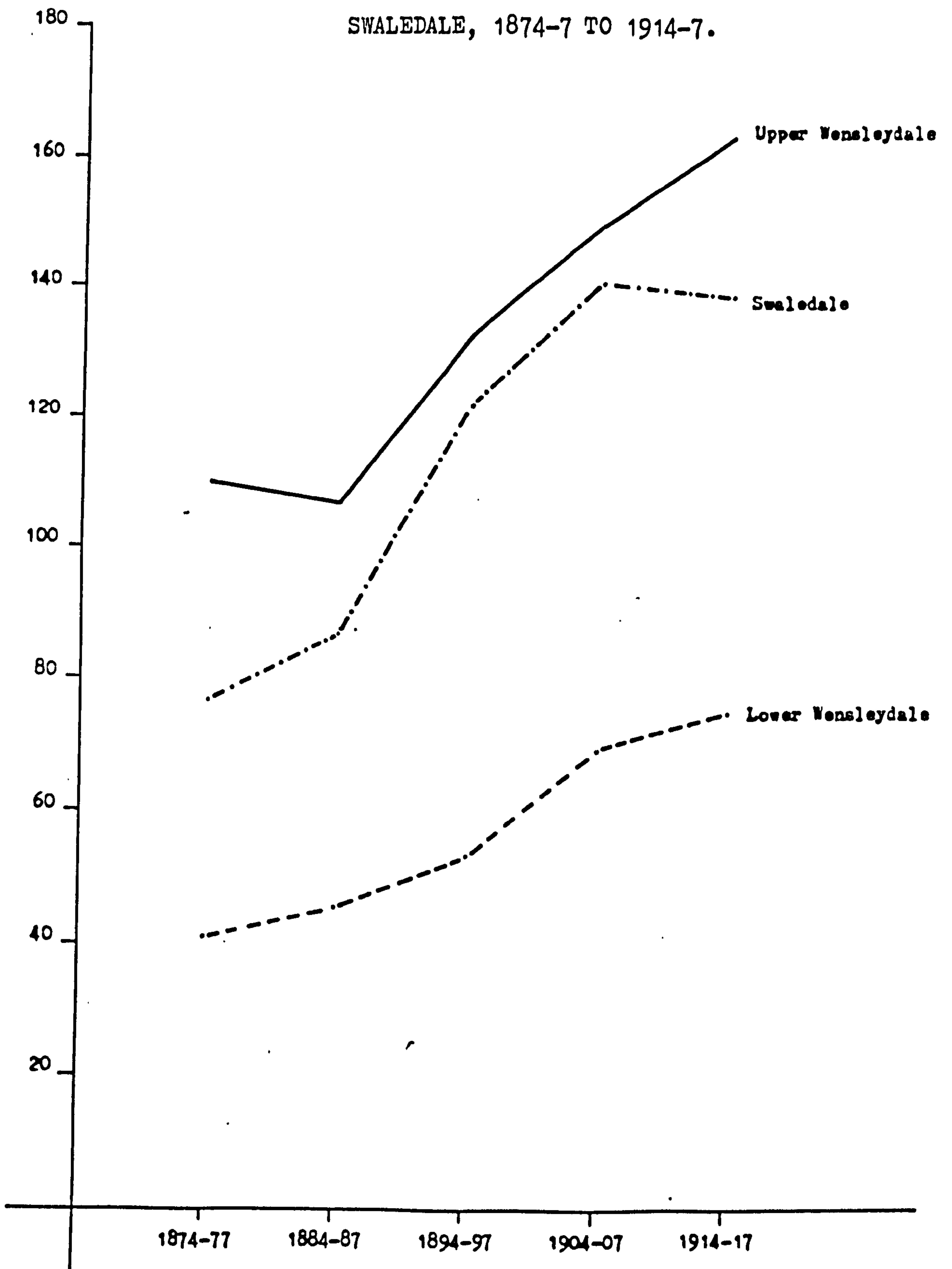
Source: PRO, MAF 68/439,1009,1579,2149,2719, op cit, 1875-1915, upper and lower Wensleydale and Swaledale.

In 1771 the size of flocks on the eight farms examined by Young in Wensleydale and Swaledale varied between 100 and

400. The average size of flock on the Wensleydale farms was 250 and on the Swaledale farms was 200.⁸⁴ In 1803 the most frequent flock size in Wensleydale was between 101 and 200 but, with the decline in sheep numbers over the next two decades, by 1819 the most common flock size was between 11 and 50 sheep.⁸⁵

Average flock sizes for the period 1874-7 to 1914-7 are shown in Figure 9.5. There was a pronounced trend towards the keeping of larger flocks in this period due both to increases in sheep numbers and to the decline in the number of farm holdings. Upper Wensleydale had the largest flock size throughout the period. Although the average flock size declined slightly in the decade to 1884-7, thereafter it increased sharply to the end of the period. Swaledale experienced a substantial increase in its average flock size between 1874-7 and 1914-7. The increase was steepest in the decade after 1884-7 when the dale, while losing many of its farm holdings, increased its sheep numbers as it moved more completely into an agricultural economy. Contrary to the position in Wensleydale, the average flock size in Swaledale declined slightly after 1904-7 as further adjustments in the agricultural economy took place. Lower Wensleydale had less moorland grazing available and, therefore, maintained smaller flocks throughout the period although these too increased in size between 1874-7 and 1914-7.

AVERAGE FLOCK SIZE IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1874-7 TO 1914-7.



Source: see text.

VIII

The marketing of sheep followed a similar pattern to that of cattle. Prior to the development of the railway in the 1840s, sheep for fattening were purchased at the northern fairs and were driven to Wensleydale and Swaledale either for fattening locally or for onward movement to destinations further south.⁸⁶ Droving took its toll on livestock, which lost both weight and condition, and farmers were keen to make use of the railways. With the arrival of the railway at Bedale in 1855 and Leyburn in 1856, some northern sheep were purchased at those markets for fattening in the dales.⁸⁷ Later in the century, the railway enabled the dales' farmer to travel to Scotland to buy his sheep direct from the breeder.⁸⁸ In the 1890s, for example, a Castle Bolton farmer purchased his Scotch hogs each June from Lanark.⁸⁹ Some farmers bought sheep in addition to their own requirements and acted as dealers, selling the surplus animals to their neighbours.⁹⁰

Prior to the arrival of the railway, sheep fattened in the dales followed the traditional route southwards through Wharfedale to Skipton market and thence to the West Riding and Lancashire.⁹¹ By the mid-nineteenth century and before the opening of the Bedale-Leyburn railway in 1856, about 500 sheep each fortnight throughout the year were driven on this route from Wensleydale to Skipton market, where Manchester butchers purchased as many as 5-600 sheep in single lots.⁹² As with cattle, the sale of sheep via

Skipton to Manchester butchers declined after the opening of the railway.⁹³ With the change of marketing, some of the local livestock fairs, where stock for fattening could be purchased, declined. For example, the annual midsummer sheep fair at Askrigg declined to such an extent that by 1881 it was virtually defunct.⁹⁴ However, most of the local fairs and shows, where dales' fattened stock were sold, survived and thrived throughout the period. By the end of the century the surviving fairs had generally passed under the auspices and control of the newly-formed Hawes and Leyburn auction marts. For example, in October 1884, 3000 sheep were presented at Hawes fair and, in 1907, 2450 uncrossed Swaledale ewes were auctioned during the autumn fair.⁹⁵ Farmers of the Wensleydale breed of sheep altered their marketing to encourage improved sheep sales, moving their annual show and sale from Wensleydale to Northallerton so as to attract wider patronage.⁹⁶

IX

In addition to sheep and cattle, other livestock were raised in Wensleydale and Swaledale. Pigs, horses and poultry were kept and, although much less significant than sheep or cattle, they played an important supplementary role in the overall farm economy.⁹⁷

Pigs were raised primarily for home consumption. The farmer purchased one or two pigs in spring or early summer for fattening in summer during the main cheese-making

period.⁹⁹ They were then slaughtered in autumn and salted for eating over winter. Pigs were regarded as a 'necessary appendage to every dairy farm' as they were fed on the whey from the dairy.⁹⁹ In Wensleydale, for example, where most of the milk was converted into butter and cheese, Young in the late eighteenth century noted that for every ten cows on a farm two or three pigs were kept for fattening.¹⁰⁰ In contrast, Young did not mention pigs in Swaledale, where much of the milk produced was sold as liquid milk to the local population, although there were, of course, pigs in Swaledale at that time.¹⁰¹ Some of the larger dairy farmers kept more pigs than were required for their own consumption, the surplus meat being sold within the locality.¹⁰²

Numbers of pigs both in the country as a whole and in Wensleydale and Swaledale are available for the latter part of the nineteenth century. Nationally, pig numbers increased by over 16 per cent between 1875 and 1915 whereas, as Table 9.12 demonstrates, the numbers of pigs in upper and lower Wensleydale and Swaledale declined over the period.¹⁰³ In upper Wensleydale pig numbers peaked in the early twentieth century but in lower Wensleydale the peak occurred a decade earlier and in Swaledale it occurred at the start of the period. In Wensleydale numbers declined sharply between 1904-7 and 1914-7 but, in contrast, in Swaledale the number of pigs rose over same the decade.

TABLE 9.12

PIGS IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1874-7
TO 1914-7.¹

	1874-7	1884-7	1894-7	1904-7	1914-7	% ²
Upper W/d	1070	906	1050	1095	850	-20.6
Lower W/d	346	318	381	367	240	-30.6
S/d	571	368	406	345	361	-36.8
E&W ³	2079	2252	2731	2295	2420	+16.4

¹ Average of four years in each decade.

² Percentage change between 1874-7 and 1914-7.

³ In thousands, for single years 1875 etc.

Source: see Table 9.1 and MAFF, *op cit*, p126.

The relative importance of pig production in the three areas can be seen by examining the number of pigs per head of population. In upper Wensleydale there was one pig to every five people, both in 1874-7 and 1914-7. The comparable figures for lower Wensleydale are one pig to every 7.8 and 8.6 people and for Swaledale one pig to every 9.4 and 6.6 people. These differences are explicable in terms of the use of milk from the dairy herd. Upper Wensleydale, with its greater emphasis on cheese-making, had proportionately more pigs than the other two areas. In Swaledale the increase in the number of pigs per head of population over the period is indicative of a move from liquid milk into other dairy produce. In lower Wensleydale the emphasis on liquid milk throughout the period, initially for sale to the local population and later for

export out of the area, is reflected in the relatively low number of pigs per head of population at both dates.

The use of horses in nineteenth-century Wensleydale and Swaledale was both an integral part of farming activity and an important feature of the lead industry.¹⁰⁴ Young noted in the late eighteenth century that there was an average of five horses per farm in Wensleydale and, although he did not note the presence of horses on the farms he visited in Swaledale, the sturdy dales' pony was also kept on many farms in that dale.¹⁰⁵ In the early nineteenth century horses were reputedly an important element in stock rearing in the dales.¹⁰⁶ The Scots Galloway pony was interbred with local horses to 'produce an hardy and very strong race in proportion to their size.'¹⁰⁷ These animals were not only well-suited for work on the farm, coping well with the rough terrain and inclement weather of the area, but, being strong and sure-footed, they made excellent 'jagger' ponies. Also, these ponies were sold 'into the West Riding and Lancashire, for ordinary purposes'.¹⁰⁸

There was an overall fall in the number of horses in Wensleydale and Swaledale between the 1870s and the 1880s. This was contrary to the national trend and may have been due to structural changes consequent on the decline of the lead industry. Numbers subsequently rose and peaked in the first decade of the twentieth century, coincident with the national peak (see Table 9.13).

The dales' pony remained an important element on the dales' farm until well into the twentieth century and it

was not until after World War II that they were superseded by the tractor.¹⁰⁹

TABLE 9.13

HORSES IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1874-7
TO 1914-7.¹

	1874-7	1884-7	1894-7	1904-7	1914-7	% ²
Upper W/d	979	824	983	1056	884	-9.7
Lower W/d	190	214	217	262	268	+41.1
S/d	542	480	517	598	582	+7.4
E&W ³	815 ⁴	835	928	966	729	-10.6

¹ Average of four years in each decade.

² Percentage change between 1874-7 and 1914-7.

³ In thousands, for single years 1875 etc.

⁴ Excludes mares kept for breeding.

Source: see Table 9.1 and MAFF, *op cit*, p129.

Most of the farms in the dales kept some hens to provide eggs and meat, mainly for home consumption. However, at some places in upper Wensleydale, substantial numbers of geese were reared for the external market. Gayle village, near Hawes was renowned for its geese, which were driven out of the dale each year for sale.¹¹⁰ The MAFF census for 1885 shows the importance of geese in upper Wensleydale, which returned 4746 fowl and 3349 geese in comparison with 2287 fowl and 168 geese in the lower dale and 3236 fowl and 226 geese in Swaledale.¹¹¹ A large number of these geese were kept by villagers rather than farmers and provided a welcome source of additional income.¹¹²

With the exception of horses, which performed an invaluable function as draught animals, the minor categories of livestock did not make a great contribution to the agricultural economy of the two dales. Nevertheless, pigs and poultry provided useful sources of additional income and a welcome variation in the local diet. Throughout the nineteenth century, however, it was the produce of cattle and sheep which provided the mainstay of the agricultural economy of Wensleydale and Swaledale. The physical constraints which had limited both the extent and profitability of arable farming in the dales proved, in the nineteenth century, to be a blessing in disguise because it was the producers of meat, dairy products and wool who reaped the benefits of improved prices for much of this period.¹¹³

NOTES - LIVESTOCK

- ¹ P.Deane & W.A.Cole, *British Economic Growth 1688-1959*, Cambridge, 1969, pp68-75, passim.
- ² *Ibid*; G.Hueckel, 'Relative Prices and Supply Response in English Agriculture during the Napoleonic wars', *ECHR*, 2nd ser., XXIX, 1976, p414.
- ³ G.Hueckel, 'Agriculture during Industrialisation', in R.Floud & D.McCloskey, *The Economic History of Britain since 1700*, Vol 1, 1981, pp182-4.
- ⁴ T.W.Fletcher, 'The Great Depression of English Agriculture, 1873-1896', in P.J.Perry(ed), *British Agriculture 1875-1914*, 1973, p38.
- ⁵ *Ibid*; C.S.Orwin & E.H.Whetham, *History of British Agriculture 1846-1914*, 1964, p391.
- ⁶ Hueckel, 1981, *op cit*, p185.
- ⁷ Deane & Cole, *op cit*, p70.
- ⁸ *Ibid*.
- ⁹ J.D.Chambers & G.E.Mingay, *The Agricultural Revolution 1750-1880*, 1966, p185; MAFF, *A Century of Agricultural Statistics, Great Britain 1866-1966*, 1968, pp49-51. Between 1851-60 and 1871-80 the price of beef rose by 31 per cent as compared with a 27 per cent rise in the price of mutton, E.J.T.Collins & E.L.Jones, 'Sectoral Advance in English Agriculture 1850-80', *AHR*, XV, 1967, p79.
- ¹⁰ *Ibid*.
- ¹¹ Deane & Cole, *op cit*, p70; Perry, *op cit*, pXVIII; PRO MAF 7/3/1,15,16,23, *Cattle Plague Reports*, 1865-79, over

233,000 cattle died or were slaughtered between June 1865 and December 1867 as a result of rinderpest.

¹² Perry, *op cit*, pXVIII.

¹³ *Ibid*.

¹⁴ *Ibid*, pXVII; R.Trow-Smith, *A History of British Livestock Husbandry 1700-1900*, 1959, p225.

¹⁵ BPP, 1843, XII, *Reports of Special Assistant Poor Law Commissioners on the Employment of Women and Children in Agriculture*, p295.

¹⁶ P.Romney(ed), *The Diary of Charles Fothergill, 1805*, Leeds, 1984, p143.

¹⁷ W.H.Long & G.M.Davies, *Farm Life in a Yorkshire Dale*, Clapham, 1948, p59; this is higher than the usual ratio of 6:1 but the Swaledale sheep were smaller than the national average size of sheep.

¹⁸ The 1771 figure must be regarded with caution as Young included hardly any beef cattle on the Swaledale farms whereas other sources show that beef cattle were raised in Swaledale (see later this Chapter).

¹⁹ Chambers & Mingay, *op cit*, p69; Barker MSS, 2/5/1, Garth Day Book, 1795-1819; J.Tuke, *General View of Agriculture in the North Riding of Yorkshire*, 1794, p61.

²⁰ A.Young, *A Six Months' Tour Through the North of England*, Vol II, 1771, pp189,424.

²¹ Barker MSS, 2/5/1, *op cit*, 1795-1819.

²² Tuke, *op cit*, p62.

²³ Barker MSS, 2/5/1-6, *op cit*, 1795-1904, *passim*; J.H.Dugdale, 'Select Farms in the Darlington District,

JRASE, VI, 1895, p486.

²⁴ Barker, 2/5/3, *op cit*, 1865-6, Garth records some deaths of his cattle in 1865 and attends weekly cattle plague meetings in January and February 1866. In the North Riding as a whole 8 per cent of stock had died from the disease by the end of 1866, PRO, MAF 7/3/1, *op cit*, 1866-7.

²⁵ The situation had changed little since 1771. Young noted that while occasionally one acre would keep a cow in Swaledale, in some years it required three or four acres to keep a cow. Similarly in Wensleydale, Young noted that three acres were required to keep a cow. Young, *op cit*, pp189,424.

²⁶ Romney, *op cit*, p143.

²⁷ Hueckel, 1976, *op cit*, pp409-10,412,414.

²⁸ M.M.Milburn, 'On the Farming of the North Riding of Yorkshire', JRASE, XXVI, 1848, p201. The gap in the data between 1839 and the mid-1870s is unfortunate. The few narrative sources which exist point to a period of prosperity and increased output. The earlier less reliable MAFF returns also indicate that the 1860s was a period of high output as the following Table shows:

COWS AND HEIFERS IN MILK OR IN CALF IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE, 1866 to 1974-7.

	1866	1869/70 ¹	1874-7 ²
Upper W/d	3114	3795	3567
Lower W/d	678	760	763
Swaledale	1672	1935	1893

¹ Average of two years.

² Average of four years.

Source: PRO, MAF 68/79-80, 211, 268, 382, 439, 496, 553, MAFF Parish Summaries of June Returns, upper and lower Wensleydale and Swaledale, 1866, 1869-70, 1874-7.

From these figures it would appear that a nineteenth-century peak occurred for dairy cattle in upper Wensleydale and Swaledale in the late 1860s and early 1870s.

²⁷ Barker MSS, 2/5/1-2, *op cit*, 1795-1848.

³⁰ Young, *op cit*, p424.

³¹ Tuke, *op cit*, pp62-4.

³² HLRO, Minutes of Evidence, HC, 1846, LMNJ, Vol 70, evidence of Col.Wood, p135.

³³ Quoted in R. Fieldhouse & B.Jennings, *A History of Richmond and Swaledale*, 1978, p469.

³⁴ Charles Fothergill in 1805 stated that Skipton was second only to Smithfield as a fatstock market. While this is clearly incorrect it shows the importance attached to Skipton in the north of England, Romney, *op cit*, p154.

³⁵ HLRO, Minutes of Evidence, HC, 1846, Vol 70, LMNJ, evidence of Col.Wood, p129, Capt.Lawes, p151; - 1865, Vol 57, SWL, evidence of C.E.Coleridge, p7, W.Coates, p99, J.Outhwaite, p233; - 1866, Vol 30, S-C, evidence of C.Other, p26. R.Perren notes that Leeds was a marketing and distribution centre for fatstock farmers after the mid-nineteenth century, a fact borne out in the minutes of evidence which are concerned with the decline of Skipton

market as the centre for fatstock in the West Riding, R.Perren, *The Meat Trade in Britain 1840-1914*, 1978, p45. Perren comments on the expansion of the Leeds trade. By 1861 slaughterhouses in Leeds were capable of handling 2-300 cattle per day as well as sheep and pigs, R.Perren, 'The Meat and Livestock Trade in Britain, 1850-70', *ECHR*, 2nd ser., XXVIII, 1975, p389.

³⁶ HLRO, LMNJ, op cit, evidence of Col.Wood, p125, Capt.Lawes, p151, W.Lodge, pp178-80.

³⁷ HLRO, S-C, op cit, evidence of C.Other, pp22,26; SWL, op cit, evidence of W.Coates, p86.

³⁸ HLRO, SWL, op cit, evidence of C.E.Coleridge, p7, W.Coates, p86.

³⁹ HLRO, SWL, op cit, evidence of J.Outhwaite, p229; S-C, op cit, evidence of C.Other, pp21-2,26.

⁴⁰ HLRO, SWL, op cit, evidence of W.Coates, p86.

⁴¹ Information supplied by M.Hartley and J.Ingilby.

⁴² Ibid.

⁴³ HLRO, SWL, op cit, evidence of W.Coates, p99; S-C, op cit, evidence of M.Stephens, p62.

⁴⁴ Barker MSS, 2/5/1-6, passim; HLRO, SWL, op cit, evidence of J.Outhwaite, p233, S-C, op cit, evidence of C.Other, p27.

⁴⁵ Barker MSS, 2/5/1-6, op cit, passim.

⁴⁶ Barker MSS, 5/8,5/8/1-2,5/9, Account Books, 1788-1891.

⁴⁷ Barker MSS, 7/3,10-12, Tithe Collection Records, Grinton Ecclesiastical Parish, 1795, 1833,1839.

⁴⁸ Calvert MSS, Tithing Books for the Constabulary of

Bainbridge, upper Wensleydale, 1803-1819. There is no information for lower Wensleydale at this period.

⁴⁹ Barker MSS, 2/5/6, op cit, 1904.

⁵⁰ BPP, 1844, V, *Report from the SC on Commons Inclosure with Minutes of Evidence and Index*, evidence of R. Rayson, p348.

⁵¹ Common cow pastures survive at Redmire, Castle Bolton and Preston-under-Scar in Wensleydale, and at Gunnerside in Swaledale. In Redmire at the present day the 300 acre pasture carries fifty-five gaits. Formerly one or two of these gaits were attached to each of the cottages in Redmire village, M. Hartley & J. Ingilby, *Life and Tradition in the Yorkshire Dales*, 1968, pp53-4. For a discussion on the existence of common cow pastures in Lincolnshire see R. Russell, *Cottagers and Cows 1800-1892: The Cow Clubs in Lincolnshire, Charity, Self-help, Self-interest*, Barton-on-Humber, 1987.

⁵² Horner MS, Disbursements Relative to Preston-under-Scar Town Pasture, listing Gait Holders of Preston High Cow Pasture, 1819-62 (with detailed accounts for 1821-57).

⁵³ Ibid.

⁵⁴ Barker MSS, 5/8/1, op cit, 1808.

⁵⁵ Ibid, 1814-5.

⁵⁶ Horner MS, op cit, 1835.

⁵⁷ *Richmond and Ripon Chronicle*, 7 and 14 May, 1859.

⁵⁸ Ibid.

⁵⁹ Ibid, 23 April 1859.

⁶⁰ Ibid, 24 April 1858.

- ⁶¹ Tuke, *op cit*, p65.
- ⁶² Trow-Smith, *op cit*, p139 n2, p140; M.Ryder, *Sheep and Man*, 1983, p460; Tuke, *op cit*, p65.
- ⁶³ Trow-Smith, *op cit*, pp138-9.
- ⁶⁴ Long & Davies, *op cit*, p37.
- ⁶⁵ Trow-Smith, *op cit*, pp141-4,271-2.
- ⁶⁶ R.Fieldhouse, 'Agriculture in Wensleydale from 1600 to the Present Day', *Northern History*, XVI, 1980, p185; W.H.Long, *A Survey of the Agriculture of Yorkshire*, 1969, pp91-2.
- ⁶⁷ Dugdale, *op cit*, p526.
- ⁶⁸ BPP, 1895, XVI, RC on the Agricultural Depression, Report by R.H.Pringle, Assistant Commissioner, South Durham and Selected Districts of the North and East Ridings of Yorkshire, p546.
- ⁶⁹ *Darlington and Stockton Times*, 26 January 1907.
- ⁷⁰ Hueckel, 1976, *op cit*, p183.
- ⁷¹ Chambers & Mingay, *op cit*, pp127-8.
- ⁷² Hueckel, 1976, *op cit*, p183.
- ⁷³ Chambers & Mingay, *op cit*, p128.
- ⁷⁴ The earlier, less-reliable MAFF returns for total sheep in the three areas are as follows:

TOTAL SHEEP IN UPPER AND LOWER WENSLEYDALE AND SWALEDALE,
1866 to 1874-7.

	1866	1869-70 ¹	1874-7 ²
Upper W/d	34,188	63,651	67,261
Lower W/d	5923	11,037	10,421
Swaledale	30,575	49,945	46,689

¹ Average of two years.

² Average of four years.

Source: PRO, MAF 68/79-80, 211, 268, 382, 439, 496, 553, *op cit*, 1866, 1869-70, 1874-7.

The figures for 1866 are particularly suspect but the 1869-70 figures show that at that date lower Wensleydale and Swaledale had more sheep and upper Wensleydale had fewer sheep than in the mid-1870s.

⁷⁵ Orwin & Whetham, *op cit*, p139.

⁷⁶ See note 74.

⁷⁷ MAFF, *op cit*, pp50-1.

⁷⁸ *Darlington and Stockton Times*, 26 January 1907.

⁷⁹ MAFF, *op cit*, p50. Locally the storms of spring 1886 were regarded as the worst of the century, *Bedale and Northallerton Times*, 6 March 1886.

⁸⁰ Orwin & Whetham, *op cit*, pp139-40.

⁸¹ *Ibid*; BPP, 1895, *op cit*, p546.

⁸² Orwin & Whetham, *op cit*, p141.

⁸³ Long & Davies, *op cit*, p40.

⁸⁴ Young, *op cit*, pp191-2, 425-6.

⁸⁵ Calvert MSS, *op cit*, 1803-19. The 1819 figure is low but the method of recording is identical to the earlier dates so it can only be assumed that the flocks declined in size over the period rather than that the data is deficient.

⁸⁶ HLRO, LMNJ, *op cit*, evidence of Capt. Lawes, p154, SWL, *op cit*, evidence of C.E. Coleridge, p11.

⁸⁷ *Ibid*, pp5, 7-8, 11.; HLRO, Minutes of Evidence, HC, 1881,

- Vol 47, S-K, evidence of R.Thwaite, p255.
- ⁸⁸ *Bedale and Northallerton Times*, 9 July 1881.
- ⁸⁹ Dugdale, *op cit*, p524.
- ⁹⁰ *Bedale and Northallerton Times*, 9 July 1881.
- ⁹¹ HLRO, LMNJ, *op cit*, evidence of Capt. Lawes, p154, SWL, *op cit*, evidence of C.E.Coleridge, p11.
- ⁹² HLRO, SWL, *op cit*, evidence of J.Outhwaite, p234.
- ⁹³ *Ibid*, evidence of C.E.Coleridge, pp23,32,35, J.Outhwaite, pp229,234.
- ⁹⁴ *Bedale and Northallerton Times*, 9 July 1881.
- ⁹⁵ *Ibid*, 18 October 1884, *Darlington and Stockton Times*, 19 October 1907.
- ⁹⁶ *Ibid*, 26 January 1907.
- ⁹⁷ There was a commercial rabbit warren in upper Wensleydale from at least the eighteenth century to the early twentieth century. Rabbits were bred principally for their pelts, Tuke, *op cit*, p70; T.Whellan & Co, *History and Topography of the City of York; and the North Riding of Yorkshire*, Vol II, Beverley, 1859, p399; additional information from the late Mr.Dinsdale, occupier of Warren House, from where the rabbits were farmed.
- ⁹⁸ Barker MSS, 2/5/1-6, *op cit*, *passim*; Milburn, *op cit*, p201.
- ⁹⁹ Hueckel, 1981, *op cit*, p186.
- ¹⁰⁰ Young, *op cit*, p424.
- ¹⁰¹ *Ibid*, p189; Barker MSS, 2/5/1, *op cit*, *passim*.
- ¹⁰² *Ibid*, 2/5/2-6, 20 December, 1824, 'Killed 2 pigs sold at 6s 6d per stone'. Most years Garth records buying pigs

in early summer and killing between two and five pigs and selling the meat in late November and December, *passim*.

