



THE ATLAS OF RURAL SETTLEMENT IN ENGLAND GIS

Province and Sub-province Descriptions

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INTRODUCTION

The following text and figures are taken from pages 40–57 of B K Roberts and S Wrathmell's *An Atlas of Rural Settlement in England* (London: English Heritage, 2000). The descriptions of the settlement province and sub-provinces from the *Atlas* are intended to accompany the spatial and attribute data included in the *Atlas of Rural Settlement in England* GIS data collection.

The relevant pages of the *Atlas* were scanned and the provincial and sub-provincial descriptions processed using Optical Character Recognition (OCR) software to obtain a digital version of the text. The text and bibliographical references have been thoroughly checked against the printed *Atlas*. The list of References Cited at the end of this document includes only those works cited in the provincial and sub-provincial descriptions.

The figures for the sub-provincial models included in this document have been renumbered, beginning with Figure 1. References to the figures for the models have been changed in the text to reflect the renumbering. The text has also been very lightly edited to make clear where references are made to figures in the printed *Atlas* which are not part of the *Atlas of Rural Settlement in England* GIS data collection, and, where necessary, to match very slight changes made to the names and alphanumeric codes assigned to local settlement regions. A list of the local regions as they appear in the GIS dataset follows the sub-provincial descriptions.

The editing and formatting of this document, as well as the text of the Introduction, are the work of Andrew Lowerre. The provincial and sub-provincial descriptions and the illustrative models are entirely the work of Brian K Roberts and Stuart Wrathmell.

THE SOUTH-EASTERN PROVINCE

The South-eastern Province has been defined using the eastern boundary of the Central Province as a delimiting line. Here we reiterate that while we have no doubts that the provinces do undoubtedly possess definable characteristics, and that their limits are confirmed by their convergent re-appearance in national maps of varied historic landscape elements, their boundaries were, nevertheless, always permeable. The South-eastern Province, an area of scattered nucleations, hamlets, villages and market towns lies largely to the south and east of the scarp of the chalk and the edge of the fenlands, although an exception appears in Lincolnshire. It is an area of very mixed landscapes, some, the chalk, being anciently cleared while others, notably the ridges of the Weald, still remain the most wooded parts of the country. Populous, prosperous and generally early enclosed, its mixed farming and woodland countryside nevertheless exhibit sharp local regional variations.

The Wash Sub-province (EWASH)

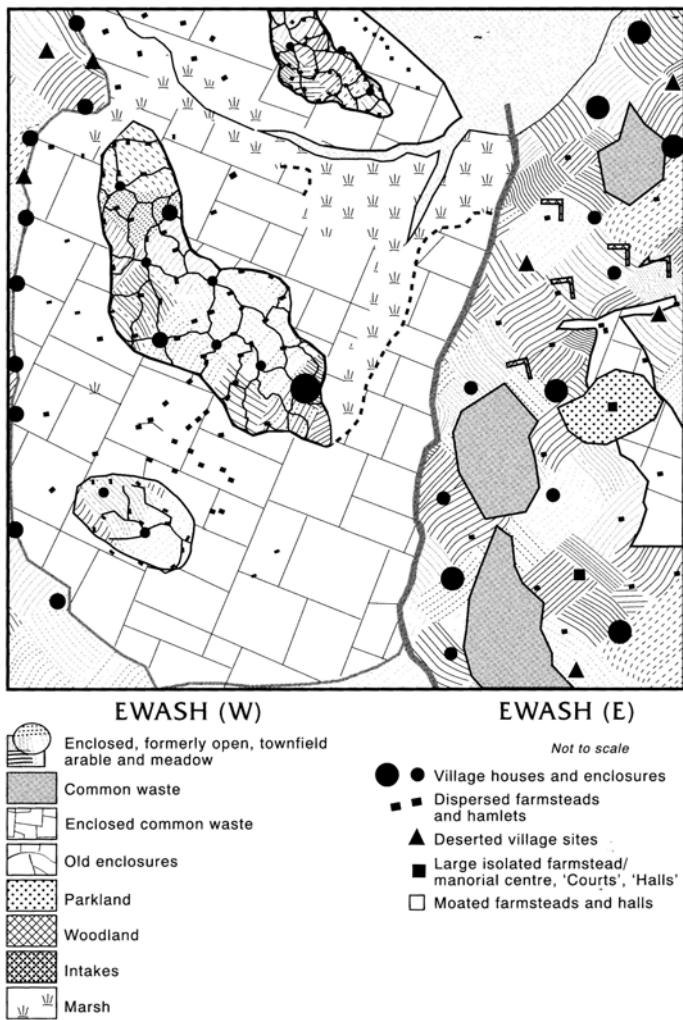


Figure 1: Diagrammatic model of the Wash Sub-province

This sub-province derives unity from the fact that its drainage is largely into the Wash, but it must be divided into eastern and western portions: the regional distinctiveness of the fenlands, EWASH(W), is unquestionable, but our inclusion of the very different countrysides of EWASH(E) is wholly pragmatic and based upon the low densities throughout the area. Such expedience in no way detracts from our objective to create a national mosaic of provinces, sub-provinces and local regions based directly upon settlement characteristics rather than preconceptions of what ought to be present based upon other work. The short account epitomising the area's characteristics, and by implication the difference between this and other sub-provinces, re-emphasises that the nationally defined variations in rural settlement provide a framework for local or regional studies, and a necessary wider perspective. In this and other cases we have suffered considerable frustration in not being able to commit time to using the rich sources available to explore more thoroughly the local regional variations within the sub-province (Stamp 1937–1946, vol VII, parts 69–77; Darby 1974; Hallam 1965; Hallam 1970; Ravensdale 1974; Spufford 1974; Owen 1971; Platts 1985; Bennett and Bennett 1993; Dymond 1990). Figure 1 distinguishes between the fenlands of EWASH(W), essentially a

landscape of late-enclosure, but with wet-dykes replacing the more usual hedges or stone fences, and the rising country of the East Anglian sandlands of EWASH(E).

The Western Wash (EWASHW) is a distinctive large region of inland fens and coastal marshes with associated silt ridges and drift islands, encroaching onto adjacent drift lands, where the precise boundary needs careful consideration. The area is characterised by a strongly delineated notable preferred settlement zone along its western boundary, between fen and rising driftland, which has been used as the eastern boundary between the Central and South-eastern provinces. The silt ridge between the marshlands and fens bears a great concentration of rather large, loose textured nucleations, although many are as much congregations of hamlets and dispersed elements as much as concentrated nuclei. A 25 by 25km square sample count contains 58 nucleations, as compared with 72 in the Midlands – a point of comparison to be used when assessing the concentration of nucleated settlements within a given tract. Deserted villages are generally seen to be absent from this sub-province, although cases appear along the narrow line of the preferred settlement zone to the west, and on the northern part of the silt ridge.

Nevertheless, this is a sub-province characterised by some of the lowest densities of dispersion found in the Lowland Zone. They appear on the fenland reclamations, with a mixture of low and extremely low densities: in contrast, the anciently settled Fen Islands carry high and very high densities of dispersion in addition to their significant numbers of nucleations. The Northern Fens (local region 4) show signs of being distinctive, with medium and high densities of dispersion. Moated sites are thin on the ground, with cases being found on the main silt ridge and in rather greater numbers in the extreme south-west of the sub-province, where their occurrence appears to be of significance representing an extension eastwards of the dense concentration in the southern portion of sub-province CEMID. Work by Sylvia Hallam on the Romano-British fenland (Hallam 1970) is sufficiently detailed to be set alongside what is known of medieval and post-medieval settlement in this well-documented zone to allow major shifts in the system to be identifiable, shifts which can be correlated with changing physical circumstances of the fenlands and coastal marshes. While larger scale questions of the origins and development of the named, historic settlements undoubtedly need further resolution, it is possible that the relatively ephemeral exploitation sites, for fishing, fowling, reed cutting, summer grazing and/or salt production, offer unrealised archaeological opportunities.

The Eastern Wash (EWASHE) is a sub-province which embraces the western portion of northern East Anglia, extending into Norfolk, Suffolk and Cambridgeshire: there are three well-marked zones. Two north-to-south parallel bands are formed by the fen edge, to the west, comprising sandy land; and the drifts of the East Anglian plateau proper, while a third zone, a mixture of heavy clay and lighter drift, is represented by several distinctive local regions to the south, where the battered escarpment of the chalk lies beneath the superficial surface deposits. The distribution of nucleations has provided the basis for identifying several local regions, with the sandy heaths of the Brecklands forming a clear hiatus in the centre, although the 'good sands' of the north-east have substantial numbers of nucleations by the nineteenth century as does the local region designated 'Southern Breckland'. Nucleation densities per unit area are below those of the Central Province to the west (ie 62 per 25 by 25 km square as compared to 70, 80 or even 90 in the Central Province).

Throughout the whole sub-province very low densities of dispersion are normal, dropping in the north and east to a mixture of very low and extremely low, and within this sub-province moated sites concentrate in several local regions: the Upper Stour Valley (EWASHE 8), Black Bourne (EWASHE 4), in the Upper Dove Valley (EWASHE 5), and are also found in some numbers in the Goodsands region (EWASHE 1) and West Norfolk (EWASH 2). The northern half of the sub-province contains significant concentrations of deserted villages according to the 1968 DMVRG map, but here a note of caution must be entered. While no review has yet been undertaken, it is possible that many of these represent elements of a settlement system which differed markedly from that of the English Midlands, where – at least in general terms – villages and hamlets formed discrete and separate entities, separated by small amounts of generally later intercalated dispersion, and where ‘classic’ deserted villages appear. The settlement system of East Anglia generally may have incorporated more ‘linked hamlet clusters’ and ‘linked farmstead dusters’, ie situations where the nucleation/dispersion threshold was blurred, less clear cut. This is a hypothesis which remains to be tested, yet is important, because an understanding of the evolution of settlement within this zone, one of the wealthiest local regions throughout the medieval period (Glasscock 1973, fig 35) demands comparison with the classic areas of village settlement in the inner and east Midlands. The eastern boundary of this sub-province, defined initially on the basis of the concentration of nucleations, is wholly confirmed by Shirley’s map of ‘greens’ [fig 30 in the printed *Atlas*]. Thus, two differing types of evidence, mapped independently, confirm a boundary that is both of importance and of antiquity, for EWASH(E) has few such names and those that do appear are concentrated in the Upper Stour. We note that the settlements of the classic study by Peter Wade-Martins (1980) all tend to lie just on the eastern side of the EWASH (E) and EANGL boundary.

This is an important transition zone. Were the Fenlands not present, the contrasts between the settlement system of the East Midlands and East Anglia proper would have been more thoroughly compared and contrasted, and perhaps the crudity of understanding of settlement based upon the simple distinction between nucleated and dispersed, discussed and explored by previous generations of scholars. There is a general absence of Domesday woodland: the exceptions found on the eastern boundary the Goodsands local region and in the far south may represent ‘false’ locations generated by placing the symbol at the position of the chief manor rather than at its true location in the landscape. Research questions in this already well-explored zone must verify the presence of deserted villages; are they indeed villages of ancient but deliberate foundation or a manifestation of agglomeration from dispersed hamlets? Further, was this a landscape ever dominated by villages with communal townfields similar to those of the Central Province, and if not, why not?

The Anglia Sub-province (EANGL)

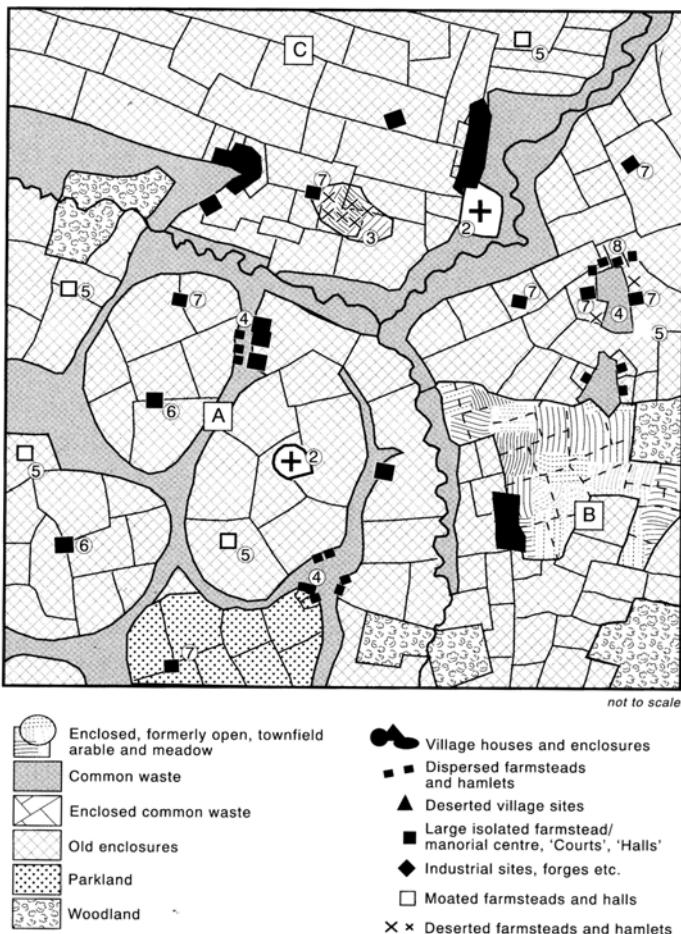


Figure 2: Diagrammatic model of the Anglia Sub-province

A landscape of low plateaux, soft subdued, intricate in its small height variations, variously dissected by shallow, well-watered valleys: it is marked out from the sub-province to the west – EWASH(E) – by a well-marked decline in the densities of dispersed settlement, a change from very high, high and medium densities to the east to low, very low and exceptionally low densities further west. The area is characterised by significantly lower densities of nucleations, hamlets, villages and market towns than the English Midlands. Local regional contrasts have been identified using the evidence of dispersed settlement. A figure of 55 nucleations per 25 by 25 km square contrasts with 70–80 normal for the Central Province, but those of the east are often smaller as well as less frequent. Nevertheless, EANGL is dominated by dispersed settlements, with some regions – notably in Essex, Suffolk and southern Norfolk – having sustained high densities. Scores as high as 13/H10 and even 34/H4 appear, exceptionally high densities, but readings within the banding designated 'very high densities' are common, intercalated with some areas of lower readings. Only towards the coast, amid the Sandlings and the Broads, do lower densities appear. There is a consistent presence of medium to very high densities of isolated halls, large farmsteads and churches, scattered in landscapes possessing large numbers of wet-ditched moated sites, loosely structured hamlets bearing 'green' names, all formerly associated with long chains of roadside commons, linking together the

scattered larger blocks of common land. This is an intricate, ancient landscape (Figure 2).

In making the map a further line has been added, less closely defined but none-the-less important, between those regions where settlements bearing the name 'green' (and in measure 'end' and 'street') occur in large numbers and regions where there are few. A national distribution map compiled by Robert Shirley [fig 30 in the printed *Atlas*] shows that names of this ilk define the limits of the Central Province almost as effectively as does the plot of nucleations' – but the distribution is complementary, for such names are almost wholly absent in the great village belt. The greatest densities of moated sites appear in the central and southern portions, on the clays. Only in the Norfolk portion of this sub-province do significant numbers of deserted villages appear, and as was noted in the discussion of the Eastern Wash sub-province (EWASH), this may well be an artefact of interpretation.

This is a complex sub-province, where many of the standard models used in categorising settlement fail to give a worthwhile picture. The area is undoubtedly long-settled, with ancient landscapes, as is suggested by numbers of substantial Roman structures ('villas'). The concentration of Domesday woodland in Essex, when set against fading amounts further north, hints at a tripartite division of EANGL, south, centre and north. Certain broad research issues appear: how late are the nucleations of this landscape (ie 'late' relative to those of the Central Province); can a working chronology be established; what is the relationship between nucleations and the isolated church sites? It is essential to explore how far the listed depopulated villages are indeed true deserted nucleations – as in the Midlands – or how far they are either hamlets by isolated churches, or components of a settlement system which so far lacks definition and terminology. The importance of careful scale comparisons of even well-known sites was emphasised in a national study of villages (Roberts 1987).

More generally, within these landscapes there appear to be three types of 'antecedent' structure, ie patterns and shapes of enclosure boundaries and associated settlements which underlie the layout of the fields and farmsteads of more recent centuries. These are large scale arrangements rather than individual elements such as deserted villages, surviving nucleations [figs 3 and 21 in the printed *Atlas*] or moated sites. The first consists of looped enclosures, each focusing on an ancient hall, farmstead or church. Later settlements, greens, hamlets and other farmsteads are intruded into the former open common wastes between these ancient cores. Secondly, beneath some landscapes there appear to be battered sequences of broad, often curving strips – coaxial systems – often up to several kilometres long and between 100 and 200 metres wide. These are now integrated into landscapes that are, superficially, composed of block-fields. Finally, there are areas of communal townfield, open, sub-divided, often showing signs of piecemeal enclosure, but limited in area, and with blocky rather than ladder-shaped furlong structures.

These are practical models, for they can be identified, simplified and described, and have a scholarly use, but at another level they represent important historical realities underlying and supporting those landscapes which have finally appeared and are now seen as characteristic of the area. Furthermore, as a concept, antecedent structures are important because they represent an identifiable arrangement of landscape elements, and while polychronous in character – ie being themselves composed of landscape elements of

varied ages – understanding their development, adaptation, devolution and destruction constitutes a unifying theme in regional landscape studies. As a theoretical concept, there is much more to be said on this idea, and it is possible to envisage it eventually being applied to all of the sub-provinces. Ultimately it is a comparison of antecedent structures identified for each province and sub-province that will provide a deeper understanding of historic landscapes at a national scale.

