Landscape, Settlement and Materiality

Aspects of Rural Life in Kent during the Roman Period

Three Volumes
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Classical and Archaeological Studies
School of European Culture and Languages

Thesis submitted for the degree of Doctor of Philosophy
University of Kent
May 2014

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Volume One:
Background, Theory and Context

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Abstract

The Roman period is well represented in Kent's long history of excavation and discovery and it has some prominent sites. Nevertheless, there has been relatively little in the way of up-to-date synthesis or the application of current theoretical approaches. In common with many other areas of the country, rural settlement, especially 'non-villa' settlement, has received scant attention, whilst even its villas are mostly poorly understood. Since the advent of PPG 16 many more such rural sites have been excavated and there has been a corresponding rise, both qualitative and quantitative, in associated data, much of which remains unpublished.

This thesis aims to reassess the Roman period of Kent from a rural standpoint, using a wide range of materials to construct a more nuanced and theoretically informed narrative.

The basis of the study is the Kent HER. The archaeological data are combined with a number of landscape resources in order to reveal the influence of Kent's highly varied terrain and the ways in which it was understood and exploited. Aspects of building and settlement morphology are examined and the potential of artefactual and ecofactual data for adding refinement to our understanding is explored. In its use of unpublished ('grey') literature, it is in line with current research priorities at national level.

Results indicate that strongly patterned distributions of evidence were influenced both by Kent's physical landscape and by human landscapes of tradition and culture. The county's archaeological record has features that distinguish it from other southern counties and from the received trajectory of Roman Britain as a whole. This thesis places Romano-British Kent within its wider chronological and geographical context, noting its particular characteristics and finding that it is an eastern, rather than a southern county, following a trajectory very similar to that of northern Gaul.

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1 Background and theoretical approaches

1.1 Introduction

This project aims to integrate a variety of sources of evidence, published and unpublished, archaeological and environmental, structural and artefactual, in order to elucidate the nature of rural settlement during the Roman period in Kent. During the process of research, objectives have been modified according to the quantity and quality of the data available. Initially, the principal objectives were:

1. The characterisation of rural (villa and non-villa) settlements in Roman-period Kent in terms of landscape, site morphology, function and consumption of material culture
2. The analysis of changes in settlement density/type over time, commencing with the Iron Age background

It had been hoped that more comparative work between aspects of rural settlement in Kent and other parts of Britain and/or the near continent would be possible; in order to do this, however, both a strong understanding of the Kentish record and suitable comparative data are required. As so little synthetic/analytical work has been carried out on rural settlement either in Kent or in other parts of Britain it became clear that understanding Kent's record was the main priority. In many ways this thesis can be seen as an audit of the present state of knowledge of rural settlement in Kent on which future comparative work can be based. Indeed it is only now (2014) as the preliminary results of the Roman Rural Settlement Project (an enterprise which commenced after the inception of this thesis) become known, that suitable comparative data are becoming available for England.[i] The record for Kent, as befits a county of contrasting landscapes, is itself not uniform, requiring comparison at intra-county level.

The thesis is structured in three volumes as follows. The first volume covers introductory matters (method and theory; Chapters 1 and 2) and the contexts of rural settlement in terms of landscape and environment (Chapter 3), temporal depth (Chapter 4, the Iron Age background) and broad trends (Chapter 5). Volume 2 consists of four thematic chapters (6-9) which discuss particular aspects of Kent's archaeological record for the period: buildings, rural site morphology, evidence for agriculture and subsistence and the rural funerary record.

Volume 3 explores certain aspects of material culture for which there is good evidence (ceramics, coinage and quern/millstones; Chapters 10-12) with the whole being brought together in Chapter 13.

It has not been possible to cover rural settlement from every angle. In particular, aspects of the economy, rural industry and religion are dealt with only incidentally. Space did not permit the inclusion of a chapter on industry as originally hoped. Pottery manufacture, iron working and salt winning at the least are relatively well attested as occurring in Kent; the actual evidence is often weak in detail, however, and (as also with the chapters on material culture) a policy of concentrating on the evidence with greatest potential has been adopted.

1.2 Background to the study

1.2.1 The importance of understanding rural settlement in the Roman period

In the past, studies of Britain during the Roman period have for the most part been concerned with issues such as the economy, the military and the development of urbanism. There are good reasons for this: as Hingley (2000) has demonstrated, the discipline of Romano-British archaeology developed in the context of a colonial power with a vested interest in emphasising its links with a classical past. It was thus concerned with finding evidence to illustrate the received Roman histories and with drawing parallels between life in Roman Britain and that nearer the heart of the empire. The only rural sites routinely investigated were villas, which were understood as necessarily being the hubs of agricultural estates of Mediterranean type.

The upshot of this is that the rural archaeology of Britain in the Roman period has been particularly ill-served and the perhaps 80% or more (Mattingly 2006, 356) of the population of Britain who were not part of the military, the civilian administration, members of the elite or town-dwellers, but instead led ordinary rural lives, have until recently been largely ignored. Hingley (2007, 109; Fig. 46) using data from *Journal of Roman Studies* and *Britannia* 1920-1996, has suggested that although the proportion of excavations of Roman non-villa settlements and small, unwalled towns has risen since 1960, nevertheless "forts, walled towns and villas still receive more excavation and emphasis in publication than their relatively lower frequency alone would warrant" (ibid., 111). These figures themselves are now regrettably out of date; nevertheless, it is pertinent to make the point that whether or not 'villas' are over-represented as a category of investigation, they have fallen out of academic favour as a subject

of study. The meanings and functions of these iconic representations of supposed Roman influence in the British countryside are badly in need of reassessment.

For Taylor, the rural landscapes of Roman Britain represent "a key arena of social change"; yet studies of rural settlement to date have been dominated by descriptive overviews that are structured around a limited range of unstated theoretical assumptions and that concentrate on typology and/or economic factors (2007, 1-2). The importance of understanding this underexplored field has been recognised at national level by English Heritage's and the Leverhulme Trust's funding of a major project focused on "the characterisation, mapping, and assessment of late prehistoric and Roman rural settlement across the whole of England" (Taylor 2007, xiii). In the south east of England, Roman rural settlement has been recognised as a research priority by the South East Research Framework (SERF) and more recently by the English Heritage funded Roman Rural Settlement Project mentioned above.

1.2.2 Opportunities for study: recent developments at national level

A "quantitative explosion" of data for Roman rural settlement was already evident to C. Taylor in 1975. Since this date the archaeological resource has been vastly increased and traditions of research challenged and transformed by responses to construction work and aggregate extraction. These responses originated with the rescue archaeology movement of the 1970s and 80s and burgeoned with the advent of Planning Policy Guidance 16 (PPG16) in 1990.[ii] It is estimated that since 1990, around 90% of all archaeological work in England has been prompted by the planning process (Holbrook and Morton 2008, 6). This mandatory evaluation of archaeological potential and consequent excavation/recording of archaeological remains in advance of development has led to the collection of a large body of evidence no longer dictated by the particular interests of individual excavators or the research agendas of government or academic bodies. The Archaeological Investigations Project (AIP) recorded nearly nine and a half thousand archaeological investigations in England during the 15 years from 1990 and 2004 which encountered Roman remains (averaging over 600/yr); over 2,700 of these were excavations. This contrasts with the much lower rate of 2,260 Roman sites known to have been investigated in any form (average 150/yr) in the fifteen years between 1973 and 1987 (Holbrook and Morton 2008, 6; 51).

The data recorded by the AIP relates to material which is almost entirely generated by archaeology undertaken within the context of planning processes. The resulting ('grey')

literature is produced in the form of client reports which are not normally widely available, although copies are usually lodged with the appropriate Heritage Environment Record. Holbrook and Morton (2008, 40-41) have found that there is a considerable time lapse (commonly in excess of five years) between the end of fieldwork and conventional publication (if conventional publication happens at all). Whilst there are moves afoot to make such grey literature more widely available (for instance via English Heritage's online library (http://ads.ahds.ac.uk/catalogue/library/greylit), its inaccessibility, disparate and often sketchy nature means that it has rarely integrated into synthetic accounts of national or regional archaeology of the Roman period (though see Williams 2003 for a relatively recent, if brief, Kentish perspective).

A further source of evidence which has only been available to archaeologists for a relatively short time and has only recently been exploited to any extent is the Portable Antiquities Scheme (PAS: e.g. Worrell 2007). Although finds reported to this scheme are by their nature almost always without archaeological context, they are an additional source of data independent of research bias (although clearly subject to biases of other natures [see below]) and can supplement the "background noise" of lesser quality data collected by more conventional archaeological means, thereby helping to contextualise the distribution of known sites. Preliminary assessment of Iron Age artefactual data collected by the scheme suggests that it may be capable of contributing to a general reassessment of regional social trajectories during the period (ibid., 385); research has been conducted to assess the extent to which PAS data can contribute to the study of the Roman period (Brindle 2013). The usefulness or otherwise of PAS data for the present project will be assessed.

1.2.3 Opportunities for study: Kent

For a combination of reasons to do with the nature of the archaeological record, current land usage and patterns of development, Kent has a large number of these more recent discoveries. A search of the Channel Tunnel Rail Link Section 1 online archive alone produces records of 39 excavations producing Roman remains.

The distribution of investigations mapped by the AIP (Fig. 1.1) shows that while there is a correlation between a significant number of these and the Roman road network in Kent,[iii] a large proportion lie at some distance from the county's Roman urban centres. It should be noted that at this small scale, individual dots may cover more than one investigation and that

the total number is thus larger than this map suggests; there are in fact 462 entries on the map's attribute table. Unfortunately, owing to the way in which monument types were assigned (Holbrook and Morton 2008, 47), the AIP database cannot be interrogated in any meaningful way in order to quantify rural settlement data in terms of types of site.

Despite the large amount of archaeological work which has taken place in Kent in recent years, there has been little in the way of synthesis of the Roman material, particularly in regard to rural settlement. The fullest account (Detsicas 1983) is now over three decades old and the seventy pages devoted to rural settlement focus strongly on sites with rectilinear buildings (farms, villa estates and "the so-called isolated bath houses") despite an acknowledgement that farmsteads "usually with round huts and ditched enclosures" were the predominant settlement type (ibid. 84). This bias reflects that in the evidence available at the time. The most recent survey of Kent in the Roman period (Millett 2007) comprises 47 pages in an edited volume and although it makes use of the latest data, a chapter of this length is clearly no vehicle for in depth assessment of the rural evidence. Meanwhile, Williams (2003), as mentioned above, considered some of the implications of recent development-led excavations. Further papers/chapters regarding the Kentish evidence include an overview of Roman Kent by Blagg (1982) and an examination of the nature and extent of cultural change within the *civitas* of the Cantiaci by Andrews (2001), framed in terms of "romanisation". The coverage of Roman Kent in the county's Historical Atlas (Andrews 2004) prioritises the urban evidence; a mere two paragraphs are devoted to the countryside. Surprisingly, there has been no further attempt to bring together the evidence for Roman rural lifeways in the county. Neither has any coherent utilisation of more recent theoretical perspectives been applied, as has been done, for instance, by Fincham (2002) for the East Anglian Fenland.

The time is thus ripe, both in terms of need and opportunity, to attempt a synthesis and analysis of the evidence relating to rural settlement in Kent during the Roman period.

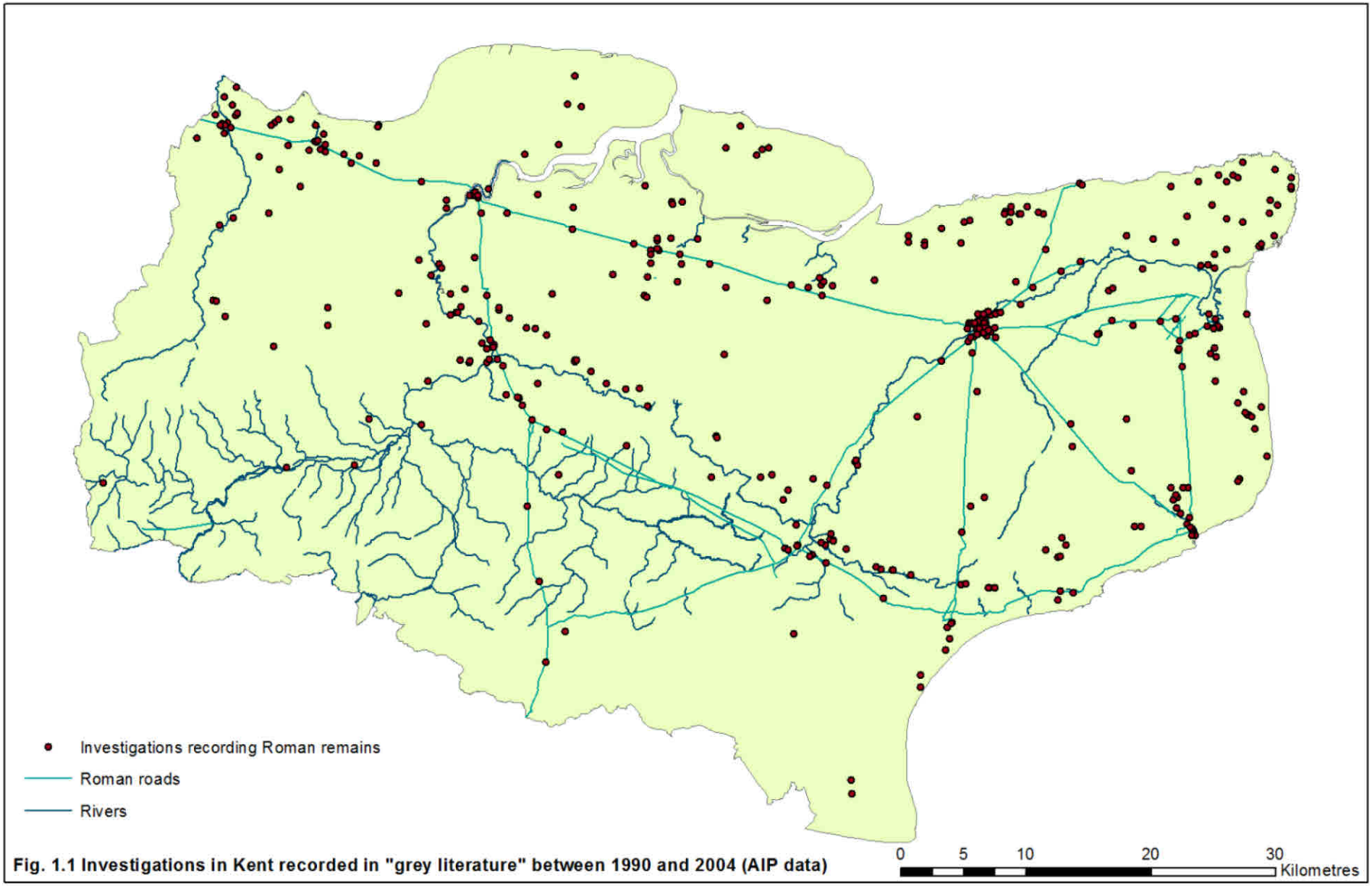


Fig. 1.1 Investigations in Kent recorded in "grey literature" between 1990 and 2004 (AIP data)

1.2.4 Environmental aspects

More recent approaches to archaeology recognise the dangers of environmental determinism (e.g. Wheatley 1993; Llobera 1996) , but it must be acknowledged that environmental factors play a part in configuring settlement patterns, land use and potentially site morphology in the Roman period as, to a lesser extent, now. Kent has particularly varied geology, soils and topography as well as being one of the most densely wooded counties in England. Successive geological formations have led to the development of distinct belts of countryside and historically recognised *pays.* Similarly, although Kent has a generally favourable climate, variations in elevation, aspect, exposure to prevailing winds and proximity to the sea mean that agricultural and living conditions in different areas (for instance the top of the Downs, the Low Weald or the Isle of Thanet) can be very different. Again, the natural resources provided by different areas differ, favouring the development of local industries (e.g. pottery, salt manufacture, iron production) whilst movement through the landscape is aided or hindered by the grain of the land.

It is therefore important to consider insofar as it is possible the nature of the landscape and climate of Kent during the Later Iron Age and Roman periods and how this may have influenced settlement. If the gaps presently perceived in the settlement pattern are genuine and not artefacts of our detection methods, may there be environmentally influenced reasons for them?

At the same time it is necessary to take into account the effects of modern land usage on the archaeological record. The nature of evidence recovery following the advent of PPG16 skews the distribution of new sites discovered towards new housing, road or rail developments: urban developments may have destroyed or obscured much evidence, but more recent work provides keyhole views into what survives. Our view of the Roman period on the Isle of Thanet, for instance, is being transformed by archaeological work consequent to a boom in development and by the (as yet unpublished) findings during the East Kent Access Road Scheme (Oxford Wessex Archaeology 2011): an area that appears as almost devoid of Roman sites on old distribution maps is now seen to have one of the denser distributions of Roman period evidence in Kent.[iv] In the countryside, agricultural land under plough is more susceptible to the discovery of finds by field walking and metal detector than land under pasture. Woodland poses a particular problem as it is not easy to determine whether it obscures earlier settlement, or, being of long standing, indicates areas that were never settled. Analysis of recent LiDAR surveys of the Weald Forest Ridge, the Blean and the Medway Valley

may contribute to greater understanding of these wooded areas;[v] clearly there is great potential/need for more work of this type in the county.

1.2.5 Geographical scope

The study is confined to the modern county of Kent. This is largely dictated by practical considerations, since it reflects the organisation of the National Monuments Record (NMR), HER and PAS databases. How far either the modern or historic counties of Kent reflect the Roman *civitas* of Cantium is debatable; more to the point is the fact that Cantium itself is a Roman construct which does not necessarily reflect any pre-existing political or social reality (viz, Caesar's reference to "four kings" [*De Bello Gallico* V, 22]). Studying the material culture of the county as a whole, wherever the actual boundary of the Roman *civitas* may have been, may allow light to be thrown both on the incorporation of earlier political or social entities into the Roman administration and on any continuing differences in expressions of identity. The varied topography and geology of the county already alluded to allows for the comparison of settlements in a number of different environmental settings (downland, Wealden, riverine, coastal).

1.2.6 Temporal scope

The rural settlement of Kent's Roman period cannot be studied in a temporal vacuum. In particular, it is necessary to place it in the context of what is known of pre-existing settlement patterns. To this end, information gathered includes evidence from the Later Iron Age (c. 100 BC - AD 43), in order to ascertain patterns of continuity and change or dislocation. Furthermore, the dividing line between Late Iron Age and Roman in Kent is difficult to discern archaeologically. It is not intended to examine the Late Roman transition as that is a topic meriting a thesis on its own.

1.3 Theoretical approaches

This thesis is framed as an exploration of rural life in Kent during the Roman period. It is intended to be both holistic and heuristic and as such is concerned with landscape, with material culture and with identity, and with the ways in which these intermeshed, formed and moulded each other. Crucially, it is ultimately about *people,* whose daily lives are memorialised in the archaeological finds and features which are all that remain of their actions. An appreciation of the theoretical issues underpinning these areas is vital if we are to understand how they relate to each other, to the archaeological record and to the people who formed it.

Several theoretical areas need consideration, in particular those concerning cultural change during the Roman period, with its implications for the understanding of identity, and the nature of landscape.

1.3.1 Understanding identity and cultural change in Britain during the Roman period[vi]

If this work had been undertaken twenty or perhaps even ten years ago, it would almost inevitably have been cast as a study of the Romanization of Kent. The dominant paradigm explaining cultural change during the Roman period for the greater part of the Twentieth Century, Romanization was first applied in Britain by Frances Haverfield (1905). In its early, unrefined form in the earlier 20th century, it was a modernist, overtly teleological perspective, bolstered by the rhetoric of Tacitus (*Agricola* 21), which saw the backwards native progressing towards a state of greater civilisation under the deliberate influence of Rome.

It is a viewpoint that tends to emphasise the homogeneity of the Western provinces, underplaying regional variations and the part played by indigenous peoples in creating the empire's culture. Haverfield equated "Roman" with Italian and Roman identity with a Roman culture whose spread was inevitable. It is a viewpoint which still persists behind many accounts of "Roman Britain", "the Roman invasion" and particularly, perhaps, in "the departure of the Romans".

Haverfield's Romano-centric model of cultural change, if not unchallenged (e.g. by Romanists such as Reece (1988; 1990) taking a 'nativist' approach) nevertheless remained dominant for over 70 years, with minor variations. It was not until the publication of Martin Millett's seminal

The Romanization of Britain (1990a) that the processes by which change happened received any further serious consideration.

For Millett, Romanization was a dialectical, two way process of acculturation, not the imposition of one 'pure' culture upon another (1990a, 1; 1990b, 37) and is a rejection of the idea that "the Britons did what they were told by the Romans because it represented progress" (1990a, xv). In this laissez-faire view of the situation, insofar as there was any deliberate policy of Romanization, this consisted in encouraging local elites to identify their own interests with those of Rome (1990b, 37). The aristocracy did not, therefore, need to be compelled to become Romanized, but used Roman material culture to enhance their own social position; those further down the social ladder became Romanized to a greater or lesser extent through a process of progressive emulation. Romanization was thus internally driven rather than externally imposed (1990b, 38) and failed or succeeded according to the natures of pre-existing Late Pre-Roman Iron Age social structures and/or the nature of Roman military intervention which in some cases disrupted these (1990a, 99-101).

Although allowing a greater degree of agency to native Britons, the approach is still broadly teleological. Millett's discussion of the process of Romanization was confined almost entirely to the elite (unsurprisingly as the data available preceded the PPG 16 watershed [cf. 1.2.2]) and to the economic consequences of membership of the Roman Empire. The dialectical nature of Romanization which he identifies was left tantalizingly under-explored.

Millett's *Romanization* became the new orthodoxy, replacing the descriptive standard texts, such as those of Frere (1987) and Wacher (1978) which had dominated the previous 25 years of Roman period studies in Britain; it is still probably the most widely accepted model. It was, however, published precisely at the point when a new generation of scholars, starting from the post-imperial perspective which Millett himself recognised, was beginning to take a more overtly theoretical stance towards matters of cultural change. It thus became the springboard for a series of alternative explanations as post-processual perspectives took hold.

The Romanization paradigm has been found wanting by a number of scholars who find it "unilateral, unidirectional and progressive" (Mattingly 2006, 14) and so at variance with an archaeological record which stresses regionality and diversity. A number of alternative approaches have emerged.

Woolf's "Becoming Roman" approach (1998) links empire-wide cultural changes ("the Roman cultural revolution" [1995, 13; 2001]) to the institutionalisation and systematisation of new

imperial structures occurring around the time of Augustus. The emulative strategies identified by Millett (1990a) arose as native elites in the western provinces sought to demonstrate their civilised qualities, encouraged by their Roman masters. Woolf defines Roman imperial culture as "a structured series of differences that was highly differentiated by region, class, social locale, age and gender among other dimensions of variability" (1997, 347). Acculturation becomes an invalid model as Roman culture was simultaneously re-invented over the breadth of the empire and indeed continued to transform itself over its duration in a process that Woolf likens to "the growth of an organism that metabolizes other matter and is itself transformed by what it feeds on" (1997, 347). Perhaps inevitably, emphasis is again on the elite: one might question how much "becoming Roman" had any meaning to those at the bottom of Woolf's series of structured differences, such as the rural poor, whose access to the means or opportunity to define their own identity in material terms was limited or non-existent.

Drawing on this approach, Hingley views the spread of Roman culture in terms of globalization (2005a). His is a problematizing approach which demands subtle interrogation of the evidence, the emergent picture being the complicated one of an empire characterised by a variety of overlapping networks of power and identity (ibid., 93) and a multitude of experiences. It is "an account that reacts against the idea that one coherent interpretation *could* provide an adequate explanation for the complex evidence" (ibid., 120).

The works of Mattingly (1997; 2004; 2006) and Webster (1995a; 1997a; 1997b; 2001; Webster and Cooper 1996) are set firmly in the context of post-colonial perspectives, emphasising the importance of power asymmetries in the negotiation of identity. Mattingly develops Said's (1993) concept of "discrepant experience", which involves "the coexistence of very different perceptions of history, culture, and relationships between colonizer and colonized" (Mattingly 2006, 17). This resulted in a heterogeneous society in which a multiplicity of identities and experiences were created as a response to Roman rule: Britannia was "a singular noun but a plural experience" (Smith, 1999, 36).

Mattingly demonstrates the ways in which Roman administrative policy might impact in very different ways both on individuals and settlement patterns, creating (in place of, but not exactly coterminous with, the "Romanized" and "non-Romanized" regions of traditional accounts) "landscapes of opportunity" and "landscapes of resistance" (2006, 520) and finding "the gap between richest and poorest widening as never before" (ibid., 20).

Webster, meanwhile (2001), has developed the concept of creolization which focuses on the experiences of the mass of the population, allowing bottom-up cultural change which does not depend on emulation: artefacts, even though appearing Romanized, may have operated "according to a different, indigenous, set of underlying rules" (2001, 219; c.f. Willis 1994).

Yet another approach involves the literary concept of "cultural bricolage" utilised by Terrenato. This is

> "…a process in which new cultural items are obtained by means of attributing new functions to previously existing ones…the result of the process resembles a *collage*: that is a complex patchwork made of elements of various age and provenance: some of them are new, but many others are old objects, refunctionalized in new forms and made to serve new purposes within a new context" (1998, 23).

As with "discrepant experience" this approach implies not just spatial heterogeneity, but also variability between different groups belonging to the same community or even within one individual's expressions of identity. This approach again challenges the viability of comparing or quantifying degrees of Romanization and in fact questions the utility of the most frequently invoked "evidences for Romanization", such as orthogonal city layouts or Roman ceramic imports on the grounds that they are too widespread and superficial to be significant. In this view, each community reacted differently to a whole range of issues and situations contingent on Roman rule, each time producing a different *bricolage.* The implication is that there is no standard set of questions to be asked when interrogating the evidence, but that each case requires its own research agenda (1998, 25).

Pitts has recently suggested that discussions of identity have been substituted for debate about "the tired issue of Romanization" (2007, 693) and indeed identity is Mattingly's key tool (2006, 18). Arguably, though, it is a recent preoccupation with the issue of identity that has fuelled a critical re-assessment of traditional theories of Romanization. The strong materiality of the Roman record allied with more recent appreciations of the potentialities of material culture are factors here: artefacts are no longer valued simply for their own sakes, for the dating evidence they provide or merely as an index of Romanization, but are interrogated for the ideas they embody and give rise to in order to answer questions of social practice, and thus of identity.

Identities are not only expressed by material culture but created by it as a result of a dynamic relationship between people and the objects they use (Miller 1987). According to this

argument, objects as well as people have agency, therefore objects themselves influence social practice and thus (implicitly) identity; this can be demonstrated for the Roman period (Swift 2009). This insight raises questions particularly relevant to the Romanization debate: what happens when we adopt aspects of 'foreign' cultures? Do these actually alter our identity? Is it then legitimate after all to talk of people as well as of their material culture as becoming 'Romanized', or is identity such a firmly entrenched feature of our nature that in adopting foreign artefacts we are simply taking on a new means of expression? Crucial to this is an understanding of how these new items of material culture were being used (Gosden 2005; Willis 1994). The problem for the archaeologist is that identity has both emic and etic dimensions; unlike the anthropologist or sociologist, we cannot ask our subjects to describe their identities from the emic point of view, we have only the outward, etic manifestations of those identities to work with; identity has always to be inferred (except, arguably, in the case of epigraphic evidence, which is of extremely limited relevance to rural Kent).

'Romanization' is certainly a problematic term, not least because of the many different layers of meaning which it carries and the potential uncertainly, unless explicitly stated, of what a particular writer means by the word. On the one hand it describes a real phenomenon, that of the increased visibility of what we today recognise as 'Roman' material culture or cultural practice within (and around the peripheries of) the Roman empire; on the other, the processes behind that phenomenon and the implications of the word itself are controversial.

The waters are further muddied by historiographical factors identified by Freeman (1993; 1997) and Hingley (1995; 1996; 2000; 2005a): the term 'Romanization' was coined in an imperialistic age which drew inspiration from a Classical past moulded in its own image and until relatively recently both historians and classical archaeologists have been text-bound. This has led to a modernist, teleological approach to the past which accepted and adopted Roman elite concepts of what it was to be civilised/barbarian and created a monolithic view of Roman culture that is not reflected in the evidence and can be challenged on theoretical and philosophical grounds (Barrett 1997).

More recent approaches which challenge the Romanization paradigm are necessarily a product of their own times and must be seen in that context. We live in a society uncomfortable with both present day imperialisms and its own imperial past, as reflected in recourse to post-colonial discourse theory. Similarly, Terrenato explicitly links new views on the nature of Roman Italy with both a post-Cold War resurgence of ethnicities and the new ideal of the European Union as a "tolerant empire of diversity" (1998, 26). There is no such thing as an

objective critique of the past and the "individualist, nationalist, separatist" nature of Europe which Haverfield regarded as an unhelpful influence on our views of the Roman empire (1924, 181) now informs our views.

These changing attitudes to the past both reflect and are reflected in the changing nature of Roman archaeology which has moved on from its 'handmaid of history' role to become a discipline in its own right. Roman archaeology is no longer the preserve of a largely male, classically-educated elite excavating the towns, military installations and villas illustrative of a received view of Rome's civilising mission. Instead, an increasing number of archaeologists see their discipline as a 'bottom-up' activity, uniquely able to elucidate the lives of those whose stories are not told by history: the poor, the disenfranchised, women and children, and the ordinary whose activities are not recorded in text, but whose pottery, adornments and settlements exist only in the archaeological record (Matthews 1997; Chadwick 1999).

In rejecting the Romanization paradigm, scholars such as Mattingly, Hingley and Webster have instead substituted views which hold unity and diversity together in creative tension. Two enduring problems, however, remain.

One of these concerns terminology and specifically the word 'Roman', which has no clear meaning in this context. The word operates on several different levels; as a cultural descriptor it strictly has a very limited application, as demonstrated by Terrenato (1998). This difficulty is reflected in the works of all the writers cited above from Haverfield onwards. For all their emphasis on heterogeneity, Woolf and Hingley still frame their theories in terms of "Becoming Roman" or "Globalizing Roman Culture", whilst the awkwardness of the term "discrepant experience" expresses in itself the difficulty of finding an alternative.

The word 'Roman' tempts us to think in anachronistically nationalistic terms. Contemporary perceptions of identity often focus on ethnicity, whilst it is difficult completely to break free from old culture-historical models which link discrete cultural suites with particular peoples. This is an acute problem since, although archaeologists focus on the physical evidence, "for the ancients, *romanitas* had more to do with temporal or literary issues, not material culture" (Freeman 1993). Moreover, although *romanitas* is the term frequently used by modern writers, Woolf (2001, 183) argues that in ancient times it was the concept of *humanitas* which described, defined and bound together 'Roman' culture (1998, 56). This concept transcended ethnic and cultural boundaries, "embodying concepts of culture and conduct that were

regarded by Romans as the hallmarks of the aristocracy in particular, yet appropriate for mankind in general" (1998, 55).

As Terrenato has argued for 'Romanization', 'Roman' is perhaps a word that, outside a set of very prescribed circumstances (e.g. Roman citizenship), is useful only as a convenient label to describe things from an etic perspective; it seems that many of those living within the Roman empire would not have thought of either themselves or their culture as being specifically 'Roman',[vii] although a widespread elite might have felt that they possessed the values of *humanitas*. As Gosden (2005, 207) points out, we have no idea whether the inhabitants of Roman Britain regarded any categories of their material culture as 'Roman' and if so, which, whilst to describe, for example, pottery as either 'Roman' or 'native' immediately introduces the binary oppositions and preconceptions which more nuanced interpretations try to avoid.

The second enduring problem relates to the archaeological visibility of the non-elite. One of the most frequent criticisms of both Romanization and of more recent attempts to explain cultural change in the Roman period is that the framework is still too elite-focused. Recent perspectives have put non-elites firmly back into the picture, but the archaeology of those who had much will always be easier to find and analyse than those who had little or nothing. At the same time, there is potentially a problem in recognising Roman period settlement evidence if elements of 'Roman' material culture were not taken up. This clearly may impact upon the present project.

1.3.2 Theoretical approaches to Landscape

Although the idea of examining archaeological sites against their wider setting is by no means new, the term 'landscape archaeology' is much more recent in origin (Aston and Rowley 1974), coming into widespread use only in the 1980s (David and Thomas 2008, 27), although the cultural meanings of landscapes had been of concern to geographers (e.g. Sauer) particularly in the USA since the 1920s. Britain meanwhile had a tradition of landscape *history* of which the most prominent exponent is seen as W.G Hoskins, whose *The Making of the English Landscape* (1955) was highly influential until recent times.

In parallel with theoretical developments in other areas of the discipline, landscape archaeology has moved from an initial focus on human interaction with the physical

environment ('nature'), whether in terms of adaptation or of impact, through an interest in the spatial patterning of sites and artefacts, towards one which questioned the *meaning* of this patterning, creating a landscape archaeology in which humans were seen as "*interacting social people* who engaged with their surroundings in various ways" (David and Thomas 2008, 32).

There is now a large corpus of writing on landscape, representing a number of different theoretical (and non-theorised) stances. At the broadest level, there is a split between the empirical approaches of traditional scholars (broadly the inheritors of the Hoskins tradition), in which theory and theoretical critiques seems to be viewed as entirely irrelevant (Johnson 2007, 200) and those whose understandings of landscape are deeply informed by scholarship from the fields of geography, philosophy, ethnography and anthropology. This split is largely one between historians and prehistorians, who in particular have adopted phenomenological approaches (e.g. Bradley 2000; Tilley 1994); although these have been critiqued by Fleming (1999; 2005; 2006). Until recently, with certain notable exceptions (e.g. Gaffney and Tingle 1989; Allen et al. 1993; Fincham 2002; Gaffney et al. 2007) landscape has not been a prominent theme in Romano-British archaeology. All too often 'landscape' has been used as a synonym for 'environment' or a regional round-up of sites; analytical approaches have been rare (Taylor 2007, 3). Explicitly theoretical approaches to Roman landscapes have thus been uncommon (Petts 1998); although a number of writers have more recently taken up themes of movement through the landscape (Witcher 1998; Copeland 2009) or symbolic and ritual aspects of landscape (Rogers 2007; Willis 2007; Eckardt 2009) whilst Fincham (ibid.) engages with the subject of imperialism and resistance in the landscape.

The 'Hoskins' approach most characteristically views the landscape as a palimpsest, a widely used analogy adopted also by O.G.S. Crawford (1953, 51) as well as cultural geographers of the Berkley School. The palimpsest analogy implies that the landscape can be 'read' (Muir 2000) by those with the right interpretive skills and is thus closely related to the concept of material culture as a form of text (e.g. Hodder 1986). Reading text is itself no simple thing as post-structuralist critiques have shown (Buchli 1995). It is also a broadly teleological approach, for whilst the layers of meaning may be stripped away to get at the past, they have also built up to form the present day landscape. It is an approach rooted in Romanticism and the search for ethnic origins (Johnson 2007; Wylie 2007, 31); Hingley (2007, 106) has pointed out that part of the reason that Hoskins himself did not appreciate the part played by prehistoric and Roman peoples in forming the landscape was that his own agenda involved demonstrating its Anglo-

Saxon origins. This explains his scant (and by the latest editions outdated) accounts of prehistoric and Romano-British landscapes.

Recent theoretical writings on landscape broadly divide into explorations of landscape either as a 'way of seeing' or (in more phenomenological approaches) as 'dwelling' or 'being-in-the-world' (Heidegger 1927); the rediscovery of *place* has been particularly important to the latter.

The word 'landscape' derives from art and has strongly visual overtones which reflect the similarly visual nature of our society where 'view' is a synonym for 'opinion', 'see' for 'understand'. As a verb, 'to landscape' describes the deliberate human moulding of the physical environment, usually for aesthetic effect (as in landscape gardening) and this idea too, of landscape as 'something done to the land' is particularly reflected in the writings of cultural geographers who understand landscapes as 'ways of seeing'.

For Cosgrove (1998 [1984]; 1985), a crucial factor is the development and use of linear perspective. This technique, which to modern Western eyes implies an accurate rendition of a scene as it might be observed in real life, has the effect not only of fixing the spatial relationships between the objects depicted, but of locating the viewer *outside* the picture (1998, 27). The landscape so represented has a spurious ring of truth about it (the equivalent of the modern view that the camera cannot lie); in its realism, it seems to be a definitive view, a static 'reality' created from an ever changing scenario whose dynamism is thus lost (1985, 57). It is frozen in time, a passive object to be contemplated intellectually rather than one which can be stepped inside and experienced. It, and the people and creatures that inhabit it, have no agency but are at the mercy of the viewer who seems to have a God-like perspective on the world, although is in fact confined to the vantage of a single viewpoint.

A number of variations on this theme have emerged. A Marxist metaphor regards the landscape as a veil, a "sophisticated 'visual ideology' which obscures not only the forces and relations of production but also more plebeian, less pictorial experiences of nature" and is therefore "duplicitous" (Daniels 1989, 206). Landscape has similarly been described in terms of 'gaze', whether 'imperial', when referring to European (often colonial) views of non-Western landscapes (Wylie 2007, 126-131) or as 'masculine gaze' by feminist geographers (ibid., 82-84). It is of course certain that Rome looked upon her provinces with an imperial gaze, exercising monopolies over certain kinds of mineral extraction, surveying and parcelling up land by centuriation (although whether this happened in Kent is debatable), appropriating land as Imperial estates, or, in the case of the *ager publicus*, requiring rent.

The detachment of view described above is not just a quality of artistic representation; it also relates to Enlightenment developments in philosophy and science which led to a conceptual split between mind and body, humans and their environment, culture and nature. As a consequence, "object and subject have been split, so that Man becomes the active subject who observes a passive nature as something which exists *for* them: at once a home and a store of resources" (Thomas 2001, 167, citing Zimmerman). Landscape art and empirical science are two variations on a modern way of looking (ibid., 169). The ultimate expression of this way of looking is to be found in cartography, a technique which lets one take in at one glance whole continents from a perspective unknown in real life prior to the invention of the balloon. Ostensibly objective, but necessarily distorting in their rendition of the three dimensional on a flat surface, maps have always been objects representing power and knowledge; not just knowledge, but the manipulation of that knowledge, for maps are as telling in their omissions as in what they include (see Mattingly 2006, 356-358 for a discussion of the modern mapping of Roman Britain in this respect).

The supposedly scientific neutrality of maps also epitomises the modernist triumph of space over place (Casey 2008, 46). Casey traces the development of philosophical thought from ancient Greece ("*to be is to be in place*") through the Renaissance ("to be is to be *in space* where "space" meant something non-local and non-particular, having little to do with exact location of close containment and everything to do with a vast homogenous medium"), the thinking of Descartes and Locke, where place indicates no more than simple position, to the end of the 18th century by which time the subject of place was no longer addressed. While space is an abstract, scientific concept, place is always humanised and meaning-laden. Whereas space is measurable, place is 'lived' and so its attributes are qualitative, not quantitative. Places only come into being in relationship to people as contexts for human experience (Tilley 1994, 15). The neutral distribution map or the creation of putative territories by the construction of Thiessen polygons, which privilege space over place, are thus misleading tools since people and places are linked to each other by relationships which cannot be measured by recourse to Euclidean geometry: "landscapes are topographies of the social and the cultural as much as they are physical contours" (David and Thomas 2008, 35). The concept of place is strongly linked to Giddens' (1984) notion of "locale" which plays an important part in the processes of social production and reproduction (Tilley 1994, 19).

Landscape as a form of dwelling is a Heideggerian perspective particularly associated with the work of Ingold (e.g. 1993; 2000). For Ingold, "landscape is constituted as an enduring record of - and testimony to - the lives and works of past generation who have dwelt within it, and in so

doing, have left there something of themselves" (1993, 152). It is not 'land', not 'nature' and not 'space', but "the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them" (ibid. 156). Landscape as dwelling or being-in-the-world has a phenomenological emphasis on embodiment: landscape is always experienced through the medium of the body. It emphasises people's active engagement in the landscape and is closely related to the concepts of *habitus* (Bourdieu 1977), agency and practice (Johnson 2007, 142). It is not a ready-made backdrop to life on which culture is inscribed, but a living process, "it makes men; it is made by them" (Inglis 1977, 489), a dynamic and recursive relationship which is always a "work in progress" (Ingold 1993, 162; Strang 2008, 52). The landscape so understood has temporality for it is ever changing and is always experienced through the medium of time as people go about their daily tasks. Ingold develops from this the notion of the *taskscape*: "just as a landscape is an array of related features, so- by analogy – the taskscape is an array of related activities" (1993, 158).

In a move which is perhaps particularly pertinent to the understanding of archaeological evidence, Ingold cites Mead's argument that objects are "collapsed acts" concluding that "*the landscape as a whole must likewise be understood as the taskscape in its embodied form*: a pattern of activities 'collapsed' into an array of features" (ibid. 162, emphasis in original). In this way a feature such as a boundary ditch becomes more than just a mark on a plan representing an abstract parcel of land, it represents a yearly cycle of toil in the landscape by people: a charged existential phenomenon.

If "lived landscapes are relational entities constituted by people in their engagement in the world" (Thomas 2001, 176), then we should expect not only that the experience of landscape should be different in different places, but that the same landscape may be understood differently by different people or at different times, so that landscapes may be described as multiple or fragmented (ibid.) or "uncommon ground" in the words of Strang (1997; 2008). A frequently quoted example is that of the deeply contrasting understandings of landscape held by indigenous Australians and European-Australian pastoralists in Australia (Morphy 1993; Strang 2000). This is a crucial point for as Thomas points out (ibid.) it is not simply a difference of perception: effectively the same location may be more than one *place* at the same time and thus be contested. This must be of relevance to current understandings of the multiplicity of experiences of life under Roman rule not least in the context of the unequal power relations inherent in the colonial situation, yet it is an aspect that does not seem to have been overtly addressed by Romanists. Mattingly, for instance, talks of "landscapes of opportunity and landscapes of resistance with many gradations in between the extremes" (2006, 369). This,

however, introduces another dualism which does not recognise that the experience of living within a "landscape of opportunity" might be very different according to individual situation. It is easy to envisage situations in Roman Britain analogous to those described in Australia.

While the 'way of seeing' and 'dwelling' approaches to landscape may be very different, they both provide useful insights. It seems futile to argue that landscape is not a way of seeing when it seems clear that this perspective has been taken, for instance by colonial powers using, for instance, cartography to chart claims to territory. At the same time it is clear that for most, if not all, pre-modern people and indeed for a significant number of societies today, the Cartesian dualistic way of mapping the world is entirely irrelevant. Although those of us living in modern western societies may indeed dwell in our landscapes, we also have the ability to step outside them when we wish to describe them. When we do so we create a picture, whether visual or verbal, which will almost inevitably be described from a certain viewpoint.

One aspect that seems crucial is that human understanding of landscape is about the quality of *relationship* which one enjoys with places. We are likely to know the place where we are born and brought up intimately; there we know how to act, we have memories of how life has been and expectations (based on these) of how it will be. How closely we know it will depend partly on our attentiveness and our degree of engagement. If we move to new a place, then we have to start a new relationship. The new place may be unfamiliar and challenging. We may not know how to act there; we will (literally) be dislocated from our past and will be less certain of the future. A new place may, indeed, appear to be a neutral canvas on which we can inscribe ourselves, our ambitions and agendas; this may cause conflict with those whose own places share the same location. Yet over time, our relationship with this new place will grow deeper as our engagement deepens.

This brief overview does scant justice to the complexities of recent theorisation on the subject of landscape; nevertheless, it is perhaps enough to indicate some of the importance of the field for our understanding of the Roman period. In the context of this thesis it is necessary to consider the ways in which the inhabitants of Kent, whether indigenous or newcomers, related to and understood their landscapes. Although maps in the modern western sense may have been unknown in the Roman world (Brodersen 2001), the planning of towns, roads and the centuriation of land to some extent at least demand that the earth's surface is viewed in terms of abstract space. We might ask how far there is evidence of an 'administrative' or indeed 'imperial gaze' in Kent. Where there are areas of continuity or dislocation in the landscape we need to ask what these mean.

Finally, as this thesis is to do with the evolution of a settled rural landscape in which it is rarely possible to assign dates to the evidence in anything but the broadest terms, it makes sense to reference, if only briefly, the approach of Braudel and the *Annales* school of historical analysis.

This approach emphasises the significance of the *longue durée,*

> a history whose passage is almost imperceptible, that of man in his relationship with the environment, a history in which all change is slow, a history of constant repetition, ever recurring cycles (Braudel 1972, 20).

On another level (that of the *conjoncture*), the history of groups and groupings unfolds at a more perceptible rate (ibid.). In this context, we are concerned with the perceptible effects of the incorporation of Kent into the economy and political structures of the Roman empire. Finally, come those individual acts which go to make up conventional history (*l'histoire événementielle*; ibid. 21). To these we might add the individual acts whose physical manifestations make up the archaeological record. Any individual piece of archaeological evidence will have resonance at all three levels of temporal change even if its precise date is unknown.

1.3.3 Summary of theoretical approach

An appreciation of theoretical issues changes and challenges our view of the meaning of the archaeological record. It helps us to understand our own preconceptions; it challenges old dualisms providing a sounder framework for thinking about the impact of "Rome" in the area under consideration, the response of those already inhabiting an area and now finding themselves under Roman hegemonic control, and the society that developed over the next four centuries; it helps us to contextualise and understand the nature of the archaeological evidence, opening its potentials and exposing the dangers of simplistic correlations between cultural traits and identity. Most importantly it should help to put people at the heart of our investigations.

Many of the same theoretical insights underpin recent thinking about both landscape and material culture. Both are now seen as having agency, as existing in a dialectical relationship with human beings, as they shape and in turn are shaped by human culture and identity. In the form in which we detect them, they comprise so many 'collapsed acts': direct if often hazy evidence of people going about the business of their daily lives within wider social constraints.

Recent scholarship on both cultural identity and landscape stresses the diversity of human experience, not just in the sense of discrete cultural groupings, but even within these groups: we can no longer regard the military, urban dwellers or rural society as homogenous categories (Mattingly 2006). One of the key issues facing Romanists is to understand and reconcile the unity and diversity which the archaeological record for the period reveals. Whilst processual approaches to archaeology may justifiably be criticised for losing sight of individuals in pursuit of underlying systems, one of the dangers of more recent approaches is that we may lose sight of the bigger picture, becoming lost in a sea of diversity. As Johnson (2007, 140) has pointed out, "Ultimately one of the central aims of scholarship must be the development of a general understanding of human societies, or more broadly of what it means to be human". Johnson regards this relationship between particularity and generalisation to be complementary and productive:

> As we develop our understanding of the general processes of landscape change, we also understand better why this or that place varied in some particular way; conversely, any celebration of particularity is meaningless without an understanding of the general processes against which that particularity is played out (ibid.).

It is hoped that this thesis will be able to extract some of the particularities of rural life in Kent whilst contributing to a wider understanding of rural settlement during the Roman period.

Notes

[i] See http://www.reading.ac.uk/archaeology/research/Roman-rural-settlement/arch-mf-settlement.aspx for information about/updates from this Leverhulme project which is an English Heritage backed collaboration between the University of Reading and Cotswold Archaeology.

[ii] PPG 16 was replaced by Planning Policy Statement 5 in 2010; it was the advent of PPG 16, however, that provided a watershed in the quantity and detail of archaeological data available.

[iii] In some cases the road itself may have been the reason for a site's inclusion in the database, even if no further Roman remains were found.

[iv] The East Kent Access scheme post-dates the AIP data represented in Fig. 1.1.

[v] So far, the only information from the Medway LiDAR of relevance to this project is the discovery of a field system potentially linked to Cobham Roman Villa (A. Mayfield, pers. comm.).

[vi] Section 1.3.1 is developed from work submitted in fulfilment of the University of Kent MA in The Archaeology of the Transmanche (2006-8).

[vii] Whist it seems that Roman citizenship could be a critical element in defining identity (Meyer 1990), this seems to have been restricted to certain groups (e.g. freedmen) at a certain point in time.

2 Methodology and the Archaeological Resource

2.1. Introduction

This chapter introduces the various categories of data on which the research is based and describes how these were evaluated and classified in order to construct the final dataset used for investigation. This description is preceded by a statement on the use of GIS (Geographic Information System) mapping as an analytic tool.

2.2 Use of GIS

GIS mapping forms an important component of this work and it is necessary at the outset to make some comment on its use and limitations.

GIS has been criticised for encouraging an environmentally deterministic approach to the evidence (e.g. Gaffney et al. 1995). It is therefore seen as looking backwards to the techniques of processualism and downplaying the roles played by symbolism and cultural/belief systems in shaping human geography. The topic was debated by Gaffney and van Leusen (1995). As van Leusen (ibid. 369) points out, the problem is less with the tool than with the way it has sometimes been used. Some aspects of the environmentally deterministic approach can be helpful as by using GIS to detect patterns, environmental determinants can be eliminated, bringing cultural factors to the fore. Hypotheses about cultural behaviours can be tested by GIS if they have spatial consequences (ibid.).

Gaffney (ibid., 373) makes the cogent points that GIS models tend to be used to explain the locations of 'sites' without qualitative assessment of the nature of these 'sites' and that these are usually assumed to be 'settlements'. The concept of the 'site' is an inadequate description of a complex reality which,

> is rarely reflected within GIS models, which all too frequently represent human activity as a series of isolated points (sites/settlements) without reference to the continuous activity that occurred across the landscape (ibid. 374).

Physical measurements on a map are not in themselves archaeological explanations and GIS analyses tend to quantify coarse resolution data at the expense of qualitative information

(ibid. 375) whilst data are often presented as a two-dimensional time-slice in isolation from what went before or followed (ibid. 377).

It is a fundamental fact that all two-dimensional maps are distorted representations of a three dimensional reality (in the case of archaeological maps, four-dimensional). Measurements of distance on a two dimensional map do not take into account terrain either in terms of the additional physical distance that this may add or the human experience of that distance (i.e. the effort that it takes). Even the symbols chosen can subliminally distort perceptions of the character/size/relative importance of places in the landscape. This does not mean that we should abandon maps as a tool, only that they need to be used with caution and understanding of their limitations. Although the use of techniques such as cost-path or viewshed analysis was contemplated, a decision to use GIS analysis for straight-forward mapping in a transparent fashion has been followed. This allows the confirmation of patterning, the spatial comparison of different datasets and the generation of basic statistics. The more complicated the technique, the more sophisticated and specialist the approach needs to be, and this is a study using GIS, not a GIS-based study. Equally the quality of the data (particularly in spatial terms) needs to be very high if the outcome of these techniques is not to exemplify 'garbage in, garbage out'.[i]

From a practical point of view, working on maps at county level, it must be assumed that there is a degree of leeway in the accuracy both of point coordinates and of polygon boundaries. Spatial analyses throughout are therefore indicators (albeit strong indicators) of trends, rather than realities set in stone. In particular, precise distances of points from polygon boundaries or from linear features such as roads and rivers may be prone to some degree of inaccuracy. At the scale of analysis used, however, this is not unduly problematic. It is not assumed that there is a direct causal link between aspects of the environment and distributions of archaeological evidence. Human agency is regarded as the crucial determinant: in a county the size of Kent where, as will become apparent, it does not seem that there was a population so large as to require major exploitation of marginal or unproductive land except for specialist purposes, the coincidence of archaeological evidence with certain geological/landscape features is regarded as indicating human understanding and exploitation of landscape resources, whether these be for practical or symbolic reasons (or a combination of the two).

Gaffney's point about the homogenisation of archaeological information as a series of 'sites' without reference to what occurred in the spaces between is fundamental. For this reason, as explained below, an attempt has been made to distinguish between sites/evidence which represent settlement or other foci in the landscape and those which act as 'background noise'

filling out the intervening spaces, thus attempting to give greater context to those places within the landscape which represent foci of activity.

