

The Making of the High Weald



Informing the High Weald AONB Management Plan 2004



Roland B. Harris

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Preface

Conclusions: The Character of the High Weald Defined

- I *Introduction*
- II *Geology, landform, water systems and climate*
- III *Settlement*
- IV *Routeways*
- V *Woodland*
- VI *Field and heath*
- VII *Sustaining the character of the High Weald: the role of 'Analytical Characterization'*

1 Introduction

- 1.1 History and the management of the High Weald
Area of Outstanding Natural Beauty

2 The Natural Inheritance

- 2.1 Introduction
- 2.2 Geology and landform
- 2.3 Natural colonization

3 Human Colonization

- 3.1 Introduction
- 3.2 Transhumance: dens and droves
- 3.3 Early industry
- 3.4 Other early activity in the High Weald
- 3.5 Drainage and reclamation
- 3.6 Nucleated settlement
- 3.7 Assart
- 3.8 Colonizing the eastern Sussex High Weald
- 3.9 Territory and colonization

4 Postscript

- 4.1 The character of the High Weald defined
- 4.2 Future research

Acknowledgements

Bibliography

‘a landscape not yet bulldozed for speed’

Laurie Lee, As I Walked Out One Midsummer Morning (1969)

The Making of the High Weald is one of several pieces of research that underpin the forthcoming *High Weald AONB Management Plan 2004: A 20 Year Strategy*. This paper has a long historical view back to the last Ice Age, and seeks to explain the main processes that have created the High Weald Area of Outstanding Natural Beauty. Without understanding these processes we have little chance of understanding the landscape and progressing beyond a superficial and largely subjective aesthetic reaction. The formative processes are inextricably linked to features – such as the prevalence of small woodlands – and the more recent character of these is explored in other research papers.

All the research papers, and the new Management Plan, will be published on the new High Weald AONB website (<http://www.highweald.org/>). This will ease movement between the various documents, especially when following a particular theme. It will also enable the documents to be updated as and when more research allows: neither the nature of the High Weald nor our understanding of it are fixed. Immediate comments on what is very much a draft are welcome, but the electronic format means that the document will continue to be revised and expanded over time: this draft does not aim to be definitive.

*Dr Roland B Harris BA, D.Phil., MIFA
High Weald Area of Outstanding Natural Beauty (AONB) Unit
Corner Farm
Flimwell
East Sussex. TN5 7PR*

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Conclusions: The Character of the High Weald Defined

I Introduction

- the essential character of the High Weald was established by the fourteenth century
- the character of the High Weald has survived major historic events, and social and technological changes
- study of the natural inheritance and human colonization allows us to identify the fundamental character of the High Weald
- reviewing the survival of the characteristics informs strategies for land management
- the more recent trends are explored in a series of short research reports
- the five main components of character of the High Weald identified in this document form the basis of the statutory *High Weald AONB Management Plan 2004*

By reviewing the natural inheritance and, especially, the evidence for the human colonization in *The Making of the High Weald* we can draw several significant conclusions of direct relevance to the management of the area today.

Above all, it is increasingly evident that through prehistoric, Roman, and Anglo-Saxon exploitation and settlement of the post-glacial natural inheritance, the High Weald was significantly cultivated, occupied, and equipped with routeways by the time of the Norman Conquest. The unusually late emergence of (non-agricultural) villages in the second half of the thirteenth century and further conversion of scrub and wasteland to farmland by the early fourteenth century simply added to the emergent settlement pattern. Importantly, the High Weald of this period would be readily recognizable to us today: the essential character of the High Weald was established by the fourteenth century. Given that the character of the High Weald is of such importance to the management of the area, these conclusions are presented here characteristic by characteristic.

II Geology, landform, water systems and climate

Characterized by deeply incised, ridged and faulted landform of clays and sandstone. The ridges tend east-west, and from them spring numerous gill streams that form the headwaters of rivers. Wide river valleys dominate the eastern part of the AONB. The landform and water systems are subject to, and influence, a local variant of the British sub-oceanic climate.

II.i Geology, landform, water systems and climate: character defined.

The distinctive geology and landform are the characteristics that, above all, correlate most closely with the High Weald AONB boundary. This is not mere chance, but recognition that these natural components, and man's interaction with them, are the visually dominant characteristics of the area. Within the pattern of largely east-west ridges and valleys, there are widespread small-scale features that are distinctive to the High Weald: the steep-sided valleys (gills) with streams that cut into the main ridges; the outcrops of sandrock, often overhanging; and the local complexity and variability of geology and soil.

Much of the High Weald comprises the headwaters of rivers which are for the most part outside the AONB (such as the Medway, Ouse and Arun), but the eastern part of the High Weald AONB contains the broader valleys of the lower reaches of the Brede, Rother and Tillingham that meet the sea just outside the AONB at Rye Harbour. The coast brings its own distinctive landform, seen most dramatically in the sandstone and clay cliffs at Fairlight, but such features are very localised and atypical of the mostly inland High Weald.

III Settlement

Characterized by dispersed historic settlements of farmsteads and hamlets, and late medieval villages founded on trade and non-agricultural rural industries.

III.i Settlement: character defined.

Without a doubt the human colonization of the Weald largely through seasonal pannage, or transhumance, had produced a distinctive settlement pattern by the Middle Ages. In contrast with the downs, coastal plain, and indeed much of England, the Weald was marked by an absence of agricultural villages surrounded by communally farmed open fields, instead having a dispersed settlement pattern of farmsteads

located within discrete, or enclosed, holdings. The small-scale of the holdings owed its origins to dens and, later, assarts, and ensured that the density of farmsteads was high. By the early fourteenth century, nucleated villages had emerged, but often in response to opportunity for trade. The hilltop villages of Ticehurst and Wadhurst are typical in their formation around market places that pre-date churches which themselves were in existence by the eleventh century. Such an origin for High Weald villages explains the relative dearth in the hinterland of the dominating ports of Winchelsea and Rye. The pattern of nucleated villages of the early fourteenth century survives today as, more distinctively, does the dispersed settlement.

IV Routeways

Characterized by ancient routeways (now roads and Rights of Way) in the form of ridge-top roads and a dense system of radiating droveways. The droveways are often narrow, deeply sunken, and edged with trees, hedges, wildflower-rich verges and boundary banks.

IV.i Routeways: character defined.

The dense and sub-radial pattern of narrow lanes and Rights of Way in the Weald represents a very visible survival of ancient transhumant routes – the droves. Along with the prehistoric ridge-top ways, these were one of the most distinctive characteristics of the High Weald in the fourteenth century and remain so. The narrowness of droves, their frequently deeply sunken form (a result of age-old wear into soft geologies), their increasing irregularity in response to the relief of the High Weald, and their boundary banks added, and continue to add, to their distinctive pattern.

V Woodland

Characterized by the great extent of ancient woods, gills, and shaws in small holdings, the value of which is inextricably linked to long-term management.

V.i Woodland: character defined.

Ancient woodland is one of the most obvious features of the High Weald AONB, and its presence is directly attributable to many of the processes that we have examined in *The Making of the High Weald*. The woodland of the post-glacial was not unique to the Weald since trees dominated the landscape, including the downs. The primeval impenetrable forest of Wealden mythology never existed – Weald (from the German *wald*) refers

to an uncultivated wilderness that included grassland, heath and shrubs as well as trees. The Weald was never cultivated to the degree of much of England, however, so that by Domesday (1086) it was the most densely wooded part of the country. The central area – the High Weald – now has the greatest proportion of ancient woodland in the country. From the Iron Age at least, the woodland was in no sense wildwood, but a managed and valued resource that served the iron industry, seasonal pannage, and lesser rural industries.

We are left with several unknowns in the history of woodland, such as the origins and development of coppice management, but it is clear that the demands of the industrial and transhumant economy and society played a pivotal role in defining the nature and extent of the woodland of the area. More particularly, the nature of landholding (small landholdings derived from dens, weak lordship, and assarts) and the deeply incised and ridged landform ensured that woodland had achieved its character of small-scale woods (often sinuous or linear) concentrated in damp gills. Although sweet chestnut appears to have expanded later, the dominance of oak, with hornbeam, ash and other understorey tree species was established through ironworking and pannage. The transhumant economy had disappeared by the thirteenth century, so the alternative demands on woodland of a resurgent iron industry and other lesser rural industries (with their demand for rotational coppice management), helped ensure that the quantity, structure, and holding size of woodlands in the High Weald was similar in the early fourteenth century and, indeed, remained so into the twentieth century.

VI Field and heath (or enclosed agricultural landscape of small irregularly-shaped fields and small-scale holdings)

Characterized by small, irregularly shaped and productive fields often bounded by (and forming a mosaic with) hedgerows and small woodlands, and typically used for livestock grazing; small holdings; and a non-dominant agriculture; within which can be found distinctive zones of heaths; and inned river valleys.

VI.i Field and heath: character defined.

The colonizing of the High Weald through transhumance, and later assarting, undoubtedly gives the area its small-scale holdings, and the absence of communal farming of large open fields. In essence, the landscape was enclosed before the post-medieval period of Enclosure. Thus, we have a landscape in the High Weald that is essentially medieval:

this can be said of few other places in the country. The small scale of holdings, the unusual extent of small woods (see above), the dense network of droveways, and the underlying geologies combined to give a landscape of small fields predominantly used for livestock grazing, and bordered by narrow woodlands (gill woodlands and shaws) or hedges. The smallness of the holdings and the poverty of the soils has had a distinct socio-economic result: the 'Weald has always tended to be underpopulated by agricultural communities'¹

Two significant geographical determinants appear responsible for areas different from this dominant High Weald landscape type. The sandy soils led easily to degradation and development of heathland. Although parks and wastes with their poor woodland and heaths were substantially eroded by medieval assart, they have survived as a visible component of the High Weald today (most obviously in Ashdown Forest). At the other end of the spectrum of soil quality the marshlands and floodplains of the lower reaches of the eastern rivers (Brede, Rother and Tillingham) presented rich soils that attracted reclaiming, or 'inning'.

VII Sustaining the character of the High Weald: the role of 'Analytical Characterization'

That the colonization of the Weald created a distinct landscape by the early fourteenth century was no guarantee that it should be recognizable 700 years later. The history of the later period, of course, is not one of stasis, for the huge socio-economic changes that swept the rest of the country and, indeed, much of the wider world, have been felt here too. Yet it is evident that the High Weald has remained physically and to some extent socially and economically distinct. Thus, while the conclusions of *The Making of the High Weald* are primarily a means of summarizing the connection between historical processes and character, they also introduce the later processes that sustained, or failed to erode, the character of the area. Aspects of later history are explored more fully in a series of short reports that examine trends impacting on the essential character of the area over the last century. Some of these papers explore those additional special and so often subjective qualities that have little historical value or meaning, but which are appreciated all the same: examples are rurality, tranquillity, and comparatively recent 'traditions' in agricultural crops (such as hop growing) and livestock (such as local breeds). These reports are available on the AONB website (<http://www.highweald.org/>) where they provide background to the *High Weald AONB Management Plan 2004*. The latter is a statutory plan in which the core policy part of the strategy is structured around the five main components of character, or 'natural beauty', identified in *The Making of the High Weald*.

¹ B Cunliffe, *The Regni* (1973), p. 96.

1 Introduction

1.1 History and the management of the High Weald Area of Outstanding Natural Beauty

Many approaches to the protection of whole landscapes appear concerned with the fleeting moment and purely visual qualities of the present, but an understanding of the past is an essential prerequisite to an intelligent approach to the present and future. As Hodder neatly expresses it:

'We can never understand anything in its present moment – we must always refer to the past and to the process of becoming in the present.'¹

This has been recognized previously in relation to the High Weald Area of Outstanding Natural Beauty. In both the *Landscape Assessment*² and the *Management Plan* as much emphasis is given to the significance of past human activity as it is to underlying landform and geology:

'... the landscape of the High Weald is above all a cultural landscape, shaped by a long legacy of human influences.'³

Additionally, understanding the central role of man in defining the character of an area in response to the underlying geology, landform, and climate has now begun to permeate national policy for landscape management, as expressed by government planning guidance,⁴ the rural white paper,⁵ English Heritage,⁶ English Nature,⁷ and the Countryside Agency.⁸

Significant human presence in the area we now know as the High Weald extends back to the end of the last Ice Age (c.9500 BC), and the recently defined area of outstanding natural beauty is large and cuts across some of the most ancient territorial boundaries in Europe. It is of little surprise, therefore, that there is no existing history that covers either the exact area or the broad timescale. In other words, there is no history book that we can pull down from the shelf and use for our own purposes, but rather a plethora of works that touch, often tangentially, on our subject and which leave great gaps in our understanding. As a bare minimum there is a need for synthesis and review, and this is the prime function of *The Making of the High Weald*. The writing of this review has entailed some limited primary research, but the principal aim has been to bring together and, where necessary, reconcile the results of the best up-to-date research.

¹ I Hodder, *Reading the past: Current approaches to interpretation in archaeology* (1986), p. 20.

² *The High Weald: Exploring the landscape of the Area of Outstanding Natural Beauty* (Countryside Commission, 1994).

³ *High Weald AONB Management Plan* (The High Weald Forum, 1995), p. 27.


⁴ *Planning Policy Guidance: Planning and the Historic Environment* (DoE and DoNH, PPG15; 1994), paras. 6.1, 6.2, and 6.40.

⁵ Rural White Paper, *Our Countryside: the future* (DETR, November 2000), Section 9.1.1–3.

⁶ G Fairclough, G Lambrick, and A McNab, *Yesterday's World: Tomorrow's Landscape: The English Heritage Landscape Project 1992–94* (1999).

⁷ *Natural area profiles* (English Nature, 1997–8; multiple vols.).

⁸ *Interim Landscape Character Assessment Guidance* (Countryside Agency and Scottish Natural Heritage, 1999).



The Making of the High Weald

To this degree *The Making of the High Weald* is conventional. Where it differs is that it is written for the purpose of informing those involved in developing land management strategies, and, above all, the partnership contributing to the *High Weald AONB Management Plan 2004: A 20 Year Strategy*. Consequently, this history is focused on the events and processes that changed the area from an unpopulated landscape to the man-made environment that evoked the desire to designate and protect it in 1983. In so doing, this history must differentiate between changes fundamental to the creation and future of the landscape we value, and those that are of only passing interest and superficial impact. In other words, *The Making of the High Weald* is an analysis of the historic processes that give us the character of the area. Since the fundamental character was established by the early fourteenth century, only the slightest attention is given to the later history of the High Weald.

2 The Natural Inheritance

2.1 Introduction

Landform is a very visible feature of the High Weald. The distinctive ridges, and the valleys of rivers and streams have contributed to its claim to be an area of outstanding natural beauty. This landform is principally the result of geological deposition, movement, and erosion. But geology has had a greater impact on the area than simply creating the relief: it has largely defined the hydrology and the soils, and, in combination with climate, has played a major role in determining the flora, fauna, agriculture, and settlement of the area. Before examining the human colonization of the High Weald in the Holocene, therefore, we need to consider briefly the geological formation and post-glacial ecological colonization of the area: that is, the natural inheritance.

2.2 Geology and landform¹

2.2.1 The laying down of the High Weald rocks.

The rocks of south-east England are sedimentary, created from sediments deposited in horizontal beds by rivers and the sea. The earliest of the sediments in this area were formed in shallow lagoons around the end of the Jurassic period (142 million years ago), when dinosaurs still roamed: they are known as the Purbeck Limestone Group. The landscape then changed to one of flood-plains and rivers which laid down iron-rich clays and sandstones, known as the Hastings Group. These are the rocks of the High Weald today.

2.2.2 Folding and faulting: the great uplift and the *Wealden Anticline*.

Later geological events are relevant since they explain how the horizontal beds of the sedimentary rocks were transformed into the present landform. Deposits which we now know as the Weald Clay Formation carried on being laid down by the rivers and flood-plains, until the whole area sank below the sea around 110 million years ago, in the middle of the Cretaceous period. The gradually deepening sea created new layers, initially clays and sands, and then chalk. Around 70–75 million years ago a great uplift began, continuing beyond the end of the Cretaceous period (65 million years ago) into the Palaeogene and Neogene periods (up to 1.8 million years ago) creating the Wealden Anticline: a huge chalk-topped dome that would have reached c.970m OD.² Under compression the strata both folded and faulted, mostly on an east–west axis: around the Purbeck Limestone Group geologies (near Mountfield), the fault throws are over 180m, but more typically they are below 100m.³

¹ The summary below relies heavily on several brief published accounts of the geology of the area: B Worssam, 'The geology of Wealden iron', in Cleere and Crossley, *Iron Industry of the Weald*, pp. 1–30; R N Mortimer, 'The Geology of Sussex', in Geography Editorial Committee (eds.), *Sussex: Environment, Landscape and Society* (1983), pp. 15–32; R Williams, 'Geology' in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), pp. 2–3; and R Williams, 'Natural Regions', in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), pp. 6–7.

² B Worssam, 'The geology of Wealden iron', in H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn. 1995), p. 6.

³ R N Mortimer, 'The Geology of Sussex', in Geography Editorial Committee (eds.), *Sussex: Environment, Landscape and Society* (1983), p. 29.

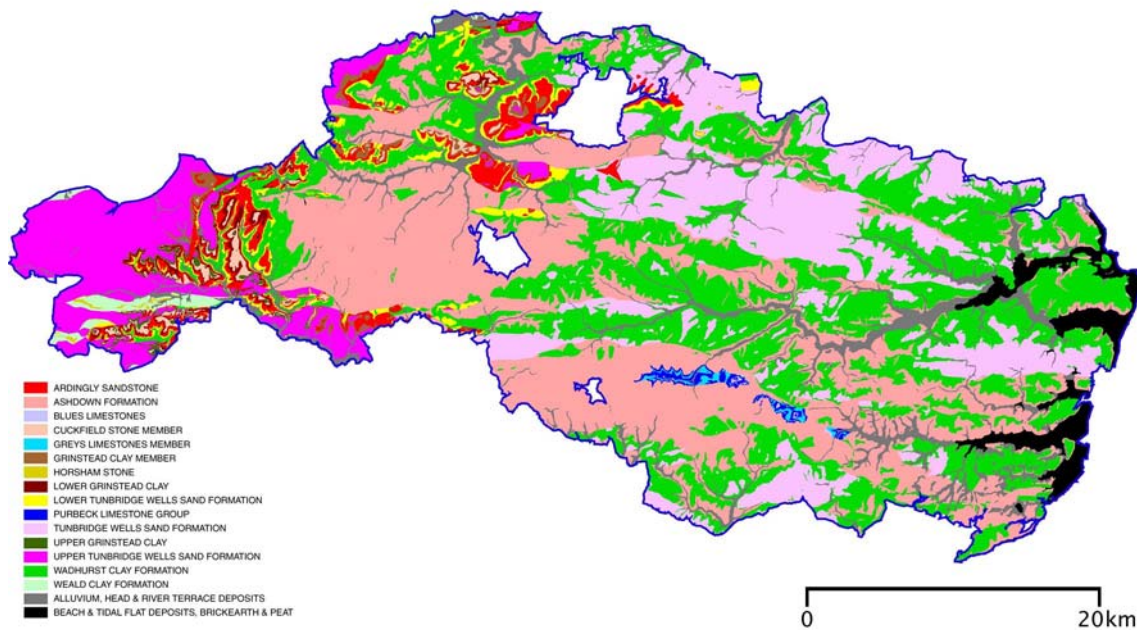


Fig. 1. The geology of the High Weald AONB. Based upon 1:50,000 digital data, by permission of the British Geological Survey.

2.2.3 Erosion of the Wealden Anticline and creation of the ridged landform.

River and stream erosion then removed most of the chalk dome leaving only a rim around the edge that is the North Downs and the South Downs. Likewise, in the centre of the anticline, the soft Weald Clay Formation also eroded leaving exposed the older geologies of the Hastings Group. Rivers and streams wore down these layers too, reducing the anticline to a more modest peak of c.240m at Crowborough Beacon.

The differing resistance of soft clays and harder sandstones of the Hastings Group, the closely related subsidiary folds, and the faults have given us the ridged High Weald of today with its disjointed outcrops of the geological formations.

