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ABSTRACT

Decisive and far-reaching changes in upper Weardale land use were made during the thirteenth century. The prelude to and complex consequences of these changes are analysed and provide a base to a study of settlement from the medieval colonisation to the end of the eighteenth century. Particular attention is drawn to the causes, chronology and, not least, the processes and effects of farm evolution in the two adjacent and contrasting units of the High Forest and Park.

Related population growth and movements, stimulated or deterred by physical realities, economic fluctuations and tenurial policies, are traced and quantified over some six centuries. An attempt is also made to measure the attraction of lead ore and its very considerable but erratic influence upon the dale's occupation and economy. Especially important are the changing scale of the mining industry and the necessary administrative adjustments it entailed. More difficult to unravel but a factor of the greatest relevance is the interdependence of mining and pastoral farming. Thus, the nature and extent of a distinctive dual economy are also examined.

Another central theme is that of land tenure beginning with the somewhat restrictive and autocratic attitudes of the powerful landlord, the Bishop of Durham, and his representatives and ending with their decline, if not demise, and the emergence, in turn, of very many independent yeomen "owners" enjoying much greater tenurial freedom.

Overall, the settlement of upper Weardale in 1800 is seen as the outward expression of factors working unequally in time and space. Their isolation, assessment, analysis and effects form the core of this investigation.

SETTLEMENT AND ECONOMY IN THE FOREST AND
PARK OF WEARDALE, CO. DURHAM, 1100 - 1800:
A STUDY IN HISTORICAL GEOGRAPHY

In two volumes: Volumes One and Two

PETER LONSDALE BOWES

Submitted for the Degree of Master of Arts in the University of Durham,

The Department of Geography. Faculty of Social Sciences.

1979

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INTRODUCTION

"There have been relatively few detailed studies aiming to elucidate the local and regional course of the process of land clearance and settlement foundation." (S. Helmfrid, 1972)

I. General perspectives, questions and objectives

The search for an understanding of the forces generating the settlement pattern and forms in a Pennine valley provides the basis of a study which requires the isolation and analysis of several factors affecting, in differing degrees, man's occupation of the land. Each factor in turn raises a number of specific and key questions: none can be treated exhaustively, many pose problems of selection and emphasis and yet each is vital if a measure of explanatory synthesis is to be achieved.

Time itself, the vehicle of opportunity, change and problems, may be seen as an important factor in its own right. In upper Weardale - the entire river Wear basin west of Rookhope and Horsley Burns (Fig.1) - the small, directly inhabited fraction of the landscape was fundamentally affected by marked contrasts in the pace and duration of developments on either side of the sixteenth century, the latter proving a decisive watershed in the period between 1100-1800. The chronological thread, therefore, although not rigidly followed, is intentional and at certain points especially significant.

The physical environment of Weardale presents a stern challenge even to today's hill farmer and the researcher of settlement origins and its evolutionary stages is left with the stimulating task of assessing the role of natural factors upon farm site, situation and overall distribution. It is the writer's belief that the study area, still a settlement frontier today, offers the possibility of tracing the diffusion of thirteenth century colonial farms in an insular and

difficult territory. Was it a faltering and haphazard business or a carefully considered venture using the best of the physical qualities to maximum effect and destined to succeed from the beginning? How far were subsequent expansions possible when margins of error appeared so small; what and where were the upper limits of settlement?

Whatever part environmental variations played in moulding the settlement lay-out, economic motives were undoubtedly a vigorous catalyst in its completion. Venison, hunted and farmed, mineral ores and the products of cattle and sheep farming were to provide attractive incentives but at the same time raised complex problems of land-use balance, distribution, change, sharing and, not least, administration. How successfully the options were realised is a prominent part of this investigation. Particularly important were the size and energies of the population, dictating the scale and intensity of developments, and its rate of growth or decline, reflecting external and internal forces. Demographic trends, therefore, cannot be ignored if economic determinants of settlement are to be given their proper emphasis. Moreover, it is a familiar contention that population, farming and mining were interdependently bound in a "dual economy" even a partial analysis of which, it seems, has never been attempted, hence the cliché that all miners were also farmers with small holdings. Lead and land may well have been closely linked but to what extent was this inevitable or merely desirable? Less well aired is the economic place of the large open spaces of the dale, the fells and moors forming 85 per cent of the upper Wear catchment in 1800. What was its practical value; how was it managed; were parts ever enclosed after medieval times and before the Parliamentary Enclosure Act of 1799?

In settlement terms, whereas physical and economic considerations can be weighed against what men are both able and want to do, tenurial factors in

deciding what they are, in fact, allowed to do are no less important. The princely and ecclesiastical roles of successive Weardale landlords were sufficient to ensure a very strong, centralised but relatively distant administration at the beginning of the period. How the power of the Durham Bishops was gradually delegated, diluted and eventually broken is a primary factor in the shaping of the settlement geography and one which, in the process, created an independent and vigorous yeomanry able to use the land as it thought fit. Further, if land acquisition and mining employment were ever to be mutually compatible, it is important to establish the tenurial foundations. Was the new landlord-tenant hierarchy less stifling than that of its medieval predecessor and how, especially, were matters of land supply and fluctuating demand controlled?

Briefly, the first three chapters of Volume I deal with the late medieval period although the content of Chapter One, in attempting an overview of economic and tenurial frameworks, extends to 1600. Both Chapters Two and Three are concerned with the visible expressions of the emerging settlement network, its pastoral basis and, above all, the detection of processes - the actual preconceived methods of land-taking - when Weardale valley floors became permanently inhabited. Chapter Four, "The Medieval Transition" and a time of settlement and economic renaissance, examines cause and effect as existing homesteads nucleated and new ones appeared at more challenging sites. Unquestionably, a precedent and an irreversible trend had been established: under the impact of recurring and mounting spasms of mining activity, population dynamics and settlement processes accelerated and combined at a quite remarkable level of development discussed in Chapter Five. Finally, it

is imperative to have, at the very least, an impression and, if possible, a quantitative statement of agricultural responses to sudden injections of settlement growth. Thus, Chapter Six is devoted entirely to the status of land in the heyday of the dual economy.

Reference should be made to one aspect of the rural settlement not within the scope of this work, viz. the clarification of settlement form. Cluster morphologies, their degree of regularity, plan types and plan elements are purposely omitted. Perhaps it may be added in passing that the present-day contribution of house rows, long and short, far outweighs that of single, detached dwellings. Also, there are sufficient, indeed very many, survivals of farmsteads and cottages which illustrate the very close form-function ties within both the farm "cores" of settlement and their miner accretions.

Another partial omission focuses upon the problems of nomenclature. Almost all salient terms - cluster (large and small), agglomeration, nucleation, scatter, dispersion, settlement territory, settlement association, expansion and contraction, open fell and field (meadow and pasture), enclosure, landlord, tenant - are used, it is hoped, in a way in which the reader will find acceptable and meaningful in a general sense. Where more precise explanation is required, it is given, albeit briefly, in the text. Nevertheless, the writer is aware of the difficulties, even inadequacies, of terminology and definition.

II. Primary sources, methods and problems

The principal primary sources, including copies, transcriptions and translations of original documents, which were consulted during this research are summarised at the end of this volume. The eight locations referred to furnished a sufficient quantity and variety of material to maintain a tenable settlement theme. It will be noticed that records older than 1600 are confined

almost entirely to the Department of Palaeography and Diplomatic and the University Library, Palace Green.

The fifteen fifteenth and sixteenth century Account Rolls of the Master Foresters (more so than contemporary Coroners' and Collectors' Accounts) contain penetrating statements regarding farms and their tenure against which disforestation, the disappearance of feudalism and patterns of economic growth or stagnation can be pieced together. The great land surveys of Bishops Pudsey (1183) and Hatfield (1381) offer little help in these directions but the first reveals in a few words a great deal about the state of upper Weardale in the twelfth century while the latter, surprisingly, tells almost nothing two centuries later. In contrast, the numerous sixteenth and seventeenth century items stored in the Weardale Chest by local farmers at a time of external Commonwealth interference are a rich source of information on farm leases, the nature and work of the Forest Court and, in Bishop Matthew's grass roots survey of Weardale in 1595, overall attitudes towards land usage plus a list of farms, old and new. The Mickleton-Spearman manuscripts do much to confirm and clarify the legal wranglings (with the Bishop) and everyday consequences of local tenurial independence in the early seventeenth century including the severe decline of the Bishop's temporal influence.

After c. 1600, the Halmote Court administration, more properly concerned with the copyhold lands of middle Weardale, effectively took over the supervision of the customary rents once managed for the Bishop by the Master Forester. There is, therefore, preserved a series of 39 customary farm rentals at intermittent intervals between 1625 - 1800. A second parallel record of leasehold tenants, rents, fines and various estate plans exists from the late sixteenth century. Both are supplemented by a set of Tithing Book entries

(1700 - 1714) and, in the second half of the eighteenth century, by a handful of invaluable Land Tax and Poor Rate Valuations which give a rewarding insight into resident and non-resident landowners and actual tenants. The usefulness of these five sources is further added to and many of the intervening gaps filled by the surnames and places in the Stanhope Parish Registers, accurately and painstakingly transcribed by H. M. Wood (1899). Together, the above have enabled a measure of continuity in a settlement reconstruction of some detail extending between 1438 - 1800.

The post-1595 Halmote rentals require interpretative care. It must be acknowledged that the surnames of each rental represent landowners only - in the sixteenth century they were known as customary tenants - and the actual occupier (or occupiers) are not distinguished although many were, in fact, owner-occupiers. Farm names are not always presented and, as old properties are divided, the fragmentations, as in the 1698 and other rentals, are ambiguously described as "the remainder", "part of the same" or "another part". Moreover, in certain lists, the several farms of one owner are often compounded under one rent. Also, there are the subtleties of small rent changes occurring for reasons not always fully explicable. One positive aspect, however, can hardly be overstressed. Since 1438 and probably from the thirteenth century, the Bishops' rents at individual farms had remained unchanged into the nineteenth century assuming, of course, that their land areas had not been enlarged or reduced. Therefore, the progressive enclosure of the improved land had led by 1800 to a large number of farms each of whose owners was still paying a Halmote rent both then and in 1843, the time of the Tithe Apportionment Survey. As all farm locations and territories in 1843 can be detected and mapped using the Tithe Plan and Schedule, it is possible to correlate the 1843 Halmote rental

and Tithe data with actual areas on the ground. Then, by retrogressive rent analysis, it can be shown when and in what way farm size had been modified. Because the nineteenth century Halmote rentals, remarkably, were the legacy of the fifteenth century or earlier leasehold rents, it is theoretically possible to re-establish the normally larger farm areas of each preceding century as far as 1438. In practice, while the writer is confident that this process can be applied in many instances to the fifteenth century, retrogression is complicated in certain cases either by rent decay or intricate rent changes indicating several fragmentations of a single farm or very complex sales and redistribution of land among more than two owners or more than one sale between surviving rentals. Therefore, although the equation of rent and land is not at all difficult after, say, 1700, it does pose problems at certain farms before that date.

The essential point is yet to be stated: the preliminary work of this study required a full cartographic representation of ownership, occupancy and farm boundaries for 1843 as the only certain reference base, none of which, paradoxically, is directly included in either volume. Amid the patchwork of some 500 farms, the resultant map exposed the lasting presence of "primary" wall lines as well as the constituent pieces of earlier and larger farms. These were the vital clues without which very little of the settlement geography could have been purposefully analysed. The Enclosure Plans for the Weardale Forest and Park, compiled shortly after 1800, in locating owners and ownership boundaries at the then upper limits of land improvement, also facilitated and supplemented the above approach.

References to the state of the dale's lead-mining - mines, output, methods and employment - are mainly concentrated into eleven late medieval Surveyors'

and Clerks' Accounts (1425 - 1529), brief but helpful depositions in the Matthew Survey, various fragments of the 1660s and, of course, a mass of eighteenth century information in the accumulated Blackett Ledgers and Bargain Books. If the economic contribution of such a long established tradition to the settlement landscape is to be properly stated, then trends and policy changes within the industry must first be isolated.

When all the documentary sources have been examined, it is perhaps no surprise to find that very few intentionally and categorically measure the progress and processes of settlement. Therefore, in the writer's view, it was all the more important that practical field familiarity of present day farm-hamlet-village distributions should be gained as an indispensable element in the entire synthesis. Every settlement site (and more) was located in the field and provided that element of reality not apparent in written and cartographic sources.

III. Previous research and secondary sources

There are very few secondary sources which relate directly to both the subject and locale of this research. Those which do and many more which do not are listed at the end of this volume. All were consulted and most are referred to appropriately in the text.

The evolving hamlet and village farms of upper Weardale and adjacent dates have largely remained outside the detailed attention of Roberts whose disclosure and explanation of numerous facets of rural settlement in lowland Northumberland and Durham are better known (1972, 1975, 1977a, 1977b, 1978 and in Dewdney 1970). However, his recent analysis (1978) of the twelfth and fourteenth century socio-economic structure of Aucklandshire - of which upper Weardale forms a sizeable and approximate western third - strongly suggests that the Jones'

multiple-estate model (1971), followed by Barrow (1973), can be applied to that particular medieval (or earlier) unit in which there was an overall integration between its upland and lowland parts. It is not the purpose of this present work to explore these links further but they can not be ignored in any discussion of medieval settlement origins in the dale. Neither, too, can work by Roberts, Turner and Ward (1973) who, in relating documentation, pollen analysis and radio-carbon techniques to the age and occupational history of a detached upland farm just to the east of the former Weardale hunting-forest, confirmed a prehistoric (Iron Age) presence at the site. Caution is urged, therefore, in an over facile acceptance of medieval pioneer beginnings further west. The numerical growth of pastoral farms in the Weardale Forest and Park from the fifteenth century has been summarised in outline (Roberts 1977a) and brings one of the subjects of this study into better preliminary focus. Further sharpening of the scene is provided by Drury's research (1976, 1977, 1978) which is most valuable for the revelation of the early fifteenth century age and names of farms authorised in the Park by Bishop Langley. Her conclusions are fully considered in Chapter Two.

Archaeological finds of medieval age or earlier in upper Weardale have not yet produced any evidence of shrunken or deserted hamlet or village settlement west of Stanhope although three disappeared fifteenth and sixteenth century farms have been claimed by Drury (1976). Suggestive banks, mounds and terraces, thinly and sporadically scattered below 1100 feet O. D. might well be prehistoric (Hildyard, 1945-52; Clack and Gosling, 1976) but have not yet been coordinated into any meaningful framework. Current work by Young has uncovered an Early Bronze Age cairnfield to the north of Stanhope and close to the well-known Heatheryburn Cave contents in the Stanhope Burn valley.

Many positive suggestions and comparisons emerged from the researches of Tupling (1927) in the not dissimilar Forest of Rossendale, by Smith (1961) in the wider upland block of Blackburnshire and also by Ramm et al. (1970) in locating and classifying some 180 shielings on the higher slopes of Northumberland and Cumbria. Highland farm dispersions, emanating from parent arable nuclei in Wales, Ireland, Scotland and Sweden have been studied by Bowen (1971), Jones (1953), McCourt (1971), Barrow (1973) and Bodvall (1959), the latter's ideas in particular having an especial relevance to the situation in Weardale. Other Scandinavian approaches contained, for example, in Helmfrid (1971) and Myhre (1974) have been increasingly concerned with process details and are sharp reminders of both the dangers of oversimplification and the seemingly infinite variety of rural settlement plan and land-use arrangements.

National historical perspectives are provided by Poole (1958), Postan (1973), Donkin, Glasscock and Darby (Darby, 1973), Ernle (1961), Dodgshon and Butlin (1978), while excellent background insights into the later period of Pennine lead-mining are given in Dunham (1943, 1967) and Hunt (1970).

Not least, the assiduous transcriptions and miscellanea of Egglestone (1882 et seq.), a local and respected antiquarian, deserve special mention. It has not been possible to trace the source of all his material - hence its value - but there is no reason to doubt its authenticity and accuracy.

Finally, to restate the main objectives: in one important respect this work is in the tradition of chronological studies carried out, for example, in the Fenland (Hallam, 1965), Forest of Arden (Roberts, 1968) and Derbyshire Pennines (Eyre, 1966). It, therefore, distinguishes the several phases and spatial extent of occupation in the Weardale uplands. Although important in themselves, they are also seen as a necessary foundation to the further

understanding of the methods and manner of that occupation. To return to the Helmfrid quotation, it is the actual "process of land clearance and settlement foundation" that has so often been neglected. In a small way, the following chapters set out to remedy this situation.

CHAPTER ONE

TERRITORIAL, ADMINISTRATIVE AND ECONOMIC FRAMEWORKS : 1100 - 1600

"The antiquitie of forests must needs be very great for they are so auncient that there is no certain beginning of them that can be shewed", so wrote John Manwood in 1615 and what was true generally was also true of the forest of Weardale¹. The early obscurity attending its occupation and use is confirmed in a "General View of the Tenures in the Palatinate of Durham"² where the first relevant but rather meagre disclosures are to ninth century lands under the single lordship of St. Cuthbert. Thus, Simeon of Durham records that, "Kings Alfred and Guthrum . . . increased St. Cuthbert's patrimony by a donation of all the country between Wear and Tyne."³ It can be accepted that upper Weardale was a portion of that donation which was to pass eventually to the Bishops of Durham who proceeded to rule there powerfully "as princes endowed with royal privileges."⁴ That the transition was probably not an easy one is instanced by the experience of Bishop Flambard (1099-1128) who after imprisonment by Henry I was restored to the Bishopric and received in 1109 from the same king "a charter which ratified the exclusive right of the Prelate and his successors to all royal forests and chaces between Tyne and Tees, in opposition to the claims of Baliol, Baron of Bywell and others (from Northumberland) who had endeavoured to assert their privilege of hunting and taking wood for fuel and other purposes within these liberties."⁵ There were other difficulties, too, in the late twelfth and early thirteenth centuries when the See was periodically vacant and administration reverted to royal control.⁶

I. Feudalism and the pre-settlement period: c. 1100-1240

The Boldon Book's witness in 1183 to roe deer hunting "in the forest" (of Weardale) and its feudal implications is a valuable record of a, by then, well-established tradition and protracted phase in the early medieval development of this elevated and remote Palatinate territory. The latter's location and physical configuration seem an appropriate test of twelfth century organisational efficiency.

Embracing in natural fashion the entire drainage basin of the upper Wear, the Bishop's forest was enclosed on three sides by high Pennine moorland (Fig. 1.1). To the east, in the absence at this time of any confining walls, the forest merged into the meadow and arable lands of the village of Stanhope. This primary unit covered approximately 60 square miles (154 sq. km.). Almost all of its surface exceeded 1,000 feet (306 m.) with the extreme margins climbing above 2,000 feet (611 m.). Occupying a central position in this upland is the river Wear which has fashioned a long but essentially narrow corridor of terrace and flood-plain land widening down-stream towards Eastgate. Rising irregularly and often steeply from this lowland ribbon are extensive sandstone-topped blocks of highland separated by the sinuous, deeply-cut lines of thirteen tributary streams. The consequences of this impressive physical base upon mean temperatures, precipitation, wind strength, soils and vegetation cannot be explored here but present-day environmental deficiencies would seem to offer little natural advantage to a colonial population seeking to establish permanent settlement. This, then, is the setting of "the forest" of Boldon Book. In 1183, it appeared as a distant, unsettled and largely undeveloped territory situated far enough to the west of Stanhope, the nearest vill, to be outside its everyday social and economic influence. No

indication is given of any permanent foci of settlement while references to a forest chapel, hall and lodges confirm that these were built or restored yearly entirely by recruited labour from the villages down-valley⁷. Westgate, the traditional location of the Bishop's temporary residence in the forest, is not referred to by name, and, in the apparent absence of any forest vill, the elaborate firmar, bordar, dreng, villein stratifications, exemplifying village feudalism elsewhere, gain no mention⁸.

The view that permanent, indigenous settlement was extremely sparse or even completely lacking is strengthened by the fact that the success of the hunt was dependent upon its organisation from without rather than within the forest. It seems significant that the hard manual work hinged mainly upon the villeins of Stanhope and Aucklandshire who, by virtue of their relative proximity and servile status, carried victuals and venison and supplied ropes in quantity. Also, it was the responsibility of certain of the Bishop's freer tenants at nearby Bradley, Rogerley and Peakfield to ensure the provision of at least nine men "in the forest forty days in fawning and rutting time."⁹ Other prominent and prestigious individuals from no fewer than twenty-four vills went on the hunt with 32 dogs. Some of these vills also supplied ropes, 141¹/₂ in all, to ensure the enclosure and trapping of the rounded deer¹⁰. As early as 1123, the Bishop was sufficiently involved to hold annual meetings of villeins (not located) and other farmers for the purpose of constructing hays and assisting in the great roe hunt¹¹. There can be no doubt that the forest influence pervaded a large part of the Bishopric affecting settlements and individuals up to 40 miles away. The office of Master Forester, seen later to be very much concerned (in Weardale) with the monetary income of the new, separate divisions of the Forest and Park and the appointment of resident farmer-foresters had not yet been deemed necessary.

Perhaps the full importance of the yearly hunts lay not only in the sport entailed and the sure supply of winter venison but also in the bringing together of the Bishop and his retinue, a reminder to all and sundry of his role as spiritual and temporal lord¹². Additionally, during interludes of more direct control from London, brief glimpses are provided into the "foresta de Werdale" as a source of royal generosity in supplying gifts of deer and dead wood to various friends¹³.

It would appear, then, that by the beginning of the thirteenth century, upper Weardale was a reserved, well-used hunting ground, quite different in its administration and land use from the lower dale where the three agricultural vills of Stanhope, Frosterley and Wolsingham were long established. The near incompatibility of rutting, fawning and large-scale hunting with cattle and sheep-farming, the lack of nucleated populations bound to co-operative farming practices and the absolute dependence upon others at the time of the great "battue" points to the forest as an extensive, ancient preserve inside easily demarcated boundaries and created beyond the western limits of village penetration in the Wear valley.

It is true that there is a late twelfth century reference to grazing and iron-workings at Rookhope and a vaccary, possibly, in the upper dale¹⁴. Also, it is certain that lead ore was being extracted.¹⁵ Drury has claimed that in 1211-12, the sum of £25 6s. 8d. for the "custom of Waisdie" is applicable to Weardale and, in particular, to occasional and seasonal pasturing there at the foresters' or agisters' discretion¹⁶. It may well be that the change from a purely hunting forest to a fully resident farming population required a transitional period when both grazing and mining were gradually encouraged. Although arguments for the territorial and

economic integration of upper Weardale into the old unit of Aucklandshire can be sustained to beyond 1200, it is difficult to avoid the conclusion that at the close of the twelfth century the upland area was devoid of farm dwellings and agricultural land, a belief encouraged by subsequent events which brought to an end the early medieval forest phase.

II. From forest organisation to rent-paying estate: c. 1240-1500

(i) The High Forest - Park separation

The foundation of thirteenth century change was itself an innovation: the division of the forest into two units whose functions were to have far-reaching settlement and economic consequences and whose management required the creation of the new office of Master Forester. A survey, first, of the primary boundaries reveals the striking contrasts between the man-introduced Park and the residual but larger High Forest.

In the surprising absence of pre-nineteenth century (or any) maps specifically marking the Park wall and the dearth of relevant, precise documentation, the locations shown in Fig. 1. 2 were interpreted mainly from the cartographic details and property lines of the Tithe Apportionment Survey of 1843¹⁷. It seems remarkable that the informative survey of upper Weardale commenced by Bishop Matthew in 1595 contains no indication of the Park limits while the Hatfield record, two centuries earlier, is even more disappointing. Indeed, the only really helpful historical comment is Leland's sixteenth century description of the Park as being "rudely enclosed with stone of a twelve or fourteen miles in compace", a distance, it may be noted much less than the present 24 miles (38 km.) along the edge of the Park Quarter, the latter being a later and

larger territorial unit requiring further explanation below.

An unfinished investigation into the line of the Park wall was carried out in the mid-twentieth century by E. J. Hildyard¹⁸. From his description, based upon sporadic field observations and the knowledge of local farmers, the circuit of the Hildyard wall, "fifteen miles round", can be followed fairly well. Importance was attached to the positions of Westgate Castle and Eastgate village, an inscribed boundary pillar (replacing an ancient stone), short and exceptional lengths of wall 6 - 7 feet (2 m.) high and a west-east ditch just outside a section of the northern wall. Using the different criterion of nineteenth century patterns of land occupation and the field-checking of walls, the present writer found a substantial measure of agreement with Hildyard except in the vicinity of Horsley Burn and Eastgate, the effect of which is to confine the wall entirely and logically to the Park Quarter and to shorten its length by two miles (3.2 km.) (Fig. 1. 2).

The High Forest occupies 50 square miles (128 sq. km.) approximately the western two-thirds of Stanhope Parish and quite clearly dwarfs the 7 square miles (18 sq. km.) of the Park. Almost the entire Forest stands well over 1,000 feet (306 m.) above sea-level whereas half of the Park is below that contour. Without fail, the 32 mile (51 km.) perimeter of the High Forest coincides with natural features of the landscape. The primary watershed of the upper Wear is followed consistently to its junction with Stanhope and Newlandside Quarters. In contrast, the Park boundary, thirteen miles long (21 km.), is very much shorter than its Forest counterpart. It is more regular, generally rectangular, largely "unnatural" and seemingly more arbitrary. The two parallel northern and southern limits are fairly straight lines which rise and fall, deliberately transgress tributary rivers and valleys and are nowhere coincident with interfluves. The western wall

ignores the "obvious" routes of Middlehope and Swinhope Burns but chooses to cross both at insignificant points. The eastern edge is the most intricate following a line west of Rookhope Burn, then south of the Wear and finally along the eastern bank of Horsley Burn. Disregarding, at this point, the powerful, additional and later evidence of farm settlements within the Park, it seems reasonable to conclude that the ancient park of Stanhope is a secondary creation involving the planned enclosure of a relatively small eastern area of less distant (from Bishop Auckland) and somewhat superior land, formerly part of the medieval forest.

The exact date of the Park's appearance remains unsolved. There are several early fourteenth century references to its existence including the 1313 statement that the farm of Swynhopelaw is situated "next to the western gate of the Park".¹⁹ It will be argued later that the innovation of the Park was the signal for an influx of farms in the High Forest and the presence in 1278 of one of these farms, the Priory holding of Burnhope, is a valuable clue in narrowing down the period of its inception. Moreover, it will become apparent that this remote farm in the far west of the Forest was not one of the first to be established. There is some justification, therefore, for fixing the wall nearer the middle of the thirteenth century. In a Boldon Book footnote, it is recorded that the great hunt continued into the episcopate of Bishop Philip (1197-1208). This and events during the time of Henry III suggest a Park - Forest division at some point between 1234-41. Whereas Henry's Forest Charter (1234) disafforested the land between the Ouse and Derwent, the special rights of the Bishop were actually strengthened giving him unquestioned supremacy over the forests of the Palatinate²⁰. Perhaps the opportune time had arrived to revise forest policy. Certainly by 1239, there was a forester administering

"the high forest of Weardale" at 3d/day aided by four other foresters²¹ and in 1241, money was set aside for enclosing the Park of Gateshead, possibly contemporaneous with Stanhope Park²². More elusive are any details of the location and construction of the perimeter and the source of recruited labour.

(ii) The new administrative hierarchy

The redrawing of territorial boundaries was an exercise in ecclesiastic and commercial enterprise necessitating a more sophisticated system of surveillance and, in time, an elaborate range of forest laws. Overall control was granted to the Master Forester, someone of considerable social standing, usually titled, well known to the Bishop and non-resident in Weardale. The office carried prestige, was held for life and earned the incumbent £6 13s. 4d. (10 marks) annually. Beginning with Richard de Whitparys, c.1340, twenty-two names of Master Foresters can be traced to the appointment of Henry Blakeston who held the post to 1637²³. It is possible that the unknown senior forester of 1239 pioneered the new design in the forest a century before Whitparys. The earliest identifiable name is that of William de Brakenbiry described in 1312 as custodia or keeper of all forests, chases, woods and parks in the liberty of Durham²⁴. Whether this official and any others before him had the same status, duties and salary as future Master Foresters cannot be determined.

Oversight of Weardale involved the keeping of financial accounts and the very practical matters of daily supervision which were delegated to the local vigilance of four sub-foresters and two parkers appointed by letters patent for life as guardians of vert and venison. In a 1343 reference, the

park keepers received 2d/day while the foresters were valued and paid at exactly half that rate²⁵. For these wages, the six officers were committed to safeguard the breeding deer during the fencemonth and autumn rutting, the gathering of water, hay and tree chippings, prevention of trespassing and disturbance in the Park and illegal hunting everywhere, the maintenance of the Park wall and, as it became necessary, the deterrence of cattle-overgrazing on the fell. From available records after 1340, it can be believed that these many duties were efficiently performed by carefully selected individuals who were also appointed as reliable tenants of various farms in the Park and Forest²⁶. The Master Forester himself, it may be noted, held, and probably sub-let at a personal profit, a farm at West Black Dene²⁷.

Almost nothing is known of the early days of the Swanimote, Forest or Foster Court, then the very real symbol of the Bishop's landlordly power and the judiciary of the Master Forester. Its origins must surely be during or before the later thirteenth century when many of the forest laws and equivalent courts in the royal forests were evolving and when upper Wear-dale, outside the jurisdiction of the Halmotes at Stanhope and Wolsingham, was undergoing unprecedented social and economic changes. During the sixteenth century, the prominence and authority of the Forest Court were indisputable but, as will be shown, its whole nature had changed radically since its inception.

(iii) Economic exploitation: an exercise in land-use planning

What were the motives underlying the division and subsequent administration of the medieval forest? Varied in nature, they imposed

severe breaks with the past but one link at least, was preserved. The deer did not disappear but were subjected to new, more careful management, part of a comprehensive plan setting aside specific areas for novel as well as traditional land uses. The priority given to "venison land" from the outset and the trend towards deer-farming rather than deer-hunting is suggested by the enclosure of Stanhope Park at the lower and more accessible eastern end of the forest. Here was the home of fallow deer separated from the red deer in the Forest²⁸. Again, it would seem, the decision was planned and the distributions intentional. Red deer, content to roam on high, open moorland are tolerant of cattle and sheep whereas fallow deer herd successfully only in a wooded refuge and, if necessary, are able to graze and browse there with cattle but not sheep. Fallow venison is not as coarse as red and preferable as winter food to, say, salted beef. It can surely be inferred from the two distributions that some denudation of timber had officially begun in the Forest but was not to be countenanced inside the Park walls. The decline of the roe deer, hunted during the twelfth century, is a further indication of the new exploitative attitudes. Although roe venison is recognised as the finest quality, the deer are reluctant to herd and show an intense dislike of cattle and sheep making them impossible to keep in quantity²⁹. An isolated reference to the 1284 purchase of 10 live fallow bucks and 20 does from Sherwood Forest may be confirmation of a systematic stocking policy which until the early 1400s, distinguished the Park from the rest of upper Weardale³⁰.

It is not certain where and to what extent the pleasures of

organised hunting persisted. The confined Park was well populated with deer and provided a less exacting challenge while certain parts of the Forest were reserved for mining and farming. And yet the great Hatfield land survey of 1381 indicated the continued existence of the hunt albeit on a diminished scale with only the bond tenants of Stanhope and West Auckland apparently maintaining their preparations for the Bishop's residence. The villeins of Auckland, Escombe and Newton no longer participated and the services offered by fourteen other villages also appear to have lapsed completely³¹. In view of the Park provision and the parkers' control of numbers there, it is feasible that the object of fourteenth century hunting had shifted solely to the sport and challenge best satisfied by red deer in the wild.

Occasionally the Park was used to bestow privilege and income on deserving individuals when, for example, in 1343, Bishop Richard de Bury assigned to a beloved and loyal servant, William Beliers, in return for his true and valued service, "... the custody of the whole of our Park of Stanhope together with the emoluments which two park-keepers are accustomed to receive there, namely 4d/day."³² But, above all, the deer were the most privileged and their well-being received the highest priority. Other animals, at least into the early fourteenth century, were excluded³³ and unlawful entry was firmly dealt with³⁴.

Contemporaneous with the designation of the Park, a careful operation in planned land use had also begun in the High Forest which produced, possibly for the first time, a monetary revenue. It should be stressed that there was nothing fortuitous about the land divisions shown in Fig.1.2. Although much attention will be given in succeeding chapters to the pattern produced and the processes

and factors involved, it is relevant to consider some aspects of the changed framework now. The plan had different objectives and was all-embracing in that all the land was allocated for four specialised purposes.

(a) The cattle farms

The decision to convert part of the Bishop's waste to a profitable ranching economy and the settlement it entailed was destined to have permanent consequences. The lower valley floors, a small fraction of the total area, soon housed thirty-one pioneer stock farms, associated land enclosures and a resident population, the whole probably requiring some clearance of the forest, redistribution of the deer and the precedent of leasehold tenures managed by the Master Forester. The latter's role in appointing lessees and collecting rent was an integral part of the entire enterprise. By 1438-39, it is known that the landlord's annual income from this source was £35 4s. 8d.

(b) The common fell

Beyond the upper limits or head dykes of the Forest farms lay the open summer grazing grounds where rights of common appurtenant³⁵ obtained but where animal numbers were nevertheless strictly controlled and tied to rents³⁶. Here cattle, primarily, and sheep of all the local farmers were permitted to graze competitively with the red deer still shielded by complex forest laws. Thus, far from conceding the vast areas of thinning woodland and moorland grass to all and sundry, the privilege of grazing there was granted only to those occupiers of the valley bottom. In this dual arrangement lay the thirteenth century origins of inby meadow and pasture and outby fell-grazing. Manwood's Common's model would seem

to apply to the High Forest where cattle on the fell were probably calculated through "an admeasurement of pasture" obtained by dividing the number of acres by the number of messuages "to avoid surcharging of Commons amongst Commoners".³⁷ Rigid rules were applied so that for example, twice annually the commons were emptied, in early June at the beginning of the fencemonth and on Holyrood Day (14 September) when all the commons' cattle were driven to pinfolds to be checked and then collected. Rules were rules. When, in 1408, unknown persons destroyed by fire ling and trees growing in the Bishop's forest in Weardale, reparations within 12 days were ordered or "they will be excommunicated".³⁸

(c) The agisted pastures

The Bishop was also anxious to earmark some convenient areas of fell, clearly defined and enclosed, which could be let to interested graziers from outside and within the dale but which did not conflict with the rights of common appurtenant. The device was that of the agisted pasture, bounded and separated from the open outby land. Agistments, it should be noted, were for herbage only and animals were pastured by the week or month. The agistment season began on 9th June, 15 days before Midsummer Day and lasted until 30th April, 15 days before Holyrood Day³⁹. No trace has been found of early agisters responsible for controlling animal numbers and it is probable that this work was an extra part of the foresters' duties. Animals were moved into the Weardale Pennines and returned to the lowlands in genuine transhumance fashion. One fragment of information reveals a payment of 9/4d in 1403 to a cowman hired by the Abbey of Durham 'pro agistamento cattallorum et custodia eorum in Werdale'.⁴⁰ It is quite

conceivable that agisted pastures, as such, may have developed from the principle of common pasture. The latter was still apparently available during the early fourteenth century to individuals farming some distance from Weardale. Thus is explained the fact that "Roger Pychard and his successors have (from 1310) common pasture in our forest of Werdale with our other free tenants for his animals occupying the above land ('by Hunwick')".⁴¹ The complications on the commons of intermingled herds and ownership, local and external, would, it can be imagined, produce practical problems best solved by a policy of agisted segregation.

The disposition of the actual six pastures into two groups (Fig. 1.2) is significant as both were conveniently but not accidentally removed from the fell land of the established farms. The first group includes the spacious pastures of Swinhope, Westernhope and Middlehope, almost encircling the deer Park, and the second, comprising Killhope, Wellhope and Rookhope, is more remotely located on inferior land at the head of the Rookhope Burn and Wear valleys. A Master Forester's Account (1438-39) shows Killhope, Wellhope and Rookhope to be leased to two individuals at respective agistment rents of 23/4d and 13/4d per annum but exactly how these sums were more than recouped from their sub-tenants is not explained.

In the royal forests, summer agistments for herbage were usually followed by a second agistment for mast when, in return for pannage, pigs were permitted access to woodland between Holyrood Day and 11th November⁴². Perhaps, initially, before Weardale woodland became

too sparse, this was true of the High Forest. Certainly, in 1313, it was granted by Bishop Richard that one William and his heirs, with land at adjacent Satley, should "keep their own pigs in our forests and woods of Werdale ... exempt (in this instance) from pannage ..."⁴³.

(d) Mineral extraction

The presence of iron and lead ores in upper Weardale was well known but poorly exploited by the mid-twelfth century when King Stephen conceded "the minerals of Weardale" to his nephew, Bishop Hugh, whose successors never relaxed their ownership rights in general and their one-ninth share of ore, the lott ore, in particular⁴⁴. Sporadic references to small quantities of ferrous and lead concentrates, mined and smelted in Weardale, abound between 1197-1425 before a more coherent picture emerges. Earlier mining, therefore, coincided with medieval hunting. Too much should not be made of this overlap, With £43 0s. 0d. spent in the extraction and smelting of lead ore and a resultant profit of £40 0s. 0d., annual output in 1197 was undoubtedly slight - maybe only 50-60 tons per annum - and operations localised⁴⁵. Given the limited technology, workings were shallow and very much restricted to a handful of surface vein exposures (Fig. 1. 2). In these circumstances, the small number of mines posed no serious threat to the roe or any other deer. Their peaceful coexistence was disturbed more by agricultural developments than by any spectacular improvement in the scale of mining. Although production was stepped up and timber further denuded to supply smelters' charcoal, the scale of mining remained very modest, at least up to the 1530s.

All the above trends show the continuing integration of upper Weardale

into a unit extending well beyond the dale. The area was still seen as tributary to the more populated Durham lowlands - a supplier of cattle produce, venison and minerals and a highly successful and acceptable arrangement if the lack of innovation, spread over 150 years, is any criterion.

(iv) The Forest and Park Quarters established

Pressure for change finally manifested itself during the episcopate of Bishop Langley (1406-37) and, in consequence, necessitated further administrative and territorial manipulations. Their effects were to draw the deer refuge into the commercial cattle-farming scene while maintaining, at the same time, some semblance of its original function. The balance became increasingly impossible. Nibbling away of deer woodland had already begun before Bishop Langley permitted the building of "sheles" there at some stage between 1406-19⁴⁶. A recent predecessor, Thomas Hatfield, in 1381 left to the Convent of Durham, among others, all of his Weardale stock including that portion in his Park of Stanhope, the whole being valued at more than 400 marks⁴⁷. Eventually, within a short space of the fifteenth century, nine-tenths of the Park became either enclosed meadow and pasture or open cattle-grazing land, the anachronistic remainder providing some protection for the dwindling deer population, first, as a frith, then as the "New Park". (Fig. 1.2).

Land-use transition in the Park created an administrative problem for the Master Forester. Were the pioneer farmers, as part of their leasehold tenures, now entitled to occupation of the high agisted fell pastures of Swinhope, Westernhope and Middlehope adjacent to the Park wall?

Apparently so as this expansive unity was reflected in a 1419 grant of the entire Park and the three pastures to the Master Forester, Robert Strangways, by Bishop Langley at an annual rent of 100 marks⁴⁸. Later the same sum is referred to as the "rent for the herbage of the Park"⁴⁹ and in the absence of any further declaration of the three areas by name or by specific allocation to them of separate rents, their territorial and economic incorporation into the Park can be safely assumed. In practical terms, Swinhope, Westernhope and Middlehope would supplement the open, shared pastures which lay between the newly improved land of the Park and its boundary wall (Fig. 1. 2). This is certainly assumed during the sixteenth century when the trio were regarded as the natural stinted moorland of the Park farmers. Perhaps the shift from agistments to grazing by right of Park tenure was gradual and, possibly, because the areas involved were so extensive, the two uses overlapped for some time, maybe to the financial advantage of the Park lessees. In this context, it is interesting to note that even in the later sixteenth century, the straying of "jeast" (agisted) cattle which had been "taken into Swinhope from the west country" was causing a nuisance to the other upper Weardale farmers further west⁵⁰.