Time depth is a problem and all archaeological maps, including those presented here, are in reality palimpsests. In *Annaliste* terms they are more representative of intermediate-term conjonctures, than of precise moments in history.

2.3 Sources of data

2.3.1 The Kent Historic Environment Record

The initial source of data for the project is the Kent HER, the most comprehensive source of collated data for archaeological sites and findspots in Kent, though one that, like HERs everywhere, can be problematic. The sources on which it is based are of widely varying quality and reliability and any search of its contents relies on the way in which information has been input and thesaurus terms applied. From the point of view of mapping data, particularly at large scale, it has to be noted that grid references are not all recorded to the same precision. The HER is subject to a constant process of refinement and a significant number of errors have been detected and corrected as a result of this project. Close contact has been kept throughout with Ben Croxford, Historic Environment Record Officer for Kent County Council, who has provided much in the way of advice and resources.

A search on the key terms 'Iron Age' and 'Roman' was initially undertaken in anticipation of the project in February 2009; this produced a document containing 3,695 records, including undated sites, multi-period sites and sites which overlapped the strict Iron-Age-Roman thesaurus date boundaries (100 BC-AD 409). The initial search was deliberately broad as it was considered important to be able to sift all potentially relevant records manually, retaining records which while individually of minor significance might add to the broader picture.

Information from this document was initially transferred to a Microsoft Access database, omitting only those records which were clearly of no relevance. The records were then subjected to a process of refinement and classification before being transferred into the ArcMap programme.

Although it would clearly be preferable to have had a clear (and early) cut-off point for the collection of data, the evolution of the archaeological record in Kent during the past five years

militated against this. Further (smaller) tranches of reports were assimilated in December 2010 and March 2011, the latter including many of the Roman period sites on the Channel Tunnel Rail Link (now HS1) which had only recently been incorporated into the HER. These additions proved essential as they significantly increased the *quality* of the available data; indeed much of the data analysed in chapters 7-10 derive from these later added sites as well as from a few interventions (notably the East Kent Access road scheme) which at the time of writing (April 2014) have still not been assimilated into the HER but for which grey literature reports are held by KCC. Further refinements to the final form of the dataset have been necessitated by the publication of a number of major interventions during the course of the research. These include HS1 Section 1 (Booth et al. 2011), HS1 excavations at Springhead and Northfleet (Andrews et al. 2011), the A2 Pepperhill-Cobham road scheme (Allen et al. 2012) and Brisley Farm (Stevenson 2013).

Just as for the HER itself, the dataset utilised cannot ultimately be claimed to be a complete record of all known rural evidence for the Late Iron Age and Roman period in Kent, although every effort has been made to make it as comprehensive as possible.

2.3.2 Portable Antiquities Scheme

By April 2010, almost 3000 objects of Roman or possible Roman date from Kent had been recorded by the PAS. By November 2011, when these were analysed for Chapter 5, the number had risen to 3605 and by February 2014 to over 4000. It is potentially a huge resource, although not one without difficulty.

Clearly there are many problems associated with PAS data. On the one hand it is a sample of data in that it is generated without an archaeological agenda and chance finds may be made in areas that would otherwise not be targeted for investigation. On the other, the majority of finds are the result of metal detecting and a multiplicity of interrelating factors may thus skew the picture. In the first place, the land must be suitable for detecting. Agricultural (arable) land is thus more likely to produce results than are areas characterised by scrub or tree cover. This is borne out in the record: GIS analysis of the data shows that of the 3605 objects of Roman date mentioned above, 52% derived from rotational arable land, although this covers just 36.7% of the county. By contrast, only 28.4% of the Core Dataset (see below) is situated on such land.

The land must be available for detecting; not all landowners (nor Natural England, where land is in stewardship) are willing to give permission for such activities and where permission is granted, modern intensive cropping often leaves only narrow windows of opportunity. Clusters of finds may be artefacts of the assiduity of individuals working a limited number of fields rather than genuine 'hot spots' (this is not to say they are not worthy of investigation, but that they be symptomatic of wider spread activity). Grid references may be of variable reliability. Crucially, there must be a good relationship between the detectorists concerned and local representatives of the PAS.

Kent is a county with one of the longest involvements in the PAS and a record of good working relationships between detectorists and Finds Liaison Officers, witnessed by the large number of finds reported. There are, however, areas with a low reportage of finds where one might expect otherwise. Notable in this respect is the North Kent Plain (see Chapter 5, section 5.5.1), which has a very healthy number of entries for Roman finds in the HER and has much agricultural land. This might lead one to expect an equally healthy number of entries in the PAS but this is signally not the case. There are further biases in the nature of the objects recovered. Given the method of recovery of most there is naturally one towards metal objects, but the predominance of coins and brooches reflects that this is one towards non-ferrous metalwork. This is only to be expected: not only do objects fashioned from the latter endure in the ploughsoil better than those made of organic or ferrous materials, but detectorists will often filter out iron signals because of the interference caused by nails and other bits of modern ferrous debris. Given these various provisos, the resulting PAS dataset is perhaps less random than 'haphazard' (M. Millett pers. comm.)

PAS data appear to be of utility for confirming overall patterns of settlement during the Roman period. Finer analysis may be of use when considering smaller areas. The two biggest categories of finds, brooches and coins, in particular would bear further analysis. At the minimum, PAS coin data can be analysed according to the framework developed by Reece (1991; 1995) for comparison with assemblages from excavated sites.

2.3.3 National Mapping Programme and Aerial Photography

The English Heritage National Mapping Programme (NMP) was launched in 1989 and aims to synthesise both old and new aerial photographs of archaeological sites and landscape across the whole of England. Kent was one of the counties chosen as a pilot area for the project and

thus has complete coverage; this has been converted to a raster layer for use within Kent County Council's GIS (Cuming 2005).

Where possible, cropmark information from the NMP has been converted into HER records, but these are far from reliable as few have been investigated archaeologically and so interpretation rests on morphology. For the present project, this resource is of limited utility since the majority of cropmarks suggested in the HER to be of suitable date are designated as IA/Roman or Prehistoric/Roman. More recent aerial photographs have in addition revealed many more cropmarks than are included in the GIS (ibid.).

Whilst this project endeavours to synthesise as much evidence as possible, the extensive use of undated cropmark evidence is likely to dilute patterning rather than add clarity.

2.4 Evaluation of potential and categorisation of records

The records were initially categorised into broad types which could be queried in Access. These include categories such as 'Building(s)'; 'Funerary'; 'Enclosure', etc.. Queries based on these categories were then used to classify the nature of the evidence further still ('Structural'; 'Cemetery'; 'Cropmark', etc.) and to assign keywords/codes more closely to identify the type of find ('Building ceramics; C [=cremation]; 'Rectilinear enclosure' etc.).

As might be expected, this is a highly varied dataset both in terms of content and quality and for this reason the evidence has been weighted according to a number of factors as shown in Table 2.1 below. This was a complicated and to an extent a subjective process as, for instance, a well-documented antiquarian excavation may in some cases be more informative than an inadequately published recent one; like-for-like, however, one expects that work done in the last twenty years will be recorded to a higher level of detail and be informed by more recent academic approaches. Although the quality of the evidence broadly decreases as the table descends, it is more an indication of the *kind* of evidence one is dealing with than anything else. In categories 1-3, the letters a-d indicate decreasing qualities of evidence; in categories 4 and 6, numbers i to iv indicate different types of evidence.

Weighting of sites
1-3: Excavated structures/Features
1 Sites planned and excavated to recent professional standards a complete b substantial c partial d inadequate publication e evaluation or survey only
2 Sites excavated in later 20c a complete b substantial c partial d inadequate publication
3 Antiquarian up to early 20c excavations a complete b substantial c partial d inadequate publication
4-9: No excavated structures/features (other than isolated pits)
4i Surface scatters/excavated material in association with AP 4ii Surface scatters/excavated material in association with geophys 4iii Surface scatters/excavated material in association with earthworks/cropmark/unexcavated structural remains 4iv Structural remains observed but unexcavated
5 Surface scatters/excavated material without supporting AP/geophys/ earthworks/structural evidence (including chance finds of e.g. burial groups by workmen, etc.)
6i AP evidence without supporting physical evidence 6ii Geophys evidence without supporting physical evidence 6iii Earthworks without supporting physical evidence
7 Lost (unexcavated) structures
8 Other brief reports/antiquarian notes
9 Observed but unexcavated remains

Table 2.1 Weighting of HER evidence

Although this method of weighting proved initially useful, it ultimately proved unwieldy and the subcategories (a-d; i-iv) were omitted from the GIS datasets.

Having been classified and weighted, the records were divided into one of three broad categories, 'Class A' ('activity foci'), 'Component' or 'Class B' (supplementary evidence). Class A evidence is defined as a location where the archaeological evidence is strong enough and of such a nature as to be able a) to state with confidence that this was a focus of activity in the period under consideration and b) to have the potential for further analysis within the scope of this project. It is likely that many other foci of activity are represented amongst the Class B supplementary evidence recorded in the HER; these provide a 'background noise' of wider activity, are important for putting the Class A evidence into context and may be useful for

broad brush analysis, but do not bear individual close focus analysis. Criteria for judging these latter three categories are shown in Table 2.2:

Class A Structural evidence of building Scatter including sufficient building materials to imply immediate presence of building Complex of ditches and/or pits/other features Presence of hearths/ indications of industrial processes Combination of the above Cemetery Features identified on AP with associated finds
Component (of larger site) As above, when known or suspected to be related to a separate entry in HER (this for practical purposes, for ease of tying together related records) Group of features (e.g. field system) implying nearby presence of settlement
Class B Other scatters/isolated finds Isolated pits or other features Brief notes (often antiquarian) implying the presence of a site, but without sufficient data to verify Interventions implying the presence of a site, but with insufficient available documentation Small interventions (e.g. rescue or PPG 16) with no sound structural evidence and which provide only keyhole views Features identified by AP strongly suggestive of IA or Roman occupation but without supporting archaeological evidence Isolated burials

Table 2.2: Criteria for categorising HER records

A small number of (mostly nucleated) sites included in the dataset fall outside this classification system: most are classified as 'local centres' (Roman period), '*oppida*' or 'hillforts' (Iron Age, sometimes with later evidence). Records with only four-figure grid references and those which referred solely to coin findspots were excised. Records representing components of larger sites have been aggregated.

2.5 Chronological framework

A further important level of categorisation involved the assignation of date ranges to the evidence, particularly to that of Class A evidence. Dating of any kind (beyond broad period)

exists for only a minority of records and in many cases even these are only approximate, and so a broad framework has been adopted:

- Late Iron Age (c. 100BC-AD 43)
- Indeterminate LIA/Early Roman date ('Transitional')
- Early Roman (AD 43 - c. AD 130)
- Mid Roman (c. AD 130-260)
- Late Roman (c.260-410)

Dating within these parameters has been possible for only 537 records of the Core Dataset (see below) and for 247 records of Class A Evidence. These have been utilised in Chapter 5 to outline a broad trajectory for rural settlement in Kent during the Roman period.

2.6 The final dataset

The final ('Core') Dataset for the Roman period (including the Transitional period) comprises 1056 entries. An overlapping dataset for the Late Iron Age (also including Transitional evidence) comprises 308 entries. These are presented as Appendices 1 and 2. Except in the few cases where none exists, each is given its HER number. Relevant bibliographic details are given within the text for all sites which are directly referenced. Further bibliography/sources may be accessed via the online HER for many of these and for sites not explicitly mentioned in the text. Within the Core Dataset there are just 385 records classified as Class A (with the addition of 12 local centres). Different topics and themes draw on different subsets of data and the quality of these is assessed in the relevant chapters.

2.7 Geographic and environmental data used for analysis

Datasets and shapefiles for GIS mapping have been gathered and/or digitised from various sources. Ordnance Survey and British Geological Survey (BGS) data have been downloaded from EDINA Digimap. Some of these data are less accurate than one might hope. In particular the courses of rivers downloaded as shapefiles proved somewhat inaccurate so most of the larger watercourses have been re-digitised. The BGS geological data are extremely detailed and have been simplified into a more comprehensible form. Elevation data (both SRTM digital elevation and contour lines) are open source data obtained from EDINA's ShareGeo Open site and made available under Public Domain Dedication and License v1.0. The Agricultural Land

Classification shapefile derives from Natural England's website under the Open Government Licence for public sector information.

Soil information proved more problematic. In 2001 the Soil Survey was incorporated into the National Soil Resources Institute administered by Cranfield University and licences for GIS data, particularly on the scale required here, are prohibitively expensive. Shapefiles for Ease of Cultivation and Brown Earth Soils were, therefore, created by the digitisation of paper maps included in Soil Survey Bulletin No 9 (Fordham and Green 1980) with oral permission from the Ordnance Survey.

Information on climate was digitised variously from paper maps (Burnham and McRae 1973) and from the Met Office website. The *pays* were digitised from Everitt 1986 with reference to the BGS geological shapefile. Information on land cover has only just (January 2014) become available in digital form, again via EDINA Digimap.

2.8 Artefactual and Ecofactual data

It was originally hoped that it would be possible to compare a corpus of sites in relation to their morphology (particularly for non-villa sites), ceramic, small finds and environmental data. Relatively few sites produced good environmental evidence, however, and on closer examination of the records available it also became apparent that there are too few detailed small find reports of sufficient size to warrant a general comparative exercise (as undertaken by Cooper [2007] or Cool and Baxter [2002]) amongst these.[ii]

The durability of ceramics makes them universal features in the archaeological record; although there is a degree of mismatch between those sites which have useful morphological information and those which have useful ceramic assemblages. This is partly because of the interim nature of much of the information available, partly because of the limited nature of many interventions and partly, particularly in the case of ceramic assemblages, a result of different levels of detail (or sometimes methodology) of analysis and recording. These problems notwithstanding, pottery assemblage analysis has been attempted with potentially useful outcomes (Chapter 10).

Querns and millstones form the only other almost universal and enduring category of find and information has been systematically collected on these. Querns and millstones were widely traded and tend to be identifiable as to source and so, like pottery, potentially form a useful

index of a site's connectivity and trading patterns (Chapter 12). The use of coin-loss patterns for site comparison has been pioneered by Reece (1995); suitable assemblages are not numerous in Kent, but a number have been amenable to analysis (Chapter 11).

Notes

[i] "GIGO": an axiom originating in the field of computer science which refers to the fact that if invalid data are entered into a system, the resulting output will also be invalid.

[ii] Indeed no scheme-wide small finds report was produced for HS1 for exactly this reason (Foreman 2004: http://archaeologydataservice.ac.uk/archives/view/ctrl/sfsswr/?CFID=12997&CFTOKEN=8B0D510F-6F13-4799-B98E7574A3BCF2EB)

3 The Physical Environment

3.1 Introduction

Before turning to archaeology, it is vital to have an understanding of the physical environment in which it was created and is now discovered; not only did the environment impact on the lives of those who lived during the Roman period in the area we now call Kent but for those of us investigating those lives it has influenced the survival or otherwise of the evidence as well as aiding or hindering its discovery. It is the underlying *longue durée* against which the *histoire événementielle* of human settlement has unfolded.

Kent is a county of sharply contrasting countrysides (Everitt 1986, 43; Garrad 1954, 1-2). It has long been recognised to fall naturally into well-defined districts or *pays*; these are a consequence of the area's varied geology which in turn has given rise in turn to a wide variety of soils and topographies. Whilst the pitfalls of environmental determinism are to be avoided, it would be unwise to suggest that aspects of the physical environment have no effect on settlement patterns, particularly in a predominantly agrarian society. Patterning may indeed be expected in settlement location if the population is not of such a size as to put undue pressure on natural resources necessitating the utilisation of more marginal or less desirable land.

3.2 Geology

The geology of Kent is summarised diagrammatically in Fig. 3.1.

Kent is situated on the northern side of one of the classic landform areas of Britain, the Wealden anticline (Fig. 3.2). This structure's sequence of Cretaceous rocks was laid down in a variety of marine and freshwater environments within and on the edge of a shallow subtropical sea. Subsequent earth movements in late Cretaceous or more recent times lifted and folded these layers into a broad, wrinkled, chalk-capped dome which in turn has eroded to reveal the strata exposed in east-west bands. The county's northern edge is fringed by bands

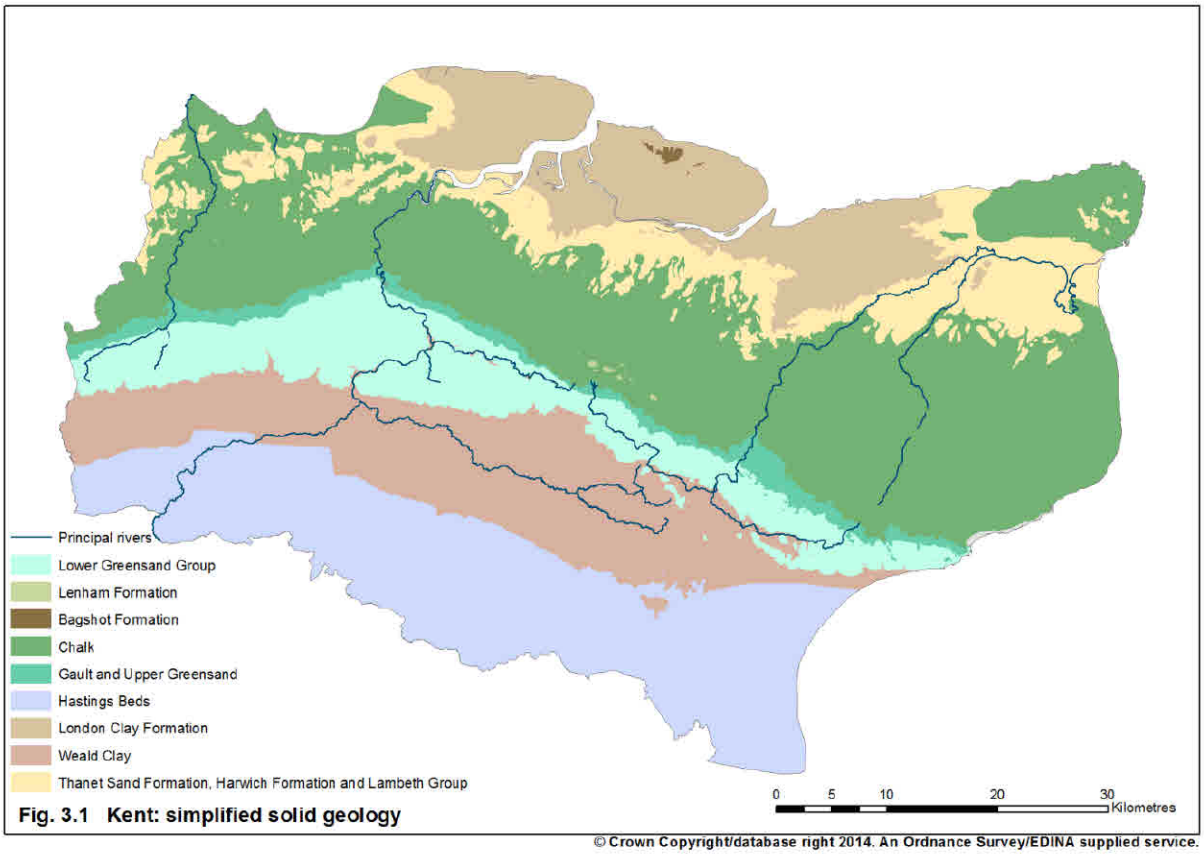


Fig. 3.1 Kent: simplified solid geology

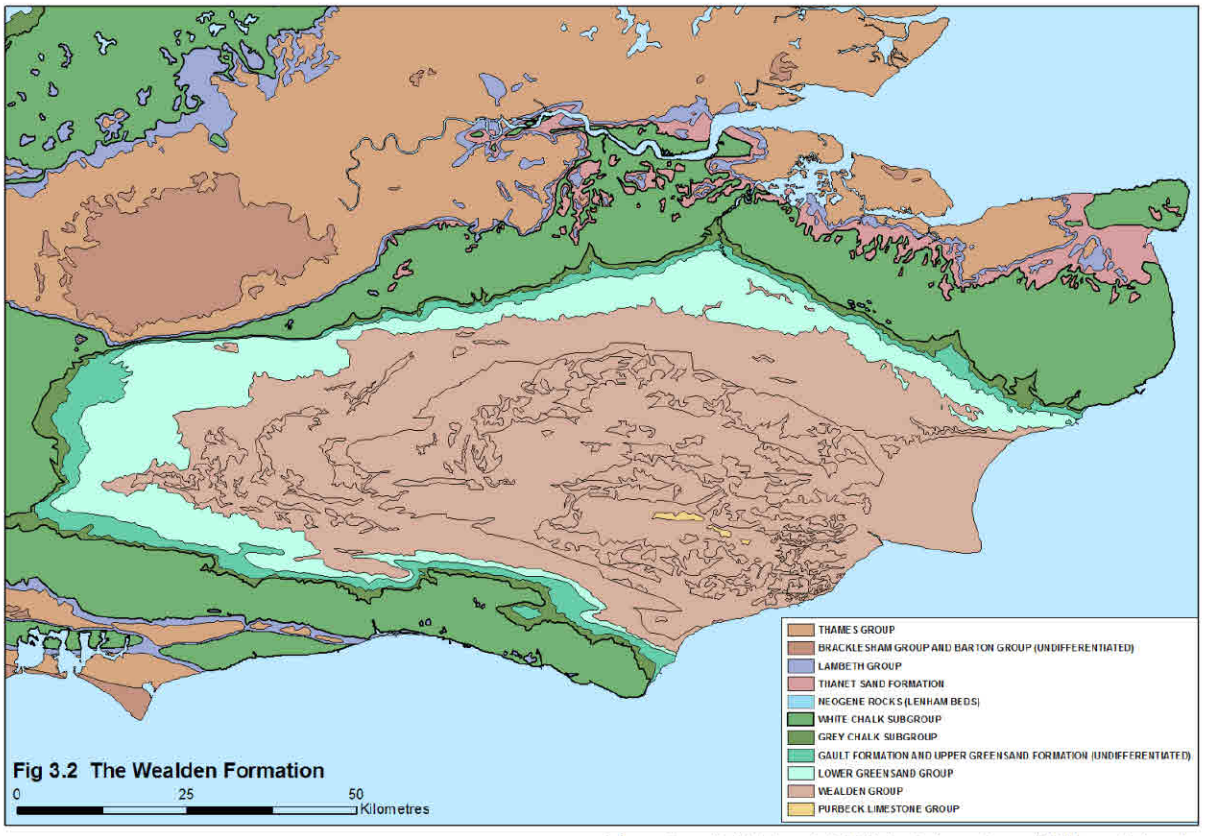


Fig 3.2 The Wealden Formation

of Eocene/Palaeocene deposits: the London Clay Formation and the sands, silts and gravels of the Thanet Sand Formation, the Harwich Formation and the Lambeth Group. As one passes through Kent from north to south, so one passes geologically back through time until reaching the oldest rocks of the sequence in the High Weald (Hastings Beds).

The belts of countryside which result are made still more varied by folding, by further subdivisions of the bedrock geology and by deposits of superficial or drift geology. Kent has notably high levels of drift geology, of which alluvium, brickearth and Clay-with-Flints are the most prominent elements. Drift deposits are of particular importance when considering the geology of the North Downs, the ridge of which is largely capped by Clay-with-Flints, in marked contrast to the South Downs (largely free of drift geology) and the Isle of Thanet which, together with the northern fringes of the North Downs dip slope has significant head deposits (brickearth [Fig. 3.3]) which have consequences both for cultivation of the land and also for industrial extraction of clays for brick and tile making: many archaeological finds have been made in the course of such activities.

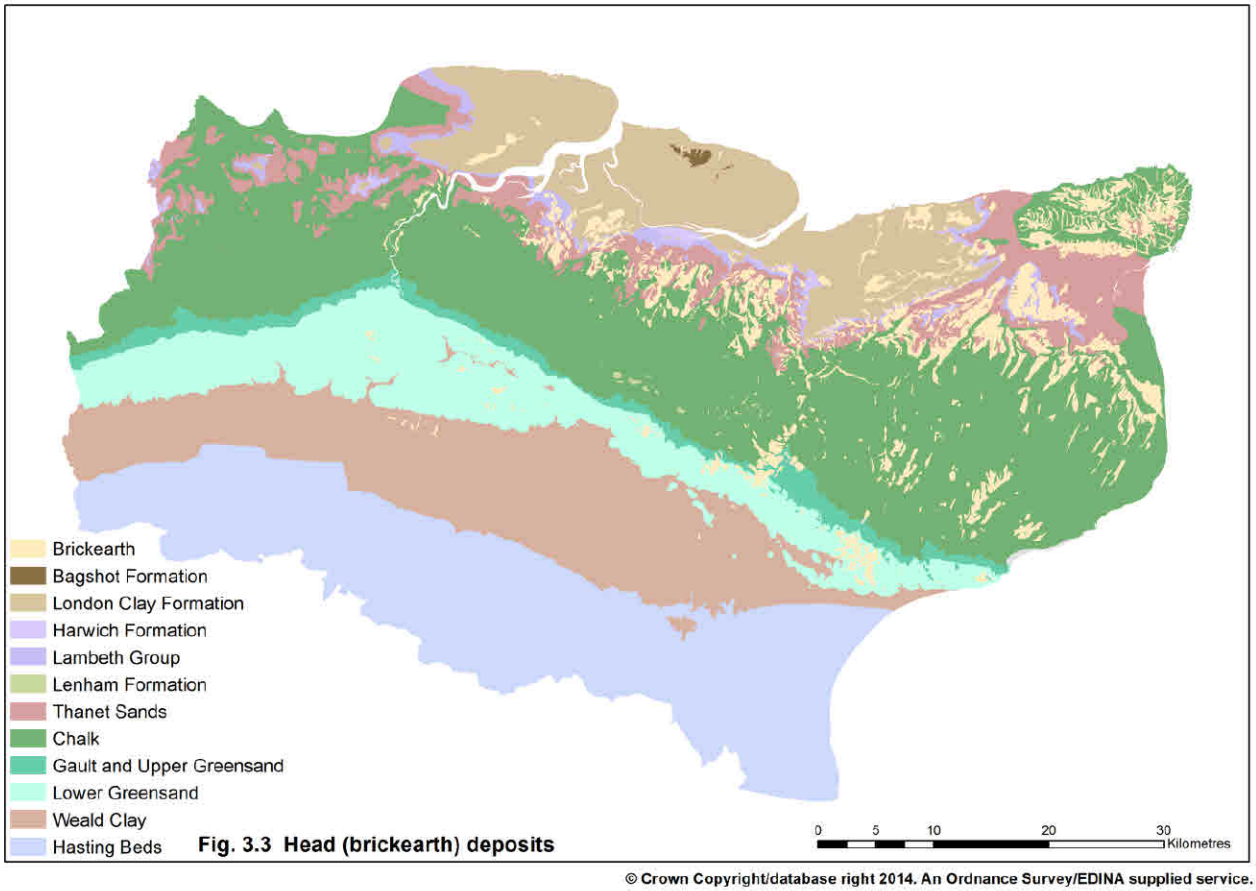


Fig. 3.3 Head (brickearth) deposits

3.3 Topography

The alternation of strata of hard, permeable rocks (chalk, sandstone and limestone) with those of softer, impermeable clays has resulted in the strong approximately east/west 'grain' of the county, resulting in elevated bands of chalk (North Downs), the (Lower) Greensand Ridge and the Hastings Beds (High Weald) overlooking lower-lying bands of softer and less permeable clays. There are consequently some sharp changes in elevation, particularly when travelling in a north-south direction, notably where the scarps of the North Downs and Greensand Ridge overlook the Gault Vale (Holmesdale) Low Weald respectively.

This geologically derived grain is, however, criss-crossed by a second, north/south (or more properly north-east/south-west) set of features. It is a noticeable characteristic of the physiography of Kent that its major rivers, the Darent, the Medway and the Stour do not follow the east-west grain of the county but instead have carved out valleys through the chalk which cross it at right angles; this is an indication of their origins prior to the erosion of the Wealden Dome. In fact, the northern half of the county's relief is characterised by a series of dendritic dry valleys following this north-east/south-west alignment, some of which carry seasonal streams (nailbournes) in very wet winters (Fig. 3.4).

These aspects of Kent's relief have had a strong impact on its post-Roman infrastructure, influencing the positioning of the road and rail systems over much of the county; as remarked by Everitt (1986, 36) it is still difficult to travel directly any distance east or west over the Downs as the major roads following the east-west grain lie to the north and south, while the Downs themselves are crossed by numerous sunken lanes follow the north-east/south-west grain; these are believed to have originated as droveways. Whatever their ecclesiastical /political origins and development, many of the county's parishes are likewise orientated on a north-east/south-west axis, with boundaries and field alignments sometimes clearly following geographical features such as valley bottoms, either directly or in parallel.

Topography determined the positioning of the principal prehistoric route through the county , the North Downs Ridgeway, which follows the North Downs escarpment (sometimes on the ridge, sometimes at the foot to avoid the Clay-with-Flints, sometimes following both in parallel). It perhaps had a slightly lesser impact on the positioning of the Roman roads (Fig. 3.5): although Watling Street follows what may have been the line of an earlier route along the foothills of the Downs (Margary 1973, 43), other Roman roads take in more varied terrain, the Dover to Richborough road in particular striking straight across country over hill and dale.

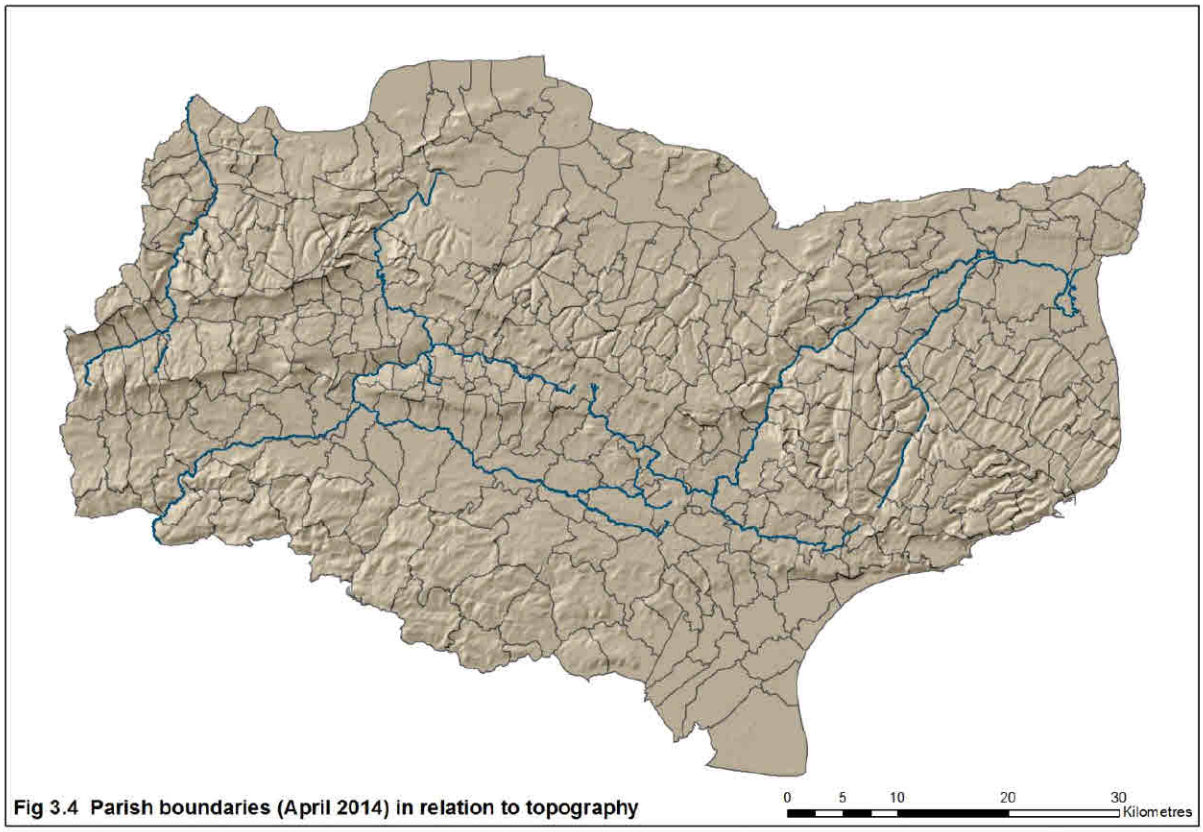


Fig 3.4 Parish boundaries (April 2014) in relation to topography

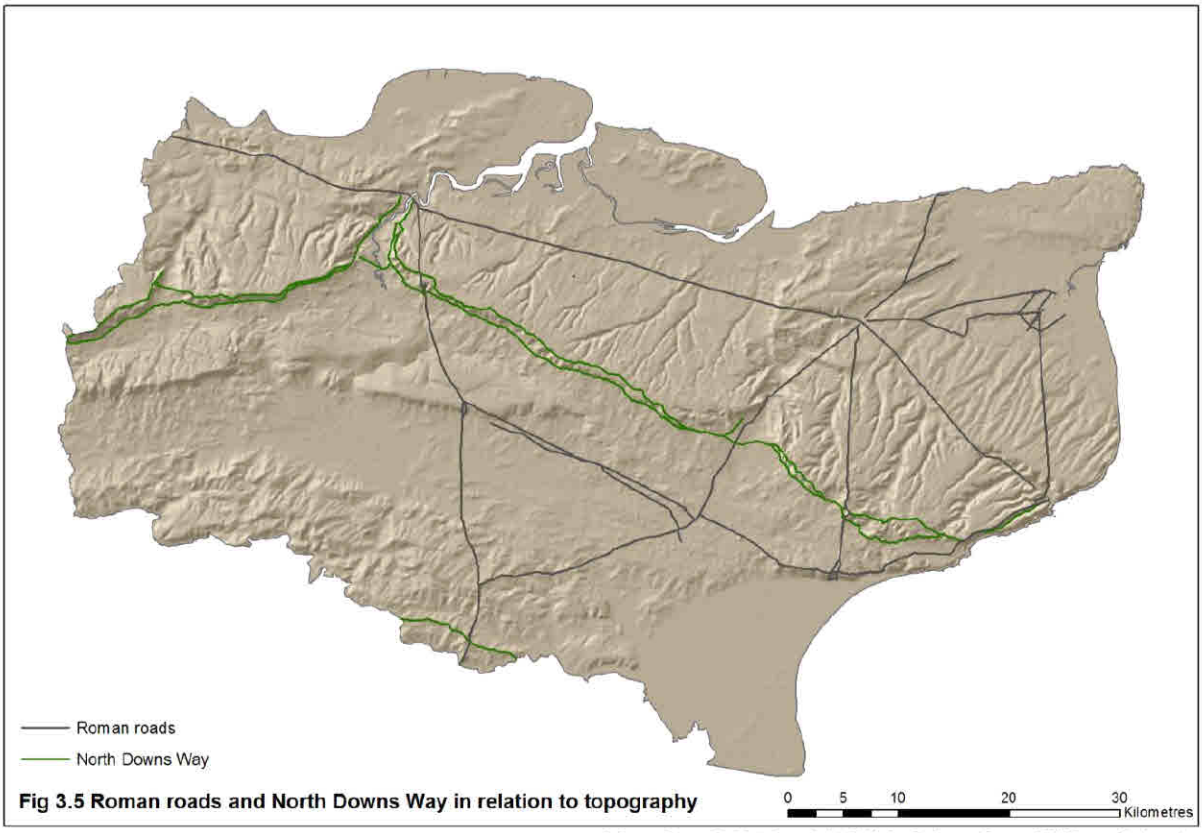


Fig 3.5 Roman roads and North Downs Way in relation to topography

3.4 Climate

Situated in the south-eastern corner of Britain, Kent has a relatively dry and mild climate with a mean annual temperature of around 10°C (Fig. 3.6); small but not insignificant variations occur as consequences of elevation and proximity to the county's long coastline. As might be expected, temperatures are generally warmer and suffer from less fluctuation in coastal areas despite the fact that these are generally quite exposed, whilst the coolest temperatures are experienced inland and are associated with the scarps of the North Downs and the Lower Greensand Ridge.

Although this variation in temperature may be small, amounting on average to no more than 2.1°C, it is sufficient to have a discernable impact on the length of the growing season. This is defined variously as the average duration of the period with a mean air temperature above 5.5°C (Burnham 1973, 1) or as the average duration of days from spring to autumn with a mean 30cm earth temperature above 6.0°C (Bailey 1980, 40). The start (and hence the length) of the growing season can vary by up to a month, from early March on Romney Marsh to April on parts of the North Downs and Lower Greensand Ridge (Fig. 3.7).[i]

Rainfall varies across the county by more than 200mm per annum (Bailey 1980, 31). Romney Marsh and those parts of North Kent below 60m elevation are the driest areas, whilst again, the High Weald, parts of the North Downs and the Lower Greensand Ridge have the highest rainfall. High rainfall increases soil acidity (Burnham 1973, 3) and is highly significant in areas of poor natural drainage, such as the High Weald, where it leads to soil waterlogging and leaching (ibid. 5).

Although there are a number of sources of evidence which may be used to attempt to reconstruct the climate of prehistoric and Roman Britain, these do not entirely accord with each other (Dark 2000, 27) and there is none directly pertinent to Kent. It is generally held that the climate deteriorated in the Late Bronze Age and Early Iron Age, becoming cooler and wetter, but that conditions improved in the Middle Iron Age (Turner 1981, 261). Recent research, however, has suggested that there were significant depressions in June-August temperature (at least in central Europe) in c. 350 BC and again in c. 50 BC (Büntgen et al. 2011). According to Dark (2000, 27), conditions at the beginning of the first millennium AD may have been similar to those of the present day, possibly becoming warmer during the

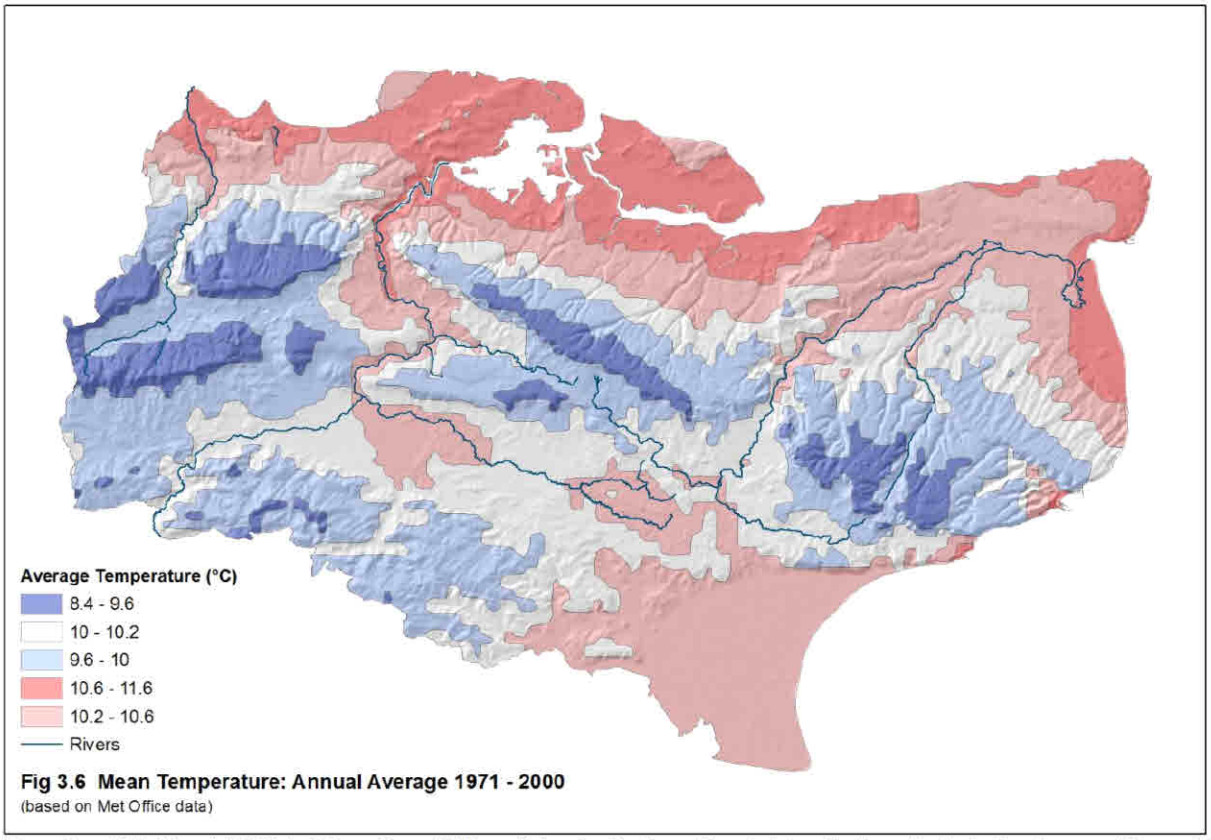


Fig 3.6 Mean Temperature: Annual Average 1971 - 2000
(based on Met Office data)

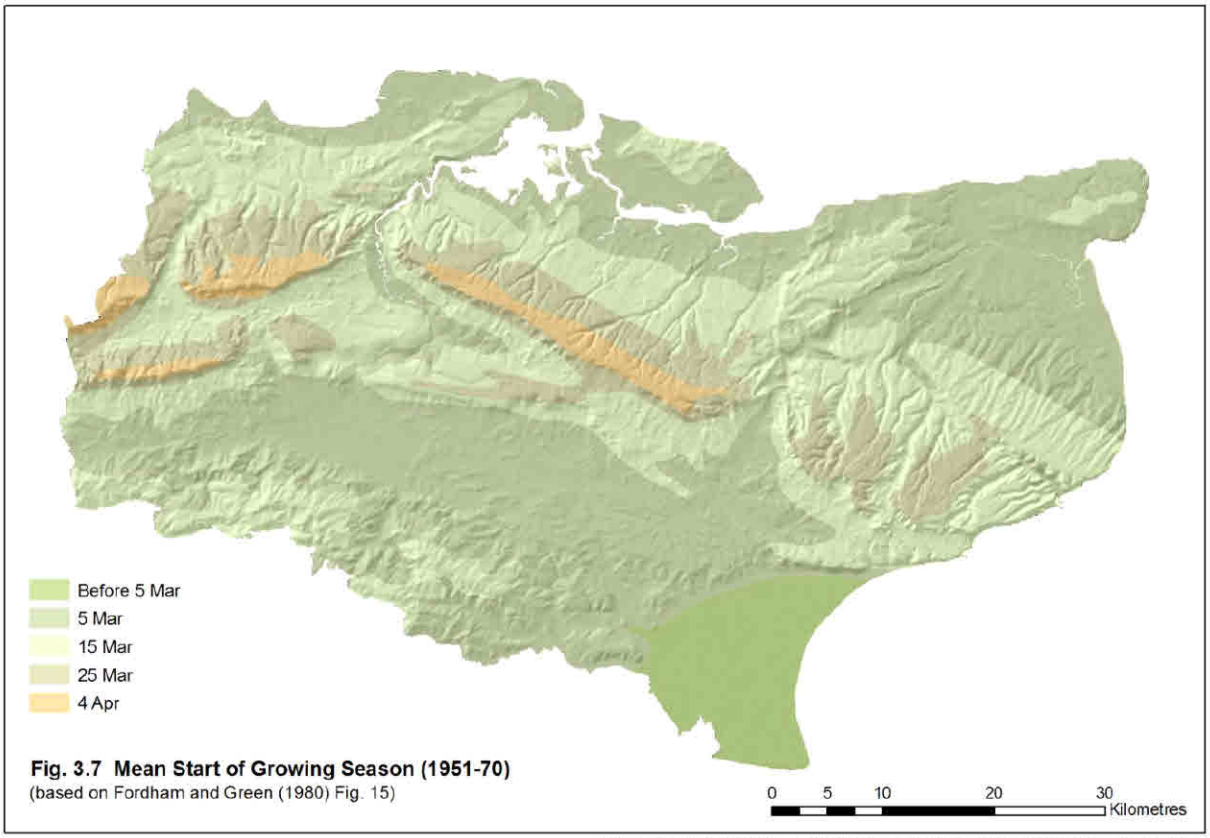


Fig. 3.7 Mean Start of Growing Season (1951-70)
(based on Fordham and Green (1980) Fig. 15)

Roman period. The practice of viticulture in the province is often seen as evidence of this (as, for example, at Wollaston, Northamptonshire; [Brown et al. 2001]) before a further deterioration starting in the fifth century AD. Again, Büntgen et al.'s data for central Europe differ somewhat, suggesting reduced temperatures and raised precipitation somewhat earlier during the 4th century. Whatever the precise climatic conditions in Kent during the Roman period, the *relative* variations in temperature and rainfall and their effect on the agricultural potential of different areas are likely to have been largely the same as at present.

3.5 Sea level/coastal change

Coastal change is a complex issue involving a number of factors; these include eustatic and isostatic sea level changes, coastal erosion and coastal deposition. Kent is subject to all these influences. During the last ice age, the weight of glaciation over Scotland caused crustal depression in the north of Britain with compensatory uplift in southern areas. Deglaciation has reversed this process, so that southern areas of Britain are still sinking, leading to rising sea levels, possibly enhanced by tectonic subsidence of the southern North Sea basin (Long and Roberts 1997, 29). This has not been a uniform process, however: mean sea level appears to have risen more in the Thames estuary and East Kent Fens than in Romney Marsh and it seems that local factors have a strong influence (ibid., 31-32) as they do on all aspects of coastal change.

Coastal erosion has occurred and continues to occur widely in Kent, but rates are highly variable and at present it is impossible to reconstruct with any exactitude the coastline of the Roman period although an attempt has been made by Young (2004). Indeed there appears to have been no systematic attempt ever to reconstruct the coastline of England for the period (as remarked by Allen et al. [1997, 124]). The chalk cliffs at Beachy Head are presently estimated to erode at a rate of approximately 1.1m per annum (Short 2006, 36) and those of the Isle of Thanet by 0.3 to 10m (McRae 1973a, 37), whilst Folkestone Warren is notorious for land-slippage caused by the instability of the Gault Clay underlying the chalk; this has already resulted in the loss of part of the East Wear Roman villa (Fig. 3.8).

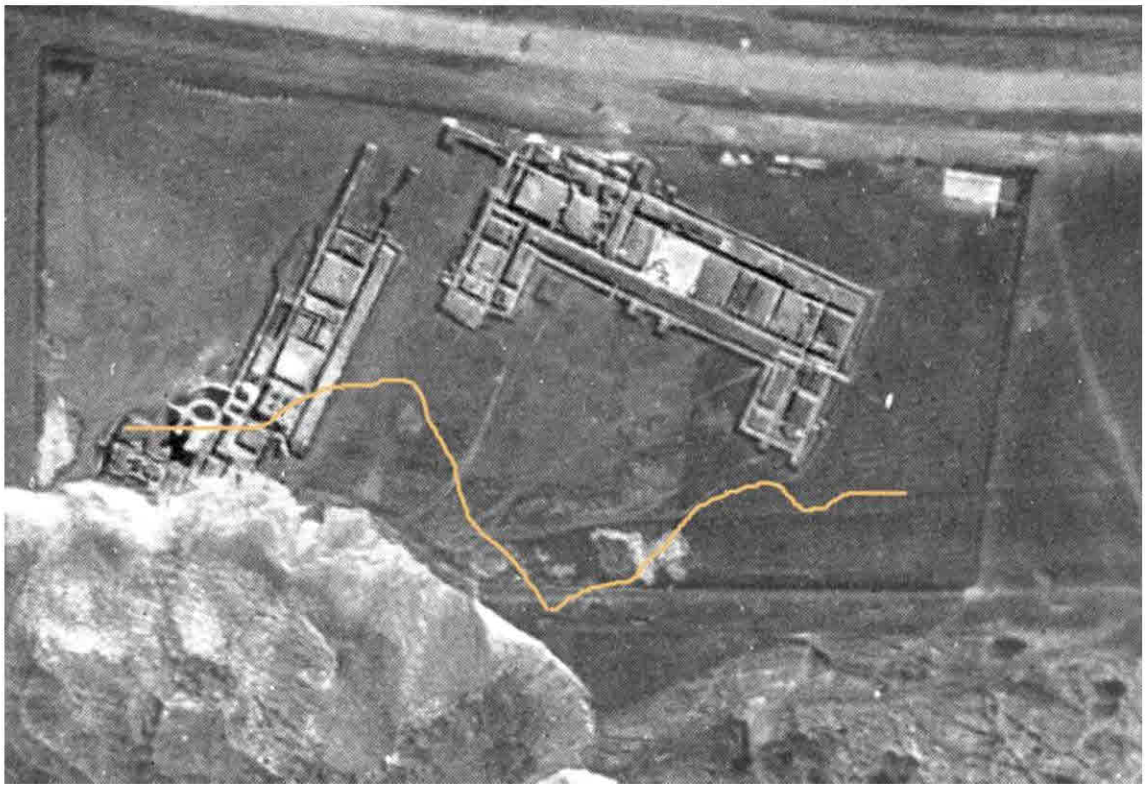


Fig. 3.8 Folkestone Villa in 1924, with graphic of current coastline superimposed.
(Aerial Photo RAF *c*. 1925; composite with modern cliff line courtesy of *Folkestone: A Town*

Along the North Kent coast the London Clays of the Thames estuary have been estimated presently to be retreating by up to 1m per annum (Short 2006, 35). From Sheerness to Herne Bay the retreat is in the order of 1 and 5m per annum (Young 2004). The present day North Kent marshes, however, have a complex history of repeated deposition and erosion. Originating as tidal mudflats and salt marshes resulting from the drowning of the Medway valley in late prehistoric times, the area was occupied during the Roman period. Here there is evidence not only of intertidal activity in the form of salterns, but for pottery manufacture, buildings and burials indicating the existence of drier conditions. Subsequent marine incursions were 'inned' by the erection of sea defences from the beginning of the 13th century (Young 2004, 4); these substantially increased the depth of marsh by now covering the Roman and Saxon levels. The present situation is one of sea level rise and coastal retreat with many Roman sites now existing in the intertidal zone. Indeed the recent North Kent Coast Rapid Coastal Zone Assessment Survey undertaken by Wessex Archaeology (2004; 2005; 2006) found that many sites already recorded on the Kent HER were either no longer visible or had become inaccessible.

Romney Marsh (properly the Romney, Welland and Denge Marshes) has been the subject of a substantial body of research, notably by Green (1968) and more recently under the auspices of the Romney Marsh Research Trust (1998-2011; available online). Following the rise in sea level at the end of the last ice age, a shallow sandy bay formed between Hythe and Fairlight (E. Sussex). The relict shoreline of this bay is still visible as a degraded cliff line which runs almost continuously from Winchelsea to Hythe; into it flowed the Rivers Rother, Tillingham and Brede. Under the influence of longshore drift, a series of shingle spits eventually formed a more or less complete bar across the mouth of the bay, with sediment deposition leading to the creation of saltmarsh and mudflats. Drawing on the pedological work of Greene (1968), Cunliffe (1988) has tentatively created a model of the coastline during the Roman period (Fig. 3.9). This reveals an inland lagoon opening to the sea near Hythe through a channel kept clear both by tidal water entering and leaving the lagoon and by the outflow of freshwater from the hinterland (ibid., 83). This provided the setting for the Roman 'Saxon Shore Fort' of *Portus Lemanis* (Lympne) and almost certainly for an earlier, as yet undiscovered *Classis Britannica* base (Cunliffe et al. 1980, 227; Millett 2007, 175). It is important to note that the situation was dynamic (and not fully understood): the coastline was changing throughout the Roman period as alluviation continued to take place; certainly there is evidence of erosion and/or alluviation by the late Roman or immediately post-Roman period (Cunliffe 1988, 83). Indeed, the site of *Portus Lemanis* itself was subject to at least three landslides Hutchinson et al. 1985). The present day landscape is a result of a combination of natural and cultural processes: the effects of longshore drift and alluviation have continued, as have coastal inundations consequent to breaching of the shingle bar; meanwhile reclamation and the erection of sea defences have taken place since the Saxon period.