The Thames Sub-province (ETHAM)

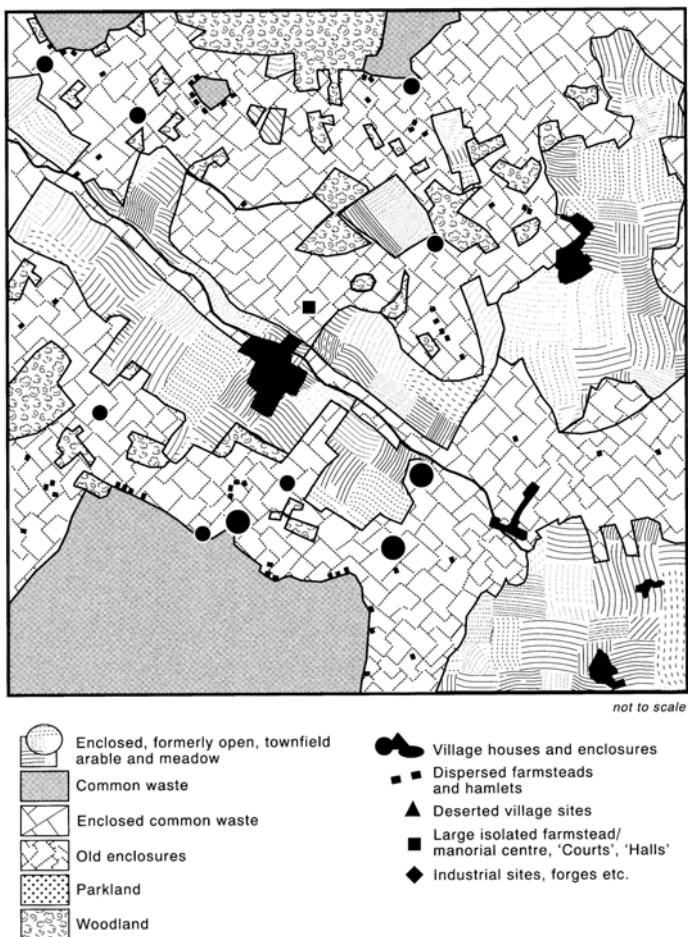


Figure 3: Diagrammatic model of the Thames Sub-province

The heart of the sub-province lies upon the floodplains and gravels of the Thames and its tributaries, with associated heathlands, and clayland tracts. To the north-west lies the Chilterns, a distinctive local region where surface layers of clay overlie the chalk. Between the two is a complex gradation. To the south of the Thames both claylands and alluvium and gravels appear on rising slopes, while east of London marshlands are characteristic. Overall this sub-province is a pivotal, transitional countryside, where local regional variations are often of sharp importance and where ancient characteristics have long been masked by first the influence of the capital, and then by spreading urban landscapes.

The whole sub-province is characterised by low densities of nucleation, an exception being found on the mid-Thames terraces which carry villages, and give rise to a distinctive local region to the west of London. These nucleations do not appear to be directly linked to the diffusion of 'suburbanisation' from London itself, but seem to represent an older layer of settlement, for there are signs that the area was once dominated by townfields. The location of this outlier of the Central Province, within a zone of contrasting settlement yet at the heartland of the English state, raises an important question: what similarities and differences exist between this group of villages and those of the Central Province proper? Concentrations are such that a 25 by 25 km square sample recorded

92, an exceptionally high figure. There are important research questions here. ‘Green’ settlements concentrate in some numbers throughout the whole sub-province, including the Mid-Thames Village Belt.

The local regions of the sub-province show great internal variations in the amount of dispersion present, from the extremely low and very low densities of the Lower Thames to the high and very high densities of the Kennet Valley, while the Mid-Thames Village Belt exhibits such wide internal contrasts in dispersion that it has been excluded from the general key. The greatest numbers of moated sites appear within the local region termed the north slope of the Lower Thames, a continuation of the concentration to the north in Anglia, while thin scatters are present in most other areas, even the Chilterns, excluding only the sandy heaths.

The distribution of Domesday woodland [fig 24 in the printed *Atlas*] is a telling factor in getting to grips with the historic roots of the sub-province; subject only to debate over the precise limits of the southern boundary, the whole was uniformly well-wooded in 1086, although a resolution to the question of ‘false’ locations is crucial, (ie woodland recorded not at its actual location but under the name of the manor which had use of it). Undoubtedly there could be debate over Essex: should this be included within ETHAM or – as has been done here – in EANGL. There is also room for debate in the matter of local regional and sub-provincial boundaries, yet we must again emphasise that our whole approach creates such tensions, between local and regional detail on the one hand and the national picture on the other, and we see the questions which are raised as being productive.

As an illustration of how a consideration of field systems can help settlement studies we can turn to the work of H L Gray (1915) on the Thames Basin. He put his finger precisely on the problem: ‘What is clear is that the plain on both sides of the Thames west of London constituted a region where the midland system and the Kentish system came into contact.... The outcome was a hybrid system difficult to follow in its origins, and indeed this difficulty prevails to the field arrangements which characterised the entire lower valley of the Thames. Scarcely any part of England is so dependent upon conjecture for the writing of this early history’ (1915, 402). Roden (1973) adopted an explanatory model which interrelated two factors, the varied conditions of soil and slope and the broad sequences of colonisation: early settled zones tend to possess varied types of townfields, while later (perhaps post-twelfth century colonisation) generated fragmented communal systems and severalty (Figure 3). There is clearly a practical problem of obtaining an overview of the distribution of characteristic features before 1800, by which date the presence of a provincial boundary along the north-western edge of the Chiltern scarp is clearly in evidence (Roden 1973, fig 8.6) and, logically enough, discussion is based upon the analysis of specific cases. A curious feature of systems found in Hertfordshire is that the common arable appears to form a second ring around the settlement foci, the first being enclosed lands.

Ultimately, the understanding and explanations which are being sought concern two components: first, what are the temporal phases which have left clearly identifiable elements within the region’s cultural landscapes, and second, how far these are indigenous developments, or intrusions with links to the cultural landscapes of other areas. ‘Links’ is a comfortable word: it begs fewer questions than the word ‘influences’, the transference,

adaptation, revitalisation of artefacts and concepts as they are passed from one region and one local society to another. In these contexts, as in most others, settlement and field systems are each one facet of a single system.

The Weald Sub-province (EWALD)

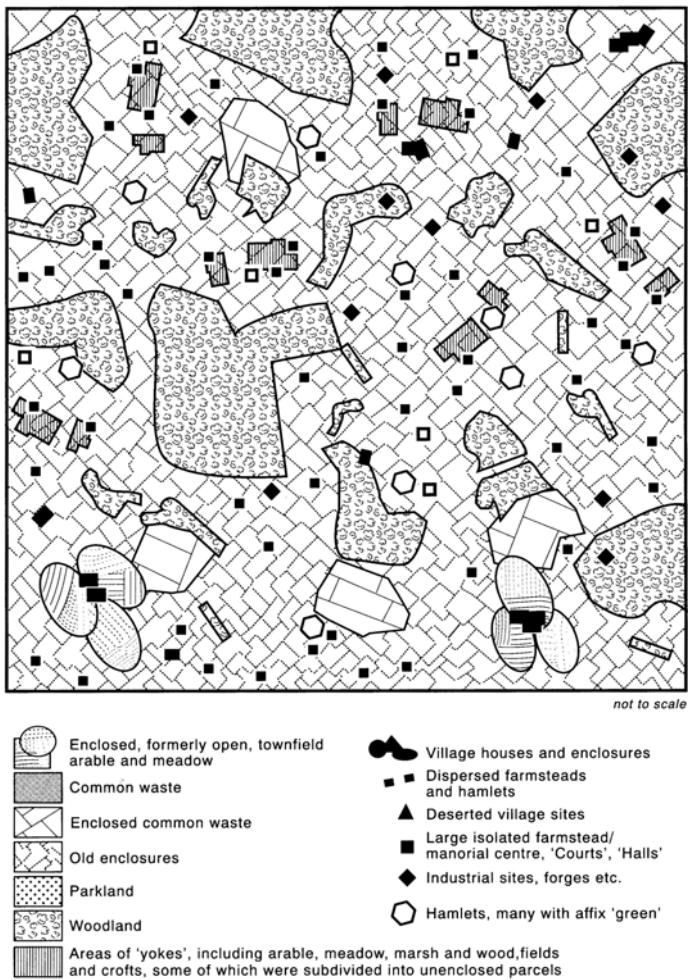


Figure 4: Diagrammatic model of the Weald Sub-province

In this case the Weald sub-province is considered to be bounded on the north by the edge of the dip slope of the North Downs, where the chalk is overlain by newer deposits, while to the south the scarp foot preferred settlement zone of the South Downs forms the boundary. In Wooldridge's words, the historic Weald 'was essentially the central forest waste within the more habitable fringes' (Wooldridge and Goldring 1953, 2). In fact, the North Downs could be seen as an outlier of the East Wessex (EWEXE) sub-province, but this is a point which serves to emphasise the pragmatic character these divisions: as Wooldridge noted, 'boundaries are necessarily conventional and must own to a high degree of unreality' (*ibid*, 2). In terms of terrain, the area comprises a broadly oval arrangement of inward facing escarpments and a sandstone central ridge, with upstanding chalk and sandstone beds separated by clay vales.

In the national context the scatter of nucleations is exceptionally light but even, with a preferred settlement zone appearing in the north, in the Vale of Holmsdale. However, mere description dismisses this scatter too lightly: evidence from the Petworth estates suggests that the nucleated villages and larger hamlets may well have once had regular plans and that these suffered subsequent devolution (Wyndham 1954, maps). Everitt

expresses the opinion that many of the Kentish villages may have originated as little market towns rather than purely agricultural communities, while others, if traced back, are seen to originate in small hamlets or single farmsteads. Everitt's cautious and qualified comments are noteworthy, indicating the need for research focused upon settlement origins (Everitt 1986, 39–40). In his words, this is 'an essentially different type of countryside' from that of the classic Midland plain, with farmsteads of medieval age (with associated severalties), common edge strings of small farmsteads and cottages, intermixed with forge and hammer houses and specialist settlements such as "denes", many of which have become nucleations'. As might be predicted 'green' settlements cluster thickly in all parts of the sub-province except the coastal periphery of the south-east and, while deserted villages are absent from the central Weald and clay vales, recorded sites cluster along the south-eastern coastal peripheries and in the south-west, along the Greensand valley.

With the exceptions of the Canterbury–Thanet local region and Romney Marsh the intensity of dispersion is uniformly high, involving a mixture of high and very high densities. Hamlets, both close-structured and loose-structured, probably represent relatively ephemeral features of this region's (and perhaps other regions') settlement landscapes: farmstead clusters can be added to, cottage and farmstead strings can be infilled, or conversely, farmsteads and cottages can disappear. The presence of industrial elements within the economy, the working of minerals or the processing of woodland products, are pressures towards more speedy change than is perhaps normal under conditions dominated by agricultural production. The presence of open commons creates conditions in which common-edge squatting occurs, generating distinctive strings. Moated sites appear on the clay, and also, rather surprisingly, amid the sandstone uplands of the central Weald.

In this sub-province the distribution of Domesday woodland is notably distorted because, of necessity, symbols were plotted at the manorial centre to which the woodland was attributed, so that the Weald core appears devoid of woodland. It is worth reflecting that the dense dispersion observed in the mid-nineteenth century occupied a landscape of which large areas were still wooded or common land. The impact of the iron industry cannot be ignored, adding both medieval and post-medieval elements to the scene.

East Wessex Sub-province (EWEXE)

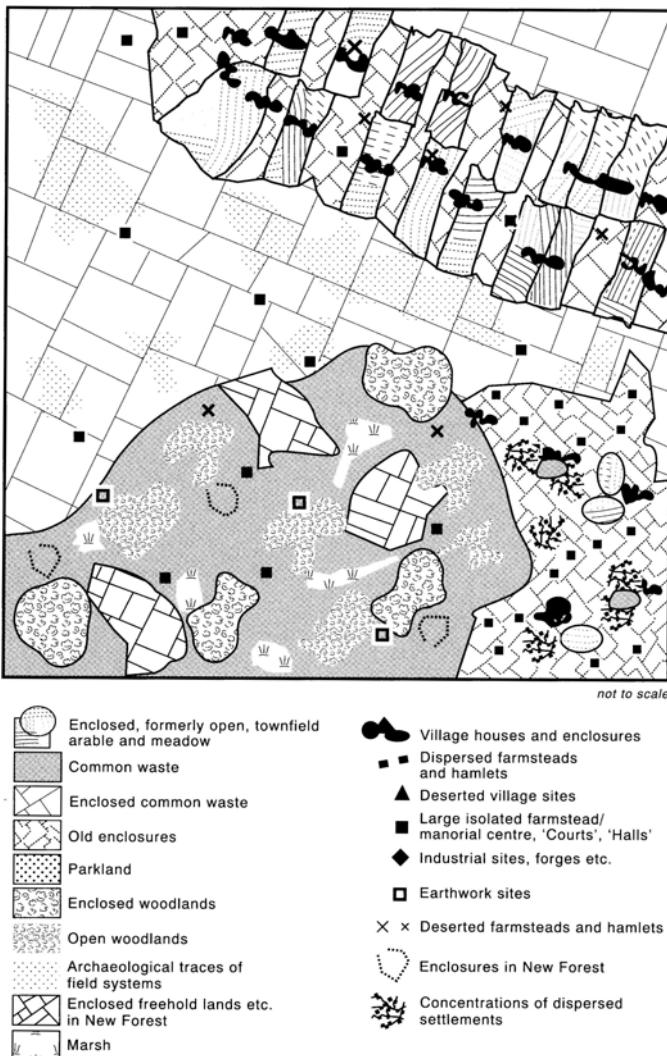


Figure 5: Diagrammatic model of the East Wessex Sub-province

This chalkland node and associated lowland basin, so distinctive in its settlement characteristics, could well be designated a province in its own right, while there are also arguments for attaching it to either the Central Province or the South-eastern Province. All three possibilities could be justified, but on balance it has been attached to the South-east because of the relatively low overall densities of nucleations [see fig 9 in the printed *Atlas*]. The distinctive rolling swells of the chalk downs, with deep smoothly-contoured valleys with winter streamflows, contrast with the rolling heathlands and woodlands of the Hampshire Basin proper.

Throughout this sub-province the location of nucleated settlements is strongly affected by terrain, and they often fall into chains along the valleys where water supply was assured: in effect, these represent a distinctive type of preferred settlement zone. It is clear that many of the settlement chains contain depopulated components, and the work of the DMVRG reveals a moderately dense scatter of deserted villages throughout this sub-province. Along the coastal plain, extending into Sussex, is a greater concentration of surviving

nucleations. In neither of these contexts is a meaningful 25 by 25 km square sample possible.

This is generally a sub-province with extremely low densities of dispersion: only along the coast east of Southampton Water and in the Isle of Wight do higher, even very high densities appear, perhaps already by the nineteenth century, reflecting the kindly climate, proximity to major harbours and relative proximity to London. Moated sites are very thin on the ground, the only concentration appearing along the coastal plain in the south-east of the zone.

Paradoxically, this area is both pivotal and peripheral: pivotal because of important harbours at Southampton, Portsmouth and Chichester with their access to the Channel, and a hinterland including Winchester, Salisbury and the wool producing areas of the chalk downlands and the Cotswolds; peripheral because of the generally poorer soils on the chalk and the newer rocks of the Hampshire Basin (the basis of the New Forest), but also peripheral to the political focus of the London Basin, to the grain-producing sub-provinces of the Midlands and to the rich and diverse lands to the west (Williams 1951, 272–80). Road links to London, Bristol, the Midlands and the south-west bond the area to its broader hinterland, while important Roman communication nodes at Old Sarum, Winchester and Silchester point to the antiquity of these important linkages (Margary 1973, map 11).

THE CENTRAL PROVINCE

The Central Province has been defined using the presence of large concentrations of nucleated settlements [see fig 10 in the printed *Atlas*], villages and hamlets, a definition largely confirmed by the distribution of dispersed elements [see fig 9 in the printed *Atlas*]. We have already pointed out that our original boundary, along the western edge of the CPNSL sub-province needs adjusting when applied retrogressively to medieval settlement. The earlier boundary in fact lay along its eastern edge [see figs 1 and 24 in the printed *Atlas*], and the villages and hamlets recorded upon the map based on the nineteenth-century sources is a reflection of industrial developments. It should be appreciated that in all of our maps the drawn boundary forms a band approximately one and a half to two kilometres in width: while the observant traveller would detect the landscape changes when crossing this zone, on-ground definition of a line can be difficult if not wholly impossible, and any such boundary may resolve itself into a narrow and complex transitional zone rather than a thin line.

Wear and Tweed Sub-province (CWRTD)



Figure 6: Diagrammatic model of the Wear and Tweed Sub-province

The Wear and Tweed sub-province has long been characterised by nucleated settlements, both surviving and deserted. In detail, site and character reflect both local terrains and landownership: in Northumberland villages and hamlets have gradually broken up under the influence of post-medieval reduction in farm numbers, while in Durham ecclesiastical control proved to be more conservative. In the latter an overlay of mining settlement adds complexity, while to the west rising land brings critical agricultural constraints and changes in settlement. This sub-province is formed of the coastal plain between the rising land of the northern Pennines and Cheviots and the North Sea, while to the south the escarpment of the Magnesian Limestone forms the boundary. To the west the rising land of the northern Pennines forms a fundamental barrier.