¹⁰³ MAFF, *op cit*, p126.

¹⁰⁴ M.Hartley & J.Ingilby, *A Dales Heritage*, Clapham, 1982, p83.

¹⁰⁵ Young, *op cit*, pp425-6; Tuke, *op cit*, p66; Barker MSS, 2/5/1, *op cit*, *passim*.

¹⁰⁶ J.Bigland, *A Topographical and Historical Description of the County of York*, 1819, p93.

¹⁰⁷ G.A.Cooke, *County Itinery of Westmorland and Yorkshire*, c1809.

¹⁰⁸ Bigland, *op cit*, p93.

¹⁰⁹ Long & Davies, *op cit*, p33; and local oral sources.

¹¹⁰ E.Pontefract & M.Hartley, *Wensleydale*, 1936, p66.

¹¹¹ PRO MAF 68/1009, MAFF Parish Summaries of June Returns, upper and lower Wensleydale and Swaledale, 1885.

¹¹² Pontefract & Hartley, *op cit*, pp59,66.

¹¹³ Hueckel, 1981, *op cit*, p195.

CHAPTER 10

ANIMAL PRODUCE

The development of the dairy industry nationally was a direct response to the growing population and rising per capita income.¹ Home production of liquid milk, cheese and butter output all increased until at least the 1860s. However, it has been estimated that, although total production of milk hardly changed in the last quarter of the nineteenth century, the proportion which was converted into cheese and butter fell to 45 per cent in 1870, to 30 per cent in 1894-8 and to 23 per cent in 1907.² Cheese was the least perishable of the dairy products and in the first half of the nineteenth century was produced in large quantities. However, from the 1860s good quality imports were causing problems for home producers and there were steep falls in prices, particularly in 1879, 1885 and 1895.³ Farmers moved out of cheese making, and home production declined by about two-thirds between the 1860s and the First World War.⁴ Butter output followed a similar trend to that of cheese. In the 1850s and 1860s output was high but from the 1860s prices fell, and between the 1860s and 1900s the volume of milk used in butter making halved from 150 million gallons to 75 million gallons.⁵ The decline in the quantity of milk used in the production of cheese and butter was mirrored by a growth in liquid milk production. With the development of the

railway in the 1840s liquid milk was increasingly transferred direct from the farm to the town.⁶ This traffic developed and grew rapidly in the last quarter of the nineteenth century. The relative profitability of liquid milk, in the context of falling prices of meat and dairy produce in the late nineteenth century, encouraged some farmers to expand their dairy herd and reduce production of meat, cheese and butter in order to concentrate on the production of liquid milk.⁷

I

Dairy farming played a major part in the agricultural economy of Wensleydale and Swaledale in the nineteenth century. Over this period the relative importance of liquid milk, cheese and butter production changed in response to endogenous and exogenous factors. There was a strong tradition of cheese and butter making in the area prior to the nineteenth century, particularly in Wensleydale. Arthur Young in 1771 noted that in Swaledale milk was sold mainly in liquid form whereas in Wensleydale it was mostly converted into cheese and butter.⁸ During the nineteenth century the cheese and butter industry became firmly established in Wensleydale with the main emphasis being placed on producing the less-perishable cheese.

Prior to the arrival of the railway the only market for liquid milk was the local population; consequently, a high

proportion of the milk produced was converted into cheese and butter. The production of cheese and butter was usually undertaken only by farmers with a dairy herd of at least three cows although generally the dairy herd consisted of seven to ten cows.⁹ The cows calved in spring and cheese, together with a little butter, was made from May to October. Most of the cattle were dry during the winter so there was little surplus after the liquid milk requirements of the local population had been satisfied. A few farms continued to make cheese during the winter months but usually any small surplus of winter milk was converted into butter.¹⁰

For most of the nineteenth century cheese and butter were produced on the farm and were generally the responsibility of the farmer's wife and daughters. As production was of variable quality and competition fierce, increasingly emphasis was placed on improvement of technique and quality.¹¹ By the late nineteenth and early twentieth centuries, in order to standardize production and respond positively to competition following the earlier establishment of cheese factories in other counties, several cheese and butter dairies were established in Wensleydale.¹² By the early twentieth century, although cheese and butter continued to be produced on the farm, most of the dales' output was produced in commercial dairies.¹³ The largest cheese factory in the area was established in 1898 in Hawes and this is the only commercial cheese and butter making enterprise to have

survived to the present.¹⁴

The efficient marketing of the dairy produce was vitally important for the success of the industry. Initially cheese and butter were collected from the farms by local factors and taken to the produce fairs (of which Yarm was the most important for Wensleydale cheese) or sold direct to city retailers.¹⁵ As the nineteenth century progressed the farm-collection method of marketing was criticized as being unsatisfactory, as factors did not discriminate between the quality of cheese and butter produced on the different farms.¹⁶ Cheese and butter markets were established at both Hawes and Leyburn so that the produce was sold in open competition and differences in quality could be determined.¹⁷ City cheese factors attended Hawes and Leyburn fairs from as far afield as Tyneside, Teesside and the West Riding.¹⁸

Before the era of the railway, the butter and cheese which were exported from the dales to the West Riding followed the drove roads through Bishopdale or Coverdale into Wharfedale and thence to Bradford, Halifax and other West Riding towns.¹⁹ With the arrival of the railway in the area in the 1850s and 1860s cheese and butter were transported from upper Wensleydale by cart to the nearest railway, either at Ingleton to the south-west or to Leyburn.²⁰ The produce was sent mainly to Bradford but some went to other West Riding and Lancashire towns.²¹ For example, it has been calculated that about 12,264 pounds of butter were forwarded from the Aysgarth area in

early 1877.²² Large quantities of butter were also sold at Hawes. On some occasions as much as 7000 pounds of butter were sold in Hawes on market day but a more usual market day total in the late nineteenth century was about 3000 pounds.²³

The establishment of cheese and butter fairs within Wensleydale in the nineteenth century and the opening of the full length of the Wensleydale railway in 1878 led to further changes in marketing. Fewer cheeses were sent to Yarm and the North East and the railway was used to send increased quantities to the West Riding.²⁴ By 1907 the Yarm Cheese Fair had virtually disappeared.²⁵

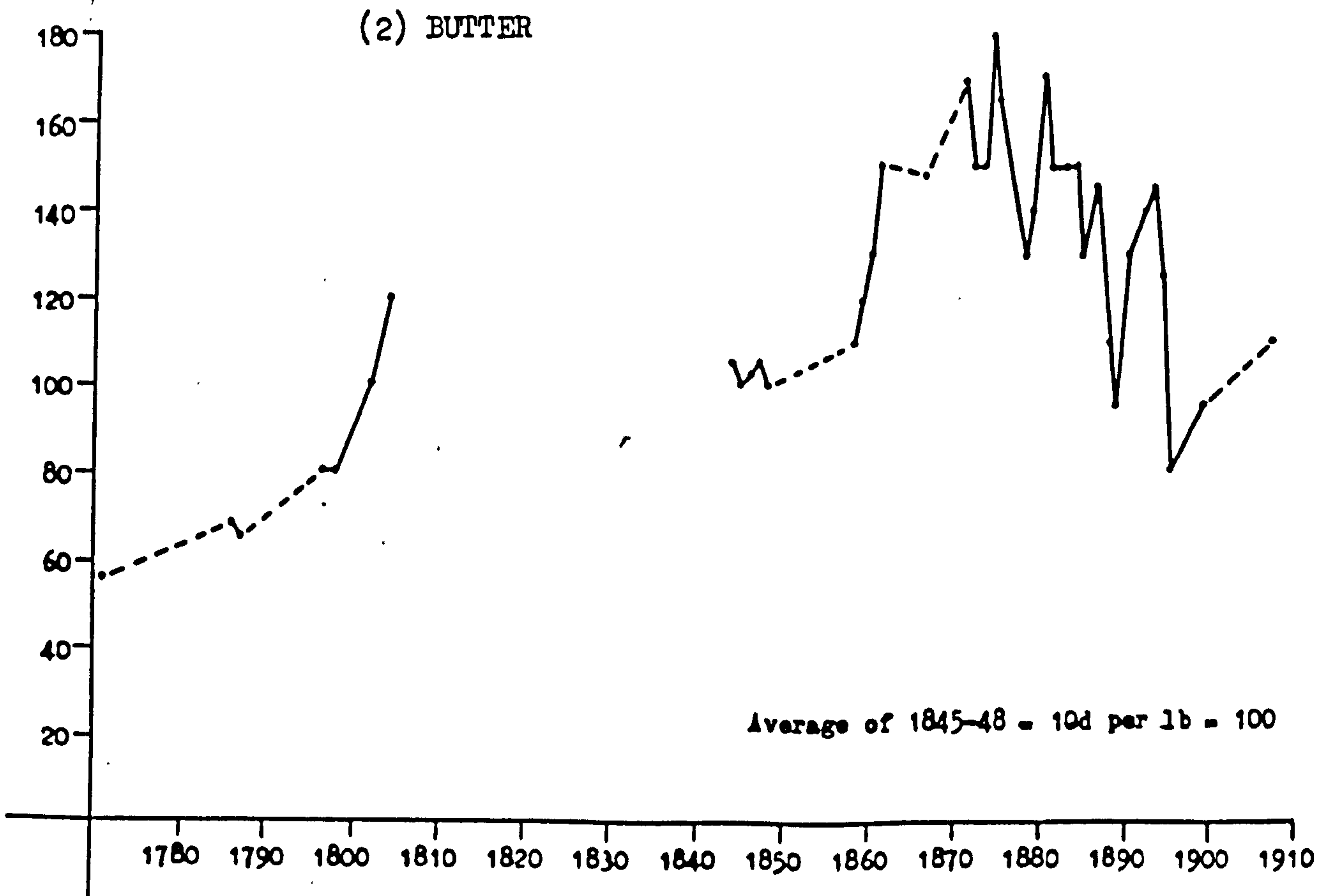
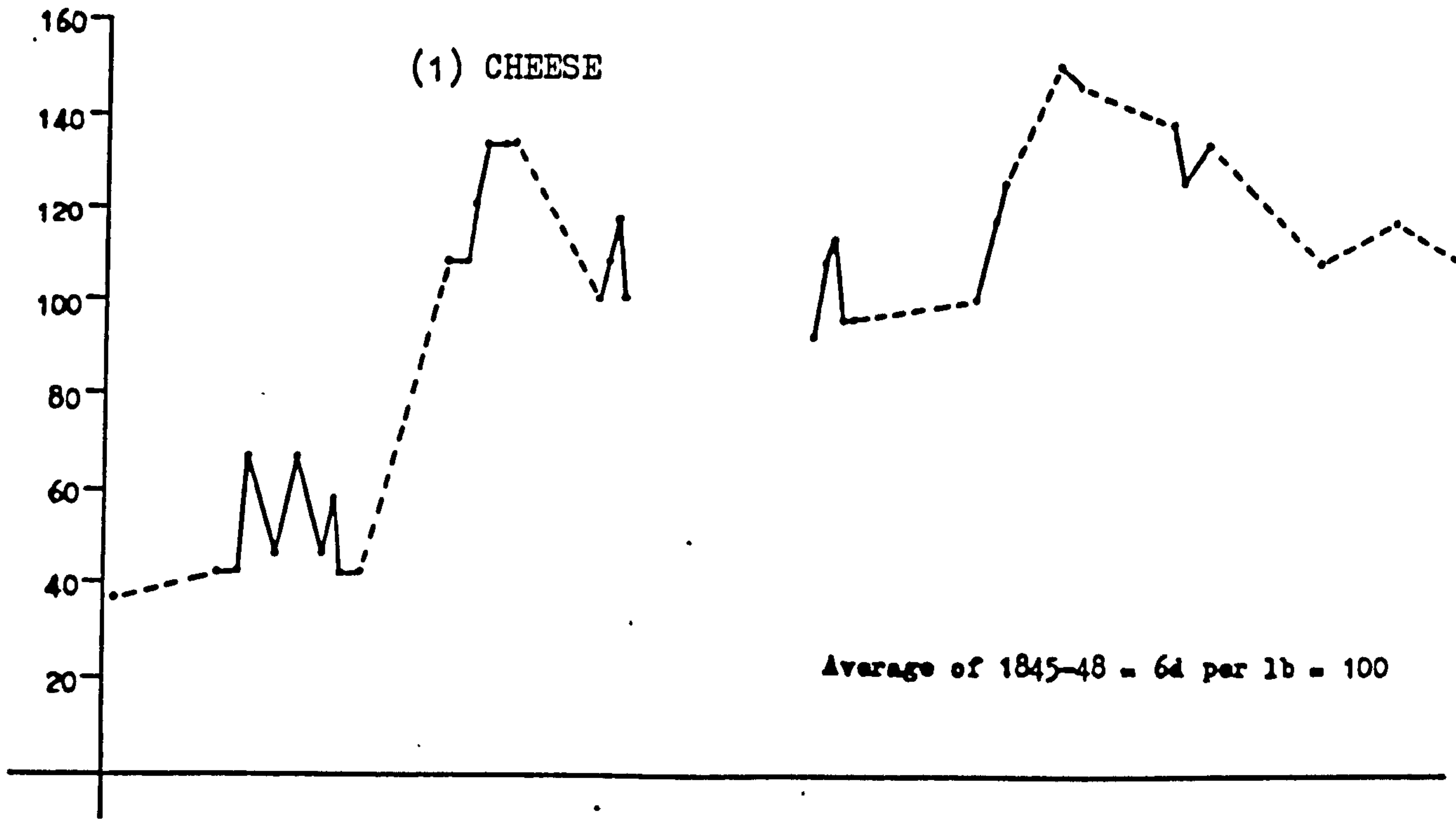
II

For most of the nineteenth century the price of dairy produce increased overall.²⁶ Some cheese and butter prices are available for Wensleydale and Swaledale at different dates throughout the period under study. Indices for butter and cheese have been calculated from the extant data and are presented in Figure 10.1 (see Appendix VI for details of prices). It has not been possible to construct a comparable local index for milk as little information exists on local milk prices.

The prices of cheese and butter followed that of cattle and climbed rapidly at the end of the eighteenth century.²⁷

Cheese, 2d per pound in 1771, had risen to 8d per pound in 1810. There was a slight decline in the difficult years of the 1820s and again in the 1840s. By the 1860s, however,

CHEESE AND BUTTER PRICE INDICES (WENSLEYDALE AND SWALEDALE),
1771-1915.



Source: see text.

the price had recovered to 7d a pound and by 1873 a peak of 8 3/4d per pound was reached. Following the national trend the price fell to a low point in the mid-1890s when a local newspaper reported 'a sudden and tremendous depression' in the price of cheese.²⁹ There was a recovery at the turn of the century and in 1907 the wholesale price was 7d a pound. This was followed by a further fall and immediately prior to the First World War the price was 6 1/2d.

Butter sold at 5 1/2d a pound in 1771 and by 1804 had risen to 1s. During the 1840s the price was lower than that of 1804 but the price advanced in the 1850s and 1860s and reached a peak of 1s 6d in 1874. The price declined in the 1890s and, as in the case of cheese, a low point was reached in 1895 when the price had fallen to 8d. This was followed by a recovery in the early twentieth century and the price rose to an estimated 1s 4d in 1913-4.

III

In order to ascertain the responsiveness of dales' farmers to both the price of and demand for dairy produce, the output of milk in Wensleydale and Swaledale has been calculated. It is not easy to quantify the average annual yield of the nineteenth-century Wensleydale and Swaledale shorthorn or to measure the different end products of that yield. However, certain assumptions have been made in an attempt to construct a picture of the dairy industry in the two dales between the late eighteenth and early twentieth

centuries. Assuming an annual average yield per head of dairy cattle of 300 gallons (see Appendix VII), the total milk output for specific years between 1795-1839 has been estimated. The numbers of dairy cattle are derived from tithe data, which may be neither comprehensive nor wholly reliable, and therefore, the figures relating to milk output should be regarded as a guide to trends rather than a precise numerical measure.²⁷ The total milk output of the Wensleydale and Swaledale dairy herd is presented in Table 10.1.

TABLE 10.1

TOTAL MILK OUTPUT IN WENSLEYDALE AND SWALEDALE, 1795-1839.¹

	Wensleydale		Swaledale	
	C&H ²	Total milk	C&H ²	Total milk
1795	1285	385,500	837	251,100
1803	2870	861,000	1880	564,000
1811	2797	839,100	1832	549,600
1819	2821	846,300	1848	554,400
1823	3363	1,008,900	2191	657,300
1833	3270	981,000	2130	639,000
1839	3402	1,020,600	2216	664,800

¹ In gallons estimated at an annual average output of 300 gallons per head of cow and heifer in milk or in calf. See Appendix VII for details of calculation.

² Cows and heifers in milk or in calf.

Source: Barker MSS, 7/3,6,10,12, Grinton Parish Tithe Collection Records, 1795, 1823, 1833, 1839; Calvert MSS, Tithing Books for the Constabulary of Bainbridge, upper Wensleydale, 1803, 1811, 1819.

Even if the less reliable 1795 figure is discounted, milk output rose over the period as a whole.³⁰ During the early part of the nineteenth century the only milk kept as

liquid milk was that intended for consumption by the local population. Liquid milk consumed in the two dales between 1795 and 1839 has been estimated and is shown in Table 10.2. The basis of the calculation employed necessarily means that the peak of milk consumption in the two dales reflects the population peak.

TABLE 10.2

LIQUID MILK CONSUMPTION IN WENSLEYDALE AND SWALEDALE,
1795-1839.

	Wensleydale		Swaledale	
	Population ¹	Milk ²	Population ¹	Milk ²
1795	7156	81,623	5739	65,461
1803	7156	81,623	5739	65,461
1811	7478	85,296	7040	80,300
1819	8322	94,923	7480	85,319
1823	8322	94,923	7480	85,319
1833	8614	98,253	7020	80,072
1839	8188	93,394	6758	77,083

¹ Population at the nearest decennial census.

² Estimated at a consumption of 0.25 pints per person per day. See Appendix VIII for details of calculation.

Source: NYCRO, PP/1,3,5,8,10, *Census Enumeration Abstract for the County of York, 1801-41*, and see Table 10.1

Milk remaining after requirements for liquid milk had been satisfied was converted into cheese and butter. In Wensleydale, which had a much higher production of milk relative to its population than Swaledale, proportionately less of the total milk output was consumed in liquid milk form and more was available for conversion into cheese and butter. In order to calculate cheese and butter output, it

has been assumed that 70 per cent of the remaining proportion of total milk went into cheese and 30 per cent went into butter as is shown in Table 10.3.

TABLE 10.3

QUANTITIES OF CHEESE¹ AND BUTTER² PRODUCED IN WENSLEYDALE AND SWALEDALE, 1795-1839.

	Wensleydale Cheese	Butter	Swaledale Cheese	Butter
1795	212,714	30,388	129,947	18,564
1803	545,564	77,938	348,977	49,854
1811	527,663	75,380	328,510	46,930
1819	525,964	75,138	328,357	46,908
1823	639,784	91,398	400,387	57,198
1833	617,923	88,275	391,250	55,893
1839	649,044	92,721	411,402	58,772

¹ In pounds, one gallon of milk to one pound of cheese.

² In pounds, three gallons of milk to one pound of butter.

Source: based on an estimate of the proportion of total milk used in cheese and butter output, see Appendix IX.

From the foregoing tables and the extant price data referred to earlier it is possible to estimate the total receipts from liquid milk, cheese and butter for the period 1795-1839 and from these derive the value of the product per cow (see Table 10.4). In addition to a considerable rise in the output of liquid milk, cheese and butter between 1795 and 1803, the price of all three commodities rose sharply. As a consequence, receipts from dairy products rose steeply, increasing almost fourfold in Wensleydale and more than fourfold in Swaledale. There was a further rise both in output and prices up to 1811, when receipts from dairy produce in Wensleydale and Swaledale

TABLE 10.4

VALUE OF LIQUID MILK, CHEESE AND BUTTER PRODUCED IN
WENSLEYDALE AND SWALEDALE, 1795-1839.¹

	Milk ²	Cheese	Butter	Value ³	Product ⁴
Wensleydale					
1795	1360	3102	1045	5507	4.3
1803	2381	14,776	3572	20,729	7.2
1811	2743	17,589	4083	24,415	8.7
1819	2769	15,341	3757	21,867	7.8
1823	2571	17,327	4189	24,087	7.2
1833	2456	15,448	4046	21,950	6.7
1839	2335	17,578	4057	23,970	7.0
Swaledale					
1795	1637	1895	638	4170	5.0
1803	2182	9451	2285	13,918	7.4
1811	3011	10,950	2542	16,503	9.0
1819	2844	9577	2345	14,766	8.0
1823	2666	10,844	2622	16,132	7.4
1833	2335	9781	2562	14,678	6.9
1839	2248	11,142	2571	15,961	7.2

¹ To the nearest £.

² Liquid milk.

³ Total value.

⁴ Product per cow and heifer in milk or in calf as estimated from the tithe returns.

Note: the value is calculated on the price (or estimated price) received by the farmers as follows: liquid milk, 1795, Wensleydale = 4d per gallon, Swaledale = 6d; 1803, W/d = 7d, S/d = 8d; 1811, W/d = 8d, S/d = 9d; 1819, W/d = 7d, S/d = 8d; 1823, W/d = 6 1/2d, S/d = 7 1/2d; 1833, W/d = 6d, S/d = 7d; 1839, W/d = 6d, S/d = 7d; cheese, W/d & S/d, 1795 = 3 1/2d per pound; 1803 = 6 1/2d; 1811 = 8d; 1819 = 7d, 1823 = 6 1/2d; 1833 = 6d; 1839 = 6 1/2d; butter, W/d & S/d, 1795 = 8 1/4d; 1803 = 11d; 1811 = 13d; 1819 = 12d; 1823 = 11d; 1833 = 11d; 1839 = 10 1/2d.

Source: see Table 10.1 and Appendices VI-IX.

peaked at £24,415 and £16,503 respectively. Subsequent variations in output and prices were reflected in fluctuations in receipts from dairy produce which ended this period, in 1839 slightly down on the 1811 peak.

In terms of the value of dairy produce per cow, Swaledale consistently achieved a higher return than Wensleydale. Liquid milk was more remunerative than cheese or butter and in Swaledale the milk sales to the substantial non-farming population resulted in proportionately less of the milk being converted into cheese and butter than in Wensleydale.

Further, due to this demand, the price of liquid milk was higher in Swaledale than in Wensleydale. It would appear that little had changed between 1771 when Arthur Young reported the product of Swaledale and Wensleydale cows as £5 10s and £4 12s 6d respectively, and 1795 when the product per cow was £5 and £4 6s respectively.³¹ The highest return of dairy product per cow for both Wensleydale and Swaledale in this period was in 1811 when agricultural prices nationally were near their peak.³² Thereafter the product per cow fell to a low point in 1833 before recovering to 1839 as the two dales emerged from the effects of the 1830s depression.

For the later nineteenth century, estimates of output can be based on the more reliable MAFF returns (see Table 10.5). As with the earlier period, changes in milk output mirror the size of the dairy herd. The reasons for the changes become apparent when the outputs of the different dairy products are examined in detail.

Local milk consumption for the period 1874-7 to 1914-7 has been estimated and is shown in Table 10.6. In Wensleydale the consumption of milk rose with fluctuations

over this period as the moderate fall in population was offset by a rise in per capita consumption resulting in an overall increase in liquid milk consumption of 15.9 per cent. In Swaledale the steep fall in population far outweighed increased consumption per person and liquid milk consumption fell by 33.1 per cent.

TABLE 10.5

TOTAL MILK OUTPUT IN WENSLEYDALE AND SWALEDALE,
1874-7 to 1914-7.¹

	1874-7	1884-7	1894-7	1904-7	1914-7
W/d					
C&H ²	4330	4653	4410	4575	5120
Total ³	1,732,000	1,861,200	1,764,000	1,830,000	2,048,000
S/d					
C&H ²	1893	1794	1711	1746	1781
Total ³	757,200	717,600	684,400	698,400	712,400

¹ Average of four years in each decade.

² Cows and heifers in milk or in calf.

³ Total milk produced. Based on an average yield of 400 gallons per cow or heifer in milk or in calf. See Appendix VII for details of calculation.

Source: PRO MAF 68/382...2833, MAFF Parish Summaries of June Returns, Wensleydale and Swaledale, 1874-7 to 1914-7.

The Wensleydale railway was opened in 1878 but it appears that little whole milk was exported prior to the 1890s and even during that decade export was limited (see Chapter 14).³³ Local farmers in the 1870s and early 1880s were still receiving high receipts for their traditional dairy output and although the liquid milk trade was

expanding rapidly elsewhere, the dales' farmers saw no immediate need to take advantage of that trade. Milk exports from Wensleydale for the period 1894-7 to 1914-7 have been calculated and added to local milk consumption in order to calculate total liquid milk output (see Table 10.7).

TABLE 10.6

LIQUID MILK CONSUMPTION IN WENSLEYDALE AND SWALEDALE,
1874-7 TO 1914-7.¹

	1874-7	1884-7	1894-7	1904-7	1914-7
W/d					
Popn. ²	8176	8204	7079	6506	6320
Cons. ³	186,515	224,585	209,937	207,785	216,263
S/d					
Popn. ²	5370	4717	3217	2520	2396
Cons. ³	122,503	129,128	95,404	80,483	81,988

¹ Average of four years in each decade.

² Population at the decennial censuses, 1871, 1881, 1891, 1901, 1911.

³ Total annual consumption in Wensleydale and Swaledale, in gallons. See Appendix VIII for details of calculation.

Source: PRO MAF 68/382..2833; op cit; NYCRO, PP19/23,24,30,34,37, *Census Enumeration Abstract for the County of York, 1871-1911.*

The growth of liquid milk exports at the end of the nineteenth and beginning of the twentieth centuries resulted in an increasingly large proportion of the total milk production of Wensleydale being kept as liquid milk. By 1914-7 over 55 per cent of milk produced in Wensleydale was marketed in its liquid form.

TABLE 10.7

WENSLEYDALE LIQUID MILK OUTPUT FOR HOME CONSUMPTION
AND FOR EXPORT, 1890s TO 1910s.¹

	1890s	1900s	1910s
Local	209,937	207,785	216,263
Export	25,000 ²	550,000 ³	920,000 ⁴
Total	234,937	757,785	1,136,263

¹ In gallons.

² A 'rule of thumb' estimate for the mid-1890s of 22,000 gallons on the NER and 3,000 gallons on the Midland line (see Chapter 14 for details of the railway companies). The first extant record of the export of milk from Wensleydale is for 1894. A report stated that 27,000 gallons of milk were exported from Wensleydale on the NER line in 1899 and that milk exports had been rising rapidly since 1894.

³ 502,209 gallons were exported on the NER line in 1906, (information derived from PRO RAIL 527/1273), and 48,000 gallons on the Midland line. The Midland output has been calculated as a proportion of the NER output.

⁴ 862,000 gallons exported on the NER line in 1915 and 60,000 gallons on the Midland line. This is calculated from the Leyburn output and projected to the other stations on the Wensleydale line.

Source: see Table 10.6; PRO RAIL 527/290, NER Minutes and Reports, 1905; PRO RAIL 527/1273, Report on the WPMS Depot, 1908; Pearson MSS, NER Leyburn Station Annual Traffic Returns, 1915.