Finally, consideration must be given to the Wantsum Channel, into which the River Stour disgorges. Until the early 19thcentury (by which time the combined effects of natural sedimentation and land reclamation finally closed its last vestiges) this waterway divided the Isle of Thanet from the Kentish mainland; the last ship had sailed through it over a century earlier, in 1672.

The character of the Wantsum Channel in the Roman period is a matter of some debate: it has been argued by some (e.g. Philp 2002a; Perkins 2007) that it was a wide sea channel, whilst others (Dowker 1897; Moody 2008, 35-52) contend that it was much narrower. Moody (ibid., 49) suggests that though relatively narrow, the channel was probably at its deepest between the Roman and late Anglo-Saxon period. The eastern end of the channel was partially

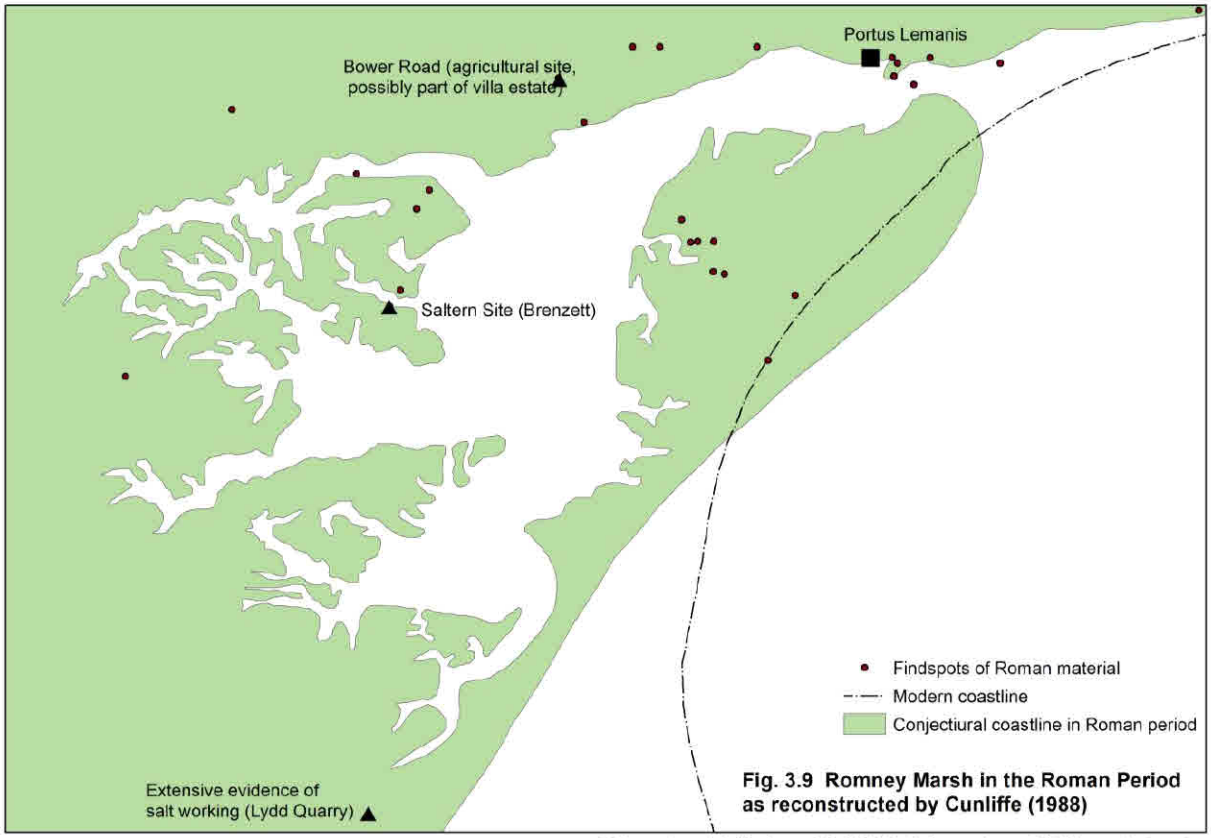


Fig. 3.9 Romney Marsh in the Roman Period as reconstructed by Cunliffe (1988)

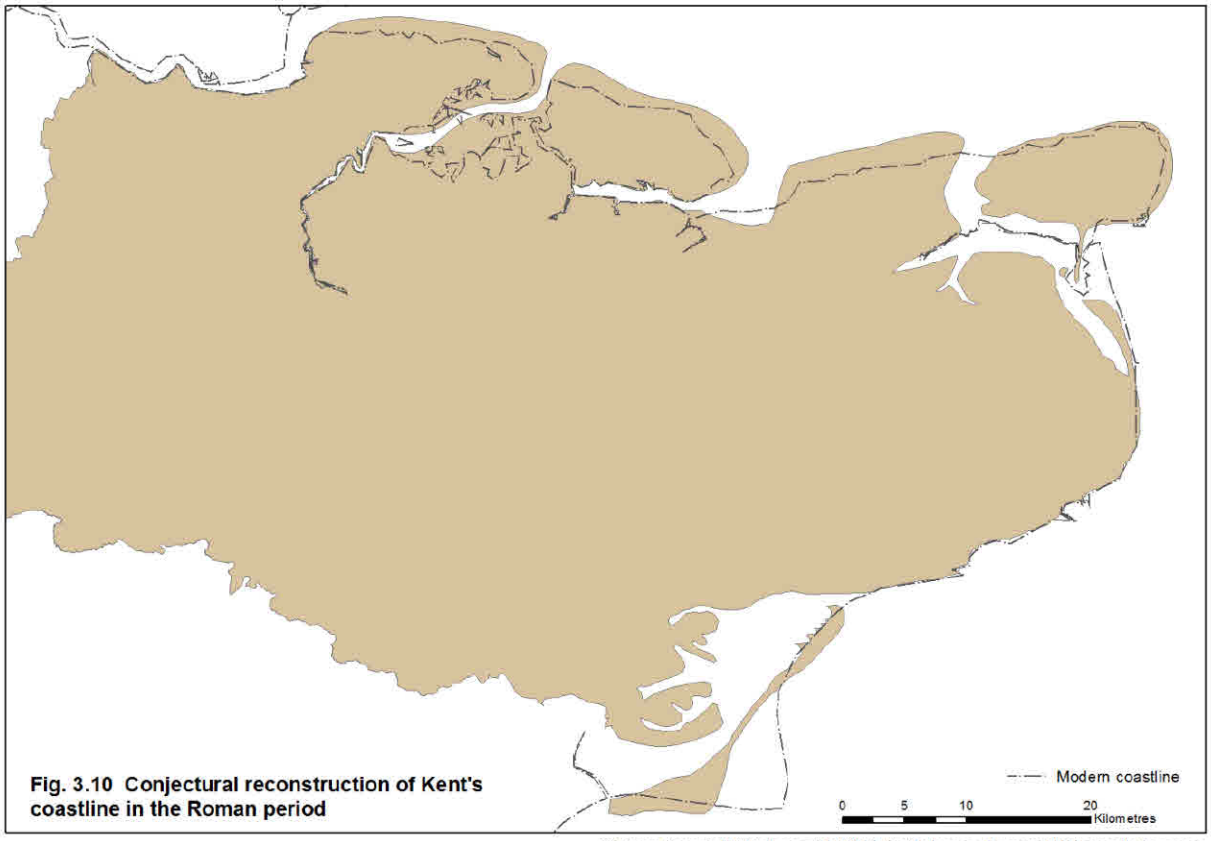


Fig. 3.10 Conjectural reconstruction of Kent's coastline in the Roman period

obstructed by the shingle Stonar Bank, which has provided evidence of occupation during the Roman period at its southern end. Some writers (Hardman and Stebbing 1940; 1941; 1942; Hawkes 1968) have followed Dowker's suggestion (ibid.) that there were entrances to the channel at both north and south ends of the shingle. In any event the existence of the Stonar Bank would have created a tidal backwater or lagoon providing a sheltered route for ships making their way around the coast to or from the Thames and a safe anchorage for the Roman army installations and civilian settlement at Richborough. Moody's most recent (2011) opinion is that "the Wantsum was a relatively low energy system where the fresh water river meandered through the valley bottom, between a series of high 'islands' periodically swelling with the tides to its maximum width, which would not all have been navigable"(pers. comm.).

The present day situations of the 'Saxon Shore' forts of Richborough and Reculver at either end of the Wantsum dramatically illustrate the different effects of coastal change: while the silting and reclamation of the Wantsum has left the remains of Richborough fort approximately two miles from the sea, coastal erosion at the northern end of the channel has caused much of the site at Reculver to be lost to the sea. Recent work at Richborough (Wilmott and Tibber 2009) appears to have demonstrated that the Roman waterfront (whether coast or a loop of the Wantsum) lay immediately to the east of the fort.

An approximation of the coastline of Kent during the Roman period is presented as Fig. 3.10. It is based on the work of Green (2004), with the Romney Marsh and Thanet areas amended to reflect the work of Cunliffe (1988) and of Moody (pers. comm.).

3.6 Soils and agricultural capability

Allusion has already been made to Garrad's statement regarding what Everitt (1986, 44) calls Kent's "bewildering variety of local soil types":

> …owing basically to the geological conditions, the nature of the soil probably varies more frequently and more abruptly than in any other county of similar size (1954, 2).

The soils of Kent have been described in detail by Fordham and Green (1980) for the Soil Survey. Earlier studies, such as those of Garrad (1954) and particularly Hall and Russell (1911) are useful for their insights into the influence of soil types in ages prior to the advent of modern heavy machinery or the intensive use of fertilizers.[ii]

Everitt (1986 23), challenging the myth of Kent as a wealthy county, points out that although commonly seen as 'The Garden of England', soil fertility is not Kent's most prominent characteristic. Citing Garrad (1954, 1-2) again:

> ...one must not think of the whole county as a fertile garden. There is a larger proportion of good and medium quality land in Kent than in the other Home Counties, but there is also a great deal of poor land ... there are also large stretches of poor, dry chalk downland and wide belts of wet, stubborn clay.

The intractability of the latter is indicated by the fact that oxen were still being used as draught beasts in the Weald in the nineteenth century and indeed were to be seen in Cranbrook as late as 1896 (Martin 1896, 30; Fig. 3.11)

From Photo by] TEAM OF OXEN.—THE PROPERTY OF MAJOR J. R. ATKIN ROBERTS. GLASSENBURY. *[E. J. Holmes.*

Fig. 3.11 Working Oxen in Cranbrook in the late 19th century (Martin 1896)

A number of shapefiles have been created or imported for the purpose of GIS analysis of settlement patterns in relation to soils and land use capability. Overall land use capability has been mapped by Natural England for the Agricultural Land Classification (ALC) system. Designed for use within the planning system, the ALC classifies agricultural land into five grades according to a complex system of criteria including climate (temperature, rainfall, aspect, exposure and frost risk), site (gradient, micro-relief and flood-risk) and soil (depth, texture and stoniness) and is available as an ESRI shapefile for use within GIS. While this is an index of land use capability for the late twentieth century and notwithstanding the fact that on local level conditions may have changed since the Roman period, nevertheless it is a general indication of those areas most favourable to agriculture.[iii]

Ease of cultivation is likely to have been a factor of some importance to farmers in a pre-industrial age and for this, information was digitised from the printed Soil Survey map (Fordham and Green 1980). The most fertile soils are the well-drained non-calcareous brown earth soils and these have been digitised from the same source.

In recent history, Kent's reputation as the 'Garden of England' has rested largely on the produce of its orchards and hop gardens, but this is a relatively recent phenomenon. Hops were only introduced to Britain from Flanders in the 16th century; McRae (1973b, 106) suggests that refugee Flemings also did much to encourage the growing of fruit in the county, as did the activities of Richard Harrys, fruiterer to Henry VIII, who planted orchards in thirty locations in Kent. In the Roman period, it is likely that the staple grains (emmer and spelt wheat and barley) formed the bulk of production. Much of this may have been at subsistence level, but large scale production, or the collection of grain from a considerable number of smaller producers, is implied by the existence of a number of substantial granaries.

Land which is unsuitable for the growing of crops may still be exploited as pasture, although there may be limitations in terms of access to water (e.g. on the Downs), or conversely excessive water retention, leading to 'poaching' of the ground in winter (e.g. on the Low Weald).

3.7 Woodland

Kent is one of the most heavily forested counties in England. Although little of today's woodland is entirely 'natural', the bulk consists of 'ancient woodland' that is land that has had continuous woodland cover since at least AD 1600. According to the Forestry Commission (n.d.), Kent has 29,737 ha of ancient woodland. These represent 75% of Kent's total woodland areas and approximately 8% of the county's area (Fig. 3.12).

The lattice of woodlands that we see today is but a remnant of the former extent of forestation and has tended to survive on poorer areas of soil that have been uneconomical to put to other uses; these include not only heavy soils such as those of the Low Weald or the Clay-with-Flints of the Downs, but also areas with light, dry, sandy or stony soils or where steep gradients make cultivation impossible (as on the scarp of the Downs). This does not mean that the woodlands are or were unproductive. Far from it, for historically the oaks of Kent have been important sources of timber for ship building (Draper 2010; Andrewes 2000,

128) and timber framing, the forests have provided important food for livestock in the forms of pannage and browse, and both chestnut and hazel have long been coppiced to provide nuts, timber and hurdles. The former prevalence of woodland is witnessed toponymically; aside from the derivation of 'Weald' from the Germanic *wald* (forest), Kent abounds with woodland-derived place names (e.g. names ending in -den, -hanger, -hurst, etc.).

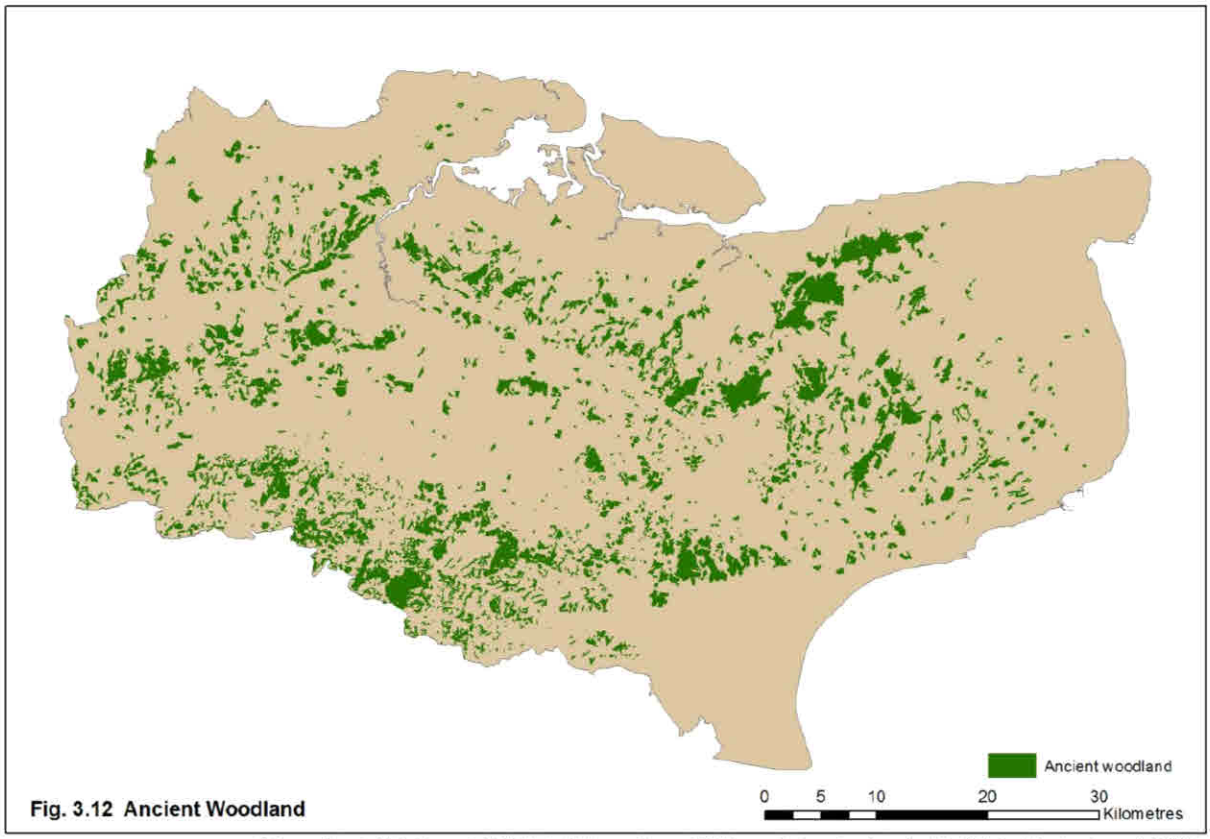


Fig. 3.12 Ancient Woodland

As with the coastline, the extent to which Kent was covered by woodland during the Roman period is again not known with exactitude. For Everitt (1986, 30), Kent was overwhelmingly a region of forest well into the Jutish period; the conventional view has been that the area between the North and South Downs was occupied by the great forest of *Silva Anderida*, later known to the Saxons as Andredsweald. This Latin name does not seem to be attested in ancient sources, although it appears in early Saxon charters variously as *Saltus-Andred*, *Silva-Andred*, *Saltus communis,* or *Silva regalis* (Horsley 1921, 75). Everitt (ibid.) further argues that the present Forest of Blean once extended from the Thames estuary to the Stour levels.

More recently, environmental evidence has called into question the idea of a dense, unbroken prehistoric woodland. Instead, many areas may have been more open and park-like with open

areas maintained by grazing animals (Vera 2000, 99-101). Woodland management may have started in prehistoric times with the creation of forest glades for the purpose of luring animals for hunting (Bannister 2007, 24). These areas would then be maintained and extended by the herbivores they attracted, creating open areas suitable for agriculture and ultimately settlement.

There are relatively few pollen sequences for Kent, but evidence of prehistoric woodland clearance comes from Brook, near Ashford (Kerney et al. 1964) where a predominantly wooded landscape was replaced by open grassland by c. 300-500 BC; whilst at Wingham and Frogholt, Godwin (1962) found evidence of deforestation occurring first in the Bronze Age, with "a late phase of greatly accelerated disforestation" (ibid., 85-87) occurring at both sites in the Early Iron Age. Molluscan evidence sealed beneath the Juliberries Grave long barrow in the Stour Valley showed that this area was already open land in the Neolithic (Evans 1975, 120).

One cannot interpolate for the whole of the county from a limited number of examples and indeed evidence from the Iron Age camp at Squerryes Court, Westerham in West Kent indicates that cultivation there was taking place in woodland clearings. Nevertheless, it was woodland that was already managed and by then consisted mainly of hazel (Dimbleby 1969; 1970).

It might be suggested that at least a proportion of the place name evidence for woodland cover in the Saxon and later periods relates to later reforestation. Evidence from other parts of south-eastern Britain indicates that major deforestation had taken place by the end of the Iron Age (Dark 2000, 45) and while the same is not necessarily true for Kent, the sparse environmental evidence we have suggests that at least some degree of woodland clearance had taken place. Further evidence of clearance can be imputed from the existence of archaeological sites. It seems unlikely that the areas of relatively dense Roman period occupation in the fertile belt of land to the north of Watling Street were thickly wooded; equally those areas of the Downs and Thanet which are thickly studded with Bronze Age tumuli are likely to have been cleared of woodland if visibility is as important an aspect of these monuments as is traditionally assumed. Certainly some prehistoric and Roman monuments now exist within ancient woodlands (e.g. tumuli belonging to both the Bronze Age and the Roman period within Gorsley Wood, Bishopsbourne), whilst evidence of prehistoric field boundaries exists at Trundle Wood, Wormshill, and at Hucking (Bannister 1998; Bannister and Bannister 1993). These facts of themselves do not tell us *when* reforestation took place but as many Romano-British settlements in Kent seem to have been abandoned in the early to

mid-3rd century, there must be a strong possibility that once-cultivated or managed land also went out of use, allowing plenty of time for woodland regeneration before the Saxon period.

LiDAR surveys such as those recently carried out over the Weald Forest Ridge (mainly for Sussex), the Blean (disclosing a hitherto unknown hilltop enclosure on a hill adjacent to Bigbury [Sparey-Green 2010]) and the Medway Valley have great potential for further elucidating this matter.

3.8 Physiographic regions and *pays*

Whilst geology and the physical forces of nature will always underpin our experience of landscape, it is the interaction of people with the land, of culture with nature that ultimately defines the character of the environment in which we exist and in which our ancestors lived and worked: the open downland, the character of the woodlands, even to an extent the shape of the coastline of Kent are all products of this interaction. The diversity of the resulting sub-regions or *pays* has always been recognised by those who live within them and has in more recent years gained national and formal acknowledgement through initiatives such as the mapping of 'National Character Areas' by Natural England in order to inform planning decisions and Environmental Stewardship.

The cultural/physiographic regions of Kent have been defined by various writers. Variations between these serve to highlight not only the differing emphases of the authors but also the diversity of the area and the difficulty of drawing boundaries: McRae (1973a) and Young (2004) both highlight physical geography; Everitt (1986) integrates physical landscape with settlement; Short (2006) describes the Kentish regions within the wider context of the South East. The diversity and local character of the landscapes of Kent is well illustrated by Kent County Council's Landscape Assessment of Kent (2004) which describes no less than 114 character areas.

3.8.1 The Foothills (North Kent Region/North Kent Plain)

Despite its relatively low elevation, the North Kent coastal plain (Fig. 3.13) was formerly sometimes known as the 'Upland' because of its position relative to the North Kent Marshes. As this term is now ambiguous, Everitt (1986, 46) prefers the term Foothills while Young (2004,

2) calls it the North Kent Region, noting that it incorporates a variety of landscape types. These include the North Downs lower dip-slope, the London Clay Hills, the Thanet chalk plateau and stretches of low ground fringing the marshes. The Foothills form a narrow region, rarely more than three or four miles in width, but are largely responsible for the perception of Kent as a prosperous county for they have all the advantages of proximity to the sea, a high proportion of easily worked, fertile soils (including the so-called Brown Earth Soils and deposits of loessic brickearths), and penetration by three navigable rivers.[iv] They also benefit from relatively milder mean temperatures and longer growing seasons than many other parts of Kent.

The land is so naturally fertile that Hasted (1798, VI, 122-132) records that in the parishes of Bapchild, Tong, Teynham and Preston the land was never allowed to lie fallow, but cultivated by the 'round tilt' method, with a continuous rotation of barley, wheat and beans. Rent for this fertile land was high, so that in Bapchild,

> These expences oblige the landholder to make the most of his land, and not to suffer it to be lessened by hedge-rows and small inclosures, by which means most of the farms are thrown into two or three, or perhaps only one field, several of which contain sixty, seventy, one hundred acres, or more, and this makes the country more open and champion than the other parts of this county usually are.

It is largely through the Foothills that the route of Watling Street passes; the good communications afforded by road and rivers combined with the high productivity of the land have encouraged the growth of settlements and commerce: Everitt (ibid.) points out that there are more ancient boroughs and market towns on the Foothills than there are in the rest of the county. In the medieval period, the area was an important supplier of grain to the capital (Sweetinburgh 2010). By the later 16th century the thriving port of Faversham was almost entirely devoted to exporting wheat to London (Clark 1976, 373); whilst rioting in 1605 arose over the purchase of large quantities of grain for export to Spain in a time of local shortage (ibid.; Lansberry 2001, 96). By extrapolation that area is likely to have been important for supply to London in the Roman era and also perhaps to the Roman Army on the *Limes*, across the southern North Sea.

Alongside large extant areas of arable land, orchards, hop gardens and grassland, the Foothills consequently now have a higher density of urban settlement than any other Kent region. In the countryside, the region retains the generally open character described by Hasted; with the significant exception of the Blean (and further but smaller forested areas on higher ground at Shorne and Chattenden) it carries comparatively little woodland.

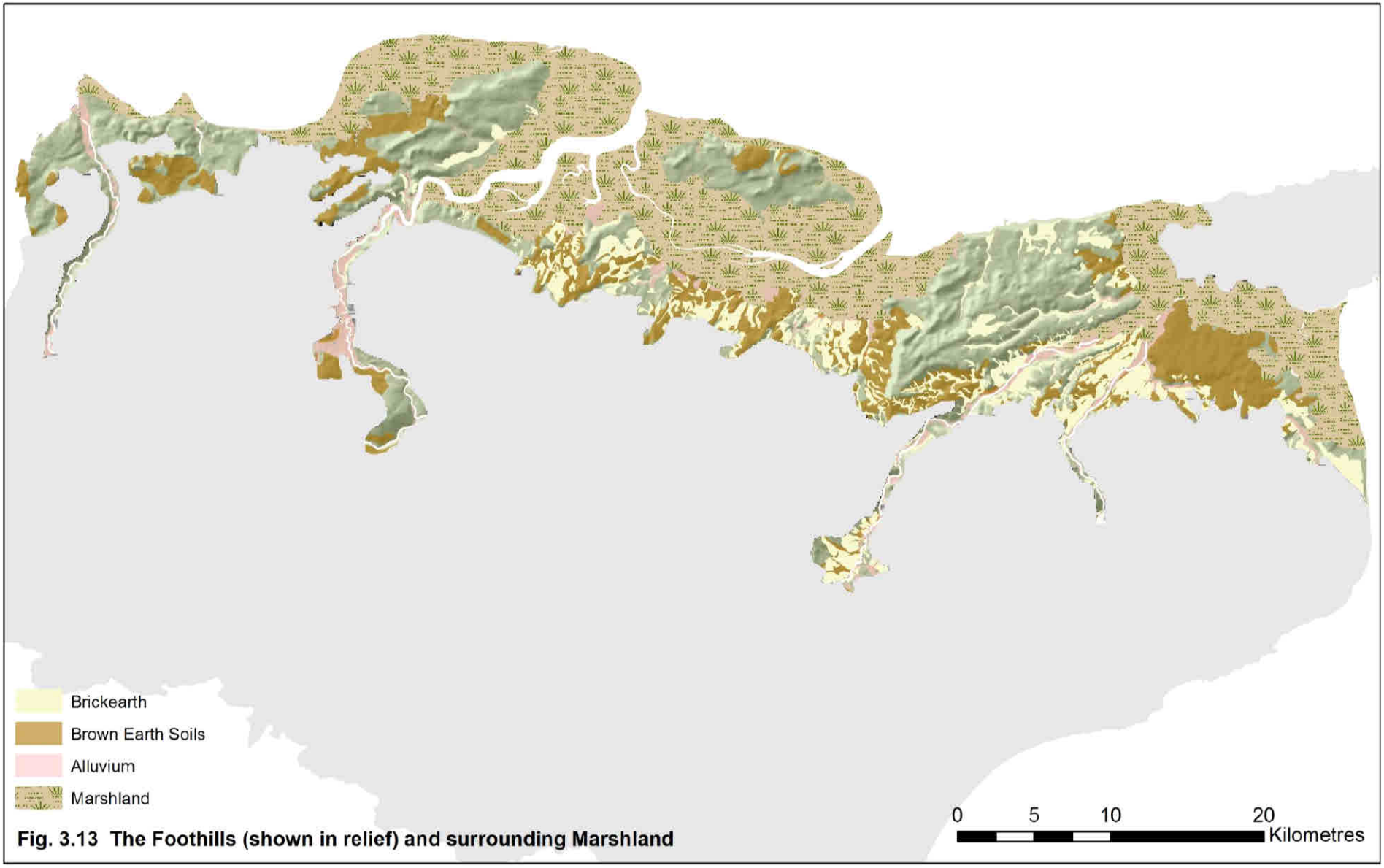


Fig. 3.13 The Foothills (shown in relief) and surrounding Marshland

Although Thanet is conventionally considered to be part of the Foothills or North Kent Region it is in fact a geological outlier of the Chalk; it will be considered in this thesis as a region in its own right. Separated, however slightly, from the mainland, there are distinct features of Thanet's archaeology that suggest it merits separate treatment. Subject to a high level of development in recent years, its rich, loamy soils are mainly given over to arable farming and little woodland cover remains.

3.8.2 The Chalk (North) Downs

The North Downs (Fig. 3.14) form the largest *pays* in Kent and their prominent, south-facing scarp, reaching c. 252m at its highest point (Westerham Hill), is a prominent feature of the Kentish landscape. Both scarp and dip-slopes are cut by a series of dry valleys which, as mentioned earlier, inhibit travel in an east-west direction but have left a legacy of "woods and combes, of sudden winding valleys...narrow lanes, steep hills and shady hollow ways, peaceful, silent and in many parts remote" (Everitt 1986, 47). The Downs are divided by the river valleys of the Darent, Medway and Stour and the wind-gap of the Elham Valley.

Elevated and exposed, with thin soils, extensive deposits of heavy Clay-with-Flints, and crucially marked by an absence of water on the upper slopes, for the most part the North Downs have made for unattractive agricultural land; nevertheless the dip-slope, particularly in the east, is characterised by more fertile soils that form the basis of the East Kent Arable Belt. Elsewhere the resulting landscape of woodlands (on the clay) and small enclosures contrasts with the open sheep walks of the South Downs (Hall and Russell 1911, 10). Historically this land has been suitable only for sheep grazing and coppicing; Hasted (1798 passim) describes the poverty and harsh conditions of the inhabitants of various Downland locations and the thinness of the soils is clearly evident in fields that have been put under plough in more recent years. Reduced levels of grazing mean that scrub is once again invading formerly cleared areas. The chalk itself was long exploited as a source of lime both for soil improvement and for mortar and the scarp face is intermittently scarred by old chalk workings.

Unsurprisingly, given their historic poverty and difficulties of communication, the Downs are less developed than the Foothills and have few settlement foci of any size, with settlement dispersed and typically characterized by what are now small villages and hamlets. Excepting

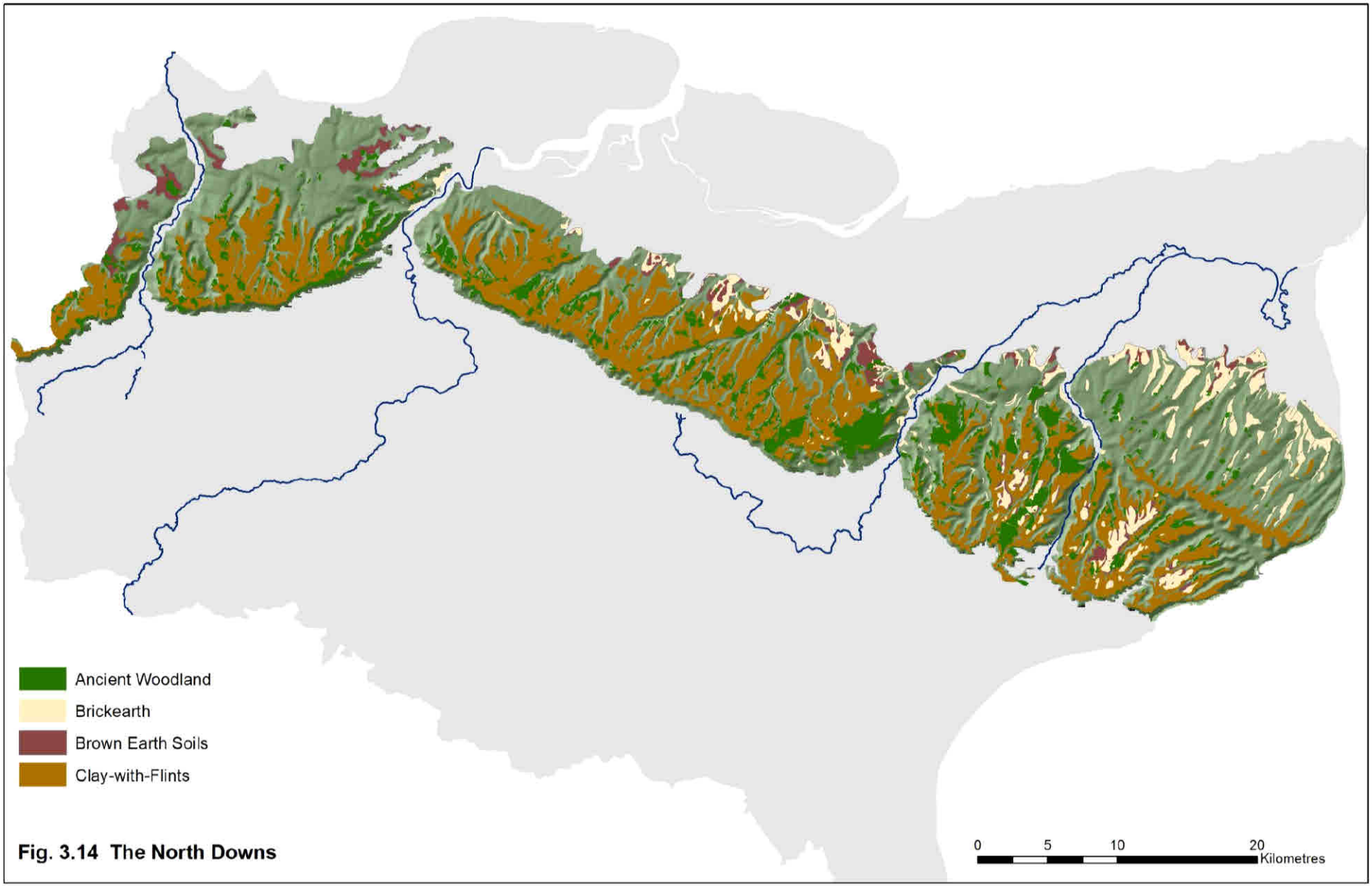


Fig. 3.14 The North Downs

the encroachment of the Medway Towns, the largest of these settlements is Dover.

3.8.3 The Vale of Holmesdale (The Gault Vale)

The Holmesdale is the name normally given to the narrow, fertile, well watered Gault Clay vale which lies at the foot of the North Downs scarp (Fig. 3.15). It is useful, however, (following McRae 1973a, 40) also to include in the region the lowest parts of the chalk outcrop; these occur below the southernmost extent of the Clay-with-Flints, contain the chalk spring-line and have ameliorated the Gault clay with chalky hillwash. Further drift deposits derive from the adjacent Greensand.

Together with the Foothills, this narrow corridor forms one of Everitt's 'Original Lands' or areas of initial settlement in the early Saxon period. Although Everitt comments on the value of this fertile land and its consequent lack of woodland, Hall and Russell describe it in 1911 as being mostly put to pasture owing to its wetness and Hasted also comments unfavourably on the soils of a number of the ancient settlements highlighted by Everitt. Nevertheless, the area can be argued to have had favourable agricultural conditions in comparison to the lands which bordered it and it enjoyed an ancient line of communication from its proximity to the North Downs Way. It is possible that the area benefitted from a warmer, drier climate during the Roman period.

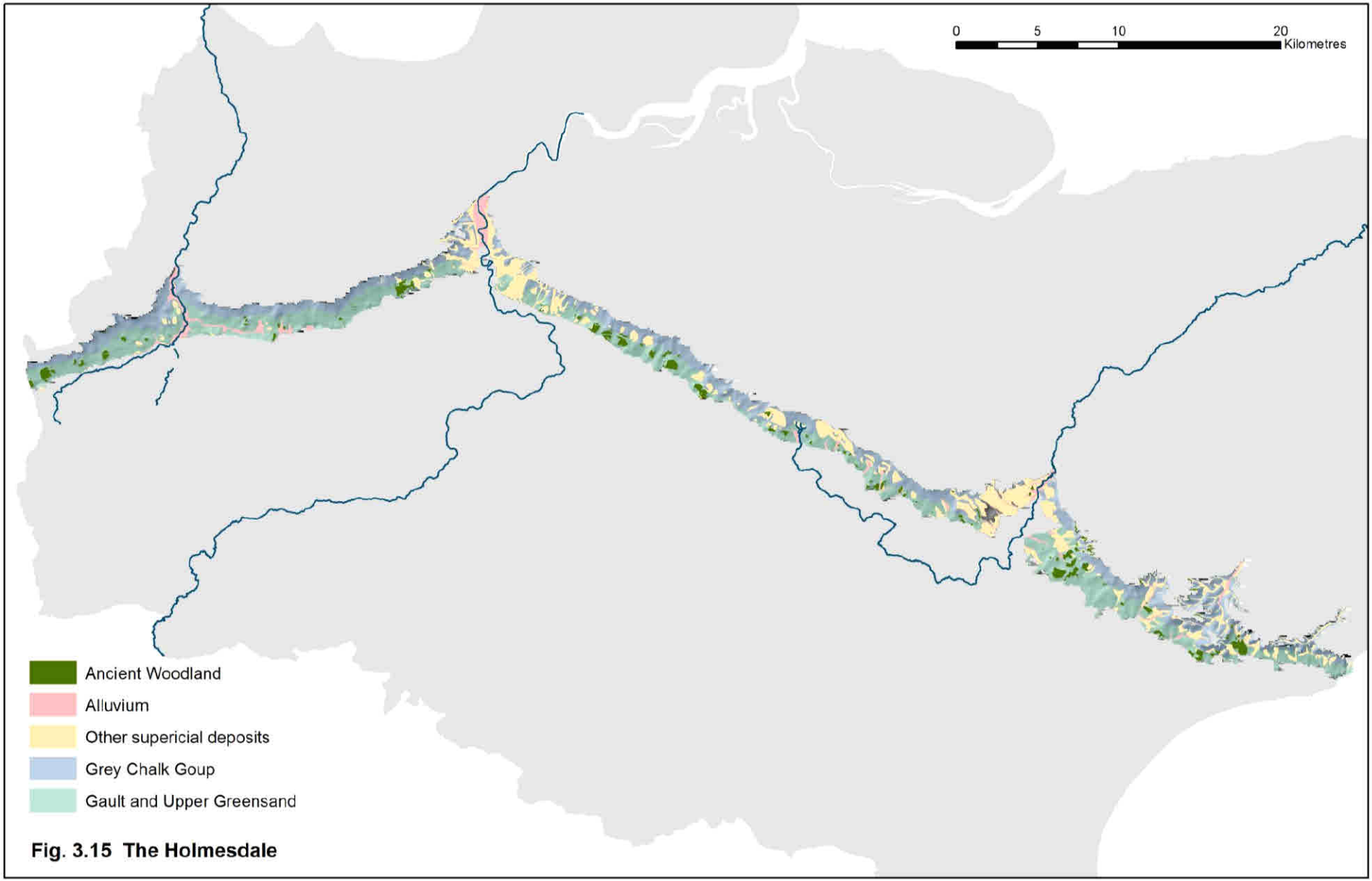


Fig. 3.15 The Holmesdale

3.8.4 The Chartland (Chart Hills/Greensand Ridge)

This area (Fig. 3.16) has also been known as the Stone Hills or Quarry Hills owing to the extensive Ragstone quarrying which has taken place here since at least Roman times. 'Chart' means 'rough common' and is a frequent place name element in the region, indicating the poor nature of much of the land, particularly in the West. The region is characterised by variations of bedrock and drift geology giving rise to some variety of fertility and agricultural character. These range from poorly drained alkaline soils over the Gault to free draining acidic soils over the Folkestone Formation. Narrow at both eastern and western extremities, it widens in the central (Maidstone) area where it is divided by the Medway Valley and outcrops of Wealden Clay. Here, fertile brown earth soils form the centre of the present day Mid-Kent Fruit Belt; according to Hall and Russell (1911, 8), however, these soils have been reclaimed by heavy manuring. In the West, the Hythe Beds are non-calcareous and like the adjacent Folkestone Sand, weather to an acidic, infertile sandy soil historically given over to woodland and heaths; today this area of the *pays* still carries both a relatively high area of ancient woodlands and a significant proportion of the county's surviving stretches of common land (Fig. 3.16; inset). The scarp of the Greensand ridge is a prominent landscape feature (reaching over 250m at Toys Hill), stretching from the county boundary in the west as far as Pluckley and reappearing as the relict sea cliff overlooking Romney Marsh in the east.

3.8.5 The Low Weald (Vale of Kent)

The Low Weald (Fig. 3.17) is formed by a broad tract of low (mostly below 30m OD), comparatively level, thick, impervious clay relieved by minor outcrops of sandstone and limestone. Superficial deposits of brickearths and alluvium in the central area between the Rivers Medway and Teise give rise to more amenable soils which have been exploited in the modern era for fruit and hop cultivation (the so-called Low Weald Fruit Belt), but most of its agricultural land is under permanent pasture. At the time of Domesday, the Low Weald was still heavily wooded; its present appearance of small fields bounded by 'shaws' of woodland is due to the deforestation which has taken place since the decline of the iron industry and of the Sussex shipbuilding industry, both of which required managed sources of wood (Natural England 2013a, 10). The 19thcentury saw the introduction of the clay drainage pipe and the area is now extensively artificially drained, but still retains its damp character with many streams and ponds.

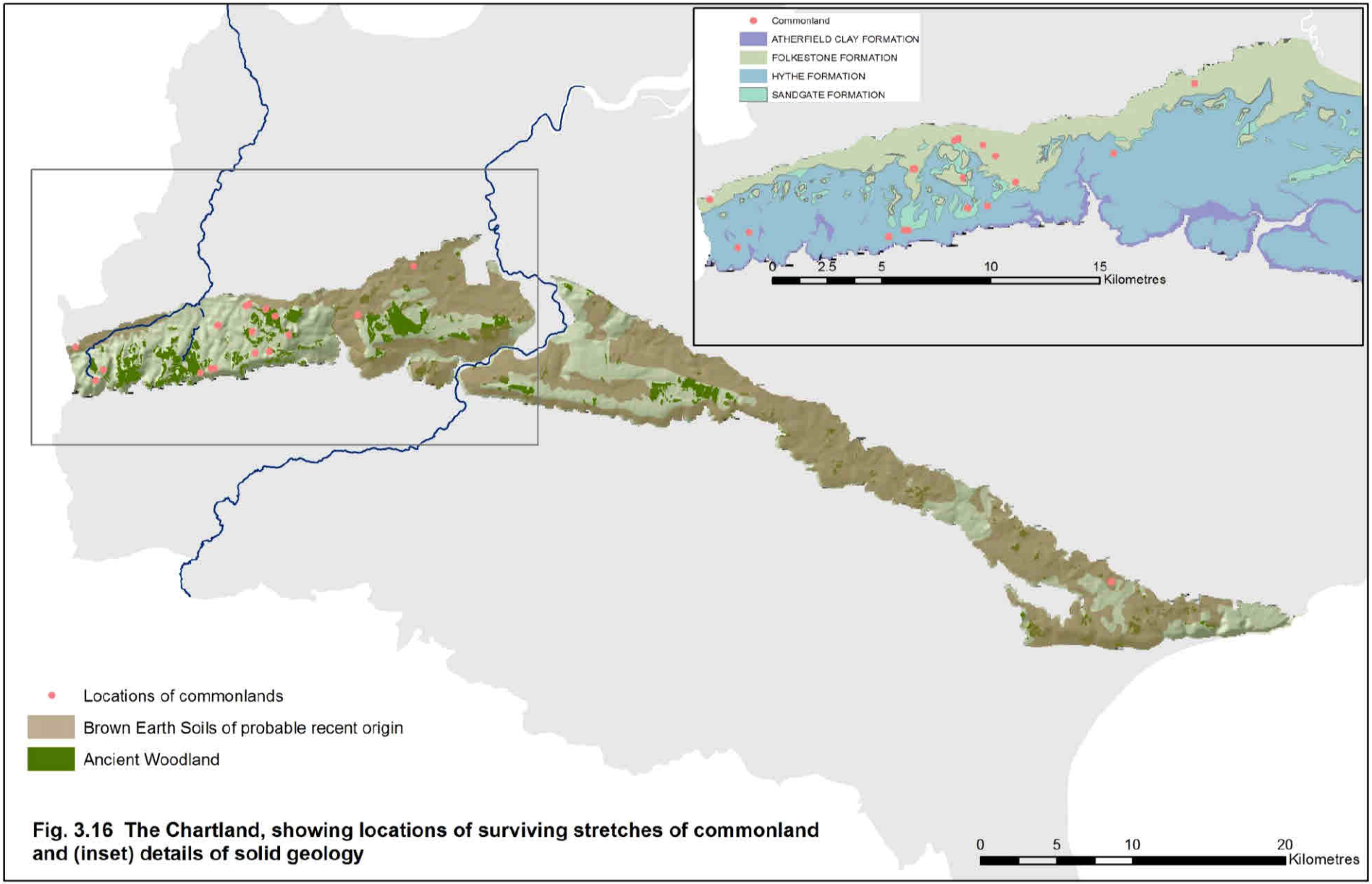


Fig. 3.16 The Chartland, showing locations of surviving stretches of commonland and (inset) details of solid geology

As late as 1911, Hall and Russell complained that,

> …patches of Brick Earth afford the only pleasant prospect to the traveller travelling through the Wealden plain, elsewhere he sees little but cold and wet grass land, carrying the poorest quality of herbage of a dreary infertile aspect, which not inadequately reflects the fact that many generations of cultivators have found this land both expensive and ungrateful to handle.

Prior to the 19th century the area was notorious for the state of its roads and consequently for difficulty of travel, particularly in winter or wet weather. Hasted commented on this aspect of a number of Wealden villages. His description of Halden (1798, VII, 220-226) vividly describes conditions:

> The turnpike road from Tenterden to Bethersden and Ashford, leads through it, which, as well as the rest of the roads throughout it, are hardly passable after any rain, being so miry, that the traveller's horse frequently plunges through them up to the girths of the saddle; and the waggons sinking so deep in the ruts, as to slide along on the nave of the wheels and axle of them. The roads are all of great breadth, from fifty to sixty feet and more, with a breadth of green swerd on each side; the hedges being filled with oak trees, whose branches hang over to a considerable extent, and render the surface near them damp, and the prospect always gloomy. In some few of the principal roads, as from Tenterden hither, there is a stone causeway about three feet wide, for the accommodation of horse and foot passengers; but there is none further on till near Bethersden, to the great distress of travellers. When these roads become tolerably dry in summer, they are ploughed up and laid in a half circle to dry, the only amendment they ever have. In extreme dry weather in summer, they become exceedingly hard, and by traffic so smooth as to seem glazed, like a potter's vessel, though a single hour's rain renders them so slippery, as to be very dangerous to travellers.

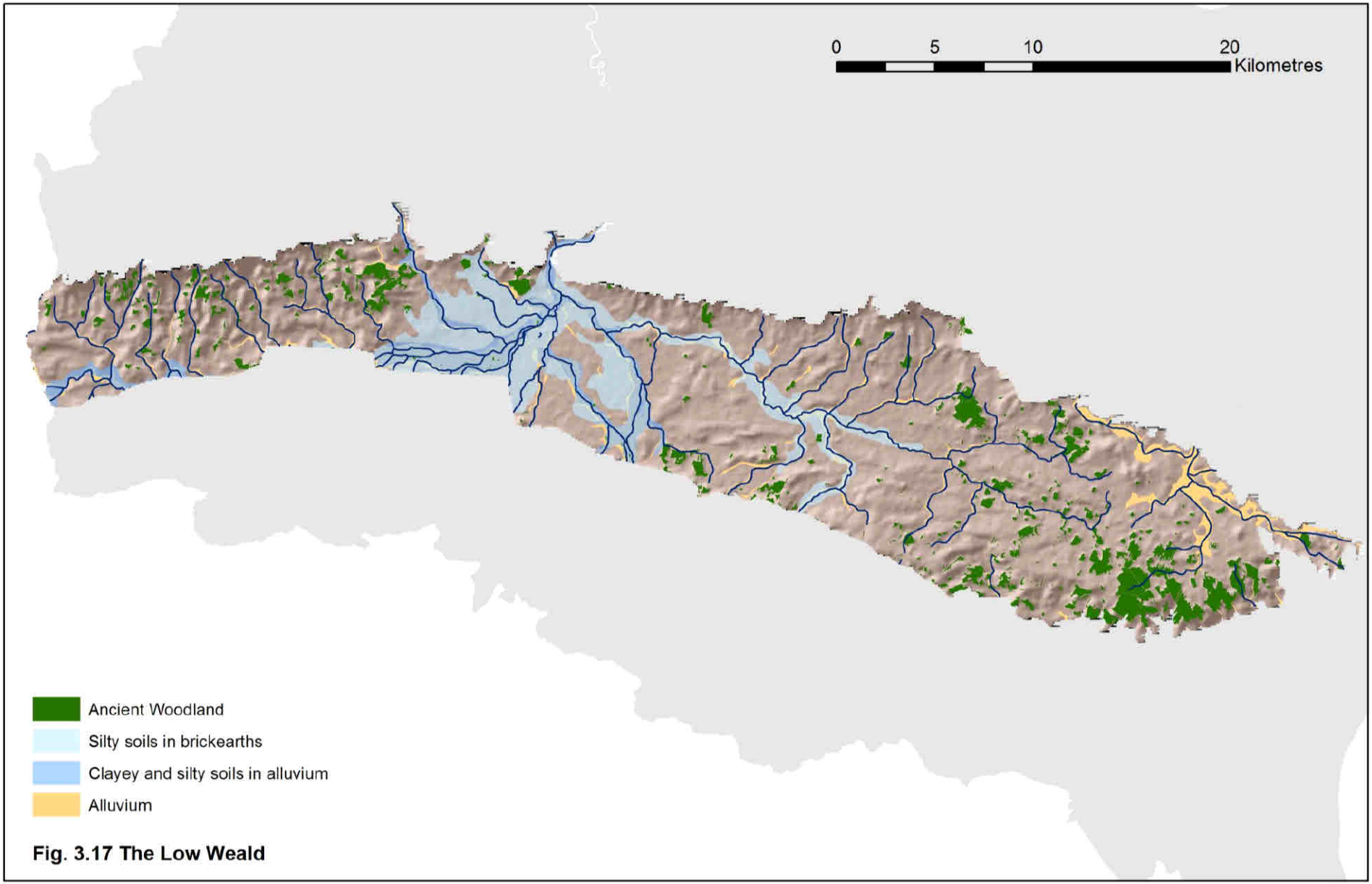


Fig. 3.17 The Low Weald

3.8.6 The High Weald

The hilly, broken ground of the High Weald (Fig. 3.18) corresponds geologically to the Hastings Beds with their interbedded sands, soft sandstone and clays; the sandstone sometimes outcrops as distinctive 'bluffs', as at High Rocks, Tunbridge Wells. The High Weald's round-topped hills carry a high density of woodland and are scored by steep sided stream valleys or ghylls.

Drift deposits in the river valleys again give rise to conditions suitable for agriculture, but the higher land supports only poor grass and woodland. Forest clearance appears to have taken place between the 9th and 14th centuries, with little change from the mid-14th century until the First World War. The hilltop villages (often with elevation enshrined in their name) typical of the area developed from an *ad hoc* medieval pattern of dispersed farms and small hamlets associated with the practice of assarting (Natural England 2013b, 13).

Historically, the most important natural resource of the High Weald was, of course, iron, derived mostly from the Wadhurst Clay which was exploited from at least the late Iron Age until the 17th century.

3.8.7 The Marshland

There are, of course, three separate areas of Marshland in Kent (the North Kent Marshes, the Wantsum and Upper Stour Marshes and Romney Marsh) all with different characteristics and all of which represent a considerable change in the nature of the landscape since the Roman period. The most salient issue concerns the way in which the modern landscape reveals or obscures that of the Roman period; these have been discussed under coastal change above.