The changing nature of the Park and its expanded influence required a revised organisational structure. This came in the form of the Park and High Forest divisions, the area of the former gaining at the expense of the other (Fig. 1. 2). The Park Quarter, it will be seen, exactly equals the area of the Park and the three pastures previously mentioned. Thus, from the early fifteenth century, it is important to differentiate terminologically

and spatially between the High Forest and Park on the one hand and the Forest and Park Quarters on the other.

III. Forest Court Dominance: c. 1500 - 1600

At the turn of the fifteenth century, both Forest and Park Quarters were affected by a wave of social, economic and tenurial changes which combined to give Weardale families a measure of independence never previously experienced. In the process and ironically, in view of its imposed thirteenth century origins, the Forest Court was turned more and more to the tenants' advantage⁵¹. Events happened slowly and gained momentum during the reign of Henry VIII (1509-47). Was it an accident that the multifarious innovations coincided, first, with a series of Durham Bishops remembered for their ineptitude, acquisitiveness and absenteeism and then with Bishop Tunstall's (1530-59) opposition to the Reformation leaving him little time for internal matters?⁵² It is highly likely too, that the minds of the Forest tenants, or, more properly, sub-tenants, were ready for release from the stifling effects and near stranglehold of two centuries of leasehold arrangements which had proved a powerful influence upon the unchanging distribution of settlement after 1300⁵³. Any opportunity, therefore, to break the outworn administrative strait-jacket was willingly seized.

Sixteenth century developments may be summarised briefly as follows:-

(i) Radical changes in the executive machinery

Beginning, in fact, in the late fifteenth century, Forest and Park officials, Weardale born and bred, were increasingly autonomous and able, it seemed, to take on two or more offices at once, a hierarchic blurring which continued into the seventeenth century. Normally, officials were admitted by letters patent but in 1595, one Robert Peart was claiming the two posts of Head Pinder and Court Crier as of right "by custom and not by

patent." Foresters were enjoying the perquisites of parcels of meadow, the right to have horses in the Park frith or other jobs such as coroner, bailiff, palliser or collector and receiver of the Bishop's rents. Sometimes, father and son either shared the duties of forester, succeeded each other or one even acted as two foresters⁵⁴. By 1600, devaluation of office had led to an open neglect of the deer laws whose contravention had once been grave offences. As the New Park and the frith at Burnhope crumbled, there seemed to be little time for, or interest in, preserving a supply of venison. Instead, sixteenth century energies were directed more towards the profits accruing from beef, mutton, wool and lead.

The Bishop's rents were still paid, of course, but they had long remained unchanged and of nominal value. Traditionally, the Master Forester had channelled this money to the Exchequer at Durham but during Henry VIII's time, his authority and status had declined. He no longer controlled the Forest and Park accounts neither did he preside in person at the Forest Court. His financial responsibilities were taken over by a new official, the Particular Receiver⁵⁵. This appointment was necessary, even vital, to keep pace with the tenurial revolution. His prime obligation involved the supervision of rents from the self-styled customary tenants, now the great majority of land occupiers. Significantly, the "customary rents" were paid to the collector at the "Chappell of Weardale"⁵⁶. Leasehold rents continued to be paid by the other tenants directly to the Exchequer⁵⁷. Clearly, leasehold tenures, controlled originally by the Master Forester, were decayed or decaying and new machinery had to be provided to encourage and ensure the efficient local payment of rent by a more obstructive and questioning tenant class.

(ii) The role and duties of the Forest Court

The late sixteenth century proceedings of the Forest Court reveal how much tenurial events had tilted in favour of the yeoman farmer. For him they were the expression of a more acceptable internal organisation after more than two centuries of oppressive and rigid leasehold conditions imposed from without. The focus of that organisation was the Court itself which met sometimes at Westgate Castle, the Rectory Tithe Barn at Stanhope or, sometimes, as in the early seventeenth century, not at all⁵⁸. Normally, it was convened twice year⁵⁹. The Bishop's new representative there, the Steward of the Court of Swanimote, was charged to inspect the Royal forest laws of England as they applied to Weardale⁶⁰. He was aided by separate Forest and Park juries consisting of 12 - 14 resident landholders, customary tenants dispersed within the dale. By their nature, many of the functions of the Court could not have been initial ones. Essentially, they were another product of evolving landlord-tenant relationships which gave the latter a much greater influence in matters of land occupation and land use than could ever have been experienced under the, by then, largely obsolete leasehold tenures. In practice, the Court, both legislature and judiciary, belonged to the farmers and its affairs fell into two categories.

(a) Customary farm tenure and land registration

The definition and consolidation of customary land-holding was a prominent part of Court procedure. At the end of the sixteenth century and "from time out of mind of man", the majority of upper Weardale tenants believed themselves to be customary tenants as of right. On the other hand, the new Protestant Bishops and before them Henry VIII, as lessors, were insistent upon different titles, namely customary

tenants for life or years at their lord's will and sufferance⁶¹ which most households rejected and, as time passed, openly spurned. The conflict began before the Reformation and continued with mounting vehemence for well over a century into the Commonwealth period. Until c.1540, proprietary policy was based upon a "leasehold for years" arrangement. For instance, most of the 1511 indentures of Bishop Ruthall were for 5 years though some extended for longer terms of 7, 10 and 13 years⁶². In 1530, it is revealed that Henry VIII demised two messuages, "Westernhopeburn and Whitwellshiele", to John Emerson "to have and to hold the same for the terme of 12 yeares."⁶³ A tenancy deterioration then occurred. Between 1540-43, the tenants of the Park (and probably the Forest) were called tenants at will and "that ... after the expiration of the said leases (for years), they (the tenants) did continue onely as Tenants thereof at will from yeare to yeare."⁶⁴ Most Park and Forest tenants, thoroughly disenchanted with the above developments, resisted, diluted or simply ignored them and, in their place, worked out a different form of tenure which gained general acceptance⁶⁵. Clearly, landlord authority was facing a severe challenge and, in spite of a real and permanent shift in tenurial control from Bishop to farmer, there were sufficient irksome conditions attached to the new customary tenure to suggest an element of compromise. Attendance at the Forest Court was obligatory twice a year. An annual custom or tack (take) penny was paid to the Bishop at the earlier of the Courts "and for that purpose (they) got some single pennies because if they had laid down any other moneys, they never could get change again."⁶⁶ New tenants also paid 4d. to the Steward of the Court "for entering their names in the Court Book". Tenants were also expected to give 10 days annually to patrols along the Scottish boundary with an

additional "two days in going and two days in returning". Locally, too, a ring of outer and inner watches was maintained day and night, especially during late summer and autumn and all tenants were required to be available at musters and frays with horses and hounds. But, perhaps, the most vital feature of customary tenure, read aloud at each Court, was the guarantee of tenurial continuity through inheritance laws very much to the tenants' advantage. Briefly, upon a husband's death, the widow was automatically granted the farm tenement. In the event of her death or remarriage, the property came to the eldest son of her late husband or, in the absence of a son, to the eldest daughter or to the deceased's next of kin⁶⁷. Thus, land occupation no longer depended upon renewal of leases for years and the tenant's ability to pay increasing fines with each renewal.

If this was a remarkable step forward, another, even more far-reaching, accompanied it. The 1595 Survey of Weardale included the following statement: "We (certain residents) find that it hath been and is accustomed that every customary tenant within the said forest and park of Weardale may at his pleasure let, sett (lease), grant or sell his tenement or any part thereof to any person or persons. And after the sale ... the buyers thereof have used to come in at some Court often kept within the said forest ... to pay a tack penny."⁶⁸ Particularly significant in this extract is the tenurial flexibility and independence evidenced in the Weardale farmer's power to conclude his land purchases privately outside the jurisdiction of the Forest Court. The latter, rubber-stamping the deal, acted merely as a place of property registration. It is a very short step from this situation to the fragmentation and enclosure of land and the spread of new tenements. Such novel developments will be considered presently.

(b) The bases and enforcement of the civil law

A second function of the Court was the presentment of misdemeanours committed in the Forest and Park. There were those crimes against vert and venison, those which interfered with the well-being of farming and those which ran counter to the maintenance of general law and order. Thus, theoretical provision was made to preserve the privileged position of the deer to the Bishop's satisfaction and, at the same time, the needs of agriculture and aspirations of the tenants were certainly not forgotten. It was an unequal contest as witnessed by the progressive denudation of woodland, illegal shooting of deer and the near collapse by 1600 of the friths in the Park and at Burnhope. Nevertheless, the cases heard and the fines imposed leave an impression of a responsible yeomanry released from outside interference and able to formulate a legal code of collective economic practices. The letter of the law was strongly egalitarian and communal in purpose. Attention was given to the orderly daily and seasonal movement of stock to the fell grazings; areas of higher land were carefully designated for exclusive groups of tenants; overstinting was vigorously discouraged; hedges, ditches, gates and outer boundary walls had to be kept in good repair; merestones could not be removed; the unlawful breaking of pin-folds and recovery of animals were forbidden as was stream diversion and damming; scabbed horses and diseased tups were to be slaughtered. No tenant could convincingly argue that such a framework was not to his ultimate advantage.

(iii) The survival and modification of leasehold tenure

The conditions of leaseholding and their profound effects upon medieval

farm settlement are better left to the next chapter. Evidence will be presented to confirm the disarray in 1500 of the whole antiquated leasehold system. The abortive attempt by Bishop Ruthall (1511) to rescue the situation by imposing universally new short-term agreements was designed primarily to restore the status quo. The time had gone when such rigid and harsh conservatism was accepted without question. Voluntary land transactions and the right of inheritance were the twin pillars of a very determined resistance. This defiance must have been a notable factor in the emergence of better leasehold terms where they actually survived after 1535. By the 1580s, the majority of conversions to customary tenure had been successfully completed. On their part, however, the post-Reformation Bishops did not accept for one moment that leaseholds had lapsed in half of the Park and most of the Forest. The legal wrangling was fierce and protracted. In 1582-83, for example, Bishop Barnes leased all the customary tenements in upper Weardale to Sir George Carey⁶⁹. As plaintiff, he began in the Durham Court of Pleas, 28 suits against 20 customary tenants all resident in the Park. The tedious arguments were pursued for two years and eventually the defendants' case was upheld. On another occasion, in 1588, the thirteen tenements at Westgate were granted to Elizabeth I and her assignee, John Stanhope. A century earlier and this would not have been contested but hard-won tenurial freedom was the last thing the men of Westgate were prepared to forfeit. The lease was spurned but not forgotten as, remarkably, it reappeared during the property disputes of the Commonwealth episode sixty years later.

As remarkable as anything was the intricate series of events at Pinfold House farm in the Forest where in c. 1543 the customary tenant was physically ejected by the Bishop's officers and the holding leased to someone else⁷⁰. The decision was vigorously disputed and finally, 39 years later, after a suit before

the Lord President at York, it was decreed that Pinfold House should be granted to the grandson of the earlier tenant and returned to customary status.

By 1600, the tenurial scores were 97 customaries and 15 leaseholds. There was still sufficient energy in the disputes for improvements to be made in the terms offered to lessees. In 1595, all but one tenement were held for a period of 21 years, a marked advance on Ruthall's 1511 proposals. Eastgate, the exception, had progressed further with the more favourable term of "3 lives". A few years later and nine other farms had graduated to this category.

The compact block of leasehold land and large farms in the Park contrast with its sporadic dispersal in small units in the Forest (Fig. 1.3). Why should these relatively few tenures persist at all? Was it accidental? Did the Park concentration reflect the Bishop's determination (or that of his lessee friends) to retain firm control over the more rewarding farms and, conversely, were the lands of Burnhope, Killhope and Wellhope so inferior that local tenant interest there was minimal? Were leasehold properties some kind of reward to leading Protestants, like the Bowes of Streatlam, lessees of Burnhope, who had remained loyal to Elizabeth and Bishop Pilkington during the 1569 Rising of the North?

In this review of administrative and economic structures and their territorial base, it has been a general premise that the advent of the Master Forester and the blossoming of the Forest Court stimulated varied economic growth. Implicit in this view is the medieval expansion of population and settlement to which attention must now be turned.

CHAPTER TWO

FARM SETTLEMENT AND PASTORAL ECONOMY c. 1250-1500

This chapter attempts a clarification of several aspects of medieval settlement and population geography and their underlying economic motives. Because events in the High Forest and Park differed, it is convenient to treat both units separately. It should, perhaps, also be emphasized that a fuller analysis of settlement process and chronology are more appropriately deferred to Chapter Three.

Between 1183 and the detailed Bishopric survey of Thomas Fatfield completed in 1381, a remarkable colonisation of land and expansion of settlement had taken place around the vills of Boldon Book. With only occasional and uncoordinated references available before 1381, the timing, pace and stages of this great movement in middle and lower Weardale are, at present, conjectural.¹ That it happened, however, and happened decisively and extensively, can be seen in Fig. 2.1. The opening up of Bishopley, Newlandside and Rookhopeside, impressive sweeps of territory, should be noted along with the location of certain constituent farms recorded in 1381.

What of the area further west? Economic pressures there would certainly be to extend this colonisation into the forest. Surprisingly, then, only two tenements there are mentioned in the Hatfield record: the farms of Swynhopelaw (later renamed Hill House) and West Black Dene.² This is an understatement of the real extent of Forest settlement at this time for, up to 1388, it is also possible to identify from other sources Burnhope (1278, 1338, 1388),³ Smalesburn (1338),⁴ Wearhead, Middle Black Dene and East Black Dene (1373)⁵ and Westgate (1388).⁶ Thus, during the thirteenth and fourteenth centuries, there is some disconnected

evidence of place names to indicate the penetration of an irreversible set of new influences leading progressively to the contraction of both deer forest and hunting-ground.

It has been claimed previously that the building of the Park wall (c. 1235) may be interpreted as a successful attempt on the part of the Bishop to plan and control the surge of farming activity. This very significant decision raises certain questions. Did the Park boundary actually precede, succeed or even coincide with the earliest farmsteads of upper Weardale? It will be argued below that, excepting advance settlement footholds at Westgate and Eastgate, the existence of the new Park and the grazing of deer and the likelihood of some hunting within it, not only delayed the introduction of farms there but also determined their eventual number and territorial extent. Beyond this buffer zone, to its north and west, contemporaneous pioneer settlement proceeded rapidly and systematically, hampered only by physical constraints and small numbers of population. There is no reason to doubt that the landlord, at first, encouraged and dictated this new development, seeing in it an opportunity to improve both land use and revenue and, at the same time, preserve his hunting and venison rights.

I. (i) The genesis of farm settlement in the High Forest

Any attempt to establish the precise distribution, chronology and rate of growth of colonial settlement in the High Forest is hindered by the fragmentary nature of the thirteenth and fourteenth century sources which, by themselves, provide no fruitful starting-point. The Master Forester's Accounts (1438-39), therefore, assume special import as the earliest and most comprehensive record of farm sites and pastoral activity in the Weardale Pennines. Most helpful is the list of 28 Forest

tenements, their tenants, rents and numbers of cattle and sheep permitted pasture rights which are documented in the form exemplified below:

20/- this year for Dirlpotshale and pasture for 30 beasts
and 15 sheep to John Dykson.

33/4 this year for Westramshawell and pasture for
50 beasts 25 sheep to Thomas Hetherynton.

To the above total must be added (1) Burnhopeschele, a farm of the Prior and Convent of Durham; (2) Swynhopelaw, granted in 1313 to the Master of Greatham Hospital; and (3) New Close, originally a Forest tenement but administratively absorbed into the Park Quarter shortly before 1438. Each of these farm sites, with their present day names, and others in the Park are shown in Fig. 2. 2. Their fifteenth century names, where appreciably different, are also included in the map key. The 15 Forest farms so affected present an initial problem of location. It will be seen from Fig. 2. 2 that 14 names were to change completely and one Herthopburnpundfold, was substantially contracted. The locations of all 31 Forest farm sites were eventually traced and confirmed by harmonising later fifteenth and sixteenth century tenement names, tenants' surnames and rentals with the information of 1438.

Particularly noticeable in the distribution are:

- (a) the spread of 27 farms along the Wear valley floor and their penetration into several tributaries including the high, western headwaters of Burnhope and Killhope Burns.
- (b) the fairly even distribution so that a median line (Fig. 2. 2) between Killhopeburn Shield, the western limit of settlement, and Weeds, at the Park wall, and drawn through West Black Dene divides

14 farms in the eastern portion from the 12 in the higher west. Distances between nearest neighbours never exceed $\frac{3}{4}$ mile (1.2 km) and fall below $\frac{1}{4}$ mile (0.4 km) in the vicinity of the Park entrance. The two Windside farms are literally "next door" to each other and represent the only definite example of clustered dwellings at this time.

Two complementary site factors dominate the distribution:

the terraces of the Wear and its tributaries which, of course, provide some of the lowest and flattest land and proximity to surface water flow, hence the choice of stream confluences wherever possible. Only one farm, Blakeley Field, in inhospitable territory, is more than 100 yards (92 m) from a watercourse while 25 (out of 27) are less than 40 yards (38 m) from a riverside.

Thus, for 5 miles (8 km) west of the Park, valley floor tenements climbed from 950 feet (290 m) at Shallowford to the remoteness of Killhopeburn Shield at 1360 feet (416 m). The localised physical qualities of high and variable relief had been skilfully acknowledged and fashioned to accommodate an extensive diffusion of settlement. The distribution is completed by a separate "appendage" of four farms along the Rookhope Burn valley north of the Park and, on the higher ground, six enclosed pastures without tenements are named in 1438 under agistments (Fig. 2.2).

It is the writer's view that the 31 farms reflect a vigorous and integrated settlement phase which, with the single exception of Hill House, was completed between c. 1240-1280. The two earliest references to any occupied sites relate to the Priory farm of Burnhope (1278) and Swynhopelaw alias Hill House (1313). Burnhope is located in a tributary valley at the

western end of the Forest and marks a relatively late stage in the sequence of settlement. Swynhopelaw, at the other extreme end, was created from 17 acres (7.7 hectares) of waste standing adjacent to but above the valley floor lands of Shallowford and Windyside. It clearly post-dates both these and the nearby Park wall and is therefore, a valuable index in confirming a thirteenth century (or pre-1313) origin for all three.

A further treatment of medieval settlement locations, chronology and processes will be considered in Chapter Three.

(ii) Medieval pastoralism: economic motives, physical requirements and land improvement

There is no doubt that medieval farming in upper Weardale was overwhelmingly, if not entirely, concerned with animal husbandry. Open arable field cultivation associated with a village-farming economy, effectively organised on spacious lower land, was not a feature of the Forest.⁸ Indeed, the dispersed pattern of settlement with its small clusters of population, relatively free from feudal restrictions, was much more in keeping with the demands and expansion of cattle and sheep-farming. Few details of farming practices emerge from the early Bishopric records except the grant to all farmers of an unlocated and unspecified area of pasture with grazing for a prescribed number of animals.⁹

Fortunately, a more revealing insight into the nature of stock-farming is available for Burnhopeschele, situated at the upper limits of land improvement, and Esterblakden, more favourably placed in the middle of the Forest (Fig. 2.2).

In 1278, two payments were made to the cowherd of Burnhope by the Priory Bursar for tending an unknown quantity of cattle and for making and embanking a new meadow there.¹⁰ From the evidence of a valuation carried out 60 years afterwards, in 1338, the farm had grown considerably. The value of all the stock totalled £26 19s. 0d.¹¹ and consisted of the following:

	£	s.	d.
(a) 9 oxen (boves) valued at 10 shillings each and worth	4	10	0
(b) 2 cows (vacce) worth		14	0
(c) 23 deer cows (vacce) with 14 newly born deer calves (vituli) of which 5 were suffering from murrain (foot and mouth) leaving 9 deer calves. The total value of the deer and calves amounting to	11	13	4
(d) 5 heifers (juvence) now 3 years old valued at 2/6d. each and worth	1	2	6
(e) 6 heifers (juvence) now 2 years old valued at 3/- each and worth		18	0
(f) 1 bullock (boveltus) now 3 years old and worth		5	0
(g) 3 bullocks (bovelti) now 2 years old and worth		12	0
(h) 13 bullocks (boviculi), yearling beasts valued at 3/- each and worth	1	19	0
(i) 180 ewes (bident) worth	6	0	0

The complete reliance upon pastoral farming is an inescapable conclusion of an inventory remarkable for its revelation of deer-rearing along with impressive numbers and graded valuations of beef cattle and sheep.

Another fifty years and an account of 1387-88 by John Collanwode, keeper of stirks (stirkettar) at Burnhopeschele, points to cattle-rearing on an

increased scale involving considerable movements of animals to and from Weardale.¹² These transferences confirm the Burnhope pastures as an early rearing ground for young oxen and heifers prior to breeding, fattening and slaughter elsewhere. The statistics show a traffic of 126 bullocks and heifers from monastic farms at Wharnowe (near Muggleswick) and Aldynrigg (Aldin Grange, nr. Durham City) to Burnhope and then, after a summer's grazing and roughening, most, 97 in all, were delivered to the keeper of Aldin. The remainder were sold at 10/- a head to various farmers at Bearpark, Kelloe and Wearmouth. Two each were bought by local cowmen at Middle and East Black Dene. Thus Burnhope's importance can be seen both as an indirect provider of meat and a source of monetary income to the monastic community.

In another account, also 1387-88, Thomas Johnson, the above-mentioned stockman of East Black Dene records the details of a pastoral economy with a very different emphasis.¹³ Excepting only two oxen, probably required for draught purposes, and one bull, dairy farming is the prime concern. A herd of 47 cows is noted. During the year, three were sold to Aldin Grange and one was stolen. Johnson provided 43/- worth of unspecified dairy produce receiving 30/- from the high milk yield of 15 cows and 13/- for the lower output of another 13. 15 cattle, apparently without calves, produced nothing. Interestingly, Johnson also received one penny for a set of antlers. His income was further supplemented by the enclosure of a hay field, the winning and carrying of 24 loads of hay and the "covering of the cattle". Commercial deer-breeding, again, involved 25 young deer of which 24 were sold to the stirkettar at Rille (another monastic farm west of Durham City) and one was diseased with murrain. During the year, these were more than replaced by 26 newly born deer-calves. No further details of fourteenth century dairy farming at East Black Dene have been traced and its

connection with the Priory subsequently ceased whereas the farm at Burnhope was retained as a distant outpost up to and after the Dissolution.

The writer's problem of discovering the medieval extent of improved land at Burnhope, East Black Dene and elsewhere in the High Forest was approached from the view that original enclosure lines might possibly be detected by applying three lines of enquiry:

- (a) Cartographic analysis of the 1843 Tithe Schedule and the identification of major territorial divides. It was this analysis which first revealed the existence of certain primary and often long, continuous lines of walls, or head dykes, representing a succession of key stages in the process of intaking valley-bottom land from the fell.
- (b) Field investigation of head dykes to check on their continued survival among the intricate present-day network of stone walls and also to relate such survivals to the vagaries of relief, in particular river terrace and other breaks of slope. The permanence of the thirteenth century lines, their sympathetic adjustment to changes of gradient and the strong tendency towards homestead-wall intervisibility, it is claimed, were three important conclusions of that investigation.
- (c) Practical consideration of basic economic needs which, in essence and for the time being, can be simplified as water and sufficient land for hay and grazing.¹⁴ As large areas of fell remained unenclosed up to the early nineteenth century and lay no great distance from the valley floor, open and poorly improved grazing land must be distinguished from that which was enclosed and of better quality.

The individual head dykes and land uses of Fig. 2. 3 reflect the above factors. Three categories of land can be distinguished: meadow, improved pasture and rough fell. The first two should not be seen as instant achievements whose use was fixed throughout the medieval period. Economic fortunes varied, pasture became meadow and vice-versa but the whole economy required an adequate supply of all three to remain viable.¹⁵ The prime spatial problem was their arrangement and accessibility within short radiating distances of each farm site. Thus, the one element common to all but two of the 31 tenements is their immediate, contiguous access to the fell, home meadow and pasture¹⁶ (Fig. 2. 3). There is no haphazard planning, no conflict of intention, no awkwardness of distribution and, as will be shown in a detailed investigation of "process", it was a remarkable precision exercise carried out consistently over a wide area. That such a balance and pattern of land use was achieved to everyone's satisfaction is ample testimony to the co-operative endeavour involved and the high level of environmental perception required. The scale of this development must, however, be kept in perspective. Although the crenulated ribbon of land in Fig. 2. 3 indicates continuity of occupation along the main valley floor, it, and the similar Rookhope Burn enclosures, amounted to no more than 6 sq. mls (15. 4 sq. km) or 12 per cent of the High Forest. Added to this were the semi-improvements of the summer agistment pastures (Figs. 2. 3, 2. 5) which, at 26 per cent of the then Forest surface, considerably exceeded the extent of lower land under continuous farming.

(iii) Tenurial factors: the implications of leasehold tenure

So far little regard has been paid to the influence of tenurial

conditions upon the settlement geography. The period in question may be seen essentially as a time of leasehold monopoly, an opportunity for Bishops to inflict a system which suited their purposes best - prestige, patronage, expediency and revenue. Throughout it all, the practising farmer and his family benefited least and settlement remained remarkably stagnant. In the High Forest, it is probable that there were no more farm sites in 1500 than two centuries earlier. In general, the tenants were lessees very many of whom were absentees, possibly knowing or caring little about the quality of farming and quite content to receive the rents of sub-tenants and, in some cases, an extra income from the mining of lead.¹⁷ In 1373, for instance, Dame Alice Nevill of Brancepeth was granted three "vacheries", Wearhead, Middle and East Black Dene, for her life and one year by the Master Forester at an annual rent of £4 10s. 0d.¹⁸ Also an indenture of 1435 allowed the grazing of "Burnhopeshele pasture" (and the Bishop's Park of Wolsingham) to pass for 20 years at a rent of £33 6s. 8d. per annum to four men from Stanhope, Wolsingham and Teesdale.¹⁹ Unfortunately, the covenants of these and other fifteenth century Forest leases, with one important exception, are not known. The earliest clue as to their strictness comes in 1479 when for services rendered against the Scots, Richard, Duke of Gloucester, became grantee of the entire Forest and Park and was responsible for foresters' and parkers' fees, repairs to farms and maintenance of the Park and frith walls, for conserving the deer and woods and for the exclusion of goats, sheep, pigs and greyhounds there.²⁰

The terms of a new set of later leases for 1511 are worth considering briefly as they reveal an inflexible and unsympathetic attitude to the farmers of Weardale which did not encourage, let alone allow, individual enterprise.²¹ They refer directly to the actual resident tenants whose names are specified. Most

of the leases are for a short term of only 5 years with no guarantee of renewal afterwards. The tenure became void if, for example,

- (a) rent was unpaid after 40 days of the required date,
- (b) the deer were hunted or hounds kept without the Bishop's licence,
- (c) the tenant was unprepared for the defence of Weardale,
- (d) the tenant died or demised any of his 5 years' term to anyone else.

All this and the traditional stipulation of limited numbers of cattle and sheep on the Lord's waste, where new enclosures simply did not take place, were very cramping conditions.

There is a hint of desperation and revisionism about the above arrangements. A comparison of High Forest lessees for 1438, 1476 and 1535 shows how the whole medieval leasehold system had fallen into disrepute and neglect.²² To summarise: the position in 1438 was probably representative of that in c.1300 with a close circle of the Bishop's associates enjoying the privilege and income of Weardale stock farms. The Rector of Stanhope had four tenements and Jn. Harryson and Wm. Batemanson three each. East of the two Hetheryntons, Westwoods and Stobbs had single leases as had certain foresters. Between 1476-1535, the practice of patronage and leaseholding was in a rut. With virtually no exception, the recorded 1505 lessees and most of those of 1476 are exactly and impossibly the same in 1535 - after an interval of between 30 - 60 years. Maybe the system had worn itself out naturally: perhaps, too, economic decline no longer made a Weardale farm an attractive proposition. There is some evidence of the latter trend. From 1485-1536, up to 11 farms were "in the Lord's hand for lack of a tenant" or were let at a reduced rent.²³ The list includes farms in the upper reaches of Killhope, Burnhope, Ireshope and Rookhope Burns, areas where the effects of economic recession would be most telling.

By 1500, it can be concluded that the decay of leaseholding was so advanced that the local challenge to its further survival had already begun and was certainly to gain momentum during the sixteenth century.

In this broad introductory survey of settlement, emphasis has been placed upon farm sites rather than farm households and actual population numbers. The method of entering rents and lessees' names in the Master Foresters' Accounts (1438-1535) conceals the actual total of households at each farm site and therefore prevents any precise assessment of settlement clustering and population. It is most unlikely that each settlement site had only attracted a single farm as late as 1535. However, the 1511 schedule, noted above, sets out the names of almost all the Forest (and Park) farmers and, as a new agreement, may well be an accurate disclosure of resident tenants, households and settlement size.²⁴ Farm groupings are indicated at several places (Fig. 2. 4) and are further confirmed in 1527 at Wearhead, Ireshopeburn, West and East Black Dene where a Mines' Account reveals the names of miners' homes. (See Chapter Five, p.102 for fuller discussion). It should be stressed that the modest settlement growth since the mid-thirteenth century, demonstrated in Fig. 2. 4, did not occur through site dispersal but by site expansion, a process more in keeping with the landlord's desire to control land-intaking and the further spread of farms. The clustered pattern is noticeable at most places, except in the Rookhope valley, and is most pronounced at the "better" sites. A minimum of 42 households exists and others, assuredly, can be added at West Black Dene and Daddry Shield. A conservative estimate of 45 families farming the High Forest might be expected to give a possible total population of only c. 200 in 1511.

II. The occupation of Stanhope Park

The origins of settlement in the Park were at least as early as those in the High Forest but the motives, scale and resultant distribution were quite different. Effective consolidation and management of the Forest-Park division required the local accommodation of four foresters and two parkers. The traditional sixteenth century home of the Park keepers was Eastgateshele at the eastern wall.²⁵ It is not possible to confirm the thirteenth century presence of a residence there but some early habitation associated with the hunting lodge - gate house - Forest Court functions at Westgate, beside the Western Park entrance, is most probable. A more certain conclusion, though, is the continued absence of a vaccary network in the Park until the fifteenth century when a number of farmsteads were eventually introduced²⁶ (Fig.2.5). Partial economic erosion, however, of the deer territory had already occurred before this time. Bishop Hatfield certainly had stock there.²⁷ His cattle and horses (but not goats, sheep and pigs), jointly exceeding 1,000, were allowed to graze in appreciable numbers. The Park also contained two rented meadows²⁸. These uses, the agistments on the fell to the north and south of the Park and pastoral farming to west and east must have created mounting pressure to regularise a situation increasingly detrimental to the deer.

Drury has shown that the solution lay in a grant in 1419 of the grazing of Middlehope, Swinhope and Westernhope Moors, the grazing of Stanhope Park and, most significantly, ten new sheles, to the then Master Forester, Robert Strangways of Durham City.²⁹ It can be established that the sheles were first introduced at some stage between 1406-19.³⁰ Their purpose, it was recorded later in certain Chancery Court proceedings in 1621, was "for the better maintenance of the wall of the said Parke and safeguard of the said Deere" and, at another point in

the same suit, "In which said forrest and Parke, the Predecessors of the said Rev. Father have (for more safety of their game and other good considerations) improved and erected severall Tenements . . ." ³¹ Much earlier, it was also stated as one of the covenants in the 1479 grant to Richard, Duke of Gloucester, that he "should uphold the sheles which were built within the said Parke in the time of Bishop Langley . . . for maintenance and safekeeping of the said (Park) wall and fryth." ³² The ten sheles in question and the grazing rights were not leased gratuitously to the Master Forester who had, in fact, to find a rent of £66 13s. 4d. (100 marks) per year for his important acquisitions. It is not revealed who built or occupied them at the beginning but three conclusions concerning their function, which differ from Drury's, can be made. ³³

- (a) In spite of the suffix, "shele", the ten houses were not merely temporary dwellings nor were they built in such numbers to "tend the deer" or "for storing walling tools and other gear . . . etc." ³⁴ As shown in Fig. 2. 4, they occupy a favourable, low-lying location in one of the more productive parts of upper Weardale making a seasonal approach to animal farming unnecessary, especially in a locality where cattle-farming and cleared land already existed. By the fifteenth century, the term "shele", a derivation from the neighbouring High Forest, had an inherited use.
- (b) The ten sites, under the leasehold tenancy of the Master Forester, were, from the outset, fifteenth century counterparts of the rent-paying Forest vaccaries and were introduced by Langley as a business enterprise thereby justifying the sizeable annual rent. Sedentary cattle-rearing without meadow and pasture enclosures is impracticable and so the walled improvement of land around the above tenements was begun and completed sometime between 1406-19.

(c) The pioneer farms were also an attempt to safeguard the deer in the Park. Compared with the previous situation, the policy was one of better separation of deer and cattle, the numerical containment of both and the assurance of enough winter deer fodder from a special reservation, the frith, in the centre of the Park (Fig. 2. 5). Quite naturally, this latter was not part of the Master Forester's award and was set aside as a non-rent paying area. Deer and cattle came together to some extent on the higher grazing land, particularly in the south between the new tenement head dykes and the Park wall but the intended key to deer survival was undoubtedly the frith. The safety of the fallow deer was further increased by the Master Forester's and later tenants' responsibility for repairing the Park and frith walls and protecting the woodland. So, it can be concluded that the Bishop hoped to receive an annual income of 100 marks from agistments on the three fells and from his stock farms in the Park and, at the same time, continue his supply of venison.

(ii) The distribution of the Park farms

One of the problems is the exact location of the ten pioneer farms (Figs. 2. 2 and 2. 5). Six can be identified with little difficulty. Two, Westyatshale and Westyatflodgateshele, are less certain: the former, like that at Eastgate, is probably sited at the wall and the latter too but beside the "flood-gate" of the Wear. Both locations mark the sites of farms which remained into the nineteenth century. Whitwelhouseshele and Westerhirstshele are exceptional in not relating to existing farm names. It is Drury's contention that Westerhirstshele became disused after 1458 and Whitwelhouseshele some time after 1530 and that both have since disappeared. Westerhirstshele's location is strongly claimed by her at an archaeological site straddling the southern Park wall³⁵ (Fig. 2. 5), while Whitwelhouseshele is believed

to have been in the vicinity of the Whitewell area, a woodland on both sides of the lower Westernhope Burn, though no trace of its position has been found.

By 1458, it is known that the ten sheles of 1419 were still present and had been leased to six individuals. The rent, unchanged at £66 13s. 4d., was presumably apportioned among the six tenants some of whom were obviously responsible for more than one holding.³⁶ Between 1476-79, the actual tenants and rent sub-divisions are disclosed but without any farm names. Nevertheless, the information reveals the probability of 17 farms and a mid-fifteenth century surge in settlement. The rent totalled £64 13s. 4d., the missing £2 0s. 0d. being traceable to Eastgateshele. In later rentals, the payment at Eastgate reverted to normal, thus, to all intents and purposes, the Park sum continued unchanged throughout the fifteenth and sixteenth centuries with the exception of one additional rent of £5 0s. 0d. at a new tenement, New Park, in the old frith.³⁷ Using the 1511 and 1595 rentals (containing farm and tenant names) and working retrogressively, it is possible to correlate 1476 rents with farms. The former are helpfully assembled into four separate groups or "quarters", administrative divisions within the Park whose boundaries can be drawn (Fig. 2. 5).

In the context of the two "vanished" farms, the following points must be made:-

- (a) The annual Park rent of 1600 is not reduced in spite of the suggested disappearance and withdrawal by then of two of the original contributory rent-paying farms.
- (b) It is possible to relate the Park rents of 1476 to the actual areas "on the ground", a very necessary exercise if the colonisation of Stanhope Park is to be properly understood. Farm sites cannot exist without farm territory. The results in Fig. 2. 5 show that neither Drury's Whitewells location nor

her southern Park wall area is part of the enclosed farm territory.

- (c) When the pace of settlement quickened between 1458-76, it seems improbable that Westerhirstshele should fade away. Moreover, it is very curious that two rent-paying farms dependent upon systematic cattle-rearing and associated pasture and meadow fields should vanish without leaving some trace of walled enclosures, improved land, tracks and identifiable dwellings, similar to those at the other eight sheles. It is worth noting, too, that all 31 medieval sites in the High Forest have survived to the present day. The writer believes that this is also true of the original ten in the Park. The wise choice and subsequent permanence of medieval farm sites are inescapable features of the settlement geography of upper Weardale.

Where then were Westerhirstshele and Whitwelhouseshele? The inference of the above argument is that both farms continued in existence and were to be found within the newly enclosed land of the Park containing in 1476 at least 17 farms.³⁸ Eight of the pioneer ten are already accounted for and the missing two must, therefore, be among the remaining nine. It should be noted again that the exercise in elimination is eased by the fragmentation of the Park into the "West" and "Est" Quarters (north of the Wear) and the "Billing" and "Faunles" Quarters (south of the Wear) and the presentation of the separate 1476 rents in their appropriate Quarter. Thus, using the rental, the nine farms can be placed as follows: two at Westgate (West quarter); Langleyshale (Est quarter); Overhorsley, Billing Shield, Gate Castle and Ludwell (Billing quarter); Swinhopeburn and Brotherlee (Faunles quarter) (Fig. 2.5). The additional dwellings at Westgate, Swinhopeburn and Brotherlee are clustered-developments of the 1419 originals. Langleyshale, Gate Castle and Horsley Head, in contrast, occupied new dispersed

sites. The rectilinear boundaries of Langleyshale point to its post-1458 creation out of Eastgateshale land while the siting of Gate Castle and Horsley Head at the head dykes of Ludwell and Horsley pastures would seem to exclude them from the initial river terrace distribution. It is the writer's conclusion, therefore, that Whitwelhouseshale and Westerhirstshale are the former names of Ludwell and Billing Shield³⁹ respectively, two of the original 1419 group of ten valley-floor farms not yet accounted for.

Fortunately, there are also fragments of documentary evidence to confirm Whitwelhouse-Ludwell and to encourage Westerhirst-Billing Shield connections. The first comes in a Chancery case brought in 1621 by Bishop Richard Neile against Arthur Emerson of Ludwellshele and John Harrison of Stone Carrs: "... King Henry VIII in (1530) did demise unto John Emerson of Westnopburne all that mesuage or sheile called Westnopburne, As alsoe all that mesuage or sheile called Whitwellsheile being one of the tenements" (i. e. either Ludwell or Stone Carrs) 'now claimed to be customary.'⁴⁰ As Ludwell is known to predate Stone Carrs, its identification with Whitwellsheile seems to be established.

Secondly, the earliest certain documented existence of Billing Shield is 1511 when Alice Maynard was the tenant.⁴¹ Her husband, Roger Maynard, is named in the 1476 rental as holding the same farm.⁴² The origin of Billing Shield sometime before 1476 and its terrace site fit very happily into the pattern of settlement evolving between 1406-19. It will be seen in Fig. 2.5 that an important "bite" of improved land exists there which is almost certainly one of the sequence of meadow-pasture intakes of the early fifteenth century colonisation.⁴³ Thus, there is a good, if not indisputable, case for Billing Shield, alias Westerhirst as one of the first ten Park farms.