All milk surplus to local consumption in Swaledale and to local consumption and export in Wensleydale was made into butter and cheese (see Appendix IX for calculations of proportion and quantity of milk used). The estimated quantities of cheese and butter produced from the available milk are shown in Table 10.8. Predictably, as liquid milk output increased in Wensleydale, cheese and butter production fell. Cheese and butter production reached a peak in Wensleydale in 1884-7 and then declined steadily

for the rest of the period as farmers transferred into liquid milk sales. Nevertheless, even in the 1890s, before the export market for liquid milk had fully developed, the market for 'tip-top Wensleydale' cheese was reported to be flourishing.³⁴ In Swaledale there was a decline in both products to a low point in 1884-7 but thereafter there was a steady recovery until by 1914-7 output had almost returned to its 1874-7 level. This suggests that although national cheese and butter output declined steeply in the last quarter of the nineteenth century the decline was most apparent in those areas where there was another outlet for the milk produced.³⁵

TABLE 10.8

QUANTITIES OF CHEESE¹ AND BUTTER² PRODUCED IN WENSLEYDALE
AND SWALEDALE, 1874-7 TO 1914-7.

	1874-7	1884-7	1894-7	1904-7	1914-7
W/d					
Cheese	1,081,840	1,145,631	1,070,344	750,551	638,216
Butter	154,548	163,661	152,906	107,221	91,174
S/d					
Cheese	444,288	411,930	412,297	432,542	441,288
Butter	63,470	58,847	58,900	61,792	63,041

¹ In pounds, one gallon of milk to one pound of cheese.

² In pounds, three gallons of milk to one pound of butter.

Source: based on an estimate of the proportion of milk used in butter and cheese output, see Appendix IX.

The value of receipts from dairy products and the value of the product per cow for the period 1874-7 to 1914-7 has been estimated and the results presented in Table 10.9.

TABLE 10.9

VALUE OF LIQUID MILK, CHEESE AND BUTTER IN WENSLEYDALE AND
SWALEDALE, 1874-7 TO 1914-7.¹

	1874-7	1884-7	1894-7	1904-7	1914-7
W/d					
Milk ²	6217	7018	7831	22,102	35,508
Cheese	39,442	38,188	28,988	21,891	17,285
Butter	10,625	9547	6371	4914	4559
Value ³	56,284	54,753	43,190	48,907	57,352
Product ⁴	13.0	11.8	9.8	10.7	11.2
S/d					
Milk ²	4083	4035	3180	2347	2562
Cheese	16,198	13,731	11,166	12,616	11,952
Buttter	4364	3433	2454	2832	3152
Value ³	24,645	21,199	16,800	17,795	17,666
Product ⁴	13.0	11.8	9.8	10.2	9.9

¹ Average of four years in each decade, value to nearest £.

² Liquid milk.

³ Total value.

⁴ Product per cow and heifer in milk or in calf.

Note: the value is calculated on the wholesale price from farmers as follows: liquid milk, 1874-7 = 8d per gallon, 1884-7 = 7 1/2d, 1894-7 = 8d, 1904-7 = 7d, 1914-7 = 7 1/2d; cheese, 1874-7 = 8 3/4d per pound, 1884-7 = 8d, 1894-7 = 6 1/2d, 1904-7 = 7d, 1914-7 = 6 1/2d; butter, 1874-7 = 16 1/2d per pound, 1884-7 = 14d, 1894-7 = 10d, 1904-7 = 11d, 1914-7 = 12d.

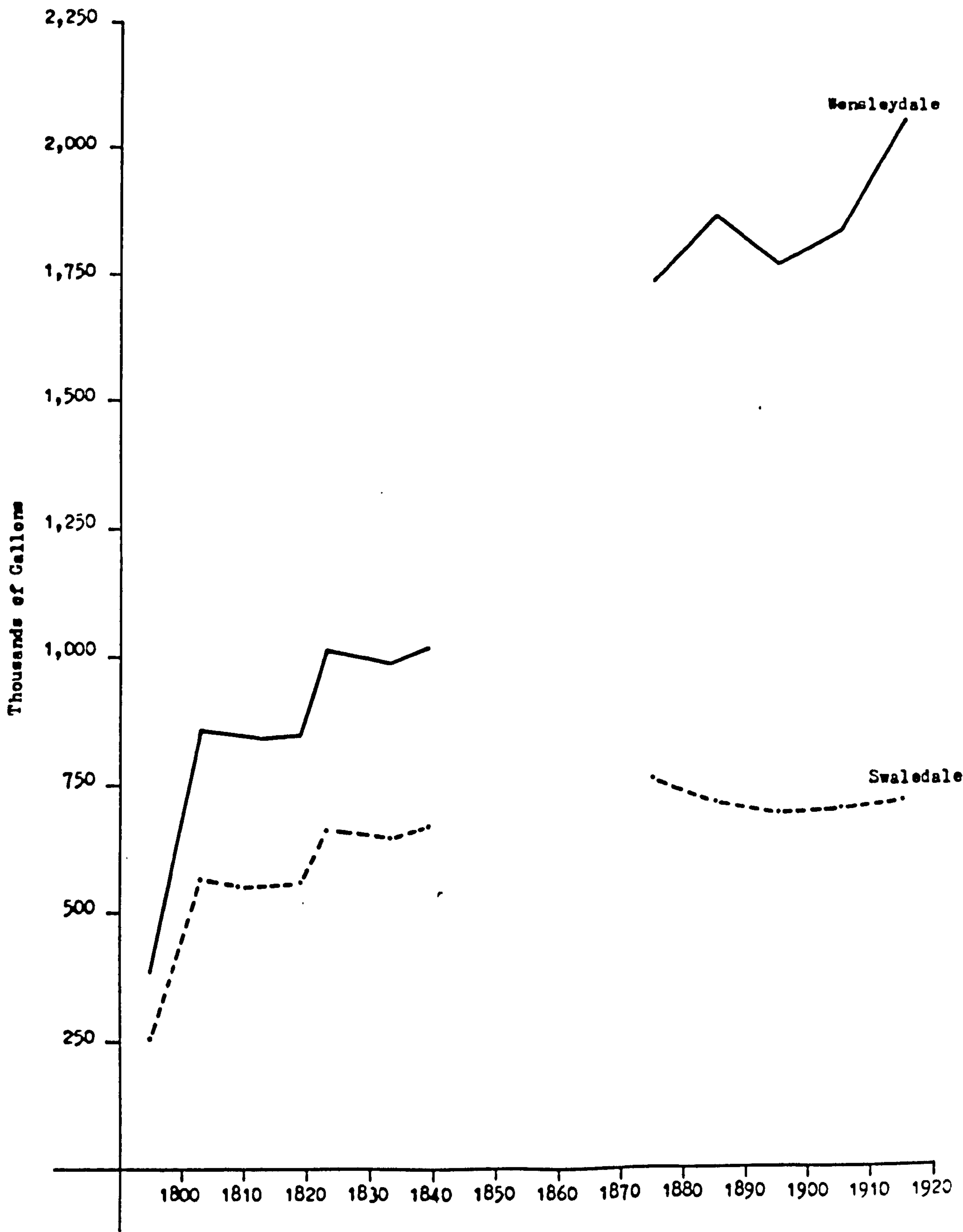
Source: see Appendix VI.

Although based on certain assumptions, these values provide a reasonably close indication of the magnitude of the returns obtained by dales' farmers from dairy produce. The Table shows a considerable fall in income in both dales in the depression of the 1890s. This was due to the fact that despite increased liquid milk output in Wensleydale there was an overall fall in dairy production in both dales. Also, although the price of liquid milk was

slightly higher in the mid-1890s than in the mid-1880s, the price of butter and cheese had fallen substantially. Whereas in Swaledale receipts from dairy produce recovered only slightly after the 1890s, in Wensleydale, due to the rapid growth in liquid milk sales, receipts recovered completely and by 1914-7 exceeded their 1874-7 level. The trend in the total value of the product per cow is comparable to the trend in the value of dairy products. The benefits, both monetary and in terms of convenience, to be derived from liquid milk provided the 'pull' that led to an expansion of the dairy herd by 15.6 per cent in upper Wensleydale and 30.5 per cent in lower Wensleydale between 1874-7 and 1914-7. The converse was true in Swaledale where the dairy herd declined by 5.9 per cent over the same period (see Table 9.5).

The data available for the early and later parts of the period allow some conclusions to be drawn about dairy output in the mid-nineteenth century. Figure 10.2 suggests that milk production in Wensleydale rose steeply, although not always smoothly, throughout the period. In Swaledale, however, it would appear that a peak in milk production occurred between 1839 and 1874-7 as it is clear from the graph that a downward trend had been established sometime prior to 1874-7. Narrative sources and the earlier, less reliable, MAFF returns point to a probable nineteenth-century peak occurring for both Wensleydale and Swaledale in the late 1860s or early 1870s.³⁶ After a fall in output Wensleydale recovered to reach a peak for the

TOTAL MILK PRODUCED IN WENSLEYDALE AND SWALEDALE, 1795-1917.



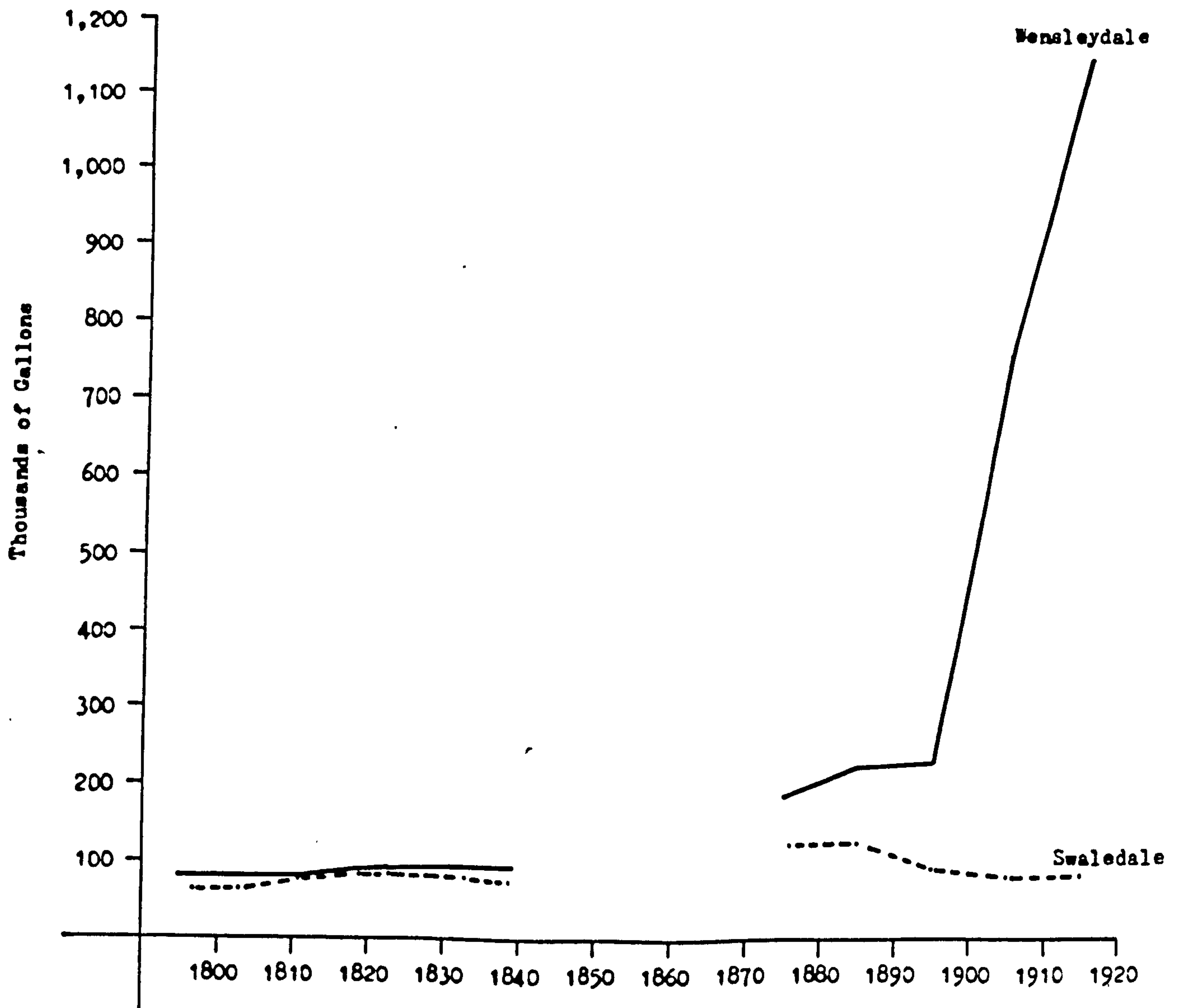
Source: see text.

whole period in the early twentieth century while Swaledale never fully recovered from the late nineteenth-century fall.

The production of liquid milk (see Figure 10.3) in Wensleydale and Swaledale was almost identical in the early part of the century. In Swaledale production may have reached a peak during the mid-nineteenth century although it is equally possible that the peak occurred in the 1880s coincident with a rise in living standards and immediately prior to the final demise of the lead industry and the deepening depression in the 1890s. The impact which the export of milk from Wensleydale had on the output of liquid milk in that dale is abundantly demonstrated by the way in which liquid milk production soared at the end of the century.

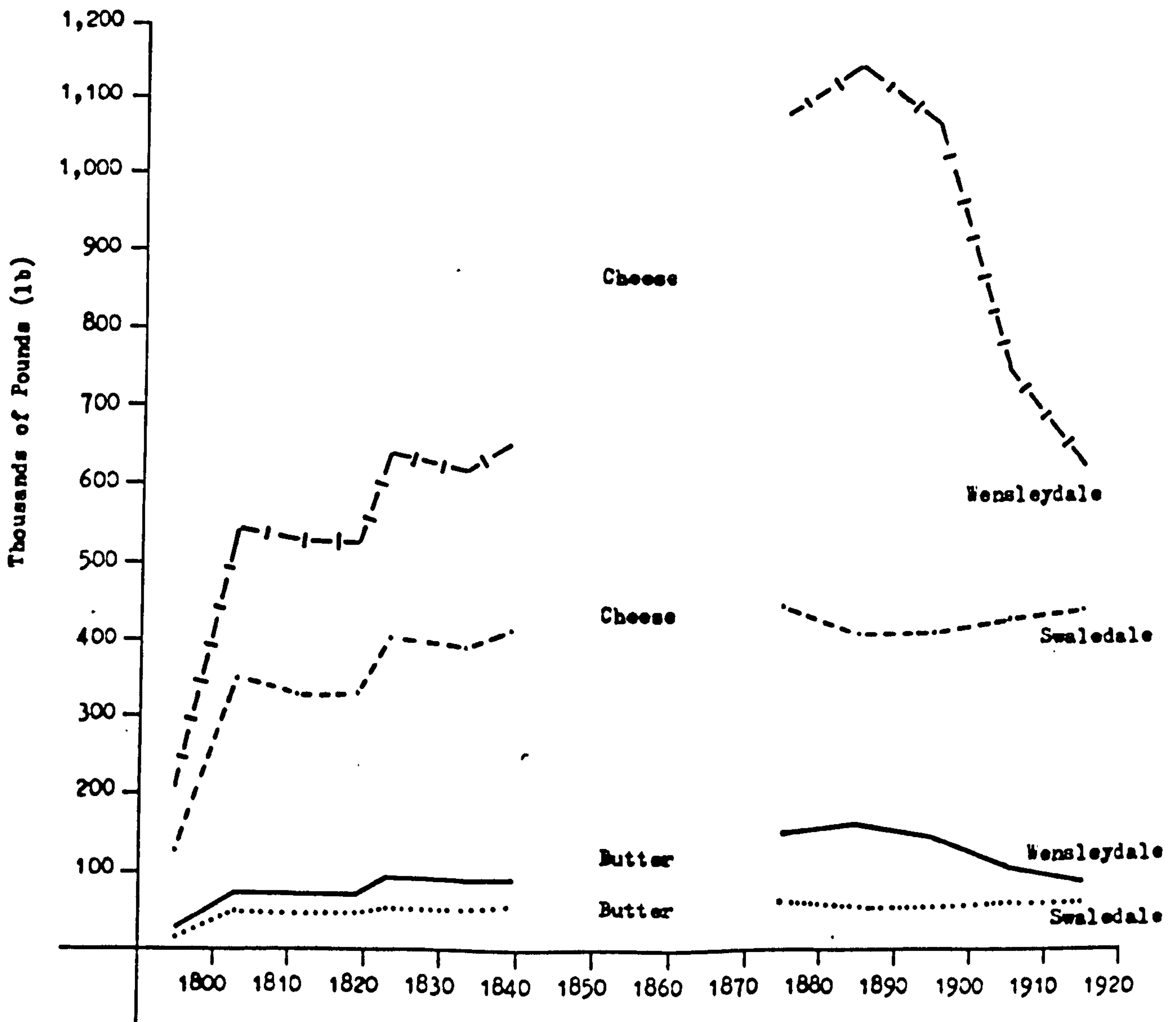
The production of butter and cheese in the two dales in the period 1795 to 1914-7 is shown in Figure 10.4. Cheese and butter output in Wensleydale rose over the mid-century period reaching a peak in the 1880s. Wensleydale farmers moved rapidly out of cheese and butter production as the railway enabled them to increase liquid milk exports. As with milk production, the output of cheese and butter in Swaledale probably reached a peak in the mid-nineteenth century, declining to a lower but relatively stable level in the latter part of the period. In the absence of a railway west of Richmond, Swaledale was less able to take advantage of the liquid milk trade.³⁷ Nevertheless, all dairy farmers were relatively more prosperous at this time

LIQUID MILK PRODUCTION IN WENSLEYDALE AND SWALEDALE,
1795-1917.



Source: see text.

BUTTER AND CHEESE PRODUCTION IN WENSLEYDALE AND SWALEDALE,
1795-1917.



Source: see text.

and as Assistant Commissioner Hunter Pringle noted:

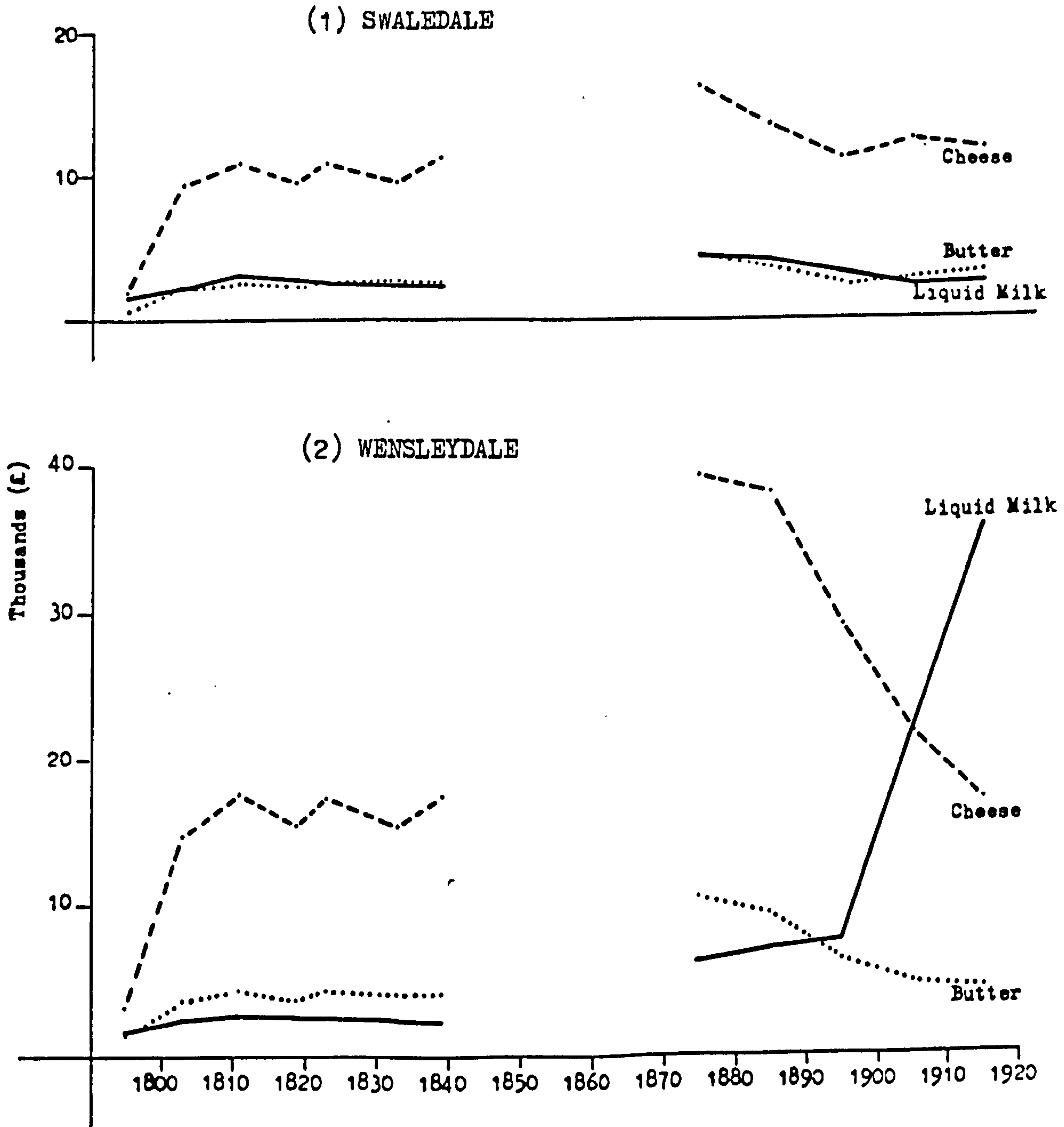
Dairy farmers, expert and progressive cheese makers, ... have done best, and among them depression, if it exists at all, is of a very mild type.³⁸

The fortunes of the dairy industry in Wensleydale and Swaledale support the revisionist view that the late nineteenth-century depression was not uniformly severe. It affected both different regions and different sectors of livestock farming to different degrees.³⁹

Dairy produce receipts for Wensleydale and Swaledale in the nineteenth century are presented in Figure 10.5. The fact that dairy produce receipts are a function of two factors, output and price, is clearly shown in the way receipts for the different products follow markedly different paths. The pattern is similar in both dales in the early part of the century and there are indications that total receipts from all dairy produce in the two dales, with the exception of liquid milk in Wensleydale, may have reached a peak during the mid-nineteenth century.⁴⁰ In the latter part of the period the positive move into liquid milk output in Wensleydale caused the pattern of receipts in Wensleydale and Swaledale to diverge sharply.

As noted earlier, between the 1860s and 1914 national production of cheese and butter declined by 40 per cent while liquid milk production quadrupled over the same

DAIRY PRODUCE RECEIPTS AT CURRENT PRICES, WENSLEYDALE AND SWALEDALE, 1795-1917.

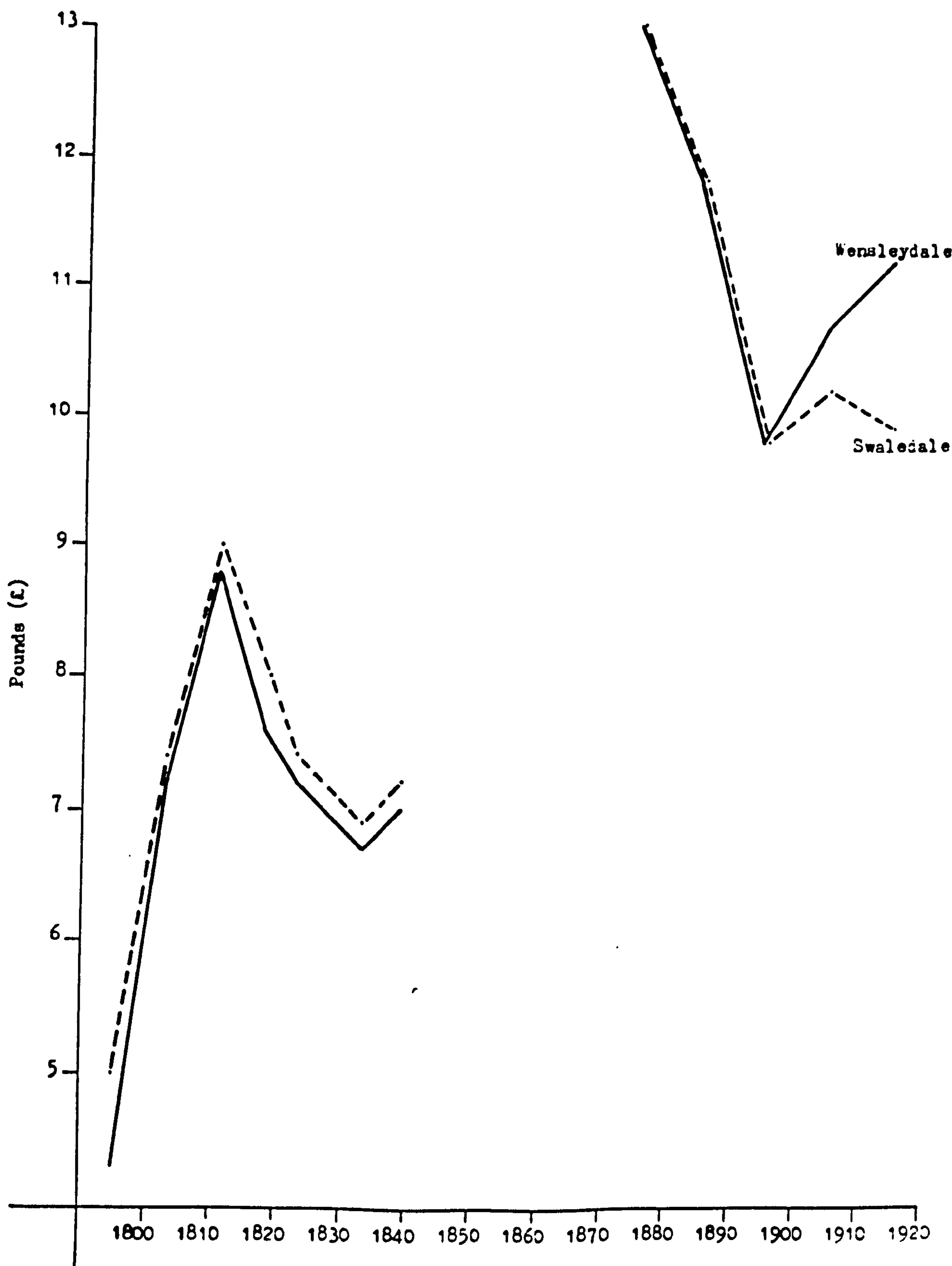


Source: see text.

period.⁴¹ Wensleydale output followed the national pattern and cheese and butter production each suffered a decline of about 41 per cent between 1874-7 and 1914-7 while liquid milk output increased sixfold over the same period. In Swaledale, which did not have access to an urban liquid milk market, cheese and butter output declined over the same period by less than 1 per cent while liquid milk output declined by a third.

The full significance of the buoyant returns for dairying can be appreciated when the total product per cow for Wensleydale and Swaledale is examined for the whole period 1795 to 1914-7 (see Figure 10.6). The peak of produce per cow achieved in both dales in 1811 during the French wars was not sustained, at least prior to 1839, and output slumped to a low point in the mid-1830s. It is possible, however, that produce per cow reached a peak in the unrecorded years of the 1860s when, in line with the rest of the country, prices were high.⁴² The impact of the depression is graphically demonstrated with a decline in the value of produce per cow to a late nineteenth-century low point in the mid-1890s. It is not surprising that Wensleydale farmers, who had been relatively unresponsive to the growing demand for liquid milk in the previous decade, should, with plummeting cheese and butter prices in the 1890s, have made structural changes in their dairy output in order to withstand the depression.⁴³ Swaledale was in a less fortunate position in not being able to take advantage of the liquid milk market, a factor which is

VALUE OF PRODUCE PER COW, WENSLEYDALE AND SWALEDALE,
1795-1917.



Source: see text.

reflected in the continuing low return of produce per cow. For most of the nineteenth century Swaledale enjoyed a marginally higher product per cow than Wensleydale but by the early twentieth century the situation was reversed. In both cases the difference was due to liquid milk sales providing better returns than the other dairy products.