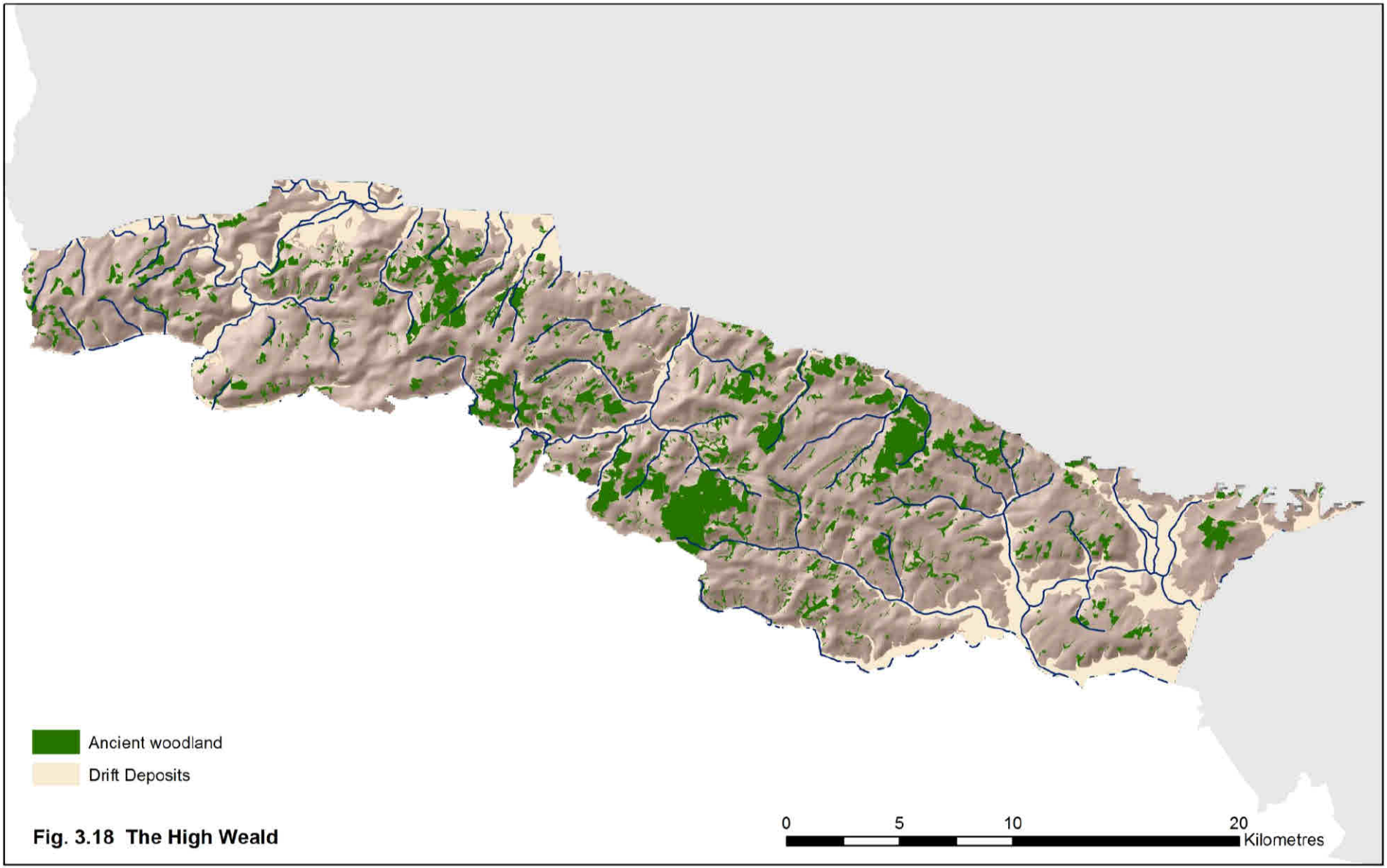


Fig. 3.18 The High Weald

3.9 Conclusions

Kent's varied geologies, topographies and consequently landscapes have important implications both for current and ancient land use and for the county's archaeology and these features underlie much of the analysis and discussion which follows in subsequent chapters.

There are several areas where knowledge is presently lacking. This is partly due to environmental conditions: Allen (2007), albeit discussing the environment and landscape of the Neolithic and Early Bronze Age, points out that chalk downland deposits contain snails but are poor for pollen preservation, whilst the opposite is true for the Weald and Coastal Plain. Nevertheless, there is a lack of stratified deposits from the latter (*ibid.*) and such information as is available rarely seems to pertain directly to the later Iron Age or Roman periods. Sea level change is another problem (Bates 2008).

Alluviation and colluviation may both obscure and protect archaeological deposits; when such alluvial deposits are exploited (as in brickearth extraction) archaeology may be destroyed (as happened so often in the past) or brought to light for excavation. In the same way modern exploitation of favourable areas, whether for settlement or for agriculture will variously obscure, deny access to, or reveal archaeological deposits.

Varied landscapes imply the ability to access varied resources from locations on their margins. We will see that this is a significant factor in the development of settlement in Kent during the Late Iron Age and Roman periods.

Notes

[i] The data are derived from McRae and Burnham 1973. The precise dates will be inaccurate for 2014, just as for the Roman period; it is the relative length of the growing season in different areas which is important.

[ii] It has unfortunately not been possible to access the digital data held by the National Soil Resources Institute of Cranfield University (which is now the UK National Reference Centre for soil).

[iii] Further details may be obtained at: http://archive.defra.gov.uk/foodfarm/landmanage/land-use/documents/alc-guidelines-1988.pdf Accessed 03.02.2014.

[iv] In his mapping of the *pays*, Everitt includes the river valleys.

4 The Iron Age Background

4.1 Introduction

Just as the Roman period rural settlements of Kent need to be considered in relationship to the physical environment and their landscape setting, so too they need to be set in the context of the earlier human geography of the area. The Roman period cannot be considered in a vacuum; current theoretical perspectives no longer permit us to view the period as simply the result of the imposition or an alien way of life on a monolithic 'Celtic' culture. It is vital to consider our knowledge of society in Kent in the Late Iron Age if we are to see patterns of continuity and change, understand why the evidence for the Roman period manifests as it does or to have any hope of comprehending the impact of Rome on those who lived in the area.

A comprehensive review of the evidence is beyond the scope of this chapter which instead aims to:

1. Put the Late Iron Age evidence (and thus the Roman evidence that follows it) into a theoretical framework which takes account of recent thinking on the nature of Iron Age society in south-eastern Britain
2. Explore the distribution of Late Iron Age and Transitional evidence in order to give context to the Roman evidence and allow patterns of continuity/discontinuity to be discerned
3. Highlight certain themes

Although, just as for the Roman period, recent decades have seen a surge in the amount of excavation data available, there is at present no detailed published synthesis of the Iron Age in Kent. Despite the prominence of type sites such as the Aylesford and Swarling cemeteries, the Iron Age archaeology of the county is much less known and understood than is that of areas such as Wessex. Although summaries of the evidence have been published in the context of overviews of the county's archaeology by Cunliffe (1982), Ashbee (2005) and Champion (2007a), Kent's presence is decidedly shadowy in some wider ranging studies: for instance Kent is mentioned in general terms in Hill's (2007) paper on the dynamics of social change in Later

Iron Age eastern and south-eastern England; nevertheless, the bulk of the paper (as illustrated by its accompanying maps) concerns developments *north* of the Thames.

There are, in fact, not inconsiderable problems facing anyone attempting such a synthesis (as has been highlighted by Champion [2007b]): these can be divided into general problems caused by working within the constraints of PPG16 and Kent-specific problems of chronology.

It can be argued that as PPG16 requires investigation prior to development in areas when archaeological remains are already suspected on the basis of the HER, its effect is to reinforce previous knowledge, whilst not shedding light on areas of archaeological ignorance (Champion 2007b, 294-5). In addition the majority of recent discoveries made in the context of PPG 16 planning legislation are by their nature small scale evaluations which are useful for plotting distributions, but less so for detailed intra-site analysis. Champion also draws attention to the lack of publication of large sites and the paucity of published settlement plans.

Problems of chronology for the later prehistoric period in Kent are acute, lacking either an agreed chronological sequence or any agreed terminology, a situation exacerbated by the multiple archaeological contractors who work in the county and who have often not been based in the region. Champion (2007b) having analysed some 160 'grey literature' reports for the later prehistoric period in Kent found himself faced by "a bewildering array of terms for the cultural affinity or chronology of pottery, and terms...often used with different meanings by different contractors" (ibid., 296). Additionally, uncertainties over the completeness of the pottery series and over its precise dating make interpretation of the data difficult (ibid., 297).

4.2 Late Iron Age Kent through ancient eyes

The Late Iron Age of Kent can be considered a proto-historic period as it is specifically referred to, if only briefly, in a number of classical texts.

Writing in c.30 BC, Diodorus Siculus (*Bibliotheca Historica* V.21) described Britain as a triangular island stretching obliquely along the coast of Europe and identified the point nearest the mainland as a promontory named *Cantium* (*ακρωτήριον...Κάντιον*). Strabo (*Geography* IV, 5), also writing at the end of the 1st century BC, described how it was possible to see across the sea from the western extremity of *Celtica* to the easternmost of Britain, *Cantium* (*το Κάντιον*). This form of the name appears to have been known to Diodorus and Strabo from Pytheas (Rivet and Smith 1979, 300) which would take it back into the 4th century BC. Although it

cannot be disproved that *Cantium* may have derived from an ethnic name, Rivet and Smith argue that it is more likely to mean 'corner land' or 'land on the edge', applying perhaps particularly to a promontory (they suggest South Foreland) and was later extended by Caesar to refer to the hinterland and the whole region.

Our first eye witness account of Kent famously comes from Caesar (*De Bello Gallico*) who defines Kent as the corner of the island to which almost all ships from Gaul were directed (*ad Cantium*; V. 13). He describes it as a wholly maritime district (*quae regio est maritima omnis*) whose inhabitants were the most civilised in Britain (*ex his omnibus longe sunt humanissimi qui Cantium incolunt*) and had customs similar to those in Gaul (*neque multum a Gallica differunt consuetudine*) (ibid. V. 14). Caesar differentiates these coastal dwellers from those who lived inland; his description of the latter perhaps owes more to common conceptions of 'barbarians' than to reality. Caesar later (ibid. V. 22) repeats his assertion that Kent lies on the sea (*Cantium, quod esse ad mare supra demonstravimus*) and states that the region was ruled over by four named kings (*quibus regionibus quattuor reges praeerant, Cingetorix, Carvilius, Taximagulus, Segovax*). This is the only record of these individuals and we have no means of knowing exactly what their status was or over which areas they held sway, neither is it possible to define exactly what Caesar means by *Cantium*.

The one final piece of Caesar's evidence which may relate to Kent is his description (ibid. V. 9) of a stronghold (commonly assumed to be Bigbury), fortified by nature and art (*locum nacti egregie et natura et opere munitum*) with entrances blocked by a large number of felled trees (*nam crebris arboribus succisis omnes introitus erant praeclusi*). The fortification is clearly situated in woodland and to this extent meshes with Caesar's later description (ibid. V.21) of the storming of Cassivellaunus' '*oppidum*' (*Oppidum autem Britanni vocant, cum silvas impeditas vallo atque fossa munierunt, quo incursionis hostium vitandae causa convenire consuerunt*). Whether or not the Britons referred to these entities by a term which could be translated as 'town' it does sound as if Caesar's experience in the south east was of fortifications within woodlands; this would be consistent with the environmental evidence from Keston and Squerryes already cited in Chapter 2 (Dimbleby 1969; 1970).

4.3 Past and present theoretical perspectives on Later Iron Age society in south east England

The Late Iron Age archaeology of Kent has played a critical role in traditional theoretical understanding of the period. The discovery of the cremation cemetery at Aylesford in 1886 with its distinctive assemblages of clear continental affinity led Evans (1890) to conclude that here was evidence of Caesar's statement that the maritime portions of the island had been settled by Belgic invaders; this conclusion was mirrored in Bushe-Fox's publication of the cemetery at Swarling (1925). Bushe-Fox nevertheless suggested that none of the material recovered from Swarling dated from earlier than 75 BC. The 'Aylesford-Swarling' culture came to be recognised to cover a fairly well demarcated region of south eastern England, roughly equivalent to what came to be understood, largely on the evidence of coinage, to be the territories of the Trinovantes, the Catuvellauni and the Cantiaci (broadly Hertfordshire, Essex and Kent, though see below). The more archaeologically visible, stratified society that appeared in the Later Iron Age in the South East with its accompanied cremation rite, the adoption of coinage, innovations in metal working and potting techniques and styles and an apparent increase in long-distance trade were thus seen to be the result of incursions from the continent. As a consequence (as remarked by Haselgrove 1984, 7, note 2) the main thrust of research into the phenomenon was effectively diverted into the intellectual cul de sac known as 'the problem of the Belgae'.

Limited excavations at Oldbury (Ward-Perkins 1939; 1944) and Bigbury (Jessup 1932; Jessup and Cook 1936) were prominent amongst a spate of British hillfort excavations. The hillforts have been interpreted in the light of these supposed 'Belgic' incursions and used to tie Kent into the history of the Roman annexation of Britain: Bigbury is often speculated to have been the fortification attacked by Caesar in 54 BC (*De Bello Gallico* V.9), whilst Ward-Perkins believed that Oldbury (which he thought was possibly initially erected as a defensive measure against Belgic expansion from the east) was refortified in AD 43 against attack by Claudius' invading forces (1939, 169-70; 1944, 153-4); on the basis of re-excavation, Thompson (1986) argues this view was mistaken. Similarly, Kelly's (1971) discussion of the *oppidum* at Quarry Wood, Loose is framed in terms of relations between Belgic and Wealden peoples and finally interpreted as a stronghold constructed out of fear of a Roman invasion.

As invasion theories fell out of fashion and Birchall (1965) demonstrated that the Aylesford burials were post-Caesarean, other explanations for the distinctive Late Iron Age archaeology of the region were needed. This came in the form of core-periphery models based on

Structuralist Marxist concepts and were most notably expounded by Haselgrove (1982). A core-periphery model describes the economic and political relationships between a highly developed area (the 'core') and those surrounding it ('the periphery'). In this scenario, the rapid expansion of the Roman world with its thirst for raw materials led eventually (particularly after the incorporation of Gaul into the Empire) to the creation of a local 'core' economy in south east England where existing elites were able to monopolise the control of trade, exchanging raw materials for luxury or 'prestige' goods. Access to such goods was thus seen as the driver of change and the structuring principle behind social relationships both within the south east region and between the 'core' and its 'periphery'.

Hill (2007, 16) points out that consideration of the core-periphery model and the nature of social organisation were eclipsed in the last decades of the 20th Century by a focus on ritual, the symbolic meanings of space and structured deposition (e.g. Bowden and McOmish 1987; Hill 1995; Oswald 1997). The model still appears to be alive and well in some quarters (e.g. Cunliffe 2005; see also Collis 2007) but has more recently been challenged on a number of grounds summarised by Hill (2007): not only does the evidence no longer fit the theory but more seriously the model fails to understand the social framework in which exchange and contacts with Gaul and Rome took place. Such trade as existed does not appear to have been on a large scale (cf. Fitzpatrick 1989) and is now understood to have taken place in the context of pre-existing links of kinship and alliance; other imports may represent gift-exchange rather than commercial transactions. Hill argues that such trade and exchange was not the cause of social change in Iron Age southern England but merely a symptom of changes which had other causes. Nevertheless, whatever the mechanism, as Mattingly (2006, 57) points out, "the key element of the core-periphery model, that territories closest to an expanding state tended to be more socially developed, still has the ring of truth about it".

The distinctive nature of the Late Iron Age archaeology of south east England is now seen to fit into a wider pattern of regional diversity: the creation and maintenance of regionally specific forms of material culture, settlement morphology, burial rites and social organisation are recognised as a major feature of Iron Age Britain; the defining characteristics of the Aylesford-Swarling cultural grouping are just one more, if particularly distinctive, set of differences.

Haselgrove (1984, 22) explained the changes in material culture, burial rites, etc., which occurred around this time as the result of indirect contact with Rome, mediated through contact with Gaul ("'Romanization' at a remove"). A more radical interpretation is offered by Creighton (2000). In a compelling narrative which starts from an analysis of the imagery used on Late Iron Age coinage and goes on to embrace other archaeological evidence indicative of

changes in behaviour and attitudes, he argues that members of the Late Iron Age elite from the south east were raised in Rome as *obsides* in preparation for roles as client kings. Caesar records the taking of such *obsides* (*De Bello Gallico* V, 20, 22, 23) from the Trinovantes and then from the forces commanded by Cassivellaunus, implicitly including those inhabiting Kent. Perhaps this was the fate of the "distinguished leader" Lugotrix captured in the fray against the Kentish forces. In Creighton's view 54 BC, not AD 43, is the critical date marking south eastern Britain's incorporation as a Roman province: this is the point at which annual tribute was demanded and the Roman state began formally to interfere in the governance of Britain, with Mandubracius and Commius installed as officially recognised leaders and Cassivellaunus left in position but with strict orders as to his behaviour towards the Trinovantes.

However formal or otherwise we accept south eastern England's relationship with Rome to have been, the cultural changes which took place in the area in the latter part of the 1st century BC were part of a wider phenomenon termed by Woolf "the Roman cultural revolution" (1995, 13; 2001). Woolf connects these to the institutionalisation and systematisation of new imperial structures occurring around the time of Augustus. These led to the imperial regime gaining a deeper involvement in provincial societies than hitherto, drawing local elites into closer relationship. In some cases this created new ruling classes and new opportunities; in others it disrupted social relations by, for instance, the separation of the civil and military spheres. The cultural impact of these changes varied according to local conditions and perceptions of identity. It is not clear if the elites of south eastern Britain perceived themselves as "becoming Roman" (Woolf 1998), but even if they did, this was not assimilation into a pre-existing social order, but participation in the creation of a new one (Woolf 1997, 345) as:

> becoming Roman was not a matter of acquiring a ready-made cultural package…so much as joining the insiders' debate about what that package did or ought to consist of at that particular time (1998, 11).

This debate is evident in the diversity of the archaeological record for the period both in the south east in general and in Kent in particular.

4.4 'Tribes' and territories

Although it is commonplace, particularly in more popularist accounts, to discuss the Later Iron Age of Britain in terms of named 'tribes' with relatively defined territories, it is important to remember that the *historical* evidence on which this is based dates from the Roman period, in particular Ptolemy's *Geography*. This was not written until the 2nd century AD; internal references make clear that much of it is based on information already collated by Marinus of Tyre, this itself probably based on information gathered during Agricola's campaigns for the north and possibly on yet another, earlier (Claudio-Neronian to early Flavian) source for the south (Rivet and Smith, 1979, 114-5). The word 'tribe' itself has unfortunate connotations (Mattingly 2006, 59) and is best avoided.

Archaeology suggests that the state of affairs in the Late Iron Age was in fact more fluid: Creighton (2000, 13) envisages a historically contingent situation in which the balance of power see-sawed between various individuals against a patchwork of differing social organisations. These social groupings had differing degrees and experiences of relationship with Rome which are witnessed not only in the numismatic evidence but in the comings and goings of various individuals as chronicled in classical texts. The glimpses we receive of inter-group conflict before Caesar's incursions (e.g. the murder of Mandubracius' father by Cassivellaunus) and internecine struggles after them (e.g. the flights of Tincomarus, Dubnovellaunus and Verica to Rome and of Amminius to Gaius) suggest that the period leading up to the final annexation by Claudius was one that saw considerable political instability in the south and south-east of England. The distribution of Late Iron Age coins bearing the names of rulers attest to two dominant dynasties, the Southern (or Commian) and the Eastern (or Tasciovanian). In an extension to his narrative of change Creighton goes so far as to suggest that Commios and Tasciovanus were Gallic leaders installed as rulers of these two new kingdoms formed by Rome from smaller political groupings that had surrendered to Caesar (2006, 22).

There is no evidence whatsoever to suggest that Kent was inhabited by one coherent tribal group in the Later Iron Age and indeed the numismatic evidence supports the notion that from at least the end of the 1st century BC, large parts of this area (which at the time of Caesar was apparently ruled by four kings) were for the most part under the sway of the Eastern Kingdom. This in itself was probably not a stable situation, as suggested by the widespread circulation of coins of the southern dynast Eppillus, ("son of Commios") at the beginning of the 1st century

AD; these were themselves were replaced around AD 15 by those of Cunobelin of the Eastern Kingdom. Some of Cunobelin's coins appear to have been struck in Kent for local use (Holman 2000, 215), whilst Amminius also issued coins here before his flight to Gaius (Creighton 2000, 78). All this combines to suggest that Kentish lands were seen as separate, but nevertheless still under control of the Eastern Dynasty.

4.5 Late Iron Age Kent: the archaeological evidence

4.5.1 The HER and other excavated evidence (Fig. 4.1)

As implied at the outset, the HER supplies a not unproblematic dataset. There are many problems with dating: it is far from clear to which part of the Iron Age some records refer even when the original (sometimes brief) sources are consulted. This problem is partially the result of the typological variability of the material and the difficulty of dating comparatively undiagnostic coarse potsherds allied to the varying expertise (over the years) of those reporting this potentially key material: the nature of the pottery does not lend itself to a readily discernible linear sequence and there has been no established system for workers to follow. Other uncertainties, though, are due to loose terminology. A good number of entries are dated to the Late Iron Age *or* Early Roman periods, others Late Iron Age *to* Early Roman; in some case it is not clear which is meant. Yet others are qualified by the catch-all descriptor 'Belgic' (which can probably be taken to mean [by convention] that the pottery shows attributes seen in the Aylesford tradition). For the purposes of this exercise, all the latter categories have been grouped together as Transitional, whilst records not clearly associated with the latter part of the Iron Age have been excluded.

Qualitatively, the evidence varies from findspots of pottery or coins, through small evaluations to large scale excavations. Interventions cover a large date range and vary greatly in the quantity and quality of supporting documentation, sometime being covered by just a few lines in the county journal or equivalent. There are few large scale published interventions, but a growing quantity of 'grey literature': the completely excavated settlement enclosure at Farningham Hill (Philp 1984) is a rare example of the former, whilst important large scale excavations at Brisley Park, Ashford, completed in 2002, have only recently come to publication (Stevenson 2013).

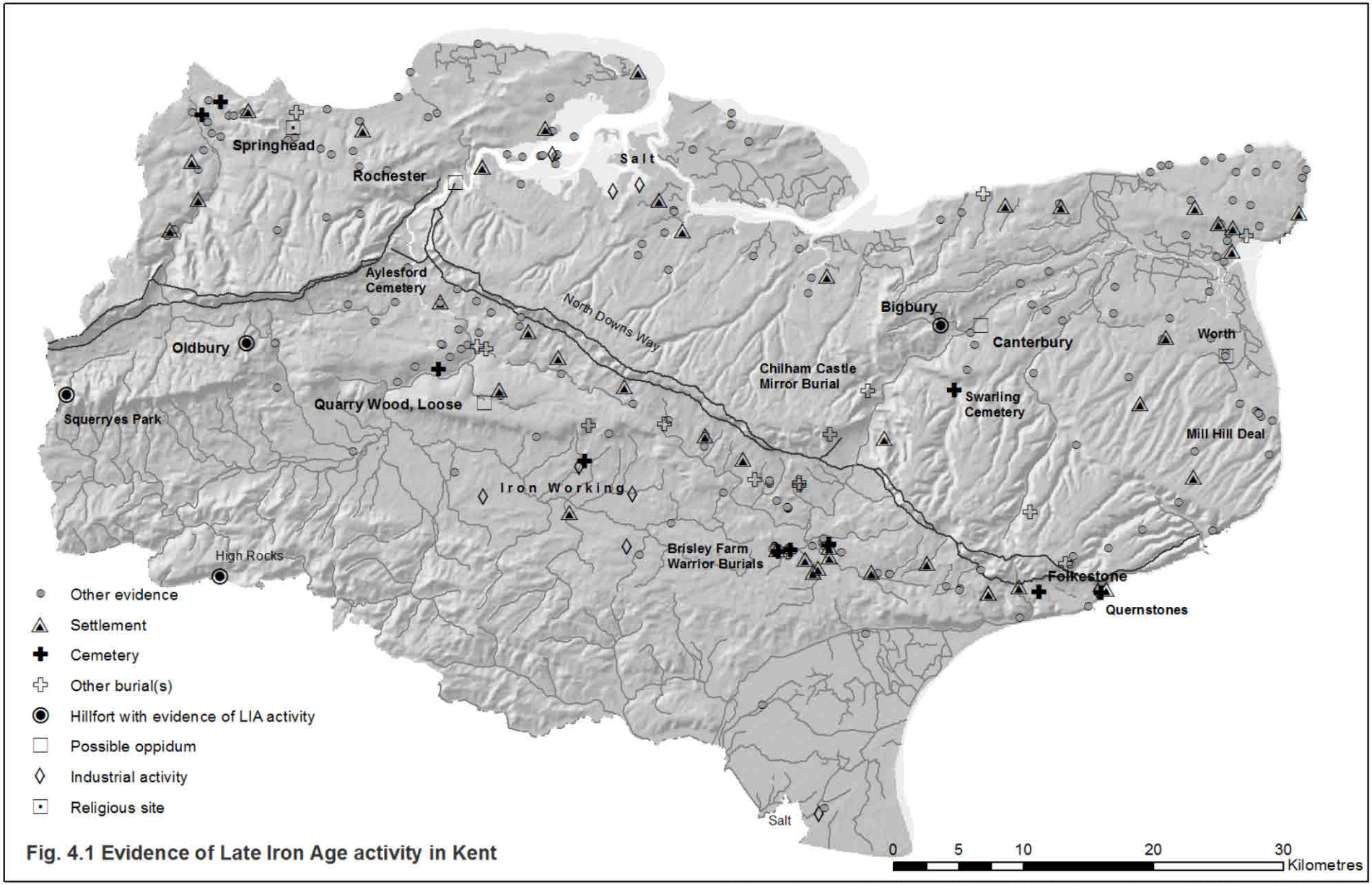


Fig. 4.1 Evidence of Late Iron Age activity in Kent

While much of the evidence can be subsumed under the headings 'settlement' or 'occupation', the reality is that many of these are sites characterised by ditches and/or pits containing (sometimes very few) potsherds. Often there is insufficient evidence to say whether these ditches define settlement sites or fields (Champion 2007a, 120). Tantalising glimpses are afforded by sites such as that investigated on the West Malling and Leybourne Bypass (Andrews et al. 2009) where field systems have been explored in response to planning legislation but the neighbouring settlement foci to which they belong have been outside the excavation area meaning that they are difficult to characterise.

While there is plenty of evidence for division of the land as observed in lengths of ditch, the nature of these land divisions is less certain. Although a number of potential Late Iron Age field systems are known from aerial photography, particularly in East Kent and Thanet, these are almost all undated and could as well be Roman as Iron Age. Similarly, rectangular enclosures known from aerial photography in East Kent might be Late Iron Age by analogy with those from Thurnham (Lawrence 2006; Booth et al. 2011, 267-269), the Whitfield-Eastry by-pass (Parfitt et al. 1997) and Kent International Business Park (Perkins 1998) although this cannot be confirmed.

The Late Iron Age burial evidence highlights a number of important themes: social differentiation, affinities with the continent and diversity of response to the new repertoire of material culture and social practices available. Champion draws attention to an east-west divide in the frequency of cremations, with few, mostly late, cremations found to the west of the Medway; this may, however, be more reflective of the general distribution of Late Iron Age evidence in Kent. Although Kent is traditionally divided east and west along the Medway, this river itself is far from being central to the modern county. What may be of significance is that at least half of known cremation burial sites are situated in central Kent in the area defined by the North Downs Way to the north and the Beult to the south, including several from just west of the Medway.

A number of (mainly) cremation cemeteries, mostly of modest proportions are known (Fig. 4.2); these are outnumbered by small groups of two or three or individual burials. Details of many of these finds are scant, as in the past many of these were discovered by workmen and material consequently lost even from important sites like Aylesford before excavation was possible. If reports are to be believed, destroying funerary urns appears to have been a favourite hobby of labourers in years gone by.

An example of the data that have been lost is given by a potentially important (and, unusually,

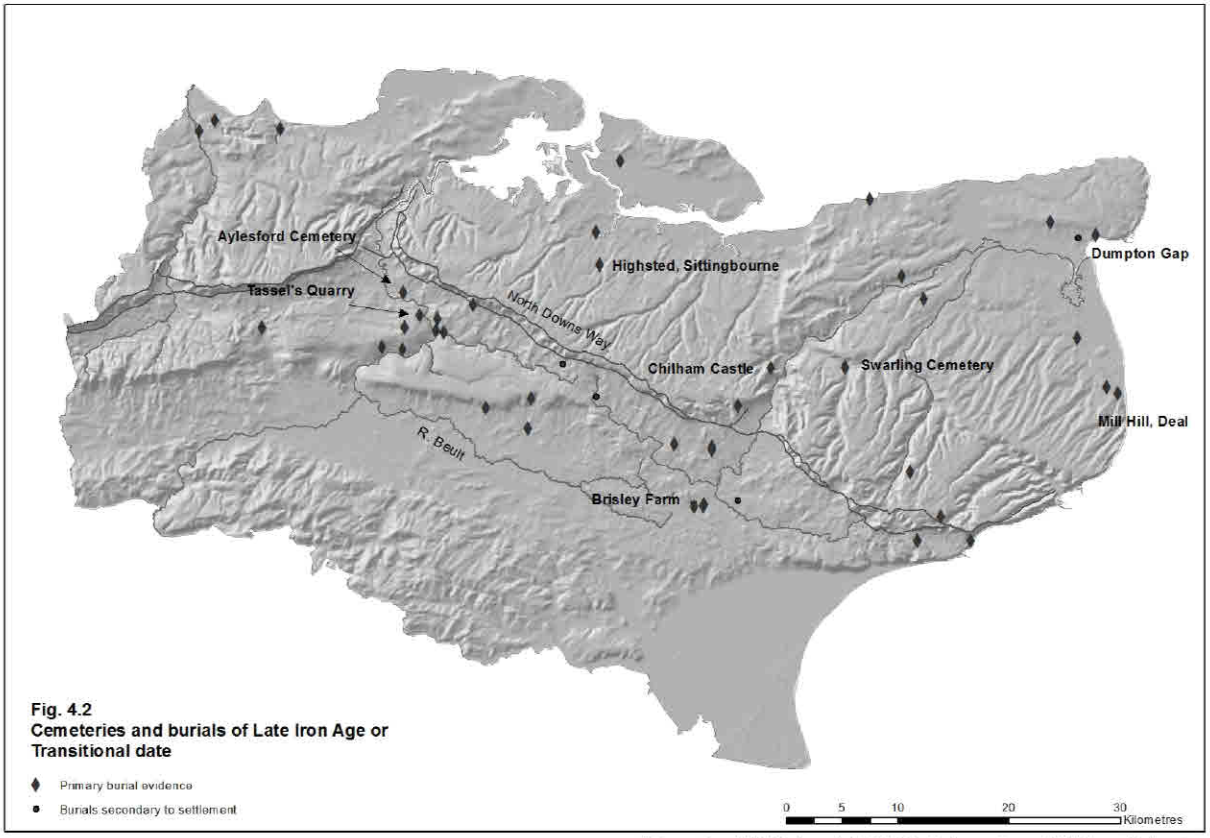


Fig. 4.2
Cemeteries and burials of Late Iron Age or Transitional date

mixed) cemetery which was excavated under emergency conditions in 1955 at Highsted, Sittingbourne. It is variously described as having 20 inhumations and six cremations or 15 inhumations and four cremations, but as the pottery and drawings were in this case stolen, there is no report recorded in the HER other than a contemporary newspaper report and photograph. Although cremation was the normative rite for the minority who received an archaeologically recognisable burial rite, an element of inhumation seems to have persisted as this record shows.

Although some burials are associated with evidence of settlement, others appear to be isolated; they may perhaps be taken as proxy indicators of otherwise unknown settlements, particularly if, for instance, placed in a boundary location. Kent unusually provides a number of examples of burials *within* Late Iron Age settlements (e.g. Brisley Farm [Stevens 2013], Dumpton Gap [Hurd 1909]).

Although many burials are simple, others show great variety in their furnishings. The typical 'Aylesford' assemblage (Fig. 4.3) is, like contemporary Gallic assemblages, focussed on (imported) feasting equipment demonstrating an engagement with new ways of eating and drinking; the incorporation of bronze-bound bucket-like vessels is a variation largely peculiar to this more local tradition.[1]

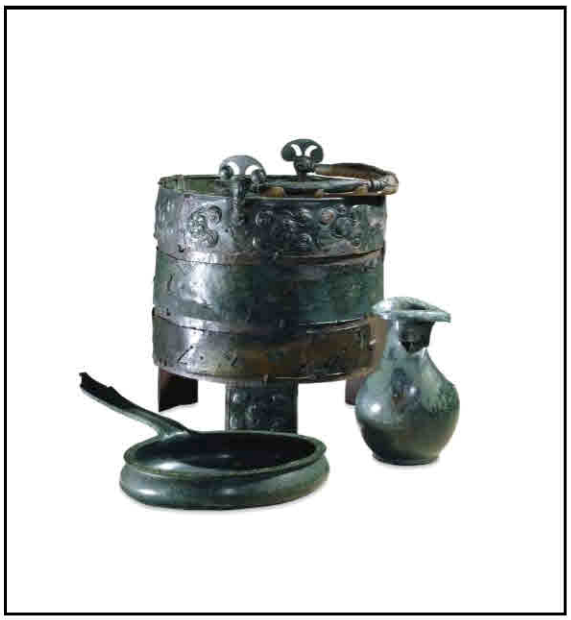
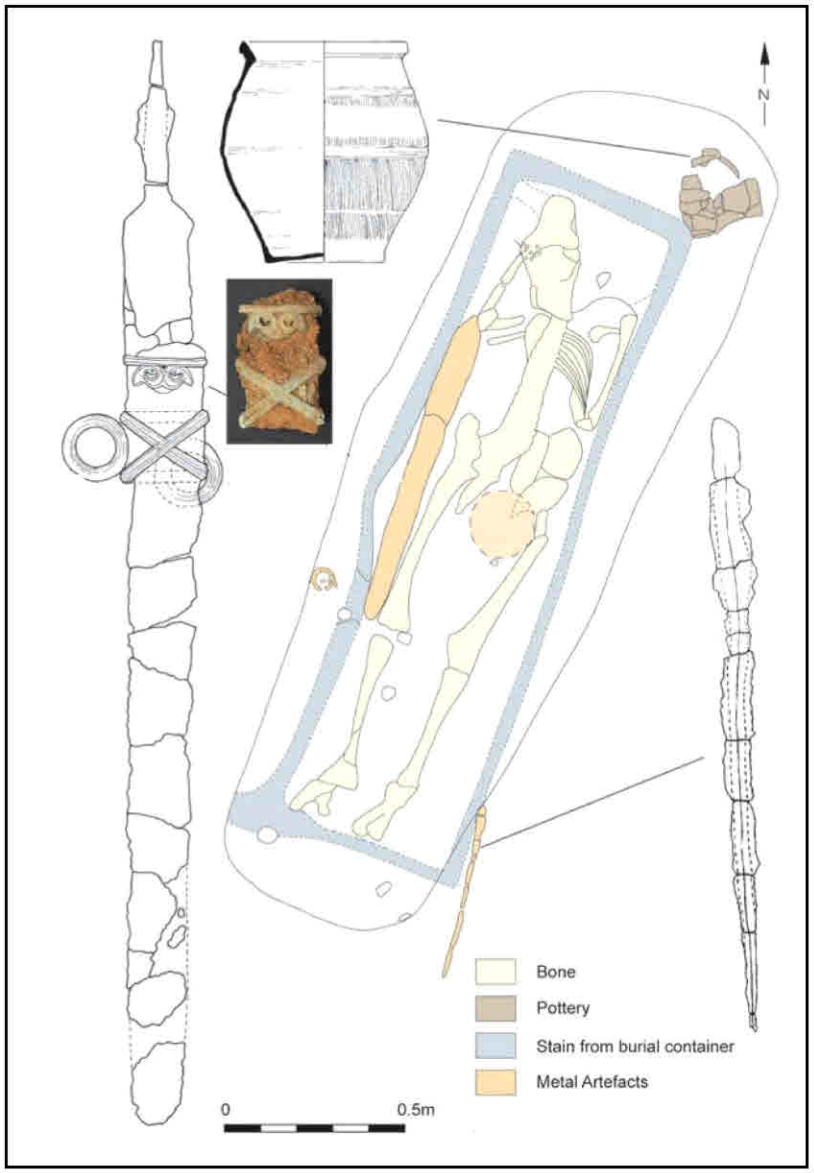


Fig. 4.3 Cremation group consisting of 'bucket', jug and patera from Aylesford Cemetery © Trustees of the British Museum

Burial 9200 at Westhawk Farm (Booth et al. 2008, 384) is a further variation on the theme with an unusual embellished casket (as opposed to a ceramic vessel) holding the ashes and grave goods and single *terra nigra* platter replacing the more usual array of closed vessels.[2] At Brisley Farm (Johnson 2003; Stevenson 2012; 2013), two inhumations with weapons (Fig. 4.4) recall the earlier (c. 200 BC) 'warrior' burial at Deal (Parfitt 1995). All three are unusual in Britain but recall burial practices across the Channel. A further variation is found in the burial of a woman with a mirror at Chilham (Parfitt 1998, 350); although over half of the known Late Iron Age mirrors from Britain derive from burials (Hamilton 2007, 93) this is so far the only one from Kent (cf. Sealey 2006).

The variations in funerary assemblages and the very fact that only a minority seem to have received such burials points to differentials in status; whether these simply reflect wealth or something more subtle is difficult to say; it has been suggested that the 'warrior' burials at Brisley might have had 'cult' status, especially by analogy with the earlier Mill Hill 'warrior' whose 'crown' may have been an item of priestly regalia (Parfitt 1995, 86).

Imported pottery and metalwork associated with feasting may imply not so much the legendary 'Celtic' appetite for imported wine, but new social practices, possibly learned on the continent, perhaps even in Rome. These would have both enabled new ways of negotiating relationships with those of similar, superior and inferior rank and given the ability to entertain and do business with travellers from the continent by utilising a dialect of a common cultural language.



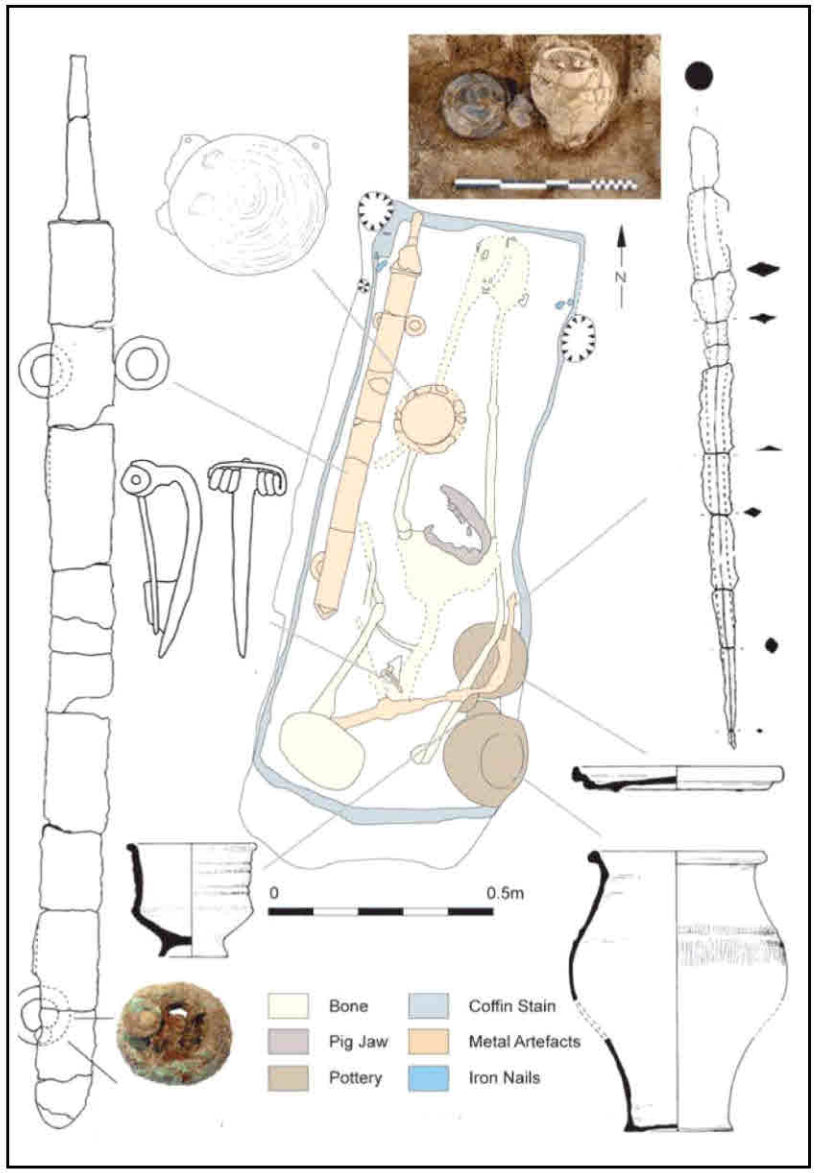


Fig. 4.4 Brisley Farm Ashford 'warrior' burials 1 (left) and 2 (right). Adapted from Stevenson 2012, Figs. 6 & 7

There is some indication for industrial activity, in the form of salterns, briquetage and 'red hill' type mounds, mostly from the North Kent Marshes. Iron production is indicated particularly in the Low Weald where evidence for bloomeries has been found.

Limited information is available regarding hillforts and *oppida* in Late Iron Age Kent and the sites which are candidates for such status are morphologically varied and do not fit particularly comfortably into such established categories. Indeed assumptions and categorization have been made concerning these sites in the literature of the past few decades based on thin evidence and limited critical thinking and evaluation. As in Surrey and in contrast to Sussex, Kent's hillforts avoid the Chalk Downs. Oldbury and Squerryes Park are located, like Surrey's hillforts, on the Greensand; Castle Hill, Tonbridge and High Rocks (in the High Weald) on the Hastings Beds and Bigbury on an outcrop of the Lambeth Group. They tend to have been created rather late (from the Middle Iron Age) in comparison to those in the main 'hillfort zone' of central southern England and, insofar as they have been investigated, do not show the same evidence of dense occupation. Bigbury is the only proven hillfort east of the Medway and the West Kent hillforts are located in areas not otherwise associated with Iron Age occupation. Although all have had their ramparts investigated, little is known of their interiors. Oldbury, containing a spring, would have been more suitable for occupation than many hillforts and some kind of occupation may be evidenced by pottery and an internal, evidently circular, structure at Bigbury (Thompson 1983). Bigbury may well have had a spring (now dry) enclosed within its so-called annex, given the nature of the specific topography of this element of the site (pers. comm. S. Willis).

Both the latter sites are sometimes supposed to be enclosed *oppida*. In Bigbury's case this is largely on account of its important deposits of ironware (including slave chains, currency bars and a firedog); these may perhaps be better seen as ritual deposits. Oldbury, anomalous on account of its great size (c. 50 ha), has been interpreted by Cunliffe (1982, 44) as a port-of-trade on the interface between two different socio-economic zones, a hillfort dominated zone west of the Darent (implicitly outside the 'core') and a more easterly zone subject to rapid social and economic change with the development of long distance trade with Gaul. There is, however, no unambiguous evidence of trade at Oldbury; one silver and about a dozen gold Iron Age coins have been found within a kilometre or so but there are no base metal coins and the gold could thus also be representative of ritual deposition rather than commerce.

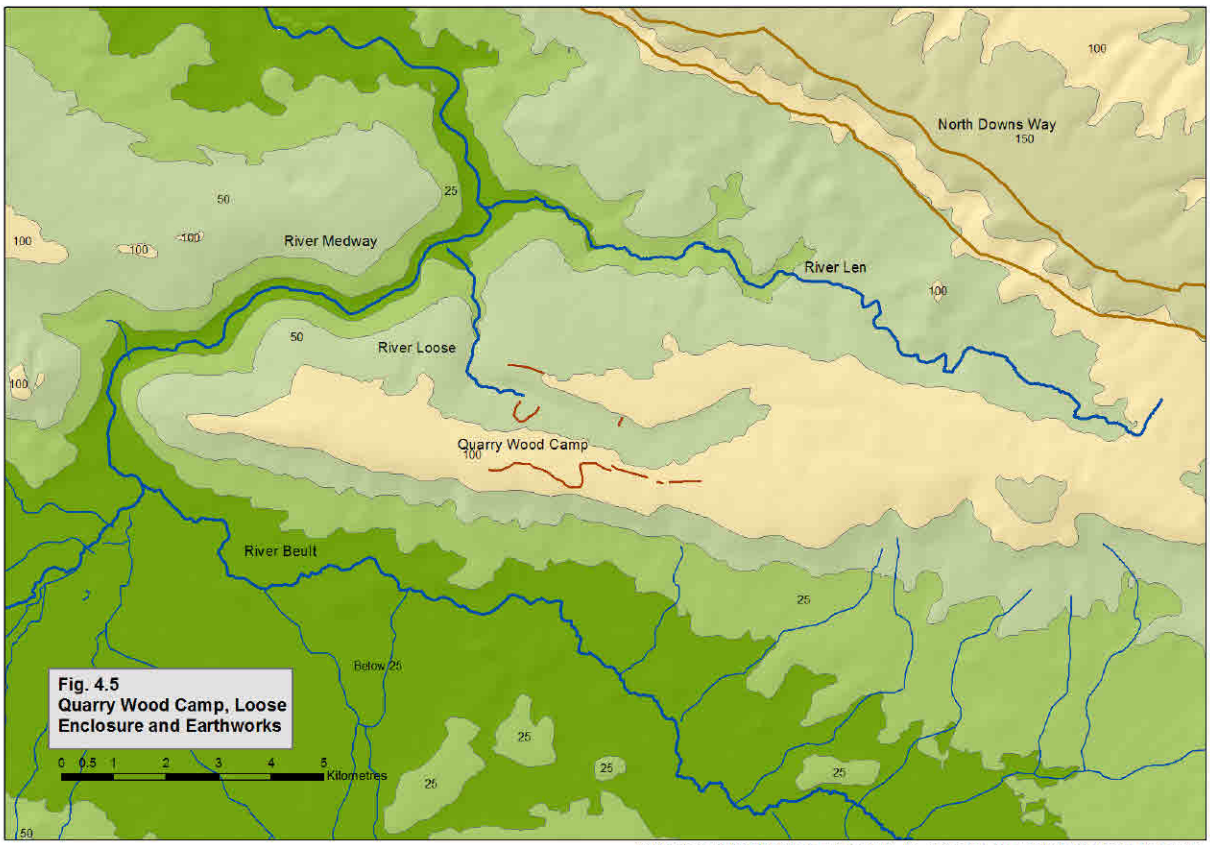
Quarry Wood Camp with a massively constructed enclosure at its centre and substantial dykes partially enclosing the Loose valley (Fig 4.5) fits the profile of a Late Iron Age *oppidum* far better, but although its ramparts have been sampled, nothing is known of its interior. Perhaps

significantly, two amphorae, possibly from a burial, are said to have been found in the vicinity (Whimster 1981, 379) while a Dressel 1 shoulder sherd bearing an 'EB' stamp from the excavations in 1911 is on display in Maidstone Museum (cf. Peacock 1971; Pollard 1991, 57). Although amphorae are typical of the richer, Welwyn category of burials, they are not generally associated with the Aylesford-Swarling cremations of Kent.

The Late Iron Age settlement at Canterbury, situated near the point where the river could be crossed by a land route (Blockley et al. 1995, 9), is another possible candidate for an *oppidum*, as is Rochester, which commands a crossing of the Medway; both have produced evidence for coin manufacture (Harrison 1991; Blockley et al. 1995, 1102). In both cases, though, later development hinders understanding of the Iron Age evidence. Canterbury may also have been focussed on a Late Iron Age religious sanctuary (Bennett et al. 2003); that it was a focus for change is witnessed by new building forms: rectangular structures and a sunken-featured building are evidenced alongside the more traditional roundhouse (Frere et al. 1987, 47; 81). Recent work in the north west of the county in the Ebbsfleet valley and surrounding areas has led to the suggestion that Late Iron Age Springhead may have been an important 'tribal' centre at the heart of a dispersed settlement pattern of small farming communities (Andrews and Smith 2011, 190; Biddulph 2011c, 244). Springhead later developed into an important Roman religious centre and may have been developing as such during the Late Iron Age.

Evidence emerging from excavations at the site of the Roman villa at East Wear Bay, Folkestone between 2010 and 2011 suggests that this site, too, formed a major focus during the Late Iron Age (Selkirk and Parfitt 2012; Parfitt 2013). East Wear Bay's importance as a site of quern stone manufacture has been known for some time (Keller 1989) but large numbers of gold coins from the excavation and the beach below and more significantly imported Dressel 1 amphorae and *terra nigra and terra rubra* suggest that it was a significant port of entry.[3] The site has a rich stratigraphy going back to the Neolithic. East Wear Bay is a rare example of a leeward facing anchorage on the south-east coastline (Fig. 4.6); perhaps this is the location to which Caesar referred when he stated that *Cantium* was the usual landfall for ships crossing from Gaul.

Another kind of settlement arrangement seems to be emerging from work in the Ashford region, where large scale excavations at Brisley Farm and Park Farm together with an implied but as yet unlocated Late Iron Age settlement associated with the high status burial at Westhawk Farm (Booth et al. 2008, 388; Johnson 2002, 2003; Stevenson 2012; 2013) have revealed what Hamilton (2007 87) has characterised as "a continuous landscape of ditched



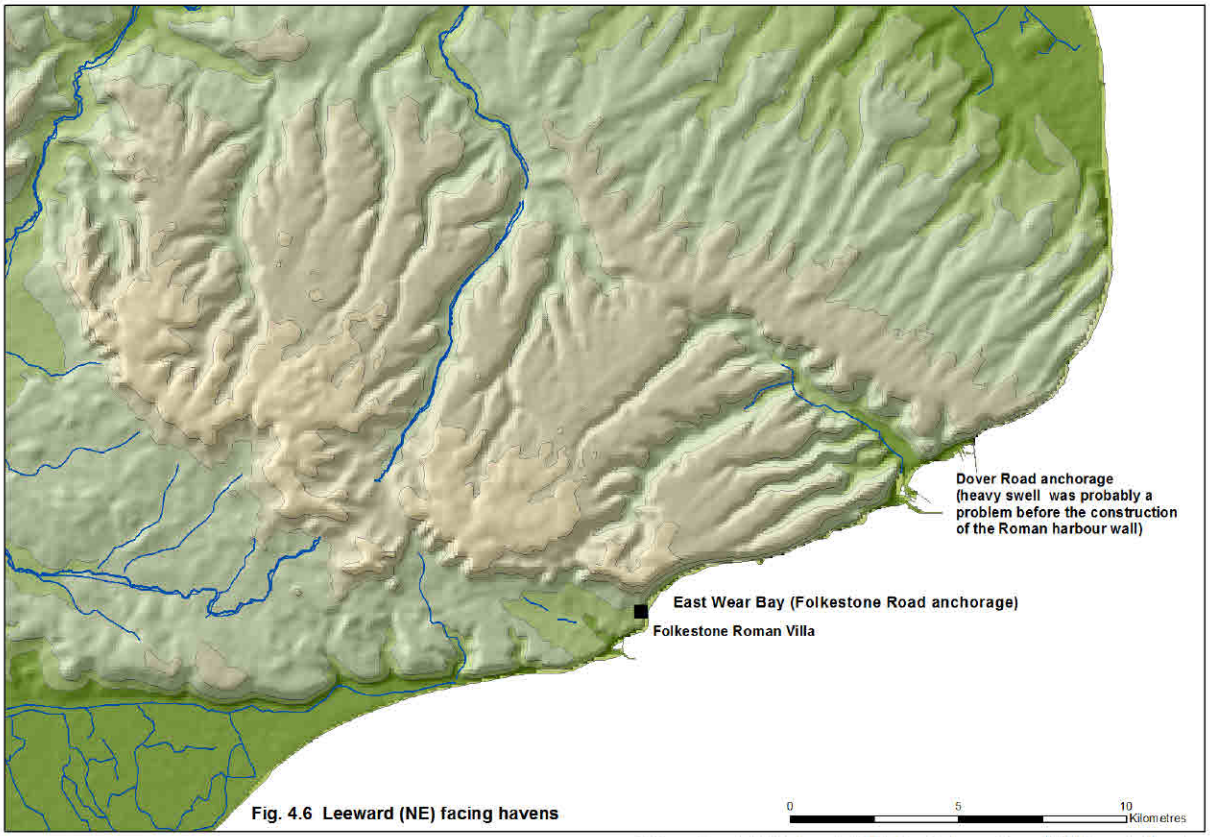


Fig. 4.6 Leeward (NE) facing havens

enclosures interspersed with larger-scale settlement foci".