2.2.4 The ridged landform today.

The principal ridge (the Forest Ridge) runs roughly east-west, stretching from Horsham to Cranbrook and with its highest point at Crowborough Beacon (241.3m OD). South of Crowborough an attached ridge (Battle Ridge) extends from Hadlow Down, narrows and meets the sea with dramatic cliffs of sands and clays at Fairlight, that stand in contrast to the chalk cliffs of the South Downs (Beachy Head and the Seven Sisters)

and the North Downs (Dover Cliffs). In the southern slopes of the Battle Ridge and the Forest Ridge are found the upper reaches of the north-south Sussex rivers – Adur, Ouse, Cuckmere, and, on a smaller scale, Waller’s Haven and Combe Haven. Other subsidiary ridges curve northwards and north-easterly from the Forest Ridge, creating a horseshoe housing the headwaters of the Medway and its tributary, the Eden. The Medway is also fed by the Teise and Bewl, running north-east from the Kentish end of the Forest Ridge. By contrast, the south-eastern part of the AONB is relatively low lying, with the long and broad valleys of the Brede, Rother and Tillingham. All of these rivers are fed by small streams descending the main ridges in narrow steep-sided valleys known as gills. The gills are especially prevalent on the southern face of the Forest Ridge, helping to give it the greatest mean slope of the main landform features of the High Weald (Fig. 2).

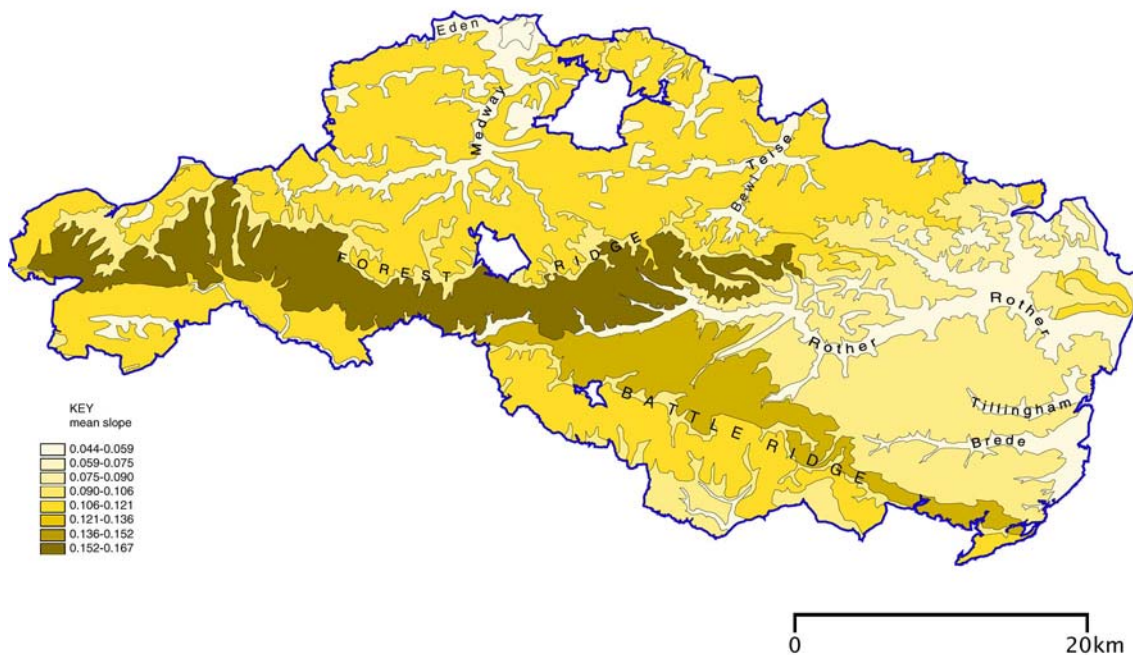


Fig. 2. The landform of the High Weald AONB, showing slope, and names of main river valleys and ridges. Source: HW AONB Unit.

2.2.5 Sandstone outcrops.

The sandstone geologies of the High Weald are exposed through natural outcrops and man-made exposures (such as sides of lanes and quarries), together adding up to a total length of 50km (Fig. 3).¹ Apart from the cliffs at Fairlight (see above), the most distinctive natural outcrops are the inland cliffs and crags of the massive Ardingly Sandstone. This weak

¹ Source: HW AONB Unit GIS coverage derived from identification of OS 1:2,500 feature-code 35.

rock hardens on exposure to form a distinctive dark protective crust. The most substantial sandrock outcrops occur between Groombridge and Frant, and Balcombe and West Hoathly.

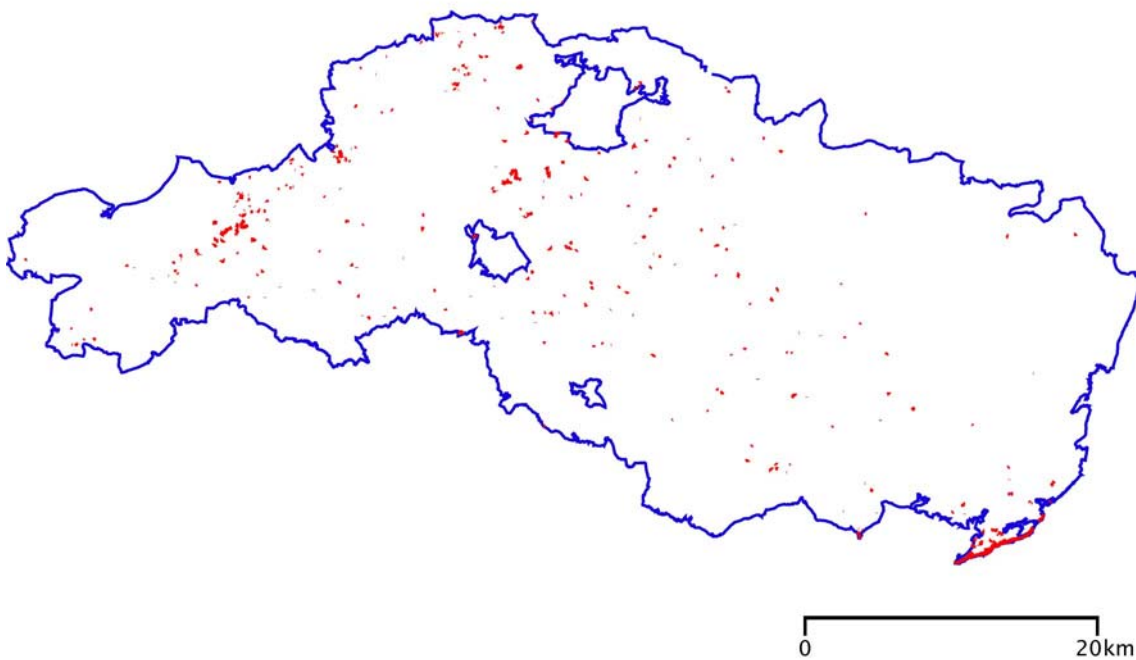


Fig. 3. Distribution of sandrock outcrops (red) in the High Weald AONB (blue). Source: HW AONB Unit.

2.3 Natural colonization

2.3.1 Understanding the natural development of vegetation after the Ice Age.

The vegetation of the High Weald has played a key role in the evolution of the present landscape. While man has had some impact on the geomorphology of the High Weald, human changes to the vegetation have been far more significant. Indeed, human colonization of the High Weald is often couched in terms of the opening up of the hitherto impenetrable wildwood. There is a need, therefore, to understand the character of the natural environment before human activity had reached a significant level. In view of the tundra-like vegetation and the periglacial conditions that prevailed in the Late Devensian (c.10,600–9,500 BC), our interest is focused on the post-glacial natural colonization. That this

period coincides with human activity in the Mesolithic means, of course, that we have to be open to the possibility of anthropogenic environmental impact during this natural colonization.

2.3.2 The arrival of trees.

With the rise in temperatures at the beginning of the post-glacial period and a continuing land link to continental Europe, arboreal species were able to expand at the expense of the herb dominated communities of the Late Devensian. Evidence for the rapid development of woodland in the High Weald (by c.9400BC) comes from Pannel Bridge, near Winchelsea.¹ Birch and scots pine were early colonizers, followed by the expansion of hazel (c.8500) that dominated from c.8200–6200 BC. The arrival of oak and elm is dated to c.8300 BC² and both pollen and plant macrofossils indicate that alder was present from c.7500 BC: this early occurrence was due to local wet conditions. Later arriving taxa include lime (c.7300 BC), ash (c.5800 BC) and beech (which was present at least by 2500 BC).³ The former expanded c.6200 BC and came to dominate the Weald with its taller canopy and longer life span, reducing hazel to the understorey.⁴

This view of a succession of species culminating in something approaching a closed forest has been challenged by Vera who argues that lowland Europe was characterized by a more open mosaic of woodland, grassland and scrub, analogous to wood pasture.⁵ However, the palaeoecological evidence strongly suggests dominance of woodland in the High Weald,⁶ very possibly with differentiation between the valley slopes and the ridges.

2.3.3 Woodland and wilderness: the lack of connection.

The survival of more woodland in the High Weald than in the comparatively denuded Low Weald and, especially, the more open South Downs does not mean that the High Weald has a longer history of purely natural formative processes, or that it was a wilderness. Indeed, some of its common arboreal species, such as hornbeam,⁷ have been shown in European terms at least to correlate closely with Iron Age iron-ore smelting.⁸ Likewise, the survival in gills and on sandrock outcrops of cryptogamic plants (notably, ferns, lichens, liverworts, and mosses) associated with humid conditions, has as much to do with land management as it has to do with any purely natural conditions. Hence, it is to the human colonization that we must now turn.

¹ M P Waller, 'Flandrian vegetational history of south-eastern England. Pollen data from Pannel Bridge, East Sussex', *New Phytologist* 124 (1993), pp. 345–69; M Waller, 'The Holocene Vegetation History of the Romney Marsh Region' in A Long, S Hipkin and H Clarke (eds.), *Romney Marsh: Coastal and Landscape Change through the Ages* (OUSA Monograph 56, 2002), p. 5.

² For the methodology used see: H J B Birks, 'Holocene isochrone maps and patterns of tree spreading in the British Isles, *Journal of Biogeography* 16 (1989), pp. 503–40

³ M Waller, 'The Holocene Vegetation History of the Romney Marsh Region' in A Long, S Hipkin and H Clarke (eds.), *Romney Marsh: Coastal and Landscape Change through the Ages* (OUSA Monograph 56, 2002), pp. 5–9.

⁴ D A Robinson and R B G Williams, 'The Soils and Natural Vegetational History of Sussex', in Geography Editorial Committee (eds.), *Sussex: Environment, Landscape and Society* (1983), p. 114–15; and J Kaminski, *The Environmental Implications of Romano-British Iron Production in the Weald* (unpublished Ph.D. thesis, University of Reading, 1995), pp. 74–8.

⁵ F W M Vera, *Grazing Ecology and Forest History* (2000).

⁶ M Waller, 'The Holocene Vegetation History of the Romney Marsh Region' in A Long, S Hipkin and H Clarke (eds.), *Romney Marsh: Coastal and Landscape Change through the Ages* (OUSA Monograph 56, 2002), pp. 5–9.

⁷ A species 'that can better withstand strong human impact': H Küster, 'The role of farming in the postglacial expansion of beech and hornbeam in the oak woodlands of central Europe', *The Holocene*, Vol. 7, No. 2 (1997), p. 240.

⁸ Ibid.

3 Human Colonization

3.1 Introduction

The seasonal movement of men and animals between different grazing grounds (transhumance) undoubtedly represents the key component in the conversion of the largely uninhabited Weald of the early Holocene to the settled landscape of today (see below), but this does not mean that it was the only early human activity in the area or the only one to have had a lasting impact. For example, it has become increasingly clear that quite different activities such as the hunter–gathering of the Mesolithic people, and the agriculture of Neolithic and later inhabitants had an effect so that by the Anglo–Saxon period the ‘vegetation had been modified by many thousands of years of activity creating secondary woodland and producing areas of heathland and open land’.¹

More well known are the Late Iron Age developments, for this period saw a ‘conspicuous reconfiguration of the settlement and economic pattern of Sussex’,² indeed of the south–east in general, that was marked in the High Weald by the establishment of iron–working and pottery manufacturing sites. These represent a significant development from earlier sub–industrial exploitation of the Weald (such as a source of stone for querns³), and were largely, though not entirely, distinct from transhumance.

¹ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), p. 83.

² S Hamilton and J Manley, ‘The End of Prehistory c.100BC–AD43’, in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), pp. 22–3.

³ P Drewett, D Rudling and M Gardiner, *The South East to AD 1000* (1988), p. 91.

3.2 Transhumance: dens and droves

- men and animals came from the downs into the High Weald in the late summer (transhumance), creating radial lanes (droves) that survive as the road system and Rights of Way
- men brought pigs to the High Weald to feed on acorns (pannage)
- their wood-pastures were known as *dens*
- pannage from the prehistoric period to the Middle Ages helped ensure the survival of woodland in the Weald while other areas were cleared of trees
- men returned to the same wood-pastures and dens became permanent settlements
- dens were isolated, giving the High Weald its characteristic dispersed settlement pattern
- settlements grew within small-scale family landholdings: there was no communal open-field agriculture in the High Weald
- the smallness of dens explains the small-scale of most High Weald woodlands
- transhumance is the key to the history of most of the High Weald and its legacy dominates the landscape

3.2.1 Defining dens and droves.

A den (Old English: *denn*) is a woodland pasture. The creation of dens represents one of the principal processes of settlement, or colonization, in the Weald, even **'the main theme of Wealden history'**.¹ In origins they were seasonal woodland pastures typically, but not exclusively,² used for swine feeding on acorns and mast during a short season in the autumn. These pastures were detached (often by 20 miles or more) from their parent settlements and connected by droves, which survive in the sub-parallel pattern of roads and tracks today. The dens and droves thus represent transhumance rather than a gradual advance of colonization deeper into the Weald by local communities expanding their lands. Given the season of usage it is inconceivable that occupation of dens did not include construction of shelters, and this may have increased the tendency for habitual return of individuals to the same sites. In time dens became places of permanent settlement and, ultimately, detached from their parent settlements. Although some later nucleated villages, or towns, take their names from dens, today dens are more frequently represented by isolated farms, former farmhouses, field names, and woodland.

¹ K P Witney, *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A.D.* (1976), p. 60.

² Woodland names such as Cowden (cow pasture), Cowlees (common cow pasture), and Shiphurst (sheep wood) 'indicate that both cattle and sheep were at one time pastured in the forest and fed off the browse': A M Everitt, *Continuity and Colonization: The Evolution of Kentish Settlement* (1986), pp. 30–1.

3.2.2 Early documentary history for dens in Sussex.

The earliest documentary evidence for transhumance in Sussex is found in a charter of c.765 describing the Stanmer estate (Fig. 4), which included woodlands in Lindfield and dens beyond, the whole forming an archipelago of detached holdings stretching from Stanmer to Burghleigh (near Turners Hill).¹ Such charters rarely survive in Sussex, but coupled with place-name evidence and careful retrogressive analysis from post-Conquest documentary sources, they do enable the identification of the pattern of association between coastal and Wealden lands.²

3.2.3 Early documentary evidence for dens in Kent.

Similar tenorial links have been established for Surrey,³ but it is to Kent that we must turn to consider the early medieval evidence for transhumance in detail, for two reasons. First, the documentary evidence for Kent, and especially the pre-Conquest charters, is much more extensive than that for Sussex and Surrey. Second, the county had preserved much of its early territorial organization at the point in the late 18th century when Edward Hasted documented the evidence.⁴ However imperfect, his work is an unrivalled source in the study of settlement in Kent.⁵ While there is evident danger in assuming that identical patterns of settlement, land use, and tenure existed in Kent, Surrey and Sussex, it is increasingly clear that there was a considerable degree of consistency in the Anglo-Saxon colonization of the Weald in all three counties.

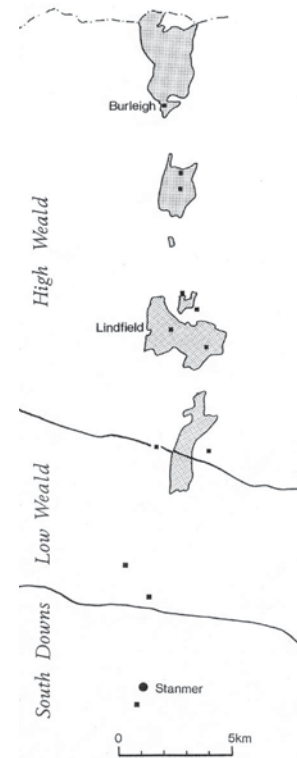


Fig. 4. Stanmer estate (M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), Fig. 4).

¹ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), pp. 38–9.

² *Ibid.*, pp. 45–9.

³ J Blair, *Early Medieval Surrey: Landholding, Church and Settlement before 1300*, (1991), pp. 12–34.

⁴ E Hasted, *The History and Topographical Survey of the County of Kent* (12 vols., 1972: reprint of 2nd edn. of 1797–1809, in itself a substantially revised and corrected version of the 4 vol. 1st edn. of 1778–99).

⁵ A M Everitt, *Continuity and Colonization: The Evolution of Kentish Settlement* (1986), pp. 38–9.

The Making of the High Weald

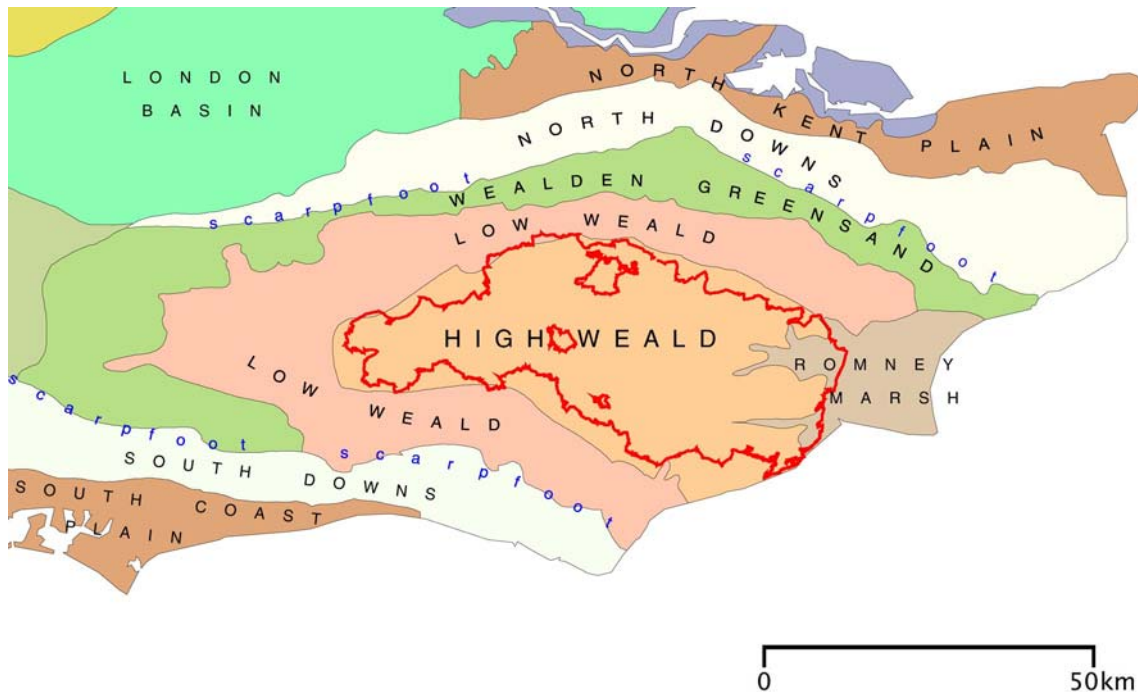


Fig. 5. Physiographic areas of south-east England, based on English Nature's Natural Areas, and showing the scarpfoot area of the South Downs and the North Downs. The High Weald AONB boundary is shown in red.

Everitt's analysis of 676 dens in Kent (a list drawn from the work of Hasted,¹ Furley,² Wallenberg,³ and Witney⁴) looks at the location of the communities to which they were attached and concludes that 74% pertained to places in the earliest-settled areas of the county, on the North Kent Plain north of the downs (*Foothills*) and along the scarpfoot of the North Downs (*Holmesdale*). A further 14% pertained to other early settlements on the central stretch of the Wealden greensand immediately south of the scarpfoot (*Chartland*), which may have been colonized from the scarpfoot as early as the seventh century. In contrast, later settled areas of Wealden Greensand exerted rights over only 6% of the dens, and all the downland only 2%. No dens were attached to marshland or other parts of the Weald. Everitt argues that the denial of dens to the later lands can only be explained in part by the fact that the North Downs had originated itself as a subsidiary pastoral zone: rather he suggests that the link between dens and the scarpfoot and Kentish Plain means that these rights were established before their daughter-settlements on the North Downs had come into being.

This then links dens to the earliest phases of 'Jutish' settlement and, given that the people of the scarpfoot and Kentish Plain had inherited so

¹ Op. cit.

² R Furley, *A History of the Weald of Kent, with an Outline of the Early History of the County* (2 vols., 1871 and 1874).

³ J K Wallenberg, *The Place-Names of Kent* (1934).

⁴ K P Witney, *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A.D.* (1976).