In this northern section of the Central Province the distribution of nucleations becomes thinner than in Yorkshire and the Midlands, yet the scatter spreads both over the coastal plain and deeply inland to the scarps, valleys, and upland edges and spurs. Although market towns appear, most villages are rather small (compared with the Midlands). The area is distinctive because of the large numbers of settlements which comprise two regular rows of house-plots, tofts or garths, facing each other across an open green or a

street (Roberts 1987, 9.3), although single row hamlets and multiple row plans are also found; indeed the region's towns show clear evidence for the use of the same planning procedures. Where documentary or archaeological evidence is available it indicates that these plans were already present by the early and middle decades of the twelfth century. The lowland plains of Durham and Northumberland carry numbers of rather small nucleations: the density is of the order of 48 per 25 by 25 km square (in contrast to densities of over 70 in the inner Midlands). Dispersion scores range from 0/H0 in the western uplands to as high as 13/H3 and 8/H7 on the coalfield, but are generally in the range 3/H0 to 5/H3.

In the case of this sub-province it is possible to suggest a list of the varied categories of nucleation visible on the nineteenth-century source maps, a useful corrective to the broad-brush approach of figures 9 and 13, 15 and 17 [in the printed *Atlas*].

The landscape dominance is a group of nucleations of ancient foundation, once surrounded by townfields, now enclosed, but whose former strips are often preserved as fossils in field boundary forms and earthworks. Among these are: full villages, with townfields once occupying at least 50% of the township; in NE England over 80% of these show evidence of structural planning. These are most usual in the lowlands of Durham and on the Northumberland coastal plain. However, amid the scarps and vales of north-western Northumberland smaller, compact and often composite village plans were associated with townfields which occupied far smaller proportions of townships. Villages or hamlets in peripheral locations, with distinctive plans based upon long house-plots represent another group; in these cases communal fields only occupy a very small proportion of each township (<15%) and, the settlement plans are often regular. On the Northumberland Plain the villages have often been wholly reorganised and restructured. Traces exist, notably in the Upper Coquet Valley, of what appear to be small estate hamlets, but field examination suggests these were laid out as substantial planned villages. Finally, there are nucleations of more recent foundation, namely, small industrial nucleations, often on common lands, linked with coal-mining, quarrying or lead-mining.

Many villages show signs of shrinkage in the form of incomplete plan-structures and earthwork traces. In Northumberland, the DMVRG map of 1968 showed a great density of deserted villages, occupying the same zone as that occupied by surviving nucleations: there is no doubt that most are indeed deserted villages, but others undoubtedly need to be questioned. In Durham depopulated villages occur mainly in the south and east of the county, but there are slight hints of other, perhaps pre-village foci, in the north and west.

The Durham and Northumberland plain are continuations of the great village belt of the Central Province (hence their attribution), but north of the Tyne the upland-lowland boundary is more subdued, more diffuse, posing many research questions – for example, some of the tiny hamlets of the Upper Coquet Valley show signs on the ground and on seventeenth-century estate maps of being substantial planned villages and have yet to be explained and placed within appropriate historical and socio-economic settings.

Classic open townfield systems do appear within the more favoured lowlands and coastal tracts, sometimes occupying substantial portions of their townships – for example at Crawcrook in the Tyne Valley, or as seen in the seventeenth-century maps of the coastal plain, where the proportion of the township they occupy falls to below 50%,

although at that stage the remaining portions were common rough grazing with some parkland. All have disappeared in the last four centuries, particularly during the seventeenth and eighteenth, as a result of engrossment, consolidation and enclosure. Further west such systems were associated with the nucleations, and enclosed systems occupy more of the landscape. The enclosures associated with improvement in the eighteenth and even the seventeenth century can be readily identified.

The Humber-Tees Sub-province (CHUTE)

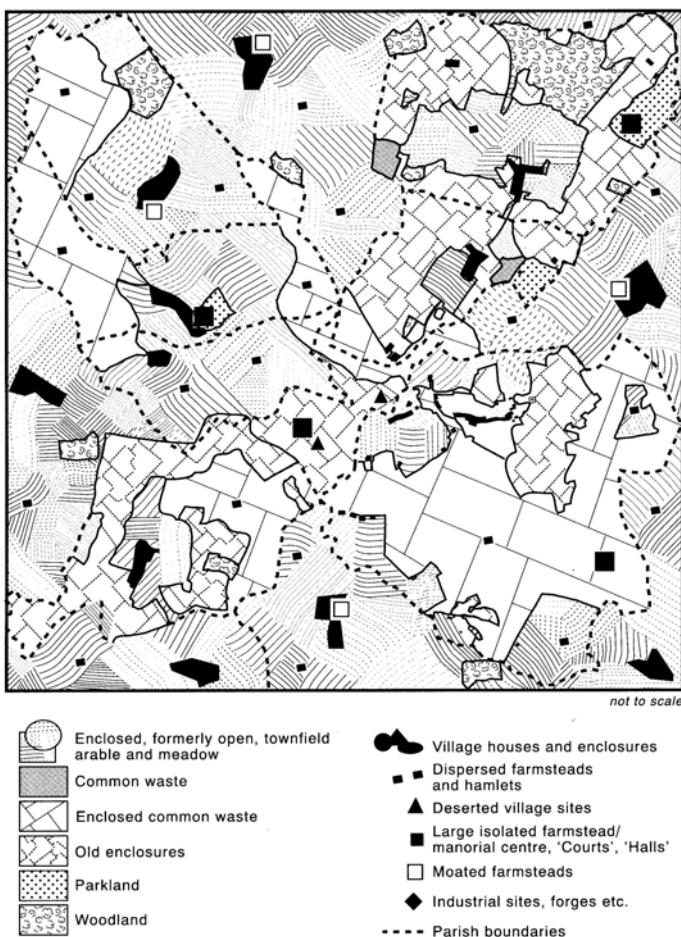


Figure 7: Diagrammatic model of the Humber-Tees Sub-province

A vast corridor between the uplands of the Pennines and the North York Moors comprises a great fertile lowland and includes the Vale of York and the Tees Lowlands. CHUTE includes many local variations caused by slight differences in terrain. It is a fascinating and complex landscape. Moving northward from the Humber the alluvial wetlands gradually give way to lacustrine clays and sands and gravels, flanked by other varied drifts, and eventually the vale is crossed by low morainic ridges. Further north the vale gradually acquires a central ridge, which reaches a summit north of Northallerton, before descending to the wide plain of the Tees. The northern boundary is seen along the scarp of the Magnesian Limestone in Durham, whose drift covered dip-slope grades southward to the Tees.

A landscape generally dominated by market towns, villages and hamlets, in detail the pattern reflects both the local variations in soils and – in no small measure – the impact of depopulation. Counts of the numbers of nucleations per 25 by 25 km square in both the northern and southern portion of this province produce scores of just over 70, directly comparable with those of the Midlands. Recorded deserted villages cluster thickly in the vale, and must represent as much as 15–20% of the potential total of nucleations once present. Only in the southern quarter do they tend to be more scarce.

The pattern of dispersed farmsteads intercalated between the nucleations is mainly of post-medieval date, created by movement out of the villages and onto newly consolidated holdings following enclosure. Some, however, are more ancient dispersals, the results of manors, granges and other farmsteads being moved out of villages in the Middle Ages; others have become isolated by the process of village depopulation, which has had a substantial impact in the area. This dispersion is generally of low or very low density, although a distinctive patch of high density scores is to be found in local region CHUTE 5. In contrast, moated sites are more common on the clays of the southern half of the vale, with significantly fewer in the northern Vale of York and the Tees Valley.

This is a complex zone in which the geomorphology is so intricate that no two published studies agree, making generalisation difficult. In many ways this is an area characterised by the classic features of the great village belt of the Midlands: strongly nucleated settlements, once supported by communal townfields, with secondary intercalated dispersion. The economic forces bringing depopulation have had a marked impact. How then does it differ from the English Midlands proper? First, there is clear evidence for a crucial phase of deep-seated discontinuity after the devastation of 1069–70; this is associated with – but did not necessarily cause – differences in manorial arrangements; second, the northern location, together with proximity and access to significant uplands are important elements of the region's historical geography.

East Yorkshire Sub-province (CEYKS)

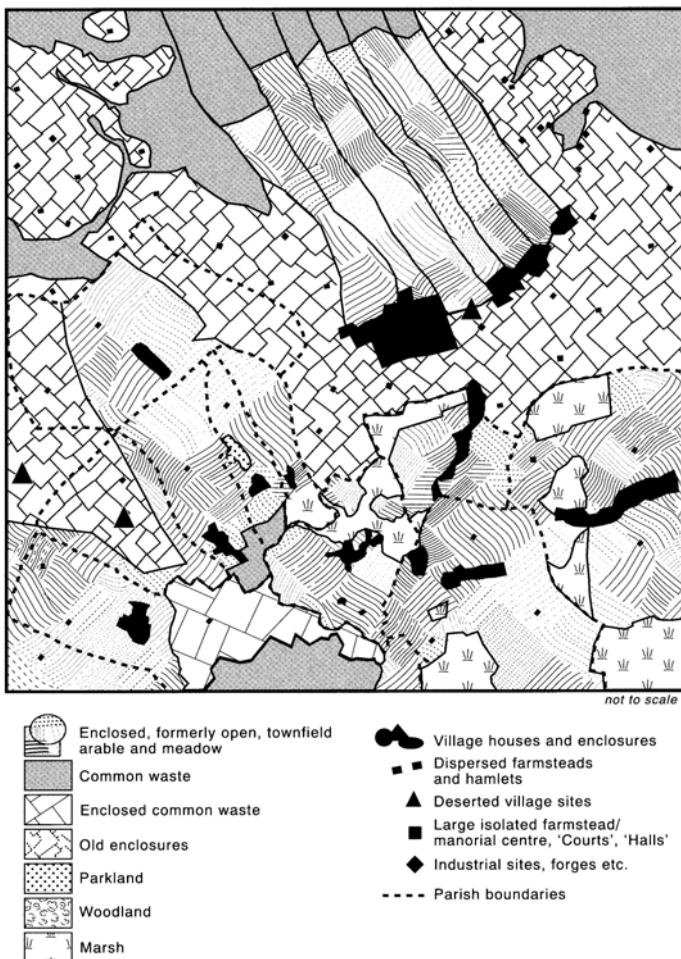


Figure 8: Diagrammatic model of the East Yorkshire Sub-province

East Yorkshire achieves unity through disunity: the geological contrasts between the soft lands of Holderness, the chalk ridge of the Wolds and the deltaic sandstones of the North York Moors compress national diversity, seen in the highland/lowland division, into one small area. Unity is achieved through the compactness and the geographical separateness of this area, where the great escarpments of southern England are turned, compressed and brought up against an outlier of Highland landscape rising above the plain. The upland edge flanking the eastern side of the Vale of York, the North Sea and the Humber are boundaries enough. The terrain is varied, from the bleak heather and grass moorlands of the north, the once marshy depression of the Vale of Pickering, the rolling dry chalk Wolds, divided from west to east by the Great Wold Valley, to the lower clayey driftlands and coastal wetlands of Holderness and Humber.

This is a sub-province dominated by what Powlesland has termed 'preferred settlement zones', which do indeed reflect the underlying geological structure. In practical terms, this means that lines of nucleations appear, eg where upland meets lowland, where contrasting soils abut, where springs appear, and where there has always been access to environments of varied economic potential. Powlesland's excavations at West Heslerton have illustrated the potentialities of preferred settlement zones: he has recovered

evidence for a long band, or chain, of settlement remains, near continuous and appearing as crop and soil marks extending for ten kilometres along the foot of the chalk scarp, on the varied soils between its foot and the Vale of Pickering. This band is about 150–200 metres in width, and contains superimposed settlements extending from the Neolithic to the late Roman period. A second band, perhaps more discontinuous (ie more nucleated), occurs rather higher up the slope, which extends in time between the early Saxon period and the present villages and hamlets. These are discoveries which must raise fundamental questions, both concerning our understanding of all such preferred settlement zones, and their importance as a type of large-scale archaeological site.

While nucleation is almost wholly absent from the North York Moors, in the Vale of Pickering and the Tabular Hills a 25 by 25 km sample records about 55 nucleations. Dispersion densities range between very low and extremely low. Moated sites appear in the two 'wet' lowland areas, the Vale of Pickering and in the Hull Valley and Holderness. With the exception of the North York Moors, deserted villages cluster thickly, representing a significant portion of the potential total number of nucleations.

As noted above, this sub-province is in many respects a microcosm of England: it is distinguished by two major research excavations of 'medieval' settlements, at Wharram Percy (Beresford and Hurst 1990) and at West Heslerton (Powlesland, ex inf), both of which emphasise the great depths of time involved in the slow genesis of the settlement systems we now occupy. CEYKS is rich in nucleations: throughout the whole area, hamlets, villages and even market towns show many traces of careful planning, based upon regular rows using rectangular compartments. A group of very regular plans seen on the Tabular Hills occupy sites which may be generally seen as peripheral. Nevertheless, traces of desertion and shrinkage are present throughout the whole sub-province, with the settlements of the chains along the preferred settlement zones, for example those fringing the Vale of Pickering or that along Great Wold Valley, representing the survivors of formerly more numerous antecedents. Well-documented, with only limited 'suburbanisation', and also offering the possibility of sufficient soil depth to retain preserved sub-surface remains (often now under threat from deep ploughing), the sub-province offers great research potential. In the moorlands Harrison has identified such rarities as ring-fenced farms rated in bovates (Spratt and Harrison 1989, 97) while assorted farmsteads, vaccaries, bercaries, granges and deer parks give texture to vast grazing lands.

Our model (Figure 8) includes evidence for a distinctive type of townfield layout found in the area, visible in present countryside along the north-eastern side of the Vale of Pickering and Tabular Hills, but also attested by documentation in some parishes on the Wolds and Holderness. Their comparisons with similar arrangements found in WCUSP and in the Bakewell area of Derbyshire (WCHPL) demand further investigation.

Pennine Slope Sub-province (CPNSL)

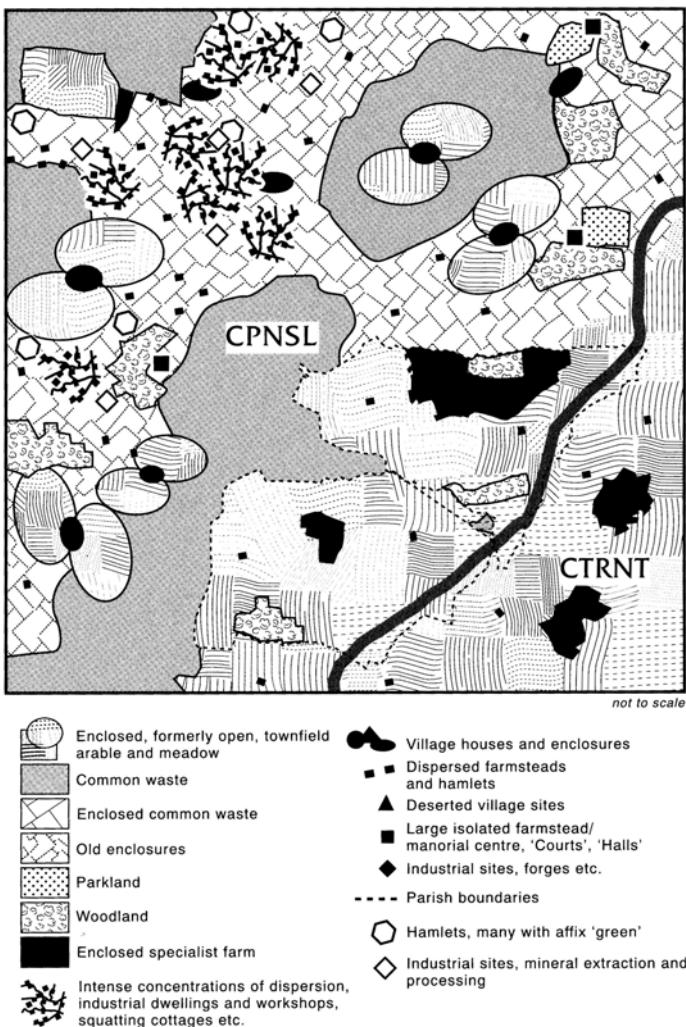


Figure 9: Diagrammatic model of the Pennine Slope and Trent Valley Vale of Trent Sub-provinces

This sub-province, with its great north to south extent, embraces the varied scarp and vale topography flanking the higher portions of the southern Pennines. It is interesting because its western boundary was at first seen as a major provincial boundary, largely on the basis of the concentration of nucleations, but, as was noted earlier, subsequent work has shown that this is a relatively recent feature, and the historic boundary ran between CPNSL and CTRNT, between Sherwood Forest and the Trent. More generally, narrow escarpments of limestone and sandstone with vales in softer shales, giving clay soils, generate a distinctive echelon north-south graining of the landscape, beginning in the Pennine foothills at the western side of the Vale of York and ending at the southern end in Sherwood Forest and a rise of land overlooking the flat lowland of the Trent Valley.

With the notable exception of the western portion of Sherwood Forest, and the higher portions of the Southern Yorkshire Dales the sub-province is well-stocked with nucleations, although in this case population increases during the Industrial Revolution increased the size of many older but minor hamlet foundations to levels which allowed

them to appear as nucleations on the nineteenth-century map. Except for a clustering in and around Sherwood, deserted villages are largely absent, except for two small groups and the occasional isolated case. Settlements with the affix 'green' occur in increasing quantities as one progresses northward from Sherwood, where there is only one, to the southern Pennine spurs, where there are many. There is a similar east to west intensification of dispersion scores, the western half of Sherwood being the lowest, with exceptionally low densities, the southern Pennine Spur the highest, with a mixture of high and very high scores. Moated sites are most common in the south and east of the sub-province, with a definite but thin scatter elsewhere.