IV

As was shown in Chapter 9, beef cattle played an important part in the agricultural economy of Wensleydale and Swaledale. Contemporary sources and such intermittent returns as are available for local markets suggest that, overall, cattle prices in the two dales increased during the nineteenth century. Predictably, this increase followed the national trend.⁴⁴ The evidence suggests that cattle prices rose rapidly in Wensleydale and Swaledale at the end of the eighteenth century and continued upward, with only slight fluctuations, until 1820.⁴⁵ Shortly after, however, depression struck and prices fell to a low point in the early 1820s. There was a recovery in the mid-1820s but another downturn occurred in the early 1830s when the two dales were again in the depths of a depression.⁴⁶ After some improvement, prices may have slipped in the 1850s but then increased, with further fluctuations in the 1870s, to reach a peak at the same time as national prices in the early 1880s.⁴⁷ From 1884 cattle prices in the two dales generally fell and continued to

decline in the deepening depression of the 1890s. Only at the end of the nineteenth century did cattle prices rise again.⁴⁶

Conditions for beef producers, while being relatively good for most of the period, were depressed in the late nineteenth century. As Assistant Commissioner Hunter Pringle, writing about Yorkshire in the 1890s, commented:

Graziers who buy lean and sell fat, are defeated by the high price of stores in contrast to the low price of fats. Foreign importation of beef and mutton and glutted markets depress their receipts, while the scarcity of stores increases their expenditure.⁴⁷

The state of the beef market acted as a push factor causing Wensleydale farmers to move more fully into liquid milk which, particularly in the 1890s, was considerably more remunerative. As Glenn Hueckel and other historians have commented, farmers were responsive to market forces.⁴⁸ Local farmers were no exception.

Information on local prices is not adequate to calculate receipts to farmers from sales of beef cattle in the three areas. However, the annual average price of 1 to 2-year-old (stirks) and 2-year-old shorthorns in Hawick are extant for 1859 to 1909.⁴⁹ Hawick was the market centre for Teviotdale in the Southern Uplands, a livestock farming area not dissimilar to the dales and, therefore, the Hawick prices have been used to estimate receipts to dales' farmers from cattle sales in 1895 and 1905 (see Table

TABLE 10.10

RECEIPTS TO FARMERS IN UPPER AND LOWER WENSLEYDALE AND
SWALEDALE FROM THE SALE OF CATTLE, 1895 AND 1905.¹

	1895		1905	
	Nos	Total Receipts £	Nos	Total Receipts £
U W/d				
Stirks	2010	17,387	2165	16,779
2 yr.old	1219	15,542	1351	15,199
Total	3229	32,929	3516	31,978
Pr. per cow		10.2		9.1
L W/d				
Stirks	557	4818	640	4960
2 yr.old	502	6401	473	5321
Total	1059	11,219	1113	10,281
Pr. per cow		10.6		9.2
S/d				
Stirks	830	7180	975	7556
2 yr.old	301	3838	325	3656
Total	1131	11,018	1300	11,212
Pr. per cow		9.7		8.6

¹ Shorthorn cattle, 1-2 year old (stirks), and 2 year old. The annual average price of stirks in 1895 was £8 12s 6d (£8.65) and in 1905 was £7 15s (£7.75) and the price of 2 year olds in 1895 was £12 15s (£12.75) and in 1905 was £11 5s (£11.25).

Source: PRO MAF 68/1579,2149, MAFF Parish Summaries of June Returns, upper and lower Wensleydale and Swaledale, 1895,1905; Roberts MS, *Resume of the Discussions of the Teviotdale Farmers Club, 1859-1909*, Hawick, 1909.

Following the national fall in the price of cattle, between 1895 and 1905 the price of stirks and two-year-old cattle declined by 10.4 per cent and 11.8 per cent respectively.⁵³ The fall in the price of cattle is reflected in a fall in produce per cow in all three areas over this period. Despite changes in the total number of

cattle and in the proportions of stirks and two-year-old cattle, lower Wensleydale had the highest produce per cow in both years and Swaledale the lowest. The fact that lower Wensleydale was most suited and Swaledale least suited to the fattening of cattle, indicated by the proportions of two-year-old cattle and stirks in the two areas, accounts for the disparity in product per cow.

V

Although beef remained the leading meat for most of the period, mutton and lamb producers also benefited from the expansion of demand as the population increased and as the standard of living improved.⁵⁴ Farmers responded by both increasing the numbers of sheep and by bringing sheep to fat more quickly, particularly by improved breeding.⁵⁵ The concentrated efforts to increase both quantity and quality of meat and to breed a quicker-fattening animal resulted in more productive half- and three-quarters-bred lambs as the century progressed.⁵⁶ The increased demand for mutton and lamb resulted in higher prices and this provided the incentive to farmers to improve their output. Prices for sheep and lambs had been rising intermittently for most of the century but during the 1870s and early 1880s they were maintained at a higher level than previously and reached a peak in 1883.⁵⁷ Sheep and lamb prices then declined but did not fall substantially until the early 1890s.⁵⁸ While demand generally pushed prices upward in the nineteenth century, the vagaries of weather and disease influenced the

farmers' ability to supply the market, resulting in short term fluctuations in the price of sheep and lambs. Increasingly in the latter part of the century, prices were affected by imports.⁵⁷

As with cattle, the price of sheep and lambs in the two dales is extremely difficult to determine. Although mutton was the predominant meat produced from sheep in the nineteenth century (lamb was generally supplied only to the more affluent households), lambs are more easily distinguished in the statistics and, consequently, their price calculated.⁵⁸ However, even with lambs, breed and age are not always clear in local extant sources and only those sources which distinguish the type of lamb have been used.⁵¹

From the data available, it appears that while prices fluctuated markedly from year to year, prices for local black-faced lambs more than doubled between 1790 and 1824, rising from 6s to 12s 4d and increasing again in 1830 to 13s 4d.⁵² Later in the nineteenth century half-bred lambs were popular and fetched significantly higher prices than pure black-faced lambs. The average price of local, good quality, half-bred lambs reached 22s in 1874, declined to an average of 19s 6d in 1884, and continued downwards to 15s in 1887 and 12s in 1892 before recovering in the early twentieth century and increasing to 23s in 1914.⁵³ As with the national trend, these short-term movements in price were often the result of weather and disease.⁵⁴ The total receipts to farmers in Wensleydale and Swaledale from

sales of black-faced and, later in the century, half-bred lambs have been estimated and are presented in Table 10.11.

TABLE 10.11

LAMBS SOLD AND TOTAL RECEIPTS TO FARMERS IN WENSLEYDALE AND SWALEDALE, 1795-1915.

	Wensleydale		Swaledale	
	Numbers	Receipts £	Numbers	Receipts £
1795	6903	2071	6803	2041
1823	5966	3679	5534	3413
1833	6563	4375	6088	4059
1875	19,079	20,987	10,283	11,311
1885	18,793	18,323	11,473	11,186
1895	20,986	20,461	12,234	11,928
1905	23,378	25,131	13,105	14,088
1915	24,814	28,536	13,612	15,654

Note: for details of calculation and prices see Appendix X.

Source: see Tables 10.1; PRO MAF 68/439,1009,1579,2149,2719, MAFF Parish Summaries of June Returns, 1875-1915, upper and lower Wensleydale and Swaledale.

While Table 10.11, at best, provides only an indication of receipts to local farmers from lamb sales, it does point to the major trends.⁴⁵ Between 1795 and 1833 receipts in Wensleydale and Swaledale were comparable and were rising rapidly. Receipts continued to rise in both dales in the mid-nineteenth century and by the 1870s had risen considerably above the 1833 level. However, by 1875, due to increased output of lambs, Wensleydale farmers were obtaining much higher receipts from lamb sales than Swaledale farmers. Although there was a decline in

receipts in both dales in the 1880s, mainly as a result of a fall in the price of lamb from the local 1875 peak, in the 1890s, even in the depths of depression, there was an increase in total receipts as lamb output increased. As noted elsewhere, farmers probably switched to sales of lamb as the price of wool declined from the 1870s.⁶⁶ Between 1875 and 1915 receipts from lamb rose by 38.4 per cent in Swaledale slightly more than the 36.0 per cent increase in Wensleydale. This probably reflects the greater diversity of agricultural opportunity enjoyed by Wensleydale farmers rather than suggesting that the circumstances for lamb production in Swaledale were relatively more favourable at this time.

VI

A combination of factors including the growing population, the rise in per capita income, and technical innovation in the production of wool textiles ensured that demand for British wool was high throughout the first half of the nineteenth century. From the 1860s the high level of imports of cheap foreign wool resulted in a fall in demand for British wool.⁶⁷

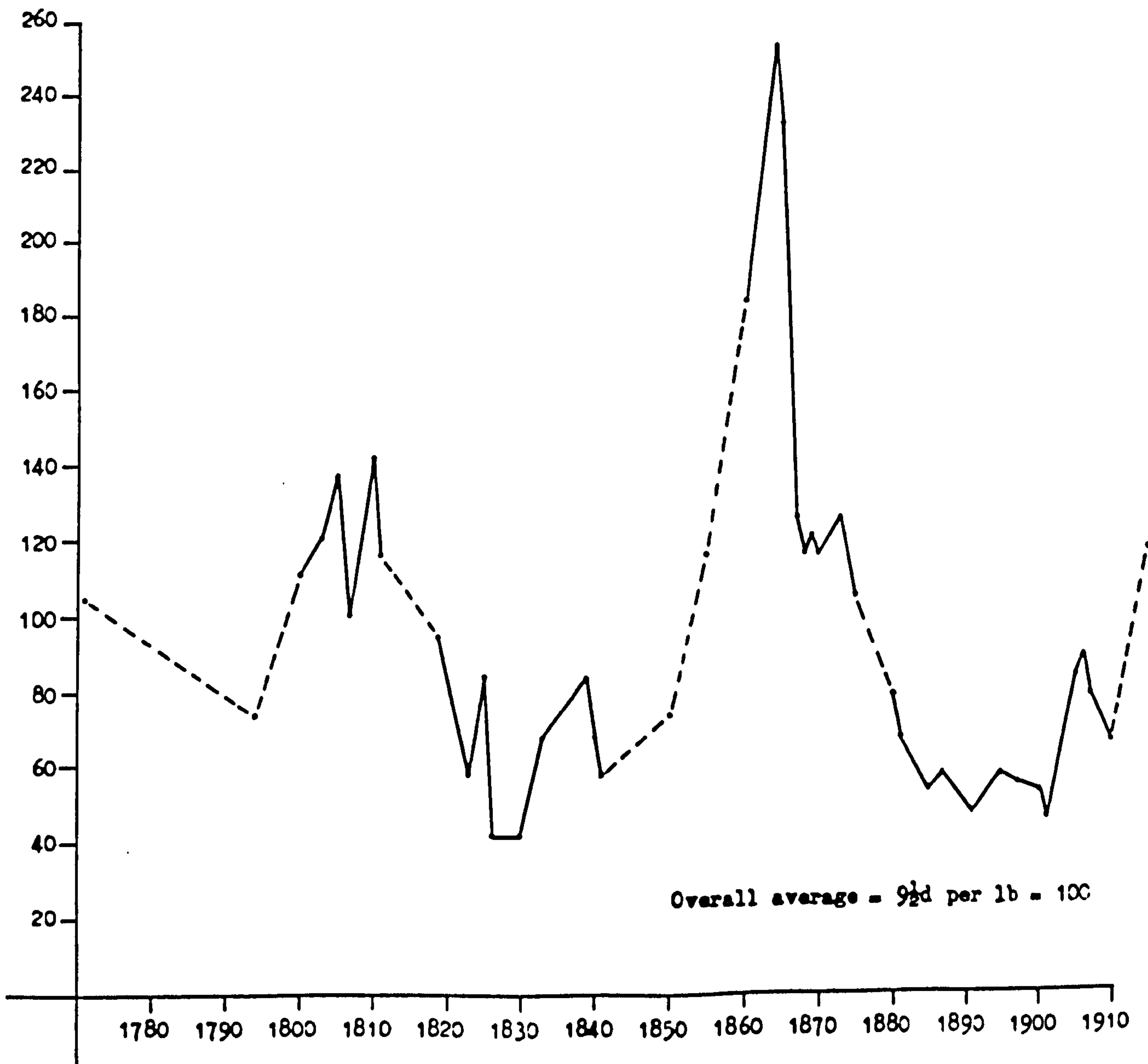
Wool prices nationally were high until 1819 when the price almost halved.⁶⁸ Apart from brief trend reversals, the price of wool continued to move downwards in subsequent years reaching low points in the late 1820s and again in the late 1840s.⁶⁹ Thereafter there was a recovery and the price of wool nationally reached a peak in the mid-1860s.

As wool imports increased from the 1860s, there was a steep fall in the wool price towards the end of that decade followed by a brief, partial recovery in the 1870s.⁷⁰ From the mid-1870s the price of wool fell and remained low until the early twentieth century when there was a recovery.⁷¹

It has been possible to construct a wool price index for Wensleydale and Swaledale between 1795 and 1915 from intermittent extant local data (see Figure 10.7). As nationally, the wool price fluctuated markedly during the French wars but it appears that a major decline in local prices was established in 1811, a little earlier than the national price fall. From the nadir in the late 1820s depression wool prices picked up and climbed with fluctuations to a peak in the mid-1860s. As was the case nationally, prices then fell rapidly, interrupted only by minor, short-lived recoveries, to a low point in the early twentieth century which almost equalled that of the 1820s. In common with most other agricultural commodities there was then a revival and prices increased, with some fluctuation, to 1915.

The total quantity of wool produced in Wensleydale and Swaledale and receipts from sales of this wool have been estimated for the period 1795-1839 and are presented in Table 10.12.⁷² Although wool output declined after 1795 the price increased dramatically during the Napoleonic wars and wool receipts reached a recorded peak in both dales in 1803 when the price was 11 1/2d per pound. Thereafter, receipts declined to a low point in 1823, when the local

WOOL PRICE INDEX (WENSLEYDALE AND SWALEDALE), 1771-1917.



Source: see text.

price was 6d per pound, and probably remained depressed for the rest of that decade. The price of wool then rose slightly to reach 6 1/2d per pound in 1833. Due to increased output and the slight rise in price both Wensleydale and Swaledale recorded an increase in receipts in 1833, which was maintained in Wensleydale through to 1839 when the price of wool was 8d per pound.⁷³ However, there was a slight decline in receipts in Swaledale between 1833 and 1839 due to a more steeply falling output.

TABLE 10.12

WOOL OUTPUT AND WOOL RECEIPTS IN WENSLEYDALE AND SWALEDALE,
1795-1839.

	Wensleydale		Swaledale	
	Output lbs	Receipts £	Output lbs	Receipts £
1795	129,856	2705	96,372	2008
1803	108,192	5184	82,420	3949
1811	98,936	4535	84,896	3891
1819	94,180	3532	80,704	3026
1823	91,492	2287	78,400	1960
1833	100,640	2726	86,244	2336
1839	93,328	3111	69,692	2323

Note: see Appendices V and XI for details of calculation and price of wool.

Source: see Table 10.1.

The output of wool and receipts from its sale have been estimated from the more reliable extant data for the latter part of the period and are shown in Table 10.13. By the 1870s the price of the wool of the Swaledale sheep was 10d per pound and output had increased substantially in both

dales. However, by 1885 wool prices had halved and, as the size of the dales' flocks had fallen, receipts fell catastrophically.⁷⁴ By 1895, as the number of sheep and the price of wool recovered, dales' farmers enjoyed increased wool receipts at a time when receipts from sales of most other commodities were declining. However, the situation was only marginally improved and a report in 1895 noted that the wool price at between 5d and 6d a pound was much lower than in former years.⁷⁵ Further, in bad weather, such as that experienced in 1894/5, the expense of purchasing extra fodder for sheep dramatically lowered profits from both wool and sheep sales.⁷⁶

TABLE 10.13

WOOL OUTPUT AND WOOL RECEIPTS IN WENSLEYDALE AND SWALEDALE,
1875-1915¹.

	Wensleydale		Swaledale	
	Output lbs	Receipts £	Output lbs	Receipts £
1875	150,132	6835	94,636	3943
1885	138,293	3193	89,864	1872
1895	146,635	3626	96,296	2207
1905	156,423	5457	100,104	3337
1915	164,169	7811	105,764	4848

¹ See Appendix XI for details of calculation.

Source: see Table 10.11.

The depressed prices prevailing in the 1890s were a long way from the inflated prices obtained in the heyday of wool production in the 1860s. One farmer living on the Yorkshire Wolds calculated in 1895 that receipts from the

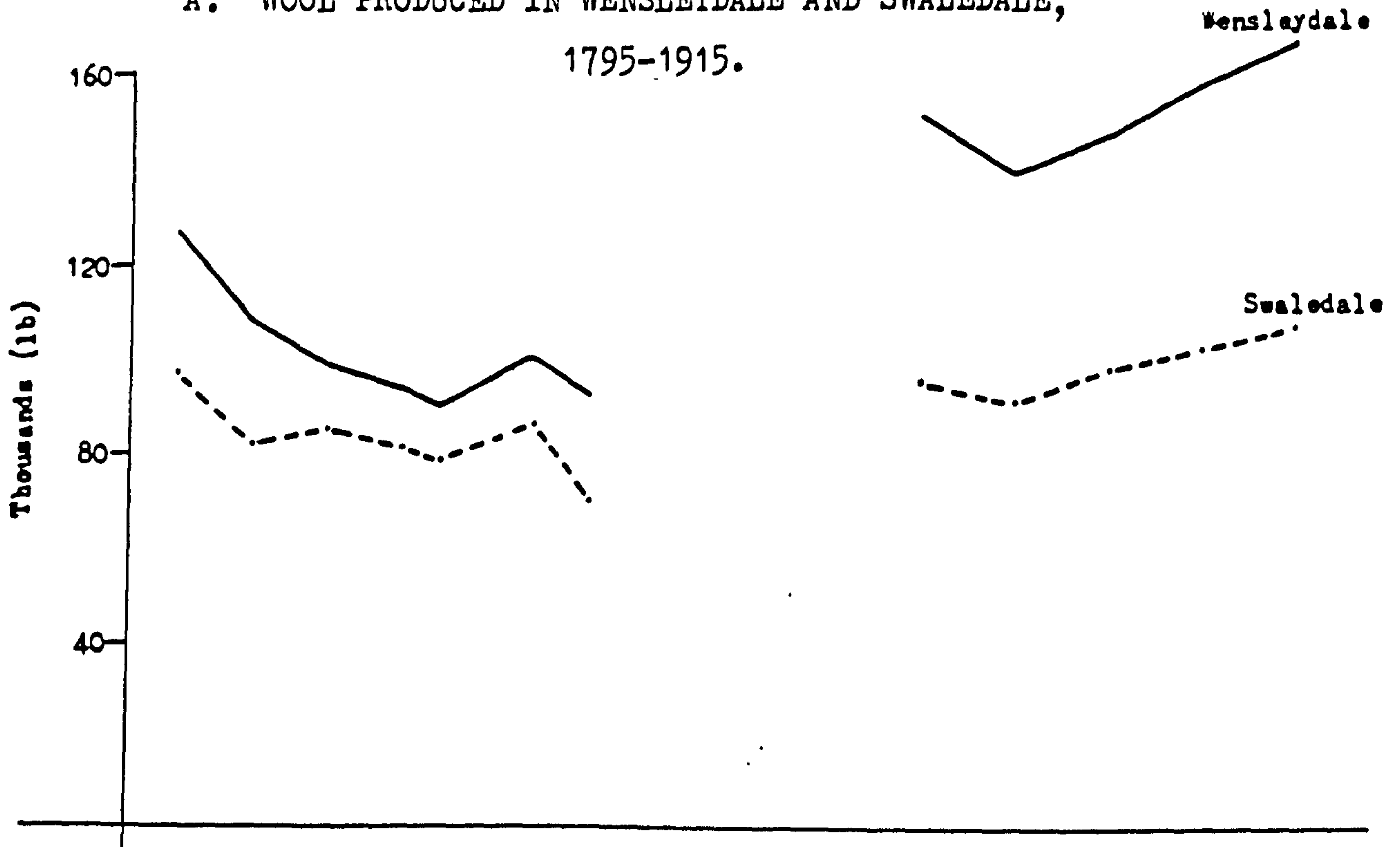
sale of his wool had fallen to less than a third (31.5 per cent) of their 1864 level.⁷⁷ If a fall of this order is applied over the same period to Wensleydale and Swaledale and if wool output in the two dales in 1864 is assumed to have been the same as in 1895, it is possible to estimate 1864 wool receipts for Wensleydale and Swaledale at £12,286 and £7006 respectively.

Figures 10.8a and 10.8b show wool output and receipts from wool sales for the whole period 1795 to 1915. Figure 10.8a shows that wool production in the two dales, which fell in the early part of the century, followed the national pattern for the mid-nineteenth century and probably peaked in the 1860s. In the latter part of the century the output of wool in Wensleydale was significantly higher than in Swaledale due both to an increase in the number of sheep and to the greater emphasis placed on the heavier-stapled Wensleydale breed.

Figure 10.8b demonstrates that both dales suffered heavy falls in wool receipts from the early nineteenth century and, although there was a recovery to 1839, receipts in that year were substantially lower than the high point reached in 1803. When the, admittedly speculative, estimate of wool receipts for 1864 (see above) is considered in conjunction with the graph, it seems probable that dales' farmers enjoyed their greatest returns from wool in the mid-1860s. This would have coincided with both the estimated peak in wool production and the actual peak in recorded prices. By the 1870s receipts were already

FIGURE 10.8

A. WOOL PRODUCED IN WENSLEYDALE AND SWALEDALE,
1795-1915.



B. WOOL RECEIPTS AT CURRENT PRICES, WENSLEYDALE AND
SWALEDALE, 1795-1915.



Source: see text.

falling and they continued downward until the 1880s, as the price of wool fell both locally and nationally. Thereafter, there was a recovery of receipts into the twentieth century and in 1915 both Wensleydale and Swaledale recorded their highest receipts from wool since the 1870s.

VII

Total receipts from milk, butter, cheese and wool for Wensleydale and Swaledale are presented in Table 10.14. There was a considerable difference between the two dales in the level of receipts from dairy produce and wool. This reflects not only differences of emphasis in the two economies but also differences in the overall size of the two dales and, due to their distinct physical characters, differences in the acreage of better quality land.

TABLE 10.14

TOTAL RECEIPTS¹ TO WENSLEYDALE AND SWALEDALE FARMERS, 1795

	TO 1915. ²	
	WENSLEYDALE	SWALEDALE
	£	£
1795	8212	6178
1803	25,913	17,867
1811	28,950	20,394
1819	25,399	17,792
1823	26,374	18,092
1833	24,676	17,014
1839	27,081	18,284
1875	63,119	28,588
1885	57,946	23,071
1895	46,816	19,007
1905	54,364	21,132
1915	65,163	22,514

¹ Milk, cheese, butter and wool.

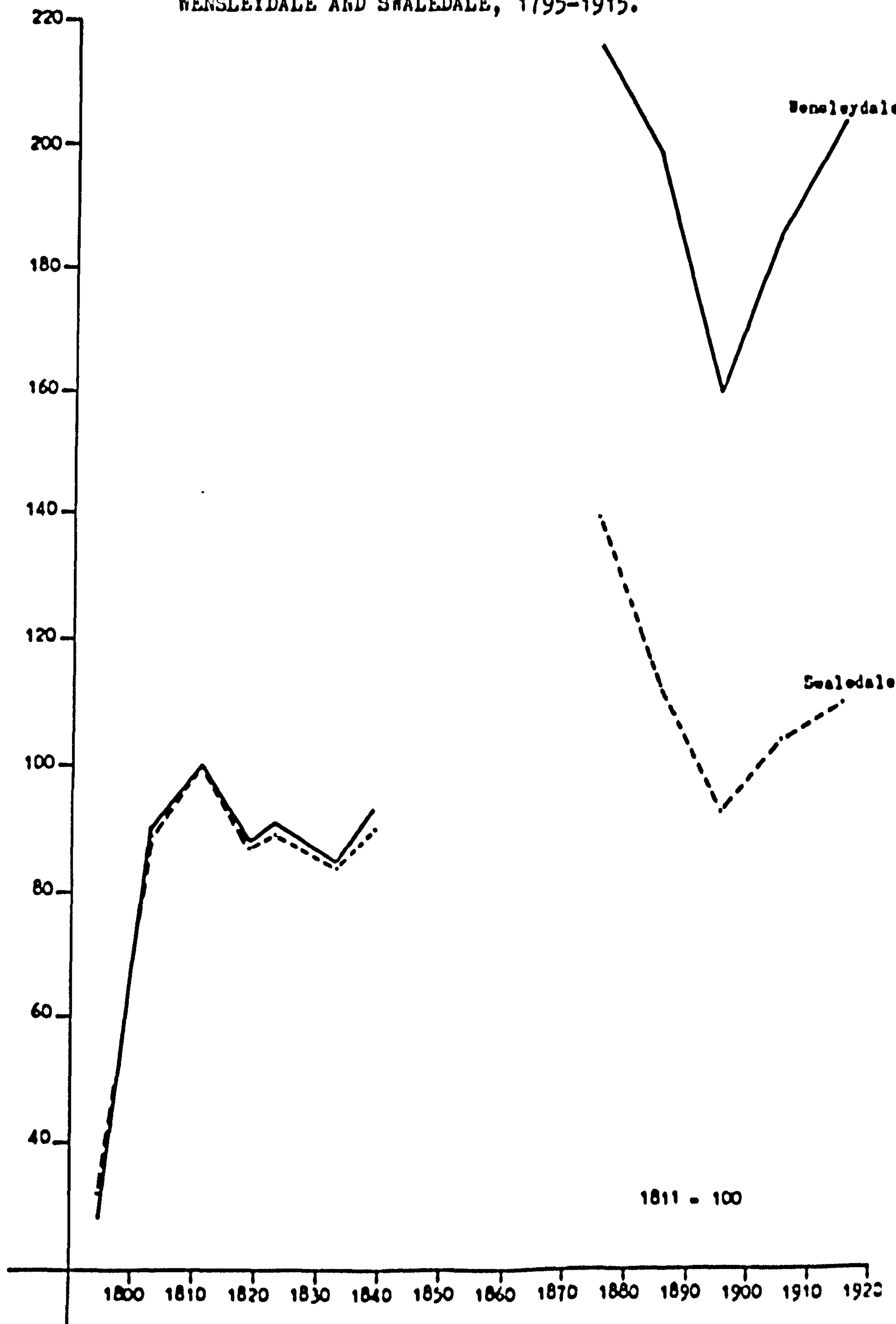
² From the 1870s the figure are averages for four years in

each decade (1874-7 etc).

Source: see Tables 10.4, 10.9, 10.12, and 10.13.

Indices of the total receipts from dairy products and wool (see Figure 10.9) demonstrate that the trend in receipts in Wensleydale and Swaledale was very comparable between 1795 and 1839, although there is a suggestion that as early as 1833 the trend in receipts in Wensleydale was beginning to diverge from and become more favourable than that in Swaledale. In the early part of the century receipts in both dales were extremely buoyant and, in line with the national pattern, rose to a peak in the latter part of the Napoleonic war. For the next two decades the trend in both dales was mainly downward but from the early to mid-1830s receipts began to move up again. Although information is not available for the mid-century it is clear that there was a substantial rise in receipts in both dales to a peak which probably occurred, as with the national peak, in the 1860s. During this period the fortunes of the two dales clearly diverged and between 1833, when their respective trends began to embark on separate courses, and the 1870s, when data are again available, receipts in Wensleydale rose 155.8 per cent as compared with only 68.0 per cent in Swaledale. From the 1870s, receipts in both dales fell rapidly to a low point in the depths of the 1890s depression. The contrasting fortunes of the two dales are apparent from the fact that whereas receipts in Swaledale fell below their 1811 level,

TOTAL RECEIPTS INDEX (MILK, CHEESE, BUTTER AND WOOL),
WENSLEYDALE AND SWALEDALE, 1795-1915.