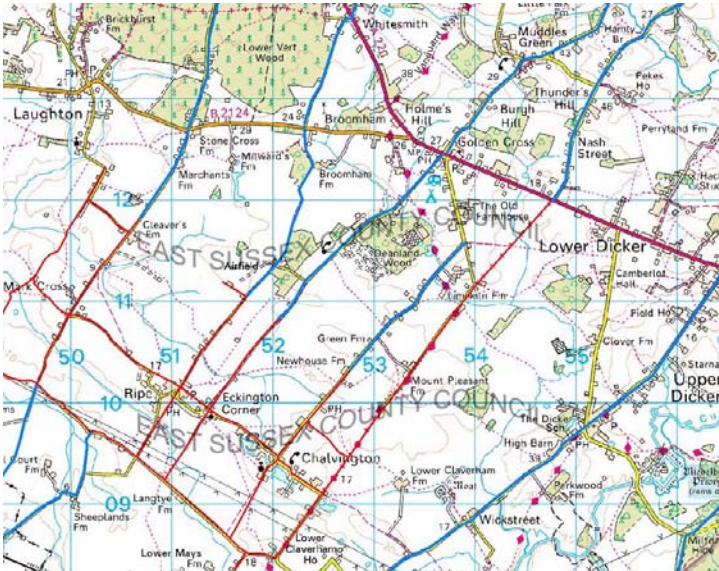


Fig. 6. Roman roads (red) and droves (blue) in the Ripe area (1km grid). Source: HW AONB Unit. Base map © Crown Copyright, all rights reserved, East Sussex County Council, LA 076600, 2002.

much from their Romano-British predecessors, it is also possible that they had inherited from them something of a tradition of transhumance and the exploitation of the Weald as a zone of detached pastureland.

3.2.4 Roman roads at Ripe as dating criteria for droves.

Evidently, there is a case for Romano-British transhumance, but the search for the origins of seasonal pannage in the High Weald does not stop there: the evidence for the Roman period could suggest still earlier origins. Margary has demonstrated that the area of unusually regular grid of fields and roads at Ripe is not a consequence of post-medieval enclosure, but very probably the result of Roman centuriation, or planned state land settlement.¹ Importantly for us, Gardiner has observed that this grid 'must have been aligned upon a pre-existing pattern of tracks' since these 'tracks continue beyond the centuriated areas on exactly the same axis, although in a less regular pattern'. These tracks follow the south-west to north-east pattern of lanes in this area, and link the scarp-foot settlements of Alciston, Firle, and Selmeston with the Weald, so that the 'centuriation may have been a local rationalisation of a network of routeways already present and dating from the Iron Age or earlier'. However, Gardiner does not support Margary's thesis that the gridded roads around Ripe are indeed Roman: he is simply stating the implications if they are.²

¹ I D Margary, 'Roman Centuriation at Ripe', *SAC* 81 (1940), pp. 31–42; I D Margary, *Roman Ways in the Weald*, (1948), pp. 204–7.

² M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), pp. 43–4.

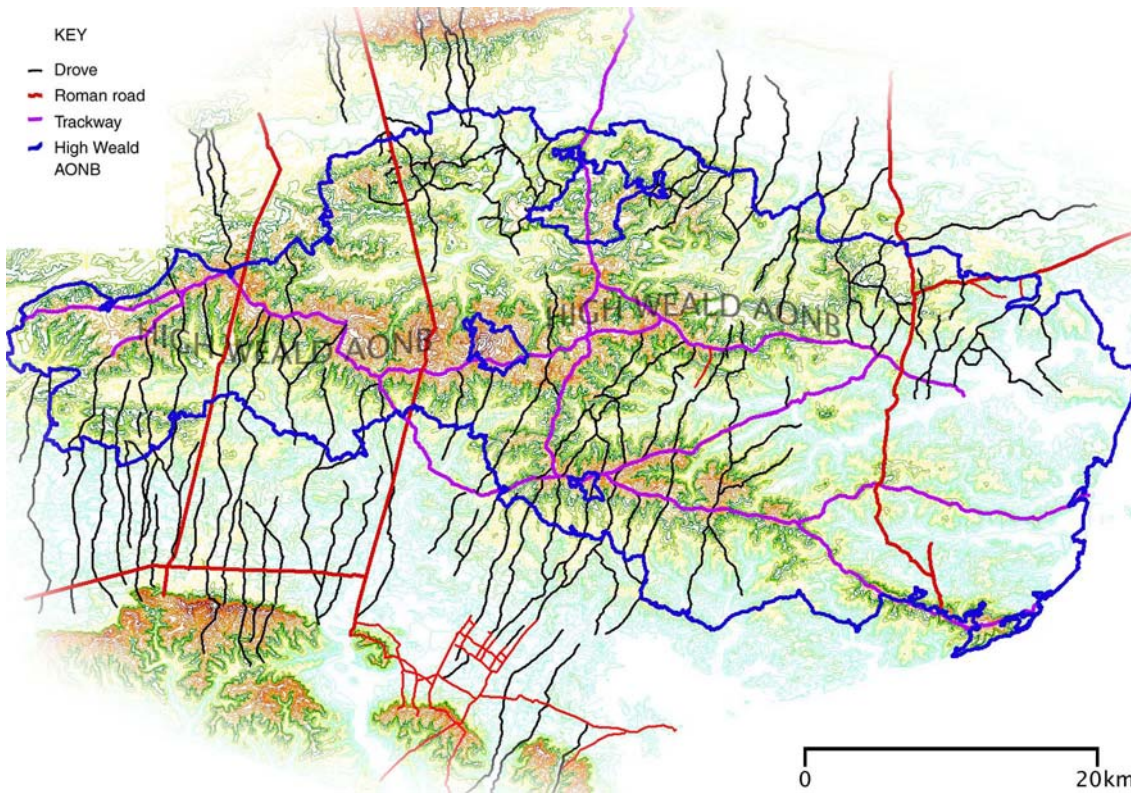


Fig. 7. Early routes in the High Weald. Source: HW AONB Unit. Base contour map © Crown Copyright, all rights reserved, East Sussex County Council, LA 076600, 2002.

3.2.5 The major Roman roads.

Mapping the different types of early routes (Fig. 7), produces a more widespread correlation between surviving lanes and Roman roads. The two main Roman roads that cross the Weald (the London–Lewes road and the London–Hassocks/Brighton road) are also aligned with the radial lanes. Most remarkably, the two Roman roads change from a SSW–NNE to SSE–NNW orientation in the High Weald, so that they correspond with the differently aligned lanes of Sussex and Surrey. Given that these orientations also coincide with the pattern of medieval detached holdings, and the major territorial holdings of rapes and *regiones* (see below), it appears that there is a common alignment of routes and territories across a wide period of time. If this common alignment is more than mere coincidence and reflects an actual relationship, the evidence for the sequence of development needs consideration.

3.2.6 The antiquity of the drove routes.

Although any given drove route must have been created before its *raison d'être* disappeared (i.e. by the 13th century),¹ the evidence from Ripe

¹ Ibid., p. 43.

could suggest that it is the Roman roads that are aligned to the droves rather than the reverse. Everitt also identifies the relationship of droves and other early roads as an indicator for early transhumance in Kent: he observes the manner in which the Kentish droves frequently cross the prehistoric Pilgrim's Way without terminating or continuing after a dogleg, and tentatively suggests that this could indicate the greater antiquity of the droves.¹ However, without archaeological evidence this is hardly proof of the relative chronology, and is rather selective since there are examples of doglegs where droves cross the prehistoric ridgeways of the High Weald.

The coincidence of droves and Roman roads raises the questions as to why would Roman roads follow the alignment of minor routes established by transhumance, or vice versa? Current interpretation of the function of the trans-Weald north-south Roman roads is that they served the Wealden iron industry,² although Margary proposes this as the principal function of the London-Lewes road only,³ with the London-Brighton/Hassocks road also used by the iron industry but 'primarily...to connect the rich corn-growing area of the South Downs with London and the rest of Britain'.⁴ The link to London to achieve either of these functions (and the iron industry explanation is the most compelling) explains the north-south trend but not the correspondence with the drove alignment. Brandon has suggested that some of the droves were 'probably Roman "iron ways" used to bring out iron' but also that 'they doubtless served a driving function as far back as the prehistoric Iron Age'.⁵ Of course, there could be a connection between transhumance and prehistoric iron industry in the sense that use of the Weald for wood-pasture could well have revealed iron ore deposits in the way that 'indigenous transhumant pastoralism' discovered iron sources in the Transylvanian Alps in the Iron Age.⁶

Whilst excavation of droves may in time reveal use by the early, and especially prehistoric, iron industry, there are two factors that indicate the drove system can have had little other than incidental value to the Roman iron industry, if indeed any droves existed in Roman times. Firstly, the droves are parallel to, and thus do not feed, the Roman arterial roads that appear to be the principal routes for extraction of iron from the Weald. Secondly, the distribution of known Roman ironworking sites (see below) does not correlate with either surviving droves or the later documented tenurial linkages of parent settlements and dens.

We are left with several explanations for the coincidence of the route systems. One possibility is that the Roman roads were constructed for an industrial purpose (perhaps with a subsidiary function of serving the arable agriculture of the South Downs) in the midst of a visible and,

¹ A M Everitt, *Continuity and Colonization: The Evolution of Kentish Settlement* (1986), pp. 39, and 121–6.

² E.g. D Rudling, 'Roman Sussex', in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), p. 24.

³ I D Margary, *Roman Ways in the Weald*, (1948), p.124.

⁴ *Ibid.*, 93.

⁵ P Brandon, 'The South Saxon *Andredesweald*', P Brandon (ed.), *The South Saxons* (1978), pp. 138–9.

⁶ T Taylor, 'Thracians, Scythians, and Dacians, 800BC – AD300', in B Cunliffe (ed.), *The Oxford Illustrated History of Prehistoric Europe* (1994), p. 383.

implicitly, active drove system, possibly even regularising existing routes. This has the merit of being consistent with Margary's identification of Roman centuriation at Ripe, but demands an unusual, if not otherwise unknown, acceptance that minor prehistoric trackways determined the orientation of major Roman roads. Moreover, it fails to explain why there should be two quite different prehistoric route systems in the sub-radial droves and the mainly east-west ridgeways.¹ Similar problems accompany the possibility that the orientation of the droves was driven by sub-radial transhumance that expressed itself (as we shall see, below) in a sub-radial territorial organization that predated the Roman roads. However, both of these options appear more likely than that which has the Roman roads aligned as they are for some as yet unknown reason, with the droves then simply following suit. The sparse Roman network means that so many of the droves are a substantial distance from Roman roads, and, thus, direct influence seems implausible.

3.2.7 Transhumance and the Roman iron industry: the case for coexistence.

The relationship of Roman roads and droves raises the possibility that transhumance not only predates the Roman period, but that it continued throughout it. Similar continuity from prehistory to the Roman period has been identified in the settlement pattern of southern Sussex,² and the continuance of a transhumant economy in tandem with a continuing prehistoric iron industry (see below), is perhaps a more convincing explanation of the state of the Weald during the Roman period than that which has been advanced for a Wealden 'Imperial Estate' that excluded all non-ironworking activity. Certainly, such multiple use of the Weald is not ruled out by the lack of material evidence for Roman occupation other than that for iron working, since seasonal pannage leaves little evidence other than the routes themselves, and the lack of archaeological research in the area is well recognized.³

The case for the exercising of Imperial control of mineral extraction in the Weald to the exclusion of any non-state activity is weakened by the fact that it is only in the extreme east of the High Weald that any iron-working sites have been identified as serving the state (in the form of the *Classis Britannica*, or Roman fleet), while those sites to the west have been accepted as belonging to a 'private' zone.⁴ In other words, even non-state ironworking was permitted and this could suggest that other non-state activity was allowed too. In this context it is interesting to note that the two zones of Roman ironworking (around Crowborough and south of Bodiam) correspond with areas devoid of surviving droves or evidence of Anglo-Saxon transhumance.

¹ Although few in number, the latter are especially interesting in that they are associated with towns and meeting places, and are worthy of overdue study.

² B Cunliffe, *The Regni* (1973), p. 74; D Rudling, 'The development of Roman villas in Sussex', *SAC* 136 (1998), p. 47.

³ M Gardiner, 'The Archaeology of the Weald – a Survey and a Review', *SAC* 128 (1990), pp. 35–53.

⁴ H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn., 1995), pp. 68–9; and D Rudling, 'Roman Sussex', in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), pp. 24–5. The evidence for the Roman iron industry is considered in more detail below [REF].

Also, when considering the potential for transhumance during the Roman period, it is important to remember the chronology of the Roman iron industry: it flourished from invasion to the mid third century, declining to the extent that there was little activity at all during the entire fourth century. The decline of the Roman iron industry in the Weald was broadly contemporary with a shift from urban to rural settlement, which runs contrary to the idea of an unexploited Weald in the fourth and early fifth centuries.

In addition to the evidence from ironworking sites, the absence of Roman villas in the Weald¹ has been cited in support of an Imperial Estate.² However, the villa is simply the most visible and studied component of rural Roman settlement, whereas the majority of farming settlements were those of peasants following a way of life with considerable continuity with the Iron Age,³ and, which has something in common with the 'typical subsistence peasant society'⁴ of the Anglo-Saxon period. Although there are few known Roman peasant settlements in the High Weald, in part this may reflect the fact that such settlements and the area have received scant attention. Nevertheless, it remains probable that, along with villas, Roman peasant settlements were never numerous in the Weald. Unlike villas with their farming for the market economy, however, it is the occupants of the peasant settlements that are more likely to have supported a transhumant economy and this, of course, does not require that the settlements themselves were in the Weald, but, rather, the opposite. Just as in the Anglo-Saxon period, a differentiation between type and quantity of settlement inside and outside the Weald can hardly be taken as evidence for a Wealden iron industry excluding all activity.

3.2.8 The origins of transhumance in the High Weald: conclusions.

Far from marking an unambiguous Imperial Estate devoid of non-state and non-ironworking activity, the Roman Weald provides us with evidence of a small area of state ironworks, more widely distributed small-scale 'private' ironworks, and, of most relevance here, the presence and pre-existence of transhumant routes. Since these routes are used in the Anglo-Saxon period too, this implies some continuity at least across the Roman period and we have seen that there is indeed a context for transhumance given the wider co-existence of peasant and villa farming and the lack of conclusive evidence for an exclusive Wealden Imperial Estate. Inevitably, the limited nature of archaeological research in the Weald to date means that there can be little certainty as to the origins and prehistoric development of transhumance in the area, but some tentative suggestions can be advanced.

Although there is something approaching a context for transhumance in the Mesolithic in that subsistent-settlement systems and routinized or

¹ Only one villa is known in the High Weald and this, at Garden Hill, appears more associated with iron production than agriculture: J H Money, 'The Iron-Age Hill-fort and Romano-British Iron-working Settlement at Garden Hill, Sussex: Interim Report on Excavations, 1968-76', *Britannia* 8 (1977), pp. 339-50.

² H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn., 1995), pp. 67-9.

³ P Drewett, D Rudling and M Gardiner, *The South East to AD 1000* (1988), pp. 204-13.

⁴ *Ibid.* p. 273.

seasonal patterns are being identified,¹ it is to the Neolithic that we must turn for the earliest echo of the early medieval system in the Weald. Bradley has identified Rackham, and less extensive sites nearby, as one of two sites in Britain supporting the hypothesis that the type of transhumance involving seasonal use of woodland was established during the period of expansion of settlement in the late Neolithic. But in observing that the sites 'recall the Saxon colonisation of the Weald through the development of seasonal swine pasture' he appears to stop short of arguing for continuity.² Drewett *et al* speculate that the Weald may have been used for 'feeding herds of pigs', with attendant 'pasturing camps', in the earlier Neolithic.³ Brandon goes further and actually proposes continuity with his suggestion that in Sussex 'the custom of droving and the agrarian ground plan which developed from it may take us back into remote pre-history', but cites no evidence.⁴

How far into prehistory we need to look for the origins of transhumance is unclear, but the dramatic changes of the Late Iron Age (that included the shifting of the distribution of enclosures from the Downs to the High Weald,⁵ and a similar movement of population⁶), provide the most obvious context for either the establishment or the large-scale expansion of Downland-Wealden transhumance.

3.2.9 Development of medieval dens.

As we have seen, we lack any detail as to the precise nature of Romano-British or earlier transhumance. In particular we know little of the impact of later fourth and fifth-century decline in the wider economy and population, the formal end of Roman rule c.410, and subsequent hiatus and further population decline during the fifth and sixth centuries. Where we do start to get a more detailed picture of transhumance is in the eighth century, by which point population was on the rise again, with social and economic development to some degree picking up from where it was in AD 43. Thus, there is little evidence as to whether or not the 'only effect of the Roman interlude, and the Germanic incursions which followed, was to deflect and retard the natural growth of British society for more than half a millennium'⁷ in relation to transhumance in the Weald.

What we do see from the earliest documentary sources, however, is a transition from transhumance operating within wide commons to within a system of clear tenure and ownership in which individual swine pastures or dens are clearly identified. At present, it can only be an assumption that transhumance within commons in the early Anglo-Saxon period represents the nature of Romano-British and earlier transhumance. Here, we explore the documented development of dens in the early medieval period.

¹ S J Mithen, 'The Mesolithic Age', in B Cunliffe (ed.), *The Oxford Illustrated History of Prehistoric Europe* (1994), pp. 116–8; P Mellars, 'Postscript: Major Issues in the Interpretation of Star Carr', in P Mellars and P Dark, *Star Carr in context: new archaeological and palaeoecological investigations at the Early Mesolithic site of Star Carr, North Yorkshire* (1998), pp. 232–7.

² R Bradley, *The Prehistoric Settlement of Britain* (1978), p. 59; E W Holden and R J Bradley, 'A late Neolithic site at Rackham', *SAC* 113 (1975), pp. 85–103; G W Dimbleby and R J Bradley, 'Evidence of pedogenesis from a Neolithic site at Rackham', *Journal of Archaeological Science* 1 (1975), pp. 117–33.

³ P Drewett, D Rudling and M Gardiner, *The South East to AD 1000* (1988), p. 46.

⁴ P Brandon, 'Introduction: the Saxon heritage', in P Brandon (ed.), *The South Saxons* (1978), p. 6.

⁵ S Hamilton and J Manley, 'Points of view: prominent enclosures in 1st millennium BC Sussex', *SAC* 135 (1997), pp. 93–112.

⁶ P Drewett, D Rudling and M Gardiner, *The South East to AD 1000* (1988), p. 129.

⁷ B Cunliffe, *Iron Age Britain* (1995), p. 117.

3.2.10 Early development of dens within commons in Kent.

Witney argues for an early correspondence of the major territorial or administrative units of Kentish lathes, and the commons.¹ It is within these commons that the early dens were formed, echoing the radiating pattern of drove roads.² Thus, the early charters (8th century) had the purpose of subtracting swine pastures from the commons. As we will see (below), the lathes divided Kent so that they were long strips radiating from the Weald. They crossed the division between royal and common woods, so that the king took the woodland on the border and the free land-holders made use of it further in. Thus, the High Weald component of each lathe was almost entirely common land. On the basis of a few charters and a wealth of place-name evidence, Witney argues that the early dens created from this common land (late 6th to early 9th centuries) were 'folk dens': that is, dens created by regular and undisputed occupation, in all probability resulting from the tendency of drovers from the same upland holdings to return to the same places year after year.

3.2.11 The formalizing of dens: evidence from Kent.

The lack of formal foundation means that the early dens were easily supplanted by grants to manors, for it was the manorial dens (with their well-defined boundaries) that displaced or engulfed the 'folk dens', from the mid 8th century onwards. Unsurprisingly, many of the manorial dens perpetuated 'folk den' names and, on analysis of names derived from male ancestors (patronymics), Witney has identified 115 dens that owe their names to so-called Jutish folk, and which have locations that can be identified. Of course, many documentary references are post-Conquest, and especially 13th-century, in date, by which time changes of place-names had taken place, so that many more corrupted patronymics could lie undetected. Witney provides a control on this by looking at pre-Conquest charters where place-names have seen less change and the distinction between patronymics and toponymics is clearer. Of the 127 pre-Conquest names, 45 appear to derive from personal names, so, if typical, this suggests that a third of manorial dens known from any source are the successors of dens first founded by 'Jutish' freemen.

The transfer of holdings to the lordships and manors was bound to break up the commons. Initially, sub-commons were formed attached to the several lordships of the lathes, fragmented along droves. From the 9th to the 11th centuries this was furthered as the manors began to assume definition and divided the sub-commons into manorial dens, or (with increasing frequency) directly attached dens to groups of holdings forming embryonic manors.³

¹ K P Witney, *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A.D.* (1976), pp. 31–55.

² *Ibid.*, pp. 56–77.