In 1086 this zone possessed much recorded woodland: its transitional nature, between lowland and upland, raises questions, and it is likely that the great density of nucleations is largely a post-medieval development, with the antecedent system being based upon some nucleations, a few of village (and town) size and many hamlets, which perhaps outnumbered true single-farmsteads. The southernmost local region, a low undulating plateau on Keuper marl that we have termed Sherwood Forest East, contains villages which were once, indeed in the case of Laxton still are, supported by extensive open townfield systems, although it is clear that 'unofficial and informal' piecemeal enclosure of these fields has continued for centuries, often leading to settlement shrinkage. In contrast, Rough Birchworth in the Pennine spurs at over 700m above sea level was once supported by a single field based upon strips in excess of 400m long (Hey 1979, fig 32), comparable to those found throughout WCUSL, in WCHPL 6 and in the eastern portions of CEYKS; they also appear in CHUTE 4a (at Mickley SE 2576). These are tremendous variations and we have been frustrated by the fact that we cannot demonstrate here the gradations between these two extremes. In the distinctive Sherwood Forest West local region there are fewer nucleations and extremely low densities of dispersion. The very absence of Anglo-Saxon place-names indicative of woodland and the name 'shire-wood' suggests the long survival of a tract containing very ancient woodland survivals. That poor soils were a factor retarding settlement cannot be doubted, but the creation of Royal Forest by the thirteenth century established a fundamental cultural barrier. The nineteenth-century pattern – of open heaths, woodland blocks, parklands and great houses, plantations and fox and pheasant covers, and rather large rectilinear enclosures – must overlie older structures, lodges, enclosed parklands, warrens, specialist stock farms, together with some ancient clearance or assart farms.

The Trent Valley Vale of Trent Sub-province (CTRNT)

This great valley, finding an origin in the uplands of northern central England, swings in a great arc between higher lands to the north and west, developed on rather old rocks, and the softer scarplands of eastern England. The western boundary, skirting Sherwood and the Permian Limestone ridge, was the original boundary between the Central and the Western Provinces. The valley is underlain by heavy clays, but superimposed on these is a variety of drift deposits, clays, sands and gravels.

This is a sub-province rich in nucleations: although not formally defined on the map, the Trent Valley divides into two major local regions: to the south and west., nucleations cluster thickly, with hints of strings associated with preferred settlement zones; but in the northern half, linear arrangements are more in evidence, while the fens and marshes of the Humber wetlands tend to be free of nucleations. A count of a 12.5 by 50 km strip – for a block sample was impossible – shows 68 nucleations. Deserted villages are present in all parts of the valley except the Humber marshlands: sites emerging within the northern zone should be seen as particularly important and interesting. Throughout, the area is characterised by very low densities of dispersion.

The subtle variations within this large sub-province demand investigation. The very low densities of dispersion are a reflection of the former dominance of townfield systems: this makes those elements of dispersion which may predate the enclosure movement particularly important.

A further point of interest is a general one, arising from the identification and use of sub-provinces: to cite a specific case, the general concentration of deserted medieval villages in north central Nottinghamshire, seen in the specific map of these features, in fact divides into two, those in the Trent sub-province and those in the Pennine Slope sub-province to the west – a division which effectively cuts across the relative parochialism of county boundaries. Up to the present time, in spite of the evidence of the literature (Chambers 1957) and the clear but general evidence of Slater's map (1907, 73) we have not felt able to create a separate generalisation for CTRNT, but have included it within CPNSL (Figure 9).

Lincolnshire Scarplands Sub-province (CLNSC)

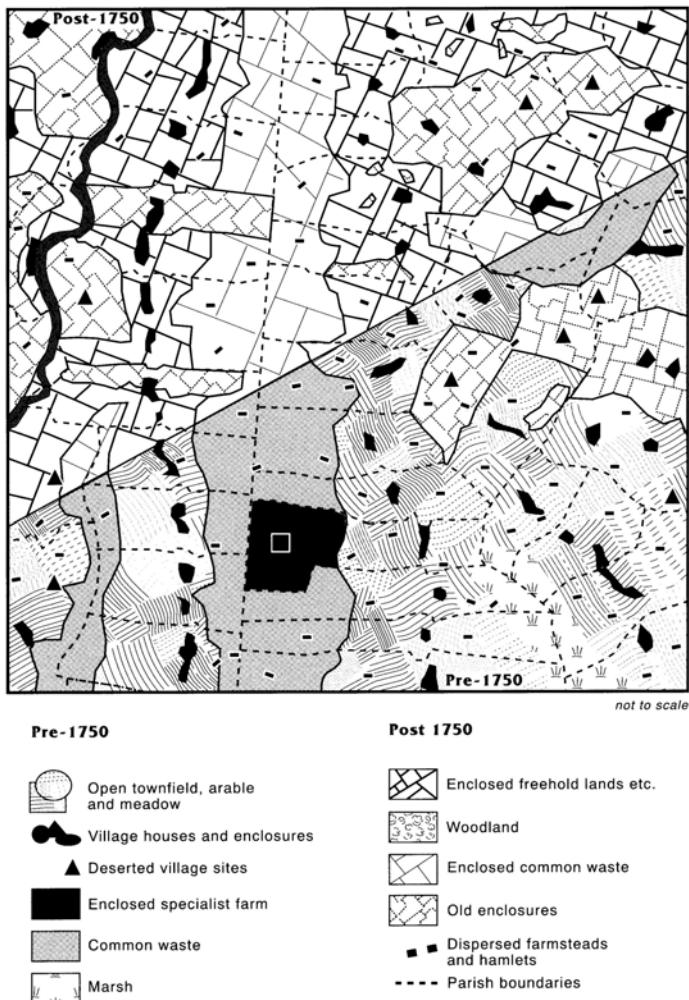


Figure 10: Diagrammatic model of the Lincolnshire Scarplands Sub-province

The Lincolnshire Scarplands (CLNSC), south of the Humber and north of the fen edge, comprises a succession of scarps and vales. The western boundary, based upon settlement criteria, has been drawn along the scarp face of the curious straight ridge known as Lincoln Edge, the Cliff or the Heath, which forms a treeless, open ridge dividing the scarp and vale country from the broad Vale of Trent to the west. The limestones of Lincoln Edge, clay vales, often with alluvial deposits, and a chalk ridge with a drift plain form the structural frameworks of this landscape. A clay vale separates the Edge from the chalk Wolds to the east, and coastal marshes and fenlands sweep round the east and south. Varied mixtures of low fen and marsh pastures, arable on rising land, with dry ridge-top pastures once supported a dense concentration of villages whose open townfields survived until the later eighteenth century. A mixture of very low and extremely low intensity dispersion is uniformly present, intercalated between the villages and hamlets. Work by the Royal Commission on the Historical Monuments of England has documented the extent and character of depopulation (Everson *et al* 1991, 28–41).

A dense scatter of nucleations, many of which are aligned along preferred settlement

zones at scarp foot, on scarp or at scarp tail, characterise this sub-province. The distribution is dense with approximately 86 nucleations to a 25 by 25 km square. A large number of deserted village sites in this zone represent at least 25%, possibly even more, of those surviving,

The settlement characteristics of this sub-province can be explored in some detail because of a series of excellent publications: the volume by the Royal Commission on the Historical Monuments of England (Everson *et al* 1991), an historical atlas (Bennett and Bennett 1993) and the enclosure records (Russell and Russell 1983; 1985; 1987). As the schematic model shows, a pre-1750 landscape was wholly dominated by open townfields, with associated common pastures and meadows, but with some areas, even whole townships, enclosed at an earlier stage. While this landscape has long had some specialist single farms, as at Temple Bruer, and others associated with the older enclosures and village depopulations, the vast majority of intercalated dispersion came after enclosure, which brought rectangular fields, stone-walled or hedged with hawthorns, and new brick farmsteads set at the end of field tracks amid open sweeps of windswept countryside punctuated by the occasional cover.

It is perhaps too easy, amid this wealth of evidence for communal farming and late enclosure, to overlook the older single farmsteads, some of which may even be ancient, while the complex and fragmented village plans, perhaps aggregations of older hamlets, link the sub-province with the villages of the east Midlands (CEMID) rather than the lands north of the Humber (CHUTE, CEYKS and CWRTD).

Inner Midlands Sub-province (CINMD)

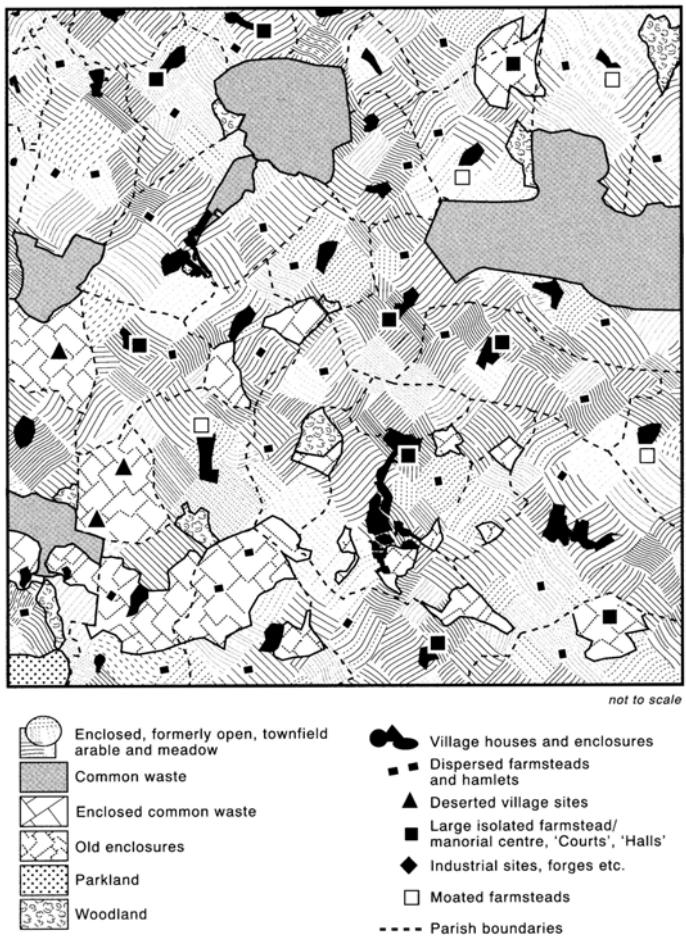


Figure 11: Diagrammatic model of the Inner Midlands Sub-province

The sub-province is strongly banded in a south-west to north-east direction by scarp and vale topography, a broad succession of clay vale, limestone ridge and clay vale emerges, giving variety in local detail. This is the largest area wholly dominated by nucleations in the country, with a vast nebula-like aggregation showing few traces of clear internal structures, although as in CEMID the detailed pattern is essentially that documented in *Domesday Book*, with presences and absences closely related to local soil conditions. A division can be created on the basis of the densities of nucleations: to the north-west, local region 1, the nucleation count for a 25 by 25 kin square is 62; to the south and east, region 2, a count of 82 was recorded. Large numbers of deserted villages are known, perhaps representing 15% or more of the numbers which once existed. In this case, the distribution appears to support the western boundary identified on the basis of the density of surviving nucleations – a welcome confirmation.

Intercalated dispersion is dominated by a mixture of low and very low density dispersion, largely the products of a movement outward from the villages following the enclosure of the communal townfields. Moated sites concentrate in two distinct areas: in the north, on the claylands of the Warwickshire-Leicestershire border, and in the south-east, in the Oxford Clay Vale in Berkshire, Bedfordshire and Buckinghamshire.

This is the heart of village England, champion country par excellence. A prime research question must undoubtedly be the extent to which older landscapes have been almost wholly eliminated by intense medieval and post-medieval cultivation. Ford (1976, 292–94) has suggested that in the Feldon of south Warwickshire there are indications that medieval surveyors laying out townfield furlongs were aware of and used pre-existing landmarks and land divisions. The model of the expansion of arable fields from 'lighter, more easily worked soils' to 'less favourable land' is an attractive one, and has appeared to fit the available facts. Nevertheless, the existence of a well-documented cleared tract [see fig 25 in the printed *Atlas*], extending across both the river terraces (often with rather leached profiles), the heavy loams and the clay of the Lias (often rich in calcium carbonate and hence amenable to tillage), but also embracing the heavy soils on the Keuper Marl, well drained where they occur on natural slopes, must lead to a serious questioning of our understanding of early woodland clearance and its chronology.

East Midlands Sub-province (CEMID)

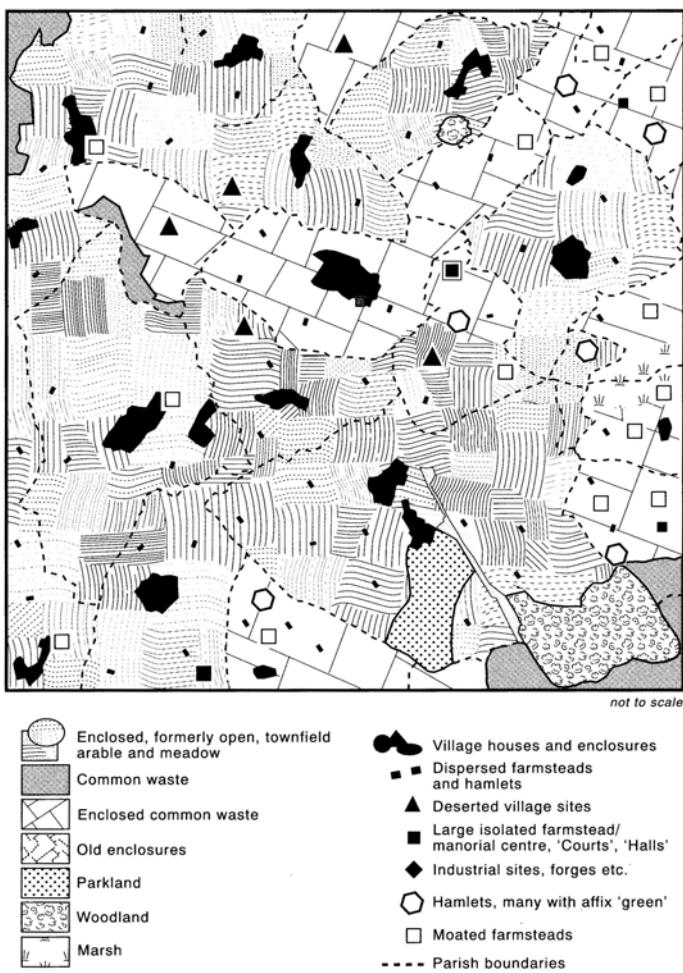


Figure 12: Diagrammatic model of the East Midlands Sub-province

The western boundary of this East Midlands sub-province has been defined on the basis of a slight change the numbers of dispersed farmsteads intercalated amongst the dominant pattern of nucleations, with slightly lower densities in eastern Northamptonshire, Leicestershire, Cambridgeshire and the Isle of Ely. The same slight break appears in Dury's maps of the 1851 census data (Dury 1963, fig 88). We would reiterate that while many of the boundaries do indeed possess time-depth, others will have resulted from change in the eighteenth and nineteenth centuries.

These East Midland landscapes are developed on the subdued scarp and vale topography of the eastern portion of the Midland plain, where chalk and limestone ridges are both lower and overlain by drift of varied thickness. Generally these are landscapes of subdued swells, shallow valleys and rather flat interfluves, but the Welland-Wreak watershed is both higher and more dissected. The sub-province is dominated by villages and hamlets, but it is nevertheless possible to identify quite small local regions using slight variations in their overall density. In the centuries before the eighteenth-century enclosure movement, which brought new dispersion intercalated between the older nucleations, the dominance of the villages and hamlets must have been an even more striking phenomenon (Hall 1995). Nucleations are less evident within Rockingham Forest (CEMID 2a), Rutland

(CEMID 2b) and High Leicestershire (CEMID 2c). As might be expected, dispersion densities range between low and very low. The distribution of moated sites raise interesting questions: in the northern portion of this sub-province they occur in densities which are unexceptional for the Central province, but in the southern portion they concentrate in numbers which are more characteristic of the south-eastern province (Taylor 1972).

The relationships between the areas dominated by nucleations and the 'woodland' local regions should be noted: it was expected that these latter would stand out as areas dominated by dispersion amid landscapes dominated by villages, but in general, this has not been proved to be the case. The woodland zones support a density of dispersion which differs little from that found in the village areas; what does differ is the concentrations of nucleations present and detailed study has already shown us that these are lower in areas where woodlands were present in and before 1086. They may even reflect slight distinctions resulting from management policies within ancient estates.

Deserted villages noted by the DMVRG by 1968 cluster thickly within this zone, more in the northern half than in the south. This would appear to reflect three factors: the physical presence of substantial numbers of desertions, the presence of identifiable remains, and the presence in the south of subtle mixtures of both champion and woodland countrysides. At the scale of the present survey it is not possible to identify local regional variations with certainty, while there is a need to evaluate the ratio of lost to surviving nucleations. A combination of the map of nucleations and the map of deserted villages would give a challenging view of the former density of clusters within this sub-province, minus, of course, the elements of dispersion. While the sub-province contains only a small number of settlements with the affix 'green', experimental plotting of two other elements, 'end' and 'street', confirms the presence of the former in significant quantities within this zone, further confirmation of its individuality.

In CEMID local landscape contrasts are subtle and deep-rooted and there appear to be contrasts between the north and the south, which have not been wholly defined in terms of local regions. The model (Figure 12) we have created for this complex landscape is simplistic, reflecting little more than the interdigitation of landscapes formerly dominated by townfields with landscapes dominated by woodlands, although comparison with Figures 6, 9 and 10, emphasises the contrast with areas largely lacking the 'woodland' component. CEMID was included within the area subjected to detailed study by Lewis, Mitchell-Fox and Dyer (2001), whose intricate maps – embracing a rather larger area – do provide a fundamental foundation for expanding and testing the arguments framed in the Atlas at the all-important sub-provincial and local regional scales. We would suggest that several specific lines of enquiry present themselves: first an assessment of the territoriality of settlement as expressed in the mosaic of parish and township boundaries, which are undoubtedly relate to both gross and subtle terrain conditions; second, a reconstruction of the sub-provincial pattern of woodland, both before and after 1086, for this appears to represent the key factor determining the broad presence or absence of anciently established villages and hamlets, and provides a way of differentiating those local territorial entities with champion or woodland characteristics, or mixtures of both; and finally, the identification and mapping of the broad patterns of feudal estates present, ecclesiastical or lay, and dominated by large, medium or small manors.