It is relevant to raise another aspect of Drury's research, namely the claim

that a second archaeological site, at Cambokeels (Fig. 2.5), was once both the headquarters of Robert Strangways, the Master Forester, and a major stock farm in the Park.⁴⁴ From the evidence of numerous horseshoes, spurs, pieces of pottery, coins, etc., Hildyard concluded that Cambokeels had been a major hunting-lodge. The coins and pottery, Drury contends, indicate some kind of occupation in the 1420s.⁴⁵ Although hunting somewhere in upper Weardale is recorded as late as 1381, it is certainly probable that large-scale hunting had petered out by 1420 making Cambokeels' early fifteenth century (but not necessarily initial) use less likely to be that of a lodge. Unfortunately, though, there is no positive evidence to confirm Cambokeels as the centre of a purpose-built stock farm and a "sizeable headquarters" from which large scale cattle-rearing was masterminded.⁴⁶ Far from being "ideal", its location seems most unusual. It is positioned inside the early fifteenth century frith, an area deliberately and successfully protected (for the time being) from the effects of commercial farming. Moreover, there is not a single appropriate meadow or pasture boundary wall adjacent to this supposed farm site which is similar to those still surviving at the ten contemporary sheles and without which stock-farming would be a haphazard affair. Existing walls near Cambokeels belong to New and Old Park farms created in the sixteenth and seventeenth centuries respectively from the land in the frith. Strangely, too, Cambokeels (Cammock Eales originally) is never documented. This and the suggested mid-fifteenth century demise of a major farm when new ones were appearing less than a mile away and the Park economy was buoyant are very difficult to understand. Later, when the two above farms were allowed in the shrinking frith, it might have been expected that the nearby and deserted Cambokeels site would have held some attraction but this was not so. The writer is drawn to the view that when the

Park colonisation began, Cambokeels was an obsolete hunting-lodge which, in view of its convenient position in the frith, had become a keeper's shelter and central storage place for deer hay. If Master Forester Strangways had had to be present in person, surely his task could have been carried out from any one of the tenements in the Park or even one close by in the High Forest. The period 1406-76 was clearly one of dynamic settlement which contrasted with the well-established, unchanging situation in the High Forest. Progress had indeed been rapid and the conversion to animal farming very successful. In 60 years, the ten sheles of 1419 had virtually doubled to at least 17.⁴⁷ This rate of growth then slowed considerably or even stopped altogether.⁴⁸ Certain conclusions concerning the resultant settlement pattern in 1500 can now be made and are illustrated in Fig. 2.5.

South of the river Wear

- (a) Indisputably, the Park wall stands out as an antecedent boundary against which both Forest and Park farm territories abut but do not transgress.
- (b) The six early farms of the southern Park developed as a continuous settlement line parallel to and along the terrace of the Wear. There is a simplicity and regularity of distribution here and a wide farm-spacing which is missing in the Forest. Overall, the landscape is less congested. Moreover, each farm's enclosed land is confined to only one, the south, side of the river, a feature also alien to the Forest. One very significant similarity and genetic connection though is the convenient and recurring proximity of all six Park (and Forest) sites to meadow, pasture and fell land (Fig. 2.5). There was, it would appear, every encouragement to engage in profitable cattle-rearing in this southern zone.

North of the river Wear

Here the pattern is appreciably different. There is no repetition of west-east, wall-to-wall continuity of settlement. Within the approximate rectangle of the northern Park there are three distinguishing features:-

- (a) The eastern portion, the Estquarter, almost one-third of the entire Park is occupied by only three farms. Two of these, Eastgate and Sunderland, rank as those upper Weardale farms having the greatest and quite unusual acreages of home pasture in the medieval period.⁴⁹ About half of this pasture, the High of the Park (178 acres./72 hectares), was leased separately at £3 6s. 8d. per annum to the Eastgate tenant and was probably added to the initial farm territory at some stage between 1406-19. Land was taken away, too, when Langleyshale was carved out of the farm at Eastgate during the mid-fifteenth century expansion (Fig. 2.5). There is much sporadic information to show the fifteenth century monopoly of Emersons at Eastgate, Sunderland and Langley and their various privileged appointments as Keepers and Foresters which may in part explain the generous leasehold grants in the Estquarter to this reliable "introduced" family.⁵⁰
- (b) The most complex man-land relationships were centred upon Westgate. The twelfth century existence there of the grand hunting-lodge and its transition to a permanent "Castle"⁵¹ must have given some early impetus to settlement but it is probable that serious agricultural progress awaited the permission of Bishop Langley. The problem of identifying the precise location of the first sheles arises from the unfailing fifteenth and sixteenth century method of listing their rents under the general names of West-quarter, Westgatequarter or Westgate. For example, between 1476-79,

the total rent, £14 0s. 0d., for the farms of Westquarter, is subdivided into five unequal amounts. This can be reasonably interpreted as a minimum of five tenements - somewhere in Westgatequarter. In the present context, the basic problem lies in deciding whether the two tenements of 1419 or the five of 1476 are all clustered near the Castle or dispersed some distance from it and each other. In view of known later events, the writer has concluded that the fifteenth century farms were concentrated close together inside the Park wall and not far from the tenement of New Close just outside it⁵² (Fig. 2.5). It seems entirely appropriate that the lodge at Westgate, the first recorded place of residence in upper Weardale, should have become, if belatedly, the scene of the largest and most compact settlement during the medieval period.

- (c) A factor in the confinement of Westgate, cramping it and preventing an eastwards spread, was the Park frith which, at less than one square mile (2.56 sq. km) was a relatively small fragment of the ancient park. As farm settlement was absent here until c. 1505, this centrally placed frith contributed nothing to the annual rent of the Park and yet it was the one vital part of the Park development plan which allowed the whole to proceed. Deer conservation was paramount and from the outset an enclosed sanctuary was essential.⁵³ In the 1621 Chancery case referred to previously, it was the Court's verdict that 'the said deere have had the liberty and benefitt of all the said whole Parke as well as of the grounds called the fryth, and have fedd and fawnd in all parts of the said Parke without restraint, the said fryth being a place provided only for the ... provision for hay for the deer in winter...'⁵⁴ This makes it plain that fallow deer were freely grazing the open, mainly southern, parkland outside the new

farms and, in theory, were even allowed access to the improved and enclosed pastures of the farms, including the extensive High of the Park.

The boundaries of the frith underwent several changes, each reducing its area stage by stage. The adjacent position and separate entity of the High of the Park suggest an early fifteenth century intention to have a frith twice the size of the one finally agreed by 1419. External grazing pressures upon this latter reserve were relentless, and further modifications had to be introduced in the late fifteenth century. The first indication of change is revealed in a 1485 reference to the New Park within the large park of Stanhope and to the existence there of a "grassy (hay) area"⁵⁵ (Fig. 2.5). Although the old frith and New Park were locationally coincident, the former's redesignation and remodelling into a smaller frith, and "service" area signified a major reappraisal of deer management. In effect, fallow deer were to be confined to the self-contained New Park, their only guaranteed refuge in a thriving and expanding cattle-raising environment. Events, however, continued to move quickly as the frith in the New Park and its coveted hay meadows became separated. Thus, by 1505-06, the "grassy area" had been encroached upon and was yielding an annual rent of £5 0s. 0d. "for the farm of the new park of Stanhope valued at £8 0s. 0d. per annum"⁵⁶ (Fig. 2.5). The diminution of the 1419 frith had not yet ceased but any further discussion of the erosive processes there must be deferred to Chapter Four.

The Park economy: speculation and resumé

The above survey has attempted to outline the problems of managing two economic policies concurrently in a relatively small area. About half of the Park had been singled out for cattle and the early frith, only one-ninth of the

total acreage, was specially reserved for deer. The remainder was available to both. Accurate calculation of stock in the Park is impossible but, as Drury has stated, a rent of £66 13s. 4d. does indeed represent a large number of animals. If High Forest rents and cattle having fell pasture there are a valid comparison, then, at an identical rent of 8d. /beast, the grand total in the Park would be exactly 2,000. Spread initially among ten farms, this does not seem too fanciful. Farmer Younge, for instance, in 1458 sold 45 three year old heifers at 8/- each⁵⁷. It is very difficult to estimate a tolerable grazing density as many variables are involved, viz. land quality, duration of occupation and age of animals. At a rate of one beast or deer per acre, the value and necessity of approximately 2,000 acres (810 hectares) of unenclosed fell inside the Park can be readily appreciated. Whatever the actual ratio, here lay the key economic problem: the mutual occupation of the fell by deer and cattle. The deer were heavily out-numbered⁵⁸ and, in spite of stipulations to the contrary, must have been sadly neglected by the tenants. The keepers, moreover, were also rent-paying farmers. As the frith crumbled, the difficulties of maintaining a deer policy increased. If not yet moribund, the plan could not withstand the economic and settlement realities of a growing resident population.

The reorganisation of Stanhope Park also involved another portion of the Weardale fell. To the north and south of the Park wall lay very large expanses of land above 1,500 feet (459 m.) which were administratively part of the High Forest. It is evident from Langley's 1419 grant to the Master Forester that, in future, this land, viz. the pastures of Middlehope, Swinhope and Westernhope, was to be considered an integral part of the Park, the new unit being known as the Park Quarter. It can be concluded, therefore, that the Master Forester, his tenants and all subsequent lessees (and stray deer) had right of common on this higher grazing land.

One other interesting repercussion of the boundary revision was the incorporation of a thirteenth century Forest farm into the Park Quarter. This farm, New Close, always had its right of common on Middlehope Fell to which it had instant access (Fig. 2.5). The Park Quarter innovation necessitated its removal from the Forest and, appropriately enough, it is not included in the 1438 record of Forest tenements. New Close was unique in being the only fifteenth century farm of the Park Quarter actually outside the Park wall.

It only remains to add that tenurially, Park settlement was entirely leasehold. The first grantee was the Master Forester who in order to run his ten farms profitably must have employed stockmen at an agreed rate or involved sub-tenants responsible to himself.⁵⁹ Later, the familiar High Forest system was employed with farms leased to six known and trusted individuals in 1458 and more than 20 in 1476.⁶⁰ Some of these tenants must have lived in the more hospitable Park as they held practical, day-to-day offices; some also had other tenements and relatives with land in the Forest.

Most of the fifteenth century had been a time of radical changes in the Park. Although largely subsiding by 1500, they had done much to remove the long-standing settlement and agricultural contrasts with the High Forest.

CHAPTER THREE

MEDIEVAL SHIELINGS AND VACCARIES: PROCESS, CHRONOLOGY AND SETTLEMENT MODEL. 1250-1500

Any understanding of the thirteenth century origins of farm settlement requires an investigation of process and sequence and, in the complete absence of any documentation of either, the writer's conclusions are based on the premise that the early network of occupation has to a large extent survived and can be identified in the field. Also, as stated in the previous chapter, the cartographic representation of the 1843 Tithe Apportionment data exposed several old, primary boundaries, invaluable clues which harmonised well with more subjective views of everyday thirteenth century economic needs. The resultant framework consists of three elements:

- (a) the settlement nodes or points which by 1313 numbered 31. All have been located and their qualities of site (position) and situation (relative position) can be investigated¹. Their overall distribution was shown (Fig.2.2) and briefly commented upon in Chapter 2.
- (b) the edges or lines emanating from the nodes and amounting to many miles of rectilinear or curving head dykes and human and animal routeways, the two often closely coincident and signifying some pattern of sequential development.
- (c) the shapes or areas combining as a complex mosaic of fields or closes, the improved land tactfully deployed to maintain a pastoral economy.

One other preliminary point should be made: the upper Wear basin is sufficiently small, self-contained and neatly definable to encourage a full reconstruction of a settlement evolution unfettered by any previous lasting stages of colonisation².

Cattle-ranching in the medieval forest, it can be assumed, signified ecclesiastical priority and assistance in the development of a vaccary base or bases in this outlandish area. The many tenurial conditions which strongly conditioned the progress of settlement in the fourteenth and fifteenth centuries had no place during the initial phases of this unique venture. Nevertheless, external vigilance in maintaining a revised deer policy continued. Hence, the effort and organisation required to enclose the Park and the change it represented with the past, convincing evidence of the planned, purposeful assault about to be launched. It had to succeed. A great deal depended upon the expertise and enterprise of professional stockmen, maybe the Bishop's farmers and tenants from lower Weardale and certainly men with a good eye for territory well able to speed the output of beef, venison and cattle on the hoof. The names of John Collanwode, 'stirkettar' at Burnhope and Thomas Johnson, cowman at East Black Dene, survive as the nearest examples of this class of men³. The intriguing signs are that there was no economic free-for-all nor anything haphazard about the whole exercise. Thus, the first farmers were delegated to create both integrated settlement and a viable economy yielding, in time, a yearly rent and a variety of animal products.

I. The original shielings: the pioneer process

If the motive for the settlement of upper Weardale was overwhelmingly economic, then economic needs in an "empty" landscape determined farm site and not vice-versa. The essential requirements seem uncomplicated enough: fresh grass for daily grazing in summer, grass for winter hay, water and winter shelter. These were the real issues. To provide all four everywhere, initially and simultaneously, and in the correct amount, was too great a practical problem. Nevertheless, the pioneer process necessitated a careful evaluation of the

physical possibilities in relation to these economic demands over most, if not all, of the High Forest so that a coordinated and extensive occupation might eventually be achieved.

A likely sequence of events at an actual farm location may be outlined. At first sight, the environment would appear to offer more obstacles than opportunities, not least being the laborious task of clearing valley-floor deciduous woodland⁴. During this phase, a temporary summer hut, destined to become a farm cluster, would suffice as accommodation. The survival into the fifteenth century of the term, "shele" in some tenement names is a reliable guide that pioneer, frontier settlement first developed on a seasonal basis increasing from a few weeks to the full summer and autumn period. Successful clearance was quickly followed by enclosure and early use of the land as rough pasture. Summer-farming on a modest scale had arrived.

The transition from episodic-periodic occupation to a more productive, elaborate hay and grazing economy and permanent habitation demanded the conversion of the original pasture close to meadow and the addition of a second complementary enclosure, the home pasture. As hay was won and grass yields increased, farming lengthened into the autumn and winter until, with shieling proximity to river water and a growing complex of dwelling, stock byre and hay shed, a yearly presence was achieved.

Where were these pioneer sites? How numerous were they? Were they grouped closely together or widely dispersed? - questions answerable on the assumption that the hired cowmen would surely occupy the best areas first. But what and where were the "best areas"? The evidence points to a remarkable perception of the problems and opportunities of four physical factors: altitude, slope, aspect and natural drainage lines.

Unnecessary altitude, with its increased precipitation, windiness and deleterious effects upon air temperatures and the length of both the grazing and growing season, was to be avoided. And yet height was often compensated for by localised shelter a product of the variable relief and protective, surrounding deciduous trees. Steep slopes, too, were unattractive to pioneer settlement but gentler gradients, their relatively dry soils and, where possible, southerly aspects would result in surprisingly high ground temperatures and good growth. Cattle-raising and human residence were impossible without regular and large supplies of river and spring water. There was no deficiency of either but stream fording points and flood levels had to be given careful consideration and were, therefore, not unrelated to everyday water provision.

Thus, the earliest shielings were attracted to the well-drained river terraces and flood plain, the best environment overall in terms of the above controls and undoubtedly, with damp, warmer alluvial and drift soils, the superior meadow land. Unoccupied by animals during the spring and summer months, the latter provided the longest and richest grass and, after the hay harvest, was open to grazing in the autumn. Its cost-efficient location in closest proximity to homestead and barn on the lowest, flattest land available reduced the time and physical effort of mowing, spreading, turning, raking, stooking, carrying and storing the hay. No doubt the slow, tedious summer routine and particularly the scything of grass in the home field were that much more acceptable on the gentler, wind-protected flats of the valley bottom. But even here, grass yields and safe harvesting would vary from year to year and the critical ratio of the amount of meadow land to animal numbers would never be easy to forecast, a factor promoting the autumn movement of herds from Weardale to the lowlands.

Complementing the meadow was the home pasture, allowing outdoor feeding for approximately two-thirds of the year. There was no merit in having distant pastures at this early stage and effort was applied to the enclosure of a piece of grazing land as near to the shieling and its meadow as possible. In upper Weardale, the sloping home pasture was on the north side of the Wear, next to the meadow and in direct contact with the homestead. The simple lay-out is shown diagrammatically in Fig. 3.1a. and demonstrates a compact farm unit of contiguous closes next to but not crossing either river.

The pasture head dyke ran across the steeper land above the meadow. Pasture work must have been a tiring and time-consuming business. Every attempt was made to keep distances, seeing, hailing and walking, to and from the homestead to a tolerable minimum. Contour convexities were not always obliging but there is ample evidence that nearly all pasture boundaries were visible from the pioneer farms. Although the slopes created problems for man and beasts including inevitable reductions in milk and beef yields, the pastures were well-drained, well-manured and had an optimum growing season.

There is one other land use aspect which influenced the first distribution of the earliest meadow and pastures. The vast acreages of partially wooded fell had a low carrying capacity and were already grazed by the deer but their relative emptiness was a definite and natural pull which steadily increased in future centuries. The open moor, by easing pressures on the pasture, gave some flexibility of herd size and, gradually by animal trampling, its quality would improve. As a widespread source of grass, peat, ling, timber, stone and game, it extended conveniently to the valley floor and the "backdoor" of the farmstead (Fig. 3.1a). So began the long and varied right of common on the poorest land probably, as yet, undisturbed by any tenurial rules and regulations.

To arrange the juxtaposition of shieling, meadow, pasture and fell in the most favourable part of the Forest was, it is suggested, the aim of the pioneer stockman. This was achieved in the most extensive zone of low and flat riverine land west of the Park, a ribbon extending for $3\frac{1}{2}$ miles between the Park wall and the Burnhope Burn - Wear confluence (Fig. 3. lb). It is not quite totally continuous along both sides of the Wear and its area at 580 acres (235 hectares) is small. "Low and flat" are defined as all flood plain and river terrace surfaces, the latter often quite undulating. Generally, slope angles are below 5° excepting terrace risers. Applying previously discussed criteria and selecting from known medieval tenements, the five sites of West Black Dene (1060 feet O. D. , 324 metres), Middle Black Dene (1050 feet O. D. , 321 metres), East Black Dene (1060 feet O. D. , 324 metres), Huntshieldford (975 feet O. D. , 298 metres) and New Close (940 feet O. D. , 287 metres) are advanced as the first Forest farms (Fig. 3. lb). It will be noticed that these shielings, at the edges of three meadow flats separated by two intervening spurs, are all linked territorially by meadow and/or pasture, the respective head dykes surviving to the present day. Each has unimpeded access to three categories of land and all are on the north side of the river with easy inter-communication. Upper pasture limits agree closely with the 1200 feet contour. The complete network represents a co-ordinated scheme bringing together the energies of the new settlers and making the best communal use of a problematic environment. This view is supported by the continuous sweeps of meadow and pasture between shielings keeping both the number of head dykes and their length to a minimum and thereby saving time and effort in their construction. An important implication is the contemporaneous origins of the shielings. It can be argued that a chain of events began at any one and within a short time the

pattern was completed. It is possible, for example, that West Black Dene was the starting-point with a diffusion eastwards first to Middle Black Dene and then, in sequence, to the other three. Such progression might explain the increasing area of the three pastures from West Black Dene to New Close. The first pasture was probably an experimental, conservative effort but its completion, a growing labour force and economic confidence led to larger enclosures.

A second implication is the use of meadow and pasture on an open and shared basis. For centuries, the dale's hay-making has been a co-operative exercise and this tradition may have originated in the thirteenth century. If the concept of land as discrete parcels, enclosed and privately owned, had not yet arrived at medieval "arable" villages, it seems logical enough to presume the presence of open meadow and pasture where the tasks of farming, say, at East Black Dene were that much easier when the maintenance of the pasture head dyke was shared with the farmer at Middle Black Dene and hay-making with neighbouring Huntshildford. Moreover, agreement on the division of the hay yield and the numerical control of cattle in the pastures was probably uncomplicated enough at this early stage. Although, therefore, it is too premature to think in terms of dales of meadow and stints of pasture, the foundations were there.

The writer sees the West Black Dene - New Close block of land as a viable pioneer base, a core area in which a definite settlement process operated and shielings evolved into vaccaries or permanent stock farms. Securing the base was the vital achievement as subsequent farms could rely upon its support. The five settlement processes which will now be examined tend to confirm this hypothesis.

II. The expansion process

Growth through expansion is defined as, (i) the enlargement by accretion of the pioneer vaccary, (ii) the establishment of a new tenement (or tenements) inside the enclosures so formed (Fig. 3.2a). At the same time, the initial advantages of the pioneer farm are preserved. If the supposition of West Black Dene as the first and, therefore, the pioneer Forest shieling is correct, then the spread of settlement to New Close is the first example of the operation of this process.

The natural outlet for expansion at West Black Dene et al lay across the Wear where potentially good but uncleared valley bottom land existed. Five pioneer vaccaries allow for five enclosures south of the river and five fords for access. These, in fact, exist and actual head dykes and crossing-points should be noted in Fig. 3.2b⁶. The closes occupy the remaining "flat" land and their head dykes mark the break of slope very accurately. This extra supply of upgraded land would be converted from pasture to meadow as quickly as possible. As hay represented economic security, the opportunity was then provided for new vaccaries across the river which duly appeared at the eight locations in Fig. 3.2b. It is not suggested that the eight were simultaneous. The probability of modest farm-grouping at Westerharthopeburn (Burnfoot) and Esterharthopeburn (Daddry Shield) involved the sharing of land on both sides of the two tributaries. Both owed their origins to colonising activity from the three parent farms at East Black Dene, Huntshieldford and New Close.

The permanence of the eight farms was ensured once home pasture-grazing was available. This was provided in traditional style by running other head dykes up and along the contours to create pastures at all the latest vaccaries except Windyside and Shallowford where pasture rights were shared with the farmers

of Huntshildford and New Close in the large pasture there (Fig. 3. 2b). The expansion process had produced a more complicated settlement network made possible only through a policy of mutual co-operation. There was no land-grabbing as witnessed by the orderly arrangement of the newest meadows. The pattern of sinuous head dykes and fields was an expression of both the natural topography and economic needs rather than any grants of specific acreages to rent-paying farmers. The eight expansion farms, again sited at meadow edges, had splendid entry to the fell and their respective home pastures. Continuation of shared, "open-field" pastoral farming is beyond doubt. Indeed, as late as the nineteenth century when the practice had long disappeared, farmers from West, Middle and East Black Dene and Huntshildford still held meadow and pasture fields south of the river, a relic of the thirteenth century when the farmers along the northern side joined with others in the building of new dykes across the Wear and so entitled themselves to a portion of hay and animal-grazing there.

The accretion stages first outlined saw the enlargement of the core area which now occupied the most productive and most easily worked land in the High Forest. Within the core two very significant trends can be isolated:

- (a) The growth of settlement associations whereby two or three farms developed stronger social and economic links with each other than with the remaining farms. For example, Gate (Ireshopeburnmouth), by position and genesis, would have closer ties with West Black Dene than, say, Huntshildford. Each of the five pioneer vaccaries had thus begun to develop within a territorial unit more extensive than the original.
- (b) The second trend is related to the first. Fig. 3. 2b makes it plain that the enclosure lay-out at the 13 tenements had resulted in each farm having an area of fell which it might or might not have to share with the

animals of other farmers. Such sharing would be necessary, for instance, between East Black Dene and Huntshildford but not at West Black Dene or New Close. This association of farmstead and localised fell-grazing was to have on-going repercussions as late as the twentieth century.

III. The extension process

It is conjectural how effectively and quickly settlement diffusion into the higher and secluded valleys might have been achieved by further westward accretion to the core, the prerequisite being the complete continuity of enclosures along one or both sides of the valley floor. However, there were natural difficulties as riverine flats upstream became smaller and interrupted making potential "natural" home meadow bases there less attractive and less accessible than those in the core area. Nevertheless, once the expansion process was impracticable, a fringe zone to the west and south of the core and containing higher pockets of meadow was exploited and settled by a quite separate process. The early pattern of development is shown in Fig. 3.3. Six isolated farms with their meadows and pastures are scattered within the fringe area. None of the six is in immediate contact with each other and all are completely surrounded by fell or stream. Initial detachment, it will be seen, is the fundamental criterion of the extension process and, in particular, separation from the core pushing the settlement frontier into higher territory.

Detachment in upper Weardale, however, was not attained fortuitously. It required a base from which small meadow clearances could be made at the best available locations. The likelihood is that at some opportune time after the consolidation of the core, communal efforts from West Black Dene and Wearhead - itself an "expansion" farm growing from West Black Dene - initiated clearances

at Burnhope and so began a sequence of events which extended satellite outposts via Burtreeford and Heathery Cleugh to Killhopeburn Shield. Similarly, Greenwell (Ireshopeburnholehouse) and Saugh Shield (Dirtpot Shield) may have stemmed from Earnwell and Daddry Shield respectively. Although their first occupation, as enclosure proceeded, may well have been on a summer pasture basis, it is unlikely that these relatively small footholds were conceived only as seasonal pastures with a transhumant economy. The prime intention was the introduction of new vaccaries which duly appeared once pasture and meadow fields were provided. The distribution of these valley-floor farms, dictated by the disposition of the tributary valleys and the varying quality of land along them, is interesting in that, although none is visible from the core area or from each other, intervening distances at about half a mile, are sufficiently small to allow relatively easy communications between them (Fig. 3. 3b).

Having established permanent farms, some simultaneously and some successively, at the six extensionsites, the "expansion" mechanism then enabled all but Greenwell and Saugh Shield to grow further and to create for each its own wider medieval territory and settlement association (Fig. 3. 3b). The lines of a second wave of head dykes, therefore, extend further away from these parent farms and, in most cases, take in steeply sloping land. Again, it was growth by accretion with the best of the new intakes quickly converted from pasture to meadow so opening the way for another injection of settlement through a small number of "expansion" farms, viz. Black Cleugh, Blakeley Field, Allers and Bridge End. In spite of considerable physical problems and limited choices, all, repeating the pattern in the core, were sited at a meadow head dyke at maximum distance from the parent farm, beside a stream (except for Blakeley Field) and next to the open fell. They, in turn, prolonged the enclosure process with the addition of

an adjacent home pasture and yet another wall in the procession of head dykes begun at the very first meadows of the extension farms (Figs. 3. 3a and b).

Not surprisingly, in more difficult terrain, the rate and extent of reclamation varied a great deal, ranging from,

- (a) no growth at Greenwell and Saugh Shield,
- (b) the very slow progress of Killhopeburn,
- (c) the steady expansion of Burtreeford and Heatherycleugh,
- (d) the impressive series of head dykes developed from Burnhope Shield.

An important difference between the fringe and core and a vital test of the validity of the foregoing processes and chronology lies in the contrast between the territories of those farms planned cohesively in the core and those developed separately and more independently in the fringe (cf. Figs. 3. 2 and 3. 3). In the former, the head dykes fit together harmoniously and possess a general symmetry which is not present between the lands of, say, Wearhead-Burnhope-Blackcleugh, Wearhead-Burtreeford, or Bridge End-Allers where they come into contact. It is very noticeable, too, that the initial isolation of every extension farm persisted to some extent with larger or smaller gaps of fell between them.

The "stepping-stone" or extension process of colonisation also operated less elaborately at three sites along the western side of the Rookhope Burn valley: South Hanging Wells, Smailsburn and Lintzgarth. Once more, after the flurry of meadow-pasture enclosure, the three farms remained physically separate from each other (Fig. 3. 3b). Their more distant removal from the core makes it difficult to decide whether the impetus for settlement came from that area or from the other side of Rookhope Burn where farm development was flourishing outside the High Forest. Again, all three farms are out of sight

of each other with intervening distances of approximately one mile.

Only one brief written source of information can be presented as supporting evidence of the processes outlined so far. It concerns the Priory farm at Burnhope in 1424 whose lay-out is described in an Almoner's Rental. The details are brief and can be correlated almost exactly with the known extent of the same farm in the nineteenth century, by then very much more fragmented into several holdings⁸. The fifteenth century head dykes and fields of Burnhopeschele are shown in Fig. 3.4 and the farm is revealed as:

- (a) "Burnhopschele lying in that valley on the north side of Burnhopeburn. A main close called Burnhopeyle from that part of the same stream containing 20 acres of meadow and 10 acres of pasture.
- (b) Also a close called the Calffell on the southern part of the same stream and on the opposite side of Burnhopschele containing 5 acres of meadow and 7 acres of pasture.
- (c) One close at the Blakcleugh stream on the northern part of the same river and east of Burnhopeyle containing 6 acres of meadow.
- (d) Also a quarter of a close in the corner west of Weresheued and on the south part of Burnhopeburn containing 6 acres of meadow."⁹

A total of 37 acres of meadow and 17 pasture acres. The half yearly rent was 3/4d. An important memorandum stated that the Almoner "is able to have the right of pasture in the pasture of Burnhope at all times of the year with 40 draught animals and their consequences for two years payment to the Chief Forester, for each beast aforesaid 6d. per annum. A total of 25/-." (The surplus 5/- arises, presumably, from the expected or actual "consequences" of ten newly born calves.)

This account confirms:

- (a) the reliance upon three land-use types: meadow, improved pasture and fell pasture,
- (b) the relative simplicity of farm plan. Four main closes are referred to and two of these, Burnhopeyle and Calfell, were sub-divided into meadow and pasture areas. The detached parcel of meadow more than a mile away suggests the extension process may have operated from West Black Dene via Wearhead with the early farmers at Burnhope retaining a share of land at their Wearhead base,
- (c) the use of undivided meadow and pasture,
- (d) the permanence of the primary dykes which were probably appearing some 150 years earlier when in 1278 the stockman was paid 12/8d. for making a new meadow there.¹⁰

Probably contemporaneous with the above developments was another and, for the medieval period, final surge of settlement activity in the core zone expressed as four additional farms and representing continuing colonial energy at West Black Dene, Gate and Daddry Shield plus a benevolent grant of waste in 1313 to Greatham Hospital. It will be remembered that the spread of tenements inside the expanding core required and had secured access to additional meadow and pasture fields. Following established practice, any other new sites there were therefore dependent upon extra enlargement of the core. Four such enlargements, accommodating the farms of Wearhead, Ulls Field, Pinfold House, and Hill House, can be identified (Fig. 3. 3b). Two of these farms, Ulls Field and Pinfold House are somewhat exceptional in that their locations at the head dyke of a new enclosure did not result in a second pasture intake outside the first boundary. Instead, both home meadow and pasture were fashioned from inside

the first enclosure by means of a still discernible secondary dyke. Maybe thirteenth century enclosure enthusiasm had now run its course or tenurial restraints had at last intervened to prevent any further expansion of the core.

Perhaps one important point may be stressed again: of the 30 farm sites reviewed above, not one was removed from the head dyke at the fell edge and all but three were sited, literally, at the common meeting-point of meadow, pasture and fell. Such a remarkably widespread and convenient arrangement is convincing confirmation of the carefully considered colonisation of the Weardale Forest.

IV. The transhumance process

The thirteenth century westerly spread of Forest vaccaries to higher altitudes ceased with the construction of Killhopeburn Shield (1400 feet O. D. , 428 metres) and Fallowhirst (1200 feet O. D. , 367 metres) where, apparently, enough summer hay could be grown to maintain permanent pastoral activity. Approximately 78 per cent of the High Forest lay above the 1400 ft contour and any effective use of its 24,500 acres (9,919 hectares) was dependent upon seasonal occupation. It is reasonable, therefore, to think in terms of shielding grounds and a scatter of summer shelters. The writer has found no indication of stone, turf or wooden huts on the high fells which can be justified as roofed and once inhabited shielings. There is a profusion of circular and rectangular sheep folds between 1,300 - 2,000 feet (397 - 611 metres) but out of the 70 or so present today, not one seems ever to have been lived in. Evidently, then, the type of migrant economy noted in upland Northumberland and Westmoreland was not employed in upper Weardale¹¹. It should be said again that it was not the Bishop's policy to allow generous and universal access to the fell land. An overloaded fell was detrimental to the red deer and had no part

in a plan where controlled settlement was the prime aim. The constraint of regulated entry to the uplands was implicit in the tenurial conditions at all vaccaries. And yet, in spite of these restrictions, the fifteenth century Master Foresters refer to agisted pastures in the High Forest¹². Some specific parts of the Weardale fell were purposely set aside as grazing grounds used by farmers, local and distant, who were able to pay the appropriate rates. The enclosures of Burnhope, Killhope, Wellhope and Rookhope (Fig. 3. 3b) are situated at the outer, western limits of the fringe zone and it is highly probable all originated during the thirteenth century prior to the long period of quiescent settlement between c. 1300 - 1500. Occurring in the 1350 - 1700 feet (413 - 520 metres) height range, they represent the final medieval penetration of the Pennine moorland and the process - one ring dyke to make an animal compound - reflects accumulating environmental problems requiring the seasonal transference of animals in transhumance fashion. Each pasture, without homestead and meadow until the fifteenth and sixteenth centuries, may have had one or two herdsman living in genuine summer shielings and entrusted with the safe-keeping and movement of cattle.

At similar altitudes and adjacent to a Park devoid of vaccaries, the very much larger expanses of Middlehope, Swinhope and Westernhope Moors were under no internal economic pressures until the early fifteenth century; they could be used profitably for summer cattle driven, perhaps, from the Durham lowlands. It can be speculated that the western pastures were rented as supplementary grazing mainly by the resident farmers and those more conveniently situated in the east by farmers from outside.

Two final settlement processes can also be distinguished in the medieval Forest. Both apply to the permanent vaccary and, following the pioneer, expansion

and extension stages, are entirely consolidatory.

V. The infiltration process

The immediate proximity of the fell and High Forest homesteads was a deliberate part of land-use planning and, as encroachments were not allowed on the lord's waste, their mutual contact could not be obstructed by any other farm. The actual settlement process was one of infiltration, a limited entry of animals whose numbers and movements were carefully supervised on a daily or weekly basis from the adjacent farm. The instructions given to the Master of Gretham Hospital and his successors were "that they may have pasturage for sixty cows, bullocks and heifers together with the offspring of the aforesaid cows of one year old" and their farm of Swynhopelawe should be securely enclosed so "that animals (from the Waste) belonging to other people cannot enter, and if by any chance because of defective fencing they do enter, that they are chased off without any right of impounding."¹³ At what earlier point strict limits were placed on fell cattle at the other vaccaries is not known. The problem is best related to the introduction and size of rents to be discussed below.

The more intensive fell-grazing and manuring within a short radius of the farmstead and the opportunity of removing natural fell products must have led to some general and modest improvement in land quality, the only lasting visible evidence of its early occupation. The tripartite land-use arrangement was now complete: meadow hay, improved pasture-grazing and semi-improved fell-grazing with supplementary fuel, wood, stone and small game were all used in obedience to three respective and different sets of rules - two devised by the local farmers and the other imposed from without by the landlord.

VI. The agglomeration process

Agglomeration is defined as the clustering of farmsteads at one vaccary site, the enlargement of a single settlement node through the building of other dwellings there. So far, the writer's attempt to simplify settlement processes has proceeded on the assumption of single shielings or vaccaries at each site. The precise appearance on the medieval landscape of the farm cluster is a complex problem. It is not until 1511 that the division of most holdings into two, three or four tenancies can be confirmed for certain¹⁴. There may also have been a similar state of affairs in 1438 as it seems inconceivable that after some 150 years of husbandry, other households were not concealed behind the single names of the tenants responsible for paying the Bishop's rent. Was there a tendency from the beginning for small farm nucleations with each cluster providing the labour for the communal work of clearance and walling and, not least, the mounting pressure from within for further colonisation? It is tempting to believe that this was the case and perhaps it was in part, but it seems more likely that an effective mid-thirteenth century occupation was completed the way it began, under the control of skilled ranchers working together and paid by the Master Forester on a piece-work basis to do a quick professional job. Possible kinship nucleation, say, at West Black Dene, may have had the reverse effect requiring time to build up the family cluster and producing, in turn, a cohesive and essential labour force reluctant to diffuse its energies elsewhere. At some stage, in the late thirteenth century, the change from wage-earning cowherds to rent-paying farmers occurred. With the settlement network already established, it can be speculated that a period of consolidation, prosperity and population-grouping then began. The economic advantages of kinship clustering, especially in the protracted work of hay-making, were considerable and undoubtedly improved the productivity and value of the Forest vaccaries.

VII. Tenurial factors in the settlement process: the role of the landlord

The transition from a forest organisation to rent-paying farms was completed in upper Weardale by c.1300. In 1313, Swynhopelawe, a late addition to the list of Forest vaccaries and the thirty-first site in all, had its first annual rent fixed at "two pounds of silver"¹⁵ which suggests that the previous farms were already tenanted and firmly established as commercial ventures. Before the transition, the pioneering stockmen, like the foresters, were probably hired at a fixed rate and from the meagre evidence of the Burnhope farm, were paid for any improvements they effected. As profitability was achieved, the Master Forester was able to adopt a leasehold tenurial system providing a rental income. Initially, the tenants may have been resident, short-term lessees rearing cattle and probably deer, selling their produce and also keeping enough for their families and, possibly, the Bishop's household. Unfortunately, it has not been possible to uncover the earliest tenants' origins, length of leaseholds and ease of renewability. There is no doubt though, that during the later fourteenth century and the first half of the fifteenth, economic progress from the humble shieling had made these Weardale farms an attractive and prestigious proposition to influential individuals including the Neville family, the Rector of Stanhope, Tyneside merchants and even Richard, Duke of Gloucester¹⁶. The latter trend necessarily relegated the local farmers to the role of sub-tenants and it is questionable whether such imposed tenurial arrangements were any real incentive to further nuclear growth of settlement. It is not known what financial arrangements existed between the absentee lessee and the sub-tenant but presumably the latter had to find a sum over and above the rent to the Bishop. When the economy was prosperous, the demand for Forest land was considerable and its acquisition a worthwhile proposition. In 1435, four men from Stanhope, Wolsingham and

Teesdale were willing to pay in advance a rent of £33 6s. 8d. for a 20 year lease of "that pasture in the High Forest of Weardale called Burnhopeschele"¹⁷ confident that more than this sum could be recovered through the demand for grazing land. Perhaps it was this kind of high land valuation which finally led Bishop Langley a few years earlier to make fuller economic use of the Park. Certainly the new rents there were in excess of those in the High Forest. However, it was noted in Chapter 2 that the fortunes of both the leasehold system and sub-tenant deteriorated during the latter years of the fifteenth century. By then disinterested lessees and depressed farmers were caught in a spiral of falling prices¹⁸, a stagnant economy and static or even dwindling population totals as some sheles stood empty.

There are no sources revealing the method of calculating rents but certain tentative conclusions may be drawn. The 1313 Swynhopelawe grant of 15 and 2 contiguous acres entailed, as mentioned above, an annual rent of 40/- "to our exchequer at Durham at two times of the year."¹⁹ It was also agreed that "common pasturage (for 60 animals) will be guaranteed to those who have the right of the aforementioned . . . land." This agreement seems to be in line with those existing in the 1438 Master Forester Accounts:

- (a) The 1313 level of rent is identical to that of several other Forest farms in 1438 suggesting that rents remained unchanged for at least a century and maybe from their inception.
- (b) There is an exact relationship between the rent and the number of beasts permitted on the waste. For example, tenants paying 20/-, 26/8, 33/4 or 40/- could graze 30, 40, 50, and 60 cattle respectively - the grazing rate being 8d/head. Did the rent determine the numbers of cattle or vice-versa? It can be argued that the latter was, in fact, the case.

As any direct connection between farm area and size of rent is very difficult to test before the sixteenth century and, moreover, seems quite inappropriate in the medieval context of shared open meadows and pastures, perhaps a more practical way of fixing the rent was to estimate the acreage of waste available for cattle-grazing (bearing in mind the precedent being established and the needs of the deer) against the number and carrying-power of the vaccaries, so allowing the total of fell cattle to be calculated²⁰. Allocating a monetary sum per head of cattle would then be a sensible way of arriving at the rent. It seems a feasible approach in upper Weardale. The 1424 example of Burnhopschele (p.63) shows that a distinction was, in fact, made between the actual rent of 6/8d. per annum and the sum, 6d, payable for each of the 40 draught animals grazing Burnhope fell pasture. The accumulated total, 26/8d, thus suggests, incorrectly, a rate of 8d. per animal. Perhaps, therefore, the annual payment to the Bishop at the other vaccaries was also composed of the two elements, ground rent and grazing rent.

There were two other aspects of grazing regulations which were to the landlord's advantage. In theory, it prevented the over-use of the waste by surcharging and, to this end, it was one of the foresters' duties to see that drifts of the Forest were carried out. Also, by general forest law, sheep, swine, geese and goats were excluded from the common. Goats and sheep tainted the pastures "so that the wild beasts of the forest will not feed where they do use to feed."²¹ In the early fourteenth century, this ruling certainly applied to Swynhopelawe but a century later, it seems to have been relaxed somewhat as each tenement then had common grazing for sheep at exactly half the rate for cattle.