³ *Ibid.*, pp. 78–103.

3.2.12 Dens and permanent settlement.

Gardiner argues that by the late 11th century, dens had given rise to permanent settlement in even the most distant parts of the Sussex Weald. He identifies dens from documentary sources, but notes that explicit references to parcels of land as 'denns' are mostly not found until the 15th century, and thus the link with seasonal pastures is questionable: it is possible that the usage was adopted from adjacent Kent.¹

3.2.13 The size and form of dens.

Witney calculates the mean size of dens in the Kentish Weald as half a square mile (320 acres), but makes the point that there was considerable variation, and gives examples ranging from c.100–c.700 acres.² Gardiner identifies similar holdings in east Sussex ranging from 80 acres to 500 or 600 acres.³ The form of such dens at given times was clearly quite different. In the early period of their establishment the dens would have been dominated by standard oaks and other arboreal species. In the Kentish Weald, and possibly throughout the Weald by analogy, there appears to have been no prohibition of cultivation, but standards could not be felled, nor could there be autumn ploughing. Given these restrictions and the fact that the value of the Weald in the early phase of seasonal dens was pannage, there seems little reason to suppose that cultivation was at all extensive.⁴

3.2.14 The location of dens in Kent.

Witney has identified the location of dens belonging to upland manors in Kent that are referred to in medieval, even pre-Conquest, documents.⁵ He argues that early dens fell short of the county boundary, and that it was not reached until the manorial era, although Gardiner suggests that the evidence is insufficient to justify this interpretation.⁶ Witney also notices that the density of dens increases eastward across the Kentish Weald: the eastern commons were narrower and more intensively used, and this relative crowding may have prompted the staking out of claims to permanent dens.⁷

The survival of medieval documents exaggerates the lack of dens around Tunbridge Wells since the creation of the large chases of the North and South Frith Woods by the Clares doubtless engulfed dens that, therefore, do not appear in the records.⁸

3.2.15 The location of dens in Sussex.

For Sussex, survival of medieval records, and especially pre-Conquest charters, is insufficient to allow the type of plotting of dens that Witney achieved for Kent, but Gardiner has mapped *-den* place-names for the Rape of Hastings using names in Mawer and Stenton, *The Place-Names of*

¹ Ibid., pp. 68–79.

² Ibid., p. 97.

³ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), pp. 69–70.

⁴ K P Witney, *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A.D.* (1976), p. 69.

⁵ Ibid., pp. 211–75.

⁶ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), p. 47.

⁷ K P Witney, *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A.D.* (1976), pp. 56–77.

⁸ Ibid., p. 76.

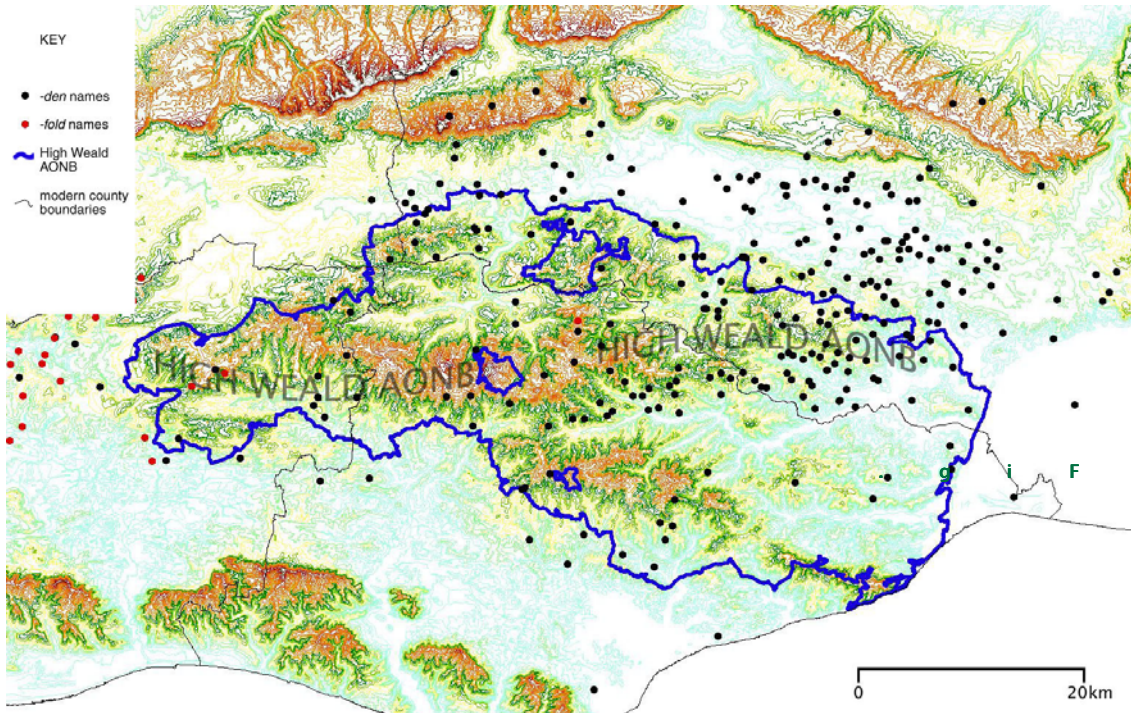


Fig. 8. Place-name evidence: *-den* and *-fold* place-names plotted from the 1:25,000 OS map-base. Source: HW AONB Unit. Base contour map © Crown Copyright, all rights reserved, East Sussex County Council, LA 076600, 2002.

Sussex, 2, and field names from the tithe maps and apportionments.¹ Plotting *-den* place-names from the modern 1:25,000 Ordnance Survey map gives a similar distribution, albeit with slightly less detail (Fig. 8). Given the correlation between *-den* place-name distributions as evidenced from the modern 1:25,000 mapping and Witney's and Gardiner's mapping, it is evident that the former gives a crudely reliable means of plotting the place-name distribution across the High Weald, and reflects the early (i.e. medieval, and probably pre-Conquest) distribution of dens. Of course, any given *-den* name derived from the 1:25,000 map base may have no demonstrable pre-Conquest origins or a connection with seasonal pasture.

This distribution shows a much lower density of dens in Sussex than in Kent, with the exception of the area along the southern slopes of the eastern part of the Forest Ridge, between Crowborough and Ticehurst, although given the approximate nature of the methodology we should be wary of reading too much into this. While the lack of *-den* place-names in the lower lying extreme east of Sussex has been accepted as reflecting an absence of swine pastures,² it is harder to believe that the lack of –

¹ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), pp. 67–70. Although several apparent *-den* place-names exist in extreme eastern Sussex or are recorded on the tithe (e.g. Crabden and Eatenden, in Mountfield; Delmonden and Neatenden, in Sedlescombe; Idens, Pattendens and Sowdens, in Brede; Tiffenden and Ashenden, in Guestling; Tildens and Wythenden, in Pett; Surrenden and Walden, in Icklesham; Ashendens, in Iden; and Ebdens and Sindens, in Westfield), these are either genitive forms which typically originate in the 14th and 15th centuries, or otherwise lack evidence of early forms: pers. comm. Dr Mark Gardiner, University of Belfast.

² *Ibid.*, p. 67.

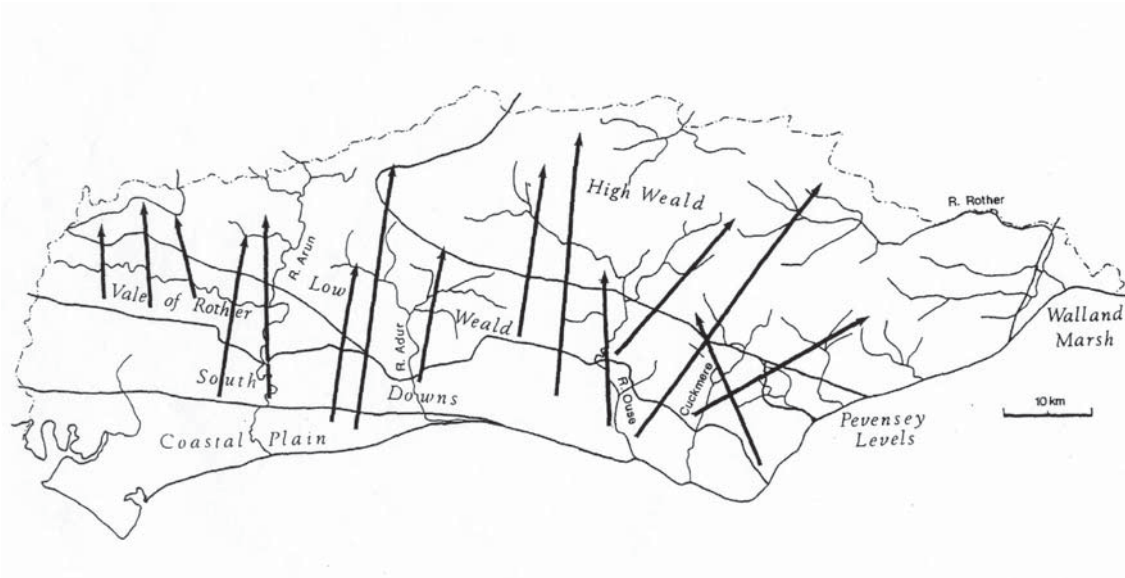


Fig. 9. The pattern of detached Wealden holdings in Sussex: M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), Fig.10.

dens north and west of Crowborough represents a similar absence of swine pastures.

Brandon has suggested that a *fold* is the west Sussex and Surrey equivalent of a *den*,¹ but this still leaves the area comparatively thinly occupied by swine-pastures (Fig. 8). More convincing is Gardiner's analysis of the pattern of detached holdings in Sussex that strongly suggests an early transhumant economy extending across most of the county, with the notable exception of Ashdown Forest and the south-eastern part of the Rape of Hastings.² The evidence for this derives from pre-Conquest charters, medieval and post-medieval manorial records, and common place-name elements. All of these indicate the presence of coastal plain or downland parent settlements with Wealden outliers, with either a clear or inferred pig-pasture function (Fig. 9). This suggests that west of Crowborough, we should not accept the distribution of surviving '-den' place-names as evidence of the distribution of medieval swine-pastures.

There is also a marked difference in the pattern of holdings either side of the River Ouse. To the east of the river the pattern is aligned SSW-NNE; and to the west it is aligned S-N. Ashdown Forest was thus avoided by both groups, and remained largely unoccupied until the 13th century, although Gardiner stops short of making this the explanation for the pattern. Rather he implies that the pattern results from the River Ouse

¹ P Brandon, 'The South Saxon *Andredesweald*', in P Brandon (ed.), *The South Saxons* (1978), pp. 150-2.

² M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), pp. 34-71.

marking the position of an ancient territorial boundary. Certainly, the coincidence of the river and the deanery boundary suggests that the Ouse marked the boundary of the unreformed Norman rape and very possibly a Saxon boundary.¹ However, Gardiner himself argues that the marshland of the Pevensey Levels would have formed an obstacle to movement on the east side of the rape until drained in the 13th century.² Add to this the absence of downland east of Eastbourne, which we have seen as a possible explanation for the lack of dens in the extreme east of the county, and there is a case for geographic determinism to the pattern. Moreover, since the pattern of transhumance is so closely associated with the droves which survive in the roads and tracks of today, it is interesting to note that, if anything, these suggest a progressive fanning centred on the Ouse but extending as far west as Plumpton, rather than an abrupt change at the river.

3.2.16 The location of dens in Surrey.

In eastern Surrey, Blair has identified similar evidence of a transhumant economy, although again the county lacks the number of pre-Conquest charters found in Kent. Here the pattern of upland settlement and Wealden outlier is generally N-S, and contained within the individual *regiones*.³

3.2.17 The correlation between documented dens and surviving droves.

This documented pattern of dens and parent settlements tallies extraordinarily well with the radial pattern of lanes, greenways, and Rights of Way that survive in the Weald today and which represent the droves used for transhumance (Fig. 7). The correspondence of the physical and documentary evidence serves to confirm the near ubiquity of transhumance as a colonizing force in the High Weald and, simultaneously, highlights the areas where it played little part, namely Ashdown Forest and the south-eastern part of the Rape of Hastings. These two areas are considered amongst the other colonizing processes (below).

¹ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), pp. 69–71.

² *Ibid.*, p. 45.

³ J Blair, *Early Medieval Surrey: Landholding, Church and Settlement before 1300*, (1991), pp. 14–17.

3.3 Early industry

- **ironmaking** was the main industrial activity in prehistoric, Roman, and medieval times
- the High Weald had the **natural resources** of iron ore and wood (for fuel) required for industry
- the prehistoric and Roman iron industry **managed** the **woodland**, even accounting for some tree species
- prehistoric and Roman ironworking has left a legacy of **archaeological monuments: hillforts, slag heaps, ponds, and roads**
- the **iron industry** helped ensure that **woodland** was not permanently cleared from the High Weald

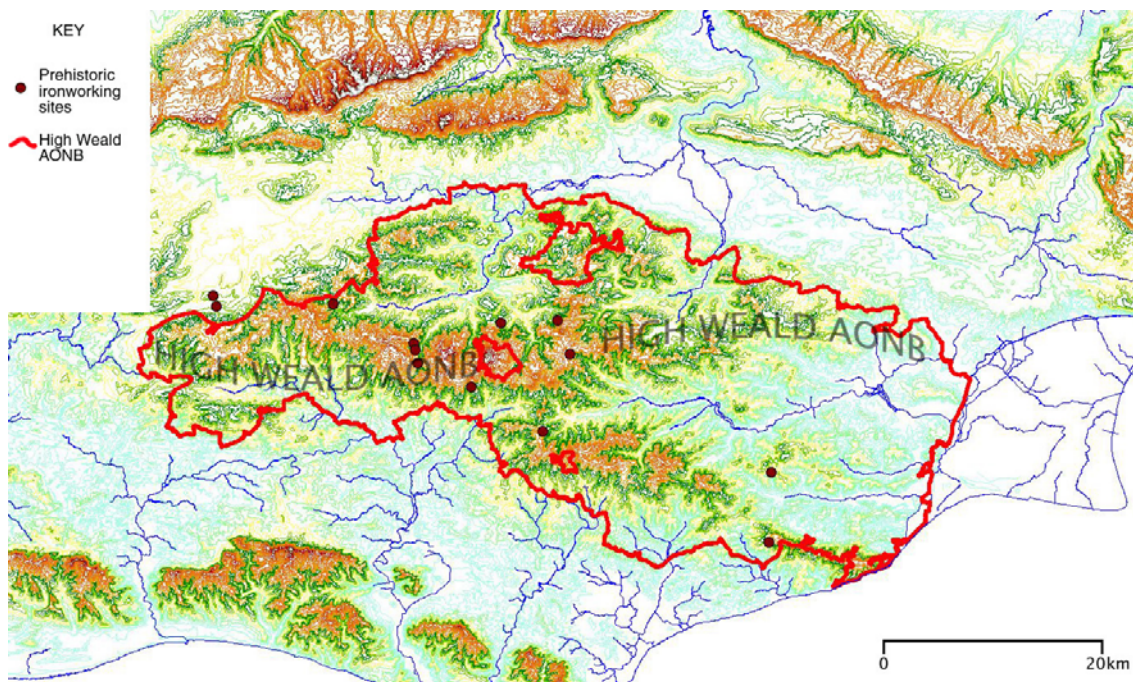


Fig. 10. Prehistoric Wealden ironworking sites. Source: sites identified by Cleere and Crossley, *Iron Industry*, Fig. 17. GIS mapping: HW AONB Unit. Base contour map © Crown Copyright, all rights reserved, East Sussex County Council, LA 076600, 2002.

3.3.1 Romano-British iron industry.

The Weald, and especially the High Weald, is well known for its Roman (and indeed later) iron industry, and was one of three main concentrations of activity in the country, along with the Forest of Dean, and Northamptonshire and environs (e.g. Rockingham Forest¹). The earliest evidence of ironmaking in the Weald is from the 1st century AD and represents a later (slag-tapping) technology than other early furnaces found on the western side of the British Isles (400–100 BC). While Cleere and Crossley state bizarrely that there appears to have been ‘no ironmaking in the High Weald in the prehistoric period’, 11 of their 13 prehistoric sites fall within the High Weald AONB and thus are far from concentrated on the ‘northern and southern fringes’ of the Weald.² The majority of these sites form a ring around Crowborough, with other sites in the East Grinstead–Crawley area, and north of Hastings (Fig. 10).

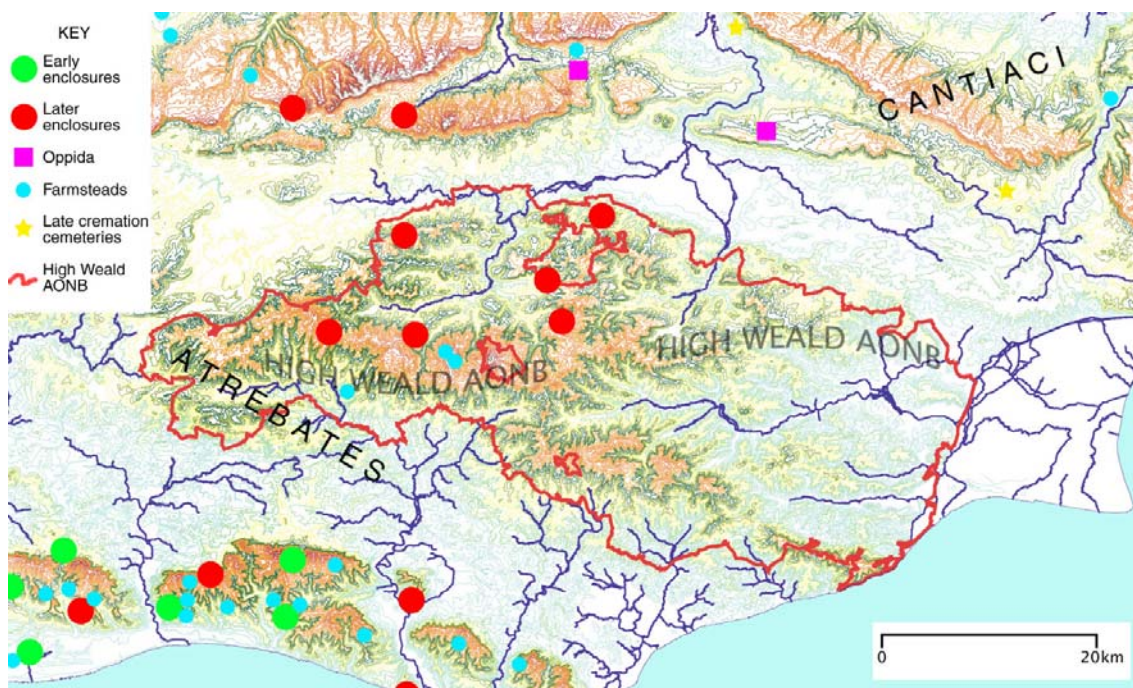


Fig. 11. Iron Age hillforts, other key sites (excluding ironworking), and tribal territories of the Weald and environs. After P Drewett, D Rudling and M Gardiner, *The South East to AD 1000* (1988), Fig. 5.2. Base contour map © Crown Copyright, all rights reserved, East Sussex County Council, LA 076600, 2002.

3.3.2 Iron Age hillforts.

There are prominent Iron Age enclosures, or hillforts', at six sites in the High Weald, and these have been linked to the early iron industry. Certainly, they are distinct from their counterparts on the South Downs: the latter are mostly Late Bronze Age/Early Iron Age (c.1000–400BC),

¹ G Foard, 'Medieval Woodland, Agriculture and Industry in Rockingham Forest, Northamptonshire', *Medieval Archaeology* 45 (2001), pp. 41–95.