Experience suggests that the first and second of these are indeed feasible (Bennett and Bennett 1993; Platts 1985, fig 34) but the third, touching the wholly crucial mosaic imposed upon the land by estate and manor, present cartographic challenges which have yet to be satisfactorily resolved.

Cotswold Scarp and Vale Sub-province (CCTSV)

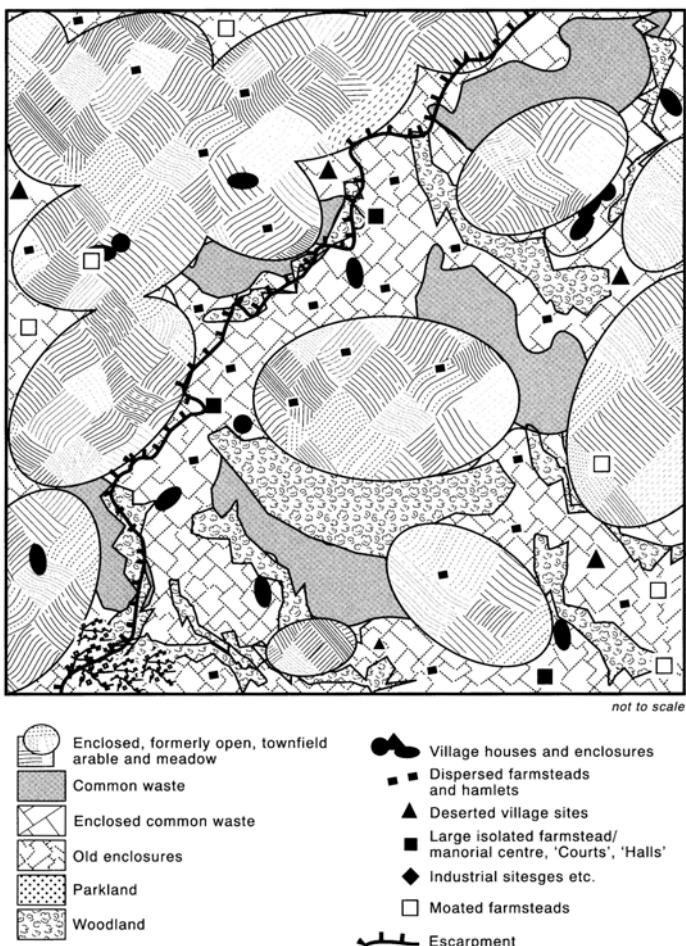


Figure 13: Diagrammatic model of the Cotswold Scarp and Vale Sub-province

Delimited by the converging provincial boundaries as they trend south-westwards, the eastern boundary of CCTSV is represented by a change already discussed in CINMID. That to the south-west is equally vague, no more than a slight increase in the number of nucleations between CCTSV and CWEXW. Nevertheless, the reconstruction of early woodlands does suggest that those areas of the Central Province, including and to the south-west of CCTSV, carried more woodlands than the sub-provinces of the Midlands proper, a theme we will pursue in further research. This sub-province forms a cross-section of scarp and vale landscape, from the clay and alluvial landscapes of the Severn Plain, over the high Cotswold ridge and down its dip slope to the Oxford Clay Vale.

Villages and hamlets cluster most thickly on the Severn Plain, are fewer on the higher levels of the Cotswolds, and appear in moderate densities elsewhere, in the valleys and on the dip slope and clays. Generally absent from the Severn Plain, deserted villages in some numbers appear on the Cotswolds and spread into the clay vales to the south and east. There is a significant scattering of 'greens' throughout this sub-province, although numbers never approach those found in parts of the South-east and Northern and Western Provinces. Mixtures of low to extremely low densities of dispersion prevail, but a zone of high density dispersion, intermixed with nucleations, extends into the Upper

Avon and Thames and into the Vales of Pewsey and Malmesbury. Moated sites concentrate along the Severn Plain and in the Upper Avon and Thames.

The sub-province has a ‘transitional’ feel, between the Midlands proper with their relatively large areas of relatively homogeneous terrain, where variations are very subtle, and the broken, heterogeneous terrains of CWEXW to the south, in which the woollen industry has long played a part in sustaining densities of settlement. Culturally this is a zone in which Romano-British roots lie closely beneath this northern frontier of an emergent Wessex (Finberg 1964, 21–65; Finberg 1972, 426–7, 486–7; Aston and Iles 1987) in which there have long been complex mosaics of cleared land (feldland) and woodland (Costen 1987). Aston and Iles’s fine grained atlas, provides an important local synthesis which cuts across two of our sub-provinces and illustrates the synthesising role of our present national study.

West Wessex Sub-province (CWEXW)

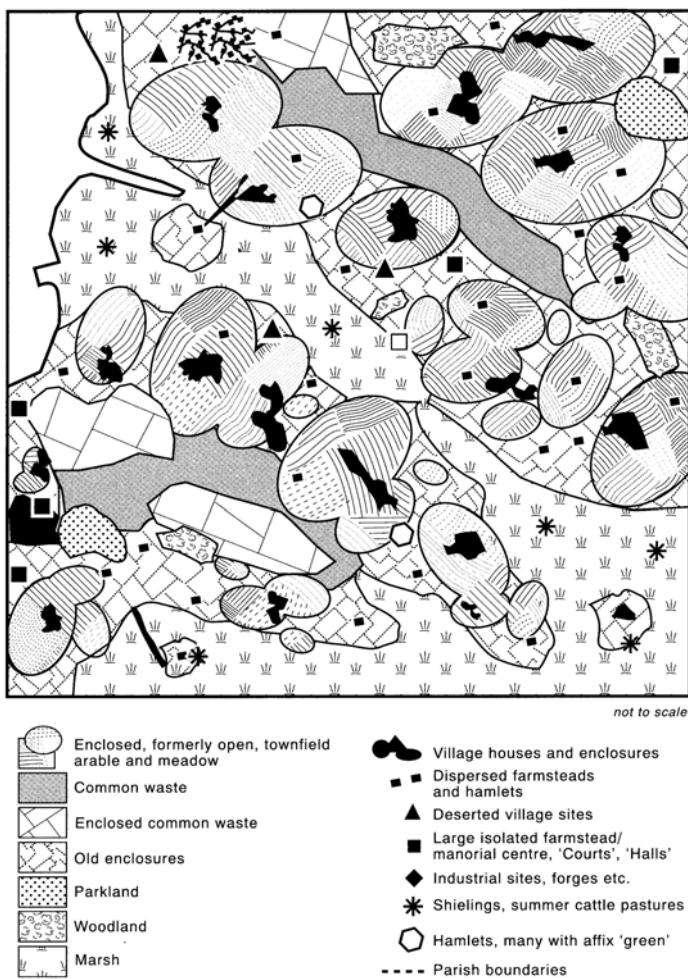


Figure 14: Diagrammatic model of the West Wessex Sub-province

The north-eastern boundary of this sub-province has been discussed in the description of the Cotswold Scarp and Vale sub-province (CCTSV), while the irregular eastern and western boundaries are those of two provinces, involving sharp changes in the density of nucleations. Variety is the keynote, up-standing escarpments of limestone and sandstone, with clay vales, chalk uplands and alluvial tracts all intermix, and it is this richness of landscape types which has allowed this area to support great densities of nucleations.

In fact, this area contains the greatest density of nucleations in the country – concealed by the fact that many are rather small. Preferred settlement zones along lines of contrasts in the local terrain intermingle with more homogeneous scatters over areas with more uniform terrain. Even within this rich zone, depopulated settlements are found, particularly in the east and south of Somerset, but they are only a very small proportion of the total stock of nucleations. Generally, there are very low and extremely low densities of dispersion, but to the east, in Blackmore Vale, and to the west, in Taunton Deane, the Vale of Stogumber and the slopes of the Quantocks, high and even very high densities are to be found, perhaps involving the clear mixing rather than superimposition of two settlement patterns.

This sub-province contains the most intricate, the most complex of settlement landscapes (Figure 14), with many short distance variations, and probably many genetic layers. The model suggests this, and the mixtures of townfield systems and early, non-Parliamentary enclosures, with piecemeal enclosure perhaps accounting for the broken and fragmented arrangements seen in the townfields. One aspect of its complexity can be illustrated by an example taken from the work of a long established scholar, whose conclusions we cordially criticise. In his short study of the medieval rural landscapes of Avon (1987, 110–1) Iles publishes an aerial photograph of a field system on Bleadon, at the western end of the Mendips: it is suggested that this shows medieval open fields which overlie ‘early fields’ but to our eyes there is evidence for a set of ‘great’ strips, with traces of parcels substantively longer than the normal 200 metres, and which are closely paralleled by similar systems found in CEYKS, in WCUSL and in CPNSL. Of course, we would hesitate to say these Bleadon fields do not have prehistoric antecedents, for there are parallels with the reaves of Dartmoor (Fleming 1988) but the features to be seen – some continuous sustained enclosures, parallel fossil boundaries, some lyncheted, superimposed cross-boundaries, and ‘angled residuals’ – suggest that the whole system, both ‘early’ and ‘medieval’, is based upon a series of great strips, not necessarily wholly regular, but slicing across the landscape, like the ones documented in WCUSL (Roberts 1996). Our argument is simple: while detailed on-ground mapping will undoubtedly reveal that the likely sequence of events was infinitely more complex than the two-stage model which has been proposed, the full importance of the survival of this type of system is revealed by comparison with those of other areas, and for this precise scale definition is needed. Our own conclusion is that this system is neither ‘early’ nor ‘medieval’ but may contain elements from remote antiquity as well as from late twentieth-century farming practices, and indeed all periods between. Period classification is a necessary tool, but like a chainsaw it is a remarkably dangerous one.

THE NORTHERN AND WESTERN PROVINCE

The Northern and Western Province is geographically fragmented by the Severn estuary, and once again, there could be grounds for identifying the south-west peninsula as a wholly separate province rather than a mere sub-province, but this is a classificatory detail. Delimited to the east by the western boundary of the Central Province with its dense concentration of villages and hamlets, the great north to south extent and physical variety, from the mountains of the Lake District to the plains of Herefordshire, provides physical diversity. Nevertheless, our sub-provinces and local regions have been devised to reflect the settlement diversity appearing on the key maps of nucleation and dispersion [figs 8 and 9 in the printed *Atlas*].

Cheviots and the Pennines Sub-provinces

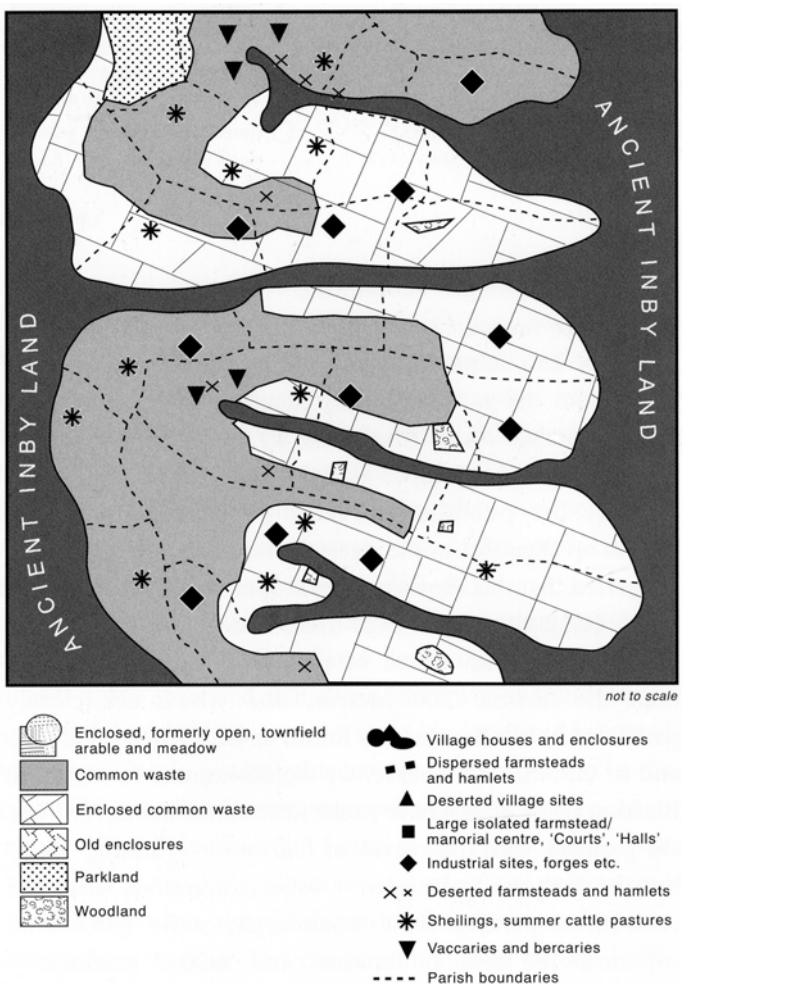


Figure 15: Diagrammatic model of the Cheviots and Northern and Southern Pennines Sub-provinces

- Cheviots (WCHEV)
- Northern Pennines (WPENN)
- Southern Pennines (WPENS)

There can be no doubt that these upland masses have long been integrated economically with the lowlands which surround them (Figure 15). Nevertheless, they form distinctive and separate settlement regions, and are – for convenience only – grouped together in one discrete sub-province. There are great local variations dependent upon terrain, landownership, and the time and character of industrialisation.

In general these are hill masses with flat or undulating upper surfaces rather than jagged peaks: often peat covered, with deeply incised rather narrow valleys, or dales. They can be monotonous and uniform, but there are subtle variations dependent upon the underlying lithology and the depth and character of any superficial deposits, drift or peat, varied management practices, such as improved grass, rough grass, bracken or heather moor in varied associations, and varied land-usages, grazing, grouse production, army

ranges, extractive industry, and some areas given over to forestry.

Nucleated settlements and dispersed settlements are generally absent. Apart from specialist nucleations – mining clusters and railway foci – settlement has normally been dispersed. Shielings (areas of summer pastures), bercaries and vaccaries (sheep and cattle production stations), parkland extensions and sites associated with stone or other mineral extraction have all been associated with settlements which have been only episodically occupied. Dependency upon the lowlands is normal. In these marginal environments dating can be difficult, and visible cases range in date from prehistory to the later nineteenth century.

In the medieval period and later these are regions of specialist settlement, marginal, subject to boom and slump depending upon short term climatic conditions or market conditions to which local agriculture and industry respond. Parry (1978, 112–22) showed how far occupation can interlock with climatic variations, and research agendas must concentrate upon the extent to which it is possible to identify multiperiod rather than episodic occupation.

Cumbria and Solway Lowlands Sub-province (WCUSL)

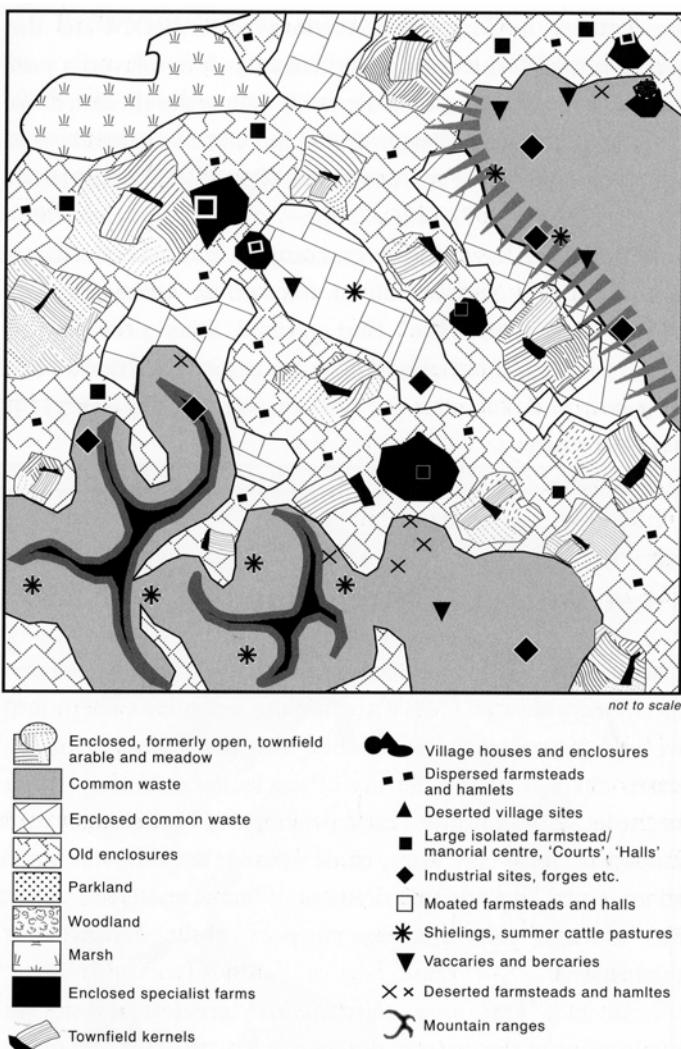


Figure 16: Diagrammatic model of the Cumbria and Solway Lowlands Sub-province

The southern boundary of this sub-province (between WCUSL and WLALO) divides the uplands of the Lake District into two parts; the identification of the southern sector – approximately one third of the whole – is based upon two criteria: significant variations in terrain (this sector being lower and less mountainous), and the presence of significantly different settlement qualities, with greater quantities of dispersion and many small hamlets with some villages.

The northern sectors of the Cumbrian mountains, the Solway Plain and associated areas and the Vale of Eden form a distinctive sub-province, enclosed behind upland barriers and entered by only four land routes: the Lune Gorge, the pass of Stainmore, the Tyne Gap and the Solway and Irthing fords. Within comparatively short distances are encapsulated vivid highland/lowland contrasts: the good red lands of the Vale of Eden have much in common with the lowlands of the Central Province, while the miniature mountains of the Lake District and great escarpment of the northern Pennines are indisputably part of the highland Britain.