Source: see text.

receipts in Wensleydale did not fall below a level which was 61.7 per cent up on the 1811 figure. Following this low point receipts in both dales recovered but by 1914-7, whereas receipts in Wensleydale had reached a new peak, receipts in Swaledale were still 21.2 per cent lower than their 1870s level.

The indices in Figure 10.9 relate to specific commodities and, of course, do not facilitate a complete comparison of the health of the agricultural economies of the two dales. If lamb receipts, for example, were included, Swaledale would exhibit a relatively better performance in the latter part of the nineteenth century. On the whole, however, Figure 10.9 gives a fair indication of the divergent fortunes of agriculture in the two dales in the second half of the period.

Two factors stand out in explaining the variation in the fortunes of the two dales. These were the lead industry and rail transport. The lead-mining communities had been a major market for the produce of the Swaledale farmer, providing him with relatively higher returns from some commodities than those enjoyed by his Wensleydale counterpart. The loss of this market when the lead industry collapsed in the latter part of the nineteenth century was a serious blow to the Swaledale farmer. This misfortune was compounded by the failure of the dale to attract a railway west of Richmond. Although Swaledale farmers were able to cross the watershed and move livestock and non-perishable produce on the Wensleydale railway line,

they were unable to take advantage of the rapidly expanding liquid milk market at the turn of the century. Writing in 1895, Hunter Pringle summed up the difficulties experienced in Swaledale:

the country is rich and fertile but delivery for hay, stock, dairy and poultry produce is awkward and costly ... The farmers ... complain severely of the absence of a railway.⁷⁰

Although farmers in Swaledale were relatively much less successful than their Wensleydale counterparts in the last quarter of the nineteenth century, agriculture in the area as a whole was much more soundly based than in many parts of the country. Paradoxically, the area's adverse geographical and climatic conditions had limited the two dales' exposure to arable farming, and ensured that the two dales exploited their limited natural advantages by concentrating on pastoral farming, which exhibited a greater resilience than arable in withstanding the impact of the late nineteenth-century depression. This point was not lost on Hunter Pringle who in 1895 observed that:

Dairy farmers ... have not been much disturbed ... I think depression exists in the dales, ... but I saw no reason to believe that the events of the past nineteen years had proved so damaging to agriculture in those districts where sheep-breeding, milk selling, and cheese making were the leading branches of industry, as they undoubtedly have been on arable land.⁷¹

While agriculture constituted the bedrock of the economies of the two dales', its contribution to the material well-being of their inhabitants varied both geographically and temporally. The overall vigour and health of those economies in the nineteenth century was due to a matrix of economic activity and employment opportunity which included the extractive industries and textiles. Greatly improved communications, particularly in Wensleydale, enabled the potential of this relatively diverse economic base to be realized.

NOTES - ANIMAL PRODUCE

- ¹ J.D.Chambers & G.E.Mingay, *The Agricultural Revolution 1750-1880*, 1966, pp109-10.
- ² D.Taylor, 'The English Dairy Industry, 1860-1930', *ECHR*, 2nd ser., XXIX, 1976, p585; T.W.Fletcher, 'Lancashire Livestock Farming in the Great Depression', in P.J.Perry, *British Agriculture 1875-1914*, 1973, p104.
- ³ Taylor, *op cit*, p591.
- ⁴ *Ibid*, p590.
- ⁵ D.Taylor, 'Growth and Structural Change in the English Dairy Industry, c1860-1930', *AHR*, 35, 1987, p55.
- ⁶ *Ibid*, p57.
- ⁷ *Ibid*.
- ⁸ A.Young, *A Six Months' Tour Through the North of England*, 1771, Vol II, pp189,424.
- ⁹ W.Livesey, 'Wensleydale and its Dairy Farming', *Journal of the British Dairy Farmers Association*, 2, 1879, pp47,50.
- Livesey also commented that he had found a dairy 'made from one cow'.
- ¹⁰ *Ibid*, pp49-50; J.H.Dugdale, 'Select Farms in the Darlington District', *JRASE*, VI, 1895, p526; M.Hartley & J.Ingilby, *Life and Tradition in the Yorkshire Dales*, 1968, p13.
- ¹¹ T.C.Calvert, *Wensleydale Cheese*, Clapham, 1946, 2nd ed., 1977, pp12-3; Dugdale, *op cit*, p526. In 1888 the Earl of Wharnccliffe established a dairy school for the benefit of tenants on his estate near Hawes, *Bedale and Northallerton*

Times, 26 June 1888. Wharnccliffe may have been responding to a government scheme offering a grant to aid dairy schools which were already in existence or which were established before the end of 1888, W.E.Bear, *The British Farmer and His Competitors*, 1888, p161.

¹² Livesey, *op cit*, p49; Taylor, 1987, *op cit*, pp50-1; G.E.Fussell, *The English Dairy Farmer 1500-1900*, 1966, p291; Calvert, *op cit*, pp13-6.

¹³ *Ibid*.

¹⁴ *Ibid*, pp13,44.

¹⁵ *Ibid*, pp13-4; *Wensleydale Advertiser*, 22 October 1844.

¹⁶ *Ibid*, 27 February 1844, 22 October 1844.

¹⁷ *Ibid*, 9 April 1844; Livesey, *op cit*, p46; *Bedale and Northallerton Times*, 30 June 1888.

¹⁸ *Wensleydale Advertiser*, 8 and 22 October 1844.

¹⁹ HLRO, Minutes of Evidence, HC, 1865, Vol 57, SWL, evidence of T.Airey, p13.

²⁰ HLRO, Minutes of Evidence, HC, 1866, Vol 30, S-C, evidence of the Earl of Wharnccliffe, p10.

²¹ *Ibid*, evidence of C.Other, p21.

²² Bell MSS, NER Aysgarth Invoices, April, 1877, additional information supplied by the late R.Hugill, former manager of Askrigg Dairy.

²³ Livesey, *op cit*, p46; J.Murray, *Handbook for Travellers in Yorkshire*, 1882, p319.

²⁴ Bell MSS, 1877, *op cit*; Weatherald MSS, NER Telegraphs to Askrigg, 1881.

²⁵ *Darlington and Stockton Times*, 26 October 1907.

²⁴ G.Hueckel, 'Agriculture during industrialisation', in R.Floud & D.McCloskey, *The Economic History of Britain since 1700*, Vol 1, 1981, pp186,192,195.

²⁷ See Appendix VI for sources of prices used in the text.

²⁸ *Darlington and Stockton Times*, 21 September 1895.

²⁹ In order to construct as full a picture as possible, extant data for Swaledale for 1795, 1823, 1833, 1839 have been projected to Wensleydale and extant data for Wensleydale for 1803, 1811, 1819 have been projected to Swaledale (see Appendix IV). The trend information in respect of total milk output simply reflects changes in the size of the dairy herd over the period and the trend information in respect of liquid milk consumption, cheese and butter similarly reflects changes in the size of dairy herd and of the local population.

³⁰ The Swaledale tithe collection returns for 1823-39 are all of the same type as are the Wensleydale tithe collection returns for 1803-19. The 1795 tithe return follows the same format as the later returns. However, the difference in the number of stock etc recorded in the 1795 return, as compared with the later returns, suggests that the data may be deficient and should, therefore, be treated with circumspection.

³¹ Young, *op cit*, pp189,424; Barker MSS, 7/3, Account of Grinton Tithes, 1795-6.

³² The national peak in agricultural prices has been identified as occurring in 1812-3, Hueckel, *op cit*, p182.

³³ Only 27,000 gallons of liquid milk were exported from

Wensleydale on the NER line and a limited quantity on the Midland line in 1899, PRO RAIL 527/290, *Report of the proposed WPMS depot, 1905.*

³⁴ BPP, 1895, XVI, RC *on the Agricultural Depression, Report of R.H.Pringle on South Durham and Selected Districts of the North and East Ridings, p546.*

³⁵ *Ibid*, p547; C.O Grada, 'Agricultural Decline 1860-1914', in Floud & McCloskey, *op cit*, Vol 2, p181.

³⁶ See Chapter 9 note 28 concerning evidence from the earlier MAFF returns which suggests that milk output may have been high in the 1860s.

³⁷ BPP, 1895, *op cit*, p567.

³⁸ *Ibid.*

³⁹ Fletcher, *op cit*, p103; O Grada, *op cit*, pp192-4.

⁴⁰ See Chapter 9 note 28. Other sources attest to the high prices pertaining in the late 1860s and early 1870s, Taylor, 1976, *op cit*, pp590,593.

⁴¹ O Grada, *op cit*, p181.

⁴² Taylor, 1976, *op cit*, p593.

⁴³ Cheese making was still important. In 1895 it was reported that a first class cow whose milk was converted into the best Wensleydale cheese 'should be worth £30 to £36 from cheese alone', BPP, 1895, *op cit*, p546.

⁴⁴ Hueckel, *op cit*, p183; E.H.Whetham, 'Livestock Prices in Britain 1851-93', *AHR*, 11, 1963, p29; E.L.Jones, *The Development of English Agriculture 1815-73*, 1968, p19; C.S.Orwin & E.H.Whetham, *History of British Agriculture 1846-1914*, 1964, p391.

⁴⁵ Barker MSS, 2/5/1-2, Garth Day Books, 1795-1820, passim; - 5/8, 5/8/1-2, Account Books, 1788-1820, passim; M.Hartley & J.Ingilby, *A Dales Heritage*, Clapham, 1982, p62.

⁴⁶ Barker MSS, 5/8/1-2, op cit, 1820-36.

⁴⁷ Ibid, 1842-51, passim; *Wensleydale Advertiser*, 1844-48, passim; *Richmond and Ripon Chronicle*, 1858-9, 1874, passim; Barker MSS, 2/5/3-4, op cit, 1859, 1882, passim.

⁴⁸ *Bedale and Northallerton Times*, 1881, 1884, 1886, passim; *Darlington and Stockton Times*, 1895, 1901, 1907, passim; Barker MSS, 2/5/6, op cit, 1904.

⁴⁹ BPP, 1895, op cit, p567.

⁵⁰ G.Hueckel, 'Relative Prices and Supply Response in English Agriculture during the Napoleonic Wars', *ECHR*, 2nd ser., XXIX, 1976, p413; O Grada, op cit, p181. However, Taylor notes that the responsiveness could have been more dynamic, 'The English Dairy Industry, 1860-1930: the Need for a Reassessment', *AHR*, 22, 1974, p159.

⁵¹ Roberts MS, Resume of the Discussions of the Teviotdale Farmers Club, 1859-1909, Hawick, 1909.

⁵² J.Tivy, 'The South of Scotland', in J.R.Mitchell (ed), *Great Britain, Geographical Essays*, Cambridge, 1962, pp480-1.

⁵³ See Orwin & Whetham, op cit, p391 for national price movement.

⁵⁴ Hueckel, 1976, op cit, pp404-7; R.A.Dodgshon, 'The Economics of Sheep Farming in the Southern Uplands during the Age of Improvement, 1750-1833', *ECHR*, 2nd ser., XXIX, 1976, pp568-9; Whetham, op cit, pp28-31.

- ⁵⁵ Hueckel, 1981, *op cit*, pp186-7.
- ⁵⁶ Orwin & Whetham, *op cit*, pp12-13.
- ⁵⁷ Whetham, *op cit*, p29.
- ⁵⁸ *Ibid*.
- ⁵⁹ *Ibid*, p30; Orwin & Whetham, *op cit*, p260.
- ⁶⁰ *Ibid*, pp142-3.
- ⁶¹ Dodgshon, *op cit*, p551.
- ⁶² Hartley & Ingilby, *op cit*, p62; Barker MSS, 5/8/2, *op cit*, 1824, 1830.
- ⁶³ *Bedale and Northallerton Times*, 12 November 1874, 18 October 1884; *Richmond Observer*, 1 November 1887; *Bedale and Northallerton Times*, 17 September and 26 November 1892; *Darlington and Stockton Times*, 7 November 1914.
- ⁶⁴ Whetham, *op cit*, pp30-1.
- ⁶⁵ In addition to lambs being retained for flock replacement, some lambs were retained in Wensleydale and Swaledale as store lambs for sale at a later date, oral sources, D.Middleton & H.Kirkbride, farmers.
- ⁶⁶ Whetham, *op cit*, p31.
- ⁶⁷ *Ibid*, p28.
- ⁶⁸ Prices listed in *Transactions of the Highland and Agricultural Society of Scotland*, XXXIII, 1921, p315.
- ⁶⁹ *Ibid*, pp315-6.
- ⁷⁰ *Ibid*, p316.
- ⁷¹ *Ibid*.
- ⁷² As noted earlier, these figures from the tithe collection return provide a rough guide only.
- ⁷³ At 8d per pound in 1839, wool was still below the 1819

figure of about 9d which was reported to be half the 1818 price, letters of John Dover 4 August and 26 November 1819, quoted in M.Hartley & J.Ingilby, *The Old Hand-Knitters of the Dales*, Clapham, 1951, repr.1978, pp104-5. For information on sources see Appendix XI.

⁷⁴ The fall in price was in response to imports of wool which had increased dramatically from 344.5 million pounds in 1874 to 526.5 million pounds in 1884; B.R.Mitchell & P.Deane, *Abstract of British Historical Statistics*, Cambridge, 1962, p193.

⁷⁵ Dugdale, *op cit*, p524.

⁷⁶ *Ibid.*

⁷⁷ *Darlington and Stockton Times*, 1 June 1895.

⁷⁸ BPP,1895, *op cit*, p547.

⁷⁹ *Ibid*, p553.

CHAPTER 11

LEAD MINING

Although, traditionally, agriculture had been the basis of the economy of Swaledale and Wensleydale, lead mining had for centuries been a supplementary source of employment and wealth.¹ The development of the industry in the late eighteenth and nineteenth centuries, in response to the demands of a growing and increasingly industrialized population, elevated lead mining to a dominant position in the economy of Swaledale and, for a time, parts of Wensleydale. In order to assess the impact of this industry on the economic and social life of the two dales it is necessary to examine the mechanisms which triggered the exploitation of the resource; the management and financing of the mines; the level and value of output, costs of production, and profitability; and employment generation and earnings.

I

Lead has been produced in this country for a wide range of purposes - industrial, architectural, military and domestic - for at least the last 2000 years. Over this period vast quantities of lead were absorbed in the construction of churches, abbeys, castles and great houses which, together with a host of other uses, resulted in a steadily growing demand.² It was not until the second half

of the eighteenth century and the nineteenth century, however, that the use of lead rose sharply. The impact of industrialization, urbanization, a rapidly growing population and an improving standard of living combined to stimulate a greatly increased demand from the construction trades.³ The building industry, which was probably the most important single consumer, required lead for roofs, guttering, flashing, pipework, cisterns, glazing and general ornamentation. Industrial uses included the paint, glass, pottery, printing, chemical and ship-building industries. Military demand for shot, although uneven, remained generally high and there was a growing demand for shot for sporting purposes.⁴ The traditional demand for use in the production of pewter for domestic utensils was one of the few areas where lead consumption not only failed to grow but actually decreased over this period.⁵

Britain was the world's principal producer of lead until well into the nineteenth century, although its exports were vulnerable to the vicissitudes of international relations. The French wars clearly had a major adverse impact on production. The output of lead fell from over 25,000 tons in the 1780s to 12,500 tons in 1810 and exports dropped from over 14,000 tons in 1792 to less than 8000 in 1808.⁶ In the post-war period both total production and exports recovered. By the 1820s production had risen to 45,000 tons, of which 16-17,000 were exported.⁷ This recovery was short-lived and competition from the newly-developed Spanish mines, a reduction in the import duty on lead and a

general downturn in the lead-using industries in Britain, particularly the building industry, all contributed to a major depression in the national lead industry in the period 1829-33.⁹ By 1831 British exports had fallen to less than 9000 tons.⁷ Lead production recovered in the mid-1830s and, despite the entry of the United States into the export market, the depressed conditions of the early years of the decade did not recur for half a century.¹⁰ Production rose to a peak of over 73,100 tons in 1856 during the Crimean War boom. Apart from 1859 and 1860, when it dropped to just over 63,000 tons, output remained at over 65,000 tons between 1856 and 1871. Thereafter, output declined rapidly, falling to 54,200 tons in 1873; 40,100 tons in 1884, when Australian ore began to invade the market; 24,400 tons in 1900; and 18,100 tons on the eve of the First World War.¹¹ Although national production did not peak until 1869-70, Britain was always a net importer of lead after 1865.¹² By 1880 Britain was importing almost twice as much lead as it produced and from being the world's major producer in the 1820s had fallen to a poor fourth in the league of international lead producers.¹³

Although there is a general relationship between the price of lead (see Appendices XIV and XV) and the level of production, the complexities of the industry and of trade in lead mean that the correlation between price and production is not always close. Between 1785 and 1800 the price of lead fluctuated between £18 and £23 per ton before rising to a peak of £42 per ton in 1806, more than double

its 1785-1800 average. The general trend in prices over the next twenty-five years was downward, falling by 1832-3 to a third of its 1806 level. For the next twenty years prices drifted between £16 and £26 per ton.

In the mid-1850s, at the peak of nineteenth-century output, prices rose to £24 per ton, a level which was not to be repeated in the period up to the First World War. The price of lead remained relatively stable until the late 1870s when, as depression took its toll and the full impact of ore imports was felt, it fell, reaching a new nineteenth century low of £11 per ton in 1884. Following another new low of £10 per ton in 1893-4, the price rose briefly but there was no general recovery and the average price for the period 1895-1913 remained depressed at little more than £14 per ton.

The principal lead-mining areas of England and Wales in the eighteenth and nineteenth centuries were the North Pennine field, centred on the Alston Block within the counties of Durham, Northumberland, Cumberland and Westmorland; the Yorkshire Pennines which, in addition to Swaledale and Wensleydale, included parts of Wharfedale, Nidderdale and Airedale to the south; the Derbyshire field, centred on the southern Peak; Flintshire and north-east Denbighshire; and the central Wales field of north Cardiganshire and west Montgomery. In addition to these areas, lead was mined on a smaller scale in the Lake District, west Shropshire, the Mendips, and parts of Devon and Cornwall.¹⁴ The various fields reached their zeniths

at different times. The Derbyshire field, closely rivalled by the Flintshire district, was almost certainly the major producer of lead for much of the eighteenth century.¹⁵ The North Pennine field grew considerably in importance over the course of the eighteenth century and in the nineteenth century rose to predominance with an output of more than double that of its closest rivals.¹⁶ In 1856, when national production reached a new peak of 73,129 tons of lead, the output of the major fields was as follows: North Pennines (including the Lake District) - over 25,000 tons; Derbyshire - over 6000 tons; the Yorkshire Pennines - almost 9000 tons; Flintshire and Cardiganshire - nearly 15,000 tons; Cornwall - over 6500 tons.¹⁷

II

The lead deposits of Swaledale and Wensleydale occur, in association with other metallic and non-metallic minerals, in complex systems of faults and fractures within the Carboniferous limestones.¹⁸ One of the main characteristics of lead deposits, as of all vein minerals, is that their occurrence in commercial concentrations is unpredictable, a factor which has given lead mining a reputation for being highly speculative. An apparently promising fault might contain a valuable ore body of great size, only the non-metallic minerals, or be wholly barren.¹⁹ The only method available to the nineteenth-century miner to ascertain the richness or otherwise of a particular vein was empirical. This

resulted in fortunes being both won and lost.²⁰

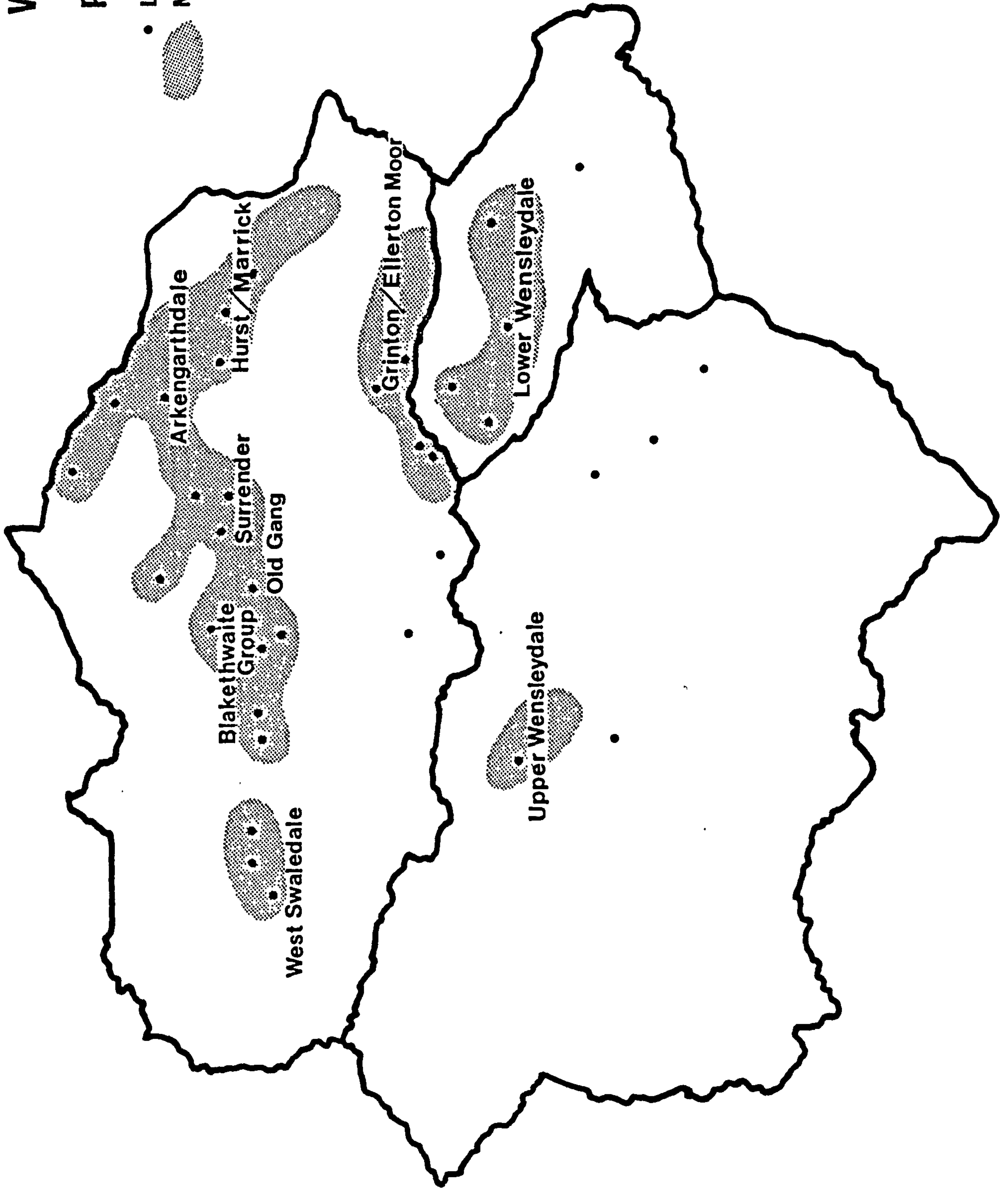
The area where vein mineralization was most concentrated was on the northern side of the Swale valley, in a more or less continuous east-west belt between Keld and Marske.²¹ Within this area the mines fall into a number of distinct groups as follows: west Swaledale; Blakethwaite/Lownathwaite/Swinnergill; Old Gang; Surrender; Arkengarthdale; and Marrick/Hurst. South of the Swale the mineralized areas were fragmented. The major areas lay astride the Swale/Ure watershed; the Grinton/Ellerton Moor and the lower Wensleydale (Lord Bolton's) mines lying to the north and south of the watershed respectively. Another area of concentrated mining activity lay to the north of the river, between Askrigg and Hawes, in upper Wensleydale.

A large number of scattered mines and workings occurred outside the major mineralized zones. These were often based on isolated deposits which may have given rise to profitable but short-lived operations. The main mining areas and mines are shown in Map 7.

Lead mining in Swaledale and Wensleydale dates back to the Roman period. Until at least the sixteenth century, mining remained a small-scale activity relying on rudimentary techniques.²² In the second half of the sixteenth century there was a revolution in mining methods as more progressive, continental techniques were adopted, such as the use of levels and adits which permitted deeper underground working.²³ The seventeenth century saw a considerable expansion in mining activity as the new

WENSLEYDALE & SWALEDALE: PRINCIPAL LEAD MINES

- Lead Mines.
- ▨ Main Lead Mining Areas.



techniques were applied to both mining and smelting and as prosperity encouraged capital injection and structural reorganization.²⁴ The eighteenth century witnessed the beginning of what may be regarded as the modern period in lead mining and it was in this period that the foundations were laid of the great mining companies which made Swaledale the major lead-mining area in Yorkshire during the nineteenth century.²⁵

As the lead industry grew in importance so did the value attached to mineral rights. Disputes over mineral rights, particularly over demarcation of boundaries between manors, were a feature of both the seventeenth and eighteenth centuries.²⁶ Similarly, the existence of potentially valuable mineral rights attracted the interest of entrepreneurs from the growing merchant and industrial classes.²⁷ By the late eighteenth century the owners of mineral rights, who were still generally the lords of the manors, were a mixture of traditional landowners and new men (see Appendix XII).

Although some of the owners of mineral rights managed the mines themselves or let them to small partnerships, as demand for lead rose and as the shallower veins became exhausted in the eighteenth century, more capital was required for development. This led to a structural change in the organization of the industry. As in other lead-mining districts, adventurers were attracted from outside the area and for a time during the eighteenth century much of the capital invested in the Swaledale and

Wensleydale mines came from non-local sources.²⁹ The arrival of these adventurers meant that during the eighteenth century the local independent miners, with small partnerships and little capital, were pushed progressively towards the poorer mines on the periphery of the lead-mining fields.²⁷ When the speculative companies withdrew in the 1760s and 1770s to concentrate on more lucrative lead fields elsewhere in the country, many of the owners of mineral rights managed their own mines.³⁰ However, due to the problems generated by poor management and lack of capital investment, this situation was short-lived and some proprietors let the mines to 'new' adventurers.³¹ During the French wars, while national output of lead fell with the loss of export markets, local output increased rapidly, although with some fluctuations, and between 1792 and 1811 all the important mines in Swaledale were taken by new lessees, both local and from outside the area.³² These investors were not old-established companies, as the earlier adventurers had been, but were partnerships and included lead merchants who were prepared to invest capital in the source of their trade.³³ John Harland writing retrospectively in 1870 commented that:

At the commencement of the present century the mines [in Swaledale] were taken by a company of adventurers, principally from the neighbourhood of Newcastle-on-Tyne.³⁴

These two types of management, the 'external' adventurer and the local partnership, worked the Swaledale mines in

the early nineteenth century and provided capital for innovation and expansion.³⁵ However, the new operators had limited resources and a fall in the price of lead could quickly cause the curtailment of mining operations.³⁶ For example, in 1807 the price of lead fell briefly and it was noted that men were laid off because of:

the undertakings of Mining Adventurers whose narrow means are not equal to the difficulties which times like these bring on them.³⁷

During the post-war depression the external adventurers in Swaledale again found the costs of production too high, due partly to poor management, and, unlike their counterparts in other lead-mining fields who weathered the depression, they relinquished their leases and left the area.³⁸ Local people had greater confidence in the future of lead mining in the area and those who had accumulated some capital from their involvement in agriculture, textiles or lead mining during the period of high prices in the Napoleonic wars then stepped in to take up the leases and develop the mines further.³⁹ By the 1820s and 1830s many of the lessees, therefore, were local men with some capital and a good working knowledge of the area and the mines. The local, middle-class lessees, who held the mines from the end of the Napoleonic war to the 1870s, were able to improve the efficiency of the mines. They generally enjoyed a good relationship with the lessors and, being local, they were able to supervise the mines closely. It was during this period that many of the mines reached

their maximum output.⁴⁰

From the 1870s, as depression and decline became firmly established, local interest in the mines declined.⁴¹ Once again many mines were let to larger companies who brought external capital into the area.⁴² The interests of the non-local shareholders of these companies became the main consideration in the management of the mines. This gave rise to local concern that the shareholders would be inclined to withdraw their capital in times of depression.⁴³ However, the period from the 1870s was one of continuing and deepening depression in the lead mining industry.⁴⁴ The ability of the management of the lead-mining companies to ensure the survival of the industry in the two decades was severely limited, not so much by the pressures of their stockholders, as by falling lead prices and by the problems of working the mines in increasingly difficult physical conditions.⁴⁵ By the end of the nineteenth century the industry had declined to such an extent that, regardless of how it was financed or managed, it was incapable of being revived.