² H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edn., 1995), p. 53.

with some dating to the Middle Iron Age (c.400–100BC), whereas in the High Weald only the two successive forts at Castle Hill date to the Middle Iron Age, with the rest not really active until the Late Iron Age (c.100BC–AD43).¹ That said, definitive dating evidence is lacking for Philpots and Dry Hill, although excavations at the latter did unearth iron slag. At Garden Hill, High Rocks, and Saxonbury, the dating is more secure, and at Garden Hill and Saxonbury signs of ironworking were discovered.²

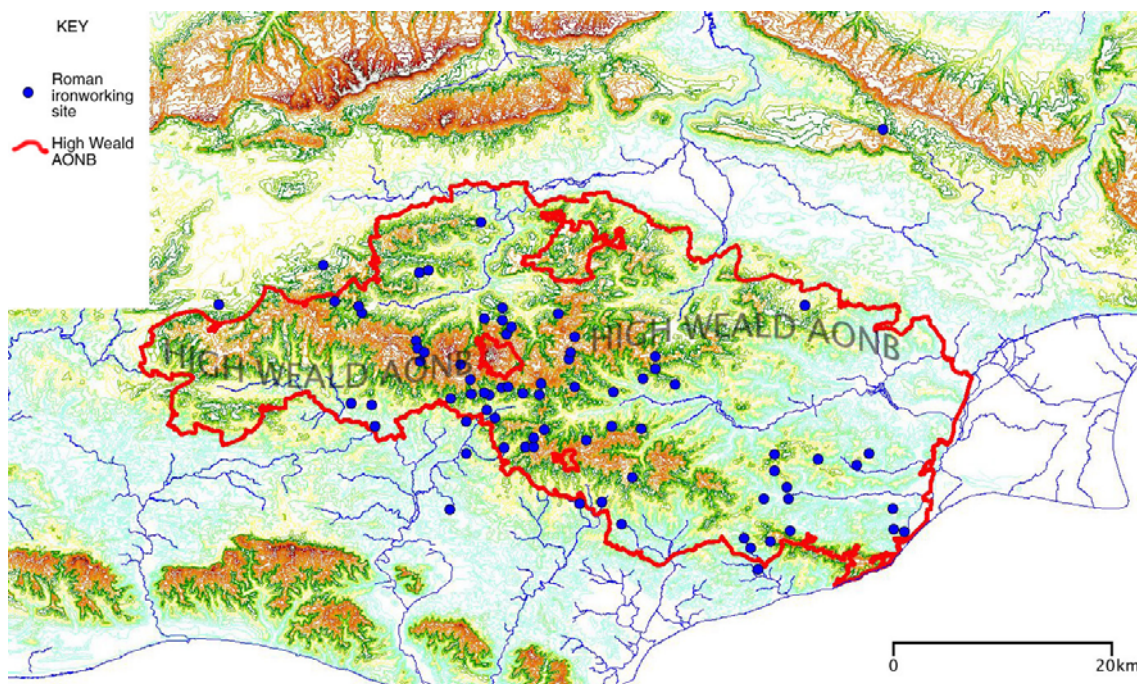


Fig. 12. Roman ironworking sites in the Weald. Source of sites: H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn., 1995), pp. 295–308 and 380–1). Base contour map © Crown Copyright, all rights reserved, East Sussex County Council, LA 076600, 2002.

The evidence linking hillforts to the pre-Roman iron industry is suggestive but not conclusive.³ A more thorough and evidentially based discussion comes to the reasonable conclusion that ‘there are a large number of possible explanations for the defended enclosures of the Weald: defence, pastoral farming and as centres for trade and the obtaining of materials and food from the woodlands.’⁴

3.3.3 The location of the prehistoric and Roman iron industry.

When the Romans arrived in AD 43 there was a ‘vigorous and technologically well advanced ironmaking industry’ centred in two areas,⁵ around modern Crowborough and the area just south of modern Battle. In the Roman period ironworking broadly followed this distribution. Even

¹ P Drewett, D Rudling and M Gardiner, *The South East to AD 1000* (1988), pp. 145–61; S Hamilton and J Manley, ‘Points of view: prominent enclosures in 1st millennium BC Sussex’, *SAC* 135 (1997), pp. 93–112.

² P Drewett, D Rudling and M Gardiner, *The South East to AD 1000* (1988), p. 157.

³ Pace S Hamilton and J Manley, ‘The end of Prehistory c.100BC–AD43’, in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), p. 22.

⁴ P Drewett, D Rudling and M Gardiner, *The South East to AD 1000* (1988), p. 160.

⁵ H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn., 1995), p. 55.

allowing for the longer timescale of the Roman industry, however, the density of sites was greater than in the Late Iron Age: Cleere and Crossley have identified 76 ironworking sites of the Roman period, of which 68 fall within the High Weald Area of Outstanding Natural Beauty (Fig. 12).

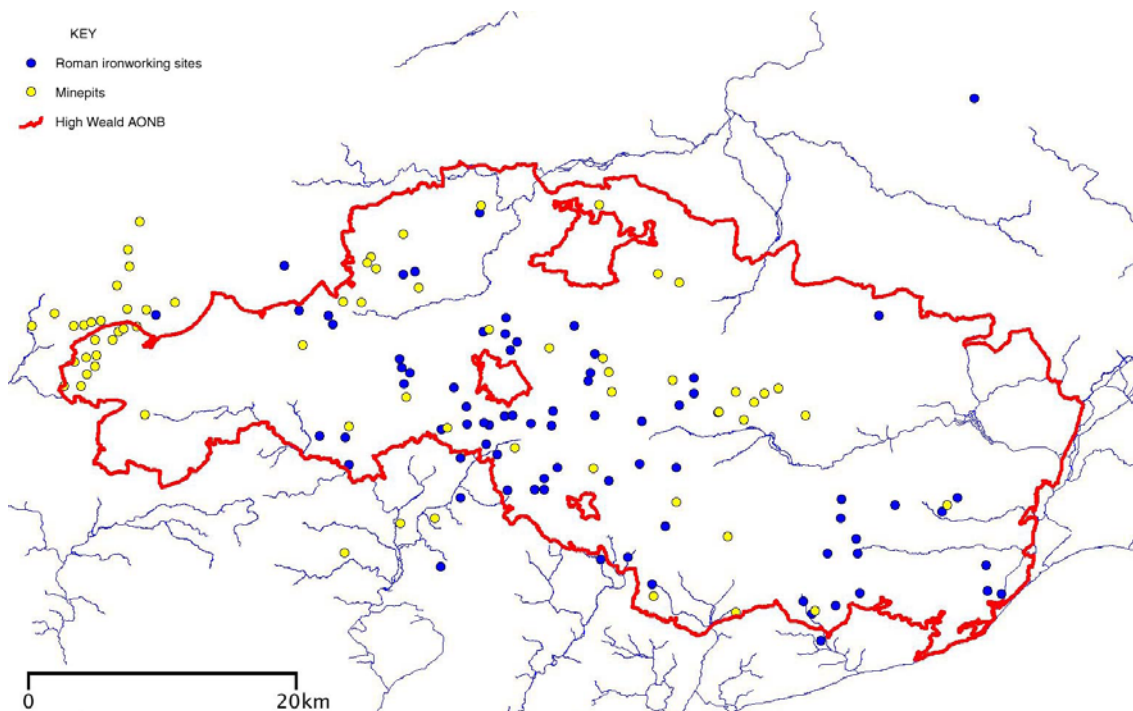


Fig. 13. Roman ironworking sites in the Weald and their relationship to iron-ore minepits. (Source of sites: H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn., 1995), pp. 15–21, 295–308 and 380–1).

Kaminski's analysis of the density of Roman bloomeries incorporates the results of the 1976 Wealden Iron Research Group (WIRG) survey of a 182km² study area¹ and concludes that 2000±500 sites would be a conservative total for his *High Wealden* region.² This area is larger than the High Weald AONB, and the figures should be reduced accordingly to 1700±400. Although bloomeries were ubiquitous in the High Weald, it is clear that the bulk of the iron output came from only nine sites that were of industrial scale.³

The distribution of prehistoric and Roman ironworking sites in the High Weald area broadly follows that of the known iron-ore workings that fall into two groups centred on Colgate and Mayfield (Fig. 13).

¹ Together with previously known sites, the study revealed 256 bloomeries of all periods: a density of 1.4 per km². C F Tebbutt, 'Wealden bloomery iron smelting furnaces, SAC (119), pp. 56–64: reprinted in abridged form in H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn. 1995), pp. 279–83.

² J Kaminski, *The Environmental Implications of Romano-British Iron Production in the Weald* (unpublished Ph.D. thesis, University of Reading, 1995), p. 348.

³ H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn. 1995), pp. 79–82; J Kaminski, *The Environmental Implications of Romano-British Iron Production in the Weald* (unpublished Ph.D. thesis, University of Reading, 1995), pp. 187–8, and 342.

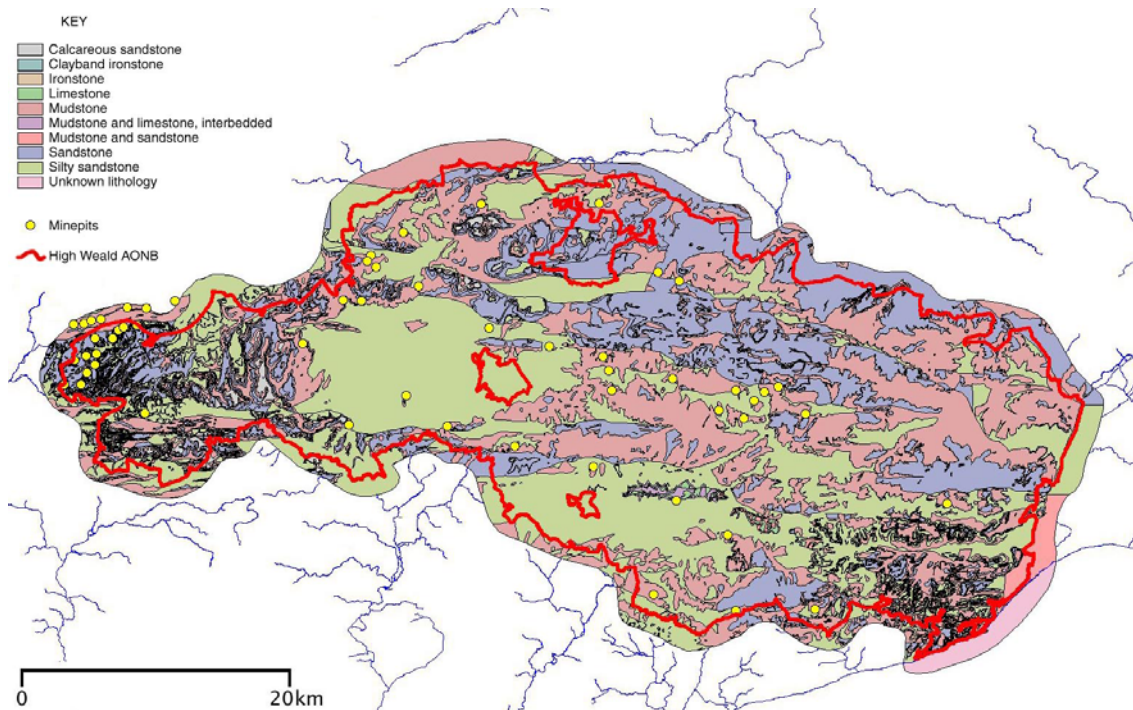


Fig. 14. Minepits of the High Weald and their relationship to solid geology rock type. Source: minepit locations from B Worssam, 'The geology of Wealden iron', in H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn. 1995), pp. 15–21. Geology based upon 1:50,000 digital data, by permission of the British Geological Survey.

3.3.4 Sources of iron ore and the relationship with the location of ironworking sites.

In the High Weald clay ironstone, or siderite mudstone, provided the bulk of the iron ore:¹ of the 49 minepits in the AONB, 35 are located on Wadhurst Clay Formation mudstone, and 13 are located on Upper Tunbridge Wells Formation mudstone.² Most of those on the Wadhurst Clay are within metres of the Ashdown Formation silty sandstone, while those on the Tunbridge Wells Formation mudstone are next to the Tunbridge Wells Formation silty sandstone. Worssam has suggested that this is due to the fact that iron carbonate was produced in certain environments where organic matter was abundant, such as 'in clays on the outer fringes of sandy deltas' that existed at the time these sedimentary rocks were formed.³ That the correlation between ironworking sites and mines is stronger in the prehistoric and Roman period than during the post-medieval renaissance of the industry suggests that the very specific location of accessible ore was a more significant constraint in the earlier period.

¹ B Worssam, 'The geology of Wealden iron', in H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn. 1995), pp. 9–13.

² Using the British Geological Survey 1:50,000 solid geology digital data.

³ B Worssam, 'The geology of Wealden iron', in H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn. 1995), p. 12.

3.3.5 The influence of the Roman fleet on the location of ironworking sites

The discussion of the geography of the Roman iron industry has been dominated by the hypothesis that the entire Weald was an Imperial Estate dedicated to the sole function of iron production. However, we have seen (above) that there is an increasing body of evidence for transhumance in the Roman and prehistoric periods. Combined with the fact that it is only the eastern group of bloomeries that can be linked to state use (in the form of the *Classis Britannica* – the Roman fleet), and the fact that ‘the nucleation of large industrial sites’ in the east suggests a ‘different management strategy’,¹ this suggests that the Weald is unlikely to be coterminous with an exclusive Imperial Estate.

Of course, the similar distribution of ironworking sites in the Roman period and the Late Iron Age could indicate that the factors determining the location of the industry were identical before and after conquest. This might have been the case, and the location of accessible ore might have been the chief determinant. However, the number of prehistoric sites is small and exact correlation between the successive periods cannot be demonstrated beyond reasonable doubt. This is especially the case with the eastern group that are represented in the prehistoric period by two sites only.

The Roman period saw a significant expansion of ironworking activity in this area with 17 sites and 72% of the industrial-class sites² and given the archaeological evidence linking some of the sites (namely those at Bardown, Beauport Park, Little Farningham, and Bodiam)³ to the *Classis Britannica* there is reason to believe that the demand from the navy would have had some impact on the industry. With iron appearing to reach the Roman fort at Lympne or, more probably, the *Classis Britannica* base at Dover from the hypothetical port at Bodiam, it is reasonable to conclude, in the manner of Cleere and Crossley,⁴ that the expansion of the eastern group of ironworking sites was one such impact. While Cleere goes further and suggests that the eastern group was directly controlled by the fleet,⁵ Kaminski is surely right to urge for more caution: the specialized nature of iron-production, a pre-existing skilled indigenous workforce, more pressing demands on the fleet (especially during the first-century advances of the armies), and an absence of military items from major excavations at even the largest sites, leaves *CLBR* (i.e. *Classis Britannica*) stamped tiles and ‘the military-style barrack block at Bardown, and the military-style bathhouse at Beauport Park’ as the only evidence for a military link. Certainly, the evidence for a link is there, but it falls short of implying significant deployment of personnel from the *Classis Britannica*.⁶

¹ J Kaminski, *The Environmental Implications of Romano-British Iron Production in the Weald* (unpublished Ph.D. thesis, University of Reading, 1995), p. 340.

² *Ibid.*, p. 187.

³ Cleere and Crossley undermine their case for linkage of the eastern group with the *Classis Britannica* by citing the site as Bardown as evidence for this site, and its satellites, appear to be firmly located within the more numerous but less productive western group (Fig. 00). H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edn. 1995), pp. 63–5.

⁴ *Ibid.*, pp. 63–5, 68–9, and 82–4.

⁵ H Cleere, ‘The Roman Iron Industry of the Weald and its Connexions with the *Classis Britannica*’, *Archaeological Journal* 131, (1975), pp. 188–9.

⁶ J Kaminski, *The Environmental Implications of Romano-British Iron Production in the Weald* (unpublished Ph.D. thesis, University of Reading, 1995), p. 432–3.

3.3.6 Visible remains of the early iron industry: slag heaps.

In addition to the minepits and bloomeries, slag heaps were an essential by-product of ironmaking. Often these have proved the means by which bloomery sites have been discovered, and at the industrial-class sites they were enormous. For example, Cleere has estimated that the total production of 30,000 tonnes of iron at Beauport Park produced 100,000 tonnes of slag with a volume of 30,000m³.¹ The smaller slag heap at Bardown largely remains, but slag at the industrial-sites was prone to attrition: Kaminski estimates that 50,000 tonnes of bloomery slag were removed for local and regional road metalling in the 19th century from these large bloomery sites.²

3.3.7 Ironworking settlement.

At a few sites archaeological excavation has provided limited evidence of associated settlement. Thus we now know of the large-scale (possibly 8–10ha) settlement at Beauport Park, complete with bath-house; smaller settlements, such as the 3ha at Bardown; and the Bardown satellites such as Holbeam Wood (1ha).³

3.3.8 Ironworking settlements and their agriculture.

Likewise, there is some evidence for the immediate vicinity of the Roman ironworking sites. Palynological evidence from Ludley Farm (Beckley parish) suggests hay-meadow, while macro-botanical remains from Great Cansiron (Forest Row) suggest damp meadow. These could reflect fodder for draught animals rather than significant agriculture since the 'evidence for arable production in the vicinity of Roman iron production sites is limited'.⁴ Ludley Farm has also provided environmental evidence for heather (*Calluna sp.*), indicating localized impoverishment of the Ashdown Sands.⁵

Wider impact of Roman ironworking settlement has been argued, however, on the basis of place-names. Witney identifies 18 place-names deriving from 'field' (Old English *feld*) in the Kentish Weald, and makes the point that these are early names yet not located in accordance with what we know of 'Jutish' settlement. That they are adjacent to Roman roads,⁶ or tracks used and improved by the Romans or are located in the iron-bearing areas of the High Weald suggests to Witney that they could represent fields associated with iron working that were left to grow thin secondary woodland after the collapse of the Roman iron industry.⁷ Brandon⁸ and, more thoroughly, Gardiner have looked at the evidence for the element *feld* in Sussex and this shows a correspondence with later medieval 'downland' or common.⁹ These areas were poor for cultivation, but not too barren for woodland, and thus could represent very early areas of deliberately thinned woodland or even heathland.¹⁰ There is no evidence, however, linking 'field' place-names with Roman ironmaking

¹ H F Cleere, 'Some operating parameters for Roman ironworks' *Bulletin of the Institute of Archaeology* 13 (1976), p. 238.

² Op. cit., pp. 12–13.

³ H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edn. 1995), pp. 70–4.

⁴ J Kaminski, *The Environmental Implications of Romano-British Iron Production in the Weald* (unpublished Ph.D. thesis, University of Reading, 1995), p. 361.

⁵ Ibid., p. 253.

⁶ See above for discussion of Roman roads.

⁷ K P Witney, *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A.D.* (1976), pp. 19–30.

⁸ P F Brandon, 'The South Saxon *Andredesweald*', in P F Brandon (ed.), *The South Saxons* (1978), pp. 142 and 152.

⁹ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), pp. 81–3.

¹⁰ Ibid.

settlements, and Witney's ascription to *feld* of a more specific meaning than open, or cleared, land is evidently suspect.

3.3.9 Roman iron industry and woodland management.

It is increasingly evident that the Roman iron industry was not synonymous with deforestation, but rather that the period was marked by some form of regenerative woodland management.¹ Rackham was the first to propose medieval-style coppicing in the Roman Weald,² and more recently gathered evidence from preserved charcoal is consistent with this. Young branch-like wood dominates, with certain taxa, such as alder and willow, excluded, most logically due to poor charring qualities and value for other usage. However, selection of young twig-free wood does not prove coppice management, and Kaminski has cautioned that the absence of dated Roman woodbanks might tell against coppicing.³ Given the almost complete lack of archaeological study and dating of woodbanks in the area this might prove otherwise. Equally inclusive is the representation of different taxa in charcoal recovered from ironworking sites: oak dominates, and otherwise assemblages are marked by the presence of classic secondary woodland species such as hazel and birch, whereas taxa less associated with secondary woodland (such as elm, beech and hornbeam) are comparatively rare.⁴

Since progressive deforestation is no longer a tenable hypothesis, a minimum area of regenerative woodland required to feed the Roman iron industry across the Weald can be calculated by use of figures for rotation coppice. Taking Cleere and Crossley's estimate of 750 tonnes of iron per annum for the peak period from 150–250AD,⁵ this would translate to 33,000 hectares of coppice.⁶ The strong possibility of woodland management being less efficient than post-medieval coppice, especially in the non-industrial sites, could imply that the woodland resource required to supply the Roman iron industry was significantly greater than this calculation suggests.

3.3.10 Prehistoric pottery industry.

The first evidence of centralised pottery production occurs in the Late Iron Age, in the High Weald at sites such as Chelwood Gate and Horsted Keynes.⁷ As with the iron industry, this was in response to the availability of raw materials (especially the potting clays), yet there does not appear to have been the same continuity into the Roman period.⁸ Analysis of the Iron Age pottery from archaeological excavation at Bishopstone on the South Downs has identified a High Wealden origin for some of the fabric, noting the high iron content and that 'the spathic ore [in the Wadhurst clay] is overlain by a very plastic clay which is highly suitable for pottery manufacture'.⁹

¹ J Kaminski, *The Environmental Implications of Romano-British Iron Production in the Weald* (unpublished Ph.D. thesis, University of Reading, 1995), pp. 398–424, and 445–52.

² O Rackham, *Trees and Woodland in the British Landscape* (revised edtn. 1990), pp. 40–1.

³ J Kaminski, *The Environmental Implications of Romano-British Iron Production in the Weald* (unpublished Ph.D. thesis, University of Reading, 1995), pp. 412–13.

⁴ J Kaminski, *The Environmental Implications of Romano-British Iron Production in the Weald* (unpublished Ph.D. thesis, University of Reading, 1995), pp. 413–14.