4.5.1.i General distribution of HER and other excavated evidence

The most immediate and pressing problem concerning the distribution of Late Iron Age (or any other archaeological period's) evidence is that of disentangling the complex web of relationships that exist between past and present settlement patterns and land usage and indeed, between these and past and present archaeological practice.

When the distribution of LIA and Transitional evidence from the HER and other excavated sites (310 records) is plotted in isolation (Fig. 4.7a) it shows clear patterning. In particular, there is a swathe of points occupying a transverse band across the county from north-west to south-east which is highlighted when the density of points is plotted against a 5km grid (Fig. 4.8). A lighter scattering of points occurs to the north of this band in the east of the county, with a further spread along the length of the county in the north; this latter is densest at either extremity. This contrasts strongly with the much more evenly dispersed pattern of modern settlement points (Fig. 4.7b). Nevertheless, when compared to a map of modern urban areas (Fig. 4.7c), some broad similarities can be seen, with, generally speaking, the largest modern urban areas occupying the same swathes of territory. The areas in the south west of the county which represent Sevenoaks, Tonbridge and Tonbridge Wells are the exceptions to this general pattern, occupying an area at present virtually devoid of archaeological evidence for Late Iron Age occupation.[4]

While it may be that the modern evidence represents the end point of a settlement pattern already established in late prehistory, any further analysis must also take into consideration the possibility that the apparent pattern of LIA activity is actually an artefact of the distribution of recent human activity which has brought such evidence to light. That this is not the case is suggested by the absence already noted of HER evidence from the south west of the county and indeed from the majority of modern urban areas themselves; on the other hand it may be that the evidence from areas such as south west Kent, the Weald and large parts of the Downs is more ephemeral. There is much work to be done on the changing patterns of settlement in later prehistoric Kent but it is already noted that, as also throughout the Thames estuary region (Yates 2001), the areas of Kent which saw the development of field systems during the Bronze Age appear largely to have been abandoned before the Iron Age, not being reoccupied until the very end of the period (Champion 2007b, 300); additionally Early Iron Age pottery,

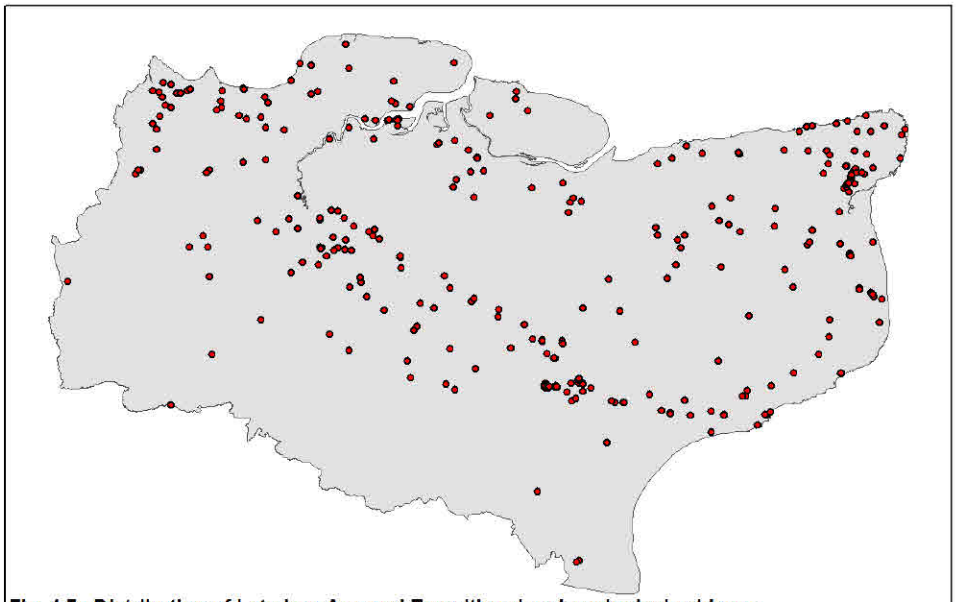


Fig. 4.7a Distribution of Late Iron Age and Transitional archaeological evidence

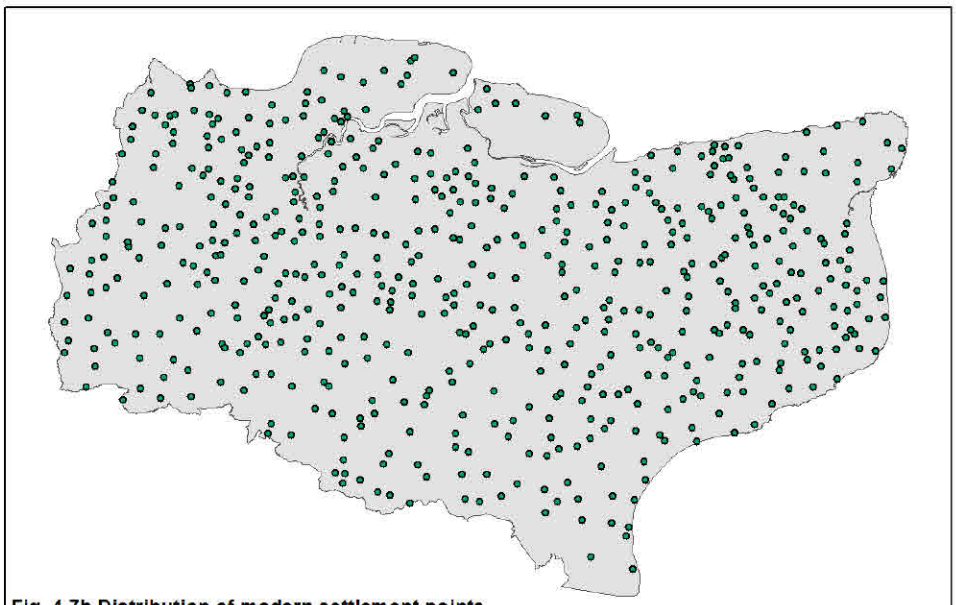


Fig. 4.7b Distribution of modern settlement points

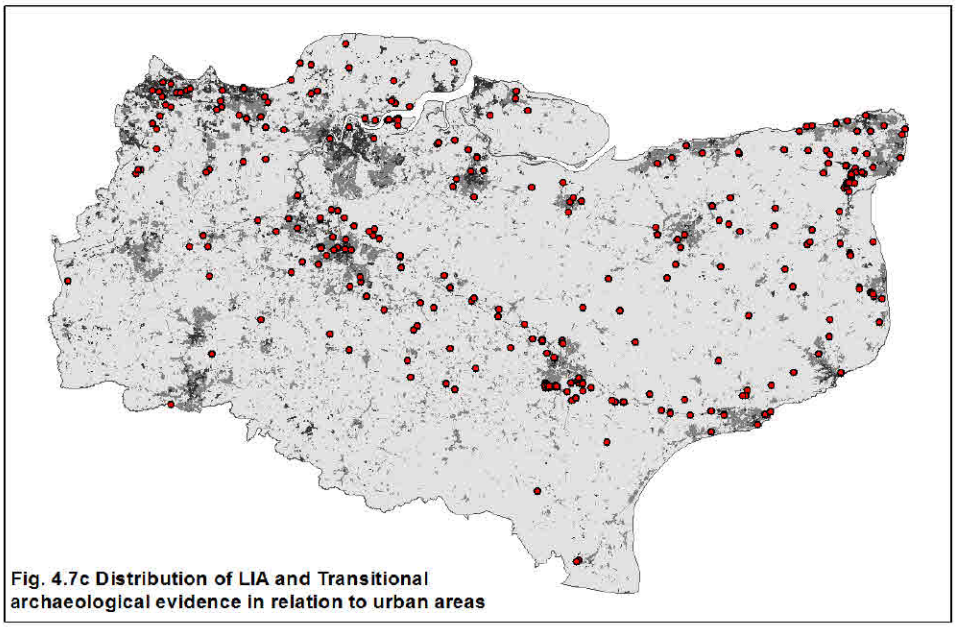


Fig. 4.7c Distribution of LIA and Transitional archaeological evidence in relation to urban areas

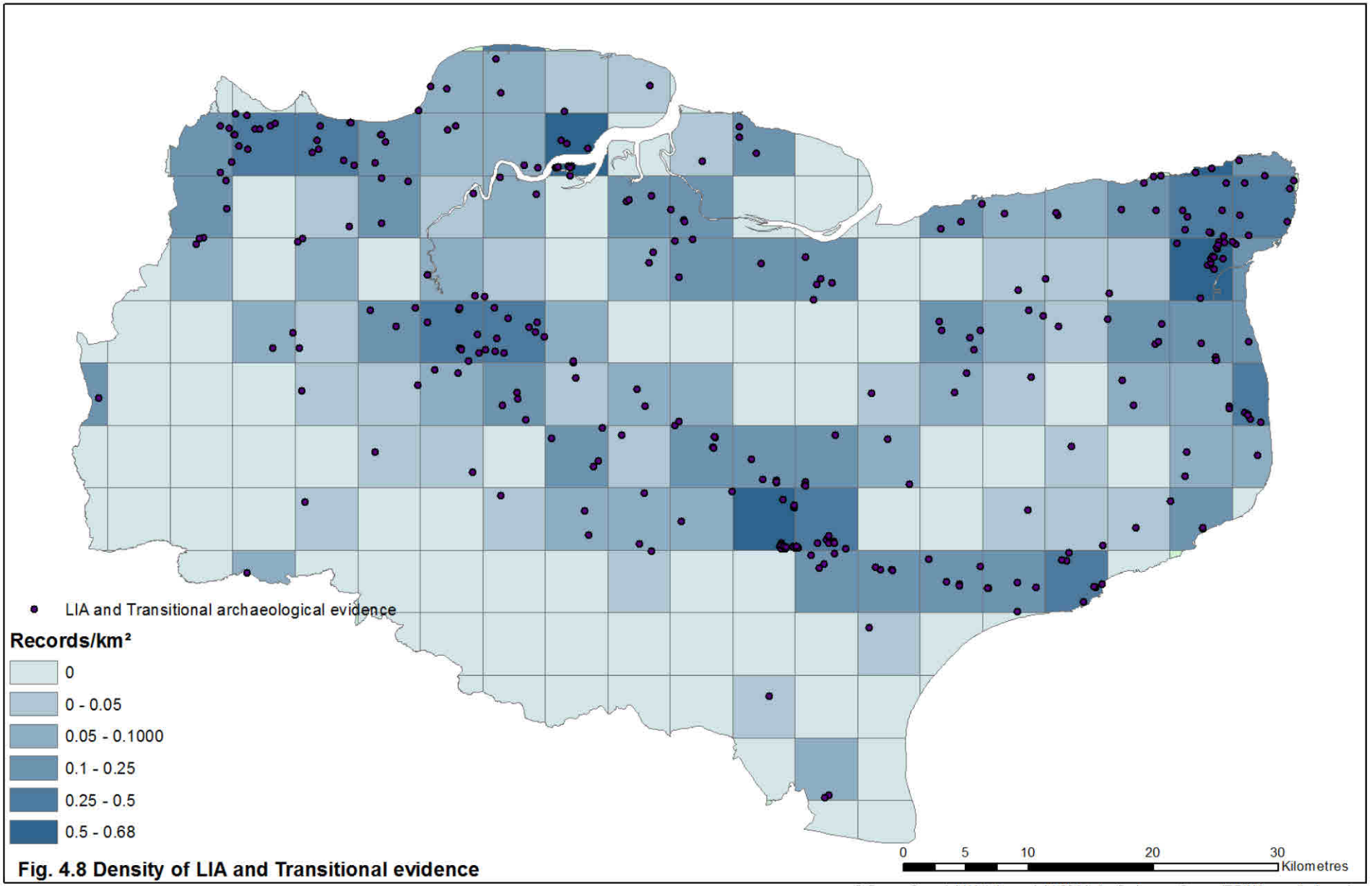


Fig. 4.8 Density of LIA and Transitional evidence

which has a distinctive presence in east Kent, is at present unknown from west Kent and in central Kent is represented only at White Horse Stone (Glass 1999, 194). Champion (ibid.) acknowledges that we do not know at present whether this appearance of abandonment is caused by lack of understanding of the problematic ceramic sequence, represents an archaeological truth or whether a landscape with no field divisions, unenclosed settlements, insubstantial buildings and an aceramic material culture has simply escaped notice. While Champion suggests that such a landscape might have been used for cereal production rather than the intensive pastoralism that required land division in the Later Bronze Age, Hill (2007, 22) suggests that it may have been seasonally inhabited by farmers practicing transhumance and their herds .

The suggestion that the effect of PPG 16 has been to reinforce our knowledge of archaeology in those areas where it is already known to exist, whilst failing to illuminate others is difficult to test on immediately available data. The HER does, however, contain dates of events for many entries. When these are plotted on a map (Fig. 4.9), it appears that our knowledge of the distribution of Late Iron Age and Transitional activity has been greatly enhanced by work carried out since 1990. Several major archaeological events are evident in the distribution: the Channel Tunnel Rail Link (CTRL, now HS1) forming a diagonal transect across the county; widening of the A2 in the north-west and the Hadlow to High Halden pipeline in the Weald. It is notable that CTRL works did not find evidence of Late Iron Age occupation where it crosses the central area of the North Downs, reinforcing the impression of absence of evidence from this area, whilst pipeline work as well as development in the Ashford area have considerably added to the impression of a Late Iron Age presence in the Weald.

Not all investigations since 1990 have been carried out in response to planning legislation: notably the vulnerable archaeology of Kent's north coast was assessed by Wessex Archaeology (2000; 2004; 2005; 2006) as part of a wider English Heritage initiative.

Whilst acknowledging that the pitfalls of geographic determinism are to be avoided, GIS technology nevertheless offers a tool for investigating the relationship between the distribution of the evidence with various physical aspects of the landscape. In order to do this, the evidence was broken down into several overlapping subsets. Initially, burials other than cemeteries were regarded as supplementary evidence (Class B) and therefore not included in the category of activity foci. As only a very small proportion of the population seems to have received an archaeologically visible burial right, suggesting that these burials in themselves constituted important places in the landscape, a second expanded category of activity foci

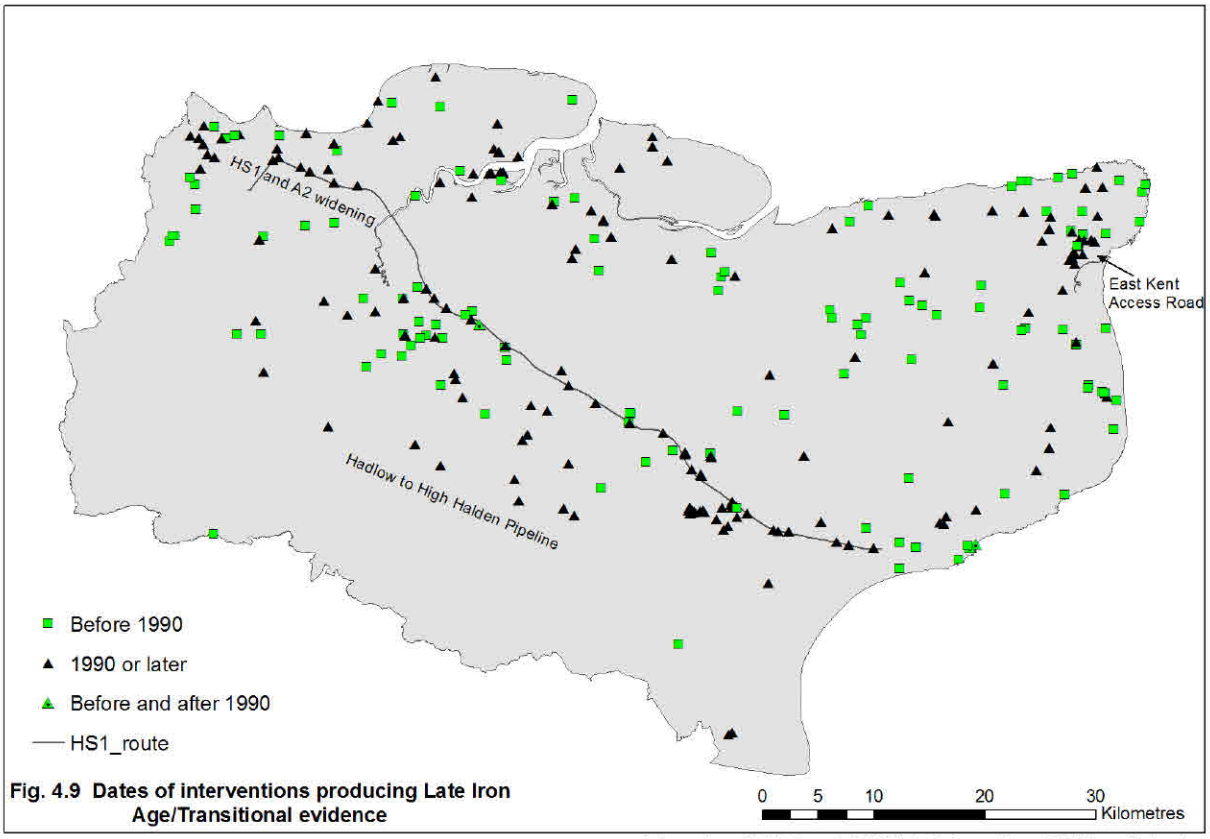


Fig. 4.9 Dates of interventions producing Late Iron Age/Transitional evidence

Including all burial records was created. The categories analysed are thus:

1. All retained records of Late Iron Age or Transitional activity (n = 308)
2. All Late Iron Age activity (n = 172)
3. Late Iron Age or Transitional Activity foci (n = 133)
4. Late Iron Age or Transitional activity foci with all burials (n = 161)
5. Late Iron Age activity foci (n = 81)
6. Late Iron Age or activity foci with all burials (n = 96)

In the event, the results were more or less consistent across all categories and so in the majority of accompanying maps, the complete dataset is utilised. The distribution of the evidence has been analysed in relation to bedrock and superficial geology, *pays*, the occurrence of fertile Brown Earth Soils and ease of cultivation.

4.5.1.ii Distribution of the evidence in relation to geology

The most notable feature is the almost total absence of evidence from the Hastings Beds and from large areas of the Chalk Downs (Fig. 4.10). In fact in terms of overall density of evidence, 34.7% of all records pertain to the Chalk which itself comprises 33.8% of the area of Kent (Table 4.1) although these are not evenly distributed. The Hastings Beds correspond to modern Romney Marsh and to the High Weald. A major anomaly to note is the density of records pertaining to the Lower Greensand: nearly a quarter of all records (22.7%) occur on a geology which accounts for only 10.3% of the area of the county. Whilst it might be thought that the 14.3% of the county dominated by Wealden Clay was a particularly unattractive location, 12.7% of records pertain to it although these again are unevenly distributed. Some of these anomalies can be accounted for when superficial geology is considered.

The uneven distribution on the Chalk relates closely to the Downs' capping of Clay-with-Flints (Fig. 4.11); this would have been an extremely unattractive subsoil and soil base to early agriculturalists and it is likely that it was left largely wooded. Water availability (or its lack) is another factor as away from the spring-line it would be necessary to sink wells or gather rainwater. Much of the evidence on the Greensand and the Weald Clay is located close to rivers and water courses and their associated alluvial deposits; in particular, the concentration of evidence that has recently accrued in the Ashford region is associated with (although not actually within) wide tracts of alluvium around the head of the Stour and its tributaries (Fig. 4.12).

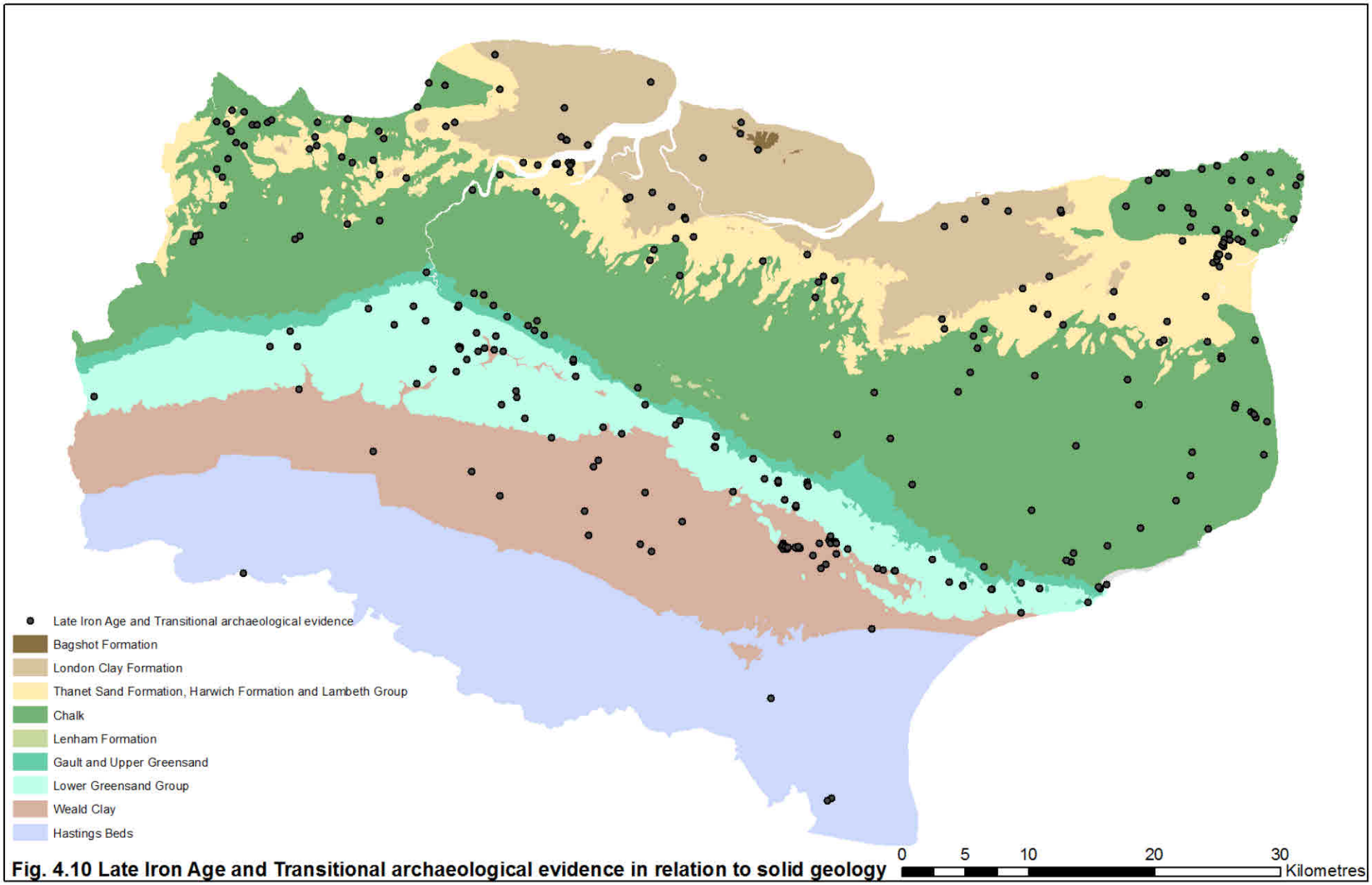


Fig. 4.10 Late Iron Age and Transitional archaeological evidence in relation to solid geology

	Area		All LIA and Transitional		LIA		LIA and Transitional Activity Foci		LIA and Transitional Activity Foci with all burials		LIA Activity Foci		LIA Activity Foci with all burials	
	Sq km	%	No	%	No	%	No	%	No	%	No	%	No	%
Kent totals	3851		308		172		133		161		81		96	
Bagshot Formation	3	0.1	2	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
London Clay	394	10.2	24	7.8	14	8.1	10	7.5	12	7.5	5	6.2	7	7.3
Harwich Formation	19	0.5	1	0.3	1	0.6	1	0.8	1	0.6	1	1.2	1	1.0
Lambeth Group	66	1.7	8	2.6	5	2.9	3	2.3	3	1.9	2	2.5	2	2.1
Thanet Beds (inc. Thanet)	309	8.0	45	14.6	23	13.4	15	11.3	20	12.4	7	8.6	9	9.4
Chalk (all)	1300	33.8	107	34.7	63	36.6	50	37.6	56	34.8	32	39.5	36	37.5
Gault & Upper Greensand	97	2.5	8	2.6	3	1.7	4	3.0	4	2.5	3	3.7	3	3.1
Lower Greensand	396	10.3	70	22.7	36	20.9	29	21.8	42	26.1	18	22.2	24	25.0
Weald Clay	550	14.3	39	12.7	25	14.5	18	13.5	20	12.4	11	13.6	12	12.5
Hastings Beds	712	18.5	4	1.3	2	1.2	3	2.3	3	1.9	2	2.5	2	2.1

Table 4.1 Late Iron Age and Transitional archaeological evidence in relation to solid geology

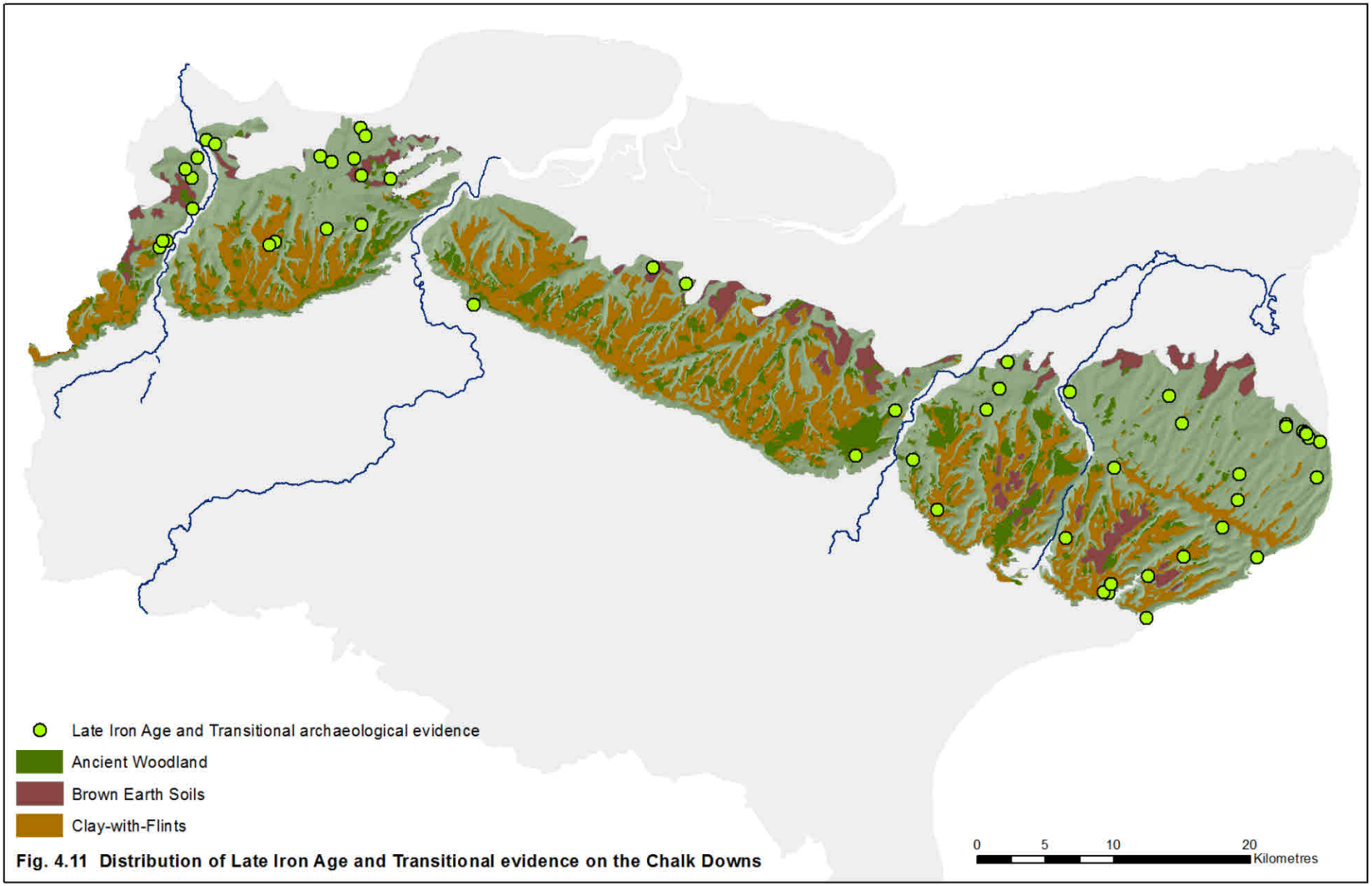


Fig. 4.11 Distribution of Late Iron Age and Transitional evidence on the Chalk Downs

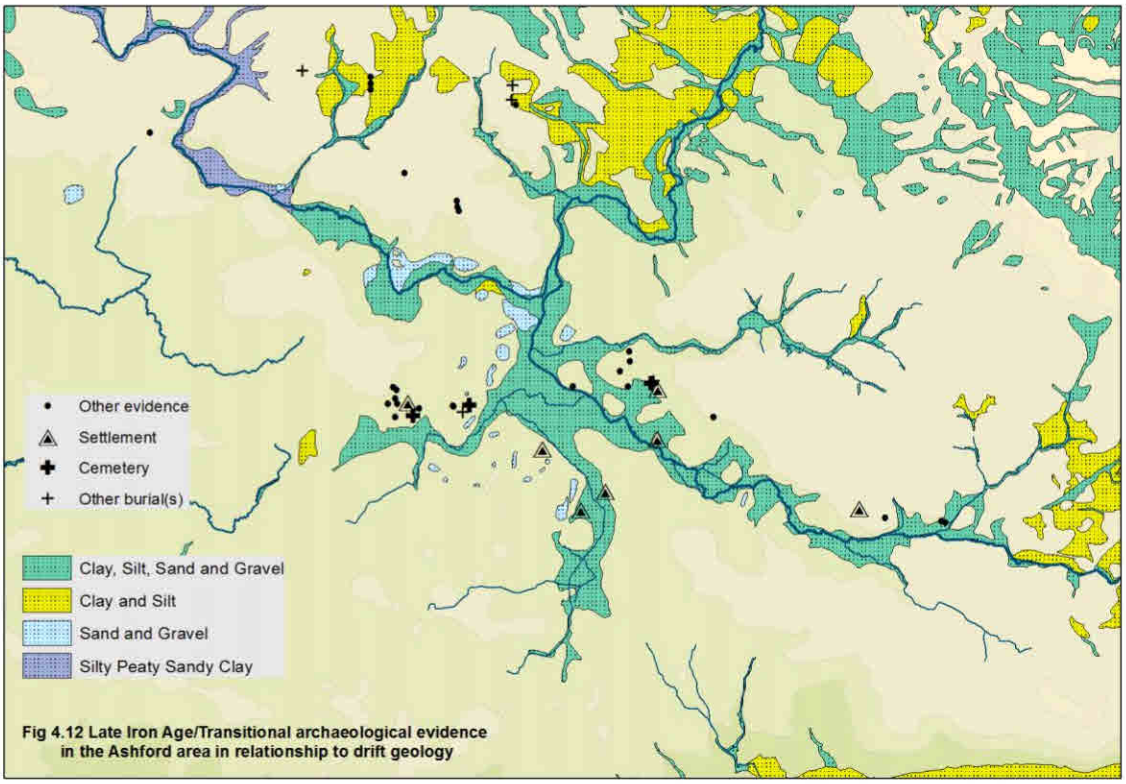


Fig 4.12 Late Iron Age/Transitional archaeological evidence in the Ashford area in relationship to drift geology

4.5.1.iii Distribution of the evidence in relation to agricultural capability and soils

Initially there appears to be relatively little direct correlation between known Late Iron Age or Late Iron Age/Early Roman evidence and what today is considered the best agricultural land: only 41 out of 307 records (13.4%) are on land classified as Grade 1 in the ALC system (Fig. 4.13). Grade 1 farmland occurs predominantly in the north of Kent and on present day Romney Marsh, the latter being irrelevant in respect to the Iron Age, given its chronology of formation (e.g. Eddison and Green 1988; Eddison et al. 1998; Long et al. 2002; 2007).

These statistics may be misleading, however, as looking slightly further afield, we find that 101 (32.9%) are on or within 1km of such land and 142 (46.3%) within 2km. Even where evidence is located on the best land, it tends to be on the margins of these areas. A note of caution must, nevertheless, be sounded: a number of these marginal locations are situated within unclassified (urban) areas, the locations of which strongly suggest that they themselves have developed on the better land. Nevertheless, some degree of marginality appears to be present even if urban areas are considered as potential Class 1 agricultural land: whereas 32.9% of the evidence (101 records) is located within an area consisting of ALC Class 1 and contiguous urban

areas (excluding Romney Marsh), a further 31.9% (98 records) is located within a 1km buffer zone.

The situation with regard to the Brown Earth Soils (Fig. 4.14; Table 4.2) is complicated by the fact that (as noted in Chapter 3) those in the Greensand belt are probably the result of relatively recent deliberate soil improvement (Hall and Russell 1911, 8). This makes it impossible to assess the impact of potential soil fertility in this region, or indeed the ease with which the land could be worked owing to the close correlation between Brown Earth Soils and land classified as Ease of Cultivation Grade 2. Just as with ALC Class 1 land, the geographical relationship of the Brown Earth Soils to the urban areas of north Kent suggests that the two should be taken together as potentially representing the full distribution of this soil type. Further historical research might elucidate this matter: Hasted (1797, II) for instance states that the valleys of Dartford parish supported a rich and fertile loam, suggesting that the correlation between urban areas and Brown Earth Soils might be correct. The area represented by the Brown Earth Soils and urban areas of the north Kent plain represents only 11.7% of the area of the county but has a much higher proportion (19.8% = 61) of the archaeological records (Table 4.2) with a further 9.7% (= 30) in the surrounding 1km (total 28.9%). Again the map suggests a degree of marginality. On Thanet this tendency is particularly marked: 8.8% of records of Late Iron Age and Transitional activity is found on the 0.7% of the county represented by Thanet's Brown Earth soils and contiguous urban areas.

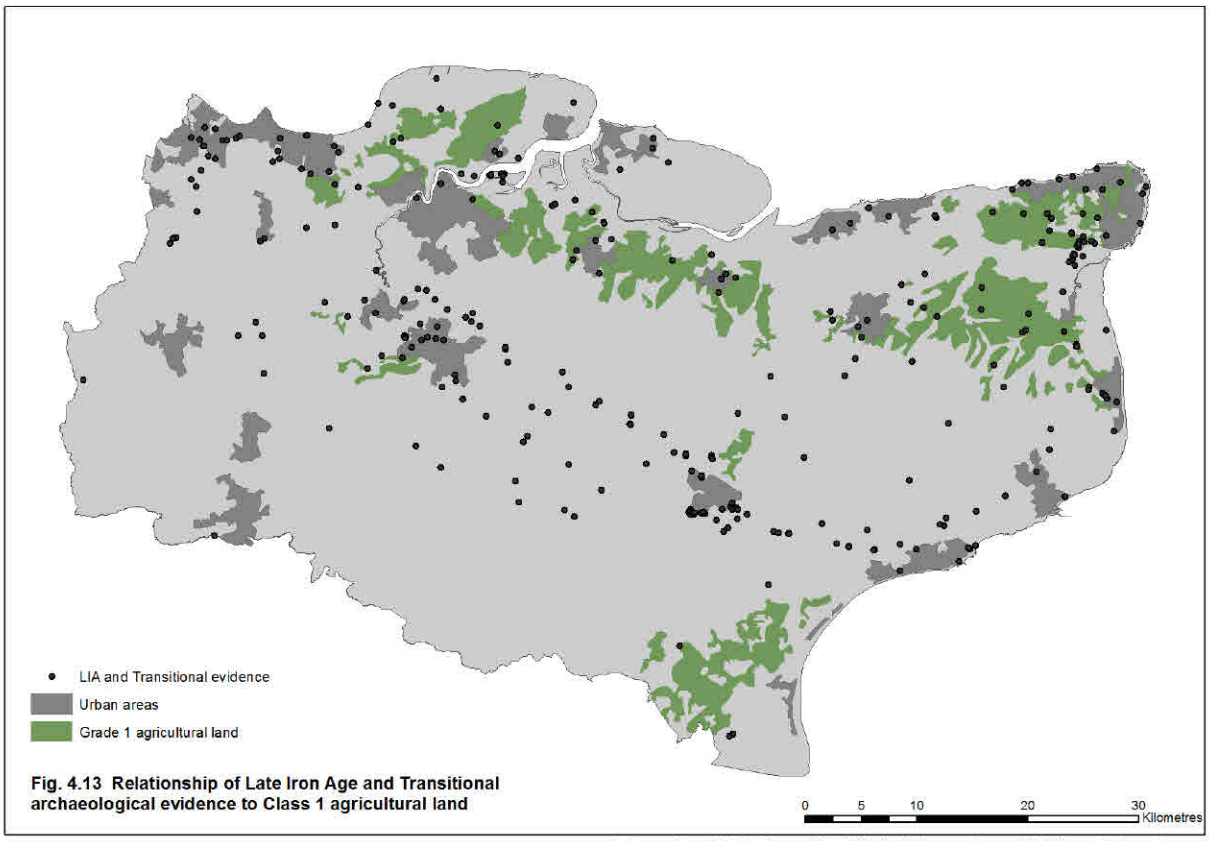


Fig. 4.13 Relationship of Late Iron Age and Transitional archaeological evidence to Class 1 agricultural land

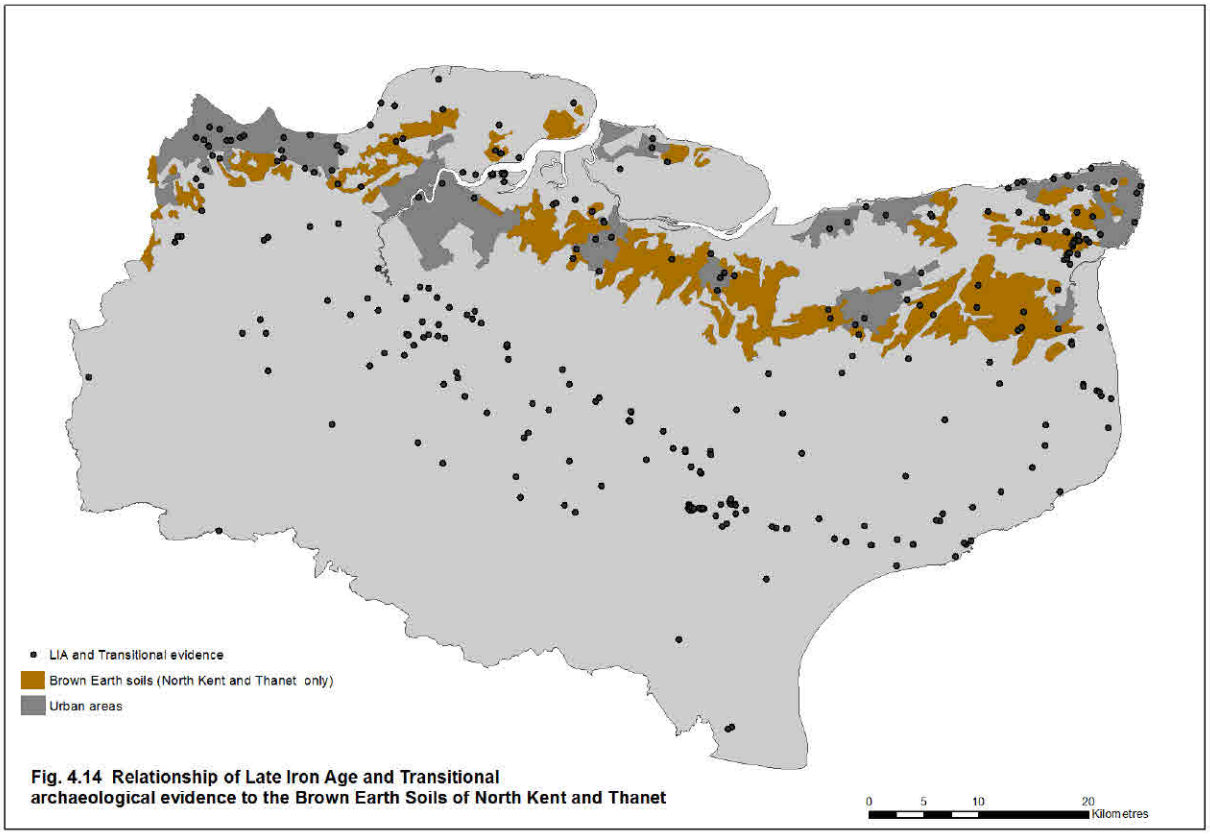


Fig. 4.14 Relationship of Late Iron Age and Transitional archaeological evidence to the Brown Earth Soils of North Kent and Thanet

	Area		All LIA and Transitional		LIA		LIA and Transitional Activity Foci		LIA and Transitional Activity Foci with all burials		LIA Activity Foci		LIA Activity Foci with all burials	
	Sq km	%	No	%	No	%	No	%	No	%	No	%	No	%
Kent totals	3850.7		308		172		133		161		81		96	
North Kent Brown Earth Soils (BES) & contiguous urban areas (not Thanet)	451.6	11.7	61	19.8	31	18.0	21	15.8	26	16.1	13	16.0	17	17.7
In or within 500m of North Kent BES & contiguous urban areas (not Thanet)			81	26.3	45	26.2	31	23.3	36	22.4	19	23.5	23	24.0
In or within 1km of North Kent BES & contiguous urban areas			91	29.5	50	29.1	34	25.6	41	25.5	21	25.9	26	27.1
Thanet BES and contiguous urban areas	28.1	0.7	27	8.8	17	9.9	12	9.0	14	8.7	8	9.9	8	8.3
In or within 500m of Thanet BES & contiguous urban areas			38	12.3	25	14.5	20	15.0	22	13.7	15	18.5	15	15.6

Table 4.2 Late Iron Age and Transitional evidence in relation to the incidence of Brown Earth Soils in North Kent and Thanet

It appears that the better soils did exercise a degree of 'pull' over the siting of Late Iron Age and Transitional settlement but the suggestion of marginality is intriguing. Does this perhaps indicate that the better land was recognised and farmed cooperatively, rather than being appropriated by individual farmers? The opposite might be the case with the new elite exercising control over who might or might not have access to it. The evidence is not particularly robust and there may be more prosaic explanations to do with the recovery of data in the present or physical difficulties of access in the past.

Nevertheless, the landscape does not appear to be 'filled up'; less attractive land appears to be avoided suggesting that the population was not of sufficient size as to be putting pressure on land resources.

Ease of cultivation is another factor likely to have been of relevance to pre-industrial farmers (Fig. 4.15; Table 4.3). Analysis of the data shows that 25.3% of the evidence (78 records) is located on the lightest soils (Ease of Cultivation Class 1). Nevertheless, over one third (38.3%) of the evidence comes from areas classified as Ease of Cultivation Class 3 or below; most is located on the Weald Clay where a number of sites are clearly associated with iron processing. Others located on the London Clay are associated with pottery and/or salt manufacture. The close relationship between the Brown Earth Soils north of the Weald and land classified by the Soil Survey as Ease of Cultivation Class 2 again "muddies the waters". As the cultivation qualities prior to improvement of the areas of the Greensand belt now covered by Brown Earth Soils are unknown, it is conceivable or even likely that an even greater proportion of activity was situated on land of Ease of Cultivation Class 3 or below. In addition, a small amount might be added to the narrow strip of Ease of Cultivation Class 1 land that runs along the northern edge of this geology. On present evidence it appears that the ease with which the land could be worked may have had a greater influence over the settlement pattern than soil fertility.

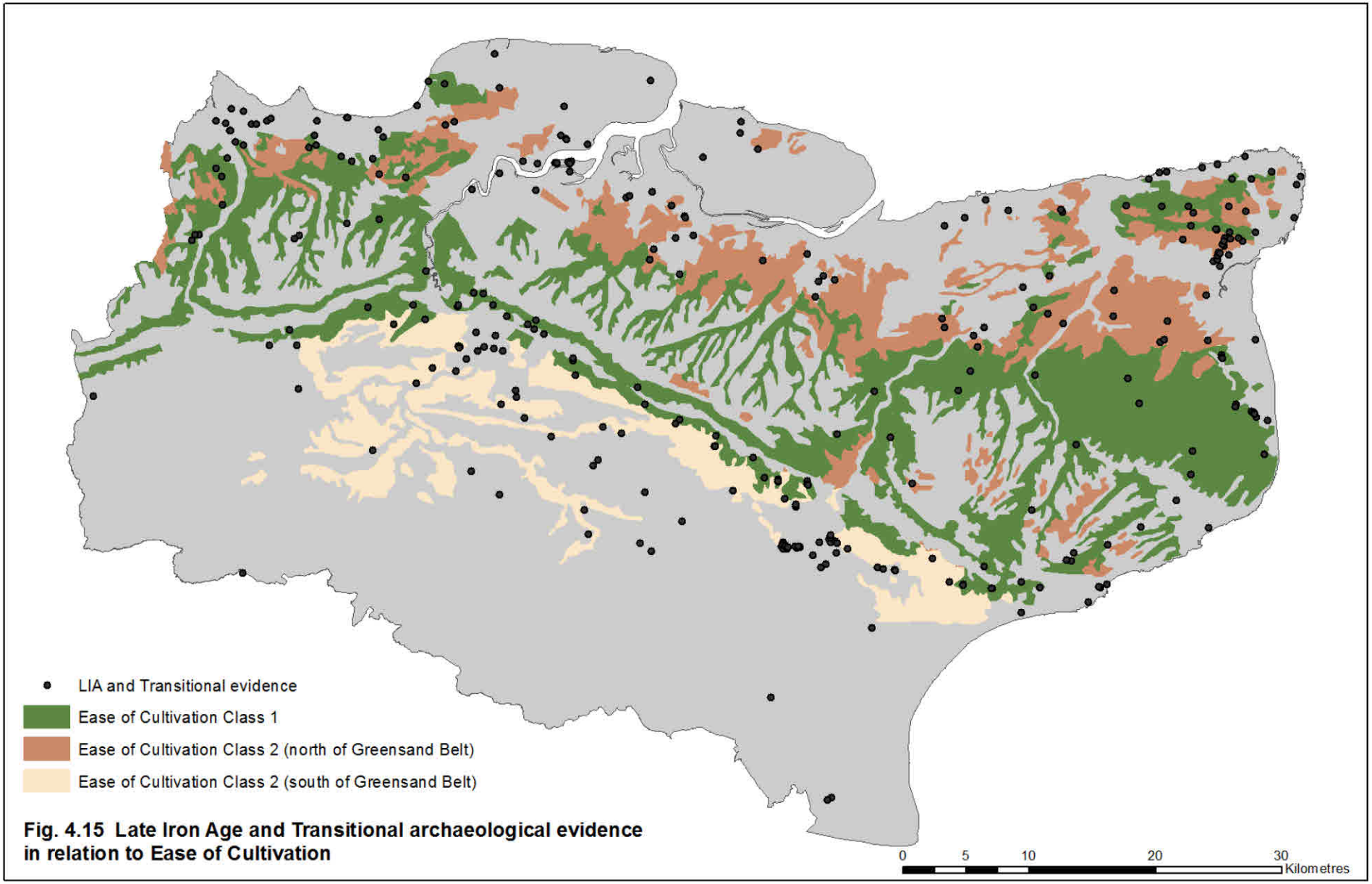


Fig. 4.15 Late Iron Age and Transitional archaeological evidence in relation to Ease of Cultivation

	Area		All LIA and Transitional		LIA		LIA and Transitional Activity Foci		LIA and Transitional Activity Foci with all burials		LIA Activity Foci		LIA Activity Foci with all burials	
	Sq km	%	No	%	No	%	No	%	No	%	No	%	No	%
Kent totals	3850.7		308		172		133		161		81		96	
Ease of cultivation Class 1	451.6	11.7	78	25.3	45	26.2	39	29.3	46	28.6	25	30.9	29	30.2
Ease of Cultivation Class 2 (north of Greensand belt)			44	14.3	20	11.6	18	13.5	21	13.0	10	12.3	10	10.4
Unclassified			46	14.9	28	16.3	18	13.5	22	13.7	12	14.8	16	16.7
Class 3 or below	28.1	0.7	118	38.3	66	38.4	47	35.3	55	34.2	26	32.1	31	32.3

Table 4.3 Late Iron Age and Transitional evidence in relation to ease of cultivation

4.5.1.iv Distribution of the evidence in relation to physiography

Late Iron Age and Transitional evidence is plotted in relation to elevation and relief in Figure 4.16. Evidence of occupation appears entirely absent from elevations over 200m AOD and present at only 20 points (6.5%) over 100m AOD. Perhaps surprisingly, these include only two of the three hillforts known to have been occupied in the Late Iron Age/Transitional periods (Oldbury and Squerreys Park). Two hundred and six points (66.9%) occur at 49m AOD or below and a further 82 (26.6%) between 50 and 99m AOD.

What the map graphically shows is the way in which so much of the evidence clusters:

- In river valleys (particularly those of the Medway and Darent),
- on the North Kent Plain,
- on the lower dip-slope of the North Downs,
- in the central region demarcated by the scarp of the North Downs to the north and the River Beult to the south.

Where river valley settlement is concerned, it tends to be away from areas considered frost-prone; for instance as far as the Medway is concerned the frost prone areas of the Medway Gap and the area to the north of the confluence of the Medway and Beult are largely devoid of evidence.