The overall state of the local lead industry was, of course, dependent upon the performance of individual mines. While the different groups of mines responded to fluctuations in national demand and the price of lead, the fortunes of each group followed an individual course which depended on the discovery, richness and ease of working of the lead deposits. This meant that significant changes in the lead-mining fortunes of the individual mining fields,

while often following a general pattern, occurred at different dates.

A guide to the fortunes of the individual mining fields and to the different types of management is presented in Table 11.1 (see Appendix XIII for a detailed history of the individual mining areas). The peak of output of the mines occurred at different dates in the nineteenth century. Output from the Swaledale mines was at its peak from the early to mid-nineteenth century and, in most cases, by the 1870s the mines were in their final decline. In Wensleydale, relatively high output from the mines spanned only a brief period from the mid-1850s to the mid-1860s and the final decline was established by the late 1860s. Although most of the mines were in decline in the third quarter of the nineteenth century many continued in production until the end of the century and some were not abandoned until the early twentieth century.

While there were marked differences in the evolution and development of the lead industry in Swaledale and Wensleydale, there were similarities in parts of the two dales with the situation in the lead-mining fields in other areas of the country. The rapid decline of the Wensleydale mines after the early 1860s, while not generally followed in Swaledale, was similar to the situation in Derbyshire where many mines failed in the 1850s and 1860s.⁴⁶ The lead industry in Swaledale, as with that in neighbouring Cumbria and parts of Wales, continued for longer because of the

TABLE 11.1

CHRONOLOGY OF THE LEAD INDUSTRY IN SWALEDALE AND

WENSLEYDALE

	New Adv. ¹	Local Ptnps ²	Late 19C Cos. ³	Peaks Output ⁴	Major Decl. ⁵	Closed/ Abnd. ⁶
Swaledale						
A/d	1799- 1821	1821-70	1870-	1805 1840s l. 1870s m. 1880s	1850s 1889-	1912
O.G. ⁷	1811-28	1828-87	1889-	e. 1840s m. 1850s m. 1860s	1876-	1914
Su. ⁸	18C	e. 19C	1873-	1818 1840s 1850s	1829-33 1860s	1885-
Bl/Lo						
/Sw. ⁹	e. 1800s	1836-67	1873-	e. 1820s m. 1840s	1829-33 1860s	1870s
Gr.M. ¹⁰	18C	1833-	1887-	l. 18C m. 19C	1870s	1875-
M/H ¹¹	l. 18C	1814-82	1882-	1840 1867 1887	1877-	1891
W.S/d ¹²	1843-7	1801-	1860s	e. 19C	1830s-	1860s-
Wensleydale						
U.W/d	-	19C	1860s-	m. 19C	1860s 1880s	1880s
L.W/d	e. 19C	-	1840s-	l. 1850s e. 1860s	l. 1860s	1888

¹ 'New' Adventurers - see text.

² Local partnerships.

³ Late nineteenth century companies.

⁴ Estimated peaks of output.

⁵ Major periods of decline.

⁶ Mines closed or abandoned.

⁷ Old Gang mines.

⁸ Surrender mines.

⁹ Blakethwaite/Lownathwaite/Swinnergill mines.

¹⁰ Grinton/Ellerton Moor mines.

¹¹ Marrick/Hurst mines.

¹² West Swaledale mines.

Note: l = late, e = early, m = mid.

Source: see text and Appendices XII and XIII.

relative richness of some of the veins.⁴⁷ By the 1880s most of the accessible veins of lead ore in Swaledale had been worked out and, thereafter, the industry declined rapidly.⁴⁸

Production did not necessarily closely reflect market forces but was significantly affected by local factors such as the richness of the vein being worked.⁴⁹ When a rich vein was encountered it was usually worked until it was exhausted, regardless of market conditions. In Swaledale and Wensleydale, the final decline of the lead industry was not the direct result of external factors such as the lead price and cheap imports or of the alleged problem of having non-local people as lessees, or even of transport difficulties. While improvement in any of these factors might have briefly forestalled the decline it would not have saved the industry from its inevitable extinction.

The experience of other areas of the country emphasizes that it was the richness and accessibility of the veins which was the crucial factor in an increasingly competitive market.⁵⁰ Similarly, it was the deterioration and, in some cases, exhaustion of accessible ore reserves that caused Swaledale and Wensleydale to fail to respond when markets showed signs of recovery in the early twentieth century.

The organization of the lead industry in Swaledale and Wensleydale in the eighteenth and nineteenth centuries clearly demonstrates the conditions which were necessary for industrialization to be triggered. The progression

from a system of small-scale, dual-economy mining and farming to a highly-organized industry required not only an entrepreneurial spirit and a skilled workforce, both of which the two dales possessed, but also a high level of capital investment. While lead mining could take place in a pre-industrial society and fortunes could be made if a rich vein of ore was discovered, the full development of the industry required large amounts of capital. As the two dales, although increasing in wealth in the seventeenth and eighteenth centuries, did not have the extensive resources required for large-scale investment, the impetus which would have been necessary to set the local industry on a firmer footing was supplied largely by external capital. The professional financiers, who included both the traditional and the 'new' adventurers, played an important, although short-lived, role in the growth of the lead industry in the eighteenth and early nineteenth centuries. The adventurers brought with them new techniques and capital, and developed the industry at a time when demand and the price of lead were relatively high. However, for a variety of reasons, including inefficient management, the 'new' adventurers withdrew from the industry in the 1820s (see Appendices XII and XIII).

The withdrawal of the adventurers left the way clear for local men who, between the 1820s and 1870s when the industry experienced a period of high prosperity, exhibited an entrepreneurial spirit which was worthy of those industries at the centre of the industrial revolution. The

local capitalists were prepared to invest in the mines because being local they could provide close supervision and were confident that the dales' industry could be profitable again. They invested surplus capital gained from the high prices obtained during the French wars and recycled what was probably a high proportion of their lead mining profits back into the industry. They also brought a personal interest and a detailed knowledge of the area to the management of their leases (see Appendices XII and XIII).⁵¹

The local partnerships experienced some difficult periods, not least in the 1829-33 depression, but they weathered these. However, when output began to fall in the 1870s the local men withdrew from the industry. It was still hoped by some of the owners of mineral rights that if enough capital was invested in the industry the mines could, once again, enjoy high output. Attempts were made to attract capital by the creation of new companies, and prospectuses were issued, portraying a glowing future for the mines.⁵² Some investors, mainly from outside the area, invested in the companies. However, given that the search for ore deposits was related to market price and that the long-term price trend from the 1870s was downward, there was a lack of incentive to invest in the industry and insufficient capital was forthcoming.⁵³

The involvement of outsiders and the injection of external capital in lead mining in Swaledale and Wensleydale in the late nineteenth century was short-lived.

The exhaustion of the richest and most accessible seams coincided with the years of depression in the final two decades of the century and, as costs of production soared, the companies withdrew and the mines were abandoned.²⁴

An examination of production statistics enables a picture to be drawn of the rise and fall of the lead industry in Swaledale and Wensleydale. From these statistics conclusions can be drawn concerning the impact of the industry, in terms of wealth creation and employment, on the economy of the two dales.

III

Although the mines of Swaledale and Wensleydale benefited from investment and development in the late seventeenth and eighteenth centuries, a substantial increase in output occurred only from the late eighteenth century. However, while output in Swaledale and, probably, Wensleydale generally increased in the late eighteenth and early nineteenth centuries, production was erratic, and fluctuations in demand, price and the availability of rich, workable seams all affected output.

Lead production figures are available only for certain groups of mines prior to the mid-1840s. All of these mines are in Swaledale and the only one with a substantially complete run of output statistics for the first half of the nineteenth century is the Pomfret-Denys or A.D. group. In the absence of comprehensive data for the two dales in the

period 1785 to 1845, when the official mineral statistics begin, the data for the A.D. mines have been used to construct a picture of lead production in the late eighteenth and first half of the nineteenth centuries (see Table 11.2).

TABLE 11.2

OUTPUT OF A.D. GROUP OF MINES, SWALEDALE, 1785-1844.¹

	Output	% ²		Output	% ²
1785-9	584 ³		1815-9	1748 ⁴	+17.9
1790-4	949	+62.5	1820-4	1587	-9.2
1795-9	1232	+29.8	1825-9	1635	+3.0
1800-4	1981	+60.8	1830-4	1229	-24.8
1805-9	2076	+4.8	1835-9	1770	+44.0
1810-4	1482 ⁵	-28.6	1840-4	2906	+64.2

¹ In tons, annual average by quinquennia.

² Percentage change from the previous quinquennium.

³ 1785-9, average of four years only.

⁴ 1815-9, average of three years only.

⁵ 1810-4, one year (1811) only.

Source: see Appendix XIV.

There was a considerable increase in output of lead from the A.D. mines in the period 1785-1805. From a low point of 469 tons in 1788 output rose almost sevenfold to an all time peak of 3252 tons in 1801. However, despite the exceptionally high price of lead in the period 1805-14, the rise in output was not sustained. In the period following the close of the French wars output increased but then drifted downward between 1820 and 1834. The unexpectedly high output of 2692 tons produced in 1826 was the highest production figure in the period 1802-1839. This contrasts with the 1075 tons produced only five years later in 1831,

a figure which was lower than any in the preceding or succeeding thirty years. From the 1831 low, at the height of the 1830s depression, output recovered and more than doubled in the ten years from 1830-4 to 1840-4. The increase in output from the A.D. mines at this time was due not only to increased demand but also to the introduction of improved methods of production.⁵⁵

Although the output figures for the A.D. mines provide an indication of the scale of lead production in Swaledale, the only specific information which is available for the whole dale is obtained from narrative sources. In 1814, for example, the output of lead in Swaledale is estimated to have been well in excess of 3000 tons.⁵⁶ In the immediate post-war years output from some of the Swaledale mines fell briefly but the general trend was upward (see Appendix XIV). In 1821 Swaledale output was reputed to have been some 6000 tons of ore, equivalent to some 4500 tons of lead, of which the A.D. mines' production of 1731 tons constituted 38.5 per cent.⁵⁷ While the reliability of the Swaledale figure may be questioned, contemporary writers indicate that this period was one of the most productive in the history of the Swaledale mines.⁵⁸ The fact that the population of Swaledale peaked in 1821 lends credence to this view (see Chapter 2). The high production achieved in this period did not last and production fell sharply during the 1829-33 depression, influenced by a downturn in national industrial activity, increasing competition in export markets from Spanish lead and a fall

in the lead price to £14 per ton, the lowest point reached in either the preceding or succeeding half centuries (see Appendix XIV).

Following the close of the 1829-33 depression there was a general recovery in output but the extent of this recovery does not become clear until the official mineral statistics become available in the mid-1840s. The mineral statistics (see Table 11.3) show that the overall output of lead in Swaledale was increasing, although at a slow rate, into the late 1850s. The recorded peak of lead output in Swaledale of 4366 tons occurred in 1856, at the same date as the national peak, and output remained high for several years, although with some sharp fluctuations (see Appendix XV).

TABLE 11.3

OUTPUT OF LEAD IN SWALEDALE, 1845-9 TO 1910-4.¹

	Output	% ²		Output	% ²
1845-9	3288		1880-4	2127	-17.2
1850-4	3486	+6.0	1885-9	1821	-14.4
1855-9	3572	+2.5	1890-4	486	-73.3
1860-4	2429	-32.0	1895-9	228	-53.1
1865-9	3334	+37.3	1900-4	63	-72.4
1870-4	2990	-10.3	1905-9	48	-23.8
1875-9	2570	-14.0	1910-4 ³	53	+10.4

¹ In tons, annual average by quinquennia.

² Percentage change from the previous quinquennium.

³ 1910-4, average of four years only.

Source: see Appendix XV.

Despite the fact that the price of lead remained relatively high at around £22 per ton (see Appendix XV) in the early 1860s, output declined due to the working out of several major seams. This decline, however, was matched by

a strong recovery in the second half of the decade. The subsequent decline in output in the early 1870s is attributable to low output from the Arkengarthdale field which on average had produced almost one-half of the Swaledale output.⁵⁹ Had it not been for the major drop in output from this field, production in Swaledale as a whole would have continued to rise in this period. This marked the beginning of a sustained fall in output which continued into the early twentieth century as, although production from the Arkengarthdale field recovered in the mid-1870s and remained buoyant until 1887, output at the Old Gang mines plummeted.⁶⁰ The end of the 1880s and the early 1890s witnessed the collapse of the lead industry in Swaledale. Output fell by 82 per cent in six years, from 1622 tons in 1888 to a mere 291 tons in 1894. The record low price of lead, which was £10 per ton in 1893/4, provided the final blow for most of the Swaledale mines. Only in Arkengarthdale, where new discoveries enabled some of the mines to operate profitably, did the industry continue in any substantial way and even at those mines output had fallen to a negligible level by the early twentieth century.⁶¹

Although returns are not available for the output of lead in Wensleydale prior to 1851, it would appear from contemporary comments that, in the early years of the nineteenth century, only small quantities of lead were produced in the dale. However, by the early 1830s output was probably quite substantial.⁶² In the 1850s, as in

Swaledale, the industry was buoyant (see Table 11.4). However, lead production in Wensleydale appears to have been particularly volatile and, for example, output in 1852 was double that of either the preceding or succeeding year (see Appendix XV).

TABLE 11.4

OUTPUT OF LEAD IN WENSLEYDALE, 1850-4 TO 1890-4.¹

	Output	% ²
1850-4 ³	796	
1855-9	1459	+83.3
1860-4	1518	+4.0
1865-9	577	-62.0
1870-4	371	-35.7
1875-9	276	-25.6
1880-4	243	-12.0
1885-9	67	-72.4
1890-4	7 ⁴	-89.6

¹ In tons, annual average by quinquennia.

² Percentage change from the previous quinquennium.

³ 1850-4, average of four years only.

⁴ 1890-4, average of two years only.

Source: see Appendix XV.

The output of lead in Wensleydale in 1856, the year of the national peak, was high, at 1806 tons, but the peak output came four years later in 1860 when 1872 tons of lead were produced (see Appendix XV). A high level of production was maintained for a decade from the mid-1850s to the mid-1860s but thereafter there was a sustained decline with a sharp fall in production in the late 1860s.⁴³ By the mid-1880s output was minimal and the industry was finished by the early 1890s. Throughout the second half of the nineteenth century most of the lead produced in Wensleydale came from

the Keld Heads mine. For example, in 1864 Keld Heads produced 75.4 per cent of the total Wensleydale output, and for a number of years including 1873-4, 1886 and 1888 Keld Heads mine was the sole lead producer in the dale.⁴⁴

As noted earlier, the lead industry in Wensleydale was a pale reflection of the Swaledale industry. It had a considerably shorter life span and its output was much lower. At the height of its prosperity, in the period 1855-64, output averaged less than half that of Swaledale and even at its peak in 1860 the Wensleydale industry had only two-thirds of the output of Swaledale.⁴⁵

IV

In the absence of comprehensive data on lead output in Swaledale prior to 1845, the A.D. output has been used as a basis for estimating the value of lead produced in the whole of Swaledale in the first half of the nineteenth century. Table 11.5 shows that the value of lead produced at the A.D. mines in the period 1785 to 1849 was considerable.

Although there was generally a close relationship between output and price, output did not inevitably follow price. While high prices encouraged the exploitation of lead ore deposits, the time lag between development of the mines and production could result in peak output occurring in periods when prices were relatively depressed. The nature of the lead industry was such that when ore was discovered and made accessible it was usually worked regardless of market

conditions. The period of peak prosperity in the lead industry, therefore, was not necessarily coincident with either the peak in the price of lead or the peak in output.

TABLE 11.5

VALUE OF LEAD PRODUCED AT THE A.D. MINES, 1785-9 TO
1845-9.¹

	Price ²	Output ³	Value ⁴
1785-9	20	584	11,680
1790-4	20	949	18,980
1795-9	20	1232	24,640
1800-4	29	1981	57,449
1805-9	38	2076	78,888
1810-4	34	1482	50,388
1815-9	24	1748	41,952
1820-4	24	1587	38,088
1825-9	22	1635	35,970
1830-4	15	1229	18,435
1835-9	21	1770	37,170
1840-4	18	2906	52,308
1845-9	18	1689	30,402

¹ Based on the London price of lead.

² Price per ton in £.

³ Output of A.D. mines in tons.

⁴ Total value to the nearest £.

Notes: see Table 11.2.

Source: see Appendix XIV.

This is well illustrated in the case of the A.D. mines. The production peak, which averaged 2906 tons per annum in the period 1840-4, was 40 per cent higher than in 1805-9, the highest point in the previous half century, and yet, because the lead price was less than half of the 1805-9 figure, the value of the 1840-4 lead output at £52,308 per annum was only 66.3 per cent of the 1805-9 level. When the

value of lead produced at the A.D. mines peaked in the period 1805-9 it was due to the fortuitous coincidence of the nineteenth century peak in the metal price of £38 per ton and the highest level of output achieved prior to the peak of 1840-4.

The value of the A.D. mines, shown in Table 11.5, together with narrative sources relating to output for the whole of Swaledale demonstrate that the value of the Swaledale mines prior to 1845 was, at times, very high.⁴⁶ The estimated total Swaledale output in 1814 was 3000 tons and in 1821 was 4500 tons of lead, of which the A.D. mines accounted for 49.4 and 38.4 per cent respectively. On the basis of the 1814 and 1821 output and using the London price of lead, the value of the Swaledale output at those dates will have been £102,000 and £108,000 respectively. These figures compare with a known peak in the value of the Swaledale production for the second half of the nineteenth century, based on the London lead price, of an average of £82,156 per annum in the period 1855-9 (see Table 11.6). In the early years of the nineteenth century the value of the Swaledale mines was probably even higher than in 1821. The value of the output from the A.D. mines alone, at an average of £78,888 per annum in the years 1805-9, was only 4 per cent lower than the total value of the Swaledale production at its peak in the second half of the nineteenth century. Given that the Arkengarthdale mines were estimated to be producing between 1200 and 1400 tons per annum in 1803-4, and that other Swaledale mines were also

in production, it is not unreasonable to conjecture that the total output of the Swaledale mines in the period 1805-9 was in excess of 4000 tons of lead per annum.⁴⁷ This would give an annual production value in excess of £150,000. Although slightly speculative, this figure when considered in conjunction with those derived for 1814 and 1821, suggests that the peak in production and value of Swaledale lead occurred in the first quarter of the nineteenth century and not, as previously supposed, in the 1840s and 1850s.⁴⁸

The contrast in the economic contribution which the lead industry made in the two dales during the second half of the nineteenth century is evident from Table 11.6. The value of lead production at the point when both the price and output were high in the late 1850s was considerable in both Swaledale and Wensleydale, with the lead produced being worth £82,156 and £33,557 respectively. In the following quinquennium the value of production fell in both dales, in Wensleydale by a modest 5 per cent and in Swaledale by 37.9 per cent. Between 1855-9 and 1875-9 whereas the value of the Swaledale production fell by little more than two-fifths, the value of the Wensleydale output fell by more than four-fifths.

By the late 1880s the value of Swaledale's lead was less than a third what it had been in the late 1850s and the value of Wensleydale lead was a mere £871. By 1890-4 the value of the Swaledale output had fallen by 93.5 per cent from its peak and the value of the Wensleydale output had

become inconsequential.

TABLE 11.6

VALUE OF SWALEDALE AND WENSLEYDALE LEAD OUTPUT, 1845-9 TO
1910-4.¹

	L.Pr. ²	S/d ³	W/d ³
1845-9	18	59,184	-
1850-4	20	69,720	15,920
1855-9	23	82,156	33,557
1860-4	21	51,009	31,878
1865-9	20	66,680	11,540
1870-4	20	59,800	7420
1875-9	19	48,830	5244
1880-4	14	29,778	3402
1885-9	13	23,673	871
1890-4	11	5346	77
1895-9	13	2964	-
1900-4	13	819	-
1905-9	16	768	-
1910-4	16	848	-

¹ Based on the London price of lead.

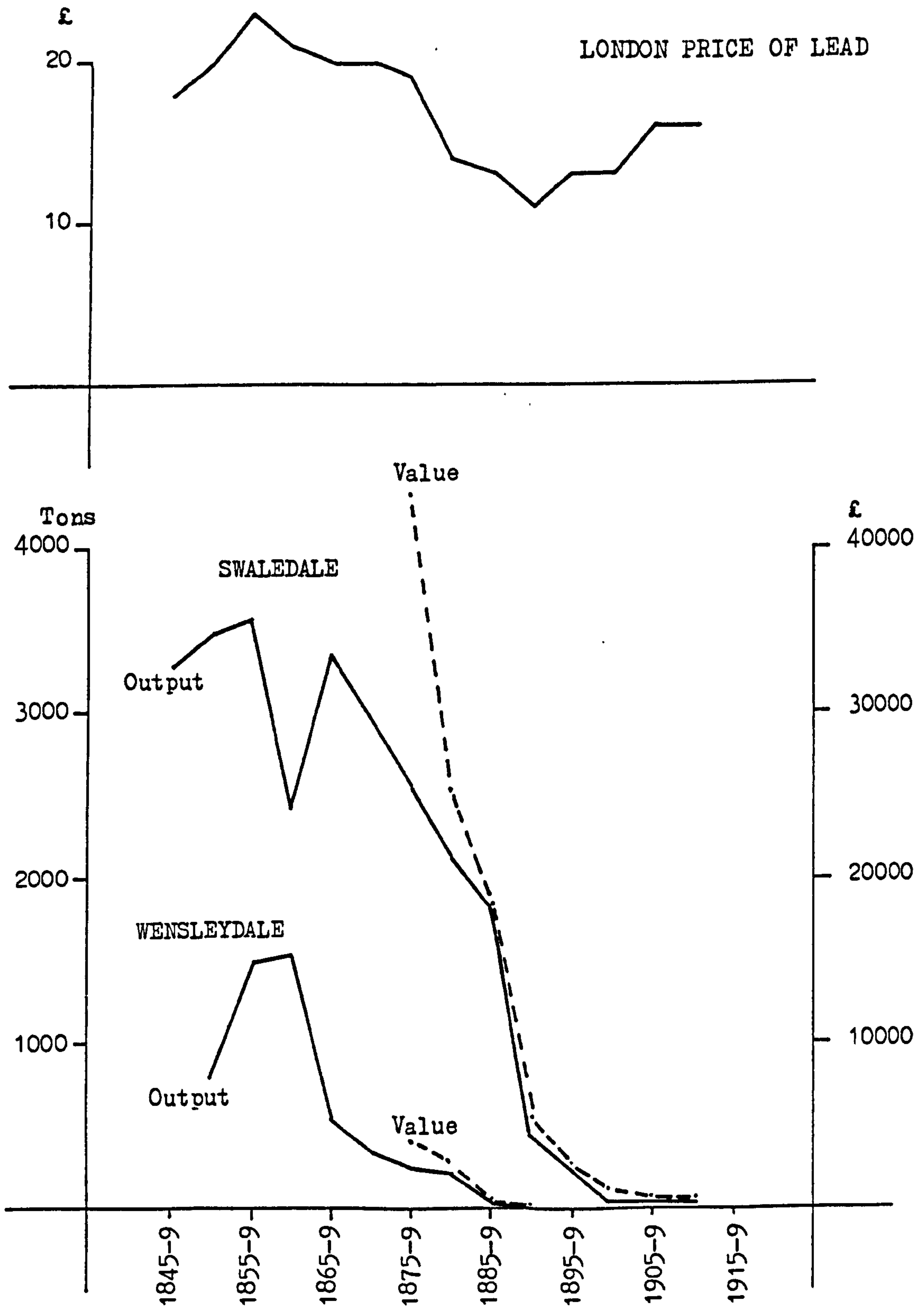
² Price per ton in £.

³ Total value to the nearest £.

Source: see Appendix XV.

Figure 11.1 shows the output and value of lead from the Swaledale and Wensleydale mines and the London price of lead in the second half of the nineteenth century. The graph shows clearly that output did not follow an identical pattern in the two dales. Also, although output peaked when the price of lead was high, the subsequent decline in output was relatively steeper than the fall in the London price of lead. When detailed information on the value of the lead output from the Swaledale and Wensleydale mines is available, in the quinquennium 1875-9, it shows that, although the value of the Swaledale mines was 13.2 per cent

OUTPUT AND VALUE OF LEAD IN SWALEDALE AND WENSLEYDALE,
AND THE LONDON PRICE OF LEAD, 1845-1914.



Source: Mineral Statistics.

less than that calculated on the basis of the London lead price (see Table 11.6), the value of Swaledale lead at over £42,000 was nevertheless substantial.⁶⁷

As Table 11.7 shows, the lead industry in Swaledale and Wensleydale was relatively unimportant in national terms. The two dales produced only between 5.0 and 7.5 per cent of the U.K. output between 1850-4 and 1885-9. By the early 1890s the lead industry had suffered a much greater decline in Swaledale and Wensleydale than it had nationally and the area's share of the U.K. output had fallen sharply. By the early twentieth century the industry in the two dales had continued its relatively steep fall and its contribution to the national output was insignificant.⁷⁰

Although other lead mines in Yorkshire had been highly productive in the nineteenth century, by the 1870s Swaledale was producing most of the county's lead. However, by the 1890s Swaledale's share of the rapidly diminishing county output had fallen steeply and by 1900-4 had dropped to only 14.7 per cent.

By the early years of the twentieth century the U.K. industry was in a generally depressed state, with production having slumped to a third of the level achieved in the third quarter of the previous century. However, national output was still in excess of 19,000 tons per annum and some mining fields in the country continued to enjoy relatively high production. The Welsh mines, for example, were still producing an average of 9230 tons of lead ore per annum in the first decade of the twentieth

TABLE 11.7

OUTPUT OF LEAD IN SWALEDALE AND WENSLEYDALE, YORKSHIRE, AND
THE UNITED KINGDOM, 1850-1913.¹

	S/d & W/d	Yorkshire	% ²	U.K.	% ³
1850-4 ⁴	4282	5958 ⁵	71.9	63,920	6.7
1855-9	5031	7169 ⁵	70.2	67,500	7.5
1860-4	3947	6030 ⁵	65.5	66,640	5.9
1865-9	3911	5349 ⁵	73.1	69,460	5.6
1870-4	3361	3598 ⁶	93.4	63,180	5.3
1875-9	2846	3817	74.6	57,420	5.0
1880-4	2370	2653	89.3	47,860	5.0
1885-9	1888	2099	90.0	37,660	5.0
1890-4	493 ⁷	936	52.7	30,940	1.6
1895-9	230 ⁸	550	41.8	27,080	0.8
1900-4	63	430	14.7	20,380	0.3
1905-9	48	116	41.4	22,180	0.2
1910-4 ⁹	53	63	84.1	19,200	0.3

¹ In tons, annual average by quinquennia.

² Percentage which Swaledale and Wensleydale output comprised of total Yorkshire output.

³ Percentage which Swaledale and Wensleydale output comprised of total U.K. output.

⁴ An average of the four years 1851-4 for the Wensleydale return.

⁵ Estimated from ore figures on the basis of 1870-4 lead output representing 65 per cent ore output.

⁶ Average of 1873-4 only.

⁷ Lead produced in Wensleydale for only two years of the quinquennium.

⁸ Lead produced in Wensleydale for only one year of the quinquennium.