The overall impression is that the thirteenth and fourteenth century Bishops, through their Master Foresters, exercised firm supervision of their vaccaries and, with the exception of Hill House (Swynhopelawe), prevented their numbers from

increasing beyond the limits set in the thirteenth century. Without ecclesiastical licence or special grants, as to the Master of Greatham Hospital, further enclosures on the Common were impossible and encroachments unthinkable. It can only be concluded that after the thirteenth century burst of activity, the Forest settlement geography changed hardly at all before 1500.

Much of what has been outlined at some length regarding the processes and chronology of settlement and the accompanying evolution of tenurial practices is summarised in the diffusion model of Fig. 3.5 and in Table 3.1.

CHAPTER FOUR

THE END OF THE MEDIEVAL TRADITION, 1530-1620

In Chapter One, some attention was given to the sixteenth century dissolution of the majority of leaseholds and the appearance, in turn, of a new tenurial class, the customary tenant. This very important development was accompanied by far-reaching settlement and economic changes which brought to a close a long, stagnant period in the High Forest and accelerated the more positive trends already apparent in the Park. It is the object of this chapter to analyse and explain some aspects of these changes which unfolded rapidly throughout upper Weardale.

I. Land division and rents: Yeoman opportunity and practical repercussions

The central innovation was the enclosure of land. There is no indication in either the 1511 leasehold schedule or the 1535 Master Forester's Account, the last one available, that the established settlement or traditional economy in the High Forest had then been disturbed. Sixty years later, though, 16 local landholders provided information to the effect that "there are sundry enclosures or intacks enclosed according to the custom and within the said forrest of Weardale by the tenants of Windieside, Dawdrieshele, Harthopeburn, Ireshopeburne and Middle Black Deane . . . upon their severally (i. e. separately) stinted pasture grounds being severally known by their several meets and bounders: and are part and parcel of their tenements being of several rents: and therefore no warrant but consent of neighbours thereunto hath been used for the same: but what quantity of pasture grounds the said intacks do contain severally or otherwise we cannot present."¹ Among many points raised by this statement,

the deposition suggests the beginning of the enclosure process some time before 1595. Further refinement of the timing is provided by the appearance of new tenements associated with this movement. In 1569-72, John Nattress of Cowshill, a recent farm, was one of the tenants pardoned by Queen Elizabeth for his part in the Rising of the North.² A rental of 1588, recording the name of "Lingerige", another sixteenth century tenement, and the 97 names of customary and leasehold tenants, showed the completion of the bulk of settlement change by then.³ Earlier, in 1539, with the help of four local arbitrators, the Harrison brothers of Swinhopeburn were engaged in the novel process of dividing and walling their land.⁴ It is highly probable that this growing departure from the medieval past coincided with the events of the Reformation. They heralded a movement which continued with reduced momentum into the seventeenth century. A copy of presentments, relating to common and deer and compiled c. 1620, noted that there was:

- (a) "no common within the Park nor forest that doth belong to my lord but it be stinted pasture ground and intake have byn inclosed by dyvers and sundri owners without lysences and may be done ackording to their custom."
- (b) "theyr be divers and sundry tenants that have buyled new houses and new walls and new heges . . . the houses, the walls and the heges may be done without lysencs by the severall owners thearof and ackording to the custom within the forsayd park and forest and not any way preditionall or hurtfull to the game."⁵

Two extremely significant and related issues are raised by the above extracts:-

- (a) Settlement growth through new dwellings and new enclosures could now proceed at the communal dictates of the yeoman farmers, the great majority of whom were freed from the former leasehold system. It is clear, too, that those who remained as lessees were not prevented from sharing in this process,⁶ regarded by 1595 as "the accepted custom". Detailed examples are provided below of the varying complexity of land division. Essentially, it was an orderly development based on the principle of enclosure by neighbourly agreement preventing unfair land seizure along the valley bottom and illegal and widespread squatting on the Waste.
- (b) The concept of rent and, therefore, the landlord-tenant relationship had changed totally. Confirmation of this comes, first, in the overall rent for the High Forest and Park and also in the rents at each tenement. The respective rent amounts, including agistments, for the Forest and Park in 1438, 1535 and 1595 were £105 11s. 4d., £113 17s. 8d. and £114 13s. 5d. The difference between the first two figures is primarily accounted for by rent increases at Rookhope (13/4d.), the Bishop's farm at Burnhope (£2 6s. 8d.) and the additional £5 0s. 0d. annual income from New Park while the slight change in the sixteenth century is largely a result of certain small leasehold adjustments. The essential point is that the sixteenth century expansion of farming took place voluntarily through the initiative of the tenants without any imposition of new rents or interference from outside. Individuals' rents by 1595 were in almost all cases changed and frequently fragmented into smaller amounts in comparison with those of 1535.⁸ (Table 4.1).

The five selected farms in Table 4.1 illustrate the procedure of subdividing the 1535 totals into simple but not necessarily equal fractions of the whole. Leaving aside the use of the fell, the writer's interpretation is that each rent of 1595 signifies a discrete portion (or portions) of land and an associated tenement either somewhere inside the territory represented by the earlier global sum or somewhere outside it if recent intaking of the waste had been made. Previously, in an open meadow and pasture economy where land was shared in differing ways and degrees, the Bishop's rents never had the precision of allowing the individual farmer the exact knowledge of which land within the medieval perimeter was his and his alone, to be used as he pleased⁹. This situation was radically altered by the emerging walls and hedges which firmly and clearly equated territory and rent.

It should not be construed from the above examples that the break-up of the medieval vaccary was a simple affair with each farmer taking his agreed and straightforward share of land - a half, third, quarter or eighth, as the new rent seemed to indicate. In reality, the relationships between land amount, its distribution and rent were surprisingly variable. Indeed, there were many instances of more complicated rent divisions, which further increase the difficulty of discovering the criteria and procedure involved (Table 4.2). Table 4.2 leaves little doubt concerning the spread of fragmented land. At Westgate, the position at the celebrated 13 tenements of the 1580s was more involved than anywhere else. The rents there were based upon an unknown number of enclosures, exchanges and sales extending over several years before 1580 in the course of which the 1476 and 1595 overall rent totals, although very similar, failed to agree exactly. A natural corollary is the acute problem of identifying the sites and boundaries of the

13 farms, 10 of which bore the name of Westgate. It is known that farm dwellings were partly clustered in the modern village of Westgate and, as a new departure, were partly dispersed in the Westgatequarter of the fifteenth century but not all can be located with full assurance (Fig. 4. 1).

The possibility of reconstructing accurately the new late sixteenth century farm units in the Forest and Park varies considerably. Much depends upon the continuation intact of the 1595 rents into succeeding centuries if correlation of land and rent is to be fully achieved. On this basis, it is claimed that the West Black Dene components in Fig. 4. 1 are more accurate than those at Burnfoot (Harthopeburn) and the latter than the divisions shown at Westgate. It is important to note that, on the whole, these and other late sixteenth century farms were not compact, consolidated holdings but consisted of scattered fields, a reminder of previous shared open-field practices. The widespread nature of the farms was also to prove an influential factor in controlling settlement dispersions up to 1800.

Given this upsurge in land allocation, systematic analysis of the voluntary Weardale enclosure movement of the sixteenth century reveals four essential elements.

(a) The enclosure of riverine meadow

Meadow in the sixteenth century was walled and parcelled into shares or dales (doles or dails) which belonged to individual farmers. "Dale" was a medieval term still used during the sixteenth century and one which persisted in certain tenement and field names even later.¹⁰ They provide a valuable insight into medieval open-meadow management. Dales were often described as so many "days work". Originally, the common meadow was seen as a certain

number of days' summer mowing to be shared among the relevant households. For the practical purposes of dividing the crop, it seems likely that adjacent and open strips or "dales", probably marked by merestones, were agreed upon.¹¹ In this way no land was used up by boundary walls and shares of land could easily be re-allocated when demand changed. Moreover, meadow was organised communally between and within farm clusters with each dale an integral part of the system. The separate meadow dykes, therefore, reflected a very important tenurial shift. Each farmer now had his own appropriate dale or dales, clearly bounded, which he could further enclose, use, sell or exchange as he thought fit. Additionally, in achieving an amicable sharing out of hay land, the tenants at each of the valley-floor sites were also instrumental in pioneering clear-cut dividing lines between neighbouring clusters and so, for the first time, delimited the latter's territorial influence very precisely (Fig. 4.2). A start had been made in replacing the wider medieval settlement association by the smaller, self-contained farm whose economic loyalties were primarily to itself, usually within a single settlement cluster.

Finally, it will also be noticed from Fig. 4.2 that at some clusters (for example, Burtreeford, Wearhead, Ireshopeburn and Daddry Shield) their enclosed meadow straddled the medieval head dykes, suggesting pointedly that the latter were designed primarily as convenient medieval clearance limits and not as individual's property boundaries. Logically, this contention implies the joint pre-sixteenth century use of land between clusters, a situation easily conceivable at Bridge End - Burtreeford, Burtreeford - Wearhead, West Black Dene - Middle Black Dene, Middle Black Dene - Huntshieldford, Daddry Shield - Windy side - Shallowford, Swinhopeburn - Brotherlee et al. To give the point

final emphasis and one further twist, medieval sharing between Heatherycleugh - Crokeford, West Black Dene - Ireshopeburnmouth, Middle Black Dene - Earnwell and East Black Dene - Harthopeburn, it can be deduced, also extended across river to both sides of the valley floor (cf. Figs. 2.3 and 4.2).

(b) The enclosure of home pasture

The information that John Emerson, in taking out a lease on a tenement at Burtreeford in 1631 had "seven acres of pasture in Burtreeford",¹² is the earliest reference to a specific allocation of enclosed home pasture. As the extent of this farm and all other leaseholds in c.1600 can be accurately shown¹³, there is unequivocal evidence that their boundaries enclose pasture as well as meadow and therefore confirm a second enclosure trend. This point is demonstrable at Burtreeford, Wearhead, Windyside and Lintsgarth where seven leasehold farms stood next to but bounded from customary lands which, of course, were also undergoing meadow and pasture division.

Pasture enclosure, it should be stressed, was not only a means of providing individuals with their own grazing land. It also had two other motives. Increasingly, new sources of meadow and hay and new farm sites had to be found. The two were complementary and recourse to the once open pasture was the most obvious solution to the problem. From their inception, home pastures (Fig. 2.3) had been used most commonly by the farmers of one (e.g. Burtreeford) or two (e.g. Middle Black Dene - East Black Dene) clusters and, in one exceptional instance, by five (Huntshieldford, Daddry Shield, Windyside, Shallowford, Hill House). In future, dividing walls were to exist between the appropriate clusters giving each the freedom to subdivide further its portion of pasture, to be used as meadow or grazing either for its own purposes or for those of recently established farms located outside the cluster (Fig. 4.2).

The above process gradually terminated another medieval practice, the stinting of the home pasture. It is assumed that the latter, free from those landlordly restrictions applicable to the fell, had always been used on a stinted basis. Stinting was a practical and equitable method of sharing grazing land in an open pasture. (Fuller discussion of this practice is necessary in Section II below). Fortunately, too, it was a system which allowed an equation between stint numbers and an acreage of enclosed land. It is interesting, then that both foundations of the medieval economy, stints of pasture and dales of meadow, should undergo fundamental change simultaneously. Although stinting disappeared, therefore, in the lower pastures, the tradition itself was far from dead. In fact, the practice was intensified and transferred to the higher fell where it necessitated a further manifestation of the enclosure process (see under (c)). In this dynamic situation, it is hardly surprising that late sixteenth century references to "stinted pastures" are rather wide-ranging, embracing, as they did, both improved pasture undergoing enclosure, where stinting was declining, and relatively unimproved fell where the practice was increasing.

(c) The demarcation of stinted fell pasture: ring fences and communal occupation

In some respects, the most daring action of the customary and leasehold tenants was the appropriation of very large areas of the fell which they quite clearly believed to be theirs by right. The sixteenth century view, quoted earlier, is worthy of emphasis - "there is no common . . . that doth belong to my lord but it be stinted pasture ground and intake have byn inclosed by dyvers and sundri owners without lysences."¹⁴ They considered all of the fell land to be an integral part of their tenures but in practice only the lowest and nearest

parts were fully used. In some areas, the fell was, to all intents and purposes, left open as a very large pasture adjacent to the farms. This applied to the moors of Killhope, Wellhope, Moss, Ireshope and Harthope which were stinted and also to the commons of Wolfcleugh, Lintsgarth, Smailsburn, Hanging Wells and Sunderland which, in the twentieth century, at least, seem never to have been stinted, the practice having lapsed sometime after 1600.¹⁵ As shown in Fig. 4. 2, they had common boundaries only, purposely worked out between these adjacent fells. Elsewhere, the great majority of farmers managed their upland grazing somewhat differently. Sizeable portions, known as "stinted pastures", part of the outby land, were demarcated and treated as separate units distinct from the higher fells or "stinted moor pastures" beyond, which were also shared but much less intensively. It is quite certain that every farmer knew exactly where the upper limit of his stinted pasture lay but one cannot be so sure how their sixteenth century boundaries were actually marked on the ground.¹⁶ During the early nineteenth century enclosure of the various Weardale pastures and moors, some of these boundaries were incorporated into the allotment walls while others became obsolete and survived only as faint raised "lines" on the landscape. In 1797, the pastures were described as "ring-fenced".¹⁷ Probably all were visible as walls or fences or even by stones placed at intervals as still exists, for example, between the moorland pastures of Hanging Wells and Sunderland Commons. Interestingly the Park wall provided a ready-made head dyke for three of the pastures. Whatever the method, the outcome was the creation and separation of no less than eleven stinted pastures extending from Puddingthorn in the far west to Billing Pasture at the eastern end of the Park (Fig. 4. 2). Differing widely in size, they all fulfilled a pressing sixteenth century and later need.

The enclosure of the lower land had upset the balance of inby resources. Expansion of meadow through pasture conversion, the building of new tenements and the general upsurge of population had led inevitably to unique pressure upon the remaining and dwindling home pasture land. Securing sufficient and good replacement pasture-grazing was therefore an urgent priority and it is surely not an overstatement to claim that the whole of the sixteenth century enclosure movement would have petered out (or never been attempted) without generous and unprecedented entry to the fell. It was not that the latter had never been grazed but it was necessary now to undertake a very careful review of its management and resources in relation to farm sites, old and new. Each farm, it was agreed, should have its own specific pasture (or pastures) which it shared with a number of others.¹⁸ Examples of such farm groups can be established from Fig. 4.2. The usual situation was the communal use of one pasture by up to about a dozen farmers, the majority of whom lived at one (e.g. Heatherycleugh and Middle Black Dene) or two (e.g. East Black Dene - Huntshieldford and Westernhopeburn - Brotherlee) neighbouring medieval clusters. It is also probable that some clusters, by virtue of their tenements occurring on both sides of a boundary stream, had the benefit of two pastures. Fig. 4.2 shows that this was likely at Burnfoot (Harthope Moor Pasture and Chapel Pasture) and Daddry Shield (Chapel Pasture and Windyside Pasture). Also, it can be seen that at Burtreeford the fell swept down into the valley bottom on the north and south sides of the settlement thus allowing it the stinted use of both Burtree Pasture and Moss Moor Pasture.

One anomalous but unavoidable development occurred at Westgate where earlier boundaries - the walls of the Park and frith - so limited

manoeuvrability that some farms were unusually removed from upland pasture (Fig. 4.2). The problem was solved satisfactorily by the creation of, (i) Westgate Side Common Field, a combined meadow and stinted pasture open to all Westgate tenants regardless of tenement position, (ii) Westgate Heights Pasture, a sizeable grazing area between the Common Field and the Park wall.

Pasture definition and allocation were prominent late sixteenth century innovations and the Forest Court was charged with their implementation. A presentment of 1602 stated that "some of the dwellers at Windyside and Dawdrysheale do drive or put forth any of their goods and chattels at Middlehopedykehead into Easterblackdene fell (Carr Brow Pasture in Fig. 4.2) not having special right upon the said fell upon pain of any default . . . 6/8d."¹⁹ This particular injunction reveals a key criterion determining the distribution of stinted pasture tenancies. As the home pasture closes of Daddry Shield and Windyside back on to the above stinted pasture, it might reasonably be expected that their farmers should have had access to it. More important, though, was the position of these two clusters out of physical contact with Carr Brow Pasture, an apparent disqualification which was not to be waived. A similar situation obtained at West Black Dene which was restricted to Sedling Pasture with only nearby Middle Black Dene having the exclusive occupation of its adjacent pasture (Fig. 4.2). It is not possible to say definitely whether the same "single fell" rule applied to the many more comparable cases at Wearhead, Cowshill, Bridge End, Allers, Heathery Cleugh, Blackcleugh, Pinfold House et al where the choice of two convenient fells existed. Nevertheless, immediate physical contiguity of tenement to fell or a short, direct routeway to it, striven for since medieval times, seems to have been the one indisputable prerequisite of precious upland grazing.

(d) The enclosure of stinted fell pasture: new fields and private

The head dyke, the line marking the end of the medieval enclosures, had now become an even more significant boundary separating an increasing number of individual tenancies from the stinted fell. In the sixteenth century, there was some pressure to extend its position and so bring areas of stinted pasture into private occupation. "We find (in 1598) that there are certain parcels of ground inclosed upon the pastures called Iresop and Mibladeane by sundry of the tenants there (at Gate, Low Burn, Ulls Field, Earnwell and Middle Black Dene) which said pastures are parte of their severall tenements and know severally by severall markers and bounders but what quantity of ground they containe we cannot present."²⁰ There is ample field evidence that this did happen there and elsewhere - upon Moss Moor Pasture, Burtree Pasture, Sedling Pasture, Harthope Moor Pasture, Chapel Pasture, Windyside Pasture, Westgate Side Common Field, Westgate Heights Pasture, West Lee Pasture, East Lee Pasture, Billing Pasture and Lintzgarth Moor Pasture (Fig. 4.2). However, this particular trend and its long catalogue should not be exaggerated. There were many localities where the stinted pastures remained unaffected and the medieval head dyke unchanged. The total area enclosed, if individually important, was relatively small. Although this process and completion of the larger ring enclosures were interrelated and simultaneous, being spread over the period 1550 - 1610, they represent two different levels of local tenant authority and initiative. The collective occupation of the fell was one thing but new fields there for individual use were indeed a radical departure. In virtually every instance, the additional land became the home meadow and pasture of an untried generation of farms strung out along the new head-dyke boundaries (Fig. 4.2 and

Section III below). The developments stemming from Middle Black Dene, Gate and Ulls Field, Earnwell and Burnfoot show plainly:

- (a) head dyke extension, regular and irregular, into three stinted pastures and new accretions clearly of a different shape and size from those of the thirteenth century.
- (b) division of the intakes and its occupation by several tenants. Their rents confirm its completion on Ireshopeburn Moor Pasture and Chapel Pasture by 1595.
- (c) tenements, not present in 1535, built in the intakes before c.1600.
- (d) the unavoidable removal of some Wearhead, West Black Dene and East Black Dene inby land from the fell edge, a step only permissible after each of the clusters involved had reviewed, safeguarded and decided upon their areas of stinted pasture.

Neighbourly suspicions and disagreements must have raised problems especially, for example, on Ireshopeburn Moor Pasture where the population of four older clusters was concerned. But these difficulties were outweighed by a rising population, an economic awakening in mining²¹ as well as farming and a shortage of improved land following the parcelling out of inby resources. At each cluster, too, there was, no doubt, a peculiar combination of circumstances which motivated, in differing degrees, the expansion of farming.

II. The origins, necessity and progress of stinting

The mechanism which made all the foregoing components of enclosure possible was the practice of stinting. Everything, it is suggested, hinged upon it. Unfortunately, almost all the "facts" concerning its origins are not available, thus hampering any authoritative analysis. The Matthew Survey (1595)

and proceedings in the Forest Court (1600 and 1607)²² make it very clear that the custom was by then well established, a state of affairs also hinted at in the "articles of instruction" of the above survey when the Bishop, conceding its existence, asked his representatives to discover "what townships, hamlets or villages have eatage into common, stinted or not stinted . . ." ²³ The writer believes that this complex tradition - the right of pasture-grazing of the common at a certain rate of animals - stretches back to the medieval appearance of common appurtenant. In upper Weardale, this was a regulated and fixed right to help conserve the deer pastures but could not at that stage be properly termed "stinting". Almost certainly, genuine stinting arrangements, decided by the farmers without ecclesiastical interference, originated in and were confined to the single dyke inby pastures serving the needs of one or more clusters. By the late thirteenth century, it is estimated, a flexible system had evolved which allowed the number of stints and pasture-sharing to be changed with circumstances. The method was established but its application was limited, a state of affairs maintained for a long period after 1300. Without the Bishop's licence neither expansion on to the fell nor enclosure within the lower land had been possible and with the number of farms static, there was little possibility of disturbing a fossilising tradition. Eventually, the deteriorating leasehold and economic climate of the late fifteenth and early sixteenth centuries proved to be the first signs of far-reaching changes. Gradually, customary for leasehold tenure was substituted by the resident tenants. The emerging opportunity was not to be missed as the antiquated and rigid relationships between the annual rents and animal numbers on the fell were swept aside. For a while, as the valley-floor-enclosures gathered momentum, stinting was applied to much . . .

of the grazing land, high and low, but, in time, it became the universal method of using the fell land only, to the tenants' mutual and greater advantage. Where the stinted fells were divided into moors and pastures, a qualitative distinction was made between fell and pasture grass and the stints on each varied accordingly. It is interesting, too, that in the eighteenth century cattle stints were still allocated in Billing Pasture and sheep stints on the adjacent Swinhope Moor,²⁴ a legacy, perhaps, of the sixteenth century. The procedure of calculating stints can only be guessed at. Rationally, one would expect the total complement of farmers with an interest in a particular pasture to have met to work out their grazing needs for horses, cattle and sheep in proportion to their respective amounts of meadow (and, therefore, winter forage) and the carrying ability of the pasture. It is much more certain that the original distribution of stints would be quickly blurred as the traffic in land began and the number of farmers accelerated. In 1615, Ralph and John Nattress (of Pinfold House) sold to Nicholas Sheale (of Harthopeburn) for £60 a portion of their tenement "commonly called Hollinhille and 11 neatgates (cattle stints), a horsegate and 18 sheepgates on Danterre Sheale Moor."²⁵ The unity of inby land and pasture stints is logical enough and it is all the more surprising, therefore, to find a record of an actual sale of stints separately. One Cuthbert Hall (of Hill Top) sold to Nicholas Shields "8 gates or stints on Harthopfell"²⁶ in 1692 in what may have been an exceptional transaction. The dangers of tenant speculation in stints, it hardly needs emphasis, are appreciable. By the later eighteenth century, the practice had certainly ceased although extensive letting of stints was frequently permitted.²⁷

From various sources (1595 - 1620), the following partial picture of the rules and regulations of stinting can be pieced together.

- (a) "At a Byerley²⁸ holden the 20th of May 1595 by the general consent" of the tenants of Billing Quarter, certain decisions were agreed regarding the use of Westernhope stinted pastures.²⁹ Periodically, it would seem, tenant neighbours were expected to meet to confirm, debate or amend stinting practices by "the general consent of all".
- (b) Movements to the pastures were conducted on a daily and seasonal basis. It was urged that geld and milk cattle should be driven to the fell "at a reasonable time of the day" with a 3/4d. penalty for any annoyance caused to neighbours. "Everyone (eligible) shall put out into Whesnop (Westernhope Moor pasture) all their geld sheep at or before our Ladyday (March 25) ... unless the weather prevents it (6/8d.).³⁰
- (c) Neither scabbed horses nor diseased or rigate tups were allowed, the latter to be "put away" before Michaelmas (September 29) prior to autumn servicing (6/8d.).³¹
- (d) To prevent animals straying into the pastures, all walls and gates of tenements were to be made "lawfull" at least 20 days before St. Ellyn day (May 3) (6/8d.).³²
- (e) "It is agreed that everyone shall keepe his true stint (3/4d.) If any man's cattell doe happen to make an escape or be (deliberately) put in by any man and warning being given by any of the searchers" and not then putting them out, he shall forfeit 3/4d. or "if it shall happen any man's front do be broken and warning being given and (he) will not mend it presently for any default 3/4d."³³ Overstinting was common and tenants seemed ready to break their own agreements quite freely.

- (f) Little is known at this stage about stint-letting but at the first Forest Court of 1600, it was decided "that none shall lett gaites in Whesnop to any of the Brotherlee (tenants) provided that the neighbours (on Westernhope Pasture) shall have (accept) them at the Byerley holden for 6d. a piece."³⁴
- (g) "... there were pinders within the said Park and Forest who had yearly allowed unto them by the customary tenants 7 gates within each of the fells or hopes ... which had and enjoyed in consideration that from time to time they did drive the said fells and impounded such overstints as were found therein." Similar concessions were also made to "the Receivers of the Rents and other officers within the said stinted pastures ... in Whessenhope, Swinhope, Burnhope, Middlehope and Rucop fells ... in consideration that they (too) did from time to time drive the overstints within the said fells and help the pinder to bring them to the pinfold" where any illegal recovery ("recussum") of animals was chargeable at 6/8d.³⁵
- (h) "That none shall give leave without the general consent of all to cast (cut) peets or any other comoditie within the said Whesnop. (12/8d)"³⁶
- (i) Everyone should have "lawful warning by any of his neighbours of the Byerley to be holden."³⁷

In their entirety, the legalities of sixteenth century stinting were complex, carefully and democratically formulated and the product of "trial and error" extending over 300 years. It is worth noting, too, that the above stipulations might have applied equally to the medieval home pastures where, it has been suggested, the authentic practice of stinting originated.

III. Settlement and population dynamics

There is not any doubt that there was a very vigorous settlement response to the tenurial and economic changes of the sixteenth century. The general trend and many details are clearly discernible but, unfortunately, complete exactitude in the location of all new dwellings is impossible. The problems of individual household concealment behind place names, and customary and leasehold rents were stressed in the Introduction. However, some additional help is afforded by Parish Register entries and various items from the Weardale Chest, not least by events, people and places recorded at the Forest Court between 1598 - c. 1620.

The settlement pattern (Fig. 4.2) is a considered judgement of the position at the turn of the sixteenth century. Most of these developments occurred after 1540, and before 1595 but the arrival of a small number of farms was delayed until the early years of the seventeenth century. All are included in Fig. 4.2. Statistically, the total number of customary and leasehold tenants increased by 70 per cent from approximately 73 in 1511 to 124 in c. 1600. Comparing the Park and Forest Quarters, the overall rates of growth were 100 per cent and 58 per cent with 21 and 30 extra farms respectively.

30 new and scattered farm sites, separate from the traditional valley floor clusters were introduced: 10 in the Park and 20 in the Forest.

(i) Cluster and scatter: the processes analysed and patterns explained

Two settlement processes are apparent.

- (a) Although the 1511 and 1535 settlement information is neither sufficiently intact nor detailed to enable a completely reliable comparison with 1595, the compactness of the medieval cluster was certainly preserved and at some locations intensified. Also, it has not been possible to show the number of extra households

whose occupants, if any, were not farmers. Nevertheless as Fig. 4.2 and Table 4.3 demonstrate, an important tendency was for further farm-grouping at existing sites and for that to be more prominent in the Park and from there to decrease steadily up valley. There are two explanations at least. First, the demand for land was an unequal one. Not unnaturally, in the lower, eastern Forest and the adjacent lands of the Park, it seems to have been at its highest. Elsewhere, the readiness to venture into sixteenth century farming was less predictable varying from the surprisingly vigorous activity at insular Lintgarth to the more modest developments in the harsher territory west of East Black Dene. At some places, for example Smailsburn, North Hanging Wells, Heathery Cleugh and Allers, no change at all can be detected. Secondly, there was the problem of organising the demand. To support the additional families at the medieval clusters required the provision of enough and nearby enclosed meadow land while maintaining at the same time the viability of the whole cluster. If this proved impracticable, dispersal to distant and higher sites, with fewer inherent assets, had to be considered, possibly reluctantly. The physical and social advantages of the valley-bottom nucleations were still powerfully attractive. It was natural, therefore, that in the lower east where the quality and proportions of meadow were best of all, farmers were able to concentrate at the clusters more securely. Towards the higher west, the opposite was the case.

- (b) The second and primary settlement process, that of dispersion from the parent cluster to the pasture, was, it has been claimed, a sign of the latter's inability to cope with the growing demands for hay land. Therefore,

agreements to enclose and up-grade some of the sloping and open grazing land, formerly stinted, to productive meadow were at the heart of this movement. Where long-established pasture was insufficient to accommodate this new generation of farms, further land was taken in from the fell. The uneven incidence of scattered sites reveals significant variations in the growing demand for and the available supply of land. Moreover, on the evidence of customary tenants' surnames, the renewed interest in farming emanated much more from internal factors, including greater tenurial freedom, than from any marked inward movement of population.

One third of the new scattered locations were in the Park, reinforcing the view of a considerable agricultural interest not fully met at the agglomerations noted above. An uncharacteristic void in the north-eastern quarter of the Park requires further discussion below (p.96). Although the numbers of new farms in the High Forest exceeded those in the Park, their increase relative to the farms of 1511 was not as great. Growth in the better eastern (East Black Dene - Shallowford) was achieved mainly by clustering, in the centre (Ireshopeburn - Burnfoot) by considerable dispersion and in the poorer west (Killhopeburn Shield - West Black Dene), as demand fell away, by more limited scattering. Dispersed sites, it will be noticed, extended up to a mile from their appropriate cluster and there was an understandable tendency to locate many at maximum distance from it so that the proximity of the latter's resources was not disturbed. Of the 30 new dispersals, 24 were at the head dyke and, therefore, at the stinted pasture edge. From such sites,

individuals' meadow and pasture closes were visible downslope while access to stinted pastures was both convenient and difficult to deny.

The exceptions to the continuing medieval rule are interesting:

- (a) The position of five farms away from the head dyke at Westgate and Wolfcleugh (Fig. 4.2) and their siting upon a convex slope inflexion was sufficient to make all their respective territories, up and downslope, viewable from the farmsteads.
- (b) The earliest detectable development from Middle Black Dene took place at East Hotts and Bridge End (Fig. 4.2). The latter, close to but across the river from Middle Black Dene had no problems of direct entry to the fell pasture but the former's eccentric position is possibly explained by the very well-knit "family farm" structure at Middle Black Dene where Widow Fetherstone was the customary tenant of the entire unit, including East Hotts.³⁸ Family agreement and safeguards on stinting and other matters may well have been a consideration in its unusual siting.

(ii) Kinship groups and settlement growth

Towards the close of the Tudor period, enough time had elapsed to gauge the effects of customary tenure and inheritance upon the "cluster and scatter" processes of settlement. Widow security and the ultimate descent of her property to the eldest son (or daughter, if there were no sons) must have been a very powerful factor in maintaining the overall cohesion of the cluster and, not least, in perpetuating strong family groupings there. Indeed, it has been

assumed that dispersion, too, where it occurred, was primarily an expression of internal economic pressures amicably resolved within the circle of the family.

Under the medieval leasehold arrangements, it was impossible to discover who were the farmers actually working the land in upper Weardale. As sub-tenants, their names, hidden beneath those of absentee lessees, were of little consequence to the Master Forester. Now, having successfully challenged and changed the system at most tenements, they were the new tenants and their 96 names are recorded in the customary rentals of 1595 and later. That these names, probably in every case, belonged to the practising yeoman farmers is confirmed by the painstaking record of almost the same tenants at the Forest Court of April 11th, 1600. It is not certain whether all were actually present at Westgate on that date but it is certain that most, if not all, were in the dale. Presentments at the Forest Court make this absolutely clear revealing the wayward behaviour of some tenants by name. The 26 Forest and Park jurors are also listed and their local places of residence given. Suspicions that one "Ralph Nattress", recorded as tenant at five different farms in 1595, might be one and the same, and possibly, absentee person are unfounded. There were at least three such names serving on the Forest jury as well as Rowland, Cuthbert and William Nattress for good measure, all six occupying separate farms. An earlier insight into the identity of Weardale farmers is contained in the 37 names of Reformation dissidents in 1569-70. Their surnames and their farms are those of 1595.

The above evidence would seem to be in line with the argument that as customary tenant farmers became more self-reliant and independent of the Bishop, the desire to "own" their land would be realised. To put it another way: the number of sub-tenancies would be at a minimum in the late sixteenth century.

There are just sufficient names cropping up in the Forest Court records (1598 - c.1620), which cannot be accounted for in the rentals, to allow for a tiny fraction of the population who were either sub-tenant farmers or, being without land, were dependent upon craft, mining or labouring employment.

Returning to the main theme, kinship ties and clustering were important results of customary tenure. The Bainbridges of Saugh Shield, Emersons of Billing Shield, Earnwell, Gate Castle, Ireshopeburn, Ludwell and Smailsburn; Fetherston (haugh) s of Bridge End and Middle Black Dene; Harrison's of Swinhopeburn and West Black Dene; Nattresses of Blackcleugh and East Black Dene; Pearts of West and East Black Denes; Stobbs of Westgate and Watsons of Brotherlee were well entrenched in 1600 and, with exceptions, for many decades or even centuries to come. Indeed, through female inheritance and marriage, family concentrations were probably even more marked than the identical surnames suggest. In addition to the customary inheritance laws which helped to preserve the size and family nature of the cluster, tenurial freedom to enclose and use land as the farmer thought fit did nothing to weaken them as sons were found employment on their father's farm. Paradoxically, the right to disperse also ensured the well-being of the cluster by preventing over-population there and in the process permitted the diffusion, for instance, of Harrison's from Swinhopeburn to nearby Stone Carrs, Emersons from Ireshopeburn to Ling Riggs and Gibsons of Low Saugh Shields to High Saugh Shields.

A brief mention may be made of the progress of the leasehold tenants. There was nothing in their late sixteenth and seventeenth century covenants to prevent either enclosure or the building of new tenements but the paucity of information makes it very difficult to be certain how much change did actually occur.

Longer and renewable leasehold terms assured continuity of tenure along with the right to assign land and thereby certainly encouraged economic initiative. Most rents remained static, although at five tenements there were slight adjustments.³⁹ However, there was one notable restriction, namely the inability of the lessee to enter into the land market through the sale of all or part of his property. Never at any time did the leasehold units of 1600 change to customary status.

The motives and policies of the lessee, it can be shown, were another factor influencing the use of leasehold farms.

- (a) The high pasture lands of Killhope, Wellhope and Burnhope were held by the Fetherstonhaughs of Brancepeth and Stanhope and the Bowes of Streatlam and Biddick⁴⁰ who, in their absence, sublet to an unknown number of farmers.
- (b) The small Forest units at Burtreeford, Wearhead, Windyside and Lintsgarth, bordered by customary tenements, were managed by local lessees who probably ran their farms in similar fashion to their customary freehold neighbours.
- (c) In the Park, the five large eastern leasehold territories remained spacious with no farm dispersion and two of them, Eastgate and Longlee, continued to accommodate keepers and pallisers.⁴¹ As the last vestige of the pre-fifteenth century Park organisation, perhaps this was the part of upper Weardale which the landlord was most determined to retain. The offer of privileges to tenant officials was, in theory, an assured way of achieving this. However, the tide of change was impossible to stem. A whole new way of life had arrived with different attitudes, enlightened economic practices and changed spatial patterns and

relationships. Nothing epitomises their reality more than the accelerating post-Reformation decay of Westgate Castle,⁴² the flagrant neglect of their duties by Park officials⁴³ and the near disintegration of the Park frith, supporting in 1595 approximately 40 deer, only one-fifth of previous totals.⁴⁴

CHAPTER FIVE

LEAD, POPULATION AND SETTLEMENT TO 1800

The precise contribution of lead-mining to changes in population, settlement and land occupation is a subject of great complexity extending over several centuries. So involved are the interrelationships that any brief analysis is likely to result in superficial and familiar generalisations. Therefore, two chapters are devoted to an investigation of the various facets and problems of the "dual economy", so called because of the interplay of Pennine mining and agriculture. The underlying theme of the present chapter is the progress of mining from 1400 - 1800 alongside which significant population and settlement fluctuations are outlined and assessed. In the concluding chapter, greater emphasis is placed on the role of farming in an economy slanted increasingly towards industrial growth and employment.

I. The late medieval period 1400 - 1530: ecclesiastical monopoly and conservatism

Only a small number of Surveyors' Lead Mine Accounts, spanning the period 1425 - 1529, have survived. Fortunately, they permit more than an outline view of the state of the industry at this time.

After the grant of lead mines in 1154 to Bishop Pudsey by his uncle, King Stephen, upper Weardale was at least a spasmodic provider of valuable ore and metal¹ but nothing is known of overall output, numbers employed and the relative importance of the industry in the local economy. The existence of a co-ordinated industrial framework at the beginning of the fifteenth century suggests the probable development of serious commercial activity coincidental with or beginning shortly after the close of the farm settlement period in c.1300. The

indications are that even by sixteenth century standards, mineral yields were modest and remained so to 1529.

The 1425 output, measured in loads (heaps of $7\frac{1}{2}$ cwt) and fothers (cart-loads of $22\frac{1}{2}$ cwt) and extracted from six mines, was only 80 fothers or 90 tons.² A century later, in 1524 and 1525, total production was virtually identical.³ In all, nine mining locations are referred to (Fig. 5.1). It should be emphasised that at this time many of the organisational features of the eighteenth century were well established. Miners worked in small teams or syndicates. Each partnership was paid for the amount of ore mined, broken up and washed, and payments fluctuated, with the ease of working and the price of lead, from $3/4d.$ - $5/0d.$ a load. Already, too, there was the triple division of labour into miner-dressers, carriers and charcoal burner-smelters. As with the vaccaries, mines were leased by the Bishop to interested individuals for a period of years. Lessees were absentee merchants or landholders with tenements in upper Weardale but miners were also permitted to take out leases. The 1401 lease⁴ of three (of the nine) Weardale mines to Roger Thornton, a Newcastle merchant, was granted for 12 years along with a farm, probably Westerharthopeburn, supplying horses to carry the ore. His three mines, "Ester and Wester Blakden, Aldewodeclough and Harderake", were to operate within six months of the grant and were open to inspection by the Bishop's Surveyor. Thornton was given free way-leave to remove both ore and timber, the latter to be felled without charge. One-ninth of the total ore (lott ore) and one-tenth of the remainder (tithe ore) were reserved for the Bishop and Rector of Stanhope respectively.

The Mine Accounts reveal two unusual and, as far as population consequences are concerned, very important aspects of medieval lead-mining:

- (a) In practice, the Bishop exercised a complete monopoly of all ore mined and lead smelted. Excepting the subtracted lott and tithe fractions, money payments were made separately to every lessee for their output. In 1425, the Rector, too, received £5 10s. 0d. from the Bishop for his tithe of 19 loads plus 3 loads from the Rectory store. Such a monopoly, at variance with future trends, necessitated an overall surveillance of the entire industry and an intricate system of payments within its various subdivisions. In effect, the Bishop had to finance all operations through comprehensive and differential piece-work rates covering, (i) mining and dressing, (ii) carriage of lead ore, (iii) cutting and carriage of wood, (iv) charcoal-burning and ore-smelting, (v) casual labour at the smelteries, (vi) the transport of lead to Whickham and Swalwell Staithes and Newcastle quayside. In addition, smiths, carpenters and others were paid for making and repairing wooden wheels, iron wheel rims, leather-bound bellows, baskets for charcoal and other unspecified iron instruments used in smelting. One financial compensation for the Bishop was the relative simplicity of mining technology which required no capital outlay. The mines in the High Forest were located where known veins crossed deep valleys situated outside meadow and pasture dykes. Here the oreshoot could be exploited from the surface by the primitive and labour-saving method of hushing.⁵
- (b) The amount of ore extracted seems to have been held at a steady level. Both Accounts of 1524 and 1525 record the receipt of exactly 195 loads of lead ore which were smelted into 30 fothers ($33\frac{3}{4}$ tons) of lead at the "bayle hills" of Wolsingham (1524) and Stanhope Park (1525).