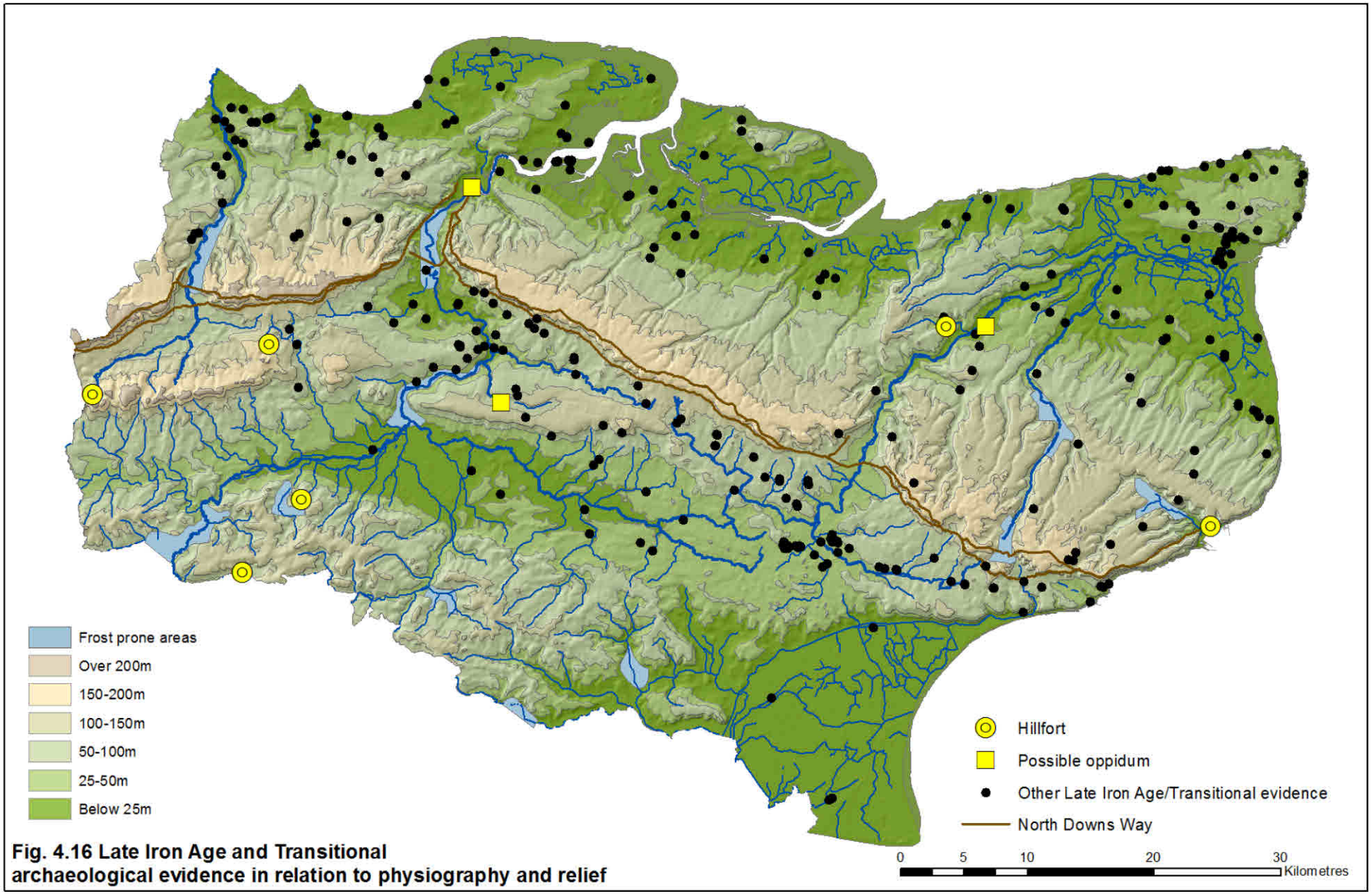


Fig. 4.16 Late Iron Age and Transitional archaeological evidence in relation to physiography and relief

4.5.1. v Distribution of the evidence in relation to *Pays*

The *pays* or physiographic regions of Kent break up the landscape in a way that has its basis in bedrock geology but reflects more closely the human experience of the landscape by taking physiography into account (see Chapter 2). For Everitt (1986), from the perspective of the origins of modern settlement in Kent, the "original lands", or earliest zones of Early Medieval occupation were the fertile Foothills with their rich soils and favourable climatic conditions (here divided into 'Foothills' and Thanet) and the Holmesdale. The Late Iron Age evidence shows a similar preference for the Foothills and (especially) Thanet (Figs. 4.17, 4.18; Table 4.4): 23.7% of the evidence occurs on the 15% of the county which makes up the Foothills and 12.3% on the 2.5% represented by Thanet.[5] The Holmesdale is less densely occupied, however, with just 3.9% of the evidence on 4.4% of the land area. The stand out statistic is the 19.5% of evidence which occurs on the Chartland (9.9% area), this chiefly in its central region. Statistics for the evidence from the area of the Low Weald are roughly in proportion (particularly in the Late Iron Age), but this disguises the fact that most of the evidence is concentrated around the confluence of the Stour and its tributaries. The Mid Kent Downs provide evidence only on their margins and the High Weald is apparently deserted save for High Rocks Hillfort.

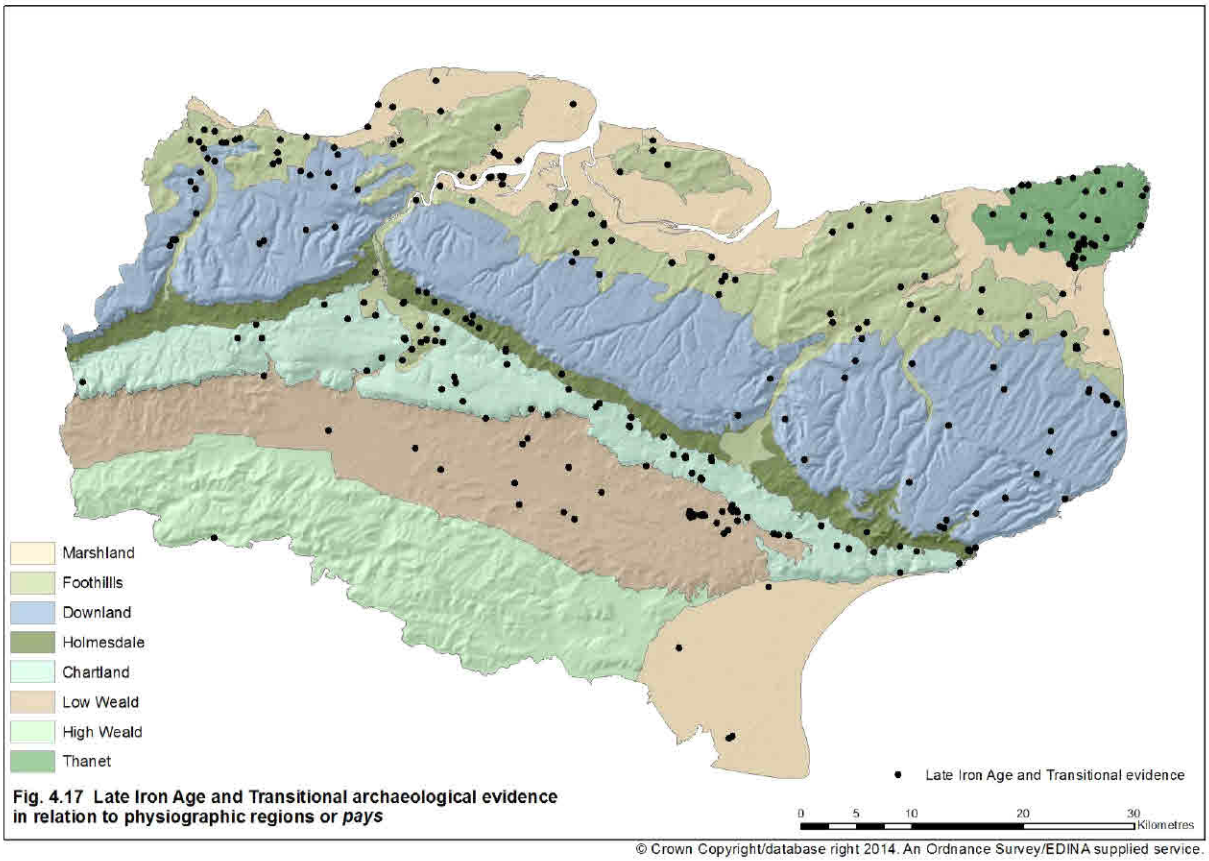


Fig. 4.17 Late Iron Age and Transitional archaeological evidence in relation to physiographic regions or *pays*

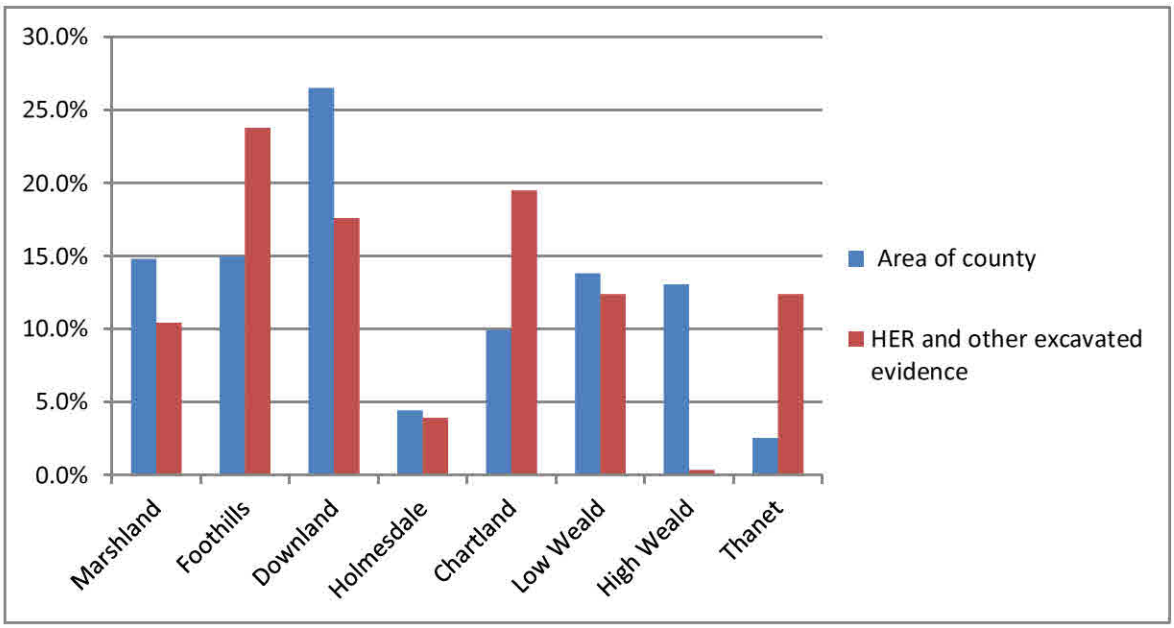


Fig. 4.18 Percentages of Late Iron Age/Transitional Archaeological evidence per *pays* compared to areas of *pays*

		Area	All LIA and Transitional		LIA		LIA and Transitional Activity Foci		LIA and Transitional Activity Foci with all burials		LIA Activity Foci		LIA Activity Foci with all burials	
	Sq km	%	No	%	No	%	No	%	No	%	No	%	No	%
Kent totals	3850.7		308		172		133		161		81		96	
Marshland	569.5	14.8	32	10.4	19	11.0	13	9.8	13	8.1	7	8.6	7	7.3
Foothills	576.6	15.0	73	23.7	34	19.8	27	20.3	36	22.4	13	16.0	18	18.8
Downland	1020.6	26.5	54	17.5	31	18.0	22	16.5	25	15.5	14	17.3	16	16.7
Holmesdale	169.8	4.4	12	3.9	7	4.1	7	5.3	8	5.0	5	6.2	6	6.3
Chartland	381.9	9.9	60	19.5	32	18.6	25	18.8	36	22.4	16	19.8	22	22.9
Low Weald	531.2	13.8	38	12.3	24	14.0	17	12.8	19	11.8	10	12.3	11	11.5
High Weald	502.6	13.1	1	0.3	1	0.6	1	0.8	1	0.6	1	1.2	1	1.0
Thanet	97.5	2.5	38	12.3	24	14.0	21	15.8	23	14.3	15	18.5	15	15.6

Table 4. 4 Late Iron Age/Transitional archaeological evidence in relation to *pays*

4.6 Portable Antiquities Scheme Evidence

As of February 2014, the PAS database has 3881 records of Iron Age/potentially Iron Age objects of which 3679 have the coordinates needed for mapping. Many of these are poorly dated; 942 mappable objects are more closely assigned to date ranges between the Later Iron Age (taken here as from 100 BC) and the Transitional/Roman periods (Fig. 4.19). The vast majority of these are coins (861 records of which 858 are of single coins): there are only 81 records of other types of object (most frequently brooches; Table 4.5). The high number of coins is partly accounted for by the fact that the Kentish Late Iron Age PAS record additionally includes data from the Kent Iron Age Coin Project, no matter by what means that data originated. Worrell (2007) notes the disparity between the numbers of coins thus recorded for Kent as opposed to other south eastern counties; within the county there is a distinct bias towards the east of the county. This latter may again be partially due to biases in collection and recording, but may also reflect different patterns of coin circulation and use. Holman (2000; 2005) has distinguished at least three such separate regions, bounded by the county's principal north-south river valleys (those of the Darent, the Medway and the Great Stour).

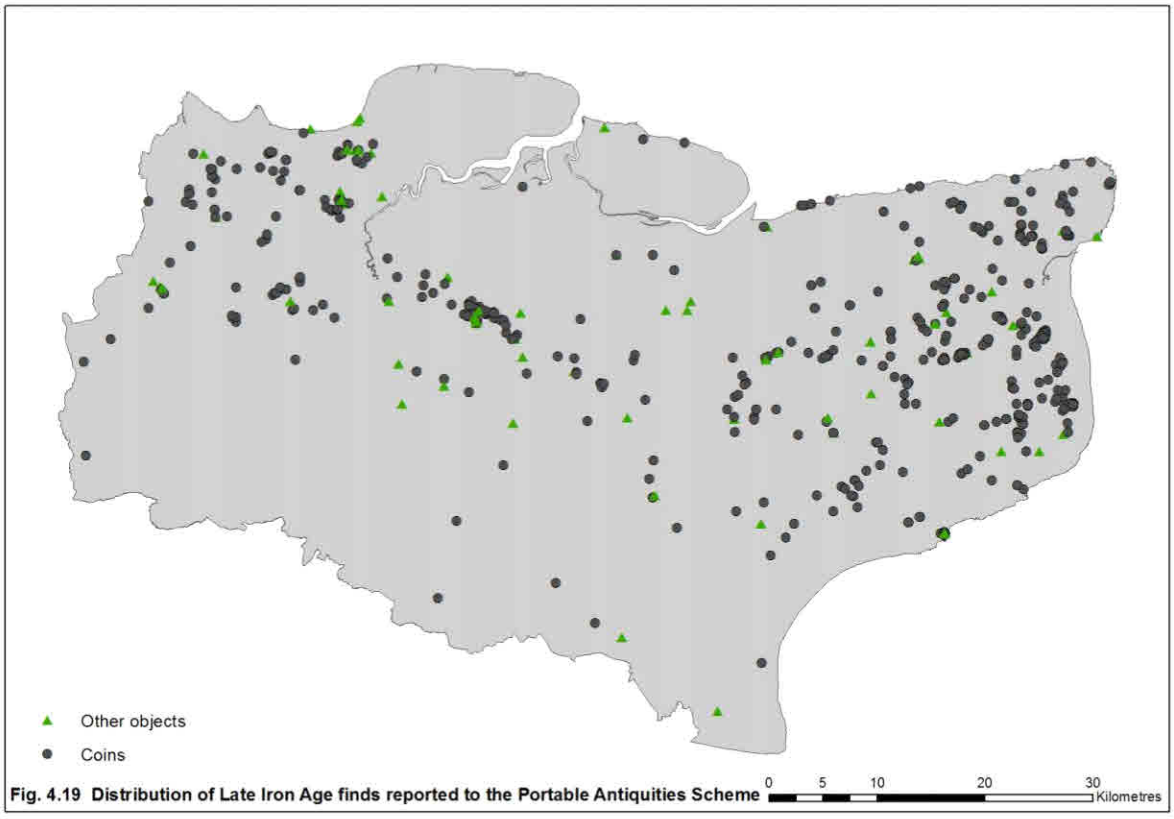


Fig. 4.19 Distribution of Late Iron Age finds reported to the Portable Antiquities Scheme

Object type	No
Amphora (DR 1)	1
Brooch	46
Cosmetic pestle/mortar	4
Hair pin	1
Harness/strap fitting	10
Helmet	1
Mount	1
Pot	11
Ring	1
Toggle	3
Unidentified	2

Table 4.5 Late Iron Age PAS finds (not coins)

One might expect any biases in the PAS evidence to complement those of the HER owing to the different manner of their discovery and collection: PAS data should not be biased by either research agendas or development pressures. As the bulk of PAS finds are recovered by metal detectorists, however, and as the most favourable locations for metal detecting are on freshly ploughed land, there is likely to be a natural bias towards the better arable soils: indeed 606 of the 942 mappable finds derive from arable land. Detectorists, like archaeologists, are likely to target areas already known to produce results and not all land, even if conditions are favourable, is accessible.

If *all* PAS finds from Kent are mapped (Fig. 4.20), some filling out of the pattern does occur, particularly in terms of finds of medieval and post-medieval date on the Downs and the High Weald, suggesting that there is some degree of 'reality' to the Late Iron Age pattern within this broader distribution.

Although the distribution of PAS finds is similar to that of the HER record, there are differences between the density patterns of the two records. The map of PAS record distribution points is in one respect misleading, since it maps only the *locations* of finds. In some cases a number of finds may originate in one spot; another problem is that the majority of finds are only mapped to the accuracy of a four figure grid reference meaning that finds from different spots within a I km grid square all map to the same location.

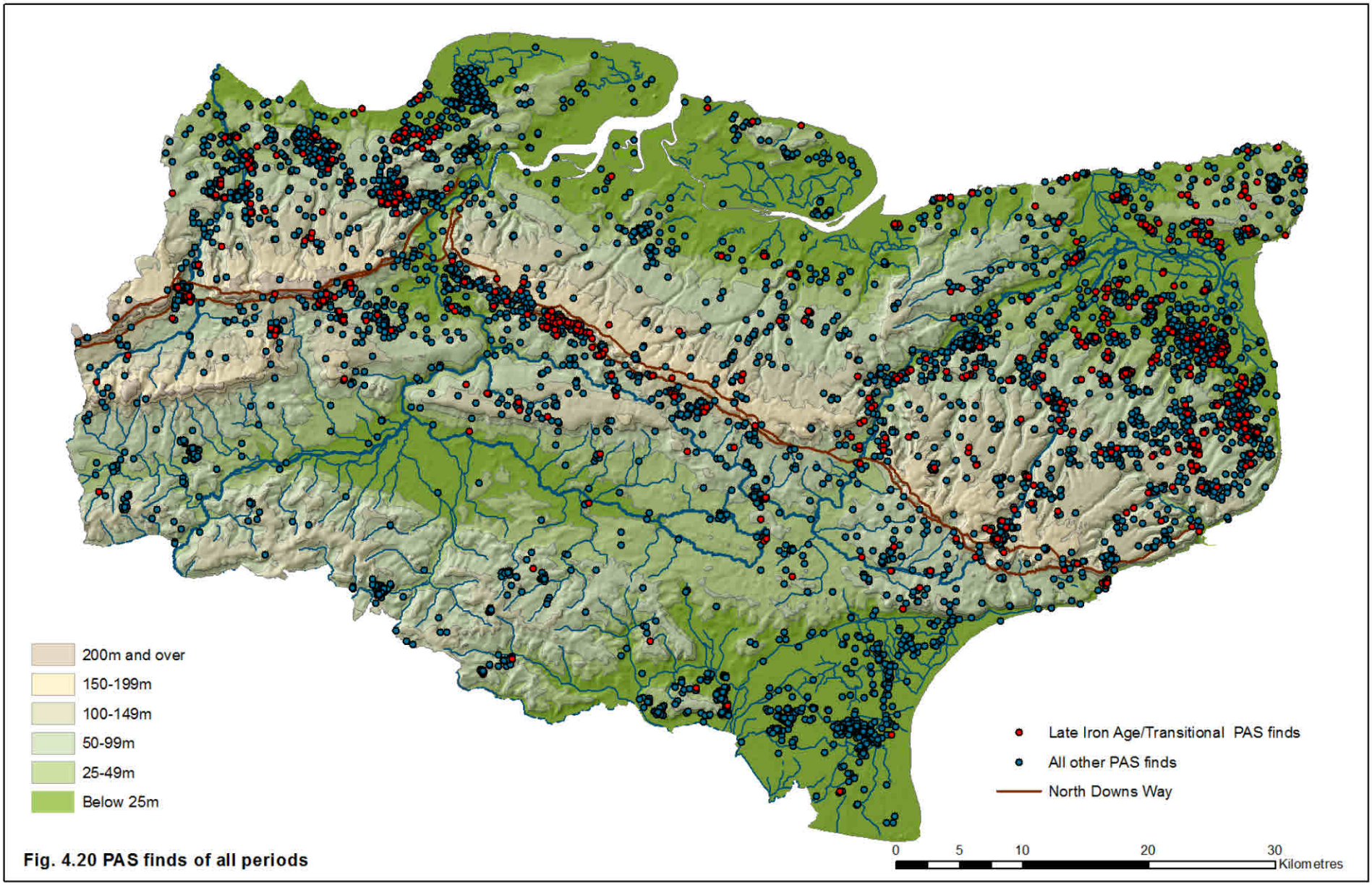


Fig. 4.20 PAS finds of all periods

Figure 4.21 combines information on the density of HER records with that of individual Late Iron Age/Transitional PAS finds (rather than allocated grid references) again against a 5 km grid. Although many of the highest concentrations of PAS finds do occur in areas with higher densities of archaeological evidence, there are a number of grid squares with no archaeology but 1-5 PAS finds and in the Upper Medway region, the concentration of archaeological sites is not matched by similar concentrations of PAS finds: these are found to the east and west. A strange feature is the absence of evidence from the North Kent Plain; although the arable fields best suited to metal detecting are not as concentrated as in some other areas, there are still plenty, leading one to suspect either restricted access or lack of reporting as possible explanations.

The large number of coins recovered from East Kent is clearly visible. Also in the east, the hinterland of Folkestone is notable for its high density of both PAS and HER records. In the Ash region the coin total is in part boosted by a large concentration in the region of what was probably a precursor to the Roman temple at Worth. In between these regions is one with a much higher density of coin finds than of HER evidence which is again is distorted a large concentration of finds associated with one site (TR 25 SE 319, south of Nookets Wood, Goodnestone).

Linear distributions of coins (particularly copper alloy and potins) associated with river valleys may suggest movement through the landscape (Fig. 4.22). A considerable number of copper alloy and potin coins have been recovered from the environs of the central section of the North Downs Way. There is, perhaps significantly given its future history, a marked concentration (additionally including at least seven gold coins) in the vicinity of the enclosed settlement at Thurnham; this site developed into a villa in the early years after the Roman conquest (Lawrence 2006). Gold coins in general show a somewhat different distribution, with higher numbers than one might expect from more elevated areas not presently associated with settlement evidence (Fig. 4.23).This may reflect both different patterns of use and different depositional processes raising the possibility of deliberate, ritual deposition of gold coins in outlying or liminal areas, a practice that has been identified by Hingley (2005b) with regard to iron ‘currency bars’.

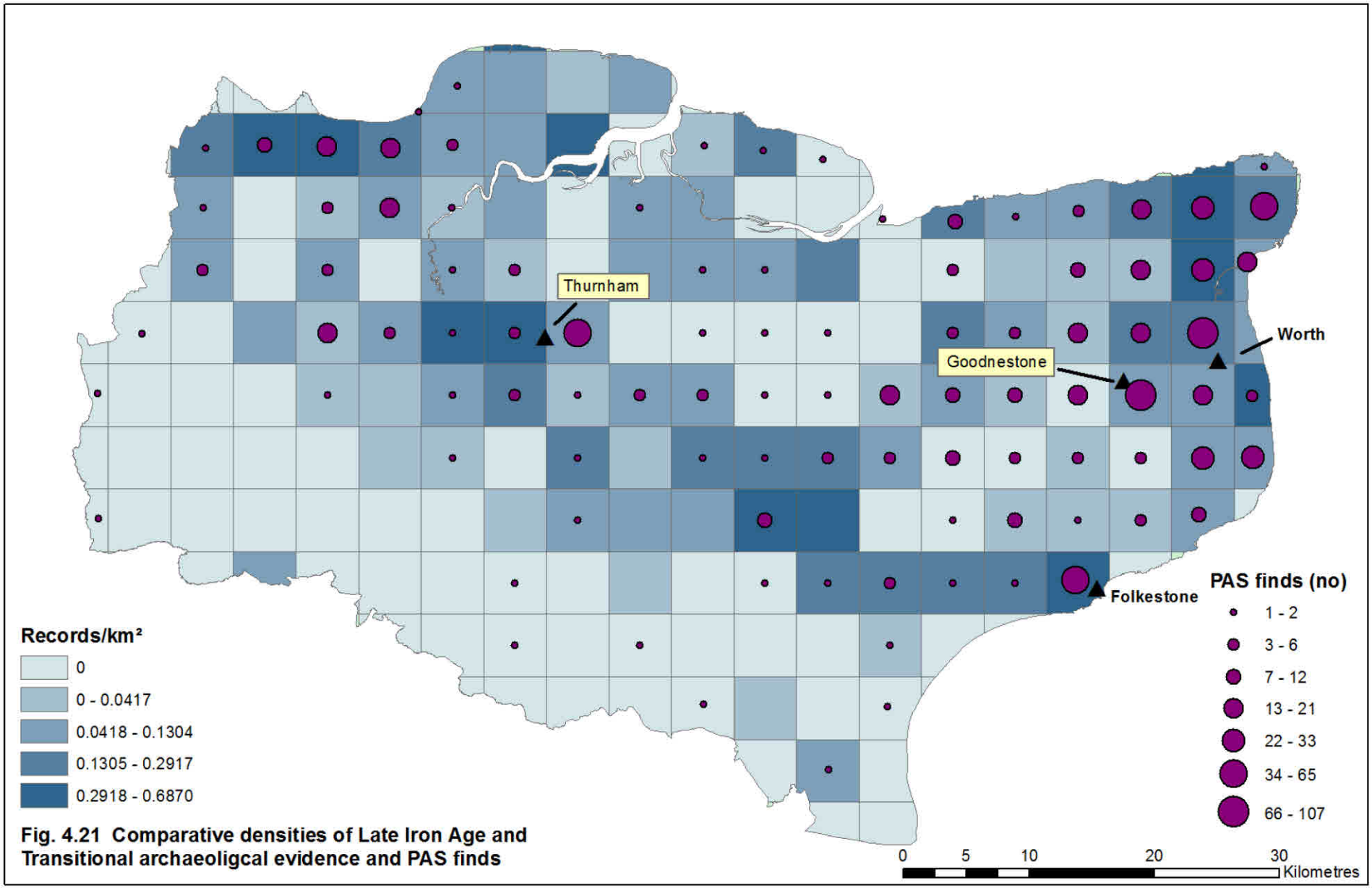


Fig. 4.21 Comparative densities of Late Iron Age and Transitional archaeoligcal evidence and PAS finds

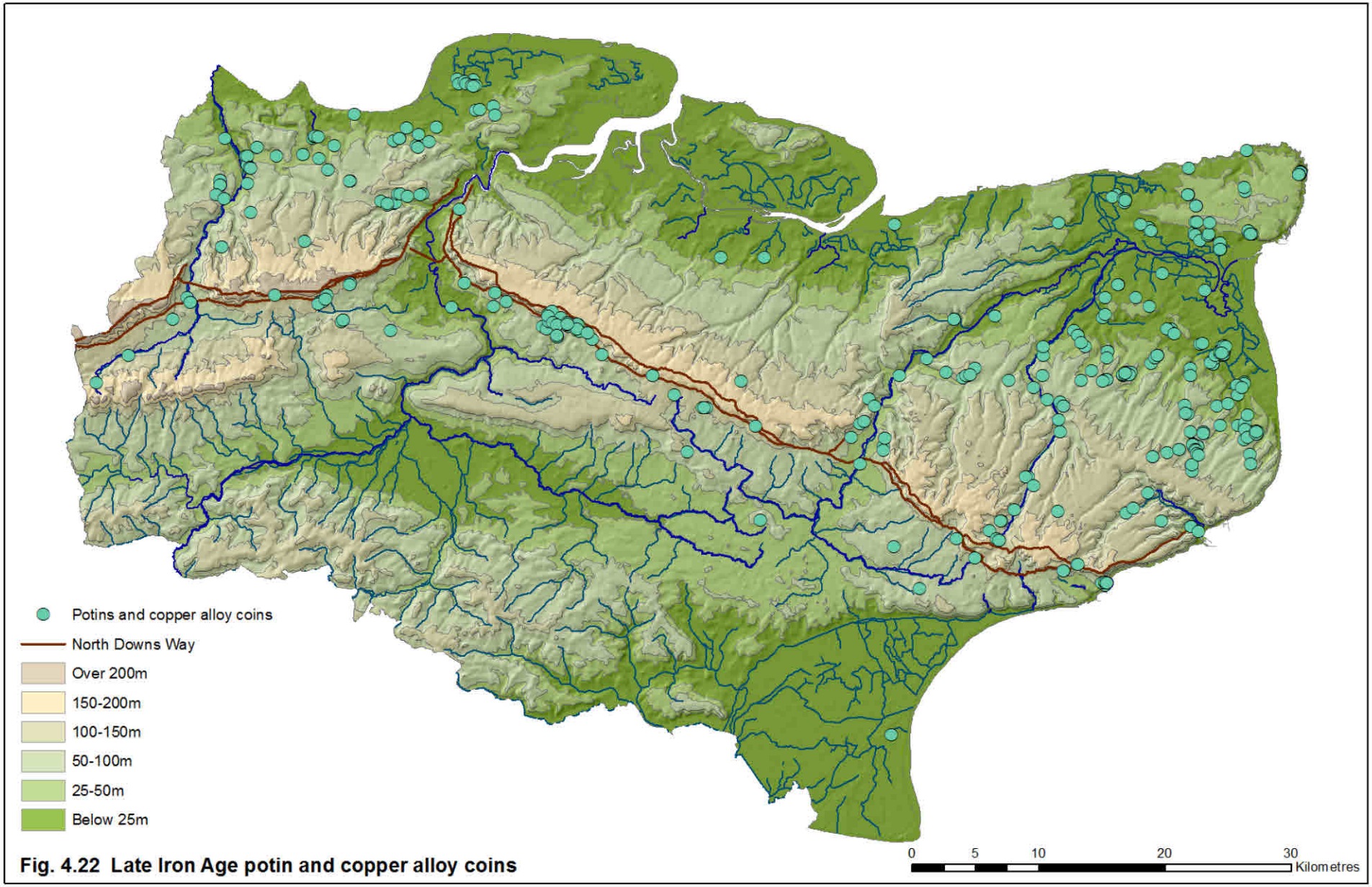


Fig. 4.22 Late Iron Age potin and copper alloy coins

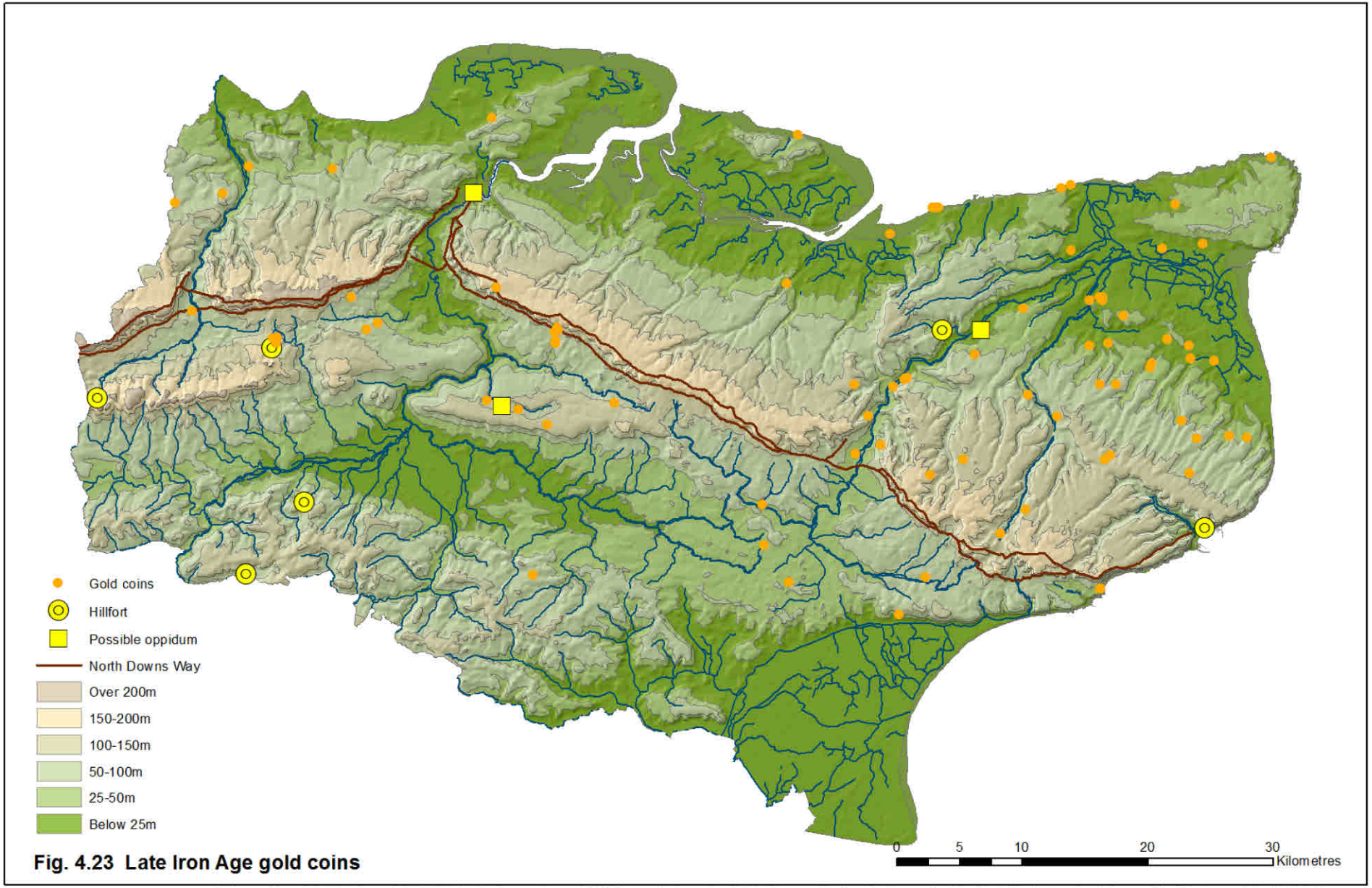


Fig. 4.23 Late Iron Age gold coins

Curteis (2001) found that a significant proportion of (excavated) sites producing Iron Age coins in the south midlands were ritual or ceremonial in nature. One possibility is that these outlying gold coins from Kent indicate the presence of special or sacred places in the landscape. We assume that much of the higher land of Kent was wooded in the Iron Age and woodland groves are popularly associated with 'Celtic' ritual. We should note, however, Webster's (1995b, 448) note of caution: most references to woodland ritual sites date to the 1st century AD, possibly reflecting proscription of the Druids and thus views of ritual practices that are, at the best, distorted, as well as being anachronistic.

4.7 Putting the evidence together

One element that has not been overtly discussed so far is that of connectivity. Although it is likely that there was a Late Iron Age precursor to Watling St (Margary 1973, 43), the major axis across the county in prehistoric times was provided by the North Downs Way which not only provided a route westwards towards Surrey and the Thames but, via intersections with the Medway and the Darent, a choice of shorter routes by land and water to the Thames estuary. The fact that Folkestone, situated at its eastern extremity can now be seen to have been a significant port of entry adds to its importance as a route for the importation of both goods and ideas from the continent.

The geographical area to the south of the North Downs Way, between the Medway and the Great Stour seems to have attracted Late Iron Age settlement more strongly than the quality of the land in itself might lead one to anticipate. To be sure, relatively advantageous conditions pertained in the narrow strip of land now known as the Holmesdale where the heavier but fertile Gault Clay is abutted on one side by the easily worked soils at the bottom of the scarp of the North Downs and on the other by the Greensand, but this does not account for the amount of evidence from the Chartland. In terms of communication, however, this region was particularly well served: a few kilometres and to the south, major tributaries of the Medway and the Great Stour lie on the same axis as the North Downs Way, providing a nexus of communication (Fig. 4.24). Looked at in this light, Quarry Wood, Loose appears to have a much more central location than perceived by Kelly (1971, 75). The concentration of settlement at Ashford at the easternmost extreme of this area, although on the ostensibly less favourable Low Weald, is particularly well served by riverine connections and seems to have benefited

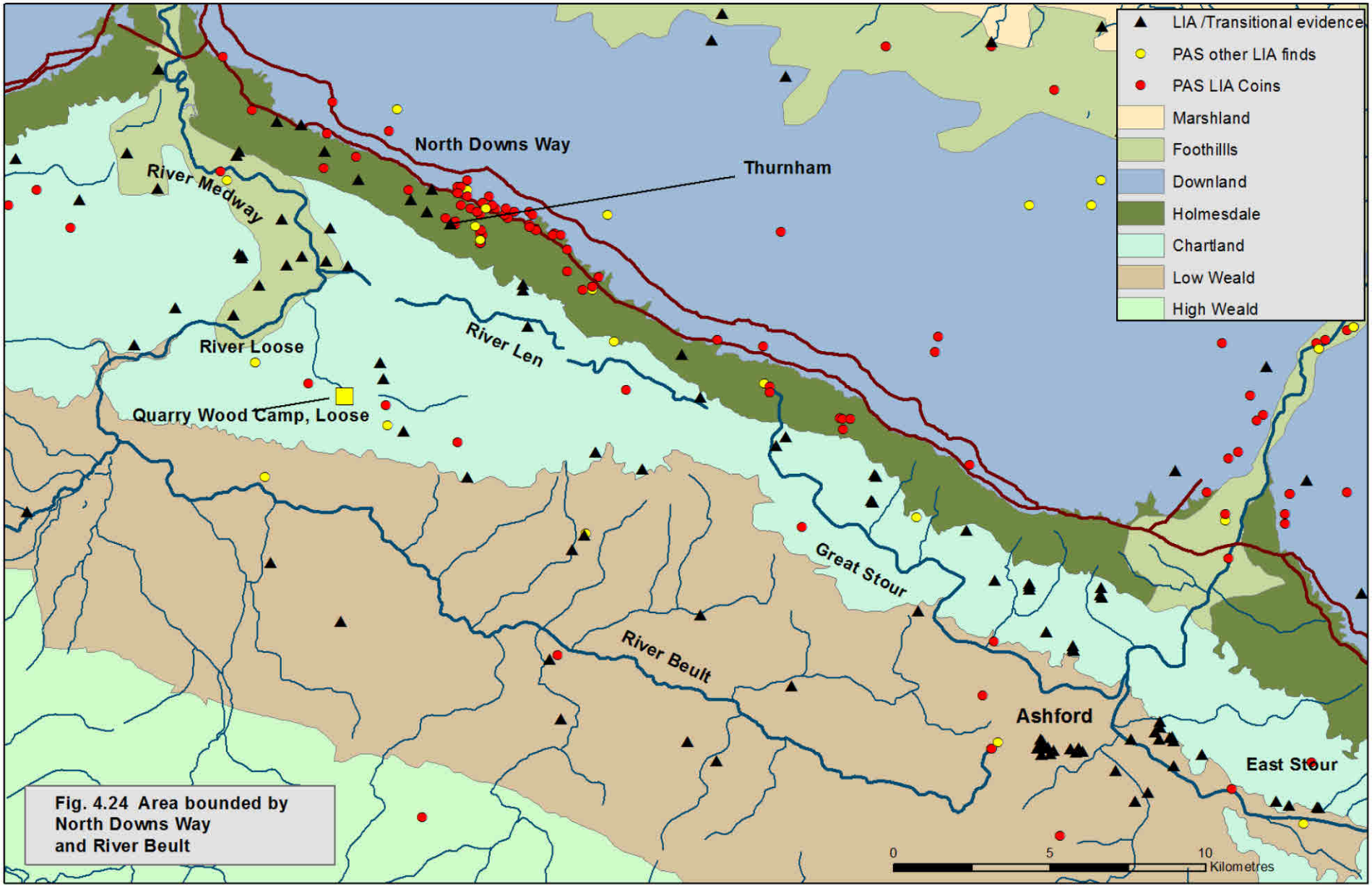


Fig. 4.24 Area bounded by North Downs Way and River Beult

from alluvial deposits alleviating the heavy Weald Clay. The distribution of HER and PAS evidence seems to suggest that the East Stour formed an important connection between the Ashford area and the North Downs way to the east of Folkestone. Other sites on the Weald clay seem also to have been situated in relation to minor tributaries and alluvial deposits. Kent's rivers provided access to the interior of the county from the sea and, via the tributaries of the Medway and the Stour provided a second east-west route across the county. It can be no surprise that important centres grew up on the Stour (Canterbury), Medway (Rochester) and the Ebbsfleet (Springhead), whilst more dispersed settlement evidence is found in the Maidstone region of the Medway valley and along the Darent.

Large areas of both the Low and High Wealds as well as much of the Downs appear to have been uninhabited, or at least to have left no trace of permanent habitation. It is likely that large parts of these areas were wooded as indeed large parts are to this day. The hillforts of West Kent, all of which (aside from Castle Hill Tonbridge) show some sign of Late Iron Age occupation, appear to be rather isolated outposts and it is not yet clear how they fit into the scheme of things. It has been suggested that they indicate increased interest in the resources of the Weald (Hamilton and Manley 2001, 31) but Oldbury and Squerreys are orientated towards the Holmesdale and the North Downs Way rather than the Weald. Squerryes Camp in fact overlooks a series of springs which form the source of the River Darent and so as well as any practical purpose may have had a symbolic significance.

Given the variety of the archaeological evidence, the clear importance of the topography of the county in settlement development and Caesar's naming of the four kings, it is hardly surprising that attempts have been made to discern different socio-economic units. Cunliffe (2005, 166 and Fig. 7.14) on the basis of coin distribution and differences in pottery fabrics suggests three such units, each centred on one of the major river valleys. Holman (2000, 220) uses the numismatic evidence to divide the county *along* the river valleys finding within these regions, "some reasonably well defined, although not numismatically distinct differences".

It is unlikely that we will ever know whether such different zones did exist in any formal sense or exactly where their boundaries were although elite centres may be postulated at Canterbury in the east, Quarry Wood, Loose in the central zone (later replaced by Rochester) and possibly Springhead in the west. Elites who may have controlled such territories certainly seem to have developed by the Late Iron Age, though none seem so far to have been interred with the extravagance of the Welwyn type burials. This apparent difference in wealth and access to prestige goods such as Dressel 1 amphorae has been interpreted as demonstrating that Kent's inhabitants were punished for their resistance to Caesar and so cut off from Roman

trade in the final years before the Claudian annexation (Cunliffe 2003, 168). The scale of the imports arriving at Folkestone suggests that this was not the case, as does the volume of gold coinage in circulation. Nonetheless, the significant quantities of continental fine wares and amphorae present at East Wear Bay may indicate only a brief episode or episodes of importation: (Lyne n.d., 33) suggests that the bulk of these fine wares arrived during the period c.15 BC-AD 25, a pattern mirroring that seen in the Fishbourne-Chichester area.

Given the variety of funerary evidence from Kent, it may be that, as Champion argues (2007a, 127) burial rites in Kent simply demonstrate the exercise of cultural preferences; on the other hand if Kent was subject at various times to the Eastern and Southern Kingdoms perhaps we should not expect its elite to be buried with the same level of grandeur as client kings: the contrast is caused by the relative greater wealth of the rulers of the Eastern Kingdom rather than by any particular poverty of the Kentish elite. If the Kentish elite were unable rather than disinclined to access amphorae for inclusion in burials perhaps this is because they were being siphoned off by their more influential neighbours: they were certainly entering the county with significant numbers being consumed at Folkestone, even if relatively few found their way permanently into the Kentish hinterland.

4.8 Kent at the dawn of the Roman period

Given the above, a certain amount of confusion over what belongs to the Late Iron Age and what to the Early Roman period of Kent is understandable: Kent was far from being a blank Iron Age canvas waiting to be painted with a veneer of *romanitas*. Neither was it a unified tribal territory just waiting to become a Roman *civitas*. In Late Iron Age Kent we find a dynamic and changing society whose elite at least were already embedded in a network of relationships with client kingdoms both at home and abroad. While Kent may have been under the sway of more powerful Roman-backed neighbouring kingdoms, those with access to new ways of behaving and consuming were making their own decisions about how to use these as they attempted to define and/ or influence their positions in the changing order of things.

This ability to choose must have been enhanced by Kent's pivotal position as the point nearest to Gaul, well used to receiving visitors and goods from abroad. We must assume that people and commodities also flowed back in the opposite direction even if the British (or Kentish) exports are less visible to us; the slave chains from Bigbury (Thompson 1983) hint darkly at what one of these exports may have been. Folkestone's position at the end of the North

Downs Way meant that it was ideally suited to the export of goods from the interior of Britain (and Kent): it is unlikely that the vessels which brought with them amphorae and fine wares (whether such items were in the form of traded goods or gifts) went back taking nothing in return.

Is this 'Romanization before the conquest'? If we accept that some members of the elite *were* brought up as *obsides* in Rome, learning 'Roman' modes of behaviour, then perhaps one could argue that it is. The opposite case can be made, however. The evidence demonstrates an understanding of what was going on in the wider Roman world, but the way in which the new material culture was being used suggests not so much emulation of Roman ways, but reinterpretation and adaptation (Willis 1994).

This discussion focuses on the elite for the simple reason that they are more archaeologically visible. The non-elite are, as ever, harder to discern, but their labours have left their mark in the industrial sites of the North Kent Marshes and Weald, in the enormous earthworks associated with the Loose *oppidum* and the creation and maintenance of the ditches which were once again dividing up the landscape. While it is a commonplace to suppose that the lives of the poor change very little no matter who is in power, the transition from what is generally supposed to have been an egalitarian society to a hierarchical one must have affected the lives of those outside the ruling class just as much as it did those who were in power. A person's labour was no longer simply for the benefit of immediate family or wider kin group, but needed to generate the surpluses which would go to pay the tribute demanded by Rome. New land divisions may indicate not just the need to control livestock but new concepts of land ownership and with them the right to work and dwell (or not) in specific areas. Life in rural Kent was taking on a shape that anticipated what was to come in the succeeding centuries of Roman rule.

Notes

[1] Similar items are, however, known from elsewhere, as with that from Melsonby, North Yorkshire (Fitts et al. 1999), while there is a later prehistoric tradition of the use of metal situla vessels in graves on the Continent, sometimes themselves containing cremations (e.g. van Heeringen 1999).

[2] Booth et al. (2008, 385) note that the micaceous *terra nigra* of which the platter is made is unusual in grave assemblages but that Ashford is close to a hub for the distribution of such wares, whilst the jug and patera set represented go on to have currency in the Roman period, particularly in association with cremations.

[3] The latest figures available (Lyne n.d.) suggest that this is not the case at least based on the weight/no of identified Dressel 1 sherds.

[4] The one HER entry refers to High Rocks Hill Fort, Tunbridge Wells.

[5] This figure may be inflated, at least in proportion to the evidence from mainland Kent, by a number of possibly related entries relating to recent large scale interventions, notably the construction of the East Kent Access road.

5 Rural Settlement in Kent during the Roman era: distribution and trends

5.1 Introduction

The purpose of this chapter is to introduce the evidence which will be used in future chapters and to investigate its nature and distribution. This exploration acknowledges problems regarding chronology, sources and reliability and examines overall patterns of distribution in the landscape.

5.2 Chronological considerations

The previous chapter demonstrated that there is no clear cut-off between the LPRIA and the Early Roman period in Kent. Whatever the political and social implications of the formal incorporation of southern Britain into the Roman empire, in terms of settlement and material culture the 'dividing line' of AD 43 is "archaeologically meaningless" (Booth 2011, 243) and invisible ceramically (Pollard 1988, 32-3). Booth consequently uses the term 'Roman' (in a purely chronological rather than cultural sense) as a convenient shorthand for the archaeology of the Late Iron Age and Roman period unless more precise terminology is required.

In addition to this, just as is the case in the later Iron Age, any mapping of the general distribution of rural settlement during the Roman period - particularly in a regional study such as this - must acknowledge that what is being mapped is, in fact, a palimpsest of activity covering a period of several centuries. As with the previous period there are a number of problems involved with such an undertaking:

1. Much of our knowledge derives from old or even antiquarian discoveries and excavations which are poorly dated.
2. More recent discoveries unfortunately similarly sometimes lack detailed reporting or dating.

3. Many interventions in response to planning legislation and which conform to current standards of excavation and reporting nevertheless by their nature provide only 'keyhole' views of the archaeology discovered.
4. Although Roman ceramics are more prolific and better understood than those of the Iron Age, much still remains to be learned about the locally made coarse wares which often form the bulk of rural assemblages.

This state of affairs means that is difficult or even dangerous to attempt to map changes in settlement patterns chronologically with any degree of precision over the whole of the county. This problem is particularly acute at the beginning of the period, as we have seen already, with a significant number of sites and finds designated as 'LIA or Roman' (hereafter referred to as 'Transitional'. Such sites conspicuously occur along the route of HS1; whilst there may be some argument that, particularly in the case of those situated in the Holmesdale or close to Ashford, these represent favoured locations for transition-period settlement, it also seems possible that greater sensitivity to the nature of the material culture and more ephemeral features uncovered has led to a higher degree of recognition and recording of the early origins of activity in these areas. It is possible that other evidence may have been assigned too firmly to either the Iron Age or the Roman periods. At the other end of the chronological spectrum we are on somewhat safer ground with conspicuously few sites producing very Late Roman material, although again under-representation is likely.

5.3 The nature of the dataset

The Complete Dataset of Transitional and Roman sites and finds contains 1121 records. Of these the vast majority are derived from the HER. Twenty-four records relate to recent work not yet recorded on the HER, including 16 from the major excavations preceding the building of the East Kent Access road on Thanet. As previously stated, these records form a disparate dataset and vary hugely in the quantity and quality of information they contain and in the nature of the evidence they describe.

5.3.1 Classification of the evidence

The complete dataset contains records which may be categorised[i] as follows (Table 5.1):

Category	No of records
Activity focus	389
Local centre/possible local centre	12
Town	3
Fort	5
Hillfort with Roman activity	2
Infrastructure	4
Further evidence associated with activity foci	43
Supplementary evidence ('background noise')	658
Possible Roman features of unproven date (e.g. barrows)	5
Total	1121

Table 5.1 Complete dataset: categories

For the purposes of analysing the *rural* settlement distribution pattern, the complete dataset has been further reduced to a Core Dataset (1056 records) consisting solely of rural activity foci and local centres (Class A evidence) and supplementary evidence (Class B evidence). Where multiple records exist which refer to separate but probably related Activity Foci (e.g. multiple buildings forming part of one complex but with separate HER numbers), these have been represented by one point for the purposes of mapping distribution (and therefore one Core Dataset entry) since the purpose is to attempt to map *settlement* rather than archaeological interventions.

Unequivocal roadside settlements exist at the extensively excavated and published sites of Springhead (Andrews et al. 2011) and Westhawk Farm, Ashford (Booth et al. 2008) and at a possibly similar though less fully excavated and still unpublished site at Westbere (Rady and Ward 2000). Multiple finds in the vicinity of Judd's Hill, Ospringe indicate the probable site of Durolevum, a posting station which figures in both the Antonine Itinerary and the Peutinger Table. A fifth has been suggested at the junction of two Roman roads in the vicinity of Benenden School (Aldridge 2005b) where numerous finds have been collected. Evidence of nucleation also occurs at Goodnestone, (Oxford Archaeotechnics 1997; Reilly 2011), Brenley Corner (Jenkins 1972; 1973), Maydensole Farm (Letterbox Field) and Broom Bungalows, Whitfield (Redding 1997), East Kent Access Zone 6 (Oxford Wessex Archaeology 2011) and at Monkton, where a partially excavated trackside settlement consisted primarily of sunken-

featured buildings (Bennett et al. 2008). At Dartford and Otford, evidence from multiple sites close to river crossings is highly suggestive of further roadside settlements, whilst there is strong cropmark and geophysical evidence for civilian settlement at Richborough (Small 2002, Millett and Wilmott 2003).

Funerary evidence has been treated differently from that in the Late Iron Age dataset. As Roman burials are comparatively more numerous than those of the Iron Age, single burials and small groups (generally under five burials) have been classified as Class B (supplementary) evidence unless circumstances make the burial particularly significant (e.g. presence of a tumulus). More than a quarter of the Core Dataset (286 out of 1056 records) is primarily funerary in nature; of these records, 210 are classified as Class B evidence. This corpus of course only includes rural burials; cemeteries associated with Roman towns have been omitted.

As can be seen from the Table 5.2 below, incidences of Class B evidence generally far outweigh those of known activity foci.