⁹ Average of four years, 1910-3, only.

Source: Swaledale and Wensleydale see Appendix XV, U.K., 1850-72, B.R. Mitchell & P. Deane, *Abstract of British Historical Statistics*, Cambridge, 1962, p160.

Yorkshire and the U.K., 1873-1913, PRO RAIL 527/1071, *Mineral Statistics, 1873-1913*.

century.⁷¹ Other areas, including the North Pennine field, suffered the same fate as the Swaledale and Wensleydale mines.⁷² While the decline in the output of all the lead fields in the country was the result of certain common causes such as the exhaustion of seams and the low price of lead, local factors in each area either

hastened or slowed the rate of decline. In Wales, among the local factors contributing to decline were the method of paying royalties, the multiplicity of mineral rights' owners, the lack of capital, large-scale dishonest practices, and unfair treatment by the smelters.⁷³ The dales were fortunate in having few of these problems. In the nineteenth century mineral rights were in the hands of a few families and there was flexibility in the payment of royalties.⁷⁴ There was little indication of dishonest practices or unfair behaviour by smelters because generally the smelt mills were run by the major lead-producing company in the area they served.⁷⁵ One factor which did affect the industry in Swaledale and Wensleydale, however, was the inaccessibility of the area which resulted in high transport costs. The railway was opened to Richmond in Swaledale in 1846 and to Leyburn in Wensleydale in 1856, and throughout the whole of Wensleydale in 1878, but this did not reduce the cost of transport from the mine to the smelt mill and thence to the rail head. Other local factors which affected the industry in the late nineteenth century were the increasing costs of production, due in part to increased wages, coupled with the lack of large-scale investment. Had it not been for the unwillingness of investors to risk loss of capital, new veins might have been discovered which could have maintained production and extended the life of the lead industry into the twentieth century.

Swaledale and, to a lesser extent, Wensleydale had the prerequisites identified by Dr. Joan Thirsk for the growth of a rural industry.⁷⁶ The area had: small pastoral farms; raw materials; an expanding population; and a tradition of dual occupations. Lead mining in Swaledale in the eighteenth century had developed into a typical rural industry in that it provided employment for many families who also had an interest in farming, resulting in a dual economy. By the late eighteenth century the lead-mining industry had become the major employer and remained so for a hundred years. The comment of a contemporary writer on the rural industrial areas of the West Riding in 1799 is also applicable to Swaledale at that date:

The greatest part of the ground is there occupied by persons who do not consider farming as a business, but regard it only as a matter of convenience.⁷⁷

Although there are no reliable figures for employment prior to the mid-nineteenth century, both contemporaries visiting the area and the enumerators of the 1801-31 census returns noted that a great many people were employed in the industry. Arthur Young, writing in 1771, was probably not exaggerating when he claimed that the mines of Swaledale gave employment to hundreds of people in the area.⁷⁸ It was estimated in 1821, when the lead industry in Swaledale was probably at its zenith, that it provided employment for about 2000 people.⁷⁹ If this estimate is correct, it

represents the peak in the number employed in the industry and accounted for about 67.0 per cent of the occupied population.¹⁰ By 1831, when the depression in the lead industry was taking its toll and miners were leaving the area in search of work elsewhere, numbers employed in the industry fell to an estimated 1372 people or 48.9 per cent of the occupied population.¹¹

As noted earlier, the lead industry in Wensleydale was probably not developed to any great extent until later in the century, a supposition which appears to be substantiated by the lack of contemporary comment on employment in the industry in the early nineteenth century.

One of the earliest comments relates to 1831 when the census enumerator for Wensley noted that 120 men were employed in the lead mines.¹²

The census enumerators' books for 1841 to 1881 provide more detailed information concerning numbers employed in the lead industry (see Table 11.8). The 1841 census returns, while not as comprehensive as the later returns, show that employment in the Swaledale lead industry remained high despite the impact of the 1829-33 depression.

The peak of employment for the period 1841-81 occurred in 1851, when 47.9 per cent of the dale's workforce was employed in the industry. This coincides with the period of high output attained in the late 1840s and 1850s. After this date the number of workers employed in lead mining fell at an increasingly fast rate.

TABLE 11.8

NUMBERS EMPLOYED IN THE LEAD INDUSTRY IN SWALEDALE AND
UPPER AND LOWER WENSLEYDALE, 1841-1881.

	1841	% ¹	1851	% ¹	1861	% ¹	1871	% ¹	1881	% ¹
S/d	1004	45.5	1301	47.9	1139	43.1	930	40.0	632	30.6
U. W/d	18	0.9	39	1.5	73	2.8	57	2.2	35	1.4
L. W/d	43	4.8	181	15.1	230	18.9	106	9.0	96	8.4
W/d	61	2.1	220	5.8	303	7.8	163	4.3	131	3.6

¹ Percentage of occupied population.

Source: PRO HO 107/1245-6, 1252-4, 2379-80, RG 9/3667-73, RG 10/4868-73, RG 11/4873-8, CEB, 1841-81, Swaledale and upper and lower Wensleydale.

By 1881 the number employed had fallen to less than half of its 1851 level and comprised less than one-third of the dale's total workforce. The lead industry in upper Wensleydale was relatively insignificant in the period 1841-81 and did not provide employment for more than 2.8 per cent of the occupied population. The lead industry in lower Wensleydale was for a short time a major employer and at its peak in 1861 provided work for 18.9 per cent of the total workforce. This was almost the same level of employment as was provided in agriculture and crafts. It is possible that employment may have peaked earlier, as in the late 1850s Keld Heads mine was reputed to have employed 250 workers and it was estimated that overall 400 workers were employed in the lower Wensleydale lead industry.²³ The number of workers fell steeply after 1861, reflecting the sharp drop in output in the late 1860s, and by 1881 the

lead industry in the whole of Wensleydale employed only 3.6 per cent of the dale's workforce.

Employment returns collected intermittently by the mineral statistics office provide some information for the period 1877 to 1913 (see Table 11.9). Over this period as a whole the number of workers in the Swaledale lead industry fell from 713 to 10, a massive reduction of 98.6 per cent. For the most part this decline was uninterrupted, although the trend was reversed briefly in 1878, 1905 and 1907. Up to 1900 the most significant fall occurred in 1880-3, coincident with a substantial reduction in output from the A.D. group of mines. By 1900 the numbers employed in the industry constituted less than a tenth of the total occupied population of Swaledale. Lead mining survived into the twentieth century only in Arkengarthdale and even there it was in a severely depressed state. In 1911 the enumerator for Arkengarthdale noted that the decline in the population of the township between 1901 and 1911 was due to the collapse of the lead industry.²⁴ In Wensleydale the lead industry employed less than a tenth of the working population by 1883 and the industry had ceased to be a major economic force.

TABLE 11.9

NUMBERS EMPLOYED IN THE LEAD INDUSTRY IN SWALEDALE AND
UPPER AND LOWER WENSLEYDALE, 1877-1913.

	Swaledale	% ¹	Upper W/d	% ¹	Lower W/d	% ¹
1877	713	34.5	46	1.9	99	8.7
1878	807	39.0	46	1.9	112	9.8
1879	794	38.4	24	1.0	111	9.7
1880	765	37.0	29	1.2	107	9.4
1883	483	23.4	10	0.4	64	5.6
1890	300 ²	21.2	-	-	2	0.2
1898	105	9.5	-	-	-	-
1899	92	8.3	-	-	-	-
1900	87	7.9	-	-	-	-
1901	77	7.0	-	-	-	-
1902	47	4.2	-	-	-	-
1903	29	2.6	-	-	-	-
1904	20	1.8	-	-	-	-
1905	28	2.5	-	-	-	-
1906	10	1.0	-	-	-	-
1907	45	4.3	-	-	-	-
1908	48	4.6	-	-	-	-
1909	44	4.2	-	-	-	-
1910	37	3.5	-	-	-	-
1911	19	1.8	-	-	-	-
1912	17	1.6	-	-	-	-
1913	10	1.0	-	-	-	-

¹ The percentage relates to the number of workers employed in the lead industry as a proportion of the total occupied population at the nearest decennial census i.e. 1877-83 is drawn from the 1881 census, 1890 from 1891, 1898-1905 from 1901, 1906-13 from 1911. The occupied population at 1891, 1901 and 1911 has been calculated on the basis of the occupied population in 1881 being 43.9 per cent of the total population.

² This figure is taken from Bulmer's Directory, 1890 and may not be accurate.

Source:

1877-80, 1898-1913 - R. Burt et al, *The Yorkshire Mineral Statistics, 1845-1913*, Exeter, 1982, passim.

1883 - PRO ZHC1 4622, *Summaries of Mineral Statistics, 1884*.

1890 - T. Bulmer & Co, *History, Topography and Directory of North Yorkshire*, Preston, 1890, pp330, 440.

The decline in the number of workers employed in the lead industry in Swaledale and lower Wensleydale was serious but at township level it was often catastrophic. Melbecks township, for example, lost just under half its population in the decade 1881 to 1891 and, as discussed above, most of the fall will have occurred in the early 1880s. Arkengarthdale lost 44 per cent of its population when the mines failed between 1891 and 1901. Muker and Castle Bolton lost about a quarter of their population in the decades 1851-61 and 1861-71 respectively.²⁰ The social and cultural structure of these townships disintegrated as the mining families left the area and it was in these areas that the readjustment to a farming community was the most radical.

Traditionally, lead mining was an occupation which could easily be undertaken in conjunction with other employment. While the opportunities for dual occupations probably diminished as increased numbers were employed in the lead industry, even by the third quarter of the century the number of workers with dual occupations was still significant. Table 11.10 provides a guide to the incidence and relative importance of dual occupations in the lead industry in the period 1841-81. For obvious reasons dual employment in lead mining was considerably more important in Swaledale than in Wensleydale. At the peak of dual employment in 1871, 12.3 per cent of those employed in lead mining in Swaledale recorded a second occupation. Although in 1881 10.6 per cent of Swaledale lead miners still had

dual occupations, the actual number had fallen by almost one-half over the previous decade. Many of those with other occupations had left mining and either migrated from the area or had concentrated on their other work.

TABLE 11.10

LEAD MINERS WITH DUAL OCCUPATIONS IN SWALEDALE AND
UPPER AND LOWER WENSLEYDALE, 1841-1881.

	1841		1851		1861		1871		1881	
	nos	% ¹	nos	% ¹	nos	% ¹	nos	% ¹	nos	% ¹
Upper W/d	-	-	1	1.5	3	4.1	10	17.5	1	2.9
Lower W/d	-	-	-	-	6	2.6	9	8.5	3	3.1
Swaledale	1	0.1	63	4.8	71	6.2	114	12.3	67	10.6

¹ Percentage of workers in the lead industry with dual occupations.

Source: see Table 11.8.

As with employment in other extractive industries in the nineteenth century, both women and children worked in the lead industry, although in Swaledale and Wensleydale they were employed only above ground in ore washing and associated activities. In 1843 many women were involved in ore washing and in 1851 59 women were returned as working on the ore floors.⁶⁶ In line with the national decline in the employment of women in the extractive industries, the number of women employed in the dales' lead industry fell in the latter part of the nineteenth century. By 1881 only six women were working in the industry in Swaledale and there were none in Wensleydale.⁶⁷ The fall in the number of women workers in the Swaledale and Wensleydale industry was in response both to a national impetus to remove women from such work and to the decline in job opportunities as

lead output fell in the locality.⁰⁰

Table 11.11 shows that, as with women, the employment of children declined from 1851 as attitudes towards children's employment changed and as the local industry declined. In 1851 and 1861, however, the contribution of children to the total lead-mining labour force in Swaledale, at over 10 per cent, was not insignificant. In Wensleydale, at the same dates, the proportion of child labour was about half that of Swaledale. This is not altogether surprising as proportionately fewer children were in employment generally in Wensleydale than in Swaledale (see Table 3.16). This may reflect differences either in local tradition or in the supply of and demand for labour.

TABLE 11.11

CHILDREN EMPLOYED IN THE LEAD INDUSTRY IN SWALEDALE AND
WENSLEYDALE, 1841-1881.

	1841	% ¹	1851	% ¹	1861	% ¹	1871	% ¹	1881	% ¹
S/D	49	4.9	138	10.6	126	11.1	67	7.2	32	5.1
W/D	-	-	13	5.9	20	6.6	4	2.5	2	1.5

¹ Percentage of all workers in the lead industry.

Source: see Table 11.8.

While conditions of work in the dales' lead industry, as in the extractive industries generally, were hard, there were some compensating features. The eighteenth and nineteenth centuries witnessed a transition from the independent miner/farmer to the proletarianized worker as the industry became organized on a larger scale. However, many of the miners retained much of their independence

through the system of bargains and often decided their own hours of work, shifts and method of working.⁷⁷ The hours of work in the Swaledale lead industry in the late eighteenth and early nineteenth centuries varied depending on the type of work undertaken. A witness before the Kinnaird Commission in 1864 noted that miners in the dales frequently worked only three or four hours, finishing for the day at 12 or 1 o'clock.⁷⁸ While this may have been an exaggeration, it appears that working hours were not long by nineteenth-century standards. From the early nineteenth century the length of a shift was generally six hours and was usually agreed and stipulated in the lease. However, if men made a 'lucky strike' they often worked longer.⁷⁹ Miners worked a six day week but those with a farming interest adapted their mining activities to the requirements of the farming year and, for example, many men stopped mining altogether during haytime.⁸⁰ The hours worked by lead-ore dressers, smelters, craftsmen, and day labourers were longer than those of the miners and by the late 1870s an eight hour day was normal.⁸¹ The hours worked in Swaledale and Wensleydale were shorter than in the lead industry in the North Pennine field where an eight hour day for lead miners and a ten hour day for dressers and smelters was usual.⁸² However, the smelters in the North Pennine field had the advantage of working only a four or five day week whereas other employees in the industry worked the usual six day week.⁸³ These differences are probably indicative of the fact that

conditions of work were determined locally and reflected local traditions.

VI

Two distinct groups of workers were employed in the lead industry, those who worked underground (pickmen and deadmen) and those who worked above ground (smelters, ore dressers, craftsmen and unskilled labourers). Table 11.12 shows that in the period 1851-81 between 88 and 96 per cent of all workers employed in the dales' lead industry worked underground.⁷⁶

TABLE 11.12

WORKERS IN THE LEAD INDUSTRY IN SWALEDALE AND
WENSLEYDALE, 1841-81.

	Lead Miners				Work asstd. with lead ¹			
	S/d	%	W/d	%	S/d	%	W/d	%
1841	949	94.5	61	100.0	55	5.5	-	-
1851	1144	87.9	212	96.4	157	12.1	8	3.6
1861	1034	90.8	274	90.4	105	9.2	29	9.6
1871	868	93.3	145	89.0	62	6.7	18	11.0
1881	596	94.3	122	93.1	36	5.7	9	6.9

¹ Above ground workers.

Source: see Table 11.8.

The earnings of workers in the lead industry, as in other extractive industries, are difficult to estimate due to under-employment and to the different methods of payment.⁷⁷ By the nineteenth century the pickmen who extracted the

ore, instead of being independent in their partnerships and paying an agreed royalty on any ore raised, were becoming increasingly tied by formal agreements. The partnerships made bargains with the mine lessees at a fixed price per bing (eight hundredweight) of ore raised.⁹⁹ Earnings, therefore, depended not only on the agreed price but on the miners' judgement and a significant element of luck. Other workers in the mines, the deadmen who drove the shafts and levels, also often worked in partnerships but were paid by the fathom worked. The partnership system gave the miners some bargaining power but had the effect of lowering earnings if too many men were taken into the partnership or if the expected quantity of ore was not found.¹⁰⁰ Not all the members of a partnership were of equal standing and workers in the partnership received different levels of pay from the bargain depending on their skill and experience.¹⁰⁰ Ore dressers and smelters were paid by the bing or fodder of lead ore or processed lead.¹⁰¹ Some craftsmen were paid by the piece and other craftsmen and unskilled labourers were paid by the day or the week.¹⁰² Carriers were paid by the pig of lead carried or by the day.¹⁰³

In the eighteenth and early nineteenth centuries pay days in the extractive industries nationally took place infrequently, usually at half-yearly or yearly intervals and this was the practice in the dales. The scarcity of small change and the problems which the mine owners often had in raising cash, generally militated against more

frequent payment.¹⁰⁴ However, occasionally events necessitated a more frequent pay day. For example, in 1803 there was a shortage of miners and, exceptionally, lead workers were paid weekly for a short time in order to attract miners to the Arkengarthdale field.¹⁰⁵ The length of time between pay days meant that miners often went into debt and tradesmen could expect to have their accounts settled only on pay days.¹⁰⁶ This resulted in some miners being continually in debt. In order to alleviate this problem some mine owners gave subsistence pay at more regular intervals and the parish also gave advances but increasingly from the early nineteenth century there was pressure to pay miners by the month.¹⁰⁷ By 1805 most of the miners in Arkengarthdale were paid monthly but, although some mines adopted monthly pay, others still experienced problems in raising the cash.¹⁰⁸ Despite legislation from the 1830s governing methods of payment, many dales' miners continued to be paid at less frequent intervals until at least the 1850s.¹⁰⁹ Traditionally the pay day was held in a public house where the publican always had a ready supply of small change which facilitated the sharing of earnings between the partners. By the 1840s, due to the payment of wages in public houses having become illegal in 1842 and to the growing influence of the temperance movement, this tradition was dying out and pay was given in small change at the mine.¹¹⁰ Wages varied significantly from mine to mine and in the 1860s, for example, at some mines weekly wages were as high as 16s to

18s whereas at poorer mines they were as low as 10s.¹¹¹
 The miners had to provide candles and gunpowder, and had to pay for dressing their ore which means that nominal wage rates do not reflect net earnings.¹¹²

Despite the absence of comprehensive data on earnings, information on wage levels is available from a variety of contemporary sources. The most detailed of this is presented, together with figures for average wages in the North Pennine lead field, in Table 11.13.

TABLE 11.13

AVERAGE WEEKLY EARNINGS OF WORKERS IN THE SWALEDALE LEAD
 INDUSTRY AND LEAD MINERS IN THE NORTH PENNINES.¹

	1795		1807		1824		1828		1851		1860		1867		1871		1874		1881	
	s	d	s	d	s	d	s	d	s	d	s	d	s	d	s	d	s	d	s	d
Pickm.	-	-	-	-	-	-	-	-	-	-	14.0	17.6	17.6	17.6	12.0					
Deadm.	-	-	-	-	-	-	-	-	-	-	12.0	13.6	15.6	16.0	13.6					
Av.Lm. ²	-	-	-	-	-	-	-	-	-	-	13.0	15.6	16.6	16.9	12.9					
Cr.& Sm ³	11.0	15.0	18.0	18.0	-	-	-	-	-	-	18.0	18.0	21.0	18.0						
Labs ⁴	9.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	15.0	15.0	17.0	12.0						
N.Pen.	-	-	15.1	13.5	13.9	14.6	15.10	17.2	22.5	-										

¹ In shillings and pence to the nearest penny.

² The average pay for an underground worker derived from the pay of pickmen and deadmen.

³ The figures for craftsmen and smelters are six times the daily rate and, therefore, do not allow for under employment.

⁴ Unskilled workers in the lead industry.

Source: modified reprint from Jennings, op cit, Table V, p290.

Women and children employed in the lead industry were paid a proportion of the man's wage. For example, in 1771 miners in Swaledale earned on average 1s 3d per day, while

women earned 1s per day, and children 4d-9d.¹¹³ As was the case in other occupations, after the outbreak of the war with France wages rose and by 1794 men were reputedly paid 3s per day for a three hour shift.¹¹⁴ In the 1790s, when there was a brief depression, some of the men were laid off and wages fell.¹¹⁵ The lead industry quickly recovered from the depression and the upward trend of earnings continued into the early nineteenth century with the period 1800-10, apart from brief downturns, being one of high wages.¹¹⁶ Earnings fell from the peak in 1810 but by the early 1820s had recovered slightly only to slump to barely above starvation level in the early-1830s. As one contemporary writer noted in 1830, many miners were without any work:

Now the mines are exhausted, the price of lead is low and miners are forced to obtain a living in other countries which they cannot get here ... The man who formerly scorned to be troublesome to the parish now seeks every opportunity to throw himself upon it.¹¹⁷

The mines were not exhausted and from the late 1830s to the early 1870s, coincident with a period of prosperity in the Swaledale industry, wages generally increased.¹¹⁸ After 1874 wages again declined as the lead industry entered the late nineteenth-century depression.

Throughout the nineteenth century the wages of lead workers in Swaledale and Wensleydale, while not as high as those of coal workers, were generally higher than those of the local agricultural worker (see Chapter 7).¹¹⁹

Although the wage rates of dales' lead miners show marked local fluctuations at least until the 1870s, they followed a similar trend to those of lead miners in the North Pennine field and to those of miners in other extractive industries.¹²⁰ This suggests that a significant factor in the determination of wage rates was the response of the industry to the trade cycle.¹²¹ After the early 1870s, the wages of the local miners were affected not only by the downturn in the trade cycle but also by other factors such as the sustained fall in the price of lead and the exhaustion of lead seams within the two dales. Consequently, when national wage levels partly recovered in the 1880s those of the dales' miners remained depressed.¹²²

The estimated annual earnings of workers in the dales' lead industry (see Table 11.14) assist in the estimation of lessees outgoings. A large proportion of the value of the lead raised from the Swaledale and Wensleydale mines was absorbed in the costs of production, of which labour costs possibly constituted at least 70 per cent.¹²³ In order to assess the level of labour costs the total wages bill in the two dales has been estimated and is presented in Table 11.15.

The wages bill for Swaledale in 1821, at £74,112, would have been the highest of the century and, although as noted earlier this figure may be a little high, it is clear that at this time both output and employment were considerable. Most of the miners' pay would have been spent within the

dale thereby generating more jobs and wealth within the area and probably making the early part of the nineteenth century the period of peak prosperity for Swaledale.

TABLE 11.14

ESTIMATED ANNUAL WAGES IN THE SWALEDALE AND WENSLEYDALE
LEAD INDUSTRY, 1821-1881.¹

	Miners £	Smelters £	Ore Dr./Labs. ² £
1821	37.2	43.2	28.8
1831	19.2	26.4	18.0
1841 ³			
1851	31.2	43.2	28.8
1861	31.2	43.2	28.8
1871	39.8	43.2	36.0
1881	30.6	43.2	28.8

¹ Based on a 48-week year, allowing an average of four weeks for haymaking and other farm work (see Jennings, *op cit*, p294).

² Ore dressers and unskilled labourers in the lead industry were paid similar rates.

³ No earnings are available for any years near 1841.

Note: the annual wage of a miner in 1821 has been estimated at 15s 6d per week. This is based on 86 per cent (the percentage in 1867) of a smelter's wage in 1824 (see Table 11.13). Although this wage appears high when compared with the 1831 figure, the early nineteenth century was a period of high wages and these did not fall steeply immediately after the war. Weekly wages in 1831 were as low as 8s per week for miners, and smelters and labourers are estimated as earning 11s and 7s 6d per week respectively at that time. In the North Pennines in 1830 smelters earned 7s 6d a fodder and this was about two-thirds the weekly wage; therefore the weekly wage was about 11s, Hunt, *op cit*, p106. In 1851 only limited information is available. The wages of smelters in 1851 and 1861 have been estimated at 18s per week and those of miners in 1851 at 13s per week (see Table 11.13 for 1828 and 1860 figures for the relationship of these wages to unskilled labourers wages).

The wages for 1871 and 1881 have been drawn directly from Table 11.13.

Source: derived from Table 11.13.

TABLE 11.15

ESTIMATED WAGES BILL IN THE SWALEDALE AND WENSLEYDALE LEAD
INDUSTRY, 1821-1881.¹

	Miners		Others ²		Total	
	nos	£	nos	£	nos	£
1821 ³						
S/d	1,760	65,472	240	8,640	2,000	74,112
1831 ³						
S/d	1,181	22,675	161	3,578	1,342	26,253
1841 ⁴						
S/d	949	-	55	-	1,004	-
W/d	61	-	-	-	61	-
1851						
S/d	1,144	35,693	157	5,659	1,301	41,352
W/d	212	6,614	8	288	220	6,902
1861						
S/d	1,034	32,261	105	3,788	1,139	36,049
W/d	274	8,549	29	1,051	303	9,600
1871						
S/d	868	34,546	62	2,455	930	37,001
W/d	145	5,811	18	713	163	6,524
1881						
S/d	596	18,238	36	1,296	632	19,534
W/d	122	3,733	9	331	131	4,064

¹ To the nearest pound.

² It is not known precisely how many of the above ground workers were smelters and how many were ore dressers/labourers, so half have been assigned to each category. Where there is an odd number it has been allocated in favour of the smelters.

³ In 1851 the ratio of lead miners to above ground workers in Swaledale was 88 : 12 (see Table 11.12) and this ratio has been used for the 1821 and 1831 calculations for which detailed information is not available.

⁴ No earnings are available for this period.

Note: the estimates do not allow for under-employment. It is not possible to calculate the number of craftsmen and labourers in the lead industry as they did not usually specify their association with the industry and were returned in their generic category.

Source: derived from Tables 11.12-11.14.

By 1831, the total wages bill had fallen by 64.4 per cent from its 1821 level. This reflects the devastating effects of the 1829-33 depression when the numbers in

employment and the level of wages fell sharply. The total wages bill for Swaledale remained fairly stable between 1851 and 1871 as the effect of the declining workforce was offset by rising wages. By 1881, however, the wages bill was little more than half its 1871 level, a fact which had repercussions throughout the community.

Unfortunately, lack of data means that it is not possible to estimate the total wages bill for Wensleydale prior to 1851. Not surprisingly, the highest wages bill in Wensleydale was recorded in 1861, when output and employment were at their peak. Between 1861 and 1881 the total wages bill fell by more than half. However, the collapse of the lead industry had a less catastrophic impact on economic life in Wensleydale than had been the case in Swaledale.

The number of workers employed in lead mining and the total wages paid graphically demonstrate the impact of the industry on the two dales. The impact was particularly great in Swaledale, which benefited more from the high employment and the consequent high total wages bill when the industry was buoyant but which, conversely, suffered greater hardship in periods of depression.

VII

It is difficult to assess the overall profitability of the lead industry in Swaledale and Wensleydale as information is not available on all aspects of production. Although some data are extant on profits at several of the

mines at certain points in the nineteenth century, these are insufficiently detailed to provide a basis for estimating the profitability of the whole of the Swaledale and Wensleydale lead field. While losses were, on occasions, substantial, profits were also frequently high. Average annual profits at the Old Gang mines rose from £4176 in 1867/72 to £5972 in 1872/3 but by 1874/5 had fallen to £441. From that date the mine recorded losses which reached a level of £2926 in 1881/2.¹²⁴ The Arkengarthdale mines show a similar picture of profits and losses. Between 1870 and 1873 the mines recorded an accumulated loss of £6700 but by 1887 the mines showed a total net profit of £45,591, including a profit of £11,390 in the single year 1877/8.¹²⁵

An indication of the profitability of the Swaledale and Wensleydale lead industry can be gained, however, from an examination of labour costs as a proportion of the total value of lead produced (see Table 11.16). The proportion of labour costs to the total value of lead produced in Swaledale varied from 59.3 per cent in 1851, when as contemporary writers noted, profits were probably high, to 70.7 per cent in 1861. With labour costs estimated, on average, at 70 per cent of total costs, there would have been little, if any, profit in 1861. The proportion of labour costs to total value in 1871 was comparable to that of 1851 and it is likely that profits were made at this period. Although some profits may have been made in the

TABLE 11.16

PROPORTION OF TOTAL WAGES TO THE VALUE OF LEAD IN SWALEDALE
AND WENSLEYDALE, 1850-4 TO 1880-4.¹

	Wages ²	Value ³	% ⁴
Swaledale			
1851	41,352	69,720	59.3
1861	36,049	51,009	70.7
1871	37,001	59,800	61.9
1881	19,534	29,778	65.6
Wensleydale			
1851	6902	15,920	43.4
1861	9600	31,878	30.1
1871	6524	7420	87.9
1881	4064	3402	119.5

¹ To nearest £.