Small villages and hamlets cluster thickly on the Solway Plain and in the Vale of Eden, with local variations provided by the presence of peat mosses and the ridge of the Forest of Inglewood. A 25 by 25 km square sample produces a count of 56 nucleations. While there were undoubtedly contrasts between the relatively stable nucleations of the richer agricultural zones of the lowlands, and more ephemeral clusterings of the mountain valleys, even in a location as remote as Wasdale Head there are slight hints of an incipient cluster (Figure 16). Deserted villages are undoubtedly present in small numbers, the absence of a nucleation at a township centre (often marked by an ancient hall) may indicate depopulation, but may also be linked to the superimposition of two systems, one older and hamlet-based, the other more recent and village-based.

Low, very low and extremely low densities of dispersion are normal along the coastlands and in the mountains, but the Vale of Eden sustains medium densities of dispersion amid the nucleations. Scattered farmsteads and hamlets appear in the mountain valleys of the Lake District, and with increasing altitude place-names and remains suggest the use of seasonal summer grazings or ephemeral activity linked with mining and quarrying.

Geographically discrete, subject to diverse influences from all directions, and containing short-distance but large scale contrasts to set against its subtle internal diversity, this sub-province possesses something of the character of a laboratory. Its townfields still – for many details remain visible – contain traces of core ‘foothold’ furlongs built of long strips, 400m, 600m, 800m or even longer, structures documented on early seventeenth-century Howard of Naworth estate maps. Sometimes these cores have become subdivided and integrated into expanded furlong groups, resembling conventional ‘field systems’, while on other occasions they retain what is probably their ancient form of long, rather broad tenurial parcels (Elliott 1973; Roberts 1987, 3.12; Roberts 1996). Research is by no means concluded, but – and to reiterate one leitmotif of this study – secure scale comparison with the more fully developed systems of the Central Province is feasible: some of the latter do appear to have developed over arrangements incorporating strip-systems much longer than the 200 metres more normal for open field parcels. There are indications of similar very long strips both in east Yorkshire, where they appear on the North York Moors Outdoor Leisure 1:25,000 map near Pickering, and in Derbyshire in the region centring on Bakewell. In all cases these are associated with regular village plans, based upon street-greens or streets. It is also possible that WCUSL retains clear on-ground evidence for the processes generating nucleated villages and townfields (Roberts 1996). While the absence of the evidence of *Domesday Book* is a documentary barrier, place-name evidence from Cumberland and Westmorland attests the complexity of the cultural links, British, Anglo-Saxon, Scandinavian and Scottish, and the Anglo-Norman take-over of the late eleventh century, when William Rufus sent ‘many peasants thither with their wives and livestock to settle there and till the soil’ (Garmonsway 1953, 227).

An early seventeenth-century survey of the Barony of Gilsland, set at the northern edge of this sub-province, suggests that the whole estate then comprised some 74,000 acres: of this nearly 33,000 acres were accounted as common pasture, while a further 17,400 acres were forest or waste – including the great waste of Spadeadam. Thus, all of the settled land, including townfields, demesnes, intakes, old enclosures, assart land, shielings and the like, accounted for only 24,000 acres out of the 74,000 (Graham 1934). In the light of such figures we can well appreciate how limited is the spread of common waste shown in

fig 25 [in the printed *Atlas*], and something of the full significance of the formal phrases of the original grant of the estate, which in the foundation charters of Lanercost Priory mention 'pasture for cows, sows and oxen, pannage in Walton Forest, timber and wood', and tithes of 'meat, hides and fox skins, and of all the chickens, calves, lambs, piglets, fleeces, cheese and butter, from ... waste land and from any cultivated land within the waste' (Todd 1997, 52, 55).

Lancastrian Lowlands Sub-province (WLALO)

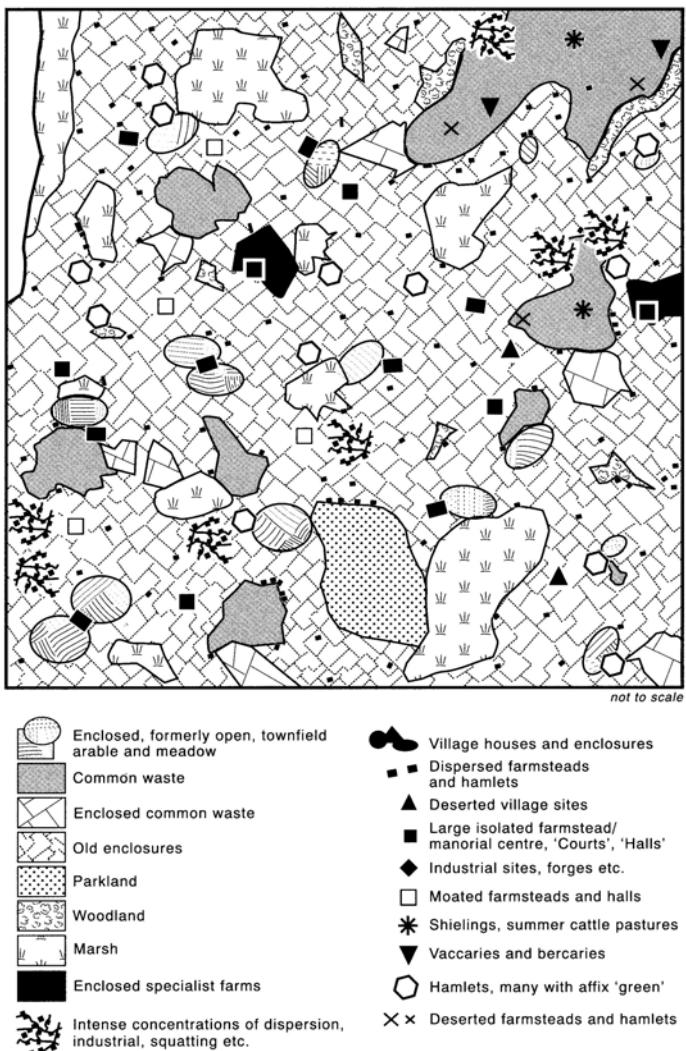


Figure 17: Diagrammatic model of the Lancastrian Lowlands Sub-province

This large sub-province occupies the western slope of the Pennines: its southern boundary is set approximately at the Mersey which appears to represent a line of settlement contrast to be seen on both the map of nucleation and that of dispersion [see figs 10 and 9 in the printed *Atlas*]. The lowlands are drift covered, with substantial marshy and alluvial tracts; inland upland masses of varied size and varied degrees of improvement rise sharply from the plain, the upper levels being given over to moorland, upland grasslands and hill peats.

The lowland portions of the sub-province support a scatter of nucleations, with many centres achieving urban status by the middle decades of the nineteenth century, a by-product of the diverse industrial base. The southern half of the sub-province contains some of the most dense levels of dispersion found in the country, a mixture of very high and extremely high density scores. Further north, in the Craven Lowlands, the Ribble Valley and Morecambe Bay lowlands, and Lancashire over Sands densities are lower, but with local mixtures of both low, medium and high densities. Moated sites are present in

some numbers on the Lancastrian Plain.

There is no doubt that the very high densities of dispersion, the many urban nuclei and perhaps many of the actual nucleations result from the industrialisation of this region between the seventeenth and the later nineteenth centuries, a period during which local populations rose rapidly. The landscape is documented on William Yates's map of 1786 (Harley 1968, 14–20), where in addition to farmsteads and the dwellings of industrial workers there are water and windmills, coal-pits and iron mines, iron and copper works. Already there were many settlement chains, sprawling along routeways as well as scatters colonising marginal lands (Harley 1968, 17). These profound changes effectively mask the older layers, which may nevertheless be present and detectable in local situations. Already by 1786, the lowland heaths, inland mosses, coastal marshlands and upland commons had been reduced, and were no longer dominant. Elliott's work suggests that field systems based upon varieties of open townfields had only a very restricted distribution throughout Lancashire (1973, fig 1.4), and he creates an image of small communally-cultivated arable cores set in landscapes dominated by the wastes of the forests, chases and common pastures, and ring-fenced farms of both specialist enterprises such as stud farms, vaccaries, bercaries, granges and shielings, together with the intaken steadings of tenant farmers. Given the distances involved, and the physical and social contrasts, it is paradoxical that the presence of moated sites and settlements with the affix 'green' suggest the presence of landscapes whose deep structures have much in common with those of EANGL: while this was generally noted by Rackham, it remains an important research theme to be tested.

Cheshire Plain Sub-province (WCHPL)

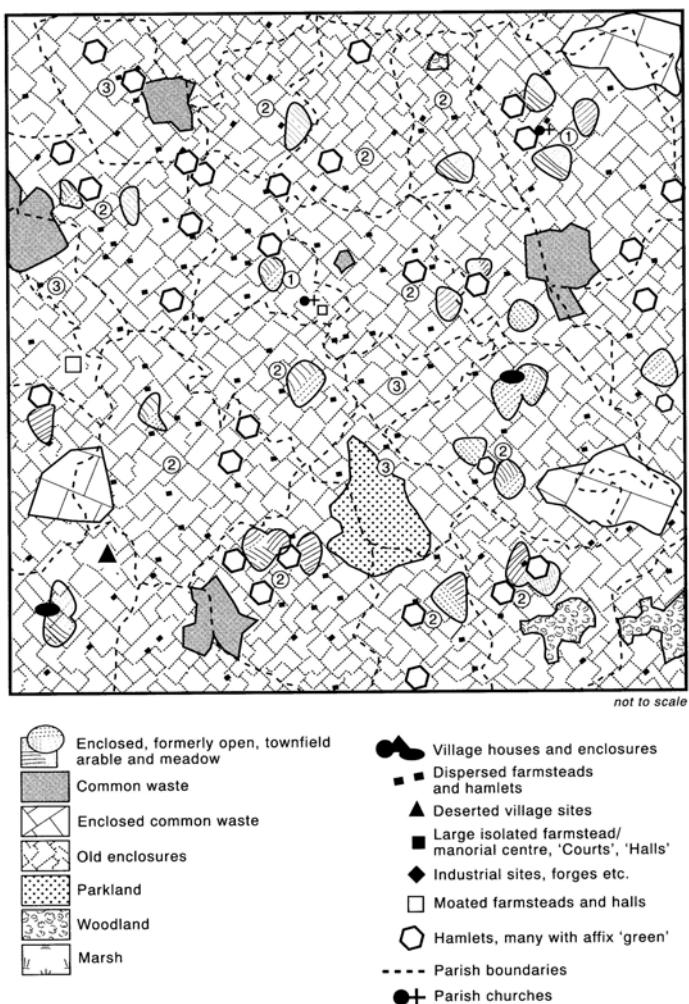


Figure 18: Diagrammatic model of the Cheshire Plain Sub-province

The sub-province intrudes into the uplands to the cast and south-east, notably the distinctive Bakewell area in the valleys of the upper Derwent and Wye, although we must admit that a more rational link would have been to associate this local region (WCHPL 6) into the West Midland sub-province (WWMID): as we have noted elsewhere it possesses its own strong unity (Barnatt and Smith 1997). The landscape of most of WCHPL is essentially a drift covered plain, diversified by some sandstone escarpments, 'a quietly undulating country, with many streams flowing gently in wide valleys' (Trueman 1938, 88-9). The distinctive small lakes, 'meres', result from kettle holes, where drift-swamped ice-blocks melted; but some also result from salt extraction in recent centuries. Sandstone and limestone ridges to the east, south of the High Peak, create distinct high-level countrysides in the southern Pennines.

With the exception of the Wirral and adjacent areas, densities of nucleations were by the 1830s and 1840s notably and significantly lower than in any other lowland area in the country, although densities are significantly higher in the Miller's Dale-Wyedale local region (WCHPL 6). In sharp contrast, again except in the Wirral and adjacent areas, densities of

dispersed settlements range between high and very high, including many small hamlets and scattered farmsteads (as can be seen in Figure 18), while there are significant densities of moated sites and settlements with the affix 'green'.

This is a challenging sub-province: Dorothy Sylvester's mapping, used as the basis for Figure 18 (1969, 257–92), shows that the settlement is by no means uniform, comprising, parochial centres, some ancient, some more recent, with traces of small areas of townfield in the form of distinctive enclosure patterns (Figure 18). Two, and more rarely three-field systems were practiced, but in none of the cases she cites would the settlement pass as a substantive village in areas characterised by nucleations. They are shown diagrammatically in the model. Numerous hamlets were also present, and from traces seen either as field boundaries or in documents it is clear that many – but perhaps not all – once possessed small areas of townfield. Finally, cases are known of townships in which by the nineteenth century nucleation was wholly absent, an observation to be set against the few known deserted villages, while others are almost wholly emparked (Figure 18). The two latter are contexts in which careful observations are needed to determine with precision the characteristics of a sub-provincial system whose arrangements could well have differed markedly from those found within the Central Province. None of the maps consulted contains traces of late surviving common wastes, but the rising lands to the south-east carry more woodland. The Bakewell area in the Peak District (WCHPL 6) remains an enigmatic intrusion into a area of upland landscapes of villages and hamlets, many with traces of planned field systems based upon very long arable strips comparable to those of the Eden Valley and Solway Plain (WCUSL).

Shropshire Hills and Severn Plain Sub-province (WSHSP)

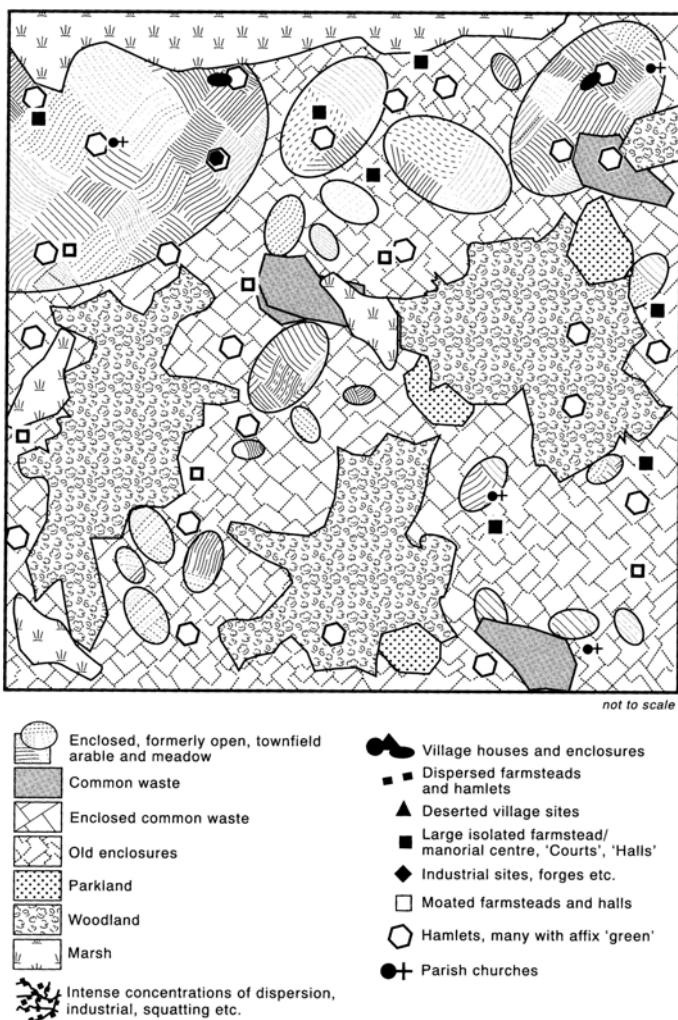


Figure 19: Diagrammatic model of the Shropshire Hills and Severn Plain Sub-province

A varied sub-province, with clay plains, limestone escarpments and old upland masses, the settlement of the Shropshire Plain is characterised by large numbers of very small nucleations, but the whole area is generally typified by dispersed settlement and old enclosures, a mixture of medium and high densities, becoming very low in the Herefordshire Hills local region to the south-west. Moated sites are present on the Shropshire Plain in limited numbers, but absent from the Oswestry region. The relationship between their distribution and that of earthwork castles needs further attention.

This mid-borderland sub-province appears to be detectable on Dorothy Sylvester's maps (1969, fig 3), and her undervalued work provides a foundation for further broad scale investigation of the many settlement questions within the lands along the Welsh border. In retrospect it is possible to see that she was wrestling with remarkably subtle north-to-south variations, along the line of the border, and had her work extended eastwards, then the fundamental woodland/champion contrasts which have been made the basis of this study would have emerged. Our landscape model (Figure 19) is generalised boldly from

material published in the Victoria County History (VCH Salop XI, 1) [see fig 27 in the printed *Atlas*] and Hill (1984), emphasising that this is a zone of short-distance contrasts, with limited areas dominated by open townfields intermingling with extensive areas of hill country. Woodlands, open commons, and extensive tracts of old enclosure are intermixed with fragmented kernels of townfield land, many of which seem to have been in place by 1086. Fig 24 [in the printed *Atlas*] suggests that a mosaic of cleared land and woodland was already present by that date. The VCH and Hill undoubtedly document a situation in which the townfield lands were associated with the oldest settlements, both Welsh and English. During the twelfth, thirteenth and fourteenth centuries assarts and other reclamations were taking place outside these cores. Hill's arguments, forced into no tight straight-jacket of preconceptions but lacking a clear-cut synoptic summary, illustrate admirably the uncomfortable complexities of the processes of change involved. That the pre-1086 clearances generated townfield lands rather than enclosed lands, even deep within this Northern and Western Province, has important implications for our eventual analysis of the national picture.