Class	**No of records**
Activity focus (Class A)	385
Roadside settlement (Class A)	12
Supplementary evidence (Class B)*	659
Total	1056

*includes the evidence from the two hillfort sites

Table 5.2 Class A and B evidence

5.3.2 Quality of the data

There are significant qualitative differences between the different classes of evidence, as might be expected. Whereas 31% of Class A sites have been the object of interventions since the 1990s (mostly) to current professional standards (Table 5.3; Weight 1), this is the case for only 18% of the much larger number of Class B sites and finds, over half of which consist of surface scatters, chance finds, isolated burials or pits, or excavated material without an archaeological context. Although the high proportion of Class A sites subject to recent excavation would seem to augur well, the quality of data is tempered by the relatively high proportion of sites which have not been brought to final publication or where the intervention has been in the form of evaluation or watching brief only (Tables 5.4; 5.5).

As can be seen from this breakdown, any analysis of the material in question depends heavily on unpublished grey literature much of which is not yet in its final form and is incomplete, particularly in terms of pottery and finds reports. A notable exception is represented by the now synthesised publication of the HS1 excavations (Booth et al. 2011; Andrews et al. 2011). Interim reports and data were made available on the internet via the Archaeology Data Service (ADS) at an early stage, whilst final digital reports and datasets are available from the ADS website. Further sites published in similar detail and having additional information available either on CD or online include the roadside settlement at Westhawk Farm (Booth et al. 2008) and the Weatherlees-Margate-Broadstairs Wastewater Pipeline (in Andrews et al. 2009). Since the initial gathering of data, a further monograph on the excavations preceding the A2 Pepperhill to Cobham road widening scheme has also been published (Allen et al. 2012). These publications are exceptional for the region (at least in terms of rural archaeology) in the quality and quantity of data they contain and are the result of high profile, well financed projects undertaken by large commercial excavation companies with in-house specialist resources. Some other recently discovered sites, particularly those excavated by voluntary bodies with little funding, are subject to much briefer publication, even in final form.

Weight*	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**Total**
A (Activity foci)	121	77	80	20	45	1	2	31	6	383
A (Roadside settlements)	5	3	0	3						11 (plus 3 sites inferred from accumulations of evidence)
B (Supplementary)	116	33	28	8	332	2	1	135	4	659

* See Chapter 2 for explanation of weighting categories

Table 5.3 Weighting of Core Dataset evidence

Status	**No**
Published in/as monograph (excluding HS1 sites)	12
Published (or partially published) in journal	11
Grey Literature	84
HS1 sites	12
Published on internet	2
No available report	2
Total	121

Table 5.4 Publication Status of recently excavated Class 1 (A1) evidence

Status	No
Final Excavation Report	34
Post Excavation Assessment	38
Interim	6
Partially published*	4
Evaluation	19
Watching Brief	11
Archive	2
Outline or summary only	4
Geophysical survey	1
No available report	2
Total	121

*includes sites subject to ongoing publication in journals and those where various elements are at different stages of publication, sometimes, as in the case of Snodland Roman Villa, having been excavated by several different agencies.

Table 5.5 Report Status of recently excavated Class1 (A1) evidence

5.3.3 Descriptive categories

All database entries have been assigned to descriptive categories in order to facilitate analysis and mapping. These are necessarily generalising and have indeed been simplified over time in order to make the dataset manageable; although ultimately fine detail is desirable too much detail during preliminary stages of analysis can over-complicate matters. Categories necessarily overlap (e.g. enclosures comprise ditches and settlements often include, or are surrounded by, enclosures). Some sites have been accorded to two or more categories, but at this point only the primary category is discussed. These are defined in Table 5.6.

The Core Dataset evidence is quantified by category in Fig. 5.1. Funerary evidence is by far the most frequently encountered category in the Core Dataset (27.7%; count = 292), followed by buildings (12.5%; count = 132), pottery (12%; no = 127) and industry (11.4%; no = 120) (Fig. 5.1). The preponderance of burial evidence reflects the large number of single and small groups of Roman cremations and interments to be found in Kent, many of which have been chance – but easily recognised – finds in the last two centuries.

Category	Definition
Building(s)	A building or buildings prominent.
CBM	Roman ceramic building material (often scatters) in sufficient quantity as to suggest a Roman building in the vicinity, but without structural evidence of such a building.
Denehole	Denehole with evidence of Roman use. Category overlaps with 'Ritual' and several are assigned to the latter as a secondary category.
Ditch(es)	A ditch or ditches of Roman date not forming part of a recognised field system or enclosure. Often the result of rescue work, evaluations or watching briefs, when only very partial excavation or observation has been undertaken.
Enclosure	An enclosure without sufficient ancillary evidence to be classified as a settlement.
Farmstead	A small settlement so classified by the excavator.
Features	A group of features (ditches, pits, etc.) not organised into a recognisable system. See 'Ditch(es)' above.
Field System	Ditches organised into a field system, without immediate evidence of domestic occupation. May also be a secondary category for some settlement sites.
Find(s)	Findspots of objects other than pottery or coins (although these may also be present).
Funerary	A cemetery or burials as the primary form of evidence. (May also be a secondary category of settlement sites.)
Hoard	A hoard of coins or other precious objects as primary evidence (not from settlement or building).
Industry	Evidence of industrial activity taking place; normally structural (kiln, etc.) but sometimes strongly implied by concentrations of pottery wasters, briquetage, etc..
Occupation	Occupation debris, possibly some features, but without a defined settlement focus.
Pit(s)	A pit or pits of Roman date which do not form part of a larger recognisable system. See 'Ditch(es)' above.
Pot	Pottery as primary evidence, often as scatters. Overlaps with 'Funerary' as sometimes includes putative unspecified cremation groups: the likeliest of these have been reassigned to the latter category.
Ritual	Unambiguous evidence of structured deposition. Used with caution and more frequently as secondary category.
Settlement	Clear evidence of an organised settlement. Includes roadside settlements.
Shaft	Shaft, well or deep pit, not initially assumed to be of primary ritual significance, although may have been described as such and may have 'ritual' as secondary category.
Temple	Evidence Romano-Celtic temple, not subsidiary to another complex.
Other	Features or structures which do not fit into the above categories.
Unknown	Unambiguous Roman presence but information too vague for characterisation.

Table 5.6 Descriptive categories

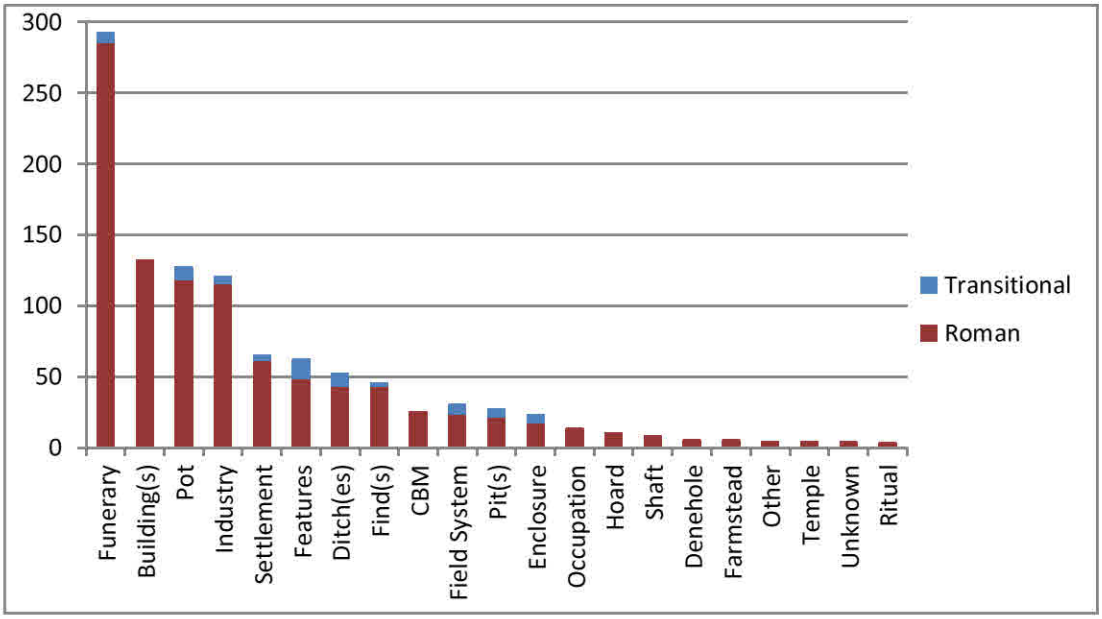


Fig. 5.1 Core Dataset , categorised (including Class A and Class B evidence)

When only Class A evidence is considered, the breakdown of category types is somewhat different as findspots of smaller group- and single burials, pottery, and other finds classified as Class B no longer play a part, neither do more fragmentary or single features (Fig. 5.2). Funerary evidence (20.5% count = 79) is still a strong component of the dataset, but is overtaken by evidence for buildings which comprise 28.6% (count = 110), with industry at 16.9% (count =65) and 'settlement' at 10.9% (count= 42).

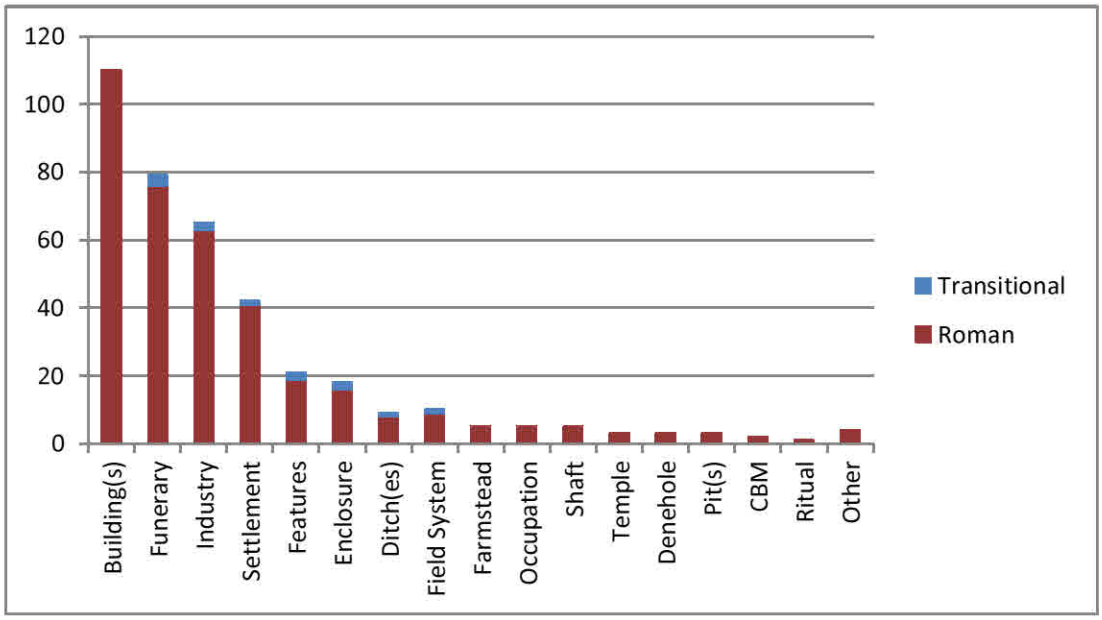


Fig. 5.2 Class A evidence only, categorised

The evidence can be consolidated by grouping together 'Occupation' and 'Farmstead' with 'Settlement' as one category and all other cut features as another (Fig. 5.3). This perhaps serves to show most clearly the nature of the dataset as it puts the (significant nonetheless) quantity of building evidence better into context.

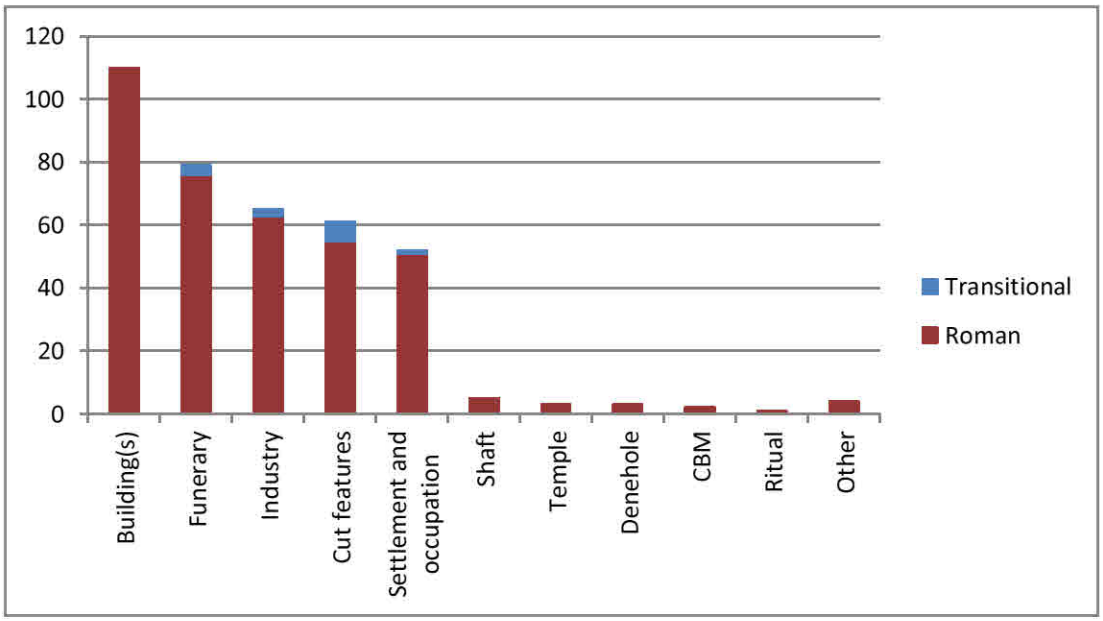


Fig. 5.3 Class A evidence, categories consolidated

Turning to the history of excavation in Kent for a moment, it is instructive to look at the data for that part of the Class A evidence that represents excavated structures or features, that is,

- A1: Sites excavated to recent professional standards (roughly from the 1990s onwards)
- A2: Sites excavated in the later 20th century
- A3: Antiquarian up to mid 20th century excavations.

Fig. 5.4 illustrates the more heterogeneous nature of the evidence excavated in recent years: records of a greater number of cut features which do not fall neatly into settlement categories potentially introduce more nuance into the picture, although this is somewhat impeded by the limited nature of many of the interventions which record such features. The earliest group of excavations perhaps unsurprisingly were focused on buildings, cemeteries and industrial sites. The excavation/discovery of buildings is a notable feature of all three periods.

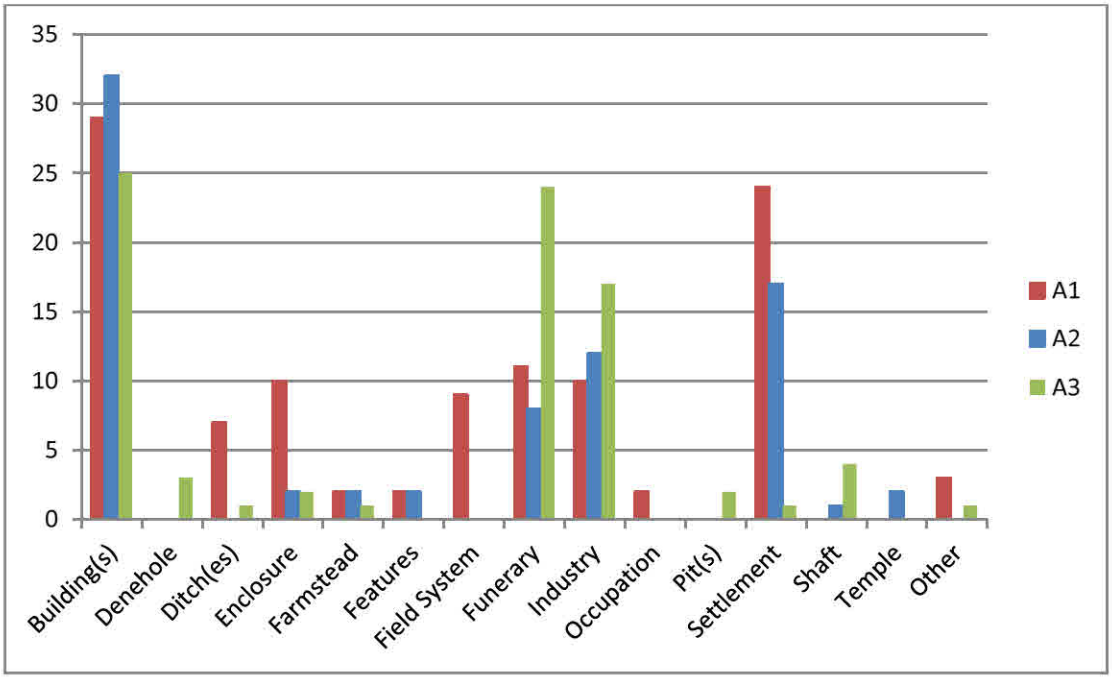


Fig. 5.4 Categories of Class A evidence organised to show excavation period

5.4 The distribution of the evidence

5.4.1 Broad comparison with the LIA evidence

Plotted in isolation, the Roman evidence, like that from the Late Iron Age, shows some clear patterning (Fig. 5.5a). The overall distribution is visually similar to that of the LIA and Transitional evidence but with some noticeable 'filling out' of the pattern which is particularly notable in the north west of the county and in the far north east (Thanet). The broad swathe of points occupying the transverse band across the county which is noticeable in the LIA and Transitional distribution is still there, but has filled out far less in comparison. Whilst there is some encroachment into those areas devoid of LIA evidence, there are still significant blank areas on the map notably in the central Downs region and the High Weald.

Again, the even distribution of modern settlement points is provided for comparison, whilst juxtaposition with modern urban areas proves interesting (Fig. 5.5 b; c). In contrast to evidence from the preceding period, there is a much stronger correlation between certain modern urban areas and the archaeological evidence. Correlation is particularly strong for the Medway Towns and for the Maidstone, Dartford, Faversham, Thanet, Deal and Ashford areas. Again

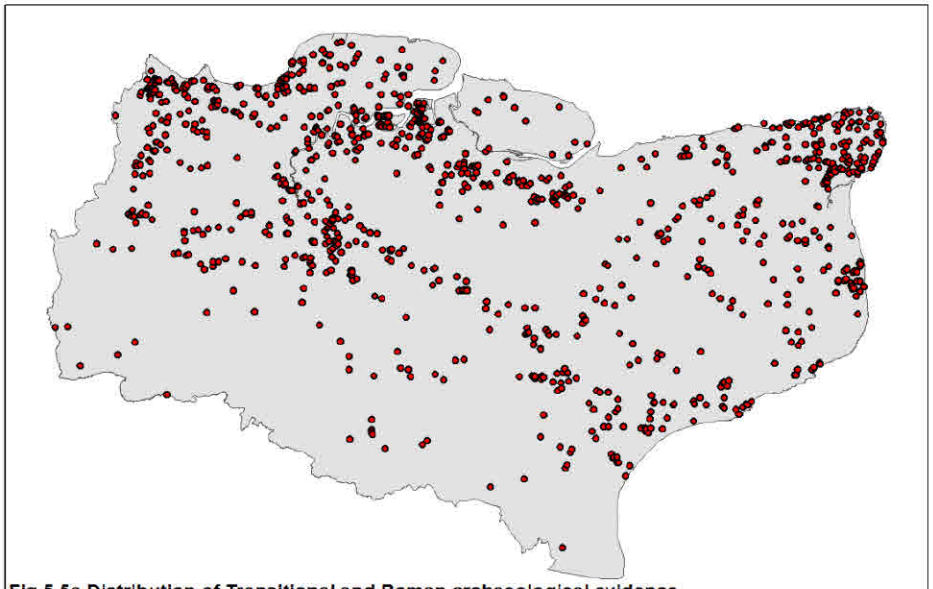


Fig.5.5a Distribution of Transitional and Roman archaeological evidence

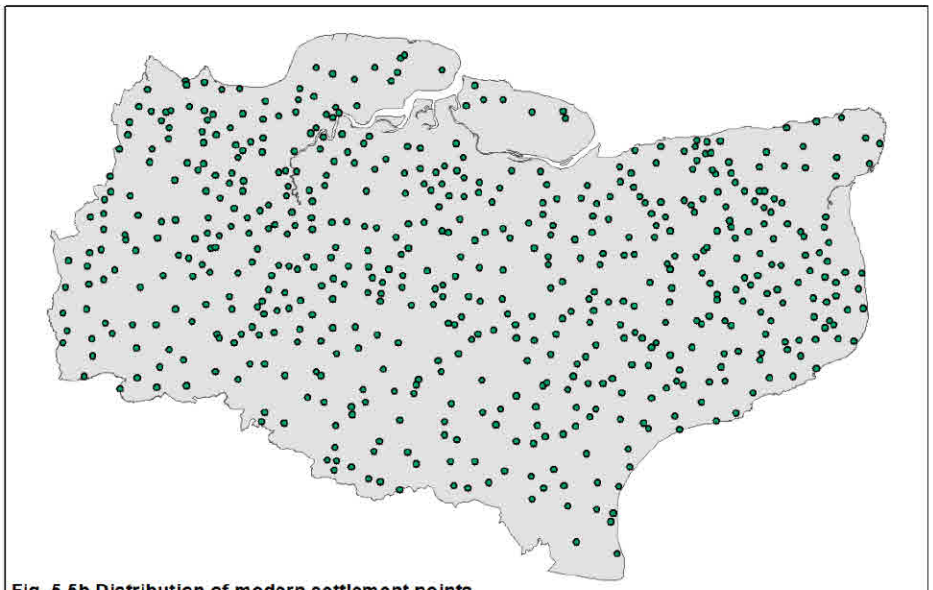


Fig. 5.5b Distribution of modern settlement points

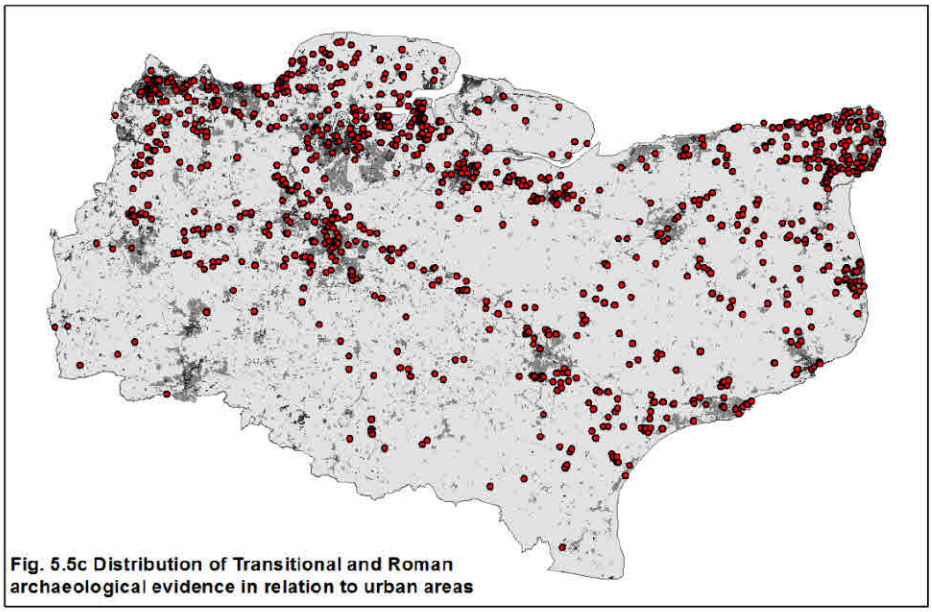


Fig. 5.5c Distribution of Transitional and Roman archaeological evidence in relation to urban areas

there is the conundrum of whether urban development is responsible for a greater rate of discovery or whether there is a degree of continuity or reuse of particularly favourable locations. Just as for the earlier evidence, however, there are still significant areas of modern settlement (Sevenoaks, Tonbridge, Tunbridge Wells) as well as many smaller urban areas in the Weald and on the Downland which have not so far produced evidence of settlement in the Roman period. At the same time other areas which today remain rural (such as the Darent Valley and the Sheppey and Medway marshes) have concentrations of Roman evidence.

These patterns are emphasised when the density of evidence is plotted against a 5km grid (as in the previous chapter) although there are subtle variations according to whether the entire Core Dataset or merely recognised Activity Foci are mapped (Figs. 5.6; 5.7). In both cases, emphasis is clearly on the north west and far north east of the county; Activity Foci by comparison seem to have a slightly greater (proportional) presence to the south west of Ashford and in the Lyminge area. Although there are some broad similarities to the LIA picture (Fig 3.8) the pattern suggests a *relative* increase in the density of settlement in the north of the county during the Roman period, particularly to the west of the Swale Estuary. It is also noticeable that the distribution of the Class A evidence is more similar to that of the preceding period: the transverse swathe across the centre of the county is a little more clearly visible in Fig. 5.7 than in Fig. 5.6 (though less so than in Fig. 4.8) because adjacent areas of the central and eastern Downs and of the High Weald are empty. In other words the *core* of settlement evidence sticks pretty much to the pattern of the preceding period, although with a shift of emphasis from the central corridor to northern Kent. The presence or absence of settlement evidence on the coastline is at least partially influenced by coastline change; it is noticeable that there is much coastal evidence from Thanet, where the chalk cliffs have been eroding but much less so on the softer geologies to the west. These have been subject to processes not only of erosion but also of deposition. It should also be noted that the present maps are based on the BGS outline of the coastline, which includes intertidal areas.

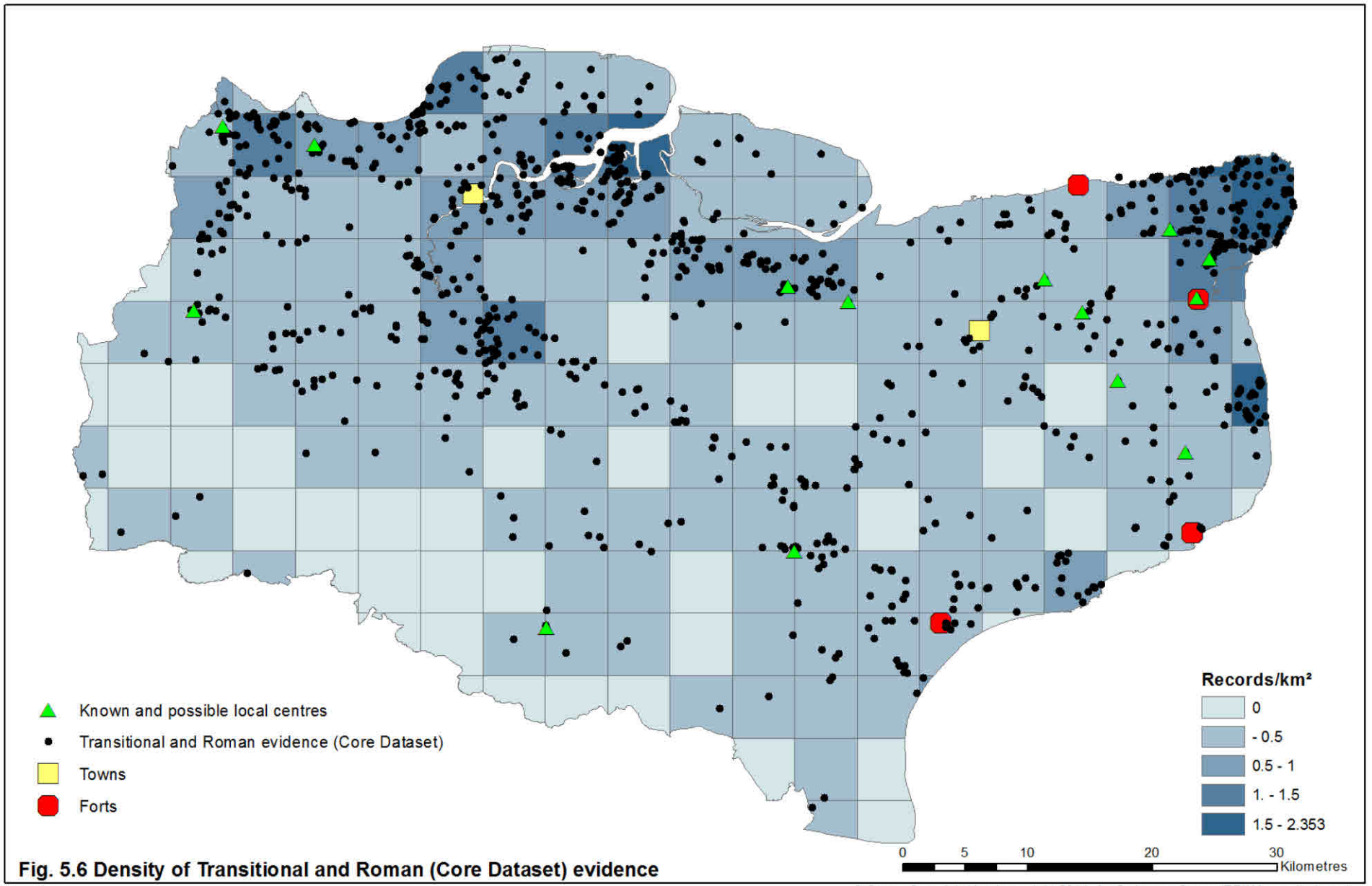


Fig. 5.6 Density of Transitional and Roman (Core Dataset) evidence

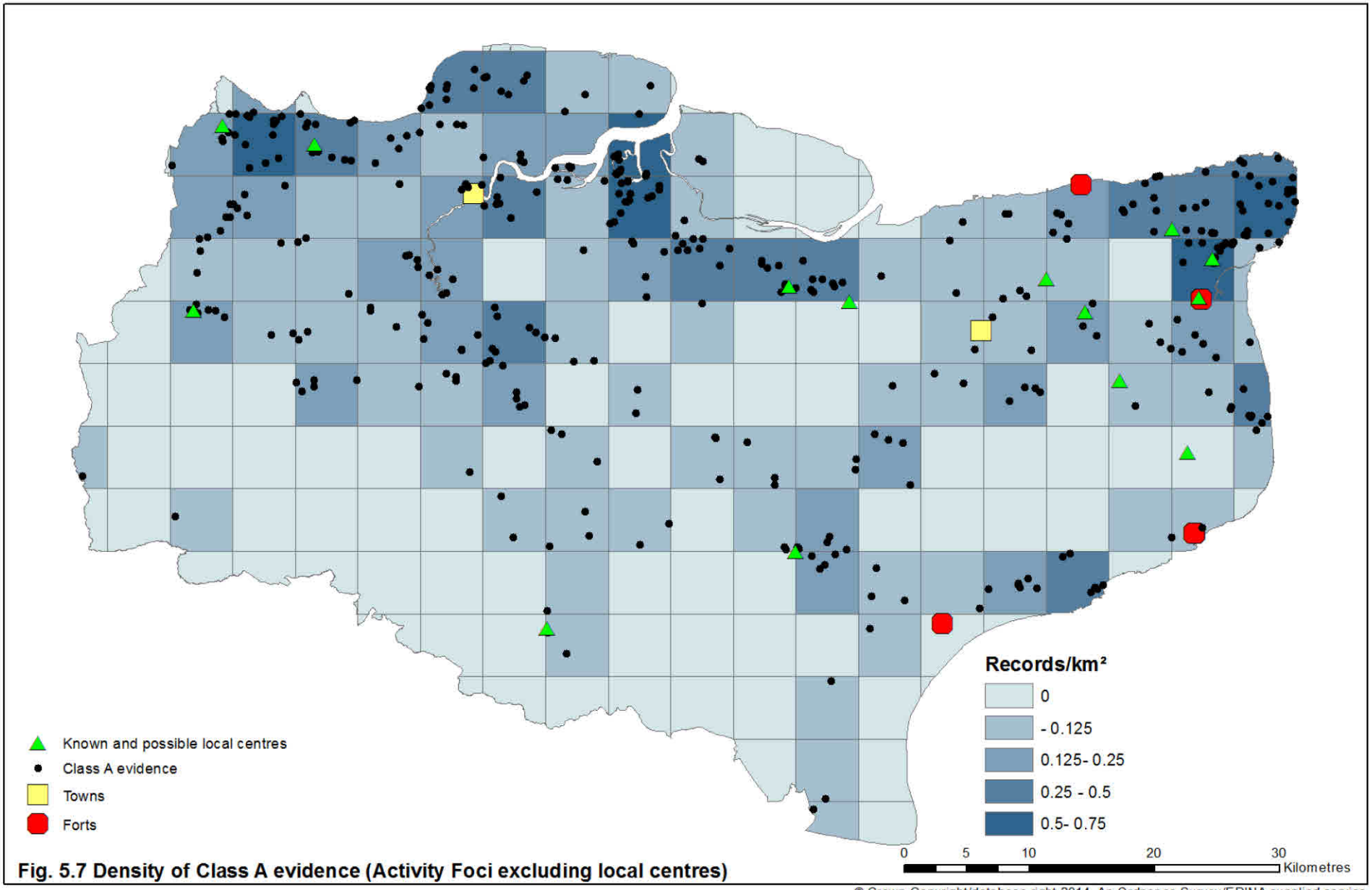


Fig. 5.7 Density of Class A evidence (Activity Foci excluding local centres)

5.4.2 The distribution of evidence in relation to geology, soils, *pays* and physiography

As for the Late Iron Age, the distribution of the evidence may be analysed in relation to bedrock and superficial geology, *pays*, the occurrence of Brown Earth Soils and ease of cultivation.

5.4.2.1 Geology (Fig. 5.8; Table 5.7)

Although there is a small increase in the relative density of evidence on the Chalk and Hastings Beds compared to the preceding period, the central area of the Chalk Downs and much of the High Weald still show as blank areas on the map. Evidence is still somewhat denser than one might expect on the Lower Greensand, but has fallen from 22.9% of all records in the Later Iron Age to 14% of the Core Dataset in the Roman period. An apparent move away from the Wealden Clay is also indicated, with a drop in the same categories from 12.7% to just 5.5% although the actual number of sites marginally increases. There are small increases in density of evidence on the London Clay, on the sandy soils of the Harwich Formation, Lambeth Group and Thanet Sands and on the Gault and Upper Greensand (Fig.5.9.)

Settlement on the Chalk Downs continues to avoid the Clay-With-Flints (Fig 5.10) but is seemingly attracted towards the river valleys, particularly the west facing slopes of the Darent and Medway valleys.

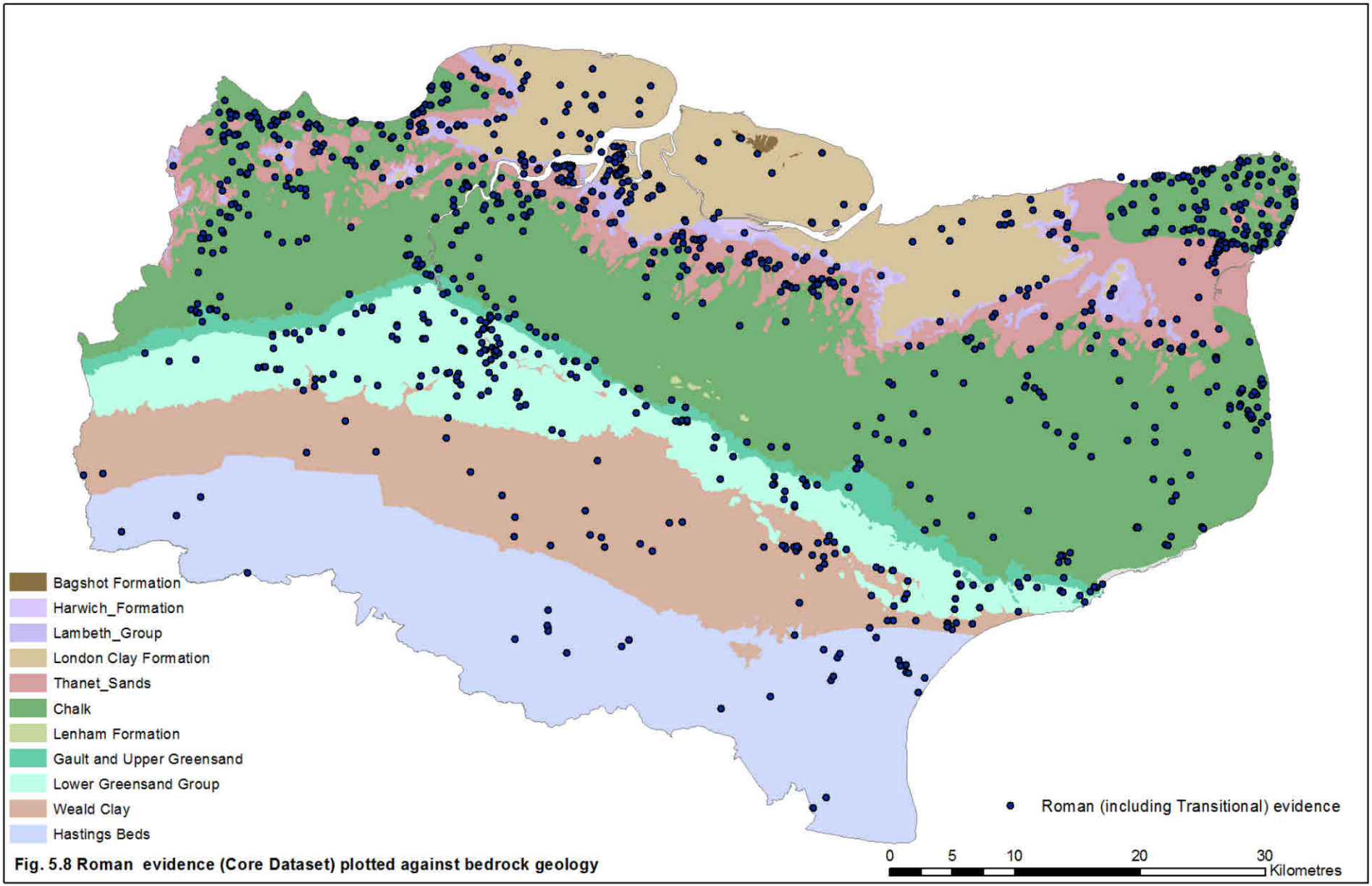


Fig. 5.8 Roman evidence (Core Dataset) plotted against bedrock geology

	Area		Core Dataset		Class A (inc. local centres)		Class B (Supplementary)	
	Sq km	%	No records	%	No records		No records	%
Kent	3850.7		1056		397		659	
Bagshot Formation	2.9	0.1	3	0.3	0	0.0	3	0.5
London Clay	393.8	10.2	130	12.3	43	10.8	87	13.2
Harwich Formation	19.3	0.5	9	0.9	2	0.5	7	1.1
Lambeth Group	66.4	1.7	35	3.3	14	3.5	21	3.2
Thanet Sands	308.6	8	173	16.4	66	16.6	107	16.2
Chalk	1300.0	33.8	441	41.8	177	44.6	264	40.1
Gault and Upper Greensand	97.2	2.5	29	2.7	14	3.5	15	2.3
Lower Greensand	395.9	10.3	148	14.0	47	11.8	101	15.3
Weald Clay	550.1	14.3	57	5.4	26	6.5	31	4.7
Hastings Beds	711.5	18.5	31	2.9	8	2.0	23	3.5

Table 5.7 Roman evidence in relation to bedrock geology

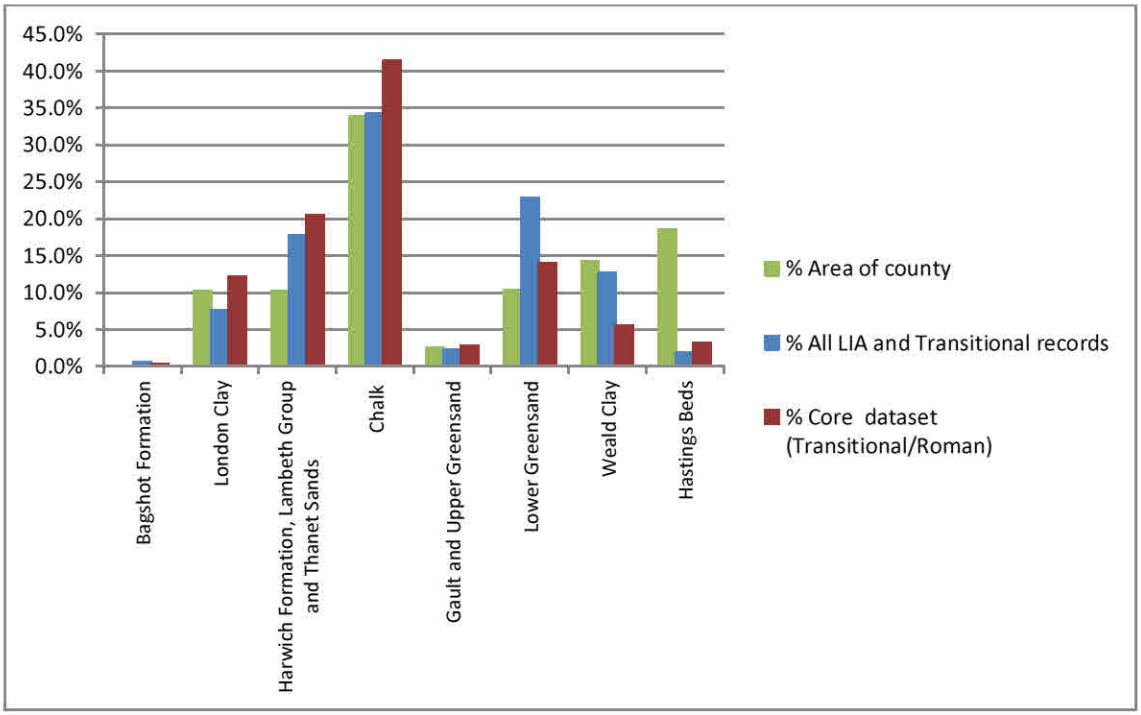


Fig. 5.9 Percentages of Late Iron Age/Transitional and Transitional/Roman Core Dataset evidence in comparison to percentage of county underlain by different bedrock geologies

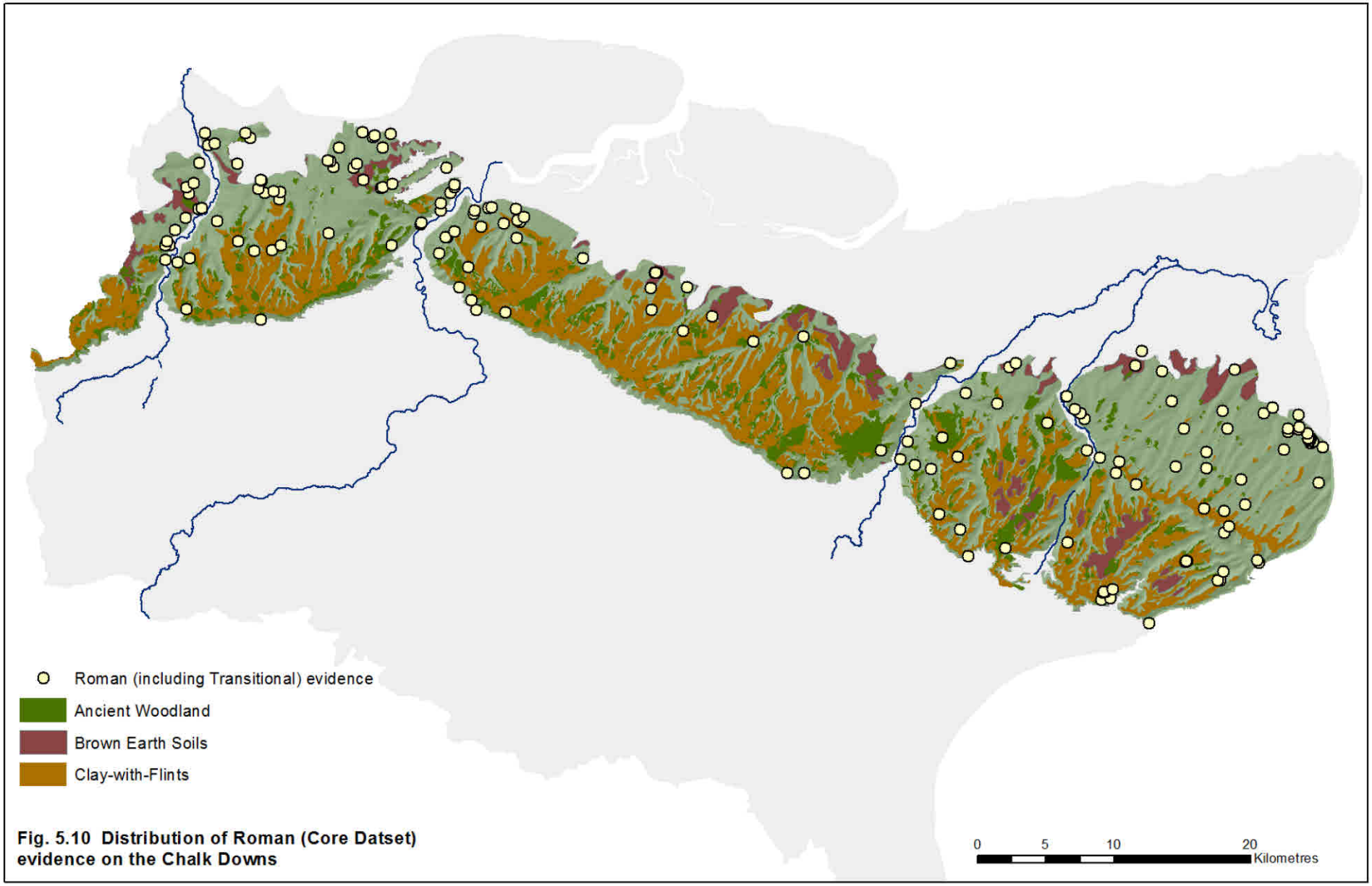


Fig. 5.10 Distribution of Roman (Core Datset) evidence on the Chalk Downs

A feature that becomes more noticeable in the Roman period (although already hinted at in the LIA distribution) is a tendency to favour areas adjacent to changes in the underlying bedrock geology.

The Core Dataset for the Kentish mainland[ii] comprises 911 records. Of these, 47.3% (count = 431) relate to sites located within 500m of a change of bedrock geology (Fig. 5.11). The greatest proportion of these (21.3%, count = 194) is associated with the junction of the Chalk and the Thanet Sands. In total 32.4% of the evidence on the mainland Chalk is adjacent to the Thanet Sands; whereas it might be argued that may be less a function of the positive attraction of the neighbouring bedrock geology than of avoidance of the superficial Clay-with-Flints, the same case cannot be made for the even larger proportion of evidence (47.1%) on the Thanet Sands that lies within 500m of the Chalk.

Although the 76.7% of sites on the Gault and Upper Greensand situated within 500m of such a change could be dismissed as resulting from the narrow band in which this geology is exposed, examination of the map demonstrates that the distribution of the small number (30) of sites concerned shows a distinct preference for the margins of the area: indeed, 18 of these are located within 250m of either the Chalk of the Lower Greensand. As far as sites on the Lower Greensand are concerned, 29.3% occur within 500m of the junction with the Gault and Upper Greensand and 19.7% within the same distance of the Wealden Clay; this latter figure includes a number of sites clustered around an outcrop of Wealden Clay in the Maidstone area, within the Greensand belt.

The Wealden Clay at first sight appears to have fewer marginal sites, although 18 out of 57 (31.6%) occur within 500m of the Lower Greensand. These include three within the small outcrop of Wealden Clay in the Maidstone area and three in the Plaxtol area, whilst the remainder are situated at the eastern extreme of the Low Weald between the area south of Ashford and Hythe.

Such distributions suggest that in some cases at least, settlement sites were selected, or perhaps became successful, on the basis of access to the greater variety of landscape resources that would result from being situated near to a change in underlying bedrock and consequently in topography, soils, water sources and vegetation. This may even be true of some of some sites on the Chalk which are adjacent to the Clay-with-Flints where heavy soils could be ameliorated by a natural or artificial admixture of chalk or lime, thin, chalky soils might be enriched by colluvial deposits, or where woodlands might be exploited.

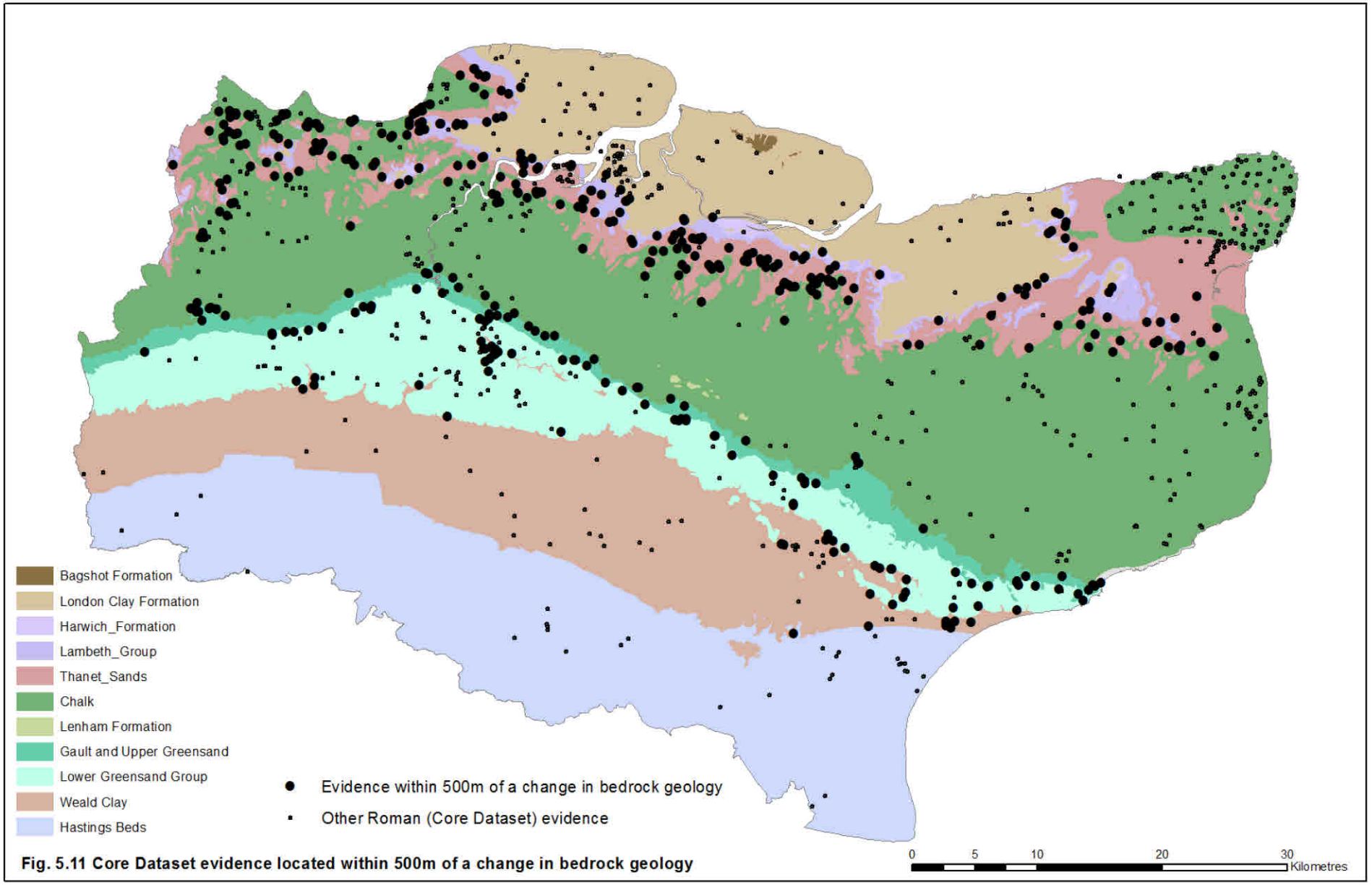


Fig. 5.11 Core Dataset evidence located within 500m of a change in bedrock geology

The junction of the Gault and Upper Greensand with the Chalk is associated with the spring line (although there is little correlation between the archaeological evidence and current springs mapped by the Ordnance Survey). The same is true of the margins of the Thanet Sands and London Clay, at least from mid-Kent eastwards, and of the junction of the Lower Greensand and the Wealden Clay.