⁵ Hansjörg Küster, 'The role of farming in the postglacial expansion of beech and hornbeam in the oak woodlands of central Europe', *The Holocene*, Vol. 7, No. 2 (1997), pp. 239–42.¹ Hansjörg Küster, 'The role of farming in the postglacial expansion of beech and hornbeam in the oak woodlands of central Europe', *The Holocene*, Vol. 7, No. 2 (1997), pp. 239–42 H Cleere and D Crossley, *The Iron Industry of the Weald* (2nd edtn. 1995), p. 81.

⁶ Calculation based on Cleere and Crossley's figure of 6000 tonnes of wood for 40–4 tonnes of iron (*ibid.*, p. 78), and figures for sustainable coppice of 3.2 tonnes per hectare (cross ref. to *Analytical Characterization*).

⁷ S Hamilton and J Manley, 'The End of Prehistory c.100BC–AD43', in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), pp. 22–3.

⁸ D Rudling, 'Roman Sussex', in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), pp. 24–5.

⁹ S Hamilton, 'The Iron Age pottery', in M Bell, 'Excavations at Bishopstone', *SAC* 115 (1977), pp. 93–4.

3.4 Other early activity in the High Weald

- Mesolithic **hunter-gatherers** used the High Weald
- although less important than in much of the country, there was a significant amount of **prehistoric farming** in the High Weald
- prehistoric agriculture accounts for **deforestation** in the High Weald

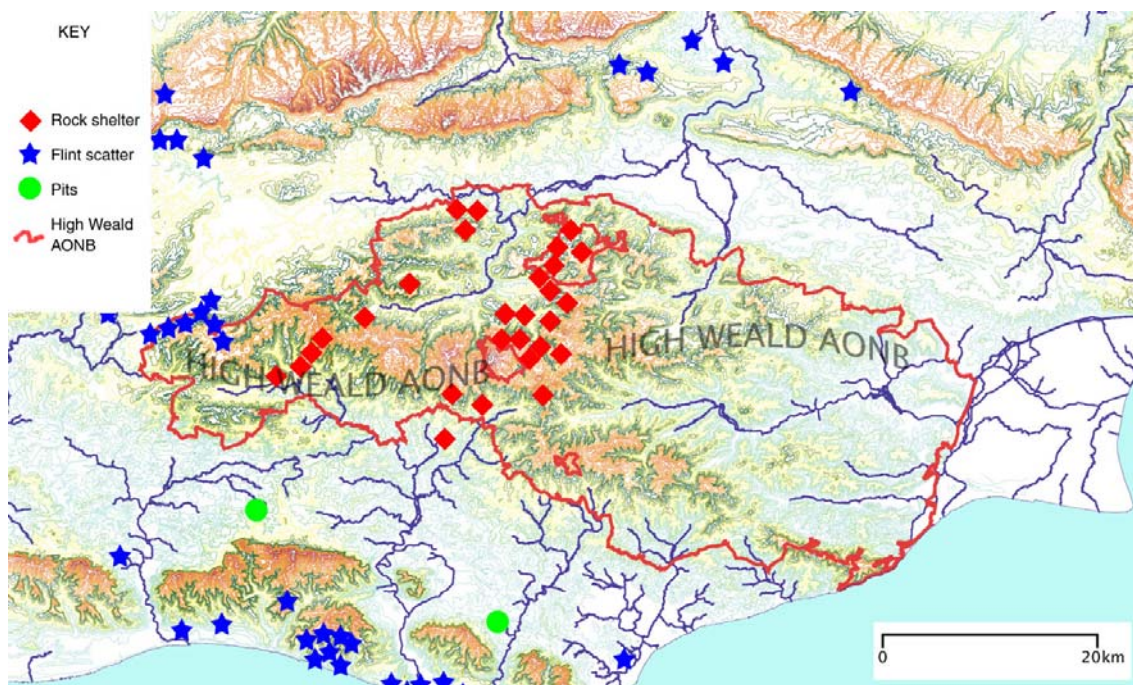


Fig. 15. Main Mesolithic sites in the High Weald and environs. After P Drewett, D Rudling and M Gardiner, *The South East to AD 1000* (1988), Fig. 1.3. Base contour map © Crown Copyright, all rights reserved, East Sussex County Council, LA 076600, 2002.

3.4.1 Post-glacial hunter-gatherers.¹

The Mesolithic (c.8000–c.4300BC) saw extensive use of the High Weald for hunting, although most of our current evidence is confined to the period after c.6000BC (by which point what is now Britain became separated from the continent).² This hunting activity extended into the period of early farming – the Early Neolithic (see below) – and artefacts of the two periods are often found together.³

Discoveries within natural rock-shelters in the Ardingly Sandstone south and south-west of Tunbridge Wells provide the most compelling

¹ Although human inhabitants in the area extend back half a million years ago into the Palaeolithic, their impact on the landscape we have inherited really begins c.10000 years ago, after the last Ice Age.

² P Drewett, 'Later Hunters and Gatherers', in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), p. 14.

³ E.g. A F Harding and J Ostojka-Zagórski, 'Excavations in Rocks Wood, Withyham, 1982', *SAC* 125 (1987), pp. 11–32.

evidence of Mesolithic and Early Neolithic hunting activity, although the use of such shelters merely echoes that by Palaeolithic predecessors. Of the High Weald rock overhangs, at least 17 have produced evidence of Mesolithic hunter-gathers. Finds – and especially the microlithic flint points so closely associated with the Mesolithic – provide substantial evidence of the activities of hunters beyond the rock-shelters. They are increasingly found on clay as well as the sandy soils and are sufficient to support the case for ‘ubiquity of Mesolithic activity in the Weald’.⁴

There is no conclusive evidence for the environmental impact of Mesolithic hunter-gatherers in the High Weald. The presence and impact of Neolithic (and later) hunting is harder to determine, since the period saw the introduction of agriculture, and all our current pollen evidence relates to this development.

3.4.2 Prehistoric farming and deforestation in the High Weald.

The earliest evidence for substantial clearance of woodland within the High Weald dates to the Neolithic (c.4300–1400 BC). Pollen analysis undertaken from inorganic alluvial deposits in the High Weald has given us a greater insight into this process and the connection with agriculture. The build-up of deep alluvial deposits in the Rother at Robertsbridge resulted from ‘widespread deforestation’ that ‘caused environmental instability with significant inputs of sediment to the valley floor’.² Similar evidence at Stream Farm, Chiddingly, shows that this clearance extended westwards.³

Agricultural activity is identified as the cause of this deforestation, and this is supported by pollen analysis at Mayfield, Robertsbridge, Stream Farm and at Sharpsbridge (at the edge of the High Weald in the upper Ouse Valley) through the presence of cereal grain, grasses (*Gramineae*), and the grassland indicator rib wort plantain (*Plantago lanceolata*).⁴ These palynological studies linking changing land-use to episodes of sedimentation and floodplain construction are suggestive of ‘anthropogenic forest clearance at intervals dating back to the Neolithic’.⁵ At Pannel Bridge and Brede Bridge, there is palynological evidence of limited human activity at the time of the elm decline (dated at the former site c.3800 BC), but the first major disruption of woodland is indicated by the removal of lime dominated woodland c.2000 BC.⁶ Together, these analyses reveal that ‘historic man appears to have played a far less emphatic role in terms of environmental impact than his predecessors’.⁷ This evidence confirms that woodland cover was significantly reduced in the prehistoric period.

¹ M Gardiner, ‘The Archaeology of the Weald – A Survey and a Review’, SAC 128 (1990), p. 42.

² R G Scaife, ‘Further evidence for the environmental impact of prehistoric cultures in Sussex from alluvial fill deposits in the eastern Rother valley’, SAC 125 (1987), pp. 8.

³ R G Scaife and P J Burrin, ‘The Environmental Impact of Prehistoric Man as Recorded in the Upper Cuckmere Valley at Stream Farm, Chiddingly’, SAC 123 (1985), pp. 27–34.

⁴ R G Scaife, ‘Further evidence for the environmental impact of prehistoric cultures in Sussex from alluvial fill deposits in the eastern Rother valley’, SAC 125 (1987), pp. 8.

⁵ R G Scaife and P J Burrin, ‘Floodplain Development in and the Vegetational History of the Sussex High Weald and Some Archaeological Implications’, SAC 121 (1983), p. 9.

⁶ M P Waller, ‘Flandrian vegetational history of south-eastern England. Pollen data from Pannel Bridge, East Sussex.’, *New Phytologist* 124 (1993), p. 363–5; M P Waller, ‘Flandrian vegetational history of south-eastern England. Stratigraphy of the Brede valley and pollen data from Brede Bridge’, *New Phytologist* 126 (1994), pp. 386–90.

⁷ Ibid. pp. 32–3.

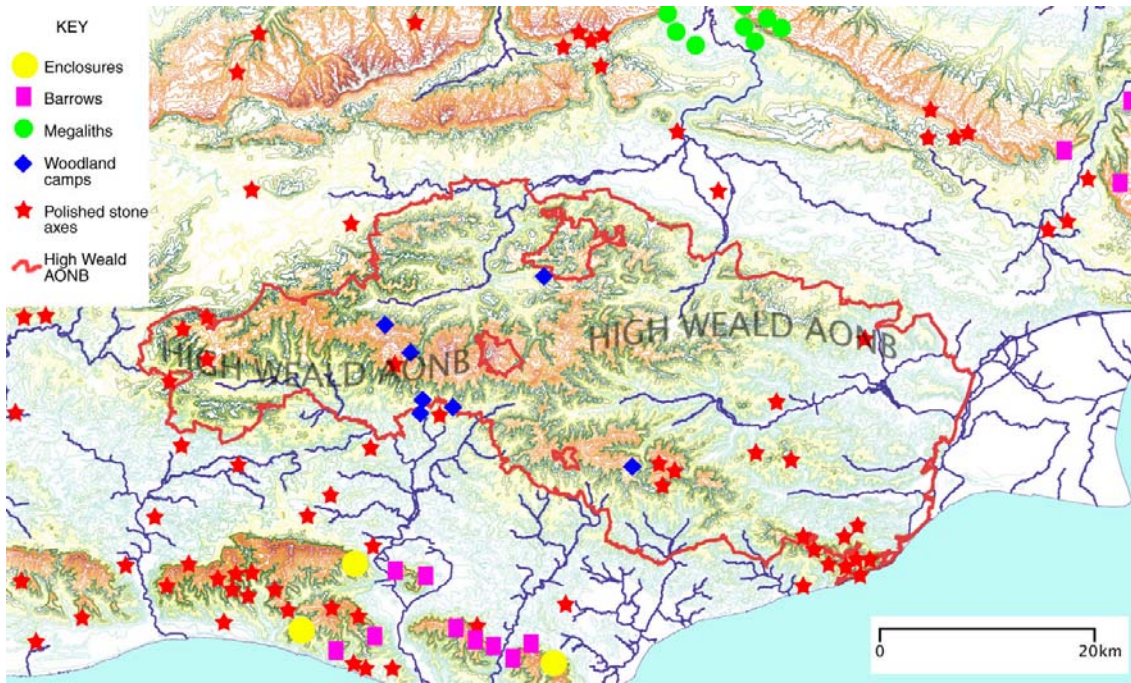


Fig. 16. Neolithic sites in the High Weald and environs. After P Drewett, D Rudling and M Gardiner, *The South East to AD 1000* (1988), Fig. 2.1. Base contour map © Crown Copyright, all rights reserved, East Sussex County Council, LA 076600, 2002.

To this environmental evidence can be added that of finds, settlements, and burials. Finds of polished stone axes are a direct record of Neolithic tree felling (Fig. 16), although we should be wary of reading too much into the concentration of finds around Hastings. Less directly, barrows on Ashdown Forest,¹ at Ewhurst,² and at Mockbeggars (Playden)³ also support the impression of widespread Bronze Age usage, with farmsteads in cleared areas of woodland. Gardiner suggests that this activity peaks in the Late Neolithic and Early Bronze Age (supporting the palynological evidence outlined above), the subsequent retreat of settlement perhaps being the result of soil exhaustion.⁴

Late Iron Age activity has been discovered by Margary on Ashdown Forest, where enclosures and field boundaries survive.⁵ A settlement has been located at Eridge Park, only 1km from Saxonbury. Pollen analysis of the palaeosol preserved between the first-phase Iron Age hillfort at High Rocks places the hillfort not in a woodland clearing, but in an area cultivated for some time before construction of the defences.⁶

¹ C F Tebbutt, 'The Prehistoric Occupation of The Ashdown Forest Area of the Weald', *SAC* 112 (1974), p. 42.

² G Jones, 'An Early Bronze Age Barrow in Ewhurst Parish', *SAC* 118 (1980), p. 367.

³ R M J Cleal, 'A Re-analysis of the Ring-Ditch site at Playden, East Sussex', *SAC* 120 (1982), pp. 1–17.

⁴ M F Gardiner, 'The Archaeology of the Weald – A Survey and a Review', *Sussex Archaeological Collections* 128 (1990), pp. 42–3.

⁵ I D Margary, 'A Celtic Enclosure in Ashdown Forest', *Sussex Notes & Queries* 3 (1930), pp. 71–2; I D Margary, 'King's Standing, Ashdown Forest', *Sussex Notes & Queries* 3 (1930), pp. 72–6.

⁶ J H Money, 'Excavations in the Iron Age hillfort at High Rocks, near Tunbridge Wells, 1957–61', *SAC* 106 (1968), pp. 158–205.

3.5 Drainage and reclamation

- parts of the eastern High are characterized by land **reclaimed** from **tidal marsh**
- recorded reclamation dates from the **twelfth century**
- the drained landscape today is the result of nearly a thousand years of **modification**
- **non-natural water management** systems have always represented a struggle between **freshwater drainage** and holding back the **tide**, with **silting-up** playing a key role

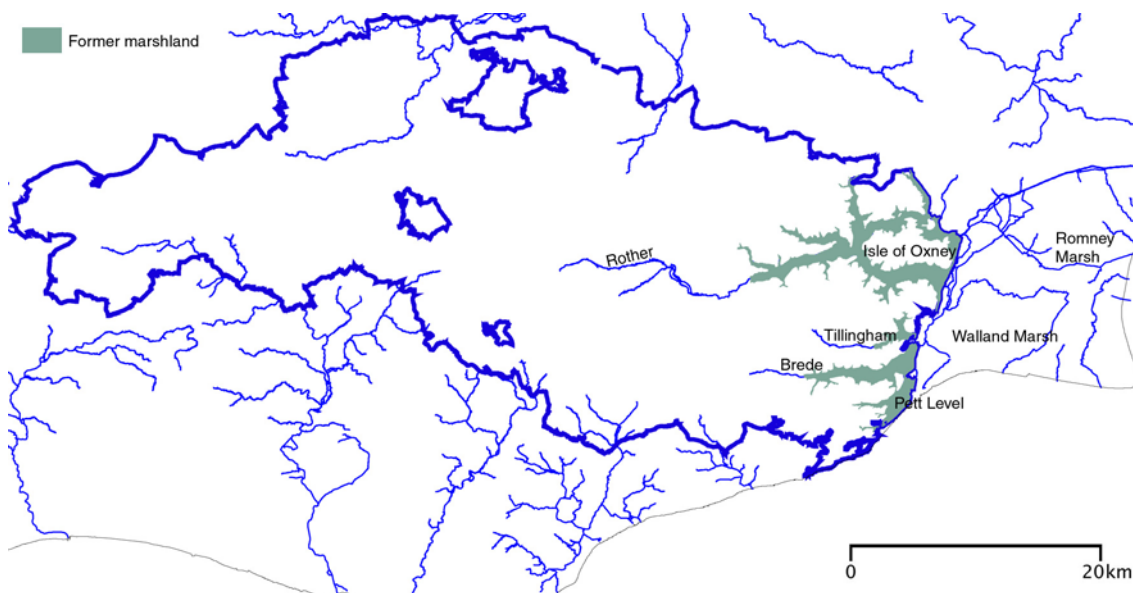


Fig. 17. Former marshland in the High Weald AONB. Source: HW AONB Unit.

3.5.1 Introduction.

The eastern part of the High Weald has a distinct landform, as the lower reaches of the valleys of the Brede, Rother and Tillingham widen and then end at the edge of Walland Marsh: the rivers join at Rye and cross reclaimed marshland to reach the sea at Rye harbour. The river valleys are below mean high water spring tides (+3.66m OD)¹ far inland so that land in these areas has itself been reclaimed from tidal marsh. The low level of the river valleys has also reduced the capacity of the rivers to empty into the sea, and this has been exacerbated by the rapid run-off from the impermeable clays of much of the rivers' catchment, the two predisposing the valleys to flooding. Thus, reclamation of the valuable

¹ G Robinson, 'Sea Defence and Land Drainage of Romney Marsh', in J Eddison and C Green (eds.), *Romney Marsh: Evolution, Occupation, Reclamation* (1988), pp. 162–6. Equinoctial spring tides in Rye Bay reach a height of +4.4m OD and tidal surges can bring these over +5.0m OD: J Eddison, 'Catastrophic Changes: A Multidisciplinary Study of the Evolution of the Barrier Beaches of Rye Bay', in J Eddison, M Gardiner, and A Long (eds.), *Romney Marsh: Environmental Change and Human Occupation in a Coastal Lowland* (1998), pp. 66–7.

alluvial soils of the river valleys involved managing freshwater drainage from the High Weald and preventing tidal ingress.

A similar landscape to the low valleys is found nearby at Pett Level, a former marshland on the coastal side of the Icklesham–Winchelsea ridge. Together, these areas total 5934ha (4.1% of the total AONB), and represent deliberate reclamation of marsh closely related to the wider reclamation of Walland Marsh and Romney Marsh. Such reclamation is a very distinct element of human colonization of the High Weald, like assarting, and is distinguished by its late date and a reasonably well-documented history. While the smaller Tillingham has yet to be investigated, the Brede and Rother valleys have been the subjects of palaeoenvironmental, archaeological and documentary studies.

3.5.2 The Brede valley.

Recorded reclamation on the grand scale in the Brede valley dates from the late twelfth and early thirteenth centuries, and was undertaken by entrepreneurs that might have included merchants from Rye and Winchelsea.¹ Gardiner has identified a second phase of reclamation beginning in the mid thirteenth century in response to the well-known storminess of that period.² The storms led to the breaching of the shingle barrier that extended from Cliff End to Broomhill, and the shifting of the mouth of the Rother (and its tributaries, the Brede and Tillingham) from Romney to Rye. The most famous and cataclysmic of the storms in 1287–8 resulted in the final breakdown of the shingle barrier, the loss of the already much damaged port of Old Winchelsea, and the creation of Rye Bay.³

Thereafter, tides were able to flow inland more easily, and the breakdown of the Rye Bay barrier and creation of a new estuary left the river valleys very exposed. The construction of the great sea wall – the *Damme* – across the Brede Valley level with Icklesham church almost certainly dates to this phase of reclamation. The multiple function of the rivers is reflected in the fact that the 1,000m embankment was also used as a causeway and was provided with a quay (at Float Farm) for the loading of coppice firewood for shipping to London and the Continent. References to the *Sloughdam* in 1357 could relate to this sea wall or, more probably, another one downstream north of New Winchelsea.⁴

The effect of these sea walls was to increase silting and this led to a third phase of works at a date between 1419 and 1442: the shifting northwards of the course of the river *Ee* (as the Brede was formerly known) downstream of the Doleham Ditch to a higher capacity channel within which the present narrower river flows.⁵

¹ M Gardiner, 'Medieval Farming and Flooding in the Brede Valley', in J Eddison (ed.), *Romney Marsh: the Debatable Ground* (1995), p. 130.

² Ibid.

³ C Green, 'Palaeogeography of marine inlets in the Romney Marsh area', in J Eddison and C Green (eds.), *Romney Marsh: Evolution, Occupation, Reclamation* (1988), pp. 167–74; C Spencer, A Plater, and A Long, 'Holocene Barrier Estuary Evolution: The Sedimentary Record of the Walland Marsh Region', in J Eddison, M Gardiner, and A Long (eds.), *Romney Marsh: Environmental Change and Human Occupation in a Coastal Lowland* (1998), pp.13–29; and

⁴ M Gardiner, 'Medieval Farming and Flooding in the Brede Valley', in J Eddison (ed.), *Romney Marsh: the Debatable Ground* (1995), pp. 130–2.

⁵ Ibid., p. 131.