West Midlands Sub-province (WWMID)

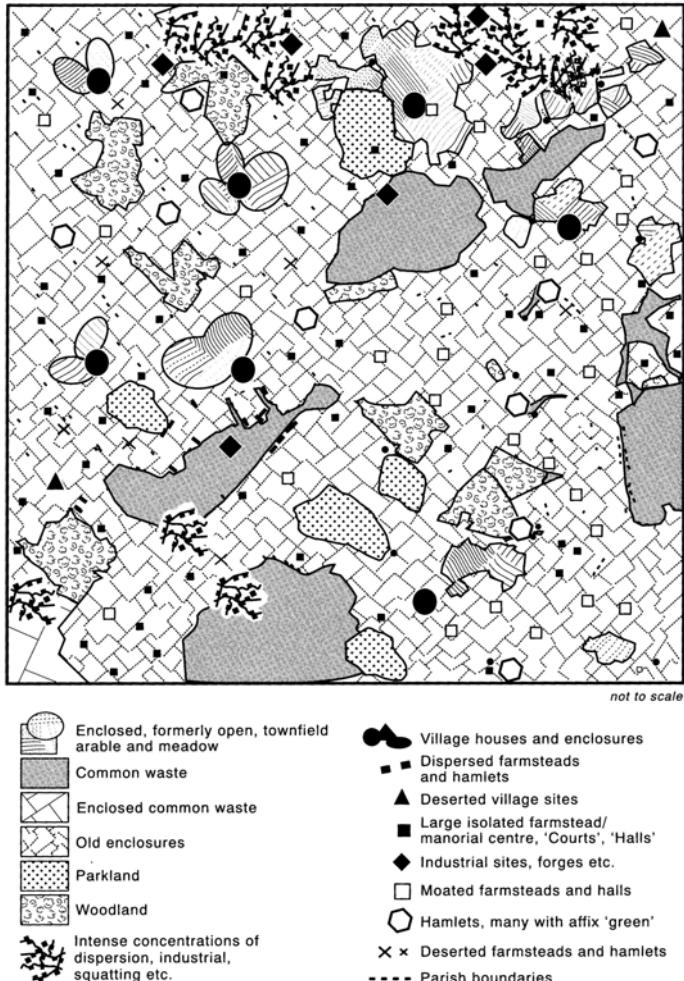


Figure 20: Diagrammatic model of the West Midlands Sub-province

In some senses this is a residual sub-province, isolated as others have been defined, and yet its eastern boundary is defined by a sharp change in the numbers of nucleations present. In Warwickshire and Worcestershire numerous studies reveal that this was already a cultural boundary in 1086 (Gelling 1978, fig 10; Darby and Terrett 1954, 270–308; Roberts 1987, 9.2, 9.9), seen in the distribution of woodland and plough teams, while place-name evidence projects it back into the Anglo-Saxon period. The area comprises a series of low plateaux and low escarpments, often with rather sandy soils, and great clay vales containing alluvial and gravel terraces linked with the Severn, the Warwickshire Avon, the Trent and their tributaries. Still well-wooded in 1086, the area embraced forests such as Kinver, Feckenham, Cannock and Arden. Compared with the lands to the east the area has significantly lower numbers of nucleations, and with the exception of the Severn valley (WWMID3) carried a mixture of medium to very high densities of dispersed settlement. This includes diverse hamlets (many bearing the name 'green'), common-edge scatters of small farmsteads and cottages, roadside cottages, and isolated larger farmsteads, generally moated, many being of medieval foundation. In certain areas – notably the Black Country – this basic pattern of dispersion has been greatly enhanced by industrial activity resulting in some of the highest densities in the country.

Nucleated settlements are present in only limited numbers and, except where industry is present, tend to be small. Apart from the Severn valley, mixtures of medium, high and very high densities are present. These have undoubtedly been enhanced by industrial activity on the varied coalfields. The ancient forest landscapes, with their intricate mosaics of old-enclosed fields and woodland blocks have long been seen as the result of medieval colonisation characterised by the hamlets bearing Anglo-Saxon names, moated sites and farm clusters or scatters with the name 'green', but they must also contain more ancient elements.

One local region requires further comment: the Black Country (WMMID2) comprises that portion of the upper Tame basin, Sedgeley-Northfield ridge and Stour valley plateau fringes underlain by the former South Staffordshire coalfield. At the beginning of the eighteenth century this was predominantly rural, with a largely dispersed settlement pattern. The exploitation of the Staffordshire Thick Coal during the next two centuries intensified settlement by causing the expansion of all former small villages and hamlets, and by increasing the numbers of dispersed elements to the point that chains of small hamlets appeared, each associated with a particular industrial activity – furnaces, transport, mining or surface extraction. The result was an intense, dense, chaotic tangle by the later nineteenth century, showing some of the highest national dispersion scores.

The Wye-Teme Sub-province (WWYTE)

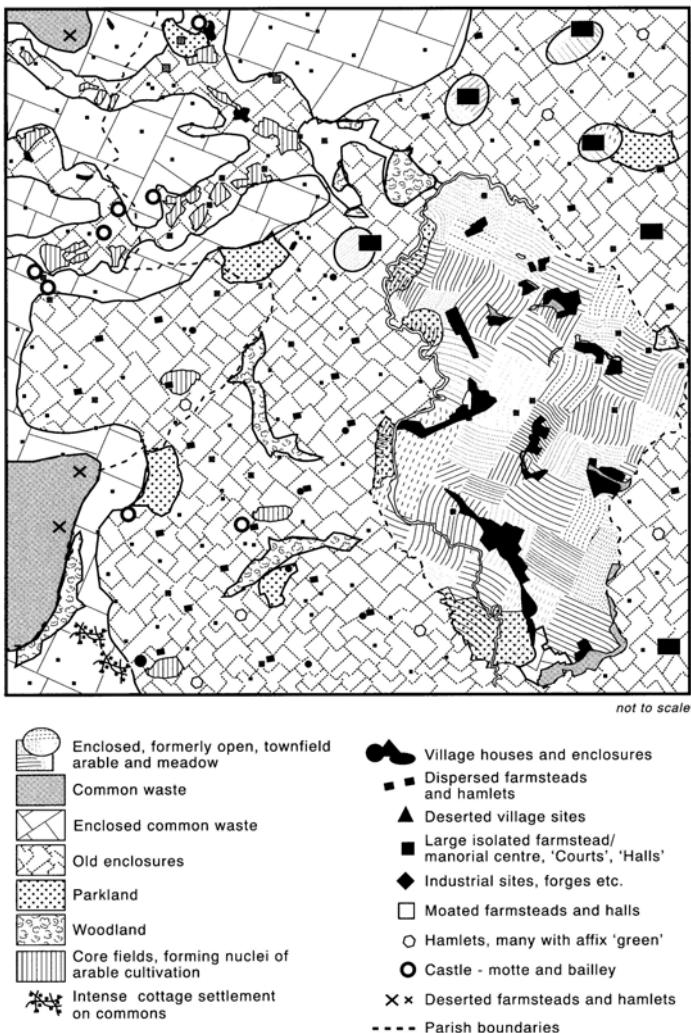


Figure 21: Diagrammatic model of the Wye-Teme Sub-province

This sub-province comprises lands lying west of the river Severn and has been identified by a significantly lower concentration of villages and hamlets than to the east; dispersion predominates. It matches no clearly definable terrain type, and is indeed a complex landscape, with upstanding escarpments intercalated with clay vales, through which the Wye, the Lugg, the Arrow, and further north the Teme, and their various smaller tributaries, have cut valleys. The first three of these rivers generate a substantial and important lowland.

Villages are thin on the ground, the nucleations present either being market towns or tending to be very small hamlets, although recent outgrowths are blurring this picture. The area is dominated by vast carpets of small hamlets and dispersed farmsteads set in intricate, anciently enclosed landscapes which still carry much timber. Particularly in the south-eastern section large numbers of settlements with the affix 'green' are found. Densities of nucleations reach no more than 25 per 25 km square, compared with densities of 60, 70, 80 or even over 90 in the Central Province. Some desertions have been noted. With the exceptions of the Forest of Dean, in the extreme south, and the

Malvern hills, the sub-province is characterised by high and very high density dispersion. Considerable numbers of moated sites are present but there are also the remains of numerous earthwork castles of varied size and complexity.

Domesday Book reveals that it was already densely settled by 1086 and that much woodland was still present. Communally organised townfields of the 'midland' type once supported the larger hamlets and villages in the valleys of the middle Wye and the Lugg and their tributaries, but elsewhere these were limited to small arable kernels adjacent to small hamlets or farmstead scatters (Figure 21). Proximity to the Welsh border has left a heritage in the form of mixtures of Welsh and Anglo-Saxon place-names, numerous small earthwork castles and moated dwellings. To the south, the Forest of Dean, wooded and with low settlement densities, forms a separate entity.

In many respects WWYTE remains *terra incognita* and the density of dispersion is quite remarkable for an area which has always been an almost wholly rural tract abutting Wales: it may contain traces of very ancient settlement systems. Sylvester (1969) remains an important source. The area's hamlets fall into two temporal groups. The first comprises late (ie estate) hamlets near great parks, common edge hamlets, and those associated with bridge-heads, small ports, fishing communities, turnpikes, post-roads, canals and railways. The second group consists of old hamlets, often with place-names which appear in *Domesday Book*. The summary model (Figure 21) reveals ignorance as much as knowledge, but the settlement characteristics can be outlined.

Village size nucleations are most common in the middle Wye and lower Lugg and Frome valleys, which C W Atkin termed the Central and Eastern Plains of Herefordshire (Darby and Terrett 1954, 106). Sylvester (1969, 231–4, 218–9) shows a concentration of townfield agriculture in this area, and a version of Sheppard's reconstruction of the Manor of Marden has been built into the model (ex inf). She postulates that the fields she can reconstruct are the end-result of aggregation from a succession of smaller townfield kernels already present by the late eleventh century. By that date the plains were already plough-rich.

A glimpse of an earlier stage of development is afforded by Lord Rennell of Rodd's study of the Hindwell Valley (1958), where on the basis of a landowner's intimate knowledge of farming (he was indeed President of the Royal Geographical Society) and an inspired use of limited records he reconstructed a series of small core arable fields which he equated approximately with the likely acreages of the ploughlands of 1086. In contexts where populations grew, these would have become core furlongs of townfields and the contrast with Marden is instructive.

Finally, the modern map reveals areas with vast carpets of small hamlets and farms set amid enclosed landscapes, with woodlands on steeper slopes and a few traces of open commons, all linked by intricate networks of roads, lanes, tracks and paths. These, and the presence of castle mottes and moats, 'green' hamlets, cottage clusterings on former common lands (particularly towards the Forest of Dean) speak of a complex post-Norman conquest history of settlement in a 'woodland' landscape. Nevertheless the repeated use of Old English place-names for farmsteads, with the occasional Welsh name, indicates deeper roots.

We have not felt able to reconstruct any of the 'deep structures' present in these landscapes, but wish to emphasise that these require investigation. Indeed, although this sub-province excites little attention, because it contains much grassland, it may be the least damaged set of old landscapes in the country.

South-west Peninsula Sub-province (WSWPN)

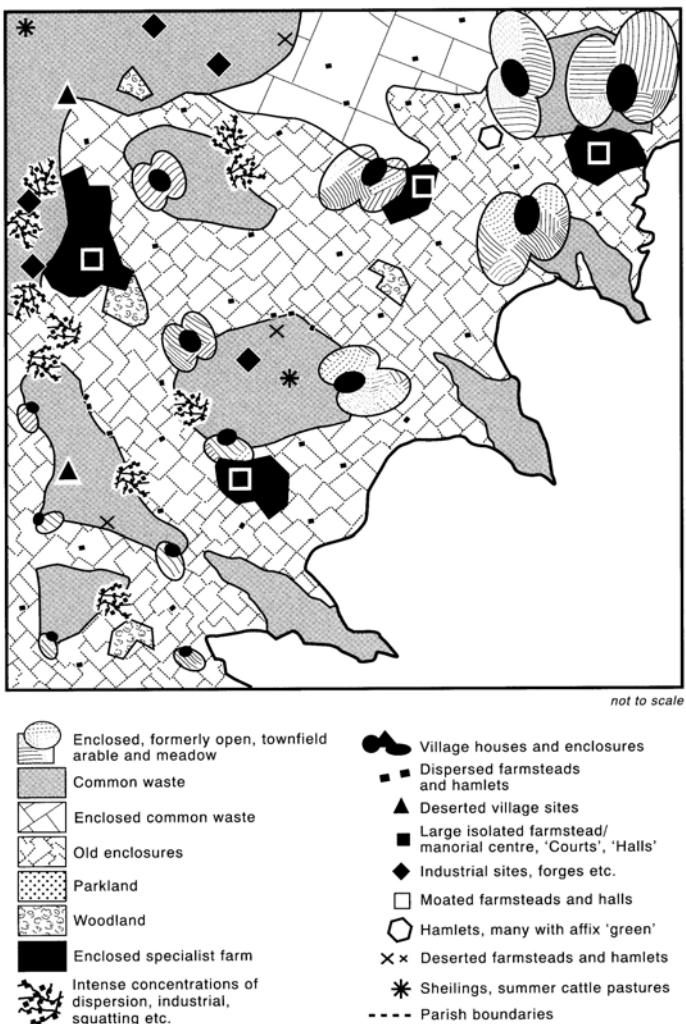


Figure 22: Diagrammatic model of the South-west Peninsula Sub-province

The South-west Peninsula is defined on the basis of settlement characteristics, and has been divided into no less than 25 local regions. Its eastern boundary is distinguished by a sharp break in the overall density of nucleations, while the sea not only delimits the remainder but has a powerful effect upon local climate and lifestyles. Cornwall has been the subject of a detailed landscape survey by Nicholas Johnson and his team (1996) to a level of detail far exceeding what is achievable in a synoptic survey. The area possesses a diverse terrain, ranging from the granite uplands, through rolling dissected plateaux, to clay lowlands further east. Basically the land surface is a powerfully rolling, undulating plateau: above this rise the uplands and some sharper ridges, but into it an intricate drainage network has cut often deep valleys; indeed towards the mouths of the rivers downcutting has been so much that a rising sea-level has been able to invade, resulting in distinctive estuaries.

An overall thin scatter of nucleations shows substantial variations at the level of the local region: the Devon Lowlands and South Hams possess sufficient numbers to warrant inclusion within the Central Province. It is probable that throughout the whole sub-

province many nucleations originated as small towns, and a high proportion may be relative latecomers to the scene. In other areas, notably the moorlands, clusters of any significant size are generally absent and deserted hamlets are known. With the exception of the empty granite moorlands the sub-province is characterised by densities of dispersion which lie above the 'medium' level; there are even some areas in which very high densities occur, reflecting the higher populations associated with extractive and mineral processing industries.

The South-west is almost another country, as well as being diverse in itself. Its foundations lie in different traditions, a view which applies with even more force once the Tamar is crossed. The presence of ancient hard formations and former deep weathering in an area never glaciated means that land-clearance has long implied stone clearance as much as the removal of trees and other vegetation. As only limited amounts of such stone can be used in the construction of buildings or as packing for roads and tracks – in Denmark Steensberg was able to show that this was an important use of such material (Steenberg *et al* 1968, 55, 1:2000 map) – much field-stone remains in field boundaries. Johnson has found examples of what appear to be essentially prehistoric fields still forming the substance of the existing farm. This touches a large theme – the way in which land progresses from what Fowler has termed 'wildscape' to the 'fieldscapes' of cultural landscapes, involving acts of vegetation clearance, acts of stone-clearance, acts of cultivation, acts of usage and accretive change – with the verb 'acts' being inserted here to emphasise the labour, the time, the deliberation involved in these complex and long-sustained processes. There is a world of difference between a dyke of field-clearance stones (to use the northern term for a wall) and a dyke of quarrystones. There are also fundamental differences between a bounding bank which incidentally includes some stone, what appears to be an earthen bank yet contains some stone, and a great earthen dyke containing but little stone. The latter are singularly common in Pembrokeshire, with its complex mixture of Welsh, English and Flemish cultural traditions. In many if not most cases these tend to lack ditches: how then were they formed? Are they the result of centuries of de-turfing arable land (with a spade or breast-plough?) before ploughing, a necessary step in the 'warmer, wetter grass-growing west' on any land not sustained as continuous arable? Such questions can be asked in other sub-provinces, let us say the Trent Valley (CTRNT) or the Lincolnshire Scarplands (CLNSC), and take us far beyond simplistic environmental explanations. Different locations (implying significant differences in latitude and longitude) and terrains result in different cultural landscapes, and lead towards those complex and long-lasting negotiations between each generation of farmers and the landscapes they inherit and use. What can remain in long usage in stone country, framed by a clearance skeleton, has often simply been worn to destruction in softer lands.

The model (Figure 22) emphasises the extent of old enclosure, while indicating the presence of townfield core and areas of shared arable, larger in the east and smaller to the west. Enclosures are dominant, tending to be irregular except where eighteenth and nineteenth-century enclosures from common pasture bring greater regularity. The demesne farmsteads, often cast in the form of a larger and more impressive version of the local vernacular style, indicate ancient settlement elements with the nucleations being a secondary element in the landscape.