Assuming the prior deduction of lott and tithe ore, the annual total for both years was 242 loads which agrees very closely with the 1425 output of 240 loads. In that year almost 37 fothers (41 tons) of lead were smelted compared with the 30 fothers of 1524-25. As mining, carriage and smelting costs and the average price of lead (£3 10s. 0d./fother) apparently remained unchanged throughout the century in question, a pattern emerges of a stable, regulated industry in which, possibly, the supply of ore and smelted lead was nicely adjusted to the market demand. A perfect balance was obviously unattainable every year and some stock-piling of ore and lead was inevitable. In 1527, for example, 62 loads of ore, costing 5/- per load, were left at the mines, ready to be used when future demand determined.⁶

It is difficult to decide whether the cause of fixed production stemmed from the situation in Weardale and deliberate ecclesiastical control of output and/or from the market. More lead ore implied more mines and miners and, therefore, increased Bishop's costs, more disturbance of the fell and, possibly, more land enclosure to support the population. Maybe it was simply that there was insufficient demand in the fifteenth century to justify such an expansion. Excepting the lott ore, it is possible to calculate the Bishop's profit at no more than 20/- per fother of lead.⁷ Thus, the Bishop was apparently content with an annual lead income of approximately £50 0s. 0d., a figure exceeding the annual rent of all his Forest tenements.

The effects of mining upon population and settlement, an intriguing consideration, were probably minimal during the medieval period. Mine leases were neither sufficiently attractive nor numerous to encourage either an

influx of new families or an entire economic dependence upon lead. The miner was, in fact, a small part of an integrated system in which his ability to supplement earnings was severely hampered by the small amounts of ore mined and the low rates per load and also by the Bishop's retention of all production and, therefore, profit from the sale of lead. Only six syndicates, about a dozen men, were working in 1426. By 1527, the names of no more than 15 miners living at six Forest vaccary clusters can be traced.⁸ The sums of money received were often pitifully small, varying in 1425-26 between 10/11d. shared by John and Peter Stobbes and £19 5s. 4d. earned by John Westwode and his partnership. The priority for the Nattresses, Fetherstonhaughs, Emersons, Bainbridges, Westwoods and Pearts of 1527 was stock-farming first and mining second. Obviously, the presence of galena could not be ignored and the farmer-miner tradition was already a reality. Nevertheless, it is reasonable to conclude that medieval growth and consolidation of settlement owed little or nothing to the mining of lead.

II. The Moor Master period 1550-1696: reappraisal, redirection and devolution

The radical economic changes of the mid-sixteenth century were not confined to agriculture. "We find that there are divers and sundry lead mines or groves ... which are wrought by sundry persons by the grant of sundry Moor Masters or their deputies who heretofore have exercised the said office", so claimed the 16 landholders, sworn and charged in 1595 to present evidence to the Matthew commission.⁹ It was also stated that this resurgence of mining had occurred "since the first year of her majesty's reign (1558) and (particularly) within these 10 years last past." Clearly, the old medieval mining tradition had also come to an abrupt end. Two innovations

stand out. First, references were made to the sinking of (unnamed) pits, a more arduous and widespread method than hushing. The implications are considerable. Mining along the vein by surface shafts and trenches took the miner on to the higher fells and away from streams and tributary floors. So began the innumerable low conical heaps which still scar the dale's upland surfaces, memorials of an output expanding beyond that of medieval times. On the fells both stinting and mining came together and both were comfortably accommodated but neither was any encouragement to the Bishop's deer. Second, the larger scale operations necessitated a new administrative hierarchy headed by the Moor Master who was appointed to supervise all operations, literally, on the moor, thus avoiding any disturbance of the in-by land.

The Moor Master was a person of considerable stature and power. Sir William Bowes, holder of the post in 1595, controlled the leases on the mines which he rented from the Bishop. Allowing for the lott¹⁰ and tithe ore, the Moor Master retained the remaining output and disposed of it privately, some of his profit being set aside to pay the miners' overheads and piece-work rates. The disappearance of the Moor Masters' Registers prevents any systematic analysis but some insight into the new administration can be gained for the period after 1660. Humphrey Wharton, Gent., a Moor Master of unusual initiative, endurance and independence, did much to stimulate employment and galena production. He succeeded to the office in 1660 (after Sir Arthur Haselrigg's intervention and management of the mines during the Commonwealth period) and remained there until 1696. Initially, his lease was for one life but was renewed in 1667 for a more favourable three lives.¹¹ The lott ore was also held

by Wharton for an annual rent to the Bishop of £60 0s. 0d. It should be stressed that production was the Moor Masters' responsibility reflecting their personal investment and enterprise. There is no doubt that in the mid-seventeenth century lead-mining had progressed impressively and was scarcely identifiable with the stagnation existing a century before. It was reported in 1662 that "the value of the lead mines which had been worth to Sir Arthur Haselrigg (after 1647) and have been so to this Mr. Wharton at least £2,000 per annum clear profit."¹² At about the same time, 118 mines, a remarkable number, were dispersed over 13 fells.¹³ No doubt, the mines were worked selectively: between August - March, 1665-66, eight of them returned 1,396 bings (558.4 tons). The price per bing was then 26/- and the price of lead at Newcastle £13 0s. 0d. per fother. A sliding scale arrangement fixed the bing price at 20/- when lead was selling at £10 0s. 0d./fother and as the latter rose or fell every 20/-, so, too, did the price per bing increase or decrease by 2/-. Some estimate of annual ore production can be gleaned from Wharton's "£2,000/annum clear profit". It seems safe to claim a figure in 1660 exceeding 2,000 and up to 3,000 bings (800 - 1,200 tons), ten or more times the medieval total.¹⁴ With the price of lead more than tripling (£3 10s. 0d. - £13 0s. 0d.), the miners' bing rate of 26/- had also improved to five times the previous "load" equivalent. Such an overall boost, initiated in the early Moor Master phase, may have gathered real momentum during Haselrigg's short-term exploitation of Weardale lead. In 1679, it was recorded that Humphrey Wharton had expended "great sums of money for these six years last past . . . in casting of levells for avoiding of waters and sinking of Shafts for the winning of certain Lead Mines there."¹⁵

Further, the pressing need for continued investment to maintain or expand production is such that the mines "in all likelihood will be a growing charge for these 20 years next ensuing, without which charge the money already expended will be to no purpose." Wharton, embroiled between 1666-67 in a legal argument with the Rector of Stanhope concerning the deduction of mining costs before calculation of the tithe,¹⁶ was astute enough to ensure that capital and working costs were covered and, at the same time, more attractive leases were offered to miner partnerships. Following the failure to win his case against the Rector, there followed an Act of Parliament in 1679 which improved the Moor Masters' lease to three lives but, in addition to the £60 0s. 0d. lott ore rent, also imposed another general rent of £75 0s. 0d. No more output figures are available for Wharton's period of office which ended in 1696 but there is every indication in the population and settlement geography that his expansionary policies were extremely successful.

Recourse to the Stanhope Parish Registers as an index of population dynamics is fraught with the usual problems of under-representation and disappearance. Nevertheless, the seventeenth century records are sufficiently intact to demonstrate three demographic trends.¹⁷ (Figure 5.2)

- (a) The population surge of the later sixteenth century levelled off after 1610 (or possibly before) and began to decline c. 1635 (Stage One in Fig. 5.2). Between 1611-30 and 1631-50, the mean number of baptisms per year in the Forest and Park was 15.7 and 12.2 respectively. Comparison with mean annual burials for almost the same periods, 9.9 (1620-30) and 9.5 (1631-50) suggests that annual population increases were small before coming to a virtual standstill. Following the Commonwealth-void when entries were not made or lost, the (incomplete) baptismal graph

more than recovered with successive peaks rising to unprecedented levels through the Wharton period (Stage Two in Fig. 5. 2). Where data are available, it appears that burials also rose but, apart from occasional epidemic (?) years, seemed to fall below the number of births. In response to changed economic circumstances, population totals, it can be surmised, were on the move again.

(b) Most of the later seventeenth century increase was due to an inward movement of younger men with or without families. Such a trend should and did result in an increase in:

- (i) the proportion of new introduced surnames¹⁸ intermingling with those familiar over the previous century and leading, in turn, to a greater number of households and larger population total,
- (ii) the number of baptisms which rose quite sharply from the 1660s,
- (iii) the number of burials as additional infant and adult mortality took effect. The graph of burials (Fig. 5. 2) alone makes it clear that the population spurt after 1665 was not due to any improvement (i. e. fall) in the death rate leaving immigration and not enlarged family size as the principal explanation.

Another aspect of population movement was the rapid turnover of families. Quantification is difficult but, for example, of 230 identifiable surnames in the Forest and Park in 1710, 47 had been introduced since 1700 and 10 of these subsequently disappeared by 1713.¹⁹ A high proportion of those who disappeared had migrated again to be replaced in turn by others prepared to face the vagaries of mining.

(c) From the 1660s and up to 1710, new place names appear in the Parish Register which not only substantiate the miner immigration and accompanying demographic forces but also give valuable pointers to the changing distribution of population and the settlement processes involved. The latter can be categorized as (i) the primary innovation of another wave of dispersion a century after the first one and (ii) the minor process of further nucleation at certain established valley-floor clusters.

That is the general statement of the processes but a completely accurate analysis of resultant households and their locations at this early stage of the eighteenth century is again impossible. The researcher is mainly dependent upon two primary sources - the Halmote Court Rentals of 1673, 1698 and 1732 and the Parish Register - none of which is entirely satisfactory and, even in combination, do not allow, a total reconstruction.²⁰ The most acute problem is the extent to which the growth of existing medieval and sixteenth century farm clusters continued. Nevertheless, it is apparent that the major process was a dispersal of settlement within the established head-dyke perimeter and approximately 43 sites appeared between c. 1665-1710 (Fig. 5. 3). The majority sought an elevated head-dyke location at some distance from the lower clusters, part of whose land they occupied. Although equally drawn out, this method was not, however, a carbon copy of that of the sixteenth century, having separate origins and greater effects. Then, unique tenurial factors, internally generated and centred upon the kinship cluster, lay at the heart of ensuing change. Now the motivation was mainly external and outside the local family unit and was realised without any further enclosures of stinted pastures. Moreover, some new dispersed farms were not at the fell edge,

an expression of more flexible attitudes and fair stinting procedures for all landholders. The "infill" process had arrived to add to the growing complexity.

Expansion of pre-existing settlement, particularly that on the lower land, also took place at a minimum of ten sites: Daddry Shield, East Black Dene, West Black Dene, Wearhead, Heatherycleugh, South Hanging Wells, Haggate, Brotherlee, Swinhopeburn and Westgate (Fig. 5. 3). A cautious estimate is an overall addition of another 25 dwellings by this second process. The tenurial and agricultural implications of all settlement developments are considered in Chapter Six but it may be said in passing that the readiness of only a few landowners to sell portions of land or the fragmentation of only certain farms after the death of individuals were important contributory factors explaining the new settlement patterns. Generally, though, it was the better endowed eastern third of the area which, once more, was the most conducive to the satisfactory absorption of incoming miners (Fig. 5. 3).

Assessing the effects of a young migrant population upon the number of households is very problematic.²¹ Arrivals and departures fluctuated so much that Tything Book entries of all households for 1700-1713 ranged between 166 names in 1701 to 230 in 1710. In the knowledge of,

- (i) a static population from c. 1625-1660,
 - (ii) the subsequent settlement expansion noted above,
 - (iii) the Tything Book record of 216 families in 1713,
- some tentative conclusion of the number of households and actual population total in c. 1715 can be estimated at 200 and 850 respectively. These figures accord well with future eighteenth century developments where a higher level

of population accuracy is possible. It is worth noting that an additional 65 families in approximately 50 years (1665-1715) may not seem a very vigorous thrust of population. However, the period in question represents a 50 per cent increase in the numbers accumulated over the previous 400 years. Nevertheless, in absolute terms, population dynamics were indeed slow and gentle compared with events yet to come.

III. The Blakett inheritance 1696-1770: early years, inertia and revival

The thesis that a rising or consistent demand for mine labour between 1665-1715 was, for the first time, a most effective catalyst in the settlement process has been presented in the absence of the most telling evidence of all - the actual output levels. It is unfortunate that accurate and continuous information of Weardale ore production is not available before 1728. Between 1665-1720, the period of concealment may well have been one of expanding or, at worst, steady ore totals. In addition to the settlement evidence, the general buoyancy of the industry is suggested by the willingness of Sir William Blakett to contract in 1696 not only the Moor Master's lease for three lives but also a second lease for 21 years at a rent of £75 0s. 0d. per annum which gave him the right to exploit lead veins within the enclosed customary land as well as the stinted pastures.²² It is important to distinguish between the two leases. Together, they gave Blakett the legal and theoretical right to extract lead minerals anywhere in Stanhope and Wolsingham Parishes but, in practice, the surface techniques still employed made it more appropriate to concentrate upon mining outside the enclosed land. The two leases now for three lives and an annual rent of £150 0s. 0d. were merged in 1763 and it is quite clear from the arguments preceding it and the names of the mines in the

Blackett records that comparatively little ore had been obtained from within the in-by meadows and pastures.²³ The only satisfactory solution lay in the driving of levels beneath the improved land (and the fell) and the 1760s were an important turning-point in that direction.

It is relevant to examine Blackett's early eighteenth century financial commitment to Weardale lead as an index of the latter's continuing influence. In 1730, for instance, approximately £4,500 was spent in getting the ore and paying rent and royalties.²⁴ However, in spite of this level of expenditure, the initial Blackett period does not appear to have been a time of any notable headway in mining. Indeed, the early momentum of his inheritance disappeared after the 1720s. Furthermore, the graphical peaks and troughs of production show that annual ore totals exceeded 4,000 bings only three times between 1728-56 (Fig. 5.4). Some of the problems of an ailing industry are illustrated by the lessee's suggestion that the Bishop should receive the one-ninth ore in kind - "our chusing to pay it in kind instead of a certain rent (£350 0s. 0d.) is purely from necessity, the groves (mines) not possibly being able to afford above the £250 offered as a short time will evidence . . ." ²⁵ Also, in a disagreement with the Bishop about lott ore payment on dead heaps, the Blacketts' view was that "we have a right to them entire but except lead should surprisingly advance its price, they must continue unmolested and remain dead heaps to us both." ²⁶ In 1730-31, the deteriorating mood was demonstrated by mutinous and petitioning miners who left the Weardale agent in no doubt of their discontent at payments withheld. ²⁷ The number of bargains fell from 132 in 1729 to 82 in 1735 while in the same period only 10 mines were active.

Much needed revitalisation was delayed until the 1750s and then, for the following 20 years, the annual total of concentrates exceeded 4,000 bings, with the single exception of 1762. On 12 occasions, the figures reached 6,000 bings or more with maximum production of 7,595 bings in 1763 (Fig. 5.4). This important turning-point, evidenced, too, in Blackett's enthusiasm for the merger of leases in 1762, reflected a more determined effort to change the scale of mining. After decades of relative neglect, investment, divided principally between production and development costs, had to increase and did so in the 1750s.²⁸ A spate of new mines²⁹ is revealed in the Bargain Books while bargains rose very sharply indeed after 1750 as more men were offered employment.³⁰ (Fig. 5.4). Mining technology also progressed. Following at least two centuries of pits and shafts, the driving of long levels (not merely for drainage) and the laying of wagon rails permitted better man haulage and a low level underground entry into the vein. The change was gradual but real. The introduction of horse-power in the levels, it should be said, was not yet as common as horse-driven gins and whimseys but it eventually gained momentum with telling effect as the century proceeded. It is true that the investment impetus eased as exploration and development costs fell away but enough had been done to maintain a production boom up to 1770. From the standpoint of family welfare, however, the most welcome advance came in 1757 as miners' top pay per bing of ore increased from 25/- to 30/- and so helped to set in motion another wave of population immigration.

Remarkably, one factor which did not intervene at this stage was the price of lead which remained unchanged at or below £15 10s. 0d./ton as late as 1780³¹ - confirmation, surely, that the perceived need to improve the mining infrastructure and incentives at the expense of profits lay behind this latest expansion phase.

IV. A new scale of settlement development:
the intensification of process

Ample testimony of the economic reawakening and the powerful pull of lead is again provided by their effects upon the number of Forest and Park births (Fig. 5. 2). Between 1751-60, the mean annual baptismal total was 48.9. In the succeeding decade, 1761-70, the figure jumped to 69.0. Corresponding mean burial rates at 28.5 and 37.8, although steepening, were more restrained and in keeping with an injection of young adults (Stage Three in Fig. 5. 2). For the next 15 years, up to c. 1785, it will be noted that both baptismal and burial peaks rose no further and suggest a waning of the inward movement of population by c. 1770. Confidence in the usefulness of the graph is strengthened by the apparent "baby boom" (1760-70) some five years after the beginning of improved employment opportunities and rising ore output (Fig. 5. 2). It is noticeable, too, that a modest flurry of births in the early 1750s also followed closely upon a short-lived five year period of expanding production. Predictably, a wealth of new surnames is added to the Parish Register after 1760.³² Admittedly, they are a crude measure but, nevertheless, can only be explained by arrivals from outside.

The baptismal graph therefore, indicates the trends but is of limited value in establishing the overall total and location of households and population between 1760-72. The problem is very largely solved by the existence of Poor Rate Valuation Surveys for 1767 and 1771.³³ As all occupants, with or without land, were required to contribute to Parish relief, the surveys record owner-occupiers or tenants at each named property. Occasionally, personnel are tabulated in the following way:-

Farms	Owners' Names	Tenants	£	s	d
Allers	Jos. Middleton	Himself and tenants	23	0	0
Dyke Head	Jn. Nattress	Wm. Place and others	15	0	0

Although the exact total of households cannot, therefore, be stated a minimum number can be deduced. A minimum aggregate in 1772 of 242 households (73 per cent) in the Forest Quarter and 90 (27 per cent) in the Park Quarter marks an increase of the order of 66 per cent since 1715 when, it was concluded, 200 households were in the upper dale.

Compared with the expansion period 1665-1715, twice as many households appeared between c. 1760-70. Calculation of the population total remains problematic. It is known that the multiplier in 1801 was 5.4 persons/household and that this figure was too high for 1770.³⁴ A more appropriate choice is 4.5 which results in a total of c. 1530. The superimposition of another 700 people upon the existing settlement landscape and its compression largely into a decade meant inevitably that settlement processes, old and new, were altogether more vigorous and complex than ever before.

Clustering of settlement, overshadowed earlier by dispersal tendencies, emerged as the key process. However, as the primary sources for 1665-1715 and 1760-70 are not readily comparable, its absolute progress since 1715, although very pronounced, cannot be measured with desired accuracy. The position in 1772 is shown in Fig. 5.5. 63 clusters comprising 227 households - 68 per cent of the total - can be located with certainty. 161 (67 per cent) and 66 (73 per cent) of Forest and Park Quarter households respectively were so grouped. Analysis of cluster distribution and size is facilitated by the use in Fig. 5.5 of symbolic

circles which distinguish simply between "small" and "large" nucleations. Clearly the proliferation of 57 small clusters (of between 2 - 7 households) is the dominant settlement characteristic. Only one locality, the western extremity, is deficient in this respect. This area, still very much a frontier territory at this time, includes the upper Killhope Burn and Wellhope Burn valleys. Elsewhere, the greatest cluster concentration coincides mainly with the medieval core zone between West Black Dene and the western Park wall but, significantly, it also transgresses the latter as far as Brotherlee, thus blurring further the earlier medieval separation of Park and Forest. Within the new expanded core from Wearhead to Brotherlee are six larger clusters (of 8 or more households) perpetuating some of the first occupied terrace sites in both Forest and Park and individually accommodating some 50 - 70 people. Population agglomeration, of whatever size, between 1760 - 72 was strongly confined to previous settlement sites and as such requires explanation below. Attention must first be given to other contemporary processes.

The absorption of the largest ever population increase was not achieved without another marked dispersal of dwellings to sites hitherto unused and some distance away from established settlement. Although some 44 such sites - 36 of them in the Forest Quarter - added to spatial congestion and complexity, the scattering process was relatively much less prominent and by no means as dominant as in the late seventeenth century. Nevertheless, by comparison, it was a process of greater intricacy - a sterner test of man's shrewdness in understanding and using his environment - as its three observable characteristics testify.

- (a) Least evident was the revived movement to existing head dykes. Only 11 homesteads - in Wellhope Pasture, at Dyke Head, Locks, High Wham, High House, Fairhills, Maiden Bower and Saugh Tree - fell into this category, resulting in sites at the junction of unproved land and fell pasture (Fig. 5.5).
- (b) The same effect was achieved at 17 further locations but only as a result of an innovatory process, namely, the mid-eighteenth century enclosure and reclamation of fairly small pieces of stinted pasture.³⁵ Some new intakes were contiguous with the medieval fields and served to enlarge the ribbon of stock-farming and some, in contrast, were carved out of the fell in detached positions, thereby extending settlement limits, albeit modestly, up the Killhope and Burnhope valleys and the Park slopes where advantage was taken of the southern Park wall (Fig. 5.5).
- (c) Coinciding closely with the zone of high density clustering was a rash of 17 infill settlements, mainly single stead and sited within the established meadow land. Out of direct contact with the stinted fell pastures and quite separate from the clusters, this development, signs of which appeared in the previous settlement phase, helped to disguise the old dual arrangement of riverine meadow and pasture-head sites.

Explanation of the above process diversity is bound up with the enlarged scale of mining, the rapidly rising demand for land, for building plots as well as agriculture, and the tenorial attitudes of local and outside landowners, the ramifications of which require full and separate treatment in Chapter Six.

The point may be made briefly here that although the surge in demand did not yet exceed the supply of land, it undoubtedly increased its price, thus presenting Weardale landowners with attractive opportunities. Accommodation was most conveniently and quickly arranged at already inhabited sites where new farm tenancies, the most usual situation, could be centralised and agreed without too much settlement or economic upheaval. More complicated administratively was the infill and head-dyke dispersion as homesteads and farm buildings spread into previously unoccupied fields. Most involved and time-consuming of all, however, was the creation by reclamation from the fell of those farms requiring the preparation ab initio of sites and territories as well as the co-operation of several neighbouring farmers whose stunted grazing was affected. Centralisation, too, it should be added, was more suited to that fraction of the mobile and fluctuating population which was landless. With or without agriculture, agglomeration economies were certain to be of some influence and it is very probable that the largest clusters were offering the services of a shop, public house, religious meeting place, blacksmith, cordwainer and other craftsmen and occasionally a mill. At these places, incoming families, particularly those very dependent upon mining, were better able to congregate. It may be too early to speak of village settlement but the evolution of farm nucleations into small and large hamlets was most certainly underway.

V. Lead production and mining employment 1780 - 1800

The spurt in concentrate output which began in 1757 tailed off in 1774. The period of expansion had run its course and for seven years, 1774 - 80, the Weardale mines only once - and then only just - topped 6,000 bings annually (Fig. 5.4). In 1777, the total plummeted to 2,248 bings, a figure more reminiscent

of the early eighteenth century and the first phase of Blakett control. At that point, there was little indication of the extraordinary boom which injected yet another burst - then the greatest ever - of economic and settlement activity in the upper dale. After 1777, and possibly uniquely, production was upwards for the next nine years and, from 1785 to 1800, it never fell below 10,000 bings annually. Indeed, on six occasions it exceeded 16,000 bings while the mean annual output for the decade 1791 - 1800 was 16,292 bings including a maximum total of 19,408 in 1793. Clearly, the second stage of eighteenth century industrial growth under the Blaketts (and now the Beaumonts) was of a quite different order than its predecessor. So, too, it will be seen, was the population and settlement response.

First, however, a brief explanation of the lead bonanza will show that it was not achieved without creating economic conditions sufficiently compelling to draw in the largest ever number of miners. It is a highly important fact that the several key factors which were always relevant during the eighteenth century, combined favourably to produce the same impressive result - the getting of lead concentrates on an unprecedented scale.

(a) The Blakett - Beaumont willingness or otherwise to step up investment lay at the bottom of all other improvements. Costs/ton of ore rose steadily between 1770-90 (Fig. 5.4) and then more rapidly to £8 10s. 0d./ton by 1800 when the sum involved in the mining and dressing of ore amounted to £47,115 (cf. £4,464 and £16,000 in 1730 and 1770). It was not a philanthropic gesture. The market price of lead had also climbed, more so, in fact, in proportion to growing costs (see below). Significantly, therefore, the Bishop's

royalty for lott ore, although jumping to £925 in 1791, was in the process of further investigation.³⁶

- (b) It was commonplace for individual lead mines to flourish, falter, cease production and then be reopened. The cycle and, therefore, production and personnel, varied widely from mine to mine. Consequently, the number of workings was not necessarily a reflection of the health of the industry but at the end of the eighteenth century, even this criterion was very important and impressive (Fig. 5.4). The 39 scattered mines of 1800, twice the total of 1770, are listed in Table 5.1. Records of yields and employees at particular mines are not available but collation of contracts from the various Bargain Books (Fig. 5.4) is a useful measure of the pronounced upward trend of employment during the later eighteenth century.
- (c) Linked closely with the dramatic spread of mining were further advances in underground technology. Although methods varied and overlapped, "driving the level" is a recurring phrase in many agreements after 1785. The extended use of horses, railways, gins and whimseys led to progress in horizontal and vertical haulage. Ventilation and drainage, too, benefited from innovations in the use of hydraulic power but, as yet, the water wheel harnessed to the crushing-mill had not arrived and so a large workforce was still needed to dress the ore manually.
- (d) There were no problems in recruiting additional labour as the bargain records prove. Totals rose very steeply after 1785 (Fig. 5.4). It should be remembered that this marked increase was partly explicable as a result of more continuous working through the year - each bargain

was normally contracted for 3 months before another one was agreed - as well as by the creation of new jobs. As each syndicate's numbers were not always stated, a reliable conversion of 599 contracts into total mineworkers is impossible. A subjective estimate, for what it is worth, equates the 599 bargains of 1800 with approximately 800 miners.³⁷

- (e) Of the greatest importance to the Blckett - Beaumonts, who were smelting Weardale ore at their Lintgarth mill, was the trebling of the selling price of lead metal during the last two decades of the eighteenth century. As military needs increased, the price, reaching £30 0s. 0d./ton in 1802, was now a constant stimulus to production.
- (f) Prosperity among mining families, always relative and never absolute, was much affected by the price paid per bing. After 1785, the highest rates improved from 30/- to 35/- and then 40/- in 1800. The extra income like the better working methods was very welcome and a real incentive but there were many remaining grievances and much distress as a miners' petition in 1796 to Colonel Beaumont revealed.³⁸ It was no solution for extra money to be given with one hand and taken away again with the other in exorbitant charges for horses, candles and gunpowder.
- (g) One source of annoyance which was attended to was the lengthy and unpredictable interval between pays.³⁹ To some extent, this had been softened by the issue of subsistence money (deductable, however, from the eventual pay). ~~Towards the end of the eighteenth century,~~ however, pays were made regularly once a year and bi-monthly

subsistence amounts were doubled from 31/6 in 1796 to 63/- in 1798.⁴⁰

The population response 1785 - 1800

The close coincidence of a 1799 Poor Rate Valuation,⁴¹ Halmote Court Rentals of 1799 and 1803 and the 1801 Enumeration offers a penetrating demographic and settlement insight into the Forest and Park after some 15 years of uniquely vigorous mining activity. Statistically, the "estimated" 332 families of 1772 had practically doubled to an actual 618 and a resultant population of 3,312 in 1801. 53 per cent (only) of the population was male and another unusual but not unexpected feature was the accommodation of the 618 families in 505 houses. Given the sudden insurge, overcrowded sharing for some was inevitable.

Most of the above increases, as revealed in the baptismal graph, took place progressively during the dynamic period after 1785 (Stage Four in Fig. 5.2). For the three successive decades beginning in 1771, the mean annual number of baptisms in the Forest and Park were 80.7, 98.4 and 124.0 and for the final five years up to and including 1801, the annual figure of 133.2 was suggestive of a very high birth rate of approximately 40/1000. The corresponding burial data were 52.3, 44.9 and 60.6, a quinquennial mean of 66.0 between 1797 - 1801 and a possible death rate of 20/1000.

The divergence in the baptismal and burial graphs after 1785 (Fig. 5.2) confirms the appreciable and sustained increases in the proportion of children and young, fertile adults. Also, there is more than a hint that the death rate was falling relatively and showing some response to rising incomes, better hygiene and the exceptionally youthful population. Maybe, too, the actual incidence

of epidemics was less. Family size in 1801 averaged 5.36 persons which, in view of the improving contemporary death rate, was almost certainly the largest up to that time.

The annual difference between baptisms and burials is not an accurate index of population increase (or decline).⁴² Nevertheless, the calculations in Table 5.2 seem to encourage two conclusions:

- (a) the rate of population increase between 1785 - 1801 was approximately double that of the 1770 - 84 "lull"
- (b) births in the dale were the prime cause of that acceleration and not an overwhelming influx of migrant adults although, of course, very many of the children born between 1785 - 1801 had immigrant parents.

The only dependable information regarding the origins of itinerant miners appears at the very end of the eighteenth century when baptismal registers record parents' birth places. Arrivals are shown from settlements in the North and South Tyne, West and East Allen, upper Derwent, Tees, Swale and Eden valleys, all within a 35 mile radius of upper Weardale, thus helping to explain the volume and suddenness of the last wave of eighteenth century immigration. Between 1798 - 1800, 18 per cent, 22 per cent and 13 per cent of infants baptised at St. John's Chapel had male parents born outside the dale.

It is worth remarking briefly that the 100 per cent+ population increase between 1772 - 1801 would have been very much greater if, despite an improving situation, infant mortality and premature adult death had not continued at a depressing level. Over the five years, 1798 - 1802, for example, the average age of burials at St. John's Chapel was 29 years. 38 per cent of all burials there

were of children no more than 5 years old, a graphic reminder that life was still short for many.

The dominance of the large and small cluster

The effects of these demographic trends upon the settlement geography were quite extraordinary. Outstandingly, the principal process was the continuation of clustering at such a rate and magnitude that to have lived outside a cluster was exceptional. To have lived out of sight of one was virtually impossible. By comparison with 1772, there were 115 (63 in 1772) concentrations of population in 1799 which, continuing the previous criteria, break down into 102 (57) small and 13 (6) large nucleations (Fig. 5.6). 85 (44) and 30 (19) clusters were situated in the Forest and Park Quarters respectively. As in 1772, the exact number of their constituent families cannot be calculated in every case as entries at 67 properties in the 1799 Valuation, the best source, only record the name of one occupier "and others". It is unlikely that each of the "others" always represented the minimum value of two families but assuming that this was so, 444 households, at least, make up the settlement clusters. As some 85 families are known to live at separate dwellings (i. e. outside the clusters), it is possible to arrive at a total of 529 overall. The 1801 census records 618 households and the accurate 1799 figure must lie between the two. At a carefully considered estimate of 590 in 1799, 505 (i. e. 590 - 85) of these, therefore, may be claimed as "clustered" families - 86 per cent of the total and even higher than the 75 per cent of 1772.⁴³ To repeat, for reasons outlined above, the accurate size (in households) or a minority of clusters cannot be shown in Fig. 5.6. Nevertheless, there can be no doubting the proliferation of small clusters involving the consolidation of the old and the appearance of no

less than 45 new ones since 1772. Moreover, only seven former small nucleations, Burtreeford, Chapel, Burnfoot, Sidefoot, Windyside, High Westgate and Swinhopeburn had edged into the higher category where, it must be emphasised, no or very little growth had occurred among the six large clusters since 1772.

There were economic limits to the size of agglomerations in the eighteenth century, and it was clear that the advantage lay with the small cluster, the focal point of 10 - 35 people, whose chief attraction was its ability to provide invaluable agricultural land. The reality and risk of being without this resource grew steadily with the size of the cluster which is not to suggest that all were, therefore, of optimum size and able to meet economic needs fully. (See Chapter Six). Also, the number of working mines and their very wide, fluctuating distribution would seem to discourage population grouping at only a few locations. It was certain that there would be a mine within the near vicinity of every cluster. The dominance of small agglomerated settlements, the archetype of the late eighteenth century, can be measured by their accommodation of c. 350 (60 per cent) households in 1799. Only c. 150 (25 per cent) were to be found in the larger clusters with their developing service functions and populations of 40 - 80.

The pressures for new sites and one more round of dispersal had also intensified but, as stated earlier in the chapter, this solution was not quite as suited to the special demographic and economic forces. Further, in view of previous scattering, the available options were by no means as generous. Two processes, evident between 1760 - 1772, can again be identified. Some

~~33 pioneer sites, primarily single stead, were fairly equally divided between~~

head-dyke dwellings (20) at the stinted pasture edge and infill (13) at various points within the enclosed land. (Fig. 5.6). In some places - Killhopeburn and Rookhope valleys and the north-western Park - the former process required a certain amount of extra land enclosure, a further expression of the increasing land scarcity.

The above growth mechanisms produced important shifts in population distribution. The "new core" in the corridor between West Black Dene and Brotherlee confirmed its status with a very high population density, particularly in and around Westgate. Its rate of growth, however, was very definitely overshadowed by the movement of families into the valleys west of Wearhead. Here were one-third of the new sites with the 10 examples of clustering there in 1772 almost trebling to 29. (Figs. 5.5 and 5.6). At the other extreme, in the eastern Park and along much of the Rookhope Burn valley, there was comparatively little change in the settlement landscape. The population centre of gravity was moving steadily westwards. In spite of the volume of change, most clustered forms had remained physically separate although in a few localities - Burnfoot - Chapel, Sidefoot - Bridge End, High and Low Westgate - the gaps had narrowed noticeably. The period of contact, however, between clusters and the consequent fashioning of several larger "village" forms with their inherited polynuclear plan elements lay in the nineteenth century and is outside the scope of this study.

CHAPTER SIX

THE ROLE OF LAND IN THE DUAL ECONOMY

1600 - 1800

The settlement and economic changes of the magnitude and over the period just considered could not have been accomplished without an extensive, well-developed and flexible agricultural base. Equally, the transformation of the farming scene during the seventeenth and eighteenth centuries would not have been necessary if the two economies had remained separate and parallel to each other.

The very involved problem of analysing the place of the farm - homesteads as well as land - in upper Weardale and especially its contribution to and modification by the lead-mining industry immediately raises the choice of relevant criteria and, not least, the limitations imposed by the available sources. For the first half of the period, the latter are restricted to a few lists of farms, rentals and owners and a small number of tithing books. Later, the rentals are more frequent and can be supported by Land Tax Accounts, Poor Rate Valuations, a handful of invaluable Stint Bills and information collected in 1799 for the calculation and implementation of the Enclosure Awards. Thus, it is possible to consider six aspects of the agricultural influence under the following headings:-

- (i) The number of farms.
- (ii) Tenurial structures.
- (iii) The monetary value of land.
- (iv) Land enclosure and fragmentation.
- (v) Stinting and the use of the fell.
- (vi) Land dependence.

All are individual and dynamic parts of a complex activity quite different in its requirements, practices and objectives from mining and yet quite unable to stand in isolation from it.

I. The number of farms

The calculations shown in Figs. 6.1, 6.2 and Table 6.1 are based upon customary and leasehold rent and tithe records, the Poor Rate Valuation surveys of 1772 and 1799 and several Land Tax Accounts between 1783 and 1803. It is better to regard the farm totals as reliable minima which, it is believed, verge closely upon the actual numbers. For the above purposes, a farm is defined simply as a dwelling with a specific amount of enclosed land. In many cases, the link between dwelling and land was easily broken or modified as both were frequently flexible components of larger originals with a single landlord.

The graph (Fig. 6.1) shows two distinct trends:

- (a) the overall, if erratic trebling of farms from c. 111 in 1624 to c. 365 in 1799.
- (b) the growing divergence between the proportion of farms in the Forest - the more active mining unit - and Park.

Sizeable gaps in the data prevent a detailed and continuous numerical reconstruction and conclusions must be approached cautiously. For the 50 year period, 1624 - 73, farm properties apparently increased so slightly that it is reasonable to assume a measure of agricultural and industrial inertia. The first signs of positive change were, in fact, confined to the last quarter or so of the seventeenth century and came as a 29 per cent increase in farms by 1700 (plus the dwellings of landless miners, not considered here). This

significant but, in absolute and future terms, sluggish growth rate - c. 35 farms in 28 years (1673-1700) - accelerated very suddenly and appreciably up to 1712 (after the Blackett takeover) but then subsided and declined by 1732 (Fig. 6.1, Table 6.1). Farm numbers moved up and down freely from 155 in 1700 to 182 in 1709 and 1712, strong evidence of rapid population movements, mining opportunities and the quest for land¹. The period 1670-1730 represented a growth-pause development not dissimilar to the cycles of the sixteenth century which had spent itself by the 1620s. Economic opportunities at either stage were unable to create enough momentum to keep the process going indefinitely. However, after the hiatus of the mid-eighteenth century, a lead boom and a deluge of new farms, unprecedented in their intensity, completely altered this situation. After 1732, but primarily between 1762-72, the number of farms at old and new sites rocketed from c. 144 to 262 giving an increase over that decade of approximately 11 farms per year. The total exceeded 300 in the early 1790s and reached at least 365 in 1799. Seen in its entirety, the period 1762-99 produced not only c. 200 extra farms at about four times the rate of the corresponding phase a century before but also revealed a clear causal connection between farm dwellings, agricultural activity and lead output.

II. Land ownership and tenancies

The readiness of upper Weardale landowners to let or sell some or all of their land assumed extraordinary relevance as the internal population, boosted periodically from outside, grew some seven fold between 1600-1800.

An attempt is made here to analyse three facets of land speculation which, after the 1670s, completely revolutionised the tenorial scene, viz., the

number and origin of landowners, the proportion of non-resident owners and owner-tenant ratios (Fig. 6.2 and Table 6.1).

The very small numerical increase in farm owners between 1624-73 suggests a quiet and, at best, consolidatory stage after the busy land sales, enclosures and new tenements of the later sixteenth century. Proprietors' surnames in 1673 were as familiar as ever. Indeed, after an interval of 50 years, only 13 new surnames responsible for 20 farms (i. e. 14 per cent of all landowners having 17 per cent of the farms) appear in the rentals². This should not necessarily be interpreted as agricultural stagnation, let alone decline, but as a continuation of the established dale's "closed" system whereby land was either inherited or sold to a relative or well-known neighbour. Undoubtedly, land traffic did occur. In 1673, a minimum of 63 farms out of a total of 120 had different owner surnames including the 20 noted above plus 43 others whose proprietors' names had also changed but were still traditional³. The remaining 57 farms perpetuated the narrow inbred kinship and inheritance ties stretching back to the previous century. In the light of future events and with probably no more than ten actual non-resident owners (11 per cent of all owners) in 1673, it would also appear that owner-absenteeism was uncommon and confined mainly to the large surviving leasehold blocks.

Estimating the number of tenants between 1624-73 is most difficult but bearing in mind their scarcity in c. 1600, the slow population and economic developments subsequently and the small total of owners who were absentee or local with two or more farms, overwhelmingly high owner-tenant ratios existed. They fell only very slightly from 1 : 0.17 to 1 : 0.24 or, to put it differently, there was only a very gentle increase in the farm tenant population from

c. 18 in 1624 to c. 25 in 1673. This situation was soon to be transformed.

The advent of three marked demographic and economic growth stages was reflected in a variety of tenurial responses which confirmed the close interplay between lead and land. As the following chronological analysis will show, competition for and interest in hay and grazing land reached progressively remarkable levels between 1673-1799.