² See Table 11.15.

³ The value of lead produced is calculated on the annual average of the quinquennia, 1850-4 to 1880-4, taken from Table 11.6 and is based on the London price of lead.

⁴ Total wages as a percentage of total value of lead.

Source: see Tables 11.6 and 11.15.

early 1880s, this was a period when considerable expenditure was required for developing the mines, so labour costs may have represented less than 70 per cent of total costs making it unlikely that profits, if any, would have been substantial. In Wensleydale during the 1850s and 1860s, when the industry enjoyed its brief period of prosperity, labour costs were low relative to the value of production and profits were probably substantial. The situation was reversed after the 1860s and, while the mines may have been running at a loss in the 1870s, by the 1880s labour costs alone were 19.5 per cent greater than the value of lead. As lead mining was a high-risk and labour-intensive industry, there was an incentive to employ

labour as cheaply as possible. This may explain why substantial numbers of children were employed in the industry at this time.

As noted earlier, the management of the mines changed over the nineteenth century and this affected the financing of the industry. Partnerships, which were the commonest form of management prior to the 1860s, ranged from three to thirty-two members and the level of investment expected from each partner varied accordingly.¹²⁶ For example, a partner in one of the larger mines in the area would be expected to invest £1-2000. Usually, partners paid their share of the bills and took their share of the profit, if any, from the sale of the smelted lead.¹²⁷ From the 1860s and 1870s several joint stock companies were established and investment was raised on a nominal share capital which could be extended later if further investment was needed. On occasions not all the nominal share capital of the newly-formed companies was taken up. In 1873, for example, the A.D. Lead Mining Company Ltd, which ran the Surrender and other nearby mines, had a nominal share capital of £25,000 of which £18,500 was taken up. Shareholders comprised five local and nine non-local people who probably received little or no return on their investment as only small quantities of ore were raised after 1873.¹²⁸ Similarly, in 1889 the Old Gang Lead Mining Company Limited had only £16,400 of its nominal share capital of £20,000 taken up and, like the A.D. Company, probably never yielded a return to its investors.¹²⁹ These examples of the poor

response to offers of shares provide a further indication of the growing lack of confidence in the industry in the last three decades of the nineteenth century.

VIII

The lead industry had a substantial multiplier effect on the overall economy of Swaledale. Tradesmen were geared to supplying the needs of the lead miners and, particularly in the early years of the century, were accustomed to waiting long periods for their accounts to be settled. Farmers had a ready market for their produce, they let their fields to miners who wished to keep a cow and they reared horses for use as 'jagger' ponies.¹³⁰

Initially, the rapid increase in the population, while bringing wealth to the dale, caused many problems. In Swaledale in 1823 there were:

to be found those appearances of squalid neglect about the persons of the inhabitants and those external accumulations of domestic filth about their dwellings, which sicken every stranger in the worst parts of Lancashire and the West Riding of Yorkshire.¹³¹

Industrialization and its attendant problems had arrived in Swaledale. Later in the century both the habits and houses of the miners had generally improved.¹³² Mine owners encouraged miners to have a small holding as it was felt this would induce them to stay in the area rather than go elsewhere in search of higher wages.¹³³ The local middle and upper classes helped miners to improve their

standard of living by establishing special shows to encourage 'habits of cleanliness and industry amongst the miners'.¹³⁴ Also, the growth of nonconformity, the temperance movement and friendly societies in the two dales in the nineteenth century helped improve the quality of life of the miners.¹³⁵

The impact, both positive and negative, of a non-agricultural industry on a rural community is clearly demonstrated by the example of the lead industry in the dales. As Dr.Thirsk has remarked, while a dual economy of farming and mining could support a larger community than agriculture alone, it could also create difficulties, particularly if mining expanded into a position of dominance. Dr.Thirsk poses the question, 'What of the social and economic problems that must have developed as populations grew and an increasing number of workers took to mining without farming?'¹³⁶ The situation in the dales, particularly in Swaledale, throws some light on this dilemma. From the late eighteenth century to the end of the third quarter of the nineteenth century lead mining was the dominant industry in Swaledale. Dependence on a single, major industry was not necessarily a problem and, overall, lead mining brought a substantial measure of prosperity to the dale, particularly from 1800 to the 1820s and in the 1840s and 1850s. However, this 'structural' imbalance in the economy, particularly when the dominant industry was so highly volatile, rendered the local community seriously vulnerable to severe hardship in times

of depression. As Francis Garth commented in the depths of the 1829-33 depression:

Snow closes the year marked throughout with the greatest distress in Swaledale which the oldest can remember - The exhausted (sic) state of the mines and the very low price of lead and a monopoly (sic) of Mining concerns has reduced Wages to a starving state - great numbers has (sic) with their families gone off and Pauperism become almost general'.¹³⁷

Although the industry recovered, the severe depression of 1829-33 and the suffering which this caused presaged the even greater difficulties which ensued when the lead industry entered its final decline in the late nineteenth century. The rapid and total collapse of the industry did not affect only lead workers, the downward multiplier effect resulted in the severe disruption of all facets of the economic and social life of the dale.

The lead industry in Wensleydale was both smaller and more localized than that in Swaledale and, accordingly, its impact was more restricted. At its height in the 1850s and 1860s it was the leading income sector in lower Wensleydale and it assisted with the development of a more diversified economy. The decline of the lead industry did not affect the local community to the same extent as in Swaledale. This was not only because the industry was more localized but because decline in the Wensleydale industry, unlike the situation in Swaledale, occurred in a period of relative prosperity. Consequently the impact on the economy, particularly on the employment prospects of the redundant

lead workers, and on the social life of the community was
less severe.

NOTES - LEAD MINING

¹ The lead industry of Swaledale and Wensleydale has been the subject of much previous research. Dr. Arthur Raistrick has published the following on the dales' lead industry: *Mines and Miners of Swaledale*, Clapham, 1955; *The Lead Industry of Wensleydale and Swaledale*, 2 vols, Buxton, 1975. Bernard Jennings completed his M.A. thesis at the University of Leeds entitled, 'The Lead Mining Industry of Swaledale', in 1959. Raistrick and Jennings jointly published *A History of Lead Mining in the Pennines*, 1965, repr. Ilkley, 1983. Roger Fieldhouse and Bernard Jennings published *A History of Richmond and Swaledale*, 1978, which includes a chapter on lead mining. Among other works relating to the dales' lead industry are R.T.Clough, *The Lead Smelting Mills of the Yorkshire Dales and Northern Pennines*, Keighley, 1962, repr. 1980, A.E.Shayler, J.K.Almond, & H.L.Beadle, *Lead Mining in Swaledale and Teesdale*, Cleveland, 1979.

It is not my intention to repeat the research of the above authors here but rather to draw on their work only to clarify the results of my own research into those areas of the industry not covered. In this chapter the lead industry is studied in order to place it in the wider context of economic and social change in Swaledale and Wensleydale.

² W.J.Lewis, *Lead Mining in Wales*, Cardiff, 1967, p1.

³ R.Burt, 'Lead Production in England and Wales, 1700-1770',

ECHR, 2nd ser., XXII, 1969, pp259-63.

⁴ *Ibid.*

⁵ Jennings, *op cit*, p64. This point relates to the nineteenth century, Burt notes that demand for lead in the pewter industry continued to grow until at least the beginning of the nineteenth century, *op cit*, pp260-1.

⁶ Lewis, *op cit*, p13.

⁷ *Ibid*, p315.

⁸ *Ibid.* In 1826 the duty on imported lead ore which had been 36s was reduced to 10s; Raistrick & Jennings, *op cit*, p279.

⁹ Lewis, *op cit*, p315,

¹⁰ *Ibid*, pp316-8; Raistrick & Jennings, *op cit*, p280. As with farm produce, the impact of the U.S.A. lead industry which began exporting in the 1840s was not really felt until the 1870s. This was due to the deterioration of the quality of Spanish lead and the rapidly increasing markets at home and abroad as population and industry continued to grow in the mid-nineteenth century. This meant that the increased production of lead in the U.S.A. was absorbed without flooding the market and drastically lowering prices.

¹¹ B.R.Mitchell & P.Deane, *Abstract of British Historical Statistics*, Cambridge, 1962, p160; Lewis, *op cit*, p317.

¹² Mitchell & Deane, *op cit*, p170.

¹³ *Ibid*, pp160,170; Jennings, *op cit*, pp182-3.

¹⁴ Burt, *op cit*, p250.

¹⁵ *Ibid*, pp251,254.

- ¹⁴ *Ibid*, p254.
- ¹⁷ Raistrick & Jennings, *op cit*, pp281-2.
- ¹⁸ Raistrick, 1975, *op cit*, Vol. I, p12.
- ¹⁹ *Ibid*.
- ²⁰ *Ibid*.
- ²¹ *Ibid*, p13.
- ²² *Ibid*, pp17,21-5.
- ²³ *Ibid*, pp25-8.
- ²⁴ *Ibid*, p31.
- ²⁵ A. Raistrick, 'The London (Quaker) Lead Company Mines in Yorkshire', draft of article later published in *Memoirs of the Northern Cavern & Mine Research Society*, II, 1973, pp1-3.
- ²⁶ Raistrick, 1975, *op cit*, p29.
- ²⁷ Joanna Martin notes a similar situation in other areas of the country, J. Martin, 'Private Enterprise versus Manorial Rights: Mineral Property Disputes in Eighteenth Century Glamorgan', *Welsh History Review*, 9, 1978-9, pp155,174.
- ²⁸ Jennings, *op cit*, p253.
- ²⁹ Raistrick & Jennings, *op cit*, p189.
- ³⁰ Jennings, *op cit*, pp253-4; Raistrick, 1973, *op cit*, pp2-4.
- ³¹ *Ibid*, p77.
- ³² *Ibid*, pp78-80. A different situation occurred in Wales where, during the war, mining in one of the largest fields was in the hands of two wealthy men (one a former land agent and the other a lead mine manager from Derbyshire) and a large number of small miners; Lewis, *op cit*,

pp108,110-116. The apparent paradox between high local output and falling national output was due to the fact that when rich seams were discovered they were usually worked regardless of market conditions. Jennings, op cit, p100. In the early nineteenth century several of the Swaledale mining fields were producing ore from recently discovered veins, Ibid, p101; P.Romney(ed), *The Diary of Charles Fothergill, 1805*, Leeds, 1984, pp222-4.

³³ Jennings, op cit, pp77-80.

³⁴ J.Harland, *A Glossary of Words used in Swaledale, Yorkshire, 1873*, pp1-2.

³⁵ Jennings, op cit, pp77-80,115.

³⁶ A similar situation occurred in Wales where in the 1840s local men including tradesmen, gentlemen, merchants and farmers, with only a little capital, took leases, Lewis, op cit, p177.

³⁷ The Letter Books of Matthew Wadeson, lead agent, extract reprinted in M.Hartley & J.Ingilby, *A Dales Heritage*, Clapham, 1982, p87.

³⁸ T.Ford & J.H.Rieuwerts, *Lead Mining in the Peak District*, Derby, first edition,1968, this edition 1975, pp19,22; C.J.Hunt, *The Lead Mines of the Northern Pennines in the eighteenth and nineteenth centuries*, Manchester, 1970, p6; Jennings, op cit, pp110-1,115.

³⁹ Ibid, pp254-61.

⁴⁰ Ibid, pp115,254,260-1,264; Fieldhouse & Jennings, op cit, pp219-221.

⁴¹ Jennings, op cit, pp161,173,254. The dales retained the

interest of 'private gentlemen' much longer than north-east Wales where most had left the industry by the 1850s, Lewis, *op cit*, p221.

⁴² Jennings, *op cit*, p254.

⁴³ M.Batty, *Gunnerside Chapel and Gunnerside Folk*, Barnard Castle, 1967, pp22-3. Sir Francis Denys, one of the local mineral rights' owners, noted that 'city men only looked to profits or flotation and considered the workings of the mines as a minor consideration', quoted in Jennings, *op cit*, p174.

⁴⁴ Mitchell & Deane, *op cit*, p160; Jennings *op cit*, pp182-3.

⁴⁵ *Ibid*, pp162-3.

⁴⁶ Ford & Rieuwerts, *op cit*, pp26-7.

⁴⁷ J.D.Marshall & J.K.Walton, *The Lake Counties from 1830 to the mid-twentieth century*, Manchester, 1981, p28; Lewis, *op cit*, p378, Appendix E.

⁴⁸ Jennings, *op cit*, pp161,344.

⁴⁹ Burt, *op cit*, p266; Fieldhouse & Jennings, *op cit*, pp218-9.

⁵⁰ Lewis, *op cit*, p228.

⁵¹ Jennings, pp254-64.

⁵² *Ibid*, pp174-7.

⁵³ *Ibid*.

⁵⁴ Raistrick & Jennings, *op cit*, pp226-7.

⁵⁵ *Ibid*, p277.

⁵⁶ R.F.Hastings, *Essays in North Riding History 1780-1850*, NYCRD Publications, 28, Northallerton, 1981, p26. There is

some confusion about output in these years. Jennings states that Clarkson exaggerated when he claimed in 1814 that output was 3000 tons for the A.D. mines and 2000 tons for the Arkengarthdale mines, *op cit*, p101. However, even if the total output for the whole area was 4000 tons, this would still have yielded the 3000 tons of lead noted by Hastings. This is based on a percentage of lead to ore of 75 per cent. The percentage varied greatly but the average of 75 per cent weight of lead to ore noted by Bulmer in relation to the Arkengarthdale mines has been used, T.Bulmer & Co., *History, Topography and Directory of North Yorkshire*, Preston, 1890, p330.

87 Clarkson, *History of Richmond*, Richmond, 1821, p311, Clarkson notes that this figure relates to a few years previously but that the lead mines after a brief slump were, in 1821, recovering; E.Baines, *History, Directory and Gazetteer of the County of York, Vol II, East and North Ridings*, Leeds, p510.

88 Romney, *op cit*, pp222-4; J.Bigland, *A Topographical and Historical Description of the County of York*, 1819, p290; Clarkson, *op cit*, p311; Baines, *op cit*, p510; Hartley & Ingilby, *op cit*, pp79-88, Account Book of M.Wadeson, lead agent, 1792-1808; T.Allen, *A New and Complete History of the County of York, Vol VI*, 1829, p339.

89 Output of lead from the Arkengarthdale field fell from 1230 tons in 1869 to 451 tons in 1872, Burt et al, *op cit*, Exeter, 1982, p4.

90 PRO RAIL 1060/12-26, *Mineral Statistics*, 1876-89.

41 PRO RAIL 1060/27, *Mines and Quarries, General Reports Statistics, 1897-1903.*

42 The enumerator in the Wensley area in 1831 noted that 120 men were employed in lead mining, NYCR0, FP 19/8, *Census Enumeration Abstract for the County of York, 1831.*

43 T. Whellan & Co, *History and Topography of the City of York; and the North Riding of Yorkshire, Vol II, Beverley, 1859, pp144-5, Whellan attests to the high output of the lower Wensleydale mines and the high dividend paid in 1859.*

Other commentators in the late nineteenth century, maintained that there was still ore to be extracted but that transport difficulties made it uneconomical to exploit, HLRO, Minutes of Evidence, HC, 1881, Vol 47, S-K, p45, evidence of R.Lodge.

44 Burt et al, *op cit, passim, 1864-75; PRO RAIL 1060/12-23, op cit, 1876-1890.*

45 Burt et al, *op cit, passim.*

46 See note 58 and W.White, *History, Gazetteer and Directory of the East and North Ridings of Yorkshire, Sheffield, 1840, p34.*

47 Romney, *op cit, p223.* Fothergill in 1805 noted that the C.B. mill (Arkengarthdale) was smelting up to three marks of lead a week. A mark weighed between 24 and 28 tons, Hartley & Ingilby, *op cit, p83.* The annual estimate based on these figures accords with Jennings's estimate based on Wadeson's account book for Arkengarthdale in 1803-4, Jennings, *op cit, p101.*

48 Ibid, p115, Raistrick & Jennings, *op cit, p281.*

69 Detailed information on the value of lead at the mines is not available until 1877. The comparison is, therefore, based on the average of three years only.

70 The Welsh mines were more highly productive than the Swaledale mines at this time. For example, between 1845 and 1938 Flintshire produced 10 per cent and Denbighshire 3 per cent of the British output of lead ore, Lewis, *op cit*, p221.

71 *Ibid*, p378.

72 Raistrick & Jennings, *op cit*, p284.

73 Lewis, *op cit*, pp185,365-6.

74 See Appendix XII and Fieldhouse & Jennings, *op cit*, pp206-8.

75 *Ibid*, p218.

76 J.Thirsk, 'Industries in the Countryside', in - *The Rural Economy of England*, 1984, pp229,231.

77 Rennie, Brown & Shirreff, *General View of the Agriculture of the West Riding*, 1799, p77, quoted in D.Hey, *The Rural Metalworkers of the Sheffield Region*, English Local History Occasional Papers, 5, Leicester, 1972, p18.

78 A.Young, *A Six Months' Tour through the North of England*, 1771, Vol II, p189.

79 Clarkson, *op cit*, p311; This is possibly only a slight exaggeration, other contemporary commentators noted the large numbers employed in the dales' lead industry. For example, in 1821 the enumerator for Melbecks commented that the number of lead miners had greatly increased since the previous census, NYCRO PP 19/5, *Census Enumeration Abstract*

for the County of York, 1821.

⁸⁰ *Ibid*, 1821. In 1821 Swaledale had a population peak of 7480. Using the same proportion of occupied population to total population as occurred in 1851, i.e. 40.0 per cent, would give an occupied population of 2992 in 1821. Therefore, 66.8 per cent (2000 persons) of the occupied population were employed in the lead industry, PRO HO 107/2380, CEB, 1851, Swaledale.

⁸¹ The enumerators for Arkengarthdale and Grinton noted the decline of lead miners, NYCRO PP 19/8, *op cit*, 1831. The 1831 census returns record 908 males over 20 years of age employed as labourers in non-agricultural labour in Swaledale. In Arkengarthdale parish 285 males were returned in that category and the enumerator notes that 285 people were employed in the lead industry. It is reasonable to assume, therefore, that all the 908 males in Swaledale were in the lead industry. In 1851 29.1 per cent of all miners were under the age of twenty and a further 4.7 per cent of all miners were women, Reeth W.E.A, *Analysis of the 1851 Census Schedules for Swaledale and Arkengarthdale*, Leeds, 1970, p11. This means that the 908 miners over 20 years represented 66.2 per cent of all miners in 1831. Although there will be an element of double counting as some of the workers under twenty would also be women, nevertheless the resultant estimate of 1372 workers in the Swaledale lead industry in 1831 provides a reasonable approximation. Swaledale had a total population

of 7020 in 1831. On the basis of 40.0 per cent of the total population being employed (see footnote 80), 2808 people will have been working in 1831 and of these 48.9 per cent (1372) were miners.

⁸² NYCRO, PP 19/8, *op cit*, 1831.

⁸³ Whellan, *op cit*, pp 145; at its peak Keld Heads mine alone employed 300 men, E.Pontefract & M.Hartley, *Wensleydale*, 1936, p186.

⁸⁴ NYCRO, PP 19/37, *Census Enumeration Abstract for the County of York*, 1911.

⁸⁵ NYCRO, PP 19/17,22,23,24,30,34, *op cit*, 1851-1901.

⁸⁶ Barker MSS, 9/2, Copy of Reply to Questionnaire from Poor Law Commissioners concerning the employment of women and children, 16 January 1843; see also *BPP*, XII, *Reports of Special Assistant Poor Law Commissioners on the Employment of Women and Children in Agriculture*, p352; W.E.A., *op cit*, pp11-2.

⁸⁷ PRO RG 11/4873-8, CEB, 1881, Wensleydale and Swaledale.

⁸⁸ As early as 1842, the employment of females underground was made illegal, R.Church, *The History of the British Coal Industry*, Vol 3, Oxford, 1986, p191. Even prior to this date, however, there is no evidence of women being employed underground in Swaledale or Wensleydale.

⁸⁹ Jennings, *op cit*, pp265-6.

⁹⁰ *BPP*, 1864, Kinnaird Commission, *Epitome of Evidence taken before the Commissioners appointed to inquire into the Condition of all Mines in Great Britain*, Q.16,686, 17,101-3, 17,832, 17,366, 17,385, evidence of T.Raw,

Surrender Mine, A.Barker, Whitaside and Summer Lodge Mines, Sir, G.Denys, mineral rights and mine owner; Young also commented that miners only worked a morning shift, Young, *op cit*, p189.

⁹¹ Kinnaird, *op cit*, Q.16,686, 17,101-3, 17,832, 17,366, 17,385; Jennings, *op cit*, pp291-2.

⁹² Ibid; Raistrick,1975, *op cit*, pp110,112; see also Young, *op cit*, p189. This tradition was also followed in other lead-mining fields, Lewis, *op cit*, pp275-6. See also BPP, 1890-1, LXXVIII, *Report on Metalliferous Mines: Average Weekly Wage for Northern Counties, 1886*, p282. It was reported that lead miners took time off during the hay harvest.

⁹³ Jennings, *op cit*, p292.

⁹⁴ Ibid, pp291-2.

⁹⁵ Ibid.

⁹⁶ It is probable that some of those who were returned in the census as lead miners were employed above ground. Table 11.12, therefore, must be treated only as a guide to the proportion of below and above ground workers.

⁹⁷ The problem of determining wages of miners in the nineteenth century is common to all the extractive industries, Church, *op cit*, pp556-8.

⁹⁸ The price per bing was modified periodically depending on local conditions and the price of lead; Jennings, *op cit*, p266.

⁹⁹ Kinnaird, *op cit*, Q 17,810, evidence of G.Robinson, Grinton Moor Mine; Fieldhouse & Jennings, *op cit*, pp227-8.

¹⁰⁰ Pontefract & Hartley, *op cit*, p186.

¹⁰¹ The weight of a fodder (or fother) varied throughout the country from 2184 lb (London) to 2505 1/2lb (York), Lewis, *op cit*, p308; a fother in the dales was 22 cwt (2,464 lbs), Jennings, *op cit*, p268.

¹⁰² *Ibid*, p266.

¹⁰³ In 1802 dales' carriers were paid thirteen guineas for every four hundred pigs of lead delivered from Richmond to Stockton, Hartley & Ingilby, 1982, *op cit*, p84. In Wales carriers were paid between 5s and 5s 6d per day, 5s was still the rate in 1870 and rates only rose to 12s per day in 1918, Lewis, *op cit*, p282.

¹⁰⁴ Romney, *op cit*, p219.

¹⁰⁵ Hartley & Ingilby MSS, (Copy of) letter sent by Matthew Wadson, 20 August 1803.

¹⁰⁶ Romney, *op cit*, p219; Kinnaird, *op cit*, Q.17,825, evidence of G.Robinson.

¹⁰⁷ Jennings, *op cit*, pp295,303-305.

¹⁰⁸ Romney, *op cit*, p219; Barker MSS, 2/5/2, Garth Day Books, 31 January, 1,3 February 1820, Garth attended the pay days at Surrender mine, Feetham, Gunnerside and Reeth respectively; Kinnaird, *op cit*, Q 17,374, 17,645, 17,825, evidence of Sir G.Denys, T.Raw, G.Robinson; Whellan *op cit*, p464; see also Pontefract & Hartley, *op cit*, p187. In the 1840s in some of the mines in the North Pennine field men were still paid yearly with a monthly or bi-monthly subsistence allowance. From 1861 miners were paid twice yearly. As the century progressed the monthly subsistence

grew to be about 80 per cent of earnings, the remainder being settled at pay days, Hunt, *op cit*, pp59-63,69,80.

¹⁰⁹ Church *op cit*, pp163-4.

¹¹⁰ Kinnaird, *op cit*, Q17,827, evidence of G.Robinson; A pay room was made available at the Old Gang mines in 1843. This was presumably in response to the new law. Hartley & Ingilby MSS, Extracts from the diary of Joseph Smithson of Low Row, June 1843, 31 September 1843. Church notes that despite the illegality of the practice after 1842, it still persisted in some areas, *op cit*, p264.

¹¹¹ Kinnaird, *op cit*, Q17,809-10, evidence of G.Robinson.

¹¹² *Ibid*, Q17,307-12, 17,438-41, 17,547-9, 17,647-51, evidence of T.Coates, Arkendale and Fell End Mines, Sir G. Denys, mineral rights owner, R.Daykin, Hurst Mine, F.Taylor, Old Gang Mine, T.Raw, Surrender Mine; Pontefract & Hartley, *op cit*, p187.

¹¹³ Young, *op cit*, p189.

¹¹⁴ J.Tuke, *A General View of Agriculture in the North Riding of Yorkshire*, 1794, p79.

¹¹⁵ Hartley & Ingilby,1982, *op cit*, p85.

¹¹⁶ Romney, *op cit*, p219; Jennings, *op cit*, p269.

¹¹⁷ Diary of Edward Broderick, 16 October 1830, reprinted in E.Cooper, *Men of Swaledale*, Clapham, 1960, p34.

¹¹⁸ The dales were not exceptional in the high wage of the early 1870s, wages were also high in the coal industry, Church, *op cit*, pp559,561.

¹¹⁹ *Ibid*, p573; Raistrick & Jennings, *op cit*, p296.

¹²⁰ Church, *op cit*, p573; Hunt, *op cit*, p82.

¹²¹ Church *op cit*, p564.

¹²² Mitchell & Deane, *op cit*, p344; Jennings, *op cit*, pp287-8.

¹²³ This percentage has been based on the proportion of labour to total costs in the coal industry. Buxton suggests the proportion rose from an average of 66.3 per cent in 1875-9 to 73.3 per cent in 1899-03, N.Buxton, *The Economic Development of the British Coal Industry*, 1978, pp146-7. Church notes that 70 per cent was common in the coal industry in the late nineteenth century, Church, *op cit*, pp501-2. Table 11.14 is based largely on Table 11.13 but is not necessarily wholly reliable (the wages for 1821, particularly, appear to be rather high). It does, however, provide a guide to trends.

¹²⁴ Jennings, *op cit*, p158.

¹²⁵ *Ibid*, p159.

¹²⁶ *Ibid*, p158. For example, in 1845 there were six partners in the Apedale mine in lower Wensleydale, *Wensleydale Advertiser*, 7 January 1845.

¹²⁷ Jennings, *op cit*, p158.

¹²⁸ *Ibid*, pp177-8.

¹²⁹ *Ibid*, p197; people were prepared to invest in high risk ventures if there was the possibility of a good return. The prospectuses issued spoke glowingly of the future prospects of the Swaledale industry, *ibid*, pp173-9.

¹³⁰ Young, *op cit*, p189; Barker, 2/5/1-5, *op cit*, *passim*; Romney, *op cit*, p219; Jennings, *op cit*, p329.

¹³¹ T.D.Whitaker, *An History of Richmondshire*, Vol I,

Leeds, 1823, p9.

¹³² By 1864 lead workers' housing in the dales was considered to have improved greatly since 1850, Kinnaird, *op cit*, Q.17,198, 17,499, evidence of J.McCollah, medical practitioner, R.Daykin, Hurst Mine; in the North Pennine field by the 1840s housing in the lead-mining areas was generally better than in the surrounding agricultural districts and in towns, Hunt, *op cit*, p143.

¹³³ BPP, 1844, V, *Report from the SC on Commons Inclosure*, Q.4814, evidence of R.Rayson; Whellan, *op cit*, p145; a similar situation occurred in the North Pennine field, Hunt, *op cit*, p145.

¹³⁴ Whellan, *op cit*, p464.

¹³⁵ Kinnaird, *op cit*, Q.17,816-8, 17,825-6, evidence of G.Robinson.

¹³⁶ Thirsk, *op cit*, pp219-20.

¹³⁷ Barker MSS, 2/5/2, *op cit*, 1830.