3.5.3 The Rother valley.

The reclamation history of the Rother valley is essentially similar to that of the Brede, although more comprehensively recorded, subject to greater setbacks, and complicated by the choice of channels either north or south of the Isle of Oxney.¹ Again a fairly controlled state of reclaimed marshland was upset by the later thirteenth-century storms, in this case leading to the construction of the *Knelle Dam* sea wall across the northern end of Wittersham Level. Within 15 years, however, the *Knelle Dam* was having a greater effect on restricting freshwater flooding in Wittersham Level than it was on preventing inundation by the sea. The breakdown of part of the embankment c.1600 confirmed the benefit of routing the Rother through Wittersham Level to those with land in the Upper Levels on the north and north-east sides of the Isle of Oxney. After much negotiation and with the pressure of overwhelming silting of the northern route of the Rother (the Appledore Channel), this was achieved in the 1635. Wittersham Level was protected from the tidal flows at its eastern end by the pre-existing Wittersham Sea Wall: between this and the *Knelle Dam*, a large indraught was created to hold excess water to scour the lower channels by sudden release. An exceptional tide in 1644 caused major flooding, and, as a solution, the indraught was reduced to the area between *Knelle Dam* and a sea wall in the middle of Wittersham Level – Blackwall: this ‘indraught’ still functions as a wet level. Reclamation of the land east of Blackwall then took place and the present straight channel (Craven Channel) was cut through Wittersham Level in 1680–4. In 1684 the Craven Channel was directed to Scots Float Channel, and finally restricted to that in 1731: Scots Float Sluice remains the tidal limit.²

3.5.4 Conclusions.

In essence, river valley marshes were reclaimed from tidal and freshwater drowning by the early thirteenth century, within a period of benign weather. The later thirteenth-century breakdown of the Rye Bay barrier then exposed the rivers to tidal surge and a greater battle ensued between freshwater drainage and holding back the high tides. This battle, in which silting-up plays a major role, is still not entirely won. Perhaps most importantly, it is abundantly evident that the drainage today is the result of centuries of work, and that the landscape is a palimpsest of features of different and often multiple phases. Some of the most significant of these extend back to the earliest periods of reclamation, in the twelfth and thirteenth century.

¹ It remains unresolved as to which side of the Isle of Oxney the Rother (or *Limen*) flowed before the thirteenth century: In the early fourteenth century, however, it flowed around the northern side: J Eddison, *Romney Marsh: Survival on a Frontier* (2000), pp. 105–6.

² J Eddison, ‘“Drowned Lands”: changes in the course of the Rother and its estuary, and associated drainage problems, 1635–1737’, *Romney Marsh: Evolution, Occupation, Reclamation* (1988), pp. 142–61; J Eddison, ‘Attempt to clear the Rother Channel, 1613–1624’, in J Eddison (ed.), *Romney Marsh: the Debatable Ground* (1995), pp. 148–63; and J Eddison, *Romney Marsh: Survival on a Frontier* (2000), pp. 102–14.

3.6 Nucleated settlement

- **nucleated settlements** exist within a High Weald **characterized by dispersed settlement**
- the nucleated settlements are late in date with many **villages** originating in the later **thirteenth** and **fourteenth centuries**, and later still
- the medieval villages were centres for **trade**, not agriculture, and were in effect **mini-towns**
- the **market origins** of **villages** explains the comparative lack of nucleated settlement in the eastern High Weald, where the ports of **Rye** and **Winchelsea** dominated

3.6.1 Introduction.

The colonizing processes in the High Weald, and especially transhumance, have given the area a distinctive character of dispersed settlement that remains a feature today. Nucleated settlements do exist, however, and the emergence of these represents a late though significant part of the colonizing of the High Weald. Late fourteenth-century depopulation and later population growth, however, means that many of our present day nucleated settlements have post-medieval origins and that many medieval hamlets might have been lost.

3.6.1 Towns.

The towns immediately adjacent to the High Weald represent the earliest concentrations of settlement in the area. The 11th-century foundations of Winchelsea (in the area of outstanding natural beauty), Rye and Hastings (both immediately adjacent to the area of outstanding natural beauty) represent coastal ports, while inland the only medieval town within the High Weald was that rapidly developing at the gates of the Battle Abbey during the late 11th and early 12th centuries. Despite the dissolution of the abbey, Battle is now the largest settlement in the area of outstanding natural beauty, although the much larger and post-medieval urban centres of Tunbridge Wells, Crowborough, and Heathfield have been somewhat artificially excluded from the designated area. Likewise, other inland towns fringe the High Weald, and some of these are early in date. East Grinstead was a new town of c.1200, and the borough of Horsham is similarly dated. Tonbridge, like Battle, quickly clustered around the gates, in this case, of Richard FitzGilbert de Clare's 11th-century motte and bailey castle.¹

¹ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), pp. 146–9; J Bleach and M Gardiner, 'Medieval Markets and Ports', in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), pp. 42–3.

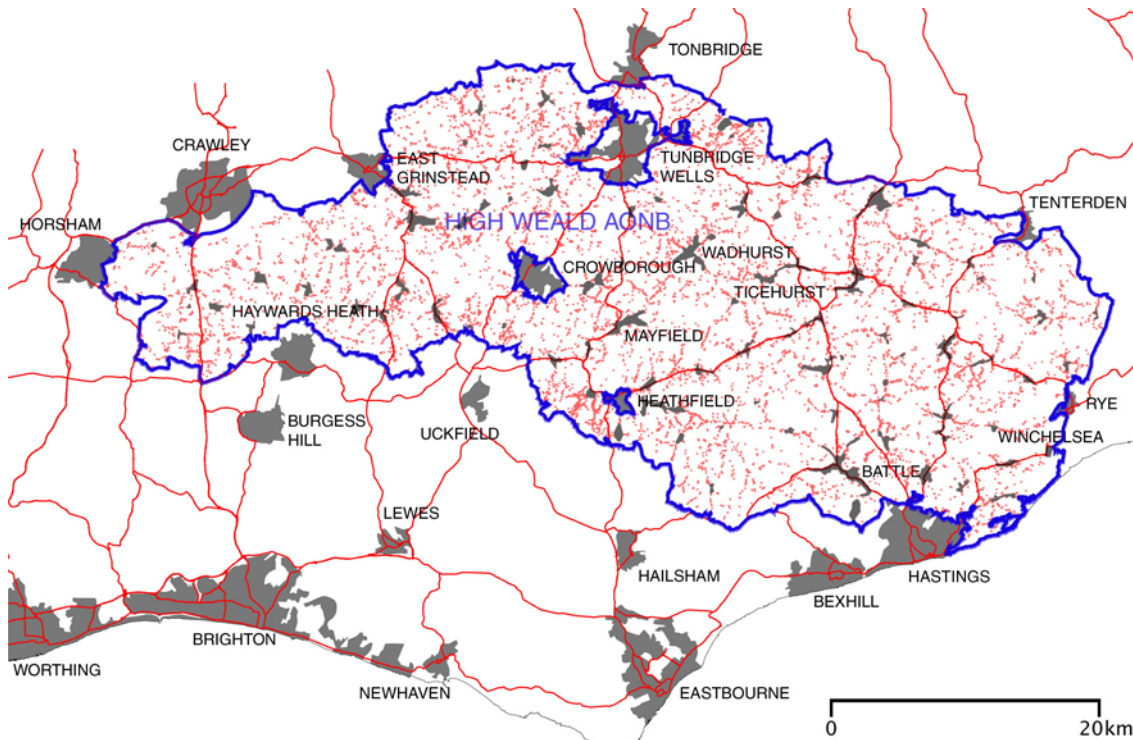


Fig. 18. Villages and towns in the High Weald AONB, and large towns in the surrounding area: the named villages are those referred to in the text. Source: HW AONB Unit.

3.6.2 Villages and hamlets.

As Gardiner has noted, outside these towns there 'is very little evidence for nucleated settlement in the eastern Sussex Weald before 1250',¹ and this applies to west Sussex, Surrey, and Kent too. Thereafter, in the second half of the 13th century villages and hamlets emerged and were motivated by trade. The oddity is that the 'trading places developed at unoccupied sites and subsequently attracted permanent settlement'.² This process can be followed at Mayfield, Ticehurst, Wadhurst, and Wartling, which developed from market stalls adjacent to otherwise isolated churches. In some cases, as at Ticehurst and Wadhurst, it is clear that the market places substantially antedated the settlements: as with most Wealden parishes, the churches were established by c.1100, but in these two villages they were set back behind what were clearly pre-existing market places. At Rotherfield the church was founded within the market place itself. Evidently, when these villages emerged in the late 13th century they were centred on open areas long-used for meeting and trading.³

The function of these villages and hamlets as trade centres for small hinterlands – in effect mini-towns – has had an impact on the

¹ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), p. 147.

² M Gardiner, 'Trade, Rural Industry and the Origins of Villages: some Evidence from South-East England', *Rural Settlements in Medieval Europe*, papers of the 'Medieval Europe Brugge 1997' conference 6 (Instituut voor het Archeologisch Patrimonium, 1997), pp. 64.

³ *Ibid.*, pp. 64–71.

distribution of nucleated settlement in the High Weald. The commercial domination of Hastings, Winchelsea, and Rye between the 11th and 14th centuries period was such that it prevented the development of markets in the south-eastern part of the High Weald, with the exception of Battle.¹ Likewise, the north and west of the High Weald were dominated by East Grinstead, Tonbridge and Horsham. As a result it is only in the central High Weald that more significant nucleated settlement occurred (Fig. 18).

¹ Ibid.

3.7 Assart

- **clearance of wasteland** for cultivation (**assart**) reduced the woodland cover of the High Weald
- **assarting** was late in date (12th-14th centuries) so is very **well documented**
- the role of **assarting** has been exaggerated
- **assarting resulted in a similar landscape to that of dens** brought into cultivation at an earlier date

3.7.1 Introduction.

Brandon has advanced our understanding of woodland clearance for cultivation, between the Conquest and Black Death. In so doing he has highlighted the role of such assarting in the medieval period, and rightly contradicted assumptions that the Weald was heavily forested as late as 1500. The more recent analysis of transhumance (above), however, reveals that when describing agricultural activity as 'sporadic and localized'¹ Brandon has underestimated the level of settlement in the Weald in the eleventh century and, as a result, exaggerated the impact of post-Conquest clearance to the extent that he considered the 'main task of wealden woodland clearance was accomplished by four or five generations of land-hungry backwoodsmen between the late twelfth and early fourteenth centuries'.²

3.7.2 The lowy of Battle: an indicator of the pre-assart extent of agriculture.

Perhaps the best illustration of the impact of pre-Conquest colonizing processes is that presented by Gardiner for the area carved out for Battle Abbey at the time of its eleventh-century foundation. Here, the creation of the roughly circular *lowy* of c.17.4 sq. km provides us with unusually detailed insight and has allowed Gardiner to estimate that the area was already very settled and, even in this area of poor land, a quarter of the area was in cultivation. He suggests that this is a broadly accurate 'impression of the extent of agricultural activity in the late 11th century'.³ Nine hundred years later, after assarting, agricultural revolution, and the great pushes for food production in the twentieth century, the cultivated area has only risen from a quarter to a half of the High Weald.

Nevertheless, there can be no doubt that post c.1100 assarting brought significant amounts of land into cultivation, and it can be seen as late phase in the colonizing of the High Weald. In essence, assarting

¹ P Brandon, 'Medieval Clearances in the East Sussex Weald', *Transactions of the Institute of British Geographers*, 48 (Dec. 1969), p. 136.

² P Brandon and B Short, *The South East from AD 1000* (1990), p. 50.

³ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), pp. 92-3.

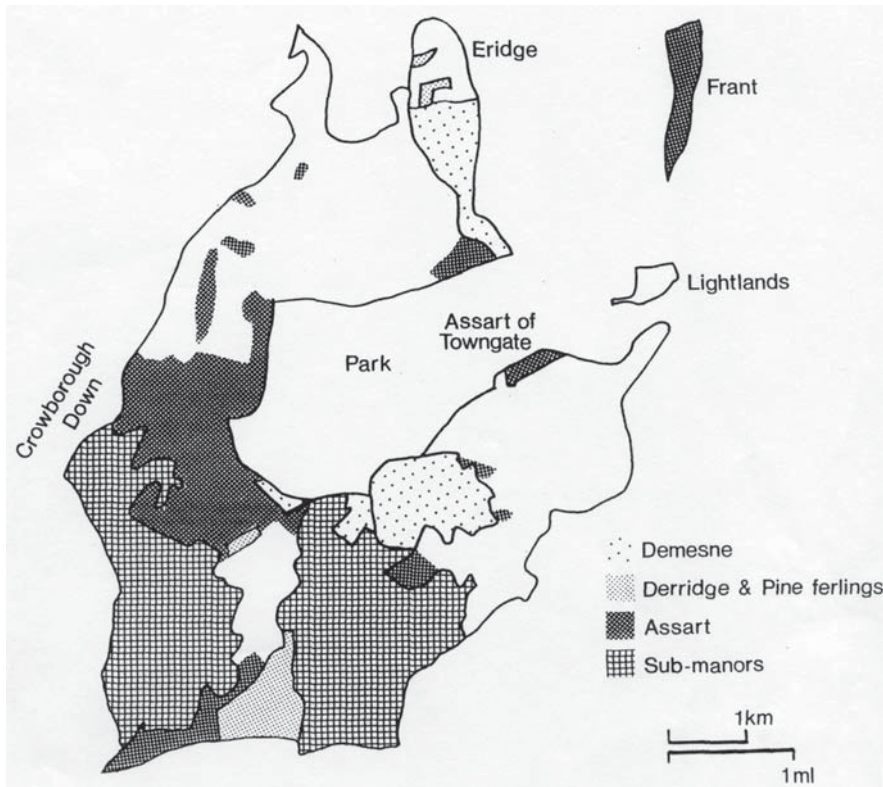


Fig. 19. Landholding elements in Rotherfield. Source: M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), Fig. 22.

expanded the area of the High Weald that consists of small fields separated by broad bands of woodland (gill woodlands, shaws, and rews) and hedges.

3.7.3 The nature and location of assart.

Just as the dens can be attributed to the better soils in the High Weald, so was assart coincident with soil type and is attributable to poorer land.¹ The location of assart on the waste is seen clearly in the contraction of Ashdown Forest through the efforts of thirteenth century assarters. Similarly vigorous creation of fields from what must have been fairly open and degraded woodland occurred in similar conditions at Dallington Chase, and in Heathfield and Waldron.² We have seen (above) how *feld* place-names are associated with the poorer lands in the High Weald – the ‘downland’ – and thus the evidence of assarting from Framfield, Maresfield, Mayfield, and Rotherfield is to be expected. Of these, the manor of Rotherfield has been investigated most thoroughly as a consequence of its good documentary record, from Domesday onwards.

¹ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), p. 102.

² P Brandon, ‘Medieval Clearances in the East Sussex Weald’, *Transactions of the Institute of British Geographers*, 48 (Dec. 1969), pp. 140.

Here assarting accelerated up to the Black Death, which marked a general collapse in assart across the High Weald. Brandon suggests that between 1086 and 1346, c.15km² of was assarted and 'cleared and partitioned into farms and smallholdings'.¹ Scaling this across similar high and marginal land across the ridges of the High Weald, it is evident that the contribution of assart was considerable. Although assarting occurred on the wastes and parks of the High Weald (incidentally areas which had already seen considerable anthropogenic impact), this does not mean that all such poor soils were improved for agricultural use. That substantial amounts of heathland survive today is a testament to the limit of assarting. Put simply, 'Ashdown Forest is a major heath because no one wanted to assart it – the soils were too awful'.²

The nature of assarting ensured that the landscape created by clearance and improvement was consistent with the older agrarian landscape of the former dens. The fields were frequently less than an acre in extent, often bounded by shaws, and formed part of small-scale holdings.³ Just as the fields of the customary and free lands on the better soils must have been nibbled out of the well-defined areas of dens already thinned by browse,⁴ so too was the assart nibbled from waste that was of broadly similar vegetational structure. The holdings were of different scale and have none of the long-term stability of those dens that became manorial demesnes and sub-manors, yet, the two types of colonization produced a field and woodland pattern, and land use that was characteristic of the Weald.

¹ Ibid., p. 138.

² Mark Gardiner, pers. comm.

³ Ibid., pp. 135–53.

⁴ We have seen (above) that even before dens, the woodland of the High Weald, along with most of lowland Europe, might have been a mosaic of grassland, heath, shrubs, and trees, more akin to woodland–pasture than modern closed forest: see F W M Vera, *Grazing Ecology and Forest History* (2000).

3.8 Colonizing the eastern Sussex High Weald

- transhumance was not the main colonizing force in the eastern Sussex High Weald
- **permanent settlement was early and dense**
- the area had a strong **Saxon tribal identity** • **proximity to the coast and wetlands** is likely to have had an impact on colonization • outside the river valleys, the landscape of this area has a similar character to much of the High Weald
- the colonization of the area is not fully understood – research is needed

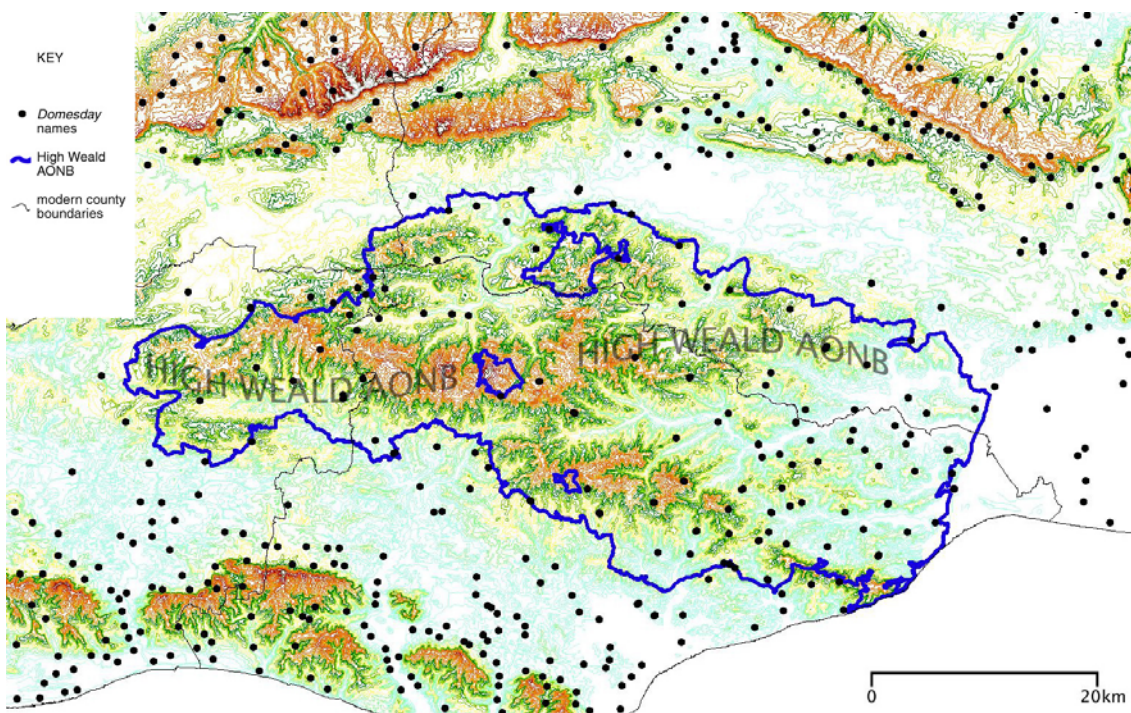


Fig. 20. Places named in *Domesday Book* (1086). Source: HW AONB Unit. Base contour map © Crown Copyright, all rights reserved, East Sussex County Council, LA 076600, 2002.

3.8.1 Introduction.

We have seen (above) that transhumance appears to have played little part in the colonization of the south-eastern corner of Sussex. While the Roman iron industry and the medieval reclamation of marsh did have an impact, these activities were geographically restricted, quite specific and

can hardly have been responsible for the colonization of the whole area. Although the growth of settlement in this part of the Weald is poorly understood,¹ some broad conclusions can be drawn.

3.8.2 Domesday Book.

Plotting holdings referred to in Domesday Book (1086) gives a distribution with a large blank corresponding to the Weald, especially the High Weald, with the exception of the eastern part of the High Weald within Sussex and a smaller area around East Grinstead. We have seen (above) that much of the blank results from the fact that many Wealden holdings are recorded in Domesday Book under their parent manors, and, thus, we should be cautious too deduce too much where holdings are shown. Indeed, the Domesday holdings in the East Grinstead area and the eastern part of the Sussex High Weald simply show up because Norman reorganization of the sub-county territorial divisions (in Sussex, the *rapes*) had separated them from their parent manors.² The transfer of lands to form the *lowy* of William the Conqueror's abbey at Battle gave rise to similar records in Domesday Book, but here the listing showed that little land was held by far off parent manors.³ East and south of Battle, the Domesday entries confirm settlement in areas, again, where there is no evidence for transhumance.