1673-1732

At first, the rate of change was relatively restrained and gave little hint of the vigorous land sales and tenancy agreements of the later eighteenth century. Although farm ownerships leapt ahead by comparison with the previous 50 years, there were still only 119 owners in 1698 and 111 in 1732 (Fig. 6.2 and Table 6.1). More revealing was the clear tendency for land-buying by a new class of owners from outside, a trend which gained momentum into the 1720s and early 1730s. In the 1698 lists, for instance, there were 21 surnames not present in 1673 and by 1732, a further 38 new post-1698 examples had been added⁴. Comparing the position in 1698 with that in 1673, 18 per cent of all owners were newcomers. They had 20 per cent (27) of all farms and were responsible for 40 per cent of all changes of farm ownership. At the end of the interval between 1698-1732, 34 per cent of all owners' names were completely new to the upper dale. They, in turn, owned 42 per cent (61) of all farms and were responsible for 69 per cent of all changes of farm ownership. Local owners, too, were drawn into the land market as many properties, when available, were fragmented, sold and then converted into tenant farms. However, in competition with their wealthy counterparts from elsewhere, they were "losing ground" as the period proceeded.

Unfortunately, at this stage of the analysis, data limitations prevent a wholly accurate division of landowners into residents and non-residents. The probability is that the proportion of proprietors who were new and absentee increased to 1732 and exceeded all those who were new and resident. The Tithing Book names of 1700, which can be compared with those of the 1698 owners, point to 19 absentees overall (15 per cent of all owners) and of the 21 new surnames in 1698 noted above, only seven were actually living in the dale. By 1732, it is very evident that land speculation from outside had continued in spite of disappointing mining performances. Some proprietors were buying up several farm properties and consolidating others which, in fact, explains the slight numerical decline in owners and farms between 1698-1732 (and also disguises the energetic activity from 1700-1715)⁵. Prominent landlord examples of this trend were Lady Eden (farms at Westgate and Shallowford), Mr. Mowbray (eight farms at Burtreeford and in the Killhope valley), Sir Walter Blackett (Killhope, Wellhope and Shortthorns), Mrs. Taylor (Westgate, Windyside and Hanging Wells), Mr. Huntley (Westernhopeburn) and Sir Francis Clavering (Middle Black Dene). Thus, it can be inferred that the late Moor Master - early Blackett mining period had so stimulated population and settlement that land values and revenues had increased sufficiently to make farms an attractive investment.

Further to this, it is logical to assume the contemporary presence of a growing farmer-miner tenant class⁶. Some fairly precise quantification of this is possible for 1700 when from the details of the tithe records, 74 tenants with and without land can be distinguished⁷, the owner-tenant ratio being 1 : 0.62. By later standards, tenant farmers and miners were still a modest but increasing minority. Significantly, though, another new tradition had been introduced.

1732-1772

It should be emphasised that most of the tenurial innovations of this second phase occurred during its final decade and, again, were very closely in line with a renewal of mining and record ore outputs. Interest in, and acquisition of land in upper Weardale continued to mount as the number of ownerships in 1771 reached a new peak (Fig. 6.2, Table 6.1).

Confidence in the longer-term prosperity of mining was high, a fact reflected in a keenly competitive land market now attracting the attention of more and more owners from afar who, on the whole, were a more well-to-do class than their indigenous fellows. Their influence can be gauged from two telling facts: 40 per cent (55) of all owners in 1772 were non-resident and collectively they controlled 46 per cent (120) of all farms⁸. In 1700, the figures were 15 per cent (19) and 18 per cent (24) respectively. Absentee landlords, then, had not only trebled but, on average, each now possessed 2.2 farms in comparison with the 1.8 farms of the other 81 proprietors. So effective was this external concern with land that the number of residential owners had slumped to below that of the 1580s. What is equally clear is that farms were not only viewed as an agricultural investment to be nurtured but also as a convenient means of gaining quick cash returns. Land of any quality - in the high west and Rookhope Burn valley as well as the larger and better farms in the Park - was bought up to meet the demands of another inward surge of miners optimistic enough to pay inflated rents but not yet able to own their homes and also aware, no doubt, that if and when their relative prosperity should come to an abrupt end, vacation and departure would be that much easier. As a result, there were in 1772 a minimum of 181 farm tenants, (not too far short of four times the number (52) in 1700) occupying 69 per cent of the farms.

The owner-all tenant ratio had swung dramatically from 1 : 0.62 in 1700 to 1 : 1.69 while the resident owner-all tenant figure was as low as 1 : 2.84.

The age of the Weardale tenant was now firmly established.

1772-1799

It is important to reflect at this point that each of the two earlier periods of economic growth set in motion two consistent tenurial responses: the growing number and proportion of (a) absentee landlords, (b) incoming farm tenants. The greater the expansion and success of mining, the more pronounced the two trends. How much further both could be sustained was to be tested after 1772 as mining took off yet again and the population more than doubled. Between 1784-99, in particular, tenurial activity was correspondingly strained and almost frenzied, it would seem, to keep up with the insatiable demand for land.

Fig. 6.2 and Table 6.1 demonstrate strong numerical growth in all three tenurial categories.

Since 1772, the total of owners had increased by 21 per cent (29) to its greatest level of 165, a certain indication of an even keener competitive interest in land which now had immense tenancy value. However, it is equally certain that as the number of proprietors mounted, the progress and inroads made over the century by absentee speculators had in one respect come to an end. The latter's position, it will be recalled, had advanced in proportion to all owners up to 1772 when, as 40 per cent (55) of the total, they controlled 46 per cent (120) of all farms. In 1799, the respective figures were 38 per cent (63) and 47 per cent (173) - notable numerical increases but no proportional headway. Over the same period, 1772-99, resident owners, more able now to buy property or take out a mortgage, had jumped from 81 having 142 farms to 102 with 192 farms, 62 per cent and

53 per cent of all owners and farms respectively.

In another respect, the earlier tradition was actually strengthened as the average number of farms per outside landlord rose from 2.2 to 2.7, a trend leaving little doubt of a desire to extract a maximum rent return. Local owners, too, were inevitably involved in financial gains but, not surprisingly as farmer-miners themselves, were less eager to let their land. Thus, their farm numbers were lower and grew more slowly from 1.8 to 1.9 per resident proprietor which, in practice, meant that some proprietors had no spare land to offer.

Regarding the ongoing eighteenth century throng of more and more tenant farmers, some quantification of the trend is possible. Calculations for 1772-99 reveal just how radical the change had been and how compelling was the associated and expanding need for labour in the mines. From 181 farm tenants in 1772, the numbers exploded to a remarkable 263 renting no fewer than 72 per cent of all upper dale farms in 1799 (Fig. 6.2, Table 6.1). Thus, owner-tenant figures generally were more than maintained at 1 : 2.96 (1 : 1.69 in 1772) whereas the resident owner-tenant position was even more impressive at 1:4.78 (1:2.84 in 1772).

Finally, in retrospect, it is worth noting the eighteenth century progress of owner-farm tenant ratios. The extremely slow emergence of farmer-tenants in the first half of the seventeenth century gave way to greater but still very much minority numbers up to 1700 when the proportions were 1 : 0.46. Not till the 1760s did they assume a majority position, the period 1760-72 being a time of maximum rate of growth. It was a decisive turning-point as the gap continued to widen from 1 : 1.33 in 1772 to 1 : 1.59 in 1799. The era of the tenant-farmer also proved to

be a further turning-point in the growth of population and lead-mining.

Without it the spread of clustered settlement too would not have been such a distinctive feature of the settlement pattern. It is perhaps surprising that in this context, the Blacketts and Colonel Beaumont did little to facilitate the accommodation of so many families. Apparently, it was no part of their managerial policy to buy land at certain clusters to foster social and economic cohesion as happened in neighbouring dales under other mining companies. Paradoxically, what land they did own, with the exception of their New House headquarters, was situated in the upper Killhope and Rookhope valleys away from the mainstream of population.

III. The monetary value of land

Ever since the private enclosures of the sixteenth century, the greater tenurial freedom and the general departure from medieval practices, the price of farm properties had been increasingly subject to fluctuations in demand. During the seventeenth century it is probable that animal husbandry had also gradually progressed along with a slow but steady rise in land values. By this time, the fixed annual customary freehold and leasehold rents payable to the Bishop were certainly no realistic guide to the actual sums paid by way of rents to local and other landlords or as leasehold fines to the Bishop's Exchequer. And yet, at the turn of the seventeenth century, most weekly farm rents could not have been more than three or four shillings and as late as 1767, only 28 farms - mainly larger ones in the Park Quarter - were worth more than 10/- a week.

The 1767 and 1799 Poor Rate Valuations form a reliable basis for calculating the price of property⁹ at a time when the appetite for land and

ability to pay had grown considerably. It should be remembered, too, that land values were further enhanced by late eighteenth century improvements enabling the selective breeding of horses, sheep and cattle and the introduction of better grasses and legumes which provided more nutritious grazing, winter hay and heavier stock to enrich the soil.

The value of property (including land) in upper Weardale rose by an average of 68 per cent over 33 years. The 76 per cent increase in the "poorer" area of the Forest was above this average and appreciably greater than that in the Park (55 per cent) (Table 6.2). As the search for land heightened, the pull and priority of lead clearly outweighed considerations of land quality.

An important and interesting paradox is revealed in Table 6.3. In spite of the rising cost of property, its mean valuation per household actually fell. As houses without land certainly gained in value between 1767 and 1799, the fall is attributable to farming households and, in particular, the declining size of farms. Thus, when land prices were increasing, many farm units, because they were now smaller, were either cheaper or only very slightly more expensive, a trend of much appeal and relief to the lead miner-farmer (Table 6.4). Notwithstanding the higher cost of land in the High Forest, mean farm valuations in 1799 were almost £7 0s. 0d. lower than in the Park, a fact explicable by the considerable discrepancy between the mean areas of their respective farms (Table 6.5). There were, of course, very many farms in the mining zone of the western Park which were as small as their Forest neighbours but these were more than compensated for by the fewer but larger leasehold blocks. Farm areas, it can be seen, in both units had shrunk on average by about one third (Table 6.5).

Perhaps the most effective measure of the close ties between agriculture and mining can be gauged from the mean 1799 price of land per acre in the lead-rich Forest, £1.33, and stock-rearing Park, £0.78, a difference of 71 per cent which was already pronounced in 1767 at 56 per cent.

IV. The enclosure and fragmentation of land

The distinction should be made at the outset between the additional intaking of open stinted pasture and the further subdivision of land in the valley bottoms. The former required the co-operation and consent of those farmers with grazing rights in the affected pastures whereas the latter was a private agreement between landowner and tenant or simply a personal decision by and for the resident landlord himself. As it happened, the further breaking up of the medieval and sixteenth century fields was by far the dominant process, leading, as shown above, to a trebling of separate farm units during the eighteenth century.

(a) The stinted pastures

The upward movement of the head dyke from c. 1250 to 1800 was restricted to three well-defined phases with long, intervening still-stands: the pioneer-expansion-extension processes of the late thirteenth century, the late sixteenth century intakes and the resumption of upland enclosure in the middle eighteenth century. In each case the cause was different as, first, the Bishop's medieval tenants sought to become established, then, having gained their independence, walled areas of the fell to prove it and, finally, engaged in a burst of colonising activity ensuring living-space and economic alternatives if mining should fail.

The absence of illegal encroachments on the open pastures and the higher fell suggests that grazing there was supervised very carefully and required compelling and urgent reasons for any disturbance of the tradition. The absorption of the first of the three seventeenth and eighteenth century population surges was achieved comfortably enough but the volume and rapidity of the second were too great to be contained in exactly the same way. Therefore, when new head dykes appeared after 1760, it was a clear indication of the pressing need for land outside the existing agricultural framework, no matter how high or remote its location. Before the pattern of expansion is examined, it should be acknowledged that this voluntary movement cannot be proved by direct documentation except in one small instance¹⁰. But neither is the evidence purely circumstantial. Particularly helpful is the first-time appearance of farm names¹¹ at the new enclosures after 1760. Also, the latter, unlike the sixteenth century intakes, were either smaller, separate accretions specific to individual farms or "green islands" established some distance away and set within the stinted uplands. They represent efforts born of individual need and initiative, but, no doubt, requiring practical neighbourly assistance. The intakes contained hastily-built dwellings and were lived in by incoming families desperate for land. Yet, farming alone was hardly a convincing initial reason for settling on the high slopes unless, of course, there was the additional lure and hope of a sufficient income from mining. That incentive came after 1760.

As Figures 5.5 and 5.6 indicated, the fairly modest erosion of the stinted pastures was by no means a universal feature and certainly

it was not an automatic response to the problem of rising population. Its strong localisation in the Killhope, Wellhope and Rookhope valleys may be interpreted as a general reluctance to advance head dykes too far or even at all unless, of course, the low quality of land and/or genuine overcrowding made it absolutely necessary to do so.

A closer investigation into the enclosure processes is provided by the highest and most westerly inhabited area in upper Weardale (Fig. 6. 3). At a height of approximately 1,750 feet (535 m) in the confined upper valley of Killhope Burn and amid a peaty surface riddled with shafts and hushes, there were in 1800, six pastoral farms some two miles beyond the limits of continuous occupation¹² Collectively, they covered no more than 50 acres (20 hectares) in 1800 but they offered invaluable food and income to the six families, all of whom were almost certainly caught up in the Killhope lead boom. It should also be noted that even the smallest amounts of "bottom" land ensured stinting rights on Killhope Moor pasture.

Late seventeenth century settlers were attracted by the small medieval summer grazing pasture at Killhope when only one or two families were present at "Killhopehead". To this former agistment, now subdivided, enclosures were added in piecemeal fashion and nearby two other small outliers were fashioned from the fell. The new patterns confirm the importance and vigour of individual enterprise in coping with new economic opportunities. Interestingly, the leasehold rights of these farms belonged to Colonel Beaumont, the lessee of lead mines, and gained for him annually £45 4s. 0d. As the accretion process continued into the nineteenth century,

it is helpful to see the position in 1820¹³ (Fig. 6.3). By then, the total area of enclosed meadow and pasture had grown to 76 acres (31 hectares) and, among others, was farmed by four Peart families, a notable development of a kinship community.

(b) The in-by land

The rapid and progressive eighteenth century clustering of population was very much facilitated by the available supply of higher quality land, already a patchwork of enclosures, within the irregular head-dyke perimeter. Inevitably, the processes of land redistribution were to complicate the patterns further by increasing their number and thereby reducing their size. Basically, this on-going transformation of the agricultural landscape was achieved in two ways. Either, existing farm territories were subdivided as the multiple or single homestead drew to it more households or farm territories were diminished as new farm sites were chosen at or towards their margins¹⁴ at some convenient distance away from the parent farms or, not infrequently, both processes operated within one farmer's land more or less simultaneously. The centralisation process lent itself very strongly to the growth of tenant farms and the second, where the break with the past was more radical, to the infusion of another set of owners.

Tracing the evolution of eighteenth century Forest and Park farm boundaries is not impossible and the actual enclosure position in 1799, with some exceptions, is clear. The following examples and analyses focus attention upon Burnhope, West Black Dene and East Black Dene where, in their contrasting ways, the dissolution of the large medieval cattle

ranches was well advanced as external pressures built up and, stage by stage, traditional boundaries were more and more eroded. To differing degrees and at different rates, the trio illustrate the three settlement processes of clustering, head dyke dispersion and intermediate (infill) locations as well as changes through reclamation and in-by enclosure, the entire remodelling being accompanied by much tenurial activity and change.

The Dean and Chapter leasehold farm at Burnhope (Fig. 6. 4)

The layout of this farm seems to have altered very little during the seventeenth century. There were still two tenants in 1690¹⁵. The Tudor trend towards local and inherited ownership meant that Cuthbert Emerson, occupying the original homestead beside the river, held a compact south-facing farm while Thomas Dawson's dwelling, the other part of the simple sixteenth century cluster, lay between his meadow and stinted pasture but was some distance away from an enclosed pasture and another meadow further down valley. In 1700, there were three tenants, both of Dawson's last two mentioned units having been used to create the new Six Days Work tenement (George Watson as tenant) in 1700. This, in turn, led to the development of fields there and also at the shrunken Burnhope remainder (George Caine) where careful regulation of land became more critical. Cuthbert Emerson's holding was unchanged. Fig. 6. 4 illustrates the scale of eighteenth century developments as "cluster and scatter" intensified to so complicate the division of land that in 1799, 27 fields embraced a mere 65¹/₂ acres (27 hectares), seven proprietors and at least 13 households.

West Black Dene (Fig. 6. 5)

The persistence of dual ownership by Pearts and Harrisons at West Black Dene from its division before 1595 to c. 1765 and the continuing equal rent

division (20/- per owner per annum) confirm the stability of the primary farm boundaries over this long period. There is no doubt, though, that during the late seventeenth and eighteenth centuries the cluster of West Black Dene was growing through the presence of several farm tenants. After 1665, the Parish Register discloses the names of many folk who were born, lived and died there whose surnames were neither Peart nor Harrison. But just how many more families there were besides, for example, the Fosters (1674); Waltons (1696); Wilsons (1702); Featherstones (1703); Bainbridges (1704) and others is not known before 1767. However, the general picture is clear. Up to c.1765, land was parcelled out to a few tenants and farmed entirely from West Black Dene. As the pace of change quickened, four new owners (replacing Harrison) and Joseph Peart were responsible in 1770 for further land fragmentation but, as yet, all homesteads were still centralised at the hamlet itself. It is one of the evolutionary features of West Black Dene that dispersion from the nucleus was long delayed. Between 1767 - 99, three of the four new head-dyke sites reflected the tenurial and geographical break-up of the Peart estate after more than 400 years of control from the central cluster. The mounting pressure upon land at West Black Dene is emphasised by the need for two extra intakes to accommodate Dyke farm and another very near West Black Dene. In toto, in 1799, on the territory traditionally known as "West Black Dene land", there were 8 proprietors, 20 families including no less than 18 farming households sharing 73 acres (30 hectares), a remarkable concentration resulting from the twin processes of cumulative fragmentation and tenurial subdivision.

East Black Dene (Fig. 6.6)

Only brief treatment is possible of the progress of land occupation at East Black Dene, the most intricate of the three examples. Unlike West Black Dene,

tenurial changes were more frequent throughout the eighteenth century as several owners bought and sold land to produce a complex distribution of properties. Some indication of the intensity of land turnover is recorded in Table 6.6 and its spatial consequences in Fig. 6.6. In spite of all the demands imposed by the population arrivals of the late seventeenth century, the cohesion of the growing cluster (with its new miner-tenants) had remained intact except for two recently detached farms, Frog Hall and Prys, at head dyke and intermediate locations respectively. As at West Black Dene, many fields, both inherited and newly made, were let to East Black Dene's land-hungry tenants. Severe competition after 1760, allied to inconvenient distances between hamlet and fields, led, in the end, to more landlords, their tenants and new homestead sites outside East Black Dene. Inevitably, as the extent of the parent cluster's land steadily diminished, farm patterns there became increasingly distorted and only John Hall's boundaries stood unchanged in 1799 (plus one small intake) as a unique reminder of tenurial continuity stretching into the previous century and a family desire to retain a large, if scattered unit.

At the end of the eighteenth century, East Black Dene devolution had produced no less than 13 proprietors, a minimum of 17 farming households sharing 113 acres (46 hectares) and at least 29 families altogether. It could never be argued, however, that the prospects of farming alone, both here and at Burnhope and West Black Dene, were the cause of, nor in themselves sufficient to support fully such numbers.

V. The stinted pastures

Trite and repetitious though it may be, it is necessary to emphasise a seventeenth and eighteenth century economic reality. Continuous stock-farming

required a winter store of hay and that in turn adequate summer meadow. It is easy to appreciate but difficult to quantify the strain that the trebling of population placed upon hay yields. Every available and suitable field able to produce a crop which, in some cases, would have been a summer pasture in less abnormal times, was used. But this trend and therefore the expansion of farms, population and lead ore could not have been carried through without one absolutely vital practice and land use, viz. , stinting and the stinted pasture. The writer believes it to be crucially important and, arguably, the paramount factor in facilitating the eighteenth century industrial and agricultural revolution in upper Weardale.

The value of communal grazings can be gauged from the presence in 1799¹⁶ of 4,935 stints on 27 stinted pastures and fells covering 26,769 acres (10,833 hectares) and another 3,580 acres (1,449 hectares) on Wolfcleugh, Smalesburn, Hanging Wells and Sunderland Commons where stinting was no longer practised. To put it differently, given the stint values of Table 6.7, a potential 4,398 cattle or 2,199 horses or 21,990 sheep (over one year) could be kept for part of the year on stinted outby land alone. Practically, of course, it was an appropriate combination of all three. There is scarcely need to stress what all this meant to the well-being of a swelling population. The 1799 allocation of stints among the landowners is demonstrated in Fig.6.7. It will be shown presently that the number of actual stint users was even greater. Attention is drawn to the vast numerical contrasts ranging between Francis Tweddell's $396^2/3$ (Westernhope Moor) and three owners having only $1/3$ stint each (Chapel Pasture and Westgate Height Pasture). In fact, there were 177 awards (out of 249) of five stints or less which does nothing to lessen their value and points to a powerful demand and some

upland grazings probably loaded to their maximum. Fig. 6.7 demonstrates the most intensive and expensive stinting along south-facing slopes in the central area where population pressures were most severe.

By the later eighteenth century, complicated and responsible stinting practices had evolved after at least 300 years of experience. Analysis of three original Stint Bills¹⁷ for Ireshope Moor (1794, 1800, 1804) encourages the following conclusions:

- (a) As of right, the stint holders were the resident and absentee proprietors of in-by land while the stint users were those local owners and tenants actually farming it. The entire allocation of stints per landowner and their proposed distribution, if any, among their tenants was agreed at the annual meeting of all stint holders held in May and recorded in the Stint Bill. Tenants' Stints, discussed privately prior to the meeting, were entered on the bill and were also included in their rent. There were 21 stint holders and 47 stint users sharing 305 stints on Ireshope Moor in 1794. In 1800, the numbers were 21, 50 and 310 respectively.
- (b) Each stint user had the option of letting (but not selling) all or part of his allocation to any other person who was normally, but not necessarily, another stint user on Ireshope Moor. Thus, in 1794, one Joseph Colling of West Black Dene and Sedling stinted ground picked up two Ireshope stints from Joseph Coatsworth. The annual price of a stint varied with the quality of the "fell" or "pasture" grass and the changing demand for grazing. In 1799, the rate on Ireshope Moor was 5/- per stint. Evidence from neighbouring Burnhope Pasture shows a rising value from 1/6d. (1751)¹⁸ to 5/10d. (1767)¹⁹ and 8/- (1799). Overall, 1799 prices per stint ranged between 1/6d. (Moss Moor) and 23/6d. (Westgate Side Pasture).

(c) Stint users had to declare at their meeting how they proposed to use their awards in terms of horses, beasts and sheep. In practice, an award of, say, 10 stints conveyed the right to graze ten horned cattle over 2 years or 20 under 2 years or 5 horses above 2 years or 50 sheep over 1 year or 80 lambs under one year or 10 colts or fillies from $1\frac{1}{2}$ to 2 years or a convenient permutation of these. The conversion values of a cattle stint seem to have been uniform throughout the dale. Some impression of the numbers and relative importance of different animals can be gleaned from the 1794 Bill. A possible tally on Ireshope Fell was 600 sheep (120 stints), 182 cattle under 2 years (91 stints) and 38 horses above 2 years (76 stints) with 18 stints unspecified.

(d) Eighteenth century stinting was dependent upon effective co-operation. Overstinting was prohibited and punishable at the rate of 5/- for each excess. Annual meetings appointed a paid Herd or Impounder whose job was to oversee and seize surplus animals. The "wages of the bull" went to the farmer providing this service. The maintenance of the pasture or fell boundary required a collection of 3d. per stint to furnish gates to prevent straying and the practice in Westgate Side Common Field was to divide the common wall into as many lengths as there were stints (21) and each stint holder repaired his own share of lengths²⁰.

One problematic aspect remains: the method of deciding stint numbers on each fell or pasture. Were stint totals calculated initially in relation to the hay yields of the in-by meadow or the carrying capacity of the common pasture or both and thereafter remained more or less unchanged? In which case, individual's stints would be inevitably and gradually reduced as the number of farm units

increased and their average size shrank. Alternatively, as time proceeded, were the totals augmented to cater for the increasing demand? Earlier discussion (Chapter Four) concluded that medieval open pasture-grazing was at a fixed rate linked directly to the Bishop's annual rent. It is totally unrealistic to claim that this level of animal usage continued unaltered into the eighteenth century. The system had already been modified appreciably during the sixteenth century when the relatively small farming population decided upon its stints and optimum animal numbers in the stinted pastures. As a result, stock allowed pasture-grazing were almost certainly very much increased. At this stage, too, the distinction was made and boundaries drawn between fell and pasture grass and the various horse and sheep equivalents of cattle stints were worked out. It can be argued that from c. 1660, pressure to add stints in some pastures and fells would be greater as the farm population and amount of in-by meadow (converted pasture) expanded. In their vigilance, existing stint holders would only admit new stints reluctantly so that the total grew at a carefully controlled rate. Assistance in this direction was no doubt given by the persistent manuring and improving quality of the stinted fells and pastures.

Thus, we have an explanation of:-

- (a) The variable number of acres per stint in 1799.
- (b) The spatial coincidence of both high density population and relatively small areas per stint.
- (c) The fractions of stints which suggest a restrained stint build-up, maximum animal-loading and careful allocation.

Supporting examples are meagre. Ireshope Fell contained 305 stints in 1794 and 310 in 1800 while numbers changed from $202\frac{1}{2}$ to $225\frac{3}{4}$ on Billing.

Pasture²¹ between 1770-1800. Details concerning stinting in Billing Pasture²² suggest a sixteenth century basis when stints were shared equally among the six farms. No further stint additions seem to have occurred subsequently but tenants arrivals there were small and seem not to have exerted undue pressures. In practice, it seems very likely that the occupants of each stinted ground were concerned to prevent both deprivation of would-be farmers and overloading of the common pasture, fell and supporting meadow. At a certain point, the two objectives were irreconcilable and on some pastures and fells that stage may well have been reached.

VI. Land dependence

Nearly all pronouncements, factual or otherwise, on the miner-land connection in the north Pennine orefield are based upon nineteenth century evidence and conclude that, "... most lead miners combined mine work with agricultural labour on their tiny upland farms"²³ although one rare piece of detailed research shows that this was only just true at Allenheads and Coalcleugh in 1861²⁴.

The five aspects of land-holding considered previously point unequivocally to a quest for land which, particularly in the less-inviting Forest, grew in determination after the mid-eighteenth century. Paradoxically, only a very small minority of employed folk were prepared to describe themselves as farmers. After 1797, the detailed baptismal entries for St. John's Chapel disclose an interesting, if imprecise, measure of occupations which requires no further comment (Table 6.8).

The overwhelming swing towards mining employment and the parallel multiplication of farms created, in the writer's view, an unavoidable inter-dependence of the two especially after 1760. As many farms decreased in size

so, too, did agricultural returns per family. It was all the more important, therefore, to have another source of income from mining but that in turn, although more remunerative than previously, was still liable to unexpected reductions. Hence the vital necessity, if outmigration or poor relief were to be avoided, of having an economic alternative in small-scale animal farming. Thus, subtle circular relationships were gradually created which began voluntarily enough but eventually became inevitable and compulsive. Of course, there was always the element of the population from neighbouring dales²⁵ which was ready to come and go as mining fortunes fluctuated but most households up to 1800 were looking for land. How far this was possible and how it was organised are tantalising questions.

To begin with, between the extremes of independent farmers and miners, there were all the complicating economic permutations of the farmer-miner or miner-farmer where one or other form of employment was in some way or other dominant. Undoubtedly, the situation varied with:-

- (a) The individual's amount and quality of farm land and his number of stints.
- (b) The choice between land tenancy and ownership and its effect upon the occupier's net profits.
- (c) The time of year as farm labour needs intensified during lambing and hay-making and as mining and dressing were suspended during severe weather and at weekends.
- (d) Private family arrangements where a division of labour might, for example, see a miner-father working alongside his two sons while mother, daughter and youngest son tended the stock.

- (e) The short term nature of the bargain system and the traditional ease of transference from one activity to another.
- (f) The Blckett-Beaumont's non-provision of grouped dwellings with food-supplying gardens. Private garden plots were available for some but their main arrival seems to have been delayed until the emergence of village farms in the first half of the nineteenth century.

The writer has concluded that each of the three expansion phases between 1660-1800 can be identified with the following changing land supply-demand relationships.

Phase I : 1660-1715

The 1700-14 Tything Books record individually the names of all Forest and Park farmers and the monetary amounts paid to the Rector of Stanhope on their wool, lambs, hay and cattle. Additionally, the names of non-farmers, i. e. those not paying any of the above tithes, are entered as all households contributed a 2d. standard charge on their stack of wood or peat. Thus, it is possible to isolate those families with, apparently, no livestock. The results are shown in Table 6.9 and indicate an overall rise and fall in non-farmers. The mean number of households in this category was 33 (15 per cent) with extremes of 12 (7 per cent) in 1701 and 51 (22 per cent) in 1710. It should be emphasised that a certain proportion of this minority was dependent upon trades outside mining. The tentative conclusion, therefore, is that only a very small number of miners were without some land. Allowing for yearly fluctuations, the percentage of landless miner households was probably very low indeed and of the order of 5 - 15 per cent of all families. During the stirring of population and its steady accumulation before 1700, it would be logical to presume an even

smaller figure. Moreover, a strong reliance upon farming was to be expected in view of relatively small contemporary returns from mining and the, as yet, comparatively gentle pressure upon agricultural resources. It was the time of the farmer-miner.

Phase II : 1760 - 1775

Weight is given to the above conclusions by the position in 1772. It will be recalled that a powerful injection of population took place in the 1760s. Lead was the incentive and it seems reasonable to assume a marked increase in the percentage of families absolutely dependent upon mining. However, the evidence of the Poor Rate Valuations of 1767 and 1772 does not support this assumption. In 1772, 47 of 311 households were restricted to "houses" (without land and stints) and paid very small rents and poor rates to confirm it. Given the data limitations, it is possible that the figure could have been higher but certainly not beyond 60. Therefore, there are good grounds for concluding that only some 16 per cent (49) - 19 per cent (60) of Forest and Park households were without land (cf. a 15 per cent (33) average between 1700 - 1713). Applying the same conditions as before, it is suggested that, again, landless miner families were numerically small in the community and no more than 10 - 15 per cent of all households (cf. 5 - 15 per cent between 1700 - 1713). The deep-rooted tradition of the farmer-miner had not yet been much modified and the capacity of the land to absorb another wave of immigrants had been successfully tested once more.

Phase III : 1785 - 1803

A comparison of farm properties in 1799 and 1803 is made possible by the end-of-century Poor Rate and Land Tax surveys. The former revealed

a minimum of 365 farm holdings in 1799 while the latter, concerned specifically with all households having discrete portions of land, accounted for another minimum of 385 farms in 1803. This number consisted of 285 named occupiers and at least 100 who remained anonymous, concealed, as they were, under the description of (fifty) "others". If the value of "others" is increased from 2 to 2.3, then there were 400 farms, probably more than the actual figure for 1799 but understandably so in view of high lead output and remarkable baptisml activity at the turn of the century. The total of all families in 1803 was surely in excess of the 618 recorded in the 1801 Census and is conservatively estimated at 640. Thus, the calculations are that the landless minority of households had grown quite noticeably from 15 per cent (49 of 332 households) in 1772 to 38 per cent (225 of 590 households) in 1799 and 38 per cent, again (240 of 640 households) in 1803. If the percentage had more than doubled, actual numbers had increased five-fold.

There are indications that population totals and land needs between 1772 - 1803 may have fluctuated more than the above figures suggest. There were, for example, c. 256 and 247 land occupiers in 1788 and 1789 (when each of the 28 and 25 "others" in the Land Tax Accounts was estimated at 2.3) which, although fewer than in 1799, compared fairly closely with the 262 of 1772. However, another Land Tax assessment for 1783 showed a "low" total of 200 farms which occurred after the abnormally poor mining years of 1777 - 80. In short, the peaks and troughs of population arrivals and departures were possibly much more erratic and closer together than surviving data actually reveal and, consequently, land may have been rented and relinquished at a very rapid rate, as it was during the first decade of the eighteenth century.

The early and middle eighteenth century seems to have been a time when land was available to and eagerly grasped by all but 15 per cent of households. As the number of miners multiplied, so farm sizes generally diminished and both mining and farming economies, necessarily and increasingly so, became more interdependent. The final decade of the century, however, inaugurated a new situation which indicated a limit to their mutual reliance. As some 38 per cent of households in 1799 and 1803 had no land at all, it would appear that the existing farming area was no longer able to support an ever-growing population. While it is true that the large-scale enclosure movement after 1815 helped to meet this problem, it is also clear from future developments in the older enclosures that room could still be found in some areas for more farms. Perhaps, therefore, a case can be made that there was always a minority of families - growing numerically as the eighteenth century lengthened - ready to take a chance and disinclined towards farm work. Additionally or alternatively, the practical difficulties and issues of absorbing families on the land as quickly as the influx demanded may have been too great to permit the provision of land for all.

CONCLUSION:

SETTLEMENT CONTROLS AND MODELS 1100 - 1800

This enquiry's introductory premise argued the importance of four factors - nature, economy, tenure and time - as primary influences shaping settlement patterns and processes in upper Weardale. The attempt, however, to maintain and compress a viable settlement theme within a limited number of words often blurred or failed to isolate their respective individual contributions. In everyday practice, of course, these contributions are summed together in the varied permutations we identify as the real world and the separate elements are difficult to isolate. Retrospectively, then, and in summary only, an assessment of each controlling factor may now be considered.

Chapters 2 and 3, it is claimed, demonstrated the closest relationships between the physical qualities of the principal valley floors, their terraces and lowest slopes and the selection of medieval shieling-vaccary sites, the location of head-dyke lines and the meadow-pasture divisions. The early distinction between "core" and "fringe" territories was determined more by the effects of rising height and slope on settlement processes than by the number of farms actually established. Although both zones were to share the processes of "agglomeration" and fell "infiltration" (as defined in Chapter 3), the lower and main valley corridor thrived on "expansion" methods while settlement by "extension" and "transhumance" was concentrated in the high tributaries. The thirteenth century adoption of varied and appropriate colonisation processes was so effective in ~~overcoming powerful natural obstacles that a network of 41 inhabited Forest and~~

Park sites had been securely developed by the early fifteenth century. Most lay between 900 - 1200 feet (275 - 367 metres) on confined alluvial flats where the best available shelter, water supply and soil drainage were used to the full. It is impossible to gauge accurately how much environmental trial and error entered into the pioneer settlers' efforts. The writer's conclusion is that the head dykes were finally laid out boldly, economically and perceptively to integrate with the carefully spaced farmsteads. Afterwards, the physical challenge was renewed during smaller sixteenth and eighteenth century advances on to higher ground. From c.1300, however, that challenge had changed essentially from one of land colonisation to land improvement as the quality of both in-by meadow and pasture increased and, more significantly, as previously enclosed pasture was converted to meadow and open stinted pasture became separated from the adjacent fell. Thus, the relatively modest and irregular ribbons of walled and sub-divided land which persisted to 1800 should not be interpreted as expressions of insuperable physical restraints. A vast amount of open land still reached down to the valley bottoms at altitudes well below the upper limits of enclosure at 1800 ft. (550 m). Clearly, therefore, the eighteenth century head dyke circumscribing the better land could not be explained in terms of physical influences alone. The additional enclosure of some 33 square miles (84 sq. km.) following the 1799 Parliamentary Act demonstrated how quickly some of the highest and poorest parts of Weardale could be brought under more effective occupation once economic pressures demanded and tenorial and administrative machinery allowed.

One aspect of the physical environment, however, which was a permanent encouragement to settlement was the close occurrence of innumerable

galena veins. Almost every valley, large or small was cut by lead fissures inviting exploitation and testing the technological ingenuity of successive generations. Because most workable deposits were more densely distributed in the High Forest, they had the general effect of attracting settlement there at the expense of the Park and yet because there were so many veins and their yields unpredictable, they did remarkably little to influence its precise siting. Very few, if any, dwellings were deliberately placed at or near mine shafts or levels.

Whereas pastoral farming normally provided economic stability throughout the period, it was mining which erratically but unfailingly infused new settlement energy, stimulated employment and attracted people with lively aspirations and fresh ideas. It is apparent from Chapters Two and Three that between 1300 - 1500 the numbers involved in agriculture showed no marked net growth and, no doubt, actually declined, first, during the climatic, epidemic and Scottish difficulties of the fourteenth century and, again, at the end of the fifteenth century when some Weardale farmsteads lay temporarily deserted. Although farms multiplied steadily during the later sixteenth century (Chapter Four) and more than trebled in the eighteenth century (Chapter Six), it has not been possible to equate this progress to either the size or value of agricultural output. It is true that as eighteenth century land prices accelerated, the stinted fell and pastures carried thousands of stock and new farms were supporting families in remote and hitherto unproductive environments but, to emphasise the point, it remains uncertain how far the remarkable mushrooming of homesteads was also accompanied by any real increase in the quantity and quality of animal products. In fact, as mean farm acreages dwindled, it is probable that for the majority of households, monetary income from farming actually decreased. Perhaps the most telling and consistent influence of pastoralism lay in its

encouragement to settlement dispersion, thus achieving the maximum and most convenient use of hay and grazing resources. Such influence is confirmed in the scattered distribution of both the thirteenth century shielings and the new sixteenth century head-dyke farms, the latter also stemming from the innovations of in-by enclosure and individual holdings.

When, then, of the stimulus of lead upon the settlement geography? It is tempting but, in reality, too facile to suggest that clustering was a consequence mainly or entirely of the later lead-mining thrusts. In fact, clustered settlement began in a common meadow and pasture economy shortly after the pioneer dispersion and was, therefore, a familiar feature in upper Weardale long before the lead expansion of the sixteenth century. Moreover, the scale of medieval lead-mining was insufficient to offer much material support to any, let alone many families. It was only a very minor factor in the early grouping of population. More positively, the number and size of late seventeenth century and eighteenth century agglomerations, analysed in Chapter Five, were strongly dependent upon miner immigrants arriving with high expectations of land. Two principal conclusions seem warranted. First, as successive Moor Masters and Blacketts wielded their authority, four post-medieval expansion stages left progressively larger imprints on the landscape. The correlation of ambitious management, improved incentives, population response, settlement growth and extracted ore (in that sequence) was so exact that only the scale of the relationships remained in doubt. It is worth reflecting that the numerical increase in population between 1770 and 1800 more than doubled the 1770 total, itself a product of five centuries of irregular but, by comparison, extremely slow progress. The settlement adjustments were rapid and led to the enlargement of earlier clusters and the emergence of new ones. If pastoralism

encouraged dispersion, lead-mining was eventually decisive in concentrating settlement in 1800 at no fewer than 108 widespread sites.

Secondly, it is suggested that as output expanded, the miners' link with land and farm settlement could no longer be guaranteed. In a highly labour-intensive industry, increasing quantities of lead concentrate should not be seen as higher bing totals, and therefore greater security, for individual miners. The unprecedented annual production figures required more and more workers who were in competition for a virtually unchanged amount of land. In the past that competition and overall demand had not exceeded its supply. After 1700, the position was different. Six out of ten mining households in 1800 clung to their farms ready to accept that reduced acreages and small (but slightly better) incomes from the mines were both unavoidable and closely complementary. The remainder, a growing eighteenth century minority, felt able to risk a "no land" situation. It can, of course, be argued that many landless families had no choice. Either the price of a few acres had risen too steeply or their availability had suddenly disappeared (Chapter Six). The two were not unrelated but the former seemed the greater problem in view of the continuing trend of more in-by farms well into the nineteenth century.