LIST OF SETTLEMENT PROVINCES, SUB-PROVINCES AND LOCAL REGIONS

The South-Eastern Province

The Wash Sub-province

EWASHE1	Goodsands
EWASHE2	West Norfolk
EWASHE3	Northern Breckland
EWASHE4	Black Bourne
EWASHE5	Upper Dove Valley
EWASHE6	Southern Breckland
EWASHE7	Granta
EWASHE8	Upper Stour Valley

EWASHW1a	Fen Islands (a)
EWASHW1b	Fen Islands (b)
EWASHW1c	Fen Islands (c)
EWASHW1d	Fen Islands (d)
EWASHW1e	Fen Islands (e)
EWASHW2	Fen
EWASHW3	Marshlands
EWASHW4	Northern Fens
EWASHW5	Lincolnshire Coast

The Anglia Sub-province

EANGL1	North-east Norfolk
EANGL2	Mid-Norfolk
EANGL3	Broads
EANGL4	High Norfolk and Suffolk
EANGL5	Tas-Waveney Divide
EANGL6	Mid-Suffolk
EANGL7	North Stour Slope
EANGL8	Sandlings
EANGL9	Blackwater-Colne Divide
EANGL10	Lower Colne
EANGL11	Lower Blythe
EANGL12	Coastal Plain
EANGL13	North-west Essex
EANGL14	Central Essex
EANGL15	Hertford Rural
EANGL16	Ash-Stour

London

ELONDI	London
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The Thames Sub-province

ETHAM1	Lower Thames
ETHAM2	Mid-Thames Village Belt

ETHAM3	North Slope
ETHAM4	South Slope
ETHAM5	North-west Slope
ETHAM6	Thames Heath
ETHAM7	Greater Chiltern
ETHAM8	Kennet Valley
ETHAM9	Sheppery

The Weald Sub-province

EWALD1	North Downs
EWALD1a	High Downs
EWALD2	Vale of Holmsdale and Len Valley
EWALD3	Greensand Bench
EWALD4	Eastern Weald
EWALD5	Western Weald
EWALD6	Southern Weald (Vale of Sussex)
EWALD7	Canterbury-Thanet
EWALD8	Romney Marsh
EWALD9	West Weald
EWALD10	Blean

East Wessex Sub-province

EWEXE1	Salisbury Plain and Hampshire Downs
EWEXE2	Marlborough Downs and Berkshire Downs
EWEXE3	Poole Lowlands
EWEXE4	Coastal Lowlands and Wiltshire Avon
EWEXE5a	New Forest
EWEXE5b	Avon-Test Divide
EWEXE6	Ringwood Forest
EWEXE7	Isle of Wight
EWEXE8	Southern Purbeck
EWEXE9	Coastlands

The Central Province

Wear and Tweed Sub-province

CWRTD1a	North-east Coalfield (a)
CWRTD1b	North-east Coalfield (b)
CWRTD2a	Pennine Spurs
CWRTD2b	Weardale
CWRTD3a	Middle Tyne
CWRTD3b	Upper Tyne
CWRTD3c	Allendale
CWRTD4	Northumberland Plain
CWRTD5a	Northumberland Scarps and Vales (a)
CWRTD5b	Northumberland Scarps and Vales (b)
CWRTD5c	Northumberland Scarps and Vales (c)
CWRTD6	Tweed-Till Lowlands and Upper Coquet
CWRTD7	Cheviot Margin

CWRTD8 Lindisfarne

The Humber-Tees Sub-province

CHUTE1	East Durham Plateau
CHUTE2	Tees Valley
CHUTE3	Cleveland Bench
CHUTE4a	North-west Yorkshire Plain
CHUTE4b	Yorkshire Dales
CHUTE5	Vale of York (North)
CHUTE6	Vale of York
CHUTE7	Vale of York (South-east)
CHUTE8	Selby-Snaith

East Yorkshire Sub-province

CEYKS1	North York Moors
CEYKS1a	North-east Coast
CEYKS1b	Eskdale
CEYKS2	Tabular Hills and Dales
CEYKS3	Vale of Pickering
CEYKS4	Howardian Hills
CEYKS5	Wolds
CEYKS6	Hull Valley
CEYKS7	Holderness

Pennine Slope Sub -province

CPNSL1	Southern Yorkshire Dales
CPNSL2	Spurs and Foothills
CPNSL3	Millstone Grit Scarps
CPNSL4	Permian Limestone Ridge
CPNSL5	Erewash Valley
CPNSL6	Sherwood Forest (West)
CPNSL7	Sherwood Forest (East)

The Trent Valley Vale of Trent Sub-province

CTRNT1	Vale of Trent
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Lincolnshire Scarplands Sub-province

CLNSC1	Scarp and Vale Country [including Lincolnshire Wolds]
CLNSC2	Lincoln Edge

Inner Midlands Sub-province

CINMD1	Stour-Avon-Soar Clay Vales
CINMD2	South Midlands
CINMD3	North-east Warwickshire (Anker Slope)
CINMD4	Charnwood Forest and Swadlingcote Hills
CINMD5	Salcey Forest-Yardley Chase
CINMD6	Newport Pagnell-Bedford Hills
CINMD7	Ouzel-Ouse Divide

CINMD8 Thurleigh Low Plateau
CINMD9 Bosworth Divide

East Midlands Sub-province

CEMID1 Soar Valley and Nene Plateau
CEMID2a Rockingham Forest and Outliers
CEMID2b Rutland
CEMID2c High Leicestershire
CEMID3a Potton Anomalies (a)
CEMID3b Potton Anomalies (b)

Cotswold Scarp and Vale Sub-province

CCTSV1 Severn Plain and Vale
CCTSV2a Cotswolds (South-west)
CCTSV2b Cotswolds (North-east)
CCTSV3 Windrush-Colne-Thames Valley
CCTSV4 Upper Avon and Thames
CCTSV5 Vale of Pewsey
CCTSV6 Vale of Berkley and Avon Valley

West Wessex Sub-province

CWEXW1 Somerset Levels and Polden Hills
CWEXW2 Blackmoor Vale
CWEXW3 South Dorset
CWEXW4 Mendip Hills
CWEXW5 North Somerset
CWEXW5a Chew Valley
CWEXW6 Frome Valley
CWEXW7 Isle-Parrett Valley
CWEXW8 Tone-Parrett Valley
CWEXW9 Taunton Deane, Vale of Stogumber and Quantock Slope
CWEXW10 Quantock Hills

The Northern and Western Province

Cheviots Sub-province

WCHEVI Cheviots

The Pennines Sub-province

WPENN1 Alston Block
WPENN2 Craven Block
WPENN3 Bowland

WPENS1 High Peak
WPENS2 Lower Derwent
WPENS3 Wadsworth Moor
WPENS4 Chorley-Ramsbottom Ridges

Cumbria and Solway Lowlands Sub-province

WCUSL1	The Borders
WCUSL2	Carlisle Coast
WCUSL3	Inglewood
WCUSL4	Northern Lake District Fringe
WCUSL5	Skiddaw
WCUSL6	Eden Valley
WCUSL6a	Asby Scar
WCUSL6b	Lune Valley
WCUSL7	Ellen-Derwent Lowlands
WCUSL7a	Keswick Heartland
WCUSL8	Cumbrian Coalfield
WCUSL9	Cumbrian Coast
WCUSL10	Lake District
WCUSL11	Howgills

Lancastrian Lowlands Sub-province

WLALO1	Lancastrian Plain
WLALO2	West Lancashire Plain
WLALO3	Ribble Valley
WLALO4	Fylde
WLALO5	Bowland Slope
WLALO6	Craven Lowlands
WLALO6a	Upper Warfdale
WLALO7	Upper Calder Valley
WLALO8	Lune Valley and Morecambe Coast
WLALO9	Lancashire Over Sands and Kentdale
WLALO10	Pendle
WLALO11	Rombalds Moor

Cheshire Plain Sub-province

WCHPL1	Cheshire Plain
WCHPL2	Wirral
WCHPL3	Oswestry Region
WCHPL4	Macclesfield Forest
WCHPL5	High Edge
WCHPL6	Miller's Dale-Wyedale

Shropshire Hills and Severn Plain Sub-province

WSHSP1	Shropshire Plain
WSHSP2	Long Mountain
WSHSP3	Herefordshire Hills
WSHSP4	Wrekin

West Midlands Sub-province

WWMID1	West Midland Plateau
WWMID2	Black Country
WWMID3	Severn Slope

WWMID4 Upper Trent and Dove

The Wye-Teme Sub-province

WWYTE1	Greater Herefordshire (including Wye Valley, Ewias and the Clee Hills)
WWYTE2a	Wye-Lugg Lowlands
WWYTE2b	Malvern Hills
WWYTE3	Forest of Dean

South-west Peninsula Sub-province

WSWPNI	Dartmoor
WSWPN1a	North-east Dartmoor
WSWPN2a	West Exmoor
WSWPN2b	East Exmoor
WSWPN3	Bodmin Moor
WSWPN4	Axe Valley
WSWPN5	Blackdown Hill Complex
WSWPN6	Devon Lowlands
WSWPN7	North Dartmoor Slope
WSWPN8	Tawe and Torridge
WSWPN9	Little Dart-Exe Divide
WSWPN10	Tawe and Torridge Watershed
WSWPN11	Exmoor Border
WSWPN12	Upper Torridge Valley
WSWPN13	Haldon Hills
WSWPN14	Torbay
WSWPN15	South Hamms (Inland)
WSWPN16	South Hamms (Coast)
WSWPN17	Cornish Lowlands and Plateaux
WSWPN18	Tintagel-Ottery
WSWPN19	Blackmoor
WSWPN20	Redruth-Truro
WSWPN21	Penwith
WSWPN22	Lizard
WSWPN23	Black Hill Ridge

REFERENCES CITED

- Aston, M and Iles, R (eds) 1987 *The Archaeology of Avon: A Review from the Neolithic to the Middle Ages*. Bristol: Avon County Council
- Barnatt, J and Smith, K 1997 *Peak District*. London: Batsford/English Heritage
- Bennett, S and Bennett, N (eds) 1993 *An Historical Atlas of Lincolnshire*. Hull: University of Hull Press
- Beresford, M W and Hurst, J G 1990 *English Heritage Book of Wharram Percy: Deserted Medieval Village*. London: Batsford/English Heritage
- Chambers, J D 1957 *The Vale of Trent, 1670-1800: A Regional Study of Economic Change*. London and New York: Cambridge University Press for the Economic History Society
- Costen, M 1987 'Late Saxon Avon', in Aston, M and Iles, R (eds) *The Archaeology of Avon: A Review from the Neolithic to the Middle Ages*. Bristol: Avon County Council, 82–93
- Darby, H C 1974 *The Medieval Fenland*, 2nd edn. Newton Abbot
- Darby, H C and Terrett, I B 1954 *The Domesday Geography of Midland England*. Cambridge: Cambridge University Press
- Dury, G 1963 *The East Midlands and the Peak*. London and Edinburgh: Nelson and Sons
- Dymond, D 1990 *The Norfolk Landscape*, reprint edn. Bury St Edmunds: Alastair Press
- Elliott, G 1973 'Field systems of northwest England', in Baker, A R H and Butlin, R A (eds) *Studies of Field Systems in the British Isles*. Cambridge: Cambridge University Press, 41–92
- Everitt, A M 1986 *Continuity and Colonization: The Evolution of Kentish Settlement*. Leicester: Leicester University Press
- Everson, P L, Taylor, C C and Dunn, C J 1991 *Change and Continuity: Rural Settlement in North-West Lincolnshire*. London: RCHM(E)
- Finberg, H P R 1964 *Lucerna: Studies of Some Problems in the Early History of England*. London: Macmillan & Co
- Finberg, H P R (ed) 1972 *The Agrarian History of England and Wales, vol 1, ii: AD 43-1042*. Cambridge: Cambridge University Press
- Fleming, A 1988 *The Dartmoor Reaves*. London: Batsford

- Ford, W J 1976 'Some settlement patterns in the central region of the Warwickshire Avon', in Sawyer, P H (ed) *Medieval Settlement: Continuity and Change*. London: Edward Arnold, 274–94
- Garmonsway, G N 1953 *The Anglo-Saxon Chronicle* (Everyman's Library 624). London: J M Dent & Sons
- Gelling, M 1978 *Signposts to the Past: Place-names and the History of England*. London: Dent
- Glasscock, R E 1973 'England circa 1334', in Darby, H C (ed) *A New Historical Geography of England*. Cambridge: Cambridge University Press, 136–85
- Graham, T H B (ed) 1934 *The Barony of Gisland: Lord William Howard's Survey, taken in 1603* (Cumberland and Westmorland Antiquarian and Archaeological Society Extra Series 16). Kendal: Cumberland and Westmorland Antiquarian and Archaeological Society
- Gray, H L 1915 *English Field Systems*. Cambridge, MA: Harvard University Press
- Hall, D 1995 *The Open Fields of Northamptonshire* (Publications of the Northamptonshire Record Society 38). Northampton: Northamptonshire Record Society
- Hallam, H E 1965 *Settlement and Society: A Study of the Early Agrarian History of South Lincolnshire*. Cambridge: Cambridge University Press
- Hallam, S J 1970 'Settlement round the Wash', in Phillips, C W (ed) *The Fenland in Roman Times: Studies of a Major Area of Peasant Colonisation with a Gazetteer Covering All Known Sites and Finds* (Royal Geographical Society Research Series 5). London: Royal Geographical Society, 22–113
- Harley, J B (ed) 1968 *A Map of the County of Lancashire, 1786 by William Yates*, facsimile edn. Birkenhead: Historic Society of Lancashire & Cheshire
- Hey, D 1979 *The Making of South Yorkshire*. Ashbourne: Moorland Publishing
- Hill, M C 1984 *The Demesne and the Waste*. Stroud: Alan Sutton
- Iles, R 1987 'The medieval rural landscape', in Aston, M and Iles, R (eds) *The Archaeology of Avon: A Review from the Neolithic to the Middle Ages*. Bristol: Avon County Council, 108–21
- Johnson, N 1996 *Cornwall Landscape Assessment*. Truro: Cornwall County Council and the Countryside Commission
- Lewis, C, Mitchell-Fox, P and Dyer, C 2001 *Village, Hamlet and Field: Changing Medieval Settlements in Central England*, paperback edn. Macclesfield: Windgather Press

- Margary, I D 1973 *Roman Roads in Britain*, 3rd edn. London: J Baker
- Owen, D M 1971 *Church and Society in Medieval Lincolnshire* (History of Lincolnshire 5). Lincoln: Lincolnshire Local History Society – History of Lincolnshire Committee
- Parry, M L 1978 *Climatic Change, Agriculture and Settlement*. Folkestone: Dawson, Archon Books
- Platts, G 1985 *Land and People in Medieval Lincolnshire* (History of Lincolnshire 4). Lincoln: History of Lincolnshire Committee for the Society for Lincolnshire History and Archaeology
- Ravensdale, J R 1974 *Liable to Floods: Village Landscape on the Edge of the Fens, A.D. 450-1850*. Cambridge: Cambridge University Press
- Roberts, B K 1987 *The Making of the English Village: A Study in Historical Geography*. Harlow: Longman Scientific & Technical
- Roberts, B K 1996 'The Great Plough: a hypothesis concerning village genesis and land reclamation in Cumberland'. *Landscape History* 18, 17–30
- Rodd, F J R, Baron Rennell 1958 *Valley on the March: A History of a Group of Manors on the Herefordshire March of Wales*. London: Oxford University Press
- Roden, D 1973 'Field systems of the Chiltern Hills and their environs', in Baker, A R H and Butlin, R A (eds) *Studies of Field Systems in the British Isles*. Cambridge: Cambridge University Press, 325–76
- Russell, E and Russell, R C 1983 *Making New Landscapes in Lincolnshire: The Enclosures of Thirty-Four Parishes* (Lincolnshire History Series 5). Lincoln: Lincolnshire Recreational Services County Library Department
- Russell, E and Russell, R C 1985 *Old and New Landscapes in Horncastle Area Lincolnshire: The Enclosures of Twenty-Three Parishes* (Lincolnshire History Series 7). Lincoln: Lincolnshire Recreational Services County Library Department
- Russell, E and Russell, R C 1987 *Parliamentary Enclosure and New Landscapes in Lincolnshire* (Lincolnshire History Series 10). Lincoln: Lincolnshire Recreational Services
- Slater, G 1907 *The English Peasantry and the Enclosure of Common Fields* (Studies in Economic and Political Science 14). London: Constable
- Spratt, D A and Harrison, B J D (eds) 1989 *The North York Moors: Landscape Heritage*. Newton Abbot: David & Charles
- Spufford, M 1974 *Contrasting Communities: English Villagers in the Sixteenth and Seventeenth Centuries*. London: Cambridge University Press

- Stamp, L D (ed) 1937–1946 *The Land of Britain: The Report of the Land Utilisation Survey of Britain*. London: Geographical Publications
- Steensberg, A, Østergaard Christensen, J L and Nielsen, S 1968 *Atlas over Borups are 1000 - 1200 eKr*. Copenhagen: I Kommission Hos G E C Gad
- Sylvester, D 1969 *The Rural Landscape of the Welsh Borderland: A Study in Historical Geography*. London: Macmillan
- Taylor, C C 1972 'Medieval moats in Cambridgeshire', in Fowler, P J (ed) *Archaeology and the Landscape*. London: John Baker, 237–49
- Todd, J M (ed) 1997 *The Lanercost Cartulary (Cumbria County Record Office MS DZ/1)* (Cumberland and Westmorland Antiquarian and Archaeological Society, Record or Chartulary Series/Surtees Society 11/203). Durham: Cumberland and Westmorland Antiquarian and Archaeological Society and Surtees Society
- Trueman, A E 1938 *The Scenery of England and Wales*. London: Victor Gollancz
- VCH Salop XI 1985 *A History of the County of Shropshire: Volume XI - Telford*. Oxford: Oxford University Press
- Wade-Martins, P 1980 *Fieldwork and Excavation on Village Sites in Launditch Hundred, Norfolk* (East Anglian Archaeology Reports 10). Dereham: Norfolk Archaeological Unit
- Williams, D T 1951 'Medieval foreign trade: western ports', in Darby, H C (ed) *An Historical Geography of England before AD 1800: Fourteen Studies*, corrected reprint edn. Cambridge: Cambridge University Press, 266–97
- Wooldridge, S W and Goldring, F 1953 *The Weald* (New Naturalist 26). London: Collins
- Wyndham, H A 1954 *Petworth Manor in the Seventeenth Century*. Oxford: Oxford University Press