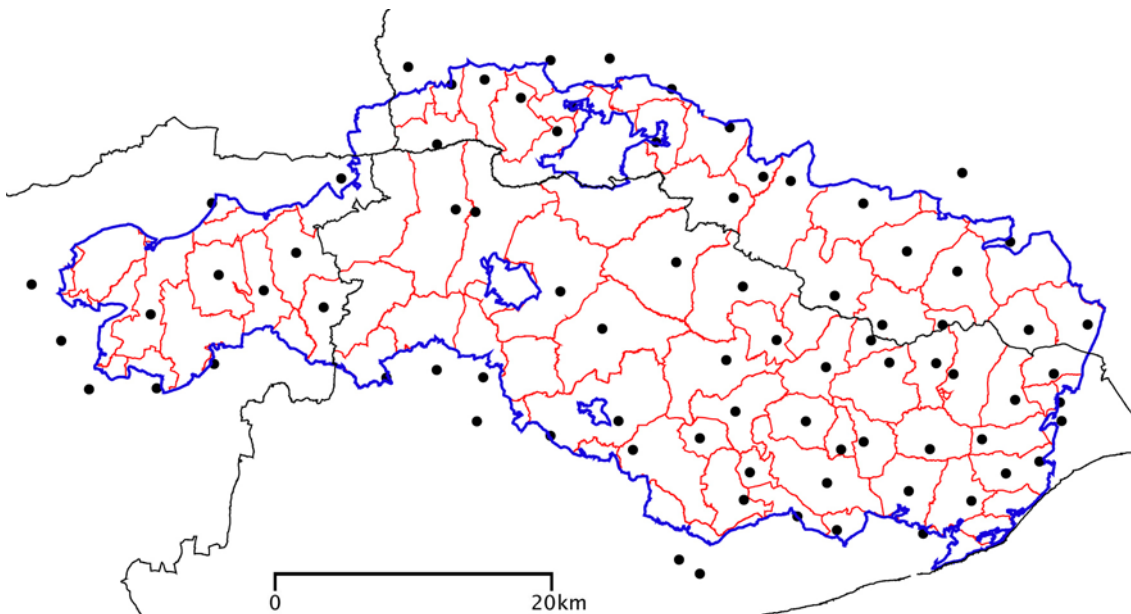


Fig. 21. Location of medieval churches within and immediately adjacent to the High Weald AONB. Modern civil parish boundaries within the AONB are shown in red. Source: HW AONB Unit.

¹ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), p. 97.

² *Ibid.*, p. 86.

³ *Ibid.*, p. 92.

3.8.3 Early churches and parishes.

The distribution of early medieval (pre-1100) churches in the High Weald (Fig. 21) is easier to understand than the evidence from Domesday Book. There is a concentration of such churches in the eastern Sussex High Weald that is strongly reflected in the parish (and hundred) boundaries which are smaller in this area. That it is only this part of the Sussex High Weald that develops minster churches is also significant: minsters served areas (*parochiae*) larger than the parishes and, crucially, were an earlier development. These minsters were located at Ewhurst, Peasmarsh and Rye. Just outside the AONB boundary, others were located at Bexhill, Filsham (near Hastings) and Herstmonceux.¹

Evidently, there are good grounds to suggest that not only was the south-eastern corner of Sussex settled by the eleventh century, but that this settlement was denser than to the north-west. This could imply that *permanent* settlement in the eastern Sussex High Weald was earlier than it was in the parts of the AONB colonized by transhumance.

3.8.4 A tribal difference?

Between the eighth and eleventh centuries, the easternmost part of Sussex was identified with the *Hæstingas*, a subject people of the South Saxons. The evidence of *-ingas* and *-inga* place-names supports settlement of the seventh and eighth centuries,² or slightly earlier.³ Welch has proposed that these people were Christians colonizing from Kent and, on the basis of the identification of a previously unidentified charter witness (*Wattus rex*) as king of the *Hæstingas*, that this was no later than the seventh century.⁴

3.8.5 The absence of transhumance.

While permanent Anglo-Saxon settlement of this area appears dense and very possibly earlier than the rest of the High Weald, and is marked by a distinct identity of the people, there can be little grounds to suppose that this itself was the bar to contemporary or, especially, earlier transhumance. Rather, this appears to result from the proximity of the sea and wetlands to this part of the High Weald. Quite simply, there is no easily accessible scarpfoot or downland parent settlement, and any transhumance would have entailed circumnavigating Pevensy Levels that remained undrained until the thirteenth century.⁵ Of course, seasonal penetration of the area would have been possible, though rather long-range, from Kent, but Kentish *-den* place-names and droves cease abruptly at the county boundary in the Hawkhurst, Newenden and Wittersham area. Of these transhumance features, the absence of sub-parallel drove routes is the most interesting, since this suggests that there was no transhumance in easternmost Sussex in prehistoric times as well as the Anglo-Saxon period.

¹ N Rushton, 'The Parochialisation of Sussex 1000–1086–1291', in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), pp. 36–7.

² M Welch, 'Early Anglo-Saxon Sussex: from Civitas to Shire', in P Brandon (ed.), *The South Saxons* (1978), p. 34.

³ R Coates, 'Place-names before 1066', in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), p. 32.

⁴ Op. cit.

⁵ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald* (unpublished Ph.D. thesis, University of London, 1995), p. 45.

However, this does not mean that easternmost Sussex was settled at this date since the Kent–Sussex border is ancient and approximates with the boundary between the Cantiaci and the Atrebates of the Late Iron Age:¹ the county boundary might have limited any prehistoric transhumance in Kent as much as it did in the early medieval period.

3.8.6 Remaining uncertainties.

We are left with something of a puzzle. The larger part of the eastern Sussex High Weald was not colonized by transhumance, chiefly as a result of the geography. However, the landform and extent of woodland cover for all bar the eastern river valleys is similar to the rest of the High Weald. Likewise the area was permanently settled as early if not earlier than the remainder of the High Weald, and it too had a dispersed settlement pattern and multiple lordship.

Prehistoric archaeology fails to explain the colonization of the area. As yet no distinctive and significant prehistoric sites have been located in the area other than two Late Iron Age ironworking sites near Crowhurst and Sedlescombe, so there are no grounds to suppose substantial and permanent prehistoric settlement as found in the downs to the west. In the Roman period, the eastern state-owned group of ironworking sites fall neatly within this area, so it is possible that a small Imperial estate did occupy this part of the High Weald (see above). Alternatively, the connection between the eastern ironworking sites and the Roman fleet could simply anticipate the seaward and wetland looking nature of medieval settlement in this part of the High Weald: the reclaimed marshlands of the river valleys and Pett Level; and the dominance of the coastal towns and the consequent lack of inland nucleated settlement have been considered above. Evidently, the development of the south-eastern part of the Rape of Hastings needs further archaeological and historical study,² and, equally, careful examination on the ground for differences in character resulting from its different colonization.

¹ B Cunliffe, *Iron Age Communities in Britain* (1975), pp. 75–106.

² Currently, Chris Ball is undertaking research for a University of Reading doctoral thesis.

3.9 Territory and colonization

- the main colonization of the High Weald occurred within periods where there were **defined territories**
- of the ancient territories, the **kingdoms (or counties)** are the most **distinctive** and the **best preserved**
- **Kent, Surrey and Sussex** are some of the **most ancient** surviving territories in Europe
- territories and boundaries have had an impact on the colonization of the High Weald
- the relationship of territory and character needs further research

3.9.1 Introduction.

The colonization of the High Weald was not simply an exercise in exploitation of natural resources. For example, we have seen (above) how the distribution of dens changes abruptly at the east end of the Kent–Sussex border, suggesting a territorial limit to Kentish pannage. Evidently, we need to consider the connections between territory, colonization and, by implication, character. This is especially important today since frequent changes in administrative bodies and boundaries in the last 100 years, coupled with greater mobility and better communications, mean that people identify less with administrative areas than they have in the past.

The designation of the High Weald AONB has furthered this trend since the protected landscape has been defined on bio–geographical grounds that do not coincide with administrative boundaries. Subsequent to the 1983 designation of the AONB, the *High Weald AONB Landscape Assessment* (1994)¹ and the *High Weald AONB Management Plan* (1995)² have developed this approach so that the nine smaller *character areas* and their subdivision into *local character areas* also have no correspondence with political or administrative areas. The benefits of this approach to landscape are manifold, but it does mean that the historic interrelationship between administrative areas and the landscape remains to be explored, for there can be no doubt that in the Weald the most significant historic administrative areas reflect the character of the landscape and arguably shaped its development.

Here, we consider the main historic administrative areas – the counties/kingdoms, and the lathes, rapes, and *regiones* that were their principal components. The later and smaller administrative areas of hundreds and manors, deaneries, *parochiae*, and parishes are not without importance

¹ *The High Weald: Exploring the landscape of the Area of Outstanding Natural Beauty* (Countryside Commission, 1994).

² *High Weald AONB Management Plan* (The High Weald Forum, 1995).

in shaping the history of the High Weald, but they represent national trends in tenure, and secular and ecclesiastical administration that were distinctive in this area because of pre-existing settlement patterns and the larger administrative units. Of themselves, they do not appear to have defined how the land was used or its special character today.

3.9.2 Kingdoms and counties.

The High Weald now falls into the counties of Kent, Surrey, East Sussex, and West Sussex. These counties, in common with the English shires in general, came into existence as Anglo-Saxon kingdoms, and are amongst the most ancient surviving administrative areas in Europe. Given their antiquity and their relationship with landholding and other cultural impacts on the landscape, it is possible that the origins and development of the counties will prove discernible in the character of the High Weald today.

3.9.3 Kent.

Bede's identification of the people of Kent as Jutes in the early 8th century is supported by modern archaeology and history: the kingdom originated from Jutish settlement in the mid 5th century. Although origins from Jutland have long been discounted, the Jutes were culturally distinct from their Anglo-Saxon neighbours. Their origins remain obscure, however, and it is possible, if not probable, that they had no special identity as a people prior to settling in Kent. In the later 5th century the Kingdom of Kent extended into Saxon Surrey, but since the later Anglo-Saxon period the boundaries of the kingdom have been approximately identical to those of the modern county. Kent's status as a kingdom declined in the late 8th and early 9th centuries, and it became 'welded into the kingdom of England', albeit with distinctive customs and laws that survived even the Norman Conquest.¹

3.9.4 Surrey.

The High Weald AONB includes less than a single parish within the county of Surrey and, as we have seen, historically even this area was not part of Surrey: it is evident that the Kent-Surrey border once ran several miles west of its present line.² This had changed before the Conquest, but is reflective of the state of flux in the early history of Surrey. Indeed, Surrey did not gain coherence as a West Saxon shire or an approximation of its modern boundaries until the mid 9th century.³

3.9.5 Sussex.

Although East Sussex and West Sussex were formally separated by the County of Sussex Act 1865 and the Local Government Act 1888, the administration of the county had been divided between the three eastern and three western rapes (see below) from the Middle Ages. Nevertheless,

¹ K P Witney, *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A.D.* (1976), pp. 2–5.

² J E A Joliffe, *Pre-Feudal England: the Jutes*, (1933), p. 91; K P Witney, *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A.D.* (1976), p. 40; J Blair, *Early Medieval Surrey: Landholding, Church and Settlement before 1300*, (1991), p. 17.

³ J Blair, *Early Medieval Surrey: Landholding, Church and Settlement before 1300*, (1991), pp. 2–11.

the origins of the two modern counties of East Sussex and West Sussex are largely that of a single entity, the Saxon kingdom of Sussex, or the kingdom of the South Saxons (*Suðseaxe*). Inevitably, the extent of this kingdom in the 5th century is unclear, but by the later Saxon period it was approximately identical to the area of Sussex up until formal division in the 19th century. Moreover, by the Conquest the county of Sussex and the diocese of Selsey (transferred to Chichester c.1075) were almost coterminous.

As a result of the 1972 Local Government Act, the boundary between East Sussex and West Sussex was moved eastwards in 1974 from its position on the Norman boundary of the rapes of Bramber and Lewes, so that the modern district of Mid-Sussex moved into West Sussex.¹

3.9.6 County borders.

Given the history of the four modern counties in which the High Weald AONB lies, the main borders with any historic significance are those of Kent and Sussex, Surrey and Sussex (in part), and a short length of Surrey and Kent. For the long Sussex–Kent boundary, Witney has hypothesised that it was determined by the progressive advance of animal droving in the 8th and 9th centuries and that it was later formalised along the line of the streams and rivers of the Kent Water, Teise, Bewl, Kent Ditch, and Rother, perhaps in the 10th century.² More recently, Gardiner has suggested that definition of the Sussex boundary by herdsmen is implausible,³ and that the consistent use of ‘two different topographical features, ridges and a trackway for Surrey, and streams and rivers for Kent’ are indicative of two separate and larger-scale agreements.⁴ However, he leaves open the possibility that the boundaries could be earlier than the Anglo-Saxon period, either marking Roman *civitates* or Iron Age kingdoms.⁵

3.9.7 Sub-divisions of the counties: lathes, rapes, and *regiones*.

Prior to later Anglo-Saxon manorialization, the respective basic territorial and social units of Kent and Surrey were the lathes and *regiones*. Similar units, called rapes, probably existed in Sussex at the same time, but their existence is not attested until the mid 11th century, and their earlier form is obscured by Norman modifications in the two decades between Conquest and Domesday.⁶ Each of the units in Kent, Surrey, and Sussex was centred on a royal vill or township, from which its name was derived.

The approximate boundaries of these units are shown in Fig. 22, which illustrates the key role of the Weald in the territorial, or administrative, geography of south-east England: these similar primary provincial units radiated from the Weald. The system breaks down west of the Leatherhead and Steyning units, where each territory had abundant non-

¹ J Godfrey, ‘Local Government in the 19th and 20th Centuries’, in K Leslie and B Short (eds.), *An Historical Atlas of Sussex*, (1999), pp. 126–7.

² K P Witney, *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A.D.* (1976), p. 54.

³ M F Gardiner, *Medieval Settlement and Society in the Eastern Sussex Weald before 1420*, (unpublished Ph.D. thesis, University of London, 1995), p. 36.

⁴ M Gardiner, ‘The Colonisation of the Weald of South-East England’, *Annual Report of the Medieval Settlement Research Group* 12 (1997), p. 7.

⁵ *Ibid.*

⁶ *Ibid.*, pp.49–61; M F Gardiner, ‘Late Saxon Sussex c.650–1066’, in K Leslie and B Short (eds.), *An Historical Atlas of Sussex* (1999), pp. 30–1.

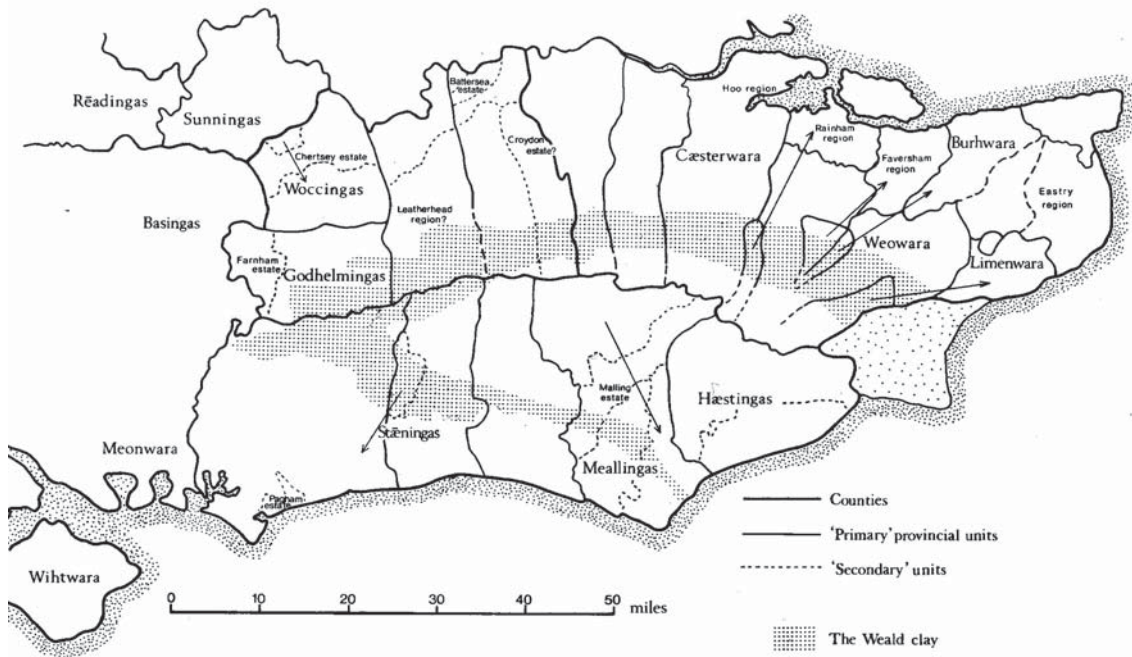


Fig. 22. The early Anglo-Saxon territorial geography of south-east England. Source: J Blair, *Early Medieval Surrey: Landholding, Church and Settlement before 1300* (1991), p. 23.

Wealden common waste. This and, above all, the radial nature of the lathes of Kent reveals a geographical determinant to the pattern wherein each strip-like unit included woodland pasture sufficient to serve the more settled non-Wealden areas. While this Weald-centred pattern is distinctive, there are no grounds to conclude that it had an ethnically Jutish origin: similar units have been identified in Berkshire and Wessex;¹ and Jolliffe's case for a 'Jutish South-East'² is no longer tenable given the quite different tribal origins of Sussex, Surrey, and Kent.³

3.9.8 The origins of lathes, rapes, and regiones.

It is possible that these units represent the territorial geography of Iron Age and Roman Britain. More certain is that they provided the building blocks of the early kingdoms, and survived the political changes of the 7th and 8th centuries. They were the units of conquest by which Kent was reduced, and Mercia and Wessex enlarged.

¹ J Blair, *Early Medieval Surrey: Landholding, Church and Settlement before 1300*, (1991), p. 22.

² J E A Jolliffe, *Pre-Feudal England: the Jutes* (1933), pp. 73-97.

³ A M Everitt, *Continuity and Colonization: The Evolution of Kentish Settlement* (1986), p. 7.

In terms of their early development, the evidence for the lathes of Kent is the most compelling. Here Witney paints a picture of their origins:

We must think then of pockets of settlement on open and fertile land, divided from each other by the wooded downs, by forest tracts such as Blean and Buckholt, and by estuaries and un-drained marshes. In this setting the lathes are seen less as divisions of a unitary kingdom than as separate nuclei of settlement linked in confederation. As the settlements expanded so the boundaries between the lathes would become defined, the size and population of each being determined by how narrowly it was constrained by the surrounding hills and marshes.¹

Everitt adds another element to this understanding of the situation in Kent, in that he proposes simpler, smaller, and more numerous *regiones* as precursors of lathes, and that these *regiones* were themselves formed (necessarily often by fusion) from the still more numerous 40 or so agrarian territories, or estates. The implications of this are clear: Everitt is proposing a greater role of topography in the origins of *regiones* and lathes and a reduced role for political circumstance and royal administration, and this reflects a greater appreciation of the value of the evidence of landscape than that of his predecessors.²

¹ K P Witney, *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A.D.* (1976), p. 49.

² A M Everitt, *Continuity and Colonization: The Evolution of Kentish Settlement* (1986), pp. 6–11; J E A Joliffe, *Pre-Feudal England: the Jutes*, (1933).

4 Postscript

4.1 The character of the High Weald defined.

The function of this analysis of key historical processes has been to identify the fundamental characteristics of the High Weald. To enable the reader to better appreciate the connection between the characteristics and the underlying research into the natural inheritance, these conclusions have been placed at the beginning of this paper.

4.2 Future research.

This paper is very much a synthesis of existing research. Brevity in some areas has arisen as a result of the absence of primary research rather than the insignificance of the subject. For example, there is a noticeable lack of discussion of palaeoecology that is far from desirable: palaeoecological research is essential for we must understand the role of natural factors and anthropogenic interference if we are to understand ecological processes that have shaped past vegetation and will determine future.¹ Elsewhere in *The Making of the High Weald* there is inconclusive discussion that also confirms the need for future research. An obvious example of this is the ambiguity that surrounds the dating of that most ubiquitous of features – the droveway.

Different agendas, enthusiasms and chance will dictate much of the future ecological, archaeological and historical research that will be of relevance to the management of the High Weald AONB. However, *The Making of the High Weald* should help to identify AONB research priorities: certainly, it has informed those listed within the *High Weald AONB Management Plan 2004*.

¹ Hansjörg Küster, 'The role of farming in the postglacial expansion of beech and hornbeam in the oak woodlands of central Europe', *The Holocene*, Vol. 7, No. 2 (1997), pp. 239–42.

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Abbreviations

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