Indirectly, too, it will be concluded below, the effects of lead upon settlement were felt through the tenurial revolution of the eighteenth century. The latter was a powerful reminder of the restraints and freedoms exerted by changing methods of land-holding and their deep involvement in the evolution of Weardale settlement. Up to the sixteenth century, land management was an exercise in planned resource allocation, clearly defined and somewhat rigidly maintained over long periods but, most significantly, decided and supervised from outside. The three consecutive phases of (i) hunting forest, (ii) High Forest

(occupied) - Park (unoccupied), (iii) Park colonisation embodied shifts in land use which slowly heightened tensions and conflicts between an autocratic administration and the day-to-day practices of the tenant, or, more usually, sub-tenant farmers (Chapter One). The irreversible break with the past led to a major replacement of leaseholding by more flexible and acceptable customary freeholds which undoubtedly encouraged a wider distribution and general growth of settlement. In practice, it also meant the substitution of very many local farmer-landlords in place of the increasingly unreal notion of a single absentee. Through their energies and initiative, they enlarged the amount of hay land and revitalised a flagging agriculture. Although these developments also coincided with the first post-medieval advances in mining, it was not until the more vigorous growth of the later seventeenth century and afterwards that lead itself began to dictate tenures and thereby mould settlement. From 1650, when residential owners still virtually monopolised the tenorial scene, tenants increased remarkably, if unevenly until in 1800 they were three times more numerous than their landlords. The latter, too, were inevitably caught up in land competition, never more so than in the many instances of non-residents speculating on the profits of tenant clusters. Thus, it can be concluded that both innovations - incoming miner-tenants and outside proprietors - contributed radically to the size and rate of growth of clustered settlement.

One final tenorial point: after the fifteenth century, the effective and responsible use of the stinted fell, guaranteed in varying proportions to all farmers, provided a reassuring element of continuity. It is no exaggeration to claim that when individual holdings were shrinking and in-by hay was relatively scarce, recourse to upland grazing was vital in facilitating higher densities of population and settlement (Chapter Six). The rigid medieval limits imposed on

fell animals were totally unsuited to subsequent and often exceptional demands for land. All miner-farmers were not suddenly made equal under the stinting system but they were at least given the opportunity of competing.

This investigation has also identified long and short periods when new decisions, attitudes and policies initiated changes in the rate of population, economic and settlement responses. Settlement chronology, in particular, has drawn attention to certain major turning-points, viz. the early thirteenth century introduction of the Park and its separation from contemporary Forest shielings, farm diffusion in the Park after 1410, the "independence" and enclosure movements between 1530-1610, the population and mining surges of 1665-1715, 1760-1772 and 1785-95. As each of the six phases shortened, the amount and, therefore, the rate of settlement adjustment progressively increased. Consequently, for instance, the accommodation of 30 dispersed Forest households over several years in the thirteenth century produced a quite different problem of settlement organisation from that involved in the absorption of another 30 there during a single year at the end of the eighteenth century. The former was concerned primarily with the deliberate and successful spread of population and settlement over a large area and the latter much more with their orderly concentration and the prevention of unnecessary congestion as agglomeration processes accelerated. Eventually and inevitably, the result was that over a relatively short time, the eighteenth century growth of 13 large and 95 small clusters did much to blur or conceal the thirteenth and sixteenth century nodes, lines and areas but, as this study has attempted to show, their underlying influences were never destroyed.

An explanation of medieval settlement processes, incorporating farm ~~siting and chronology, actual areal expansion and land-use type and balance was~~ summarised and presented in model form in Chapter Three. It remains, first,

to extend these conclusions to 1800 and then to make a brief comparison with similar investigations carried out in northern Sweden by Bylund (1960).

I. Upper Weardale time - space - process model 1500 - 1800

The four maps of Fig. 1 represent the generalised state of settlement at century intervals beginning in 1500 and should be considered in relation to the last three chapters of this volume. As in Chapter Three, the evolutionary patterns may be seen in terms of (i) site location, (ii) land enclosed, (iii) meadow-pasture-fell disposition. At the risk of oversimplification, the respective settlement controls and responses are also tabulated briefly.

Viewed together, the 300 years demonstrated that:-

- (i) Settlement influences, on the whole, were stimuli to growth. A suggested chronology is presented alphabetically. Where new settlement sites arise directly from internal kinship factors, the letters of the parent settlement are retained. Where settlement is generated externally by population arrivals, other letters are used.
- (ii) Settlement increased through dispersion either to old or new head dykes or sites intermediate between head dykes and valley-floor clusters. Agglomeration, eventually occurring almost everywhere, was particularly evident at the medieval shielings. The rate of clustering, however, varied considerably with grouping at some sites overtaking that at earlier ones.
- (iii) The rising demand for land was met by expansion, extension and infiltration processes (Chapters Four, Five and Six) operating outside the existing in-by area and by progressive meadow and pasture enclosure and pasture-meadow conversion inside. The overall effect was to reduce both the size of fields and the amount of better pasture and to increase reliance upon stinted grazing.

- (iv) The socio-economic mix - owners, tenants, natives, immigrants, itinerants, craftsmen, miners, farmers, miners-farmers, farmer-miners - became more complicated as time proceeded.

II. Upper Weardale and inner Norrland models compared

The Swedish work of Bylund (1960) in relating various colonisation models to actual settlement chronology and pioneer occupation in the upland Norrland parish of Arvidsjaur not only invites comparison with the present study area but also permits the construction of a final Weardale model in which time, space and process are all brought together over the entire period.

A succession of six linked models, A - F, was employed by Bylund to demonstrate the essential processes of upland penetration spread over an area of about 5,000 square miles (12,800 sq. km.) largely above 1000 ft. (306 m.) and rising to 2,300 ft. (703 m.). With the exception of the notation, slightly modified to coincide with that used in the writer's model, the exact "F" version, Bylund's "refined model of settlement development" is reproduced in Fig. 2a. In both models (Figs. 2a and 2b), each circle (or circle sector) denotes a single settlement and its land. The chronology includes, (i) the broad settlement stage (shown by shaded and numbered circles), (ii) the direction and sequence of development (shown by arrows).

The principal Bylund elements are summarised below (Fig. 2a):-

- (i) The starting-point, the clearance of one pioneer settlement P, is an expression of "a handful of persons who appeared as pioneers in the wilderness."
- (ii) Three subsequent and consecutive stages of radial diffusion are symbolised by the remaining circles. Eventually, as methods of land

improvement and yields of hay and other crops advanced, the necessary amount of settlers' land was reduced, thus explaining the smaller circles of the final stage.

- (iii) Settlement motivation stemmed from the "mother settlements" which sent out their (two) sons, a process termed "clone-colonisation". Thus, the four settlements of stage one created eight others and they, in turn, a further sixteen. During this latter (third) stage, it was also envisaged that the pioneer farm and each stage one and stage two farm stimulated two more making a grand total of 39.
- (iv) Each circle was conveniently located at the shortest distance from the mother settlement and was not in competition for land with its other contemporary but quite separate circles.
- (v) The completed farm distribution shows that they do not adjoin each other in chronological order but intermingle "both in the model and in reality." The pioneer and three succeeding growth stages correspond with modest early progress sometime before 1775 followed by three further colonial phases during the eighteenth and nineteenth centuries.

As Bylund's individual settlements are not described in any detail, their size and possible clustered form cannot be compared with Weardale examples shown in Fig. 2b. Also, it is not certain to what extent each Bylund circle conceals other farms within it but outside the central settlement. By virtue of the physical contact between circles, his model suggests that outward growth was primarily achieved in well-ordered "expansion" stages whose settlement territories were contiguous with but independent from those of their mother settlements.

It would also appear from Figure 2 that the assumptions and realities of settlement processes differ appreciably in the two parishes. The overall impression is that the colonisation of upper Weardale was both different and altogether more complex. The components of the Weardale model are listed below. In most respects, they reveal significant contrasts with the Norrland equivalent.

- (i) The circles and sectors* of all ages - the symbolic method of showing farm territories - vary considerably in number and size: generally, the earlier the settlement phase, the fewer the circles and sectors and the larger their area.
- (ii) The relative position of circles is extremely flexible and, in practice, allows for a great number of possibilities, illustrations of the intricacy and diversity of process.
 - (a) Almost all the territories of the pioneer and first stage (1250-1300) overlap to a greater or lesser degree. The overlaps, ranging in number between one and three, signify the early sharing of the common farm area.
 - (b) Stage 2 circles represent sixteenth century expansion and certain of these also overlap with circles of Stage 1. In these instances, the control of the overlapping area was transferred from the older to the younger farm.
 - (c) Stage 2 advances by some Stage 1 farms are indicated by sectors enlarged beyond the original circles.

* A sector represents the effects of settlement clustering and symbolises the sub-division of an existing farm whose initial form is represented by the entire circle.

- (d) A very small minority of circles remain completely detached. All except one exemplify colonisation by "extension" during the thirteenth and eighteenth centuries. The exception, in the west of the territory, represents an agisted transhumance pasture not permanently occupied until the sixteenth century (Stage 2).
- (e) A larger number, in Bylund fashion, touch (but do not intersect) larger and earlier circles. They show the incidence of growth by "expansion" mainly during Stage 4.
- (f) A few circles or sectors are incomplete in areas where earlier farm territories have left less than the optimum space for a new farm, an indication of excessive population pressures in certain areas.
- (g) Most circles or sectors of Stages 3 (1665 - 1715), 4 (1760 - 1772), 5 (1785 - 95) are small and totally enclosed within older circles, amounts of whose land have been ceded to create them. Three possible locations are shown - at marginal (head dyke), intermediate (infill) and parent farm (cluster) sites. Their shrinking size is a reminder of the small quantity of land available.
- (h) None of the land is considered empty or waste. Wherever possible, circles have direct physical contact with the surrounding common grazing land and are so distributed that narrow access corridors are conveniently preserved to as many farms as possible. Some Stage 3, 4 and 5 farms, it will be noted, are less well situated but retain an entrance indirectly.

(iii) Settlement diffusion cannot be explained completely in terms of "clone-colonisation" but more usually as a result of the arrival of families from outside and shown by appropriate arrows. The first stage of occupation achieved more than could be reasonably expected by the natural shedding of sons from successive mother settlements. Indeed, cattle-farming was probably first established by introduced teams of stockmen. Also, the blossoming of small farms during Stages 3, 4 and 5 is a reliable measure of the prolific migration to upper Weardale of families from a wider catchment. Only during the sixteenth century (Stage 2) was the kinship influence dominant as a factor in the widening spread of settlement.

Unlike the model presented in Fig.1, Fig.2b is only concerned with the growth of farm settlement. It does not, therefore, attempt to show that increasing fraction of the population which had no land. The intricate pattern of circles and sectors reflects the complexity of land fragmentation. Two particular cases, A and B in Fig.2b, are analysed briefly below.

Example A

The first farm was introduced during Stage 2. It depended entirely upon the reclamation of a sizeable area of fell land outside the territory of an adjoining Stage 1 farm. During Stage 2, another farm and dwelling were established at the head dyke and within the land of the first farm. Further sub-division of the original farm also occurred during Stage 3 which initiated an element of simple clustering. Stage 4 saw the introduction of a new head dyke farm and the subdivision of both the larger and smaller farms of Stage 2 which had now grown into clusters of three and two farm dwellings respectively.

The clustering process continued into Stage 5 when three more farm dwellings were added to the main cluster. Finally, two new Stage 5 farms were added - one at an infill site - to give 11 farming households sharing the original land of the sixteenth century tenement. Five of these farms, it will be noticed, were generated by the demand from incoming miners.

Example B

This example is a special case. The large circle of Stage 1 represents a detached medieval enclosure used initially as an agisted transhumance pasture. Its shieling remained as a seasonal dwelling until the sixteenth century (Stage 2) when it was replaced by the first vaccary. The latter occupied only a part of this pasture, the remainder surviving as agisted grazing until Stage 4 when five new farms appeared, three of which were fragmented during Stage 5. Two other important features are (i) the need to extend the thirteenth century agisted enclosure as the number of farms increased, (ii) the incomplete circles conveying the below optimum size of some farms.

The writer's model in its entirety suggests that pioneer and first stage settlement processes in Weardale required occupational co-operation, land-sharing and settlement integration. Bylund's model, in contrast, emphasises an independent approach to colonisation and the deliberate separation of farms throughout. Moreover, Fig. 2a points to a continuing low concentration of population in the zone of early Swedish settlement whereas the Weardale "core", because of the on-going subdivision of the pioneer and primary forms (Stage 1), becomes densely inhabited. Its general compactness and close farm spacing can be compared with the looser and more open settlement structure of the margins which is the reverse of the pattern revealed in the Bylund diagram. An important distinction

lies in the two environments: the Swedish model is conceived in a topography where (in all probability for Bylund is not wholly clear) limited patches of land suitable for arable are found scattered within a rock-strewn terrain of utmost difficulty. Unfortunately, it is not possible to correlate the qualities of the Norrland environment and settlement pattern from the evidence presented.

There is one final point of total agreement. Bylund concludes, "It is obvious that the very complicated pattern of the spread of settlement does not in every case admit of explanation by physico - geographical conditions alone however important these may otherwise be" (1960, p.231). In upper Weardale, it seems a justifiable assertion that after the thirteenth century physical contest was won and the settlement framework laid out, the evolution of clustered and dispersed farmsteads and other dwellings was determined primarily by the fluctuating progress and interplay of farming and mining on the one hand and the tenurial obstacles and opportunities which did so much to control settlement up to 1700 on the other. During the eighteenth century, economic developments unfolded so vigorously and rapidly that they became the strongest influence stimulating both a steady growth of landowners, within and without, and an overwhelming emergence of tenants. So great was the settlement transformation that an early nineteenth century inspection of the landscape could scarcely have detected recognisable processes operating systematically over previous decades let alone almost six centuries. This enquiry has tried to reveal that through an analysis of the available documentation, supported by field investigations, those essential processes and resultant patterns of rural settlement in the Forest and Park of Weardale can be very largely reconstructed.

PRINCIPAL PRIMARY SOURCES

A. DEPARTMENT OF PALAEOGRAPHY AND DIPLOMATIC, SOUTH ROAD, UNIVERSITY OF DURHAM.

Records of the Palatinate of Durham and Bishopric Estates deposited by the Church Commission

1. Financial and Audit Records to 1649
 - (i) Coroner's Accounts (1444 - 1542) and Collector's
Accounts (1411-1546). Darlington Ward.
 - (ii) Surveyor 's and Clerk's of Lead Mines Accounts (1425-1529).
 - (iii) Master Forester's Accounts (1438-1536)
2. Church Commission Enrolment Books of Leases and Notitia Books

These books concern the leasehold property of the Bishop of Durham and give the history of leases, lessees, fines and other relevant particulars including some plans from as early as the sixteenth century and continuing to the mid-nineteenth century.
3. List of Miscellaneous Books among the Halmote Court Records
 - (i) Coroner's Rental for all wards, 1606.
 - (ii) Leasehold Rental Registers, 1809-43.
 - (iii) Notitia Book of Darlington Ward containing leasehold records for the eighteenth and early nineteenth centuries.
4. Halmote Court Subsidiary Manorial Documents
 - (i) Leasehold Rentals for the High Forest and Park, 1645-1766
5. List of Miscellanea among the Halmote Court Records
 - (i) Various documents relating to leasehold lands and rents
in the early eighteenth century.
6. Halmote Court Rentals (customary and leasehold) for Weardale,
1625-1801.

7. The Weardale Chest. Very many items between 1-149. The Chest, safely stored in Weardale from the seventeenth century until 1953, contains a large collection of documents relating to the Forest of Weardale and Stanhope Park, in the parish of Stanhope, in the sixteenth and seventeenth centuries.
8. Survey (copy) of the Manor of Wolsingham made by order of Parliament in March 1647 together with the Forest of Weardale and their appendances. Also included in a copy of a supplement to the Survey made in 1652.
9. Bishop Cosin's Survey of the Bishopric of Durham, 1662: a schedule of leases with later amendations.
10. Copy of an Act to enable the Bishop of Durham to grant leases for three lives of lead mines in the parishes of Wolsingham and Stanhope 1667.
11. Correspondence relating to the making of the Weardale Inclosure Bill and earlier related papers.
12. An Act for dividing ... stinted moors, stinted pastures ... within the park and forest of Weardale ... 1799.
13. Inclosure Award, Maps and Documents. Allotments on the division of commons in the Park and Forest of Weardale, 1799-1815.
14. Tithe Appoetionment and Plans for the Forest and Park Quarters, Stanhope, 1842-43.

B. DEPARTMENT OF PALAEOGRAPHY AND DIPLOMATIC, PRIOR'S KITCHEN, UNIVERSITY OF DURHAM.

There are very few documents among the Dean and Chapter Muniments which relate directly to upper Weardale. Those that do are primarily concerned with the Priory and Deanery farm at Burnhope.

Bursar's, Instaurer's and Almoner's Rolls, Miscellaneous Farm Accounts, 1278-1388, at Burnhope and East Black Dene.

Receiver's Books, 1541-1800, which include the tenants and their rents at Burnhope.

Plan of lands at Burnhope in Weardale in 1798, including land valuations for 1798 and 1812.

C. THE UNIVERSITY LIBRARY, PALACE GREEN, UNIVERSITY OF DURHAM

1. The Registers of Richard Kellaw, Bishop of Durham, 1311-16.

Volumes I-IV (Registrum Palatinum Dunelmense), incorporating part of Bishop Richard de Bury's Register, 1333-1345.

2. Mickleton-Spearman Manuscripts, Vol. 11. which give an important insight into the appointment of Weardale officials and the complexities of changing sixteenth and seventeenth land tenure.
3. Calendar of Liberate Rolls, Henry III, 1226-40
4. Calendar of Close Rolls, Henry III, 1227-31
5. Calendar of Patent Rolls, Elizabeth I, 1569-72

D. THE COUNTY RECORD OFFICE, COUNTY HALL, DURHAM.

1. The Rector of Stanhope v. Moor Master dispute 1666-67
2. Easter Reckoning (Tithing) Books, Stanhope Parish, 1700-14.
3. Forest and Park Poor Rate Valuation Surveys, 1767 and 1772.
4. Forest and Park Land Tax Accounts, 1783-1803.

E. NORTHUMBERLAND RECORD OFFICE, GOSFORTH, NEWCASTLE UPON TYNE.

1. The Bell Correspondence on Weardale Enclosure, 1799-1815.
2. The Allendale Manuscripts, Part II: Blakett-Beaumont Lead-mining Records.
 - (i) Journals, 1727-1848. 9 volumes.
 - (ii) Bargain Books for Weardale mines, 1720-1800.
 - (iii) Quarterly Accounts for the Killhope-mines, 1763-75, 1 volume.
 - (iv) Quarterly Accounts for the Wolfcleugh mines, 1765-77, 1 volume.

F. CITY REFERENCE LIBRARY, SAVILLE PLACE, NEWCASTLE UPON TYNE

1. Stanhope Parish Registers. Transcriptions by H. M. Wood and W. M. Egglestone, 1899. Volumes 1 - 7. (Baptisms, Burials, Marriages).

G. THE VESTRY, ST. THOMAS' CHURCH, STANHOPE, CO. DURHAM.

1. Stanhope Parish Registers. Originals from 1595. Now transferred and stored at the Durham County Record Office.

H. PRIVATE SOURCES

1. A small collection of Stint Bills extending from 1794-1847.
Mr. C. Birkbeck, Earnwell Farm, Ireshopeburn, Co. Durham.

2. Leasehold indenture for a farm at Burnhope, made in 1776.
Mr. B. Monkhouse, Buckler Dale, Frosterley, Co. Durham.

3. Poor Rate Valuation Survey for Stanhope Parish, 1799.

Stint Pocket Book, 1799.

Eighteenth century transcription of 1511 Bp. Ruthall Leases and 1595

Bp. Matthew Survey. Mrs. J. Nutter, Brotherlee, Westgate, Co. Durham.

ABBREVIATIONS USED IN "REFERENCES AND NOTES"

B. B.	Blackett-Beaumont Records.
C. C.	Church Commission.
C. R. L.	City Reference Library (Newcastle).
C. R. O.	County Record Office.
D. P. D.	Department of Palaeography and Diplomatic.
D. U. L.	Durham University Library.
M. S.	Mickleton and Spearman Manuscripts.
N. R. O.	Northumberland Record Office.
P. K.	Prior's Kitchen.
S. S.	Surtees Society Publications.
W. C.	Weardale Chest.

REFERENCES AND NOTES

CHAPTER ONE

1. D. U. L. , John Manwood, "A Treatise on the Forest Laws" 1615, p. 32.
2. D. P. D. , Anon. , "A General View of the Tenures in the Palatinate of Durham" 1887.
3. Ibid. , p. 5 (and "Historia Ecclesiae Dunelmensis", Simeon of Durham).
4. Ibid. , p. 12.
5. D. P. D. , R. Surtees, "The History and Antiquities of the County Palatine of Durham", Vol. I, pp. cxxv-cxxvi.
6. After the death of Bishop Pudsey in 1194, there were four pronounced intervals between the elections of the next four Bishops:

Bishop Philip de Pictavia, 1197-1208.

Bishop Richard de Marisco, 1217-1226.

Bishop Richard Poor, 1229-1237.

Bishop Nicholas de Farnham, 1241-1249.

Mrs. J. L. Drury has investigated and confirmed the resumption of episcopal rights in the forest in the later thirteenth century. J. L. Drury, "Durham Palatinate Forest Law and Administration Specially in Weardale up to 1440", *Archaeologia Aeliana*, 5 vi, 1978, pp. 91 and 93.

7. W. Greenwell, "The Boldon Book", S. S. , Vol. 25, p. 62 and p. 64.

An elaborate division of labour is revealed which required,

- (i) "... all the (20) villeins (of Stanhope to) construct a kitchen, larder and dog-kennel for the great hunts and they find litter for the hall, chapel and chamber and they carry all the bishop's victuals from Wolsingham to the lodges. "

7. (ii) "All the (56) villeins of Aucklandshire (Auckland, West Auckland, Escombe and Newton) to build the bishop's hall in the forest, 60 feet in length and 16 feet in breadth within the posts, with a buttery and a larder and a chamber and a privy. Also, they build a chapel 40 feet in length and 15 feet in width . . . and they make their part of the hedge about the lodges."
8. Although it is possible that the 1069-70 "wasting of the north" removed the obvious evidence of any village sites west of Stanhope, it is unlikely that this did, in fact, occur. As mentioned in the Introduction, the writer has found no village desertions, no superimpositions of early farms on existing earthworks (with a possible exception at Billing Shield in the Park) nor even substantial earthen banks whose lines provided the foundations for later walls. Existing but infrequent banks and terraces are below 1100 ft. (339 m) and do not accord with present field boundaries. The fact that some are outside the medieval limits of enclosure or inside the fifteenth century Park frith suggests a prehistoric explanation.
9. "The Boldon Book", *op. cit.*, p. 64.
Reliable individuals - Roger of Bradley, Robert of Roanges, Belnuf of the Peke et al - were each required to find one man at critical times in the forest. These recruits can be seen as the forerunners of the four foresters and two parkers of the thirteenth century.
10. In alphabetical order, the long list includes contributions from Binchester, Birtley, Brafferton, Burdon, Butterwick, Carlton, Cornsay, Edmundbyres, Escombe, Great Unsworth, Hedley, Herrington, Hulton, Iveston, Lanchester, Little Unsworth, Lutrington, Marley, Plawsworth, Sheraton, Tribley, Twizell, Urpath and Washington.

Altogether there are eight references to "the forest" and even more to the

"great hunt" (magna caza).

11. G. K. Whitehead, "The deer of Great Britain and Ireland" 1964, Ch. XII, pp. 214-215. J. G. Millais (unlocated) is referred to as the source of this information.
12. Ibid. , Ch. XVI, p. 328. "From Sherwood Forest a consignment of 10 live fallow bucks and 20 live does was made to the Bishop of Durham in January 1284." It is not clear whether they were destined for the forest (or park) of Weardale but it is a firm indication of the priority attached to venison and the hunt.
13. D. U. L. , Calendar of Close Rolls, Henry III, 1227-31. 1227-31, p. 10. Luke, Dean of St. Martins was authorised to take dead wood from Weardale forest to the value of 100 marks in compensation for corn land taken from him by Bishop Richard Poor. 1234-37, p. 454. The king gave William de Vesci four deer from the forest of Weardale. 1237-42, p. 82. John, son of Philip, is permitted to have seven deer from the forest of Weardale as a gift of the king.
14. D. U. L. , Mickleton and Spearman MSS, Vol. 11, f. 157. S.S. , Vol. 95, Memorials of St. Giles, p. 199.
15. See page 15 below.
16. J. L. Drury, op. cit. , pp. 92-93.

17. The area of the Park Quarter exceeds that of the Park. Analysis of mid-nineteenth century Park Quarter land boundaries reveals the position of the Park wall which had survived as a dominant property divide.

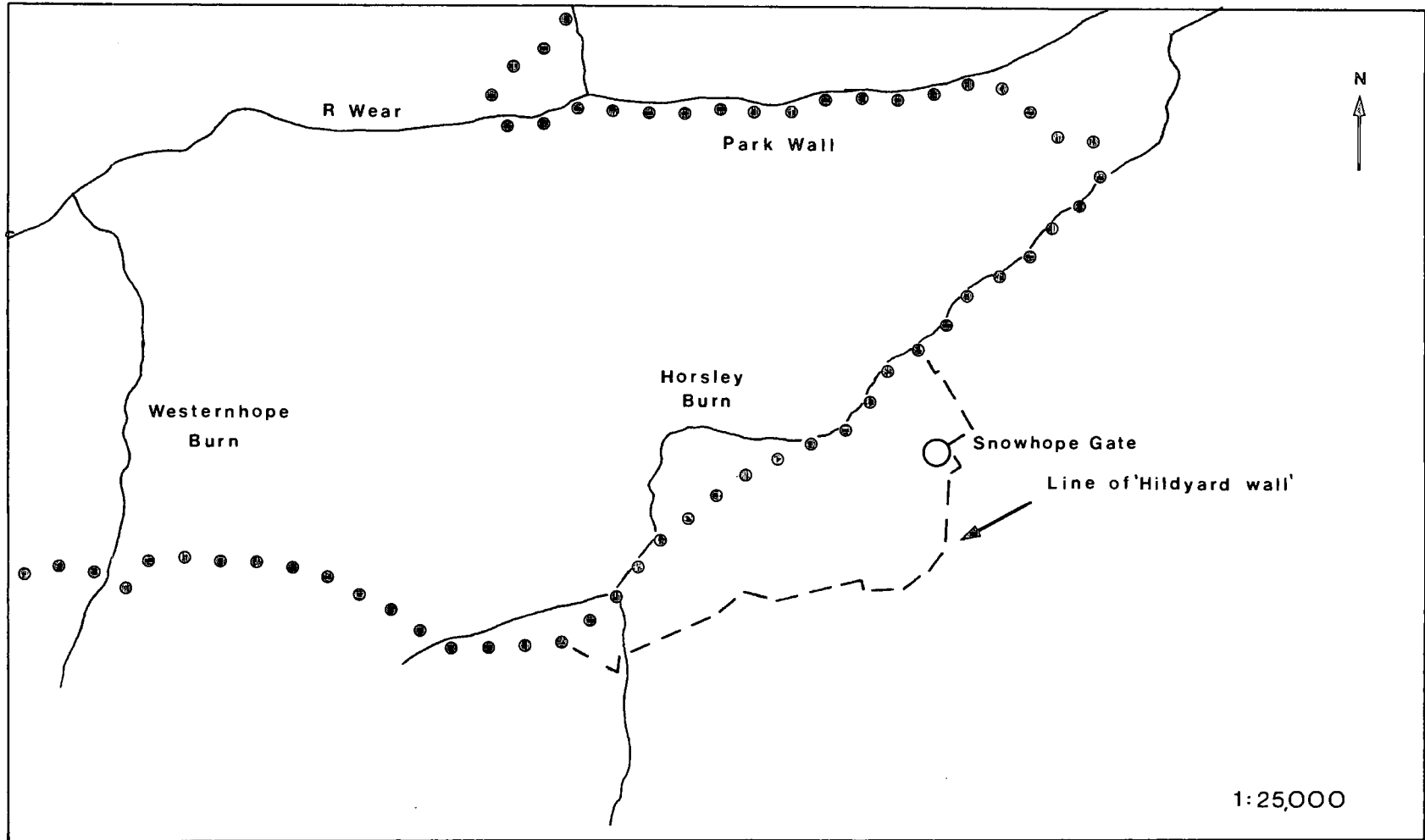
18. E. J. Hildyard, F.S.A., "Archaeology of Weardale: Summary of Research 1945. Revised and amplified 1957."

Hildyard, a Weardale landowner and amateur archaeologist, records (p. 35) that "its (Park wall's) course for the next mile and quarter (east of Horsley Burn) to Snape (Snowhope) Gate (farm) is not known to me for certain though I suspect it forms the northern boundary wall of Bollihope Moor. I do remember that this is an unusually high wall to climb. Snape Gate seems to be the obvious south gate (of the Park) . . . Running down to the Horsley Burn below Snape Gate, it follows the southern bank of the stream for $\frac{3}{4}$ mile in a north - east direction until it turns sharply at right angles north - west to join the back road to Stanhope . . ."

An alternative line of the wall is shown on the accompanying sketch map. It will be seen that it does not form the northern boundary wall of Bollihope Moor nor is Snape Gate "the obvious southern gate." More significantly, Snowhope Close, Easter House and Snape Gate farms belong to Newlandside Quarter and their copyhold rents are never included with those of the customary freehold and leasehold farms known to be inside the Park Quarter. In fact, Hildyard seems to have been unaware of any of the "Quarter" boundary lines which, it can be added, are also omitted from the various editions of the Ordnance Survey maps.

The writer's choice of the wall's position is the property boundary which short circuits the long winding section east of the upper Horsley Burn and

177.



The south-eastern Park wall

proceeds along its eastern bank to link with the Hildyard wall.

One further minor amendment in the vicinity of Eastgate completes this revision.

19. D. U. L. , "Registrum Palatinum Dunelmense", Vol. II, 1313, p.1225.

"An indenture between the Bishop of Durham and the Master and brethren of the hospital of Gretham, relative to the place called Swynhopelawe, in the forest of Werdale."

20. Ibid. , Vol. III, pp.41-46, 61-67.

21. Calendar of Liberate Rolls, Henry III, Vol. 1, 1226-40, p. 369.

The sums were accounted to William de Londonia. The term, "high forest", normally refers to the middle and western parts of the hunting forest and implies a separation from the "park".

22. Ibid. , Vol. 2, 1240-45, p.58. Accounted to Nicholas de Molis during his keepership of the Bishopric of Durham - '68/8d. in repairing the buildings and enclosing the park of Gateshead.

23. Mickleton and Spearman MSS. , Vol.11, ff.162-163.

The effective end of appointments came in the early eighteenth century. George Cox was Master Forester in 1707 during the time of Bishop Nathaniel Crewe. He appears to have been the final holder of the office.

24. R. P. D. , Vol. I, 1.114.

25. Ibid. , Vol. III, p.363.

26. Mickleton and Spearman MSS. , Vol.11, f.165.

27. D. P. D. , Church Commission 189722, A mixed list of rents, 1476-79.

Ibid. , C. C.190031, Master Forester's Account, 1485-86.

Ibid. , C. C.190040, Master Forester's Account, 1490-95.

28. Mickleton and Spearman MSS. , Vol.11, f.181.

The point is clearly stated that in 1621, "which Parke now is and always

hath been replenished with fallow deer and the said forrest with redd deer. "

29. D. and N. Chapman, "Fallow Deer", Chapter XI, pp.173-193.

The writer is grateful to Mr. W.N. Peart, Wearhead, for the loan of the above book and also for his own authoritative comments on the habits of British deer.

30. G. K. Whitehead, "The deer of Great Britain and Ireland", 1964, Ch. XVI, p. 328.

31. In the Hatfield Survey, there is no mention of the perpetuation of forest service at Boldon, Binchester, Cornsay, Edmundbyres, Fronterley (i. e. Rogerley and Peakfield), Great Usworth, Hedley, Heighington, Lanchester, Middridge, Sheraton, Thickey, Urpath and Wolsingham (i. e. Bradley).

Durham City Reference Library, W. M. Egglestone, "Stanhope and its Neighbourhood", 1882, pp.9-10 (section titled, "The Forest Hunt"). Interestingly, Eggleston, in an unacknowledged quotation, shows that hunting in some form continued into the fourteenth century. "... wine and beer seem to have been plentiful and baked bread too, for at a later period (of the hunt) (1337-38), we find the bishop's steward accounting for 'baked bread for the use of Master John de Wytcherch and those along with him hunting in Weardale'."

32. R. P. D. , Vol. III, 1343, p. 363.

"A grant to William Beliers of the Keepership of the Park of Stanhope. "

33. Ibid. , Vol. II, 1313, pp.1242-43.

"We have granted to William (son of Walter de Hessewell) and his heirs that they may keep their own pigs in our forests and woods of Weardale and elsewhere, exempt from pannage, with the exception of Parks belonging to us and our successors. "

34. Ibid. , Vol.I, 1314, p. 506.

"Trespass in the Park". Nicholas de Crayk was pardoned "for all his trespasses in our parks of Stanhope and elsewhere . . . recognising his guilt and humbly begging for forgiveness; we instruct that you do not in any account presume to inflict any damage on his person or property by reason of the said trespasses or harm him in any way. "

35. John Manwood, "A Treatise on the Forest Laws" 1615, p. 97. A term used and defined by Manwood: "A man with a messuage unto which messuage the common is appurtenant. " It is granted to those "who are inhabitants within a forest . . . and can claim on account of long possession. "

36. D. P. D. , C.C.190030, Master Forester's Accounts, 1438-39.

37. John Manwood, op. cit. , p. 96-106.

38. D. P. D. , "The Rolls of Thomas Langley", Vol.1, p. 58.

39. John Manwood, op. cit. , p. 80.

40. D. U. L. , Surtees Society, Vol. 99, "Abbey of Durham Account Rolls", p. 221. 1402-03. Expense pro Instauro.

41. Surtees Society, Vol. 162, "Records of Antony Bek 1283-1311", Item 163, pp. 173-174.

A grant by patent of land by Hunwick to Roger Pychard and his successors.

42. John Manwood, op. cit. , p. 81.

"This second agistment continues from Holyrood day (September 14) to 40 days after Michaelmas which is about the feast of St. Martin (November 11). "

43. R. P. D. , Vol. II, 1313, pp. 1242-1243.
Part of a charter of the bishop to William, son of Walter de Hessewell.
44. "Carta Regis Stephani de Mineraria in Werdale" printed in R. Surtees, "History and Antiquities of the County Palatine of Durham", Vol. 1, p. cxxvi.
The key part of this Charter (1154) is, "I bequeath to my nephew, Hugh Pudsey, Bishop of Durham, the minerals of Weardale to be worked as he wishes. "
45. D. P. D. , G. T. Lapsley, "The County Palatine of Durham" 1900, p. 283.
It is difficult to translate late twelfth century costs and profits into actual tonnages. It is, however, possible for the fifteenth century (Chapter Five) and, if the two are comparable, an annual total of 50-60 tons in 1197 can be argued.
46. D. U. L. , J. L. Drury, "Early settlement in Stanhope Park, Weardale c. 1406-79", *Archaeologia Aeliana*, 5 iv 1976, p. 142.
47. Mickleton and Spearman MSS, Vol. II, f. 157.
Thomas, Bishop of Durham, bequeathed and gave to the Prior and Convent of Durham, "(inter alia) instaurum quod iste Epus habuit in Werdale, quod tunc ut estimatum fuit bene valebat 400 marcas et amplius. "
48. J. L. Drury, op. cit. , p. 142.
49. The extent of Master Foresters' Accounts of the fifteenth and sixteenth centuries consistently confirm the Park rent as £66 13s. 4d. (100 marks).
50. D. P. D. , "Weardale Chest", Item 42: "Bishop Matthew's Survey of Lands in Weardale 1595," Ralph Trotter's deposition, article 21.
51. J. L. Drury, "~~Durham Palatinate Forest Law and Administration in Weardale~~", *Archaeologia Aeliana*, 5 vi, 1978, p. 99. The fifteenth century decline of the Forest Court in Weardale as a protector of vert

and venison and the inability of the Wolsingham Halmote Court to cope with problems there have been pointed out by Drury. Both may be seen as preludes to the revised role of the Forest Court during the sixteenth century.

52. New College Library, J. L. Low, "Diocesan Histories: Durham" 1881. p. 205. Bishop Ruthall (1509-22) was described as "immensely wealthy and his riches proved his ruin."
- p. 206. Cardinal Wolsey (1523-28) held the See in conjunction with York and "during this time he never visited the diocese." "It might seem (p. 211) as if he wished to show that bishops were not needed at all."
- pp. 213-227. Bishop Cuthbert Tunstall (1530-59) spent much time in opposing the divorce and policies of Henry VIII and eventually found himself in the Tower between 1550-53.
53. The lessee-sub-tenant relationship is a matter of great importance between 1300-1500 and its contribution to the settlement geography must be deferred to Chapter Two.
54. The fourteenth - seventeenth century appointments of foresters, pallisers, receivers, bailiffs, pinders and court criers are accumulated in Mickleton-Spearman MSS. Vol. 11, ff. 165-168. Late sixteenth century officials are contained in the various depositions of the 1595 Matthew Survey (Item 42), lodged in the Weardale Chest. Examples include,
- (i) George Emerson of Eastgate - palliser, bailiff and receiver during the time of Bishop Pilkington (1561-76) f. 167.
- (ii) ~~"And with overpluse of horses dayly pastured in the said frith~~ (by the keepers) to the number sometimes of 20 and 24 and 16 and 12 continually where there ought 3 or 4 to go usually in the said frith."

Item 42, Deposition of the Jury.

55. Mickleton and Spearman MSS. 11, f. 190. The Particular Receiver "was constituted and made by the Bishops of Durham . . . by letters patent under the great seal of the county palatine of Durham in like manner as other officers were made." The Receiver had an annual fee of 40/- annum and 30/4d. more as one of the keepers of the forest. He was also granted some meadow within the forest. From being an "imported" official in the mid-sixteenth century, the Receiver's office passed to local people who were better able to combine the work of rent collector and forester.
56. Ibid. , f. 185. The venue was the Chapel of St. John in the present village of St. John's Chapel. This building and not that of the Forest Court at Westgate had become the outward but declining symbol of ecclesiastical authority.
57. Ibid. , f. 190.
58. Weardale Chest, Item 47(iv). There are suggestions from the Forest Court proceedings of 1607 that attendance at the Court was falling away and was no longer treated as obligatory. Mickleton-Spearman, f. 186. After the purchase of property, new tenants were properly admitted as customary tenants at the next Forest Court. Some break-down in Court meetings is clearly implied by the statement that the purchase was still valid "in case no court was kept for the said Park and Forest for a long time after and until such court of courts were held."
59. The normally biannual courts met as the Court of St. Helen (May 3) and the Court of St. Michael (September 29).

60. Mickleton-Spearman, Ibid. , f.163.
Weardale Chest, Item 42, Deposition of George Emerson, Eastgate,
Bailiff, Article 18.
The first source records the appointment of Bishop Pilkington's Escheator,
William Fletewode. as Steward of the Court of Swanimote in 1561.
The second one confirms this and includes the names of seven others.
Dr. Hindmers precedes Fletewode in what seems to be a chronological
list and he may therefore be the first appointee to this new office.
61. Mickleton-Spearman, Ibid. , f.181.
62. Weardale Chest, Item 1. A schedule of Bishop Thomas Ruthall's
leases in 1511 including a long preamble of the covenants of leasehold
tenure.
Also in Mickleton-Spearman, f.181.
63. Ibid. , f.181.
64. Ibid.
65. Some leasehold agreements did survive, however, - into the nineteenth
century - and will be considered at the end of the chapter.
66. Mickleton-Spearman, Ibid. , f.185.
67. There are several documents which outline the conditions of
customary tenure. All agree very closely. The principal sources used
here are the Weardale Chest, Items 42 and 44 and the Mickleton-Spearman MSS,
Vol.11, f.185.
68. Weardale Chest, Item 42, Deposition of Jury.
Mickleton-Spearman, Ibid. , f.170.
69. Ibid. , f.188.

70. Weardale Chest, Item 42, Deposition of Robert Peart of Shallowford,
Article 26. The saga of Pinfold House indicates the strong feelings
and determination of the resident tenant who began a suit in London
and died on the return journey. His heirs continued legal proceedings
and were eventually successful.

CHAPTER TWO

1. It seems probable that this movement into the higher land produced the now relict arable fields above 1000 feet (306 m) between the villages of Frosterley and Stanhope. References to "terrae vastae" there in the Hatfield Survey suggest that some of these improvements were already abandoned before the end of the fourteenth century, maybe as a result of earlier plague and climatic difficulties. Evocative names, "Newlandside" and "Bishopley" may well correspond with the medieval settlement of the High Forest, the framework of which, it is claimed, was established by c. 1300.
2. The two tenements are recorded in the following form:-
 - (i) Liberi Tenentes. "Magister Hospitalis de Gretham ten. j vaccariam, Swynhoplaw, red. p. a. 2s." S.S., Vol. 32, p. 69.
 - (ii) Terrae Scaccarii. "Johannes Huntrodes ten. j mess. et xviii acr. 'terrae, voc. Blakden, red. p. a. 6s." Ibid., p. 70.

The almost total omission of Forest and Park lands from the Hatfield Survey is somewhat puzzling. Holdings under "Stanhope" are categorised variously as freehold, bond, cottagers' and exchequer lands. It is possible that the Forest and Park, under the jurisdiction of the Master Forester, was already safely accounted for.

3. Burnhope in Weardale.
 - (i) P. K., Rotuli Bursariorum, 1278, Dean and Chapter Muniments. Also in Abbey of Durham Account Rolls, Vol. 2, S.S., Vol. 100, pp. 485=486.
 - (ii) P. K., Rotuli Elemosinariorum, 1338, Dean and Chapter Muniments.

Also in Abbey of Durham Account Rolls, Vol. 1, p. 200,

S. S. , Vol. 99, p. 200.

(iii) P. K. , Compotus Instaur. , 1387-88, Dean and Chapter Muniments.

Also in Abbey of Durham Account Rolls, Vol. 2, S. S. , Vol.100, p. 314.

4. An account of Peter de Midrige, reeve of Manor of Auckland, 1337-38 which records the admission of John Hunter to 7 acres of meadow at Smalesburn. S. S. , Vol. 32, app. p. 277.

5. D. P. D. A lease of all three tenements to "Dame Alice Nevill of Brancepeth" dated the eve of St. Helen, 1373. Weardale Chest, part of item 1.

6. P. K. , Compotus Instaur. , 1387-88. Dean and Chapter Muniments. References to farms at Westgate and East Black Dene occur under two accounts:-

(i) Compotus Ade de Fourneys, Berc. apude le Westgate.

(ii) Compotus Thome Johnson, Vaccarii apud Estirbladenden in Wardall.

As neither farm appears in later monastic records, it is possible that both were either held by the Durham Priory temporarily or that produce was being sold to the monastic community on an occasional basis.

7. The 1278 references to Burnhope are given in full below:-

(i) "In liberacione custod. boviculorum de Werdale a die Sci. Dionisii usque Dominicam proximam ante festum Sci. Joh. Bapt. 19 - 11d. "

(ii) "Custodi boviculorum in Werdale ad novum pratum fossandum et in stipendio eiusdem ad Pentecost, 12 - 8d. "

Abbey of Durham Account Rolls, Vol. 2, S. S. , Vol. 100, pp. 485-486.

The Priory farm of "Burnhopeschele" is situated just to the north of

Burnhope Burn. It is the first indication of monastic interests in upper Weardale and it is likely that land here was granted to the Prior during the second half of the thirteenth century. The two references to 1278 and 1338 do not mention Burnhope by name but only refer in a little detail to farming activities "in Werdale". By 1387, the farm at Burnhope is named. The following points make it very probable that the organised pastoral farming somewhere in the Forest of Weardale in 1278 was to be found at a recent clearance in the distant valley of Burnhope.

- (i) Entries in an Almoner's Cartulary, dated by the Prior's Kitchen archivists as being "about the mid-thirteenth century" single out farms at "Stanhop" and Rokehop" (or "Rokehop in Stanhop") but no reference is made to Burnhope at this time when, presumably, the latter did not exist.
- (ii) The Weardale farm of 1278 and 1338 was certainly not the farm at "Rokehop" (later divided and renamed Stotsfield Burn and Brandon Walls) as an Almoner's Account, also of 1338, records that J. Butterwyk acquired Rokopschele in Stanhope. (Rotuli Elemos. S.S. , Vol. 99, p. 201).
- (iii) The farm at Burnhope appears consistently as the only monastic land in the Forest from the 1380s to and beyond the Dissolution.
- (iv) In both Priory and Bishopric records, the term, "in Werdale", was only applicable to the Forest.

The 1313 reference to Swynhopelaw is translated in part below.

"We have given ... to the master and brothers of the Hospital
of the Blessed Virgin Mary of Gretham two acres of land from
our waste land ... in a certain place called "Swynhopelawe", in

our forest of Weardale ... We have also given ... fifteen acres of land from our waste land, towards the south, adjacent to the aforementioned two acres; to be held and possessed, along with the aforementioned two acres from our waste land, by the same master and brothers and their successors, from us and our successors in perpetuity ...". D. U. L. , Reg. Pal. Dunelm, 1313, Vol. II, p. 1225.

8. Details of farming activities at Burnhope in 1338, 1387 and 1428 and at East Black Dene in 1387 contain no information concerning possible cereal cultivation. Indeed, the writer has not found any evidence of domestic grain production in upper Weardale during the medieval period. This is not to deny its existence but the possibility of specialist vaccaries dependent upon cereal supplies from nearby Stanhope and middle Weardale must be allowed.
9. D. P. D. , Master Forester's Account, 1438-39, C. C. , 190030.
10. D. U. L. , Abbey of Durham Account Rolls, Vol. 2, S. S. , Vol. 100, pp. 485-486.
11. Ibid. , Vol. 1, S. S. , Vol. 99, p. 200.

The total valuation of £26 19 0 does not quite tally with the sum of the individual items (£27 13 0). Faulty accounting or recording are evident in item (d). This entry also includes the comment that the 5 heifers are "to be joined with the cows".
12. Ibid. , Vol. 2, S. S. , Vol. 100, p. 314.
13. P. K. , Comptus Instaur. , 1387-88, Dean and Chapter Muniments.
14. A fuller treatment of the search for and management of these requirements will be presented in Chapter Three.
15. Figure 2.3 represents an optimum economic situation in 1438 with all land used to full advantage and every farm occupied. It should be

remembered that meadow had developed, first, from waste and then pasture. At times of recession and under-use, surplus meadow would, no doubt, be used as pasture. It is interesting, too, that as some leasehold agreements indicate, certain land was categorised as "leisures" - land used as either meadow or pasture.

16. Windyside and Shallowford are the two exceptions in that both are separated from their south-facing pastures by the river Wear and a narrow stretch of intervening meadow.
17. In the fifteenth century, the Bishop's High Forest rents varied from four to forty shillings. These sums must surely have been less than the amounts paid by sub-tenants but by what quantities is not known.
A comparison of individuals with lead interests in 1425-26 and farms in 1438-39 suggests that four lessees, William Blakburn (Rector of Stanhope), John Herryson, Peter Stobbes and William Westwood were concerned with both.
18. D. P. D. , Weardale Chest, part of item 1.
19. D. U. L. , M. S. , Vol. 11, f. 196.
20. Weardale Chest, op. cit.
21. A full statement of the leasehold covenants applicable to Forest and Park farms for 1511 is set out as part of item 1 in the Weardale Chest.
22. By comparison with the tenants of 1438, lessees' names for 1476 have changed in every case even if in some instances family connections are maintained. In contrast, the 1535 lessees are almost a complete repetition of those of 1505.
23. The tenements involved and recorded in various Master Foresters' Accounts are Killhopeburn, Blakeley Field, Heatherycleugh, Burnhope, Ireshopeburnpapworthhill, Ireshopeburnholehouse, Fallowhirst, Rookhope, Killhope and Wellhope.

24. The example of East Black Dene illustrates the point. In 1511, there are three farms leased for 5 years to Thomas Lowe, Alex Emerson and Alex Richardson each of whom has a one-third share and pays 13-4d. rent per annum. In 1535, the (obsolete?) Master Forester's Account shows only one tenant, John Emerson, paying 40-0d. per annum.
25. D. U. L. , M. S. , Vol.11, f. 165.
D. P. D. , Weardale Chest, Item 42,
Ibid. , List of rents, 1476-79, C. C. 189722.
The Emersons of Eastgate were lessees of this farm for a very long period beginning in the mid-fifteenth century and, additionally, held foresters' and parkers' offices.
26. J. L. Drury, "Early Settlement in Stanhope Park, Weardale, c.1406-79", Archaeologia Aeliana 5 iv, 1976, p.142.
27. D. U. L. , Scriptorum Tres, p. cliii, S. S. , Vol. 9. , p. cliii.
Ibid. , M. S. , Vol.11 , f. 157.
28. J. L. Drury, op. cit. , pp.144-145.
29. Ibid. , p.142.
30. Although the award of the sheles to the Master Forester did not take place until 1419, it is known that they were built during the time of Bishop Langley (1406-37). Presumably, at some stage between 1406-19, their construction and that of associated meadow and pasture walls were begun, but not completed until 1419 when it was possible to lease them formally.
31. Mickleton and Spearman, op. cit. , f.182.
32. D. P. D. , Weardale Chest. Part of item 1 which outlines the terms of this grant.

33. It is Drury's view that the sheles were built "first to maintain the (Park and frith) walls and tend the deer" (i. e. they had a non-agricultural function). Later, it is claimed, they were used by the Master Forester "for his own pastoral purposes while he ran a stock farm . . . for storing walling tools and other gear, for resting when it was necessary to stay up all night with animals, etc." (i. e. they were not conventional farm dwellings). As explained in the text, the writer offers another explanation and does not see the safety of the deer and maintenance of walls in any way irreconcilable with the promotion of cattle-farming and a resident population. A conflict of aims might, of course, (and did eventually) occur through farmer tenants' negligence in not repairing Park and frith walls and in not ensuring an adequate supply of winter hay for the deer.
34. J. L. Drury, op. cit. , pp.148 and 143).
35. Ibid. , p.143.
36. Ibid. , p.146.
37. D. P. D. , Master Forester's Account, 1505-06, C. C. , 190037.
38. Sixteen Park Quater rents are specified for 1476-79: 15 inside the Park and one at New Close immediately outside the western wall. 21 tenants' names are presented with the rents. It is possible that some of these tenants were absentees sharing a single and sub-let tenement or that members of one family were jointly responsible for an individual farm. The 16 rents refer to at least 16 farm sites and possibly up to 21 farms some of which were contributing to settlement clustering.
39. It is perhaps worth recalling that several names of tenements in the High Forest were also to change during the sixteenth century.
40. M. S. , op. cit. , f.181.

41. D. P. D. , Weardale Chest, part of item 1. The tenant in 1511 was "Alys Manerd".
42. D. P. D. , List of tenants and rents, 1476-79, C. C. 189722.
43. The writer sees no reason to disbelieve Hildyard's conclusions that the archaeological site at the Park wall possibly represents an early medieval smelting place or some kind of hunting-lodge at an exposed point 400 feet (122 m) above the river terrace farms.
44. J. L. Drury, op. cit. , pp. 142-143.
45. Ibid. , p. 139.

The archaeological evidence for a fifteenth century occupation of Cambokeels rests upon the discovery there of three coins (1420-27) and several pieces of imported Siegburg pottery. The evidence for a contemporary use of "Westerhirstshele" at the Park wall is based upon finds of identical pottery.

The writer wishes to make two comments:-

- (i) Other finds of flint, bone, stone, bronze and iron objects at both sites can surely be called upon to indicate a use before the 1420s.
 - (ii) Very similar archaeological evidence at both sites is invoked to establish different uses, viz. , a humble shelter for tending deer and cattle at Westerhirstshele and a grand stock farm cum administrative centre and home of the Master Forester.
46. Ibid. , p. 142.
 47. Tenants and rents, 1476-79, op. cit.
 48. The 1511 tenements confirm an unchanged situation after 1479.
 49. In the case of Eastgate, some of its pasture land was situated more than two miles from the farmstead.

50. In 1476, the "Estquarter" tenants were Roland, John, Thomas and Robert Emerson.
- In 1511, the lessees at Eastgate, Longlee and Sunderland were George Emerson, William Emerson and Ralph Bowes (late Henry Emerson).
51. J. L. Drury, "Westgate Castle in Weardale", 1977, Trans. Arch. and Arch. Soc. of Durham and Northumberland, New Series, Vol. IV, p. 31. Mrs. Drury notes the presence of Westgate Castle in 1442 and the varied uses to which the buildings were put by the Master Forester. The Castle origins have not been traced but may well lie in the mid-thirteenth century during the reorganisation and division of the medieval forest.
52. It will be explained in the text below that the Forest tenement of New Close, a much older farm than its Westgate neighbours was incorporated into the Park administration early in the fifteenth century.
53. It seems certain that the Park frith existed from the time of Bishop Langley's changes. Maintenance of its walls by the new tenants was an important part of the new design to guarantee a segregated area for breeding and winter feeding.
54. M. S. , op. cit. , f. 181.
55. D. P. D. , Master Forester's Account, 1485-86, C. C. , 190031.
- Payments are recorded as follows:
- "for keeping an enclosure around the grassy area 13-4d per annum".
- "for winning of hay in that grassy area 13-4d per annum".
- Also, in the Master Forester's Account, 1500-01, C. C. , 190033, William Emerson was made keeper of the New Park at the rate of 1¹/₂d. per-day:
56. D. P. D. , Master Forester's Account, 1505-06, C. C. , 190037.
57. J. L. Drury, op. cit. , p. 147.

58. Ibid. , p. 146.
59. Drury has explained that the Master Forester's lease "particularly forbade him to demise the sheles to anyone else" (p. 143). Obviously the Master Forester in recouping £66 13 4. could not have farmed alone and either one or both of the alternatives referred to in the text must have been followed.
60. J. L. Drury, op. cit. , pp. 146 and 148.

CHAPTER THREE

1. The sites of the two early shielings at Burnhope (later the Priory and Bishopric farms of Burnhopeshele and Holm House) are not open to field analysis as both have been submerged beneath Burnhope Reservoir since 1937. To some extent this difficulty is eased by early editions of the 6" O. S. map and old photographs.
2. Other workers, notably Hildyard, Roberts and Young, have investigated various aspects of prehistoric settlement in middle and upper Weardale. As yet, there is no positive evidence to suggest that the occupation of upper Weardale was a continuous and evolving affair. Watt's research into place names notes the almost total absence of Scandinavian roots. This and the medieval forest interlude point to a possible "break with the past" between the ninth or tenth and thirteenth centuries.
3. D. U. L. , Abbey of Durham Account Rolls, Vol. 2, S. S., Vol. 100, p. 314 for John Collanwode (1387-88).
P. K. , Compotus Instaur. , 1387-88, for Thomas Johnson.
Both men were probably examples of hard-working, rent-paying frontier farmers similar, it is suggested below, to the wage-earning stockmen of the thirteenth century.
4. The exact amount of woodland is impossible to assess. The "forest of Weardale" must have been reasonably well tree-covered to provide a suitable environment for roe deer. It is known that during the fifteenth and sixteenth centuries much timber was cut for lead-smelting. The Forest Court also penalised offenders who removed trees. It is the writer's view that valley floors and lower slopes were much more wooded than the higher areas.

5. The relatively high solar angle in summer would result in maximum insolation on the lower-angle slopes.
6. The lines of the five fords are still discernible and all but one (at West Black Dene) are still in use. Their age, permanence and importance as crossing-points are further emphasised by the presence there of later stepping-stones and bridges.
7. P. K. , *Rentale Firmarum Eleemosinariae*, 1424-40, f. 16.
8. P. K. , C. C. Deposit, 167049²/3, pp. 6-10.
 Valuation plans of individual fields and tenurial details exist for 1798 and 1812. Additionally, there is the Tithe Plan of 1843. Correlation of these with the 1424 description is straightforward except that the stated fifteenth century acreages are consistently too low. It is not clear what the area of the monk's acre was but conversations with Dean and Chapter archivists confirmed that it was not by any means uncommon for monastic lands to be calculated very inaccurately. If areas were calculated in Durham acres (1.6 x a statute acre), the fifteenth century measurements tally very well.
9. The six acres are part of the large field associated with an expansion stage from Wearhead (Fig. 3. 3b). Burnhope's connection with this meadow is logical and is explained in the text below. The allocation of six acres "in the corner" confirms their demarcation in an open meadow. In the sixteenth century, this piece of land was properly enclosed and eventually became the territory of a new farm, Six Day's Work.
10. P. K. , *Rotuli Bursariorum*, 1278.
"Custodi boviculorum in Werdale ad novum pratum fossandum et in stipendio eiusdem ad Pentecost, 12-8d."

11. H. G. Ramm et al. , "Shielings and Bastles", 1970. Approximately 180 examples of deserted shielings are recorded in Northumberland and Westmorland.
12. D. P. D. , Master Forester's Account, 1438-39, C. C. 190030.
Altogether, six agisted areas are recorded: Rookhope, Killhope and Wellhope in the Forest Quarter and Middlehope, Swinhope and Westerhope in the Park Quarter. Burnhope Pasture (Forest) had previously been of similar status. It is not absolutely clear whether it had evolved into a permanently inhabited vaccary by 1438.
13. Registrum Palatinum Dunelmense, 1313, Vol. II, p. 1225.
"An indenture between the Bishop of Durham and the Master and brethren of the hospital of Gretham, relative to the place called Swynhopelawe, in the forest of Werdale."
14. Weardale Chest, Part of item 1. A schedule of leases made in 1511 which show the occupation of tenements by tenants holding one-third, one-half, etc.
15. Reg. Pal. Dunelm. , op. cit. "Reddendo inde annuatim nobis et successoribus nostris duos solidos argenti."
16. Weardale Chest, part of item 1.
 - (i) Lease by Bishop Hatfield to Dame Alice Nevill of Brancepeth (1373) of three "vacheries".
 - (ii) Lease by Bishop Dudley to Richard, Duke of Gloucester (1479) of all farms in the Forest and Park.

Also, Roger Thornton (1401), Newcastle merchant, leased one farm and William Blackburn (1438) had four farms.
17. M. S. , Vol. II, f. 196.

The four men controlling grazing at Burnhope were Roger Bainbridge of Teesdale, Thomas Harper of Stanhope, John Egglestone and Thomas

Rogerley of Wolsingham. They also had the same privilege within the Park of Wolsingham.

18. Many writers have catalogued the factors which led to agricultural contraction between c.1300 - 1500. In particular, M. M. Postan has debated the character of the agricultural slump which was prolonged into the 1480s.

"The effect of a falling population and depressed prices on the condition of the peasants is easily imagined. It meant a greater supply of land and lower rents". M. M. Postan, "Medieval Agriculture and General Problems of the Medieval Economy," 1973, p. 48.

19. Reg. Pal. Dunelm. , op. cit.

20. J. Manwood, "A Treatise on the Forest Laws", 1615, pp.101-102.

According to Manwood, it was a common law procedure to "admeasure pasture" by calculating cattle numbers from the number of acres and messuages.

21. Ibid. , pp. 84-85.

CHAPTER FOUR

1. D. P. D. , W. C. , "Survey of Bishop of Durham's Lands, 1595",
Item 42.
2. D. U. L. , Calendar of Patent Rolls, 1569-72, Elizabeth I, p. 109.
3. D. P. D. , "Articles of Instruction for and a Survey of the Bishopric of
Durham in the Queen's Lands", 1588, pp. 135-139.
4. W. C. , Item 2.
5. Ibid. , "Copy of presentments relating to common and deer within the
forest of Weardale (undated)", c. 1620, Item 59.
6. Ibid. , "Copies of leases, 1594-1637". Item
The lease in 1618 between Bishop Richard Neile and John Lewlyn of
Burtreeford specified 7 acres of (enclosed) pasture.
7. Between 1438-1535, the Rookhope rent doubled from 13-4d. to £1 6s. 8d.
while that at Burnhope increased from £1 13s. 4d. to £4 0s. 0d.
Shortly after 1500, a new rent of £5 0s. 0d. was created at New Park Farm.
8. The figures for 1535 and 1595 are a small selection of those entered in
the last available Master Forester's Account and the Matthew Survey.
Unfortunately, not all the rents are presented in the 1511 list. The
chief difference between the 1511 and 1535 rents on the one hand and those
of 1595 is not so much the increased number of tenants but the very
many different rent amounts.
9. Dales of meadow, it should be pointed out, ceased to have any effective
boundary once farmers grazed their animals after haymaking. Home
pastures were always occupied without any physical divisions, according to the
common code.--

10. Long after the term had any practical meaning, some farm and field names continued as a reminder of the method employed in dividing the meadow. The following survived into the mid-eighteenth century or beyond: Dale Head, Margery Dale, Parkin Dales, Scrabtree Dale, Twelve Days Work, Six Dargue, Longdale, Barrass Dale, Burtree Dale.
11. There is no documentary insight into the medieval rent subdivisions at each vaccary site. It might well be that the acreage of individuals' dales was the determining factor.
12. W. C. , "Copies of Leases, 1594-1637", Items 7-33.
13. From 1600, it is known that leasehold lands never became customary holdings. As their eighteenth century extent is easily established, retrogressive reconstruction is relatively straightforward.
14. W. C. , op. cit. , Item 59.
15. Not one of the present farmers with an interest in the five commons can remember, has ever heard or read of any stinted arrangements there.
16. The various plans of the Weardale Enclosure Award (1815) make it certain that pasture boundaries were always welldefined. Their lines are clearly marked and are the only official indication the writer has discovered of the exact position and extent of each pasture.
17. D. P. D. , "Observations by Arthur Mowbray on the proposed inclosures in Weardale, 1797", C. C. Files, 34457A and 34459A.

The point is made that some parts of the fell are enclosed by ring fences and stinted while other parts are open and stinted.
18. M. S. , c. 1600, Vol. 11, f. 186.

Written confirmation is given that the stinted pasture of Swinhope Fell belonged to Swinhopeburn and Brotherlee farmers and Westernhope Fell to the tenants of Billing Quarter.

19. W. C. , "Forest Court Presentments, 1602", Item 45.
20. W. C. , Ibid. , 1598, Item 47(ii).
21. The key stages in the progress of lead-mining, including that of the later sixteenth century, are treated in Chapter Five.
22. W. C. , Forest Court Presentments, 1600 and 1607, Items 47(iii) and (v).
23. W. C. , "Articles and Instructions of Survey of Bishop of Durham's Lands, 1595", Item 42.
24. D. P. D. , Halmote Court Miscellaneous Extracts, Vol. 8, p. 49.
25. R. Surtees, "Parish of St. John's Chapel", Durham Parish Histories, Vol. 3, p. 17.
26. Ibid.
27. A small number of eighteenth and nineteenth century Stint Bills were kindly loaned to the writer by Mr. C. Birkbeck, Earnwell Farm, Ireshopeburn. Their analysis, including the letting procedure, is better considered in Chapter Six.
28. "Byrlaw" is defined in the Oxford English Dictionary as:-

"The local custom or 'law' of a township, manor or rural district, whereby disputes as to boundaries, trespass of cattle, etc. , were settled without going into the law courts; a law or custom established in such a district by common consent of all who held land therein and having binding force within its limits." Vol.1, p. 1237.
29. W. C. , "Forest Court Presentments, 1600", Item 47(iii).
- 30-34. Ibid.
35. M. S. , Vol. 11, f. 187.
36. W. C. , op. cit.
37. Ibid.

38. The Featherstone(haugh) family held Middle Black Dene, first as a leasehold farm and then as a customary freehold, from before 1438 to some time between 1673-1698.

Hotts appears in the Stanhope Parish baptismal register of 1614, the earliest reference to this "satellite" farm of Middle Black Dene.

39. The five farms were Springhouse, two at Burtreeford and two at Lintgarth. Tenants had the option of paying increases ranging from 1s. 0d. to 3s. 4d. or providing a single hen, capon, goose or lamb.

40. It is known that the absentee Bowes had lead interests in upper Weardale, were Stewards of the Forest Court and did nothing to prevent the decay of Burnhope frith which lay next to their farm lands.

41. The Emersons of Eastgate and the Trotters of Longlee held various important offices into the seventeenth century. As trusted and key tenants, they would be expected to carry out their farming responsibly. Later, in 1660, it was recorded that Lancelot Trotter of Longlee was "a very troublesome tenant and hath pawned his lease to Newcastle merchants who are to receive £30 0s. 0d. per annum out of the profits and improved rents of it for 13 years next to come."

42. W. C. , "Survey of Bishop of Durham's Lands, 1595", Item 42, deposition of Jury.

The removal of the lead roof at Westgate Castle by Bishop Pilkington after 1560 led to the progressive deterioration of the structure which in 1595 apparently required £400 to repair it. The value of the lead came to approximately £90 0s. 0d. By the 1620s the Court had ceased to meet and the Castle was in ruins.

43. Various late sixteenth and early seventeenth century records show that Park officials were willing to overcharge the shrinking frith with their horses, cattle and sheep and were allocating dales of meadow and hay intended for the deer. The frith wall was not attended to properly and deer were found straying far and wide.
44. Disease, difficult winters, illegal hunting and chasing and, in Bishop Hutton's time (1589-1595), the excessive removal of twelve deer a year were all responsible for the decimation. The end of the frith finally came in 1661 when Thomas Fetherstonhaugh was granted the first lease there of Old Park farm whose area had been "reserved for deere and officers of the Park which was lately destroyed by Haselrig", Parliament's disliked representative in Weardale.

CHAPTER FIVE

1. G. T. Lapsley, "The County Palatine of Durham", 1900, pp. 283-284.
The years 1197 and 1211-13 are cited to show the availability of iron and lead ores.
S. S. , Vol. 32, app. , pp. 202, 210 , 212. Further lead accounts spanning 1337-38 and 1348-49.
2. D. P. D. , Lead Mine Accounts, Surveyors and Clerks, 1425-26, C. C. , 190012.
3. Ibid. , 1523-24 and 1524-25, C. C. , 190019.
4. W. M. Egglestone, "Stanhope and its Neighbourhood", 1882, pp. 27-28.
What appears to be the full transcription of an authentic but unacknowledged source is presented.
5. It was not a coincidence that those Weardale lead mines operating between 1425-1529 were all sited outside the medieval farm enclosures.
Hushing required water storage and resulted in much disturbance of the land. It seems reasonable to conclude that both early mine and farm distributions were planned to avoid unnecessary practical inconvenience.

6. Lead Mine Accounts, 1527-28, C. C. 190020.

7. The Bishop's costs can be calculated as follows:-

	£	s	d
(i) For 1 fother of lead ore (i. e. 3 loads at 5-od. a load)		15	0
For 2 fothers of ore required to make 1 fother of lead	1	10	0
(ii) For transport of ore to Wolsingham smeltery of 2 fothers of ore (i. e. 6 loads at 11d a load)		5	6
(iii) For smelting 1 fother of lead (providing wood and charcoal 5-0d. and smelting 5-0d)		10	0
(iv) For transporting 1 fother of lead to Swalwell Staithes from Wolsingham		3	4
Total cost of smelting and delivering 1 fother of lead	£2	8	10

	£	s	d
Market price of 1 fother of lead	3	10	0
Total cost of producing 1 fother of lead	2	8	10
Total profit	1	1	2

In 1425-26, the 37 fothers of lead brought a return to the Bishop of approximately £39 3s. 2d. Additionally, some 8 fothers of ore (or 4 fothers of lead), the cost-free lott ore, produced another £14 0s. 0d. to make an overall revenue of about £53 0s. 0d.

8. Lead Mine Accounts, 1527-28, op. cit.
Miners can be traced to Ireshopeburn, West Black Dene, Middle Black Dene, East Black Dene, Wearhead and Blackcleugh.
9. D. P. D. , W. C. , "Bishop Matthew's Survey of lands in Weardale, 1595", Item 42, deposition of the Jury.
10. The introduction by the Bishop of a composition rent for the lott ore seems to be another sixteenth century innovation. Instead of receiving the ore in kind, the Bishop was leasing it at an agreed rent to, in 1595, Sir William Vaux (Vane?), the Master Forester.
11. (i) D. P. D. , Bishop Cosin's Survey, 1662 (with later additions), p. 59.
(ii) C. R. O. , EP/St. 43. The lease for three lives is confirmed in an extract from the Act of Parliament of 1667. (D. P. D. , C. C. Box 176, 22641).
(iii) W. M. Egglestone, "Stanhope and its Neighbourhood", 1882, p. 30.
12. Bishop Cosin's Survey, op. cit.
13. C. R. O. , EP/St. 43. The full list of mines is included in a Bill brought by the Rector of Stanhope against the Moor Master for alleged withholding of the tithe ore. The list is corroborated in W. M. Egglestone, op. cit. , pp. 31-32.

14. These calculations are based upon the fact that as late as the 1750s, the price of ore to the miner and the market price of lead were very similar to those of the 1660s. It is known that the market prices of bings of ore in the 1750s were 50s. 0d. which, after carriage to the smelteries, gave a profit of possible a little less than 20/-. Thus, the "£2,000 per annum clear profit" on ore may be the equivalent of 2,000 - 3,000 bings. These figures fit well with known outputs in the 1730s.
15. W. M. Egglestone, op. cit. , p. 30.
16. C. R. O. , "Rector v. Moor Master Dispute", op. cit.
17. The writer is aware that the graphical presentation of running means of baptisms and burials over a five-year period is more appropriate than the use of figures for each year. However, in view of the gaps in the records, such an approach would be impossible and would exclude many of the yearly figures that do exist.
18. A small selection of examples includes the following surnames:
- | | | | | |
|---------|----------|----------|-----------|---------|
| Frailer | Renwick | Pigge | Broadwood | Milburn |
| Ritson | Alsop | Bailes | Wood | Pears |
| Davey | Howard | Little | Collin | Todd |
| Morrow | Atkinson | Mason | Beastings | James |
| Bland | Rumley | Blamire | Trider | Hunt |
| Evans | Womble | Tweddell | Tinkler | Chapman |
19. C. R. O. , Tything Books, 1700-1714, EP/ST. 1.
- The lists of names are a record of all households in Stanhope Parish. Those in the High Forest and Park Quarters can be isolated and give the earliest certain evidence of the erratic but undeniable pull of mining.

20. Although the 127 entries of customary tenements in the 1698 Halmote Court Rental - 35 more than in 1673 - indicate increased buying and selling of property, they do not always clarify either the exact location or the occupants of these properties.
21. An initial and rapid increase in the number of households is to be expected following the arrival of married couples and single miners soon to marry in the dale. The early spurt in household totals ought, however, to be followed by smaller increases as further marriages are offset by the relatively early deaths among the indigenous and immigrant adult population. It is suggested that this situation had been reached by about 1720 when, to add to the effect, the numbers entering upper Weardale had been on the decline for some time.
22. Bishop Cosins Survey, op. cit. , p.178.
23. D. P. D. , "Weardale Lead Mines: Calculations of annual value, 1746-59", Items 16 and 17, C. C. 34457A and 34459A.
- It is apparent from correspondence between Blakett and the Bishop (1760-1762) that estimates of the ore "got within the inclosures and parks, including the common pastures in Weredale upon an average of fourteen years, 1746-59" varied between 800 and 3,570 bings.
24. N. R. O. , Journals, Lead Account, 672/2/19, p.63.
25. D. P. D. , "Letter from N. Blakett to Bishop of Durham about the Bishop's ore, 1732", C. C. 34457A and 34459A, Item 2.
26. Ibid.
27. C. J. Hunt, "The Lead Mines of the northern Pennines", 1970, p.60.
28. N. R. O. , Journals, 672/2/20. Production and development costs had risen slowly to just under £5,800 in 1750. By 1760, they were £8,600.

28. (cont..)

These amounts included sums for miners and dressers, timbermen and timber, labourers, stores and contingencies as well as royalties to the Bishop and Rector of Stanhope.

29. The eighteenth century Blakett records do not reveal the output of individual mines. Their changing names can, however, be found in the many volumes of Bargain Books extending from 1720-1883.

30. It is difficult to equate the number of bargains and the total of miners. Bargains were normally agreed with the Weardale Agent for 3 months but numbers of men and their names were not always disclosed in the eighteenth century. Moreover, it is impossible to discover how many miners actually contracted as many as four bargains a year. Nevertheless, it is quite certain that bargains and workforce increased together.

31. C. J. Hunt, op. cit., p. 74.

32. C. R. L., H. M. Wood, Standhope Parish Registers, Vol. 4.

33. C. R. O., "Overseers' Accounts including Poor Rate Valuations, 1766-73". D/X 384, Item 1.

34. The evidence of baptisms and burials after 1780 (Fig. 5.2) points to a widening gap between them and the probability of more children and young people than even in the population and, therefore, larger numbers per household.

35. The extent and other aspects of land-intaking are considered more fully in Chapter Six.

36. It had now become obvious that the composition for the lott (and tithe) ore was no longer representative of the increased value of the much greater amounts of ore mined. Between 1786-1808, protracted examination of Colonel and Mrs. Beaumont's accounts took place to discover the

difference between the annual composition and the one-ninth of actual annual ore output converted to its money value. The difference was considerable and led eventually to an agreement in 1808 between Beaumont and the Bishop to advance the annual composition to £4,000 and to repay a lump sum of £70,000 in four instalments as compensation for the previous underpayments of royalties.

The correspondence and calculations concerning this matter are contained in,

- (i) "Correspondence re Bishop v. Beaumont's wife, 1783-1803", D. P. D. , C. C. , Box 213, item 184, 57357.
- (ii) "Lead ore extracted from Weardale Lead Mines, 1786-1801", C. C. , Box 214, item 3, 57354.
- (iii) Amount of ore mined at Weardale Lead Mines, 1791-1801", C. C. Box 214, item 5, 57352.

37. As the scale of mining grew, it became necessary to keep individual Bargain Books for different mining areas in Weardale. The total for 1800 and others shown in Fig. 5.4 have been collated from the following sources: Upper Weardale generally (N. R. O. 672/2/132-138), Breckonsike (N. R. O. 672/2/167), Killhope (N. R. O. 672/2/168, 169, 171), Wolfeleugh (N. R. O. 672/2/57, 171-173). At some points in the eighteenth century, the record is certainly incomplete and all yearly figures ought to be treated as the minimum number of bargains contracted.
38. C. J. Hunt, op. cit., app. , pp. 258-259. The petition, signed by 184 miners, made special reference to the "enormous sum" of £120 per annum for hiring one horse from the Mining Agent and the "exorbitant price" of candles and gunpowder "on account of the long carriage they (the candles) are much brok which renders them worse by 2/6d. per doz."

39. The position did not really improve until the end of the eighteenth century. Pays were often delayed - sometimes for two years - and were held at irregular times during the year. (Hunt, p. 59).
40. C. J. Hunt, op. cit., pp. 62-64.
41. The writer is indebted to the late Mr. Edward Mushcamp and his daughter, Mrs. J. Nutter, who allowed the writer to make a copy of a most valuable record of property and inhabitants from an original document compiled in 1799 by one of his relatives.
42. The direct numerical effects of inward and outward movements are not, of course, available.
43. On the reasoned assumption that there were 505 households in clusters in 1799, 310 of these can be accounted for individually in the entries of the 1799 Valuation Survey. Therefore 195 households represent the 67 "others" giving an acceptable average value of 2.91 (195 ÷ 67) for each of the "others".

CHAPTER SIX

1. C. R. O. ,

(i) Tything Books, 1700-1714, EP/St. 1.

(ii) Stanhope Easter Reckoning Book, one leaf, 1706, EP/St. 47.

As tithes were commuted or paid in kind on wool, lambs, hay and cows, it is possible to distinguish between households which did or did not have farming land.

2. D. P. D. ,

(i) Halmote Court Rentals, Weardale Forest and Park,
1642, 1652, 1668, 1673.

(ii) Subsidiary Manorial Documents, leasehold rents, 1645,
C. C. 190326.

(iii) W. C. , Customary and leasehold rentals, 1624, Item 77.
Ibid. , 1637, Item 33.

3. Because of gaps between rentals, it is not possible to trace all farm sales between 1624-73.

4. D. P. D. , Halmote Court Rentals, Weardale Forest and Park,
1698, C. C. 192470.

Ibid. , 1732,

Ibid. , Subsidiary Manorial Documents, Weardale Forest and Park,
Leasehold Rentals, 1699 (195545), 1710 (195556), 1718 (195565),
1723 (190334).

It should be explained that new surnames are a crude measure of outside influence in land affairs and, if anything, are an understatement of the true numbers. It is possible, for example, that some new landowners' surnames may be identical with those already present and, therefore, indistinguishable.

5. In the absence of the actual yearly galena output, it is impossible to be certain how mining fared between 1698-1732. As suggested in the text, the latter half of the period was probably a little disappointing. Yields of 2,000 - 3,000 bings per annum between 1728-35 could hardly have been higher and were probably less than production between 1698-1715 when Blackett obtained both mining leases and new farms continued to appear.
6. As will be shown, there were certainly miner tenants too at this time.
7. Fortunately, the Tything Book names of all householders for 1700 are sufficiently close to the 1698 rental of all owners to allow a fairly accurate separation of owners and tenants.
8. These figures are calculated from the 1767 and 1772 Poor Rate Valuations (C.R.O. , D/X 384, Item 1).
9. Each property, with or without land, was rated in terms of its actual or estimated rent value.
10. D. P. D. , Notitia Book of Darlington Ward, "Leasehold lands at Burnhope", Vol. 2, 54007, p. 1.

The farm of Spring Wells was described in 1751 as an "incroachment on the common by consent of the inhabitants."
11. The new farm names have been accumulated from a combination of Parish Registers, Customary Rentals (1754, 1762, 1770) and Poor Rate Valuations (1767, 1772).
12. N.R.O. , Weardale Division, 1800, 404/245, ICP 1799.

A single paper sheet gives the names and rents of the tenants of Killhope and Wellhope.
13. D. P. D. , "Lands called Killhope, Wellhope and Spark Shield", 1820, Halmote Court Notitia Books and Plans, M10, 321764, pp. 118-119.

14. An extreme example of this latter trend occurred at Heathery Cleugh, one of the original shielings. During the eighteenth century, its land was apportioned to scattered satellite farms so that the parent farm eventually became a small cluster of miners' dwellings with no land.
15. P. K. , Receiver's Books, 1690-91, Vol. 63, p. 247.
16. D. P. D. , "The Weardale Enclosure Award", 1815, Halmote Court, M7. N. R. O. , "Weardale Division", 404/224.

A correct record of stints and their annual value at the time of the 1799 Enclosure Act was essential as one of the criteria required in a fair allocation of pasture and fell grazings to individual land-owners.

17. The writer is greatly indebted to Mr. C. Birkbeck, Earnwell Farm for his careful preservation of somewhat tattered original Stint Bills and his willingness to grant the opportunity to analyse them.
18. D. P. D. , Notitia Book of Darlington Ward, op. cit. , p. 1.
19. D. P. D. , Halmote Court, Notitia Book, 54001, p. 1.
20. W. M. Egglestone, "Letters of a Weardale Soldier, Lieutenant John Brumwell", 1912, pp. 87-88.

- 21 and 22. D. P. D. , "Copies of three documents relating to a query on Billing Stinted Pasture", 1814, Halmote Court, Miscellaneous Extracts, M76, Vol. 3, p. 51.

"John Johnson says he knew the common called Billing Pasture in Weardale 30 years previous to the Division and recollects it to have been a stinted pasture for the whole of that time and that there were 6 entire farms claimed and enjoyed rights of stinting thereon at the same rate of $33\frac{3}{4}$ beast stints for each of the six entire farms." "By 1799, as recorded in the Weardale Enclosure Award", op. cit. , there were $225\frac{3}{4}$ stints on the same pasture.

23. C. J. Hunt, op. cit. , 1970, p. 145.

24. Ibid. , p. 146.

"... at Coalcleugh 56.8 per cent of the houses had smallholdings and at Allenheads 65.8 per cent." Both small settlements lay a few miles outside upper Weardale.

25. The point was made in Chapter Five that incoming miners were moving only short distances to upper Weardale. Perhaps such relatively convenient moves encouraged some to try their luck regardless of any available farmland.

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