5.4.2.2 Agricultural capability and soils

5.4.2.2 i. Association with ALC Grade 1 Land

Compared with the late Iron Age evidence, there is a small increase from 13.4% to 15.8% in the proportion of sites situated on ALC Grade 1 Land (Fig.5.12; 5.14).

Similar small increases occur in the immediately adjacent areas so that as much a 57.6% of the Core Dataset evidence occurs on or within 2km of what is today considered the best agricultural land although this figure reduces to 55.9% once a group of sites associated with Romney Marsh is excluded; Romney Marsh was undoubtedly forming during this period (Cunliffe 1988) and areas could have been exploited for grazing, but it cannot have represented the best agricultural land. As with the preceding period, these figures again appear to suggest settlement *around* rather than *in* the heart of optimal farming land.

As for the Late Iron Age, contiguous urban areas may again be considered as potential extensions of ALC Grade 1 Land: whilst there is a proportional increase in the number of sites within the combined area (34.6% of Core Dataset evidence as against 26.1% of evidence for the earlier period), there is a slightly smaller proportional increase in the number of sites in the surrounding 1km buffer zone (Fig. 5.13) suggesting a consolidation of the areas of settlement.

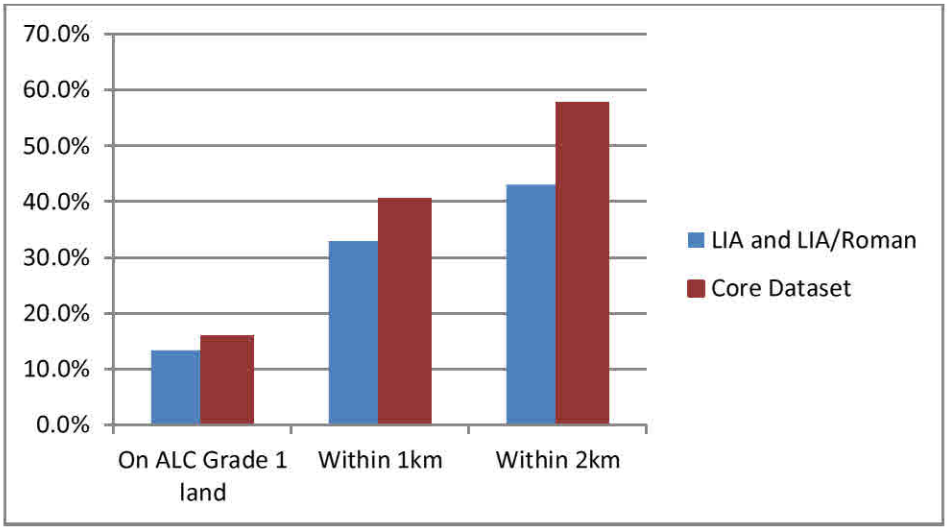


Fig. 5.12 Relationship of Late Iron Age and Roman evidence to Agricultural Land Classification Grade 1 land

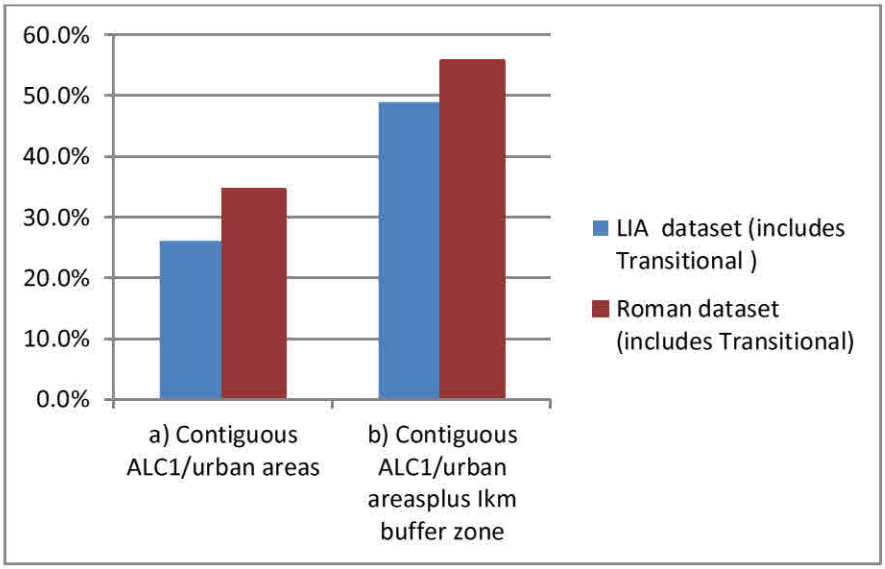


Fig. 5.13 Association of Late Iron Age and Roman evidence with a) ALC Class 1 land and its contiguous urban areas and b) those areas with a surrounding 1km buffer zone

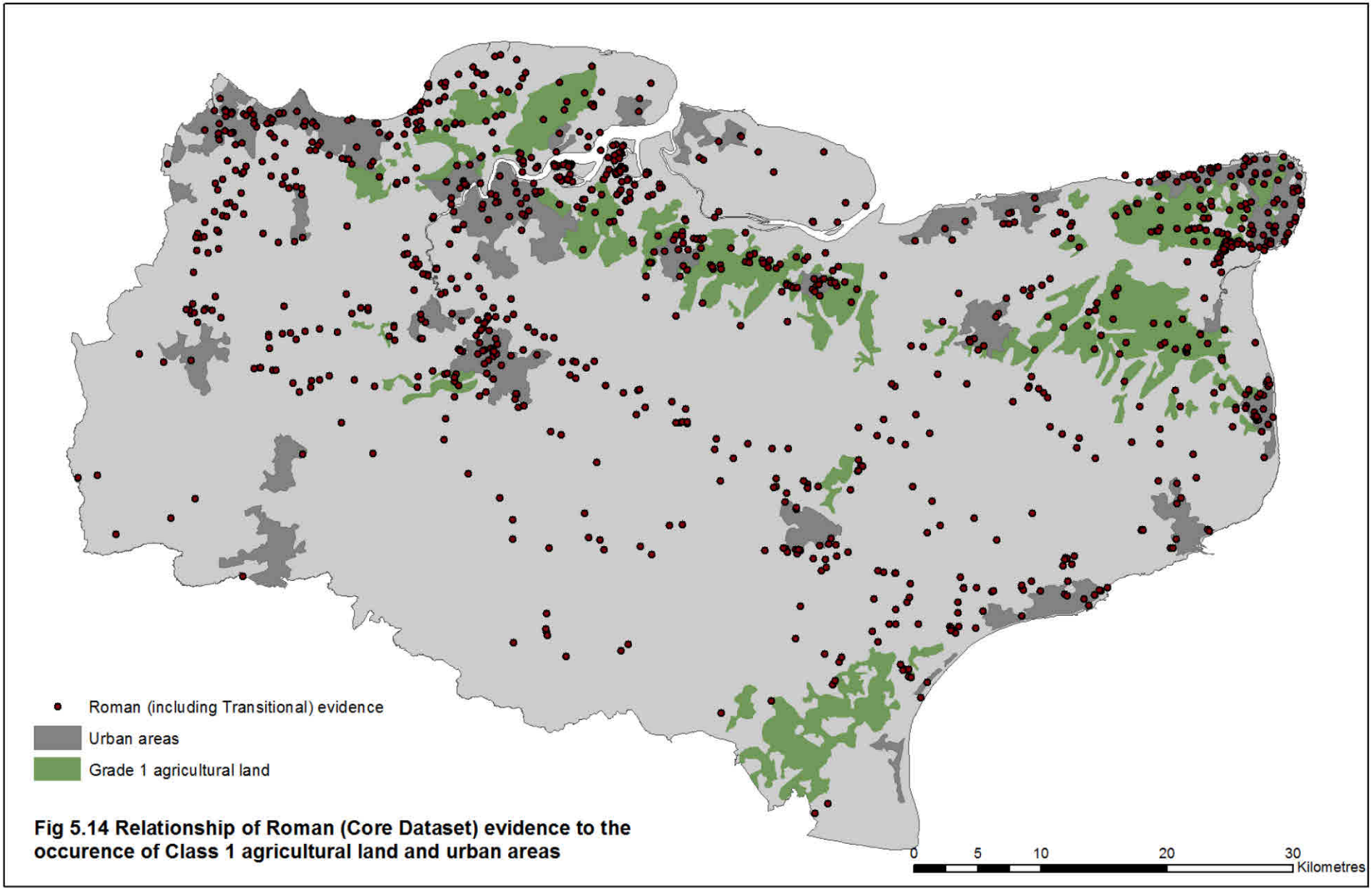


Fig 5.14 Relationship of Roman (Core Dataset) evidence to the occurence of Class 1 agricultural land and urban areas

5.4.2.2.ii. Association with the Brown Earth Soils of North Kent

As explained in the previous chapter, only the fertile Brown Earth Soils in north Kent can be assumed to have existed in the Roman period and as with ALC Class 1 land, it is here hypothesised that the original extent of these soils included adjacent, contiguous areas which are now urban in character (Fig. 5.15). The density of evidence on the Brown Earth Soils and contiguous urban areas of the North Kent Plain is slightly higher than for the Late Iron Age and approximately double that which might be expected from an even distribution: 23.7% of evidence from the Core Dataset (rising to 25.7% of Class A evidence) occupies 11.7% of the area of the county.

Just as for the Late Iron Age, occupation on Thanet's Brown Earth Soils and contiguous urban areas appears to be even denser, with 9.4% of the Core Dataset and 9.6% of Class A evidence occupying 0.7% of the county's area (Table 5.8; Fig. 5.16).

	Area		Core Dataset		Class A (inc. local centres)		Class B (Supplementary)	
	Sq km	%	No records	%	No records	%	No records	%
Kent totals	3850.7		1056		397		659	
Brown Earth Soils (BES) & contiguous urban areas*	451.6	11.7%	250	23.7%	102	25.7%	148	22.5%
Within 500m of BES & contiguous urban areas*			315	29.8%	127	32.0%	188	28.5%
Within 1 km of BES & contiguous urban areas*			353	33.4%	143	36.0%	210	31.9%
BES & contiguous urban areas (Thanet)	28.1	0.7%	99	9.4%	38	9.6%	61	9.3%
Within 500m of BES & contiguous urban areas (Thanet)			138	13.1%	55	13.9%	83	12.6%
Within 500m of BES & contiguous urban areas (total)			453	42.9%	182	45.8%	271	41.1%

*Excluding Thanet

Table 5.8 Relationship of Roman evidence to the occurrence of Brown Earth Soils and contiguous urban areas in North Kent

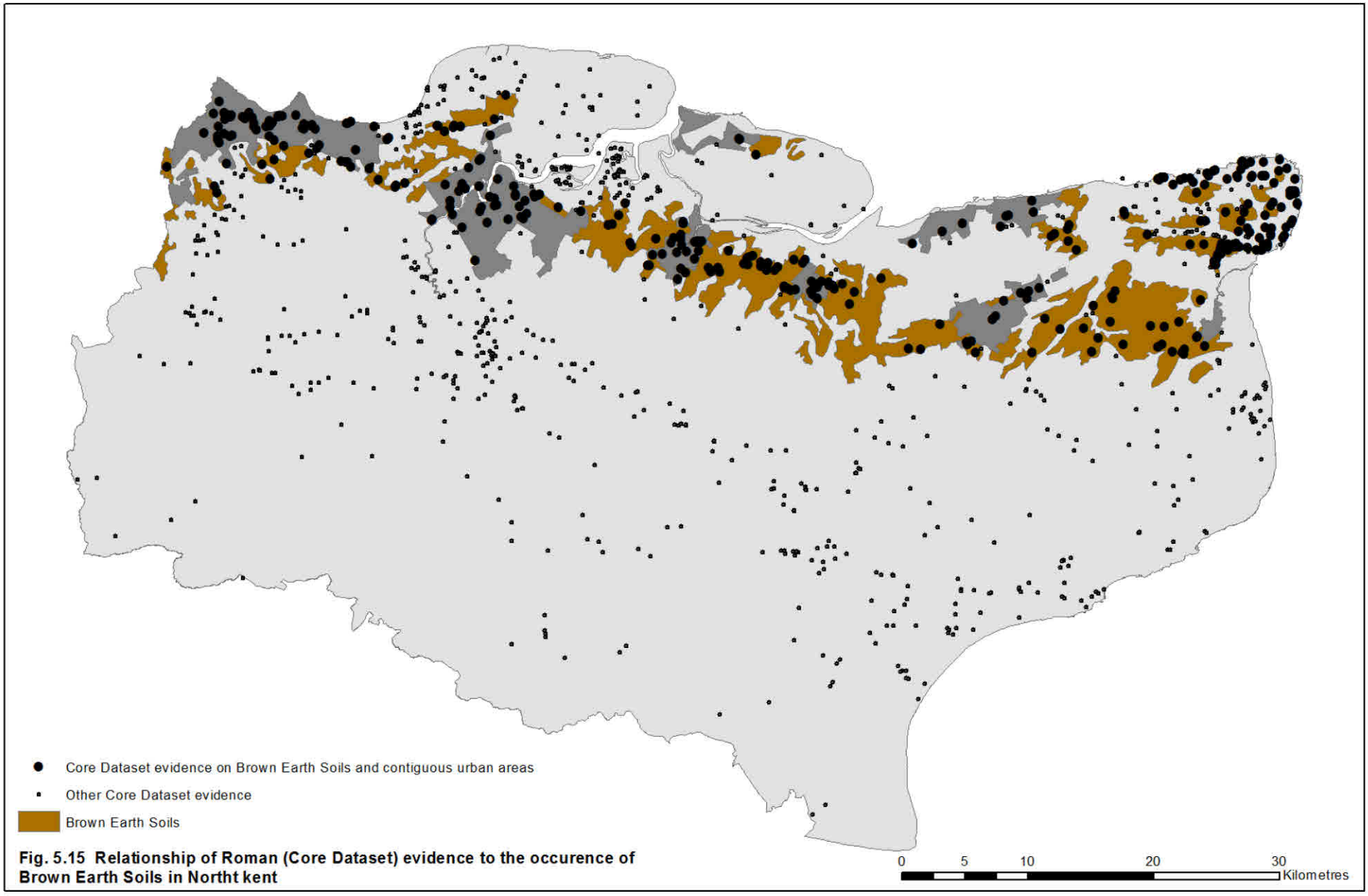


Fig. 5.15 Relationship of Roman (Core Dataset) evidence to the occurence of Brown Earth Soils in Northt kent

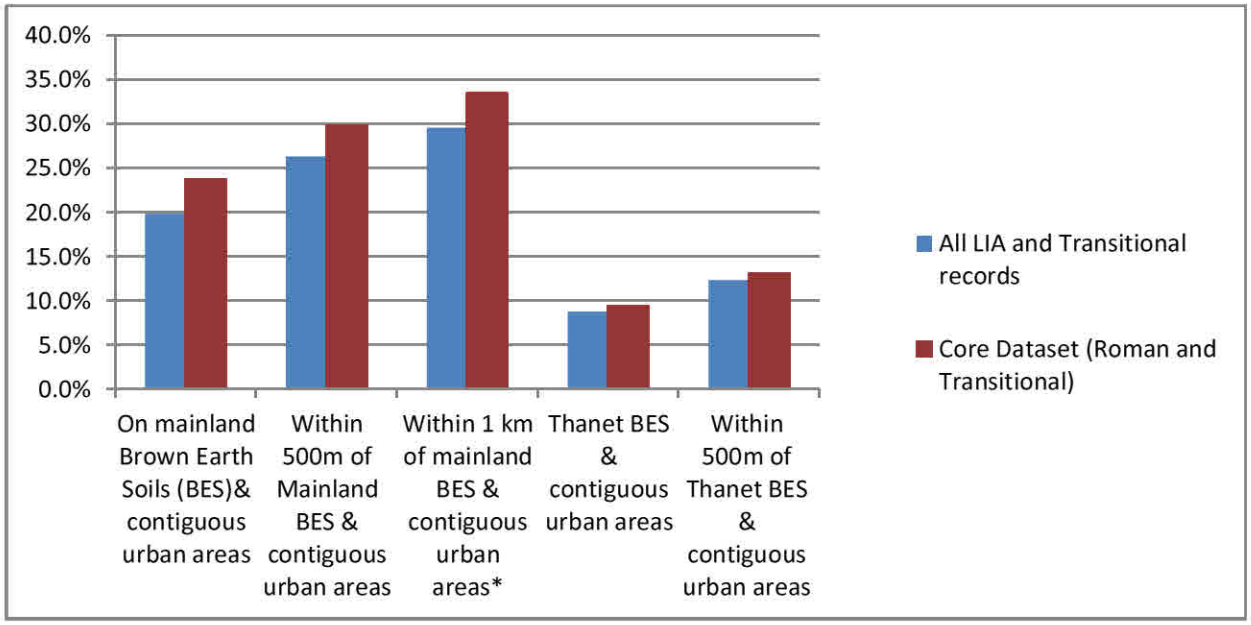


Fig. 5.16 Relationship of Late Iron Age and Roman evidence to the occurrence of Brown Earth Soils in North Kent

Interestingly, whilst for the earlier evidence the density of Activity Foci on the Brown Earth Soils is lower than the overall density of evidence, for the later period, the reverse is true (Fig. 5.17). This again may suggest the organised exploitation of the best agricultural areas.

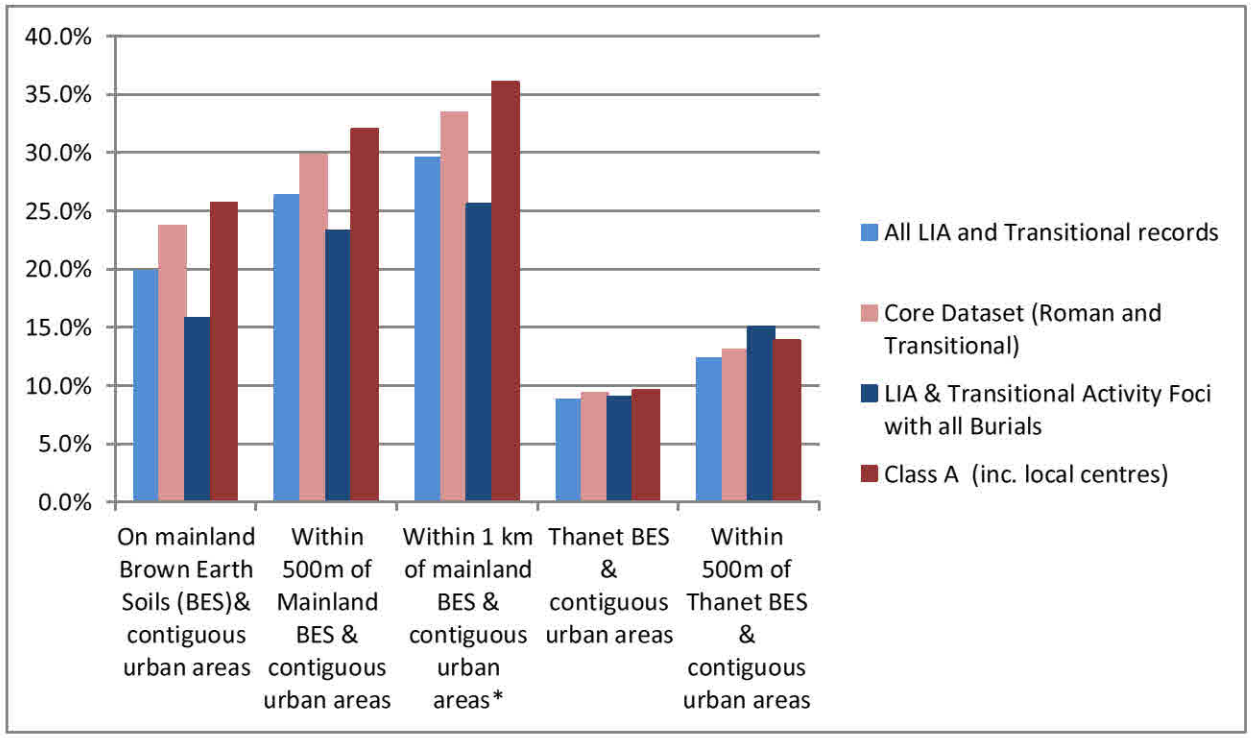


Fig 5.17 Relationship of Activity Foci (LIA and Roman periods) to Brown Earth Soils of North Kent in comparison to larger datasets

Within this band the distribution *pattern* is also somewhat different from that of the Late Iron Age: the marginal effect that seemed apparent with the earlier evidence is less evident (in both cases approximately 10% of the evidence is in a 1km buffer zone around the Brown Earth Soils and contiguous urban areas, but the Roman evidence starts at a higher level). Moreover, 19.6% of the Core Dataset evidence comes from within the urban areas, suggesting that here at least the distribution of the evidence is being distorted by the intensity or otherwise of more recent human activity. Nevertheless, when urban areas are omitted, the Brown Earth Soils of North Kent and Thanet still seem to exercise a 'pull' over the siting of settlement activity as they cover just 7.1% of the area of the county but encompass 13.4% of the Core Dataset and as much as 16.4% of Class A evidence (Table 5.9).

	Area		**Core Dataset**		**Class A (inc. local centres)**		**Class B (Supplementary)**	
	Sq km	**%**	**No records**	**%**	**No records**	**%**	**No records**	**%**
Kent totals	3850.7		1056		397		659	
On North Kent Brown Earth Soils (BES)	451.6	7.1	142	13.4	65	16.4	77	11.7
Within 500m of North Kent BES			263	24.9	112	28.2	151	22.9
Within1 km of North Kent BES			341	32.3	141	35.5	200	30.3

Table 5.9 Relationship of Roman evidence to Brown Earth Soils of North Kent (urban areas omitted)

5.4.2.2.iii Association with Ease of Cultivation

The Roman evidence displays only the slightest bias towards the most easily cultivated land (Ease of Cultivation Class 1; Fig. 5.18): these soils cover 18.3% of the area of Kent and account for 19.4% of evidence in the Core Dataset and 21.5% of Class A sites (Table 5.10). As in the Late Iron Age, over a third of the evidence (34.7%) appears to be associated with land classified as Class 3 or below. The problem of the association of the more southerly band of Ease of Cultivation Class 2 lands with soil improvement in more recent historical periods has been mentioned in Chapter 4 above; interestingly a far higher proportion of evidence is in fact associated with the Class 2 lands in the north of the county (8.4% area of county), where 13.9% of Core Dataset evidence and 16.7% of Class A sites are situated.

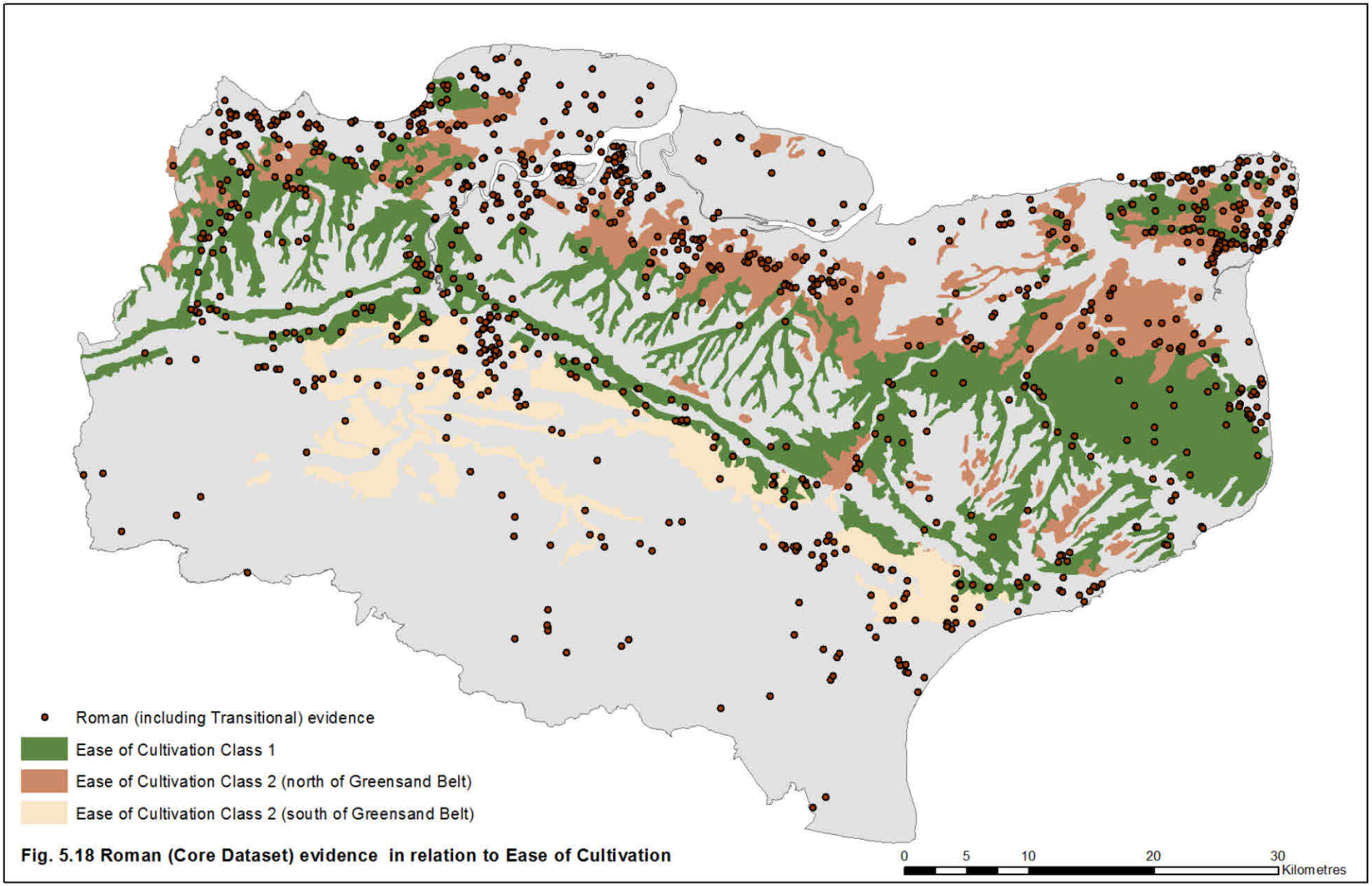


Fig. 5.18 Roman (Core Dataset) evidence in relation to Ease of Cultivation

	Area		Core Dataset		Class A (inc. local centres)		Class B (Supplementary)	
	Sq km	%	No records	%	No records	%	No records	%
Kent totals	3850.7		1056		397		659	
Ease of Cultivation Class 1	705.8	18.3	208	19.7	89	22.4	119	18.1
Ease of Cultivation Class 2	547.0	14.2	198	18.8	87	21.9	111	16.8
Class 2 north of Greensand belt	324.2	8.4	149	14.1	68	17.1	81	12.3
Unclassified	370.1	9.6	288	27.3	96	24.2	192	29.1
Class 3 or below	2227.8	57.9	362	34.3	125	31.5	237	36.0

Table 5.10 Relationship of Roman evidence to Ease of Cultivation

When the data are compared to that for the preceding period (Fig. 5.19), a small proportional move away from the lightest soils can be seen, whilst a slightly higher proportion of Class A evidence is located on land classified as Class 2.

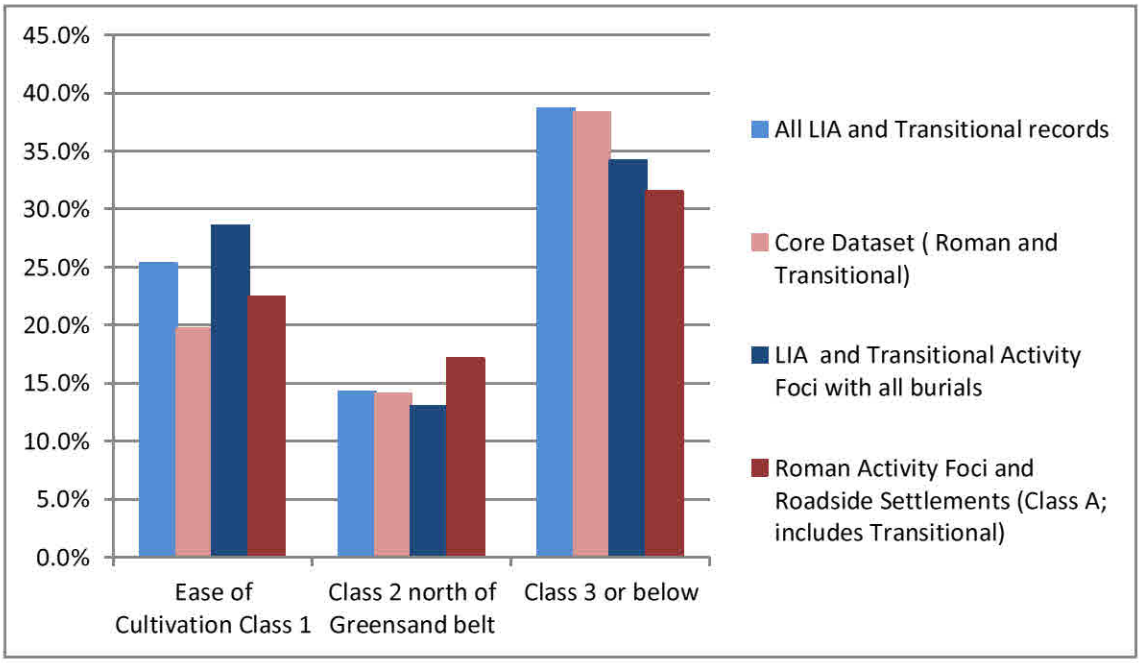


Fig. 5.19 Relationship of Activity Foci (LIA and Roman periods) to Ease of Cultivation in comparison to larger datasets

Combining this information with that for settlement evidence on ALC Class 1 land and the Brown Earth Soils suggests, to some degree at least, more intensive use of more fertile and thus also heavier soils during the Roman period. It must be remembered that the evidence concerned covers a period of four centuries and for this fact alone the reasons for these changes are likely to be multifactorial. Improvements in the design and efficiency of the plough

(Manning 1964) would have made exploitation of the heavier Brown Earth Soils more efficient, whilst a need for increased agricultural production might indicate a rise in population and/or the need to produce a surplus to contribute towards the *annona*. Nevertheless, on present evidence the Brown Earth Soils of North Kent do not seem to have been intensively occupied and there is no indication that there was sufficient population pressure to bring further tracts of poor land into cultivation.

5.4.2.3 Distribution in relation to physiography

The overall pattern of settlement in the Roman period with respect to elevation and relief is comparable to that for the Late Iron Age, with an avoidance of elevations over 100m AOD and an intensification of the pattern already seen: settlement tends to cluster in the river valleys, on the Foothills of the North Kent Plain, the lower dip slope of the Downs and the region between the North Downs scarp and the River Beult (Fig. 5.20). The one significant difference from the earlier period is a considerably higher proportion of evidence occurring at below 25m OD. Indeed, 50% of all the Core Dataset (49.9% of Class A evidence) is situated at these lowest elevations (Table 5.11). To a large extent this shift represents greater exploitation of the river valley bottoms (although still avoiding frost-prone locations) and the areas now comprising the North Kent Marshes and Romney Marsh; these latter areas lent themselves to specialist activities such as salt winning. The lower elevations also generally coincide with the areas of highest mean temperatures and lengthier growing seasons with consequent benefits for agriculture.

	Area		**Core Dataset**		**Class A**		**Class B**	
	Sq km	%	No records	%	No records	%	No records	%
Kent	3850.7		1056		397		659	
Below 25m	1185.2	30.8	528	50.0	198	49.9	330	50.1
25-49m	790.1	20.5	248	23.5	101	25.4	147	22.3
50-99m	1076.9	28.0	200	18.9	78	19.6	122	18.5
100-149m	563.4	14.6	59	5.6	17	4.3	42	6.4
150-199m	211.7	5.5	20	1.9	3	0.8	17	2.6
200m & over	23.4	0.6	1	0.1	0	0.0	1	0.2

Table. 5.11 Relationship of Roman evidence to elevation

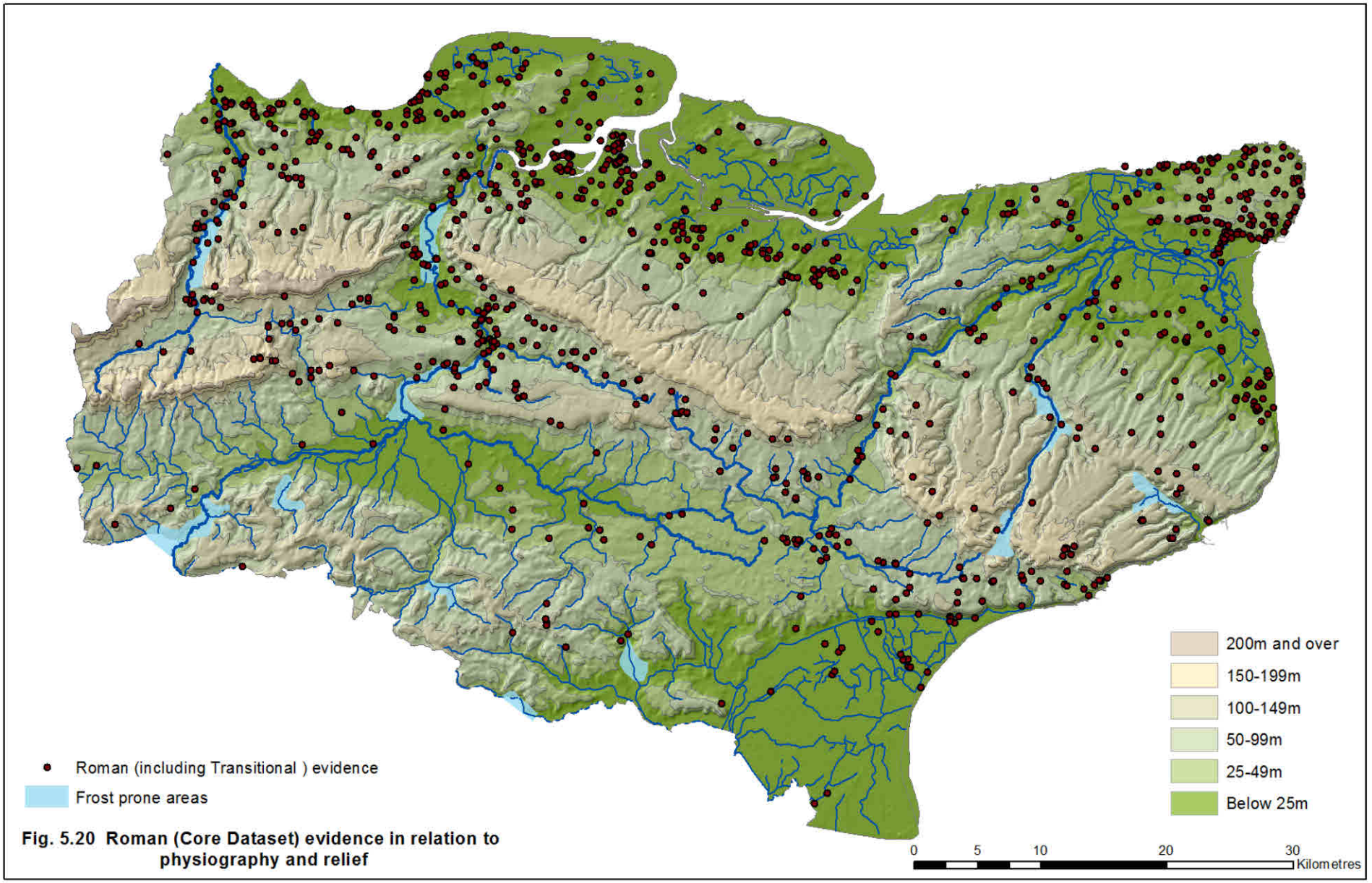


Fig. 5.20 Roman (Core Dataset) evidence in relation to physiography and relief

5.4.2.4 *Pays*

We have noted that according to Everitt (1986) the earliest zones of Early Medieval occupation were the Foothills (including Thanet) and the Holmesdale. Taking the *pays* as traditionally interpreted, this pattern seems to be becoming established before the end of the Roman period with the Foothills and Thanet in particular having relatively high densities of evidence (Fig 5.21; Table 5.12). It may be recalled that principal difference between a map of the *pays* of Kent and one purely of its bedrock geology is that the Foothills extend from the sandy soils of North Kent to encompass the main river valleys where they cross the Chalk Downs and, in the case of the Medway and Stour, the Gault and Upper Greensand; the Medway valley meanwhile penetrates well into the Lower Greensand belt and encompasses an outcrop of Wealden Clay.

In terms of absolute numbers, there are significant increases in the amount of evidence in all areas except the High and Low Wealds (Fig. 5.22). The pattern in terms of percentages of the total datasets is rather different, however (Fig. 5.23): in other words, whilst the absolute density of settlement in all areas increases, the density patterns for the two periods are somewhat different. Compared with the Late Iron Age evidence, there are large percentage rises on the Foothills and (especially) the Marshlands; small increases in the Holmesdale, Thanet and High Weald; significant decreases in the percentage of sites on the Chartland and Low Weald and a smaller decrease on the Downland.

Pays	**Area**		**Core Dataset**		**Class A**		**Class B**	
	Sq km	%	No records	%	No records	%	No records	%
Kent	3850.7		1056		397		659	
Marshland	569.5	14.8	209	19.8	61	15.4	148	22.5
Foothills	576.6	15.0	298	28.2	124	31.2	174	26.4
Downland	1020.6	26.5	174	16.5	57	14.4	117	17.8
Holmesdale	169.8	4.4	53	5.0	30	7.6	23	3.5
Chartland	381.9	9.9	123	11.6	40	10.1	83	12.6
Low Weald	531.2	13.8	43	4.1	22	5.5	21	3.2
High Weald	502.6	13.1	14	1.3	5	1.3	9	1.4
Thanet	97.5	2.5	142	13.4	58	14.6	84	12.7

Table 5.12 Relationship of Roman evidence to physiographic regions or *pays*

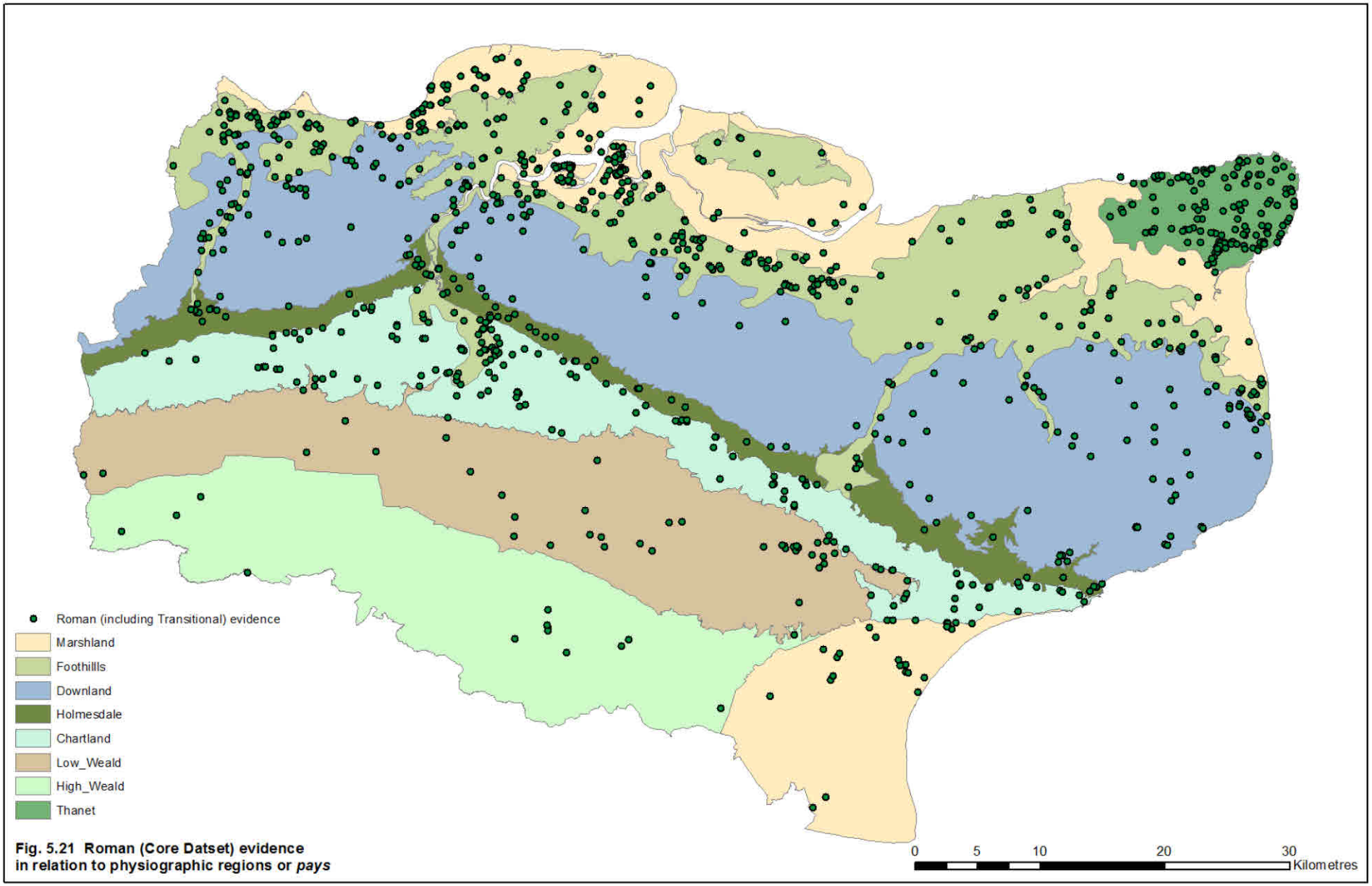


Fig. 5.21 Roman (Core Datset) evidence in relation to physiographic regions or *pays*

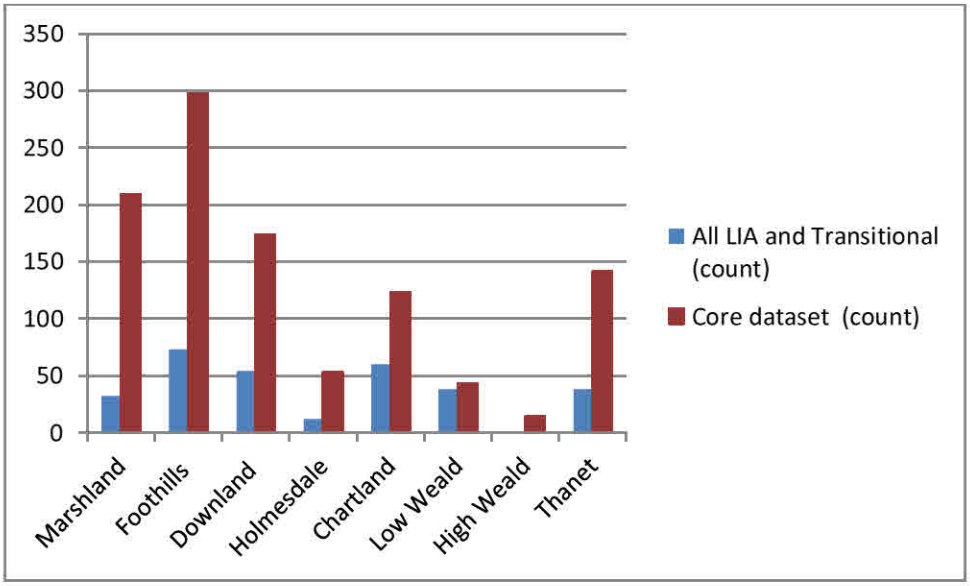


Fig. 5.22 Relationship of Late Iron Age and Roman evidence to physiographic regions or *pays* (absolute numbers)

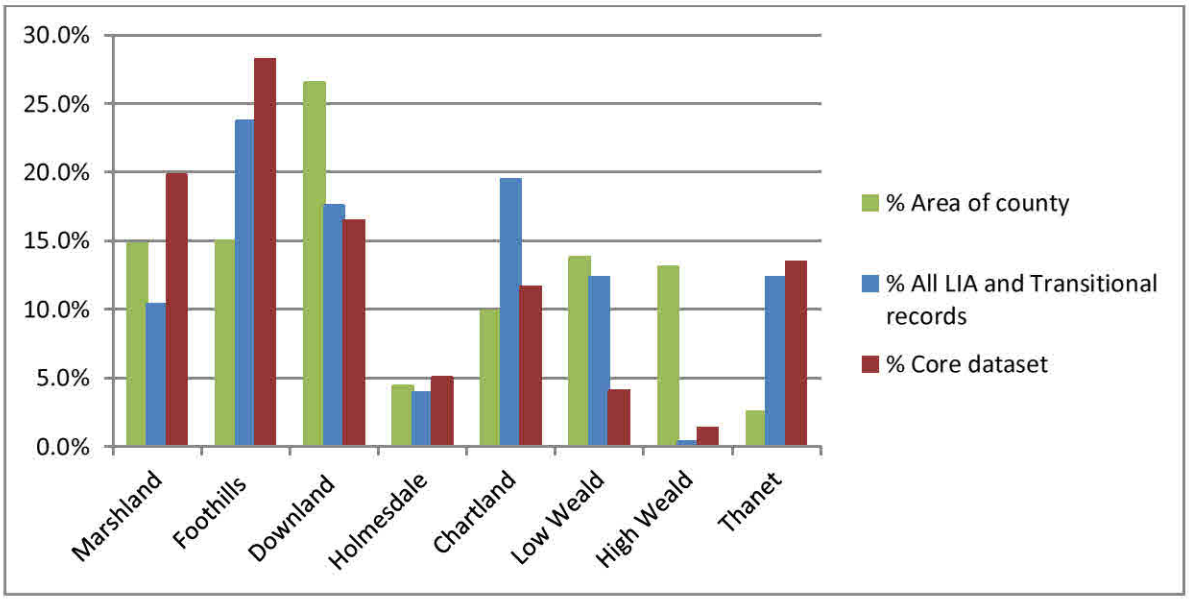


Fig. 5.23 Relationship of Late Iron Age and Roman evidence to physiographic regions or *pays* (percentages)

In the case of the Holmesdale and (particularly) Thanet, we are concerned with areas that were already foci for occupation in the late Iron Age; in the Roman period there is a distinct rise in the absolute number of sites but only a marginal rise in the percentage terms. The rises both in absolute and relative terms on the Marshland represent greater exploitation and possibly reclamation of the Northern coastal zone and the newly forming Romney Marsh.

Relative density of settlement increases on the favourable conditions of the Foothills, as one might expect and whilst in terms of absolute numbers, the amount of evidence on the Chartland nearly doubles, in proportional terms it drops from 19.5% to 11.6%.

Considering the visual distribution of points on the map, however, it is clear that certain areas of the individual *pays* have significantly different levels of Roman occupation evidence. Moreover, some of the traditional *pays* consist of non-contiguous areas: for instance the Foothills includes an island of higher ground on Sheppey and a western section mostly divided from the main mass of the Foothills by a stretch of Downland. The Downland itself is divided into three areas by the major river valleys (four if one counts the Darent) and post-Roman topographical changes as well as physical separation of areas indicate that the Wantsum channel and Romney Marsh should be considered separately from the North Kent marshes.

A more nuanced map of the *pays* has therefore been produced which takes into account both geographical factors and the distribution of Roman evidence and has thus subdivided the Foothills, the Marshland and the Downs. The parts of the Downs east and west of the Darent have been retained as one unit. This then allows the density of evidence to be mapped in a more meaningful fashion (Fig. 5.24).

This map demonstrates how varied the densities of Roman evidence are in the different regions of the North Kent Downs. Only the Wealden areas have lower densities than the Mid Downs, whilst seven areas are less densely occupied than the East Downs and nine than the West. The various divisions of the Foothills likewise show considerable variation, with the westernmost sector, which encompasses the Darent and Ebbsfleet valleys having the highest density; only Thanet and the Thames and Medway Marshes having higher densities. It is closely followed by the central Foothills, but the eastern Foothills have a much lower density of evidence, equivalent to that of the East Downs. This is no doubt explained at least in part by the presence of large tracts of woodlands, remnants of the once extensive Forest of Blean; although its ancient extent is not confirmed, this forest probably inhibited the development of settlement in the Roman period and today would obscure any evidence that exists (Fig. 5.26). The area of the Foothills on Sheppey, which is separated from the main body by a tract of (present day) marshland has a low density of evidence and contrasts with that on the Hoo Peninsula. The western and central Holmesdale have relatively high densities and appear as extensions of the Foothills, whilst its eastern extent blends with the eastern Downs.

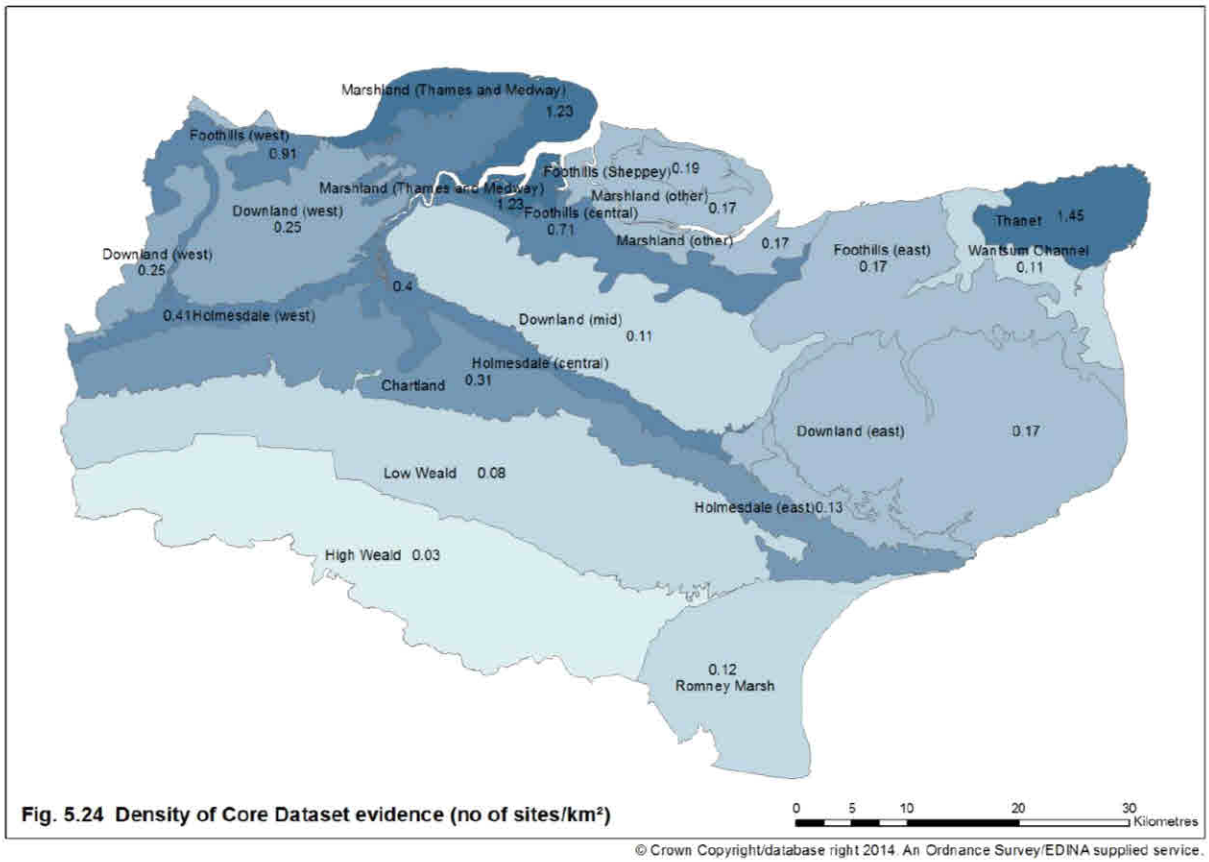


Fig. 5.24 Density of Core Dataset evidence (no of sites/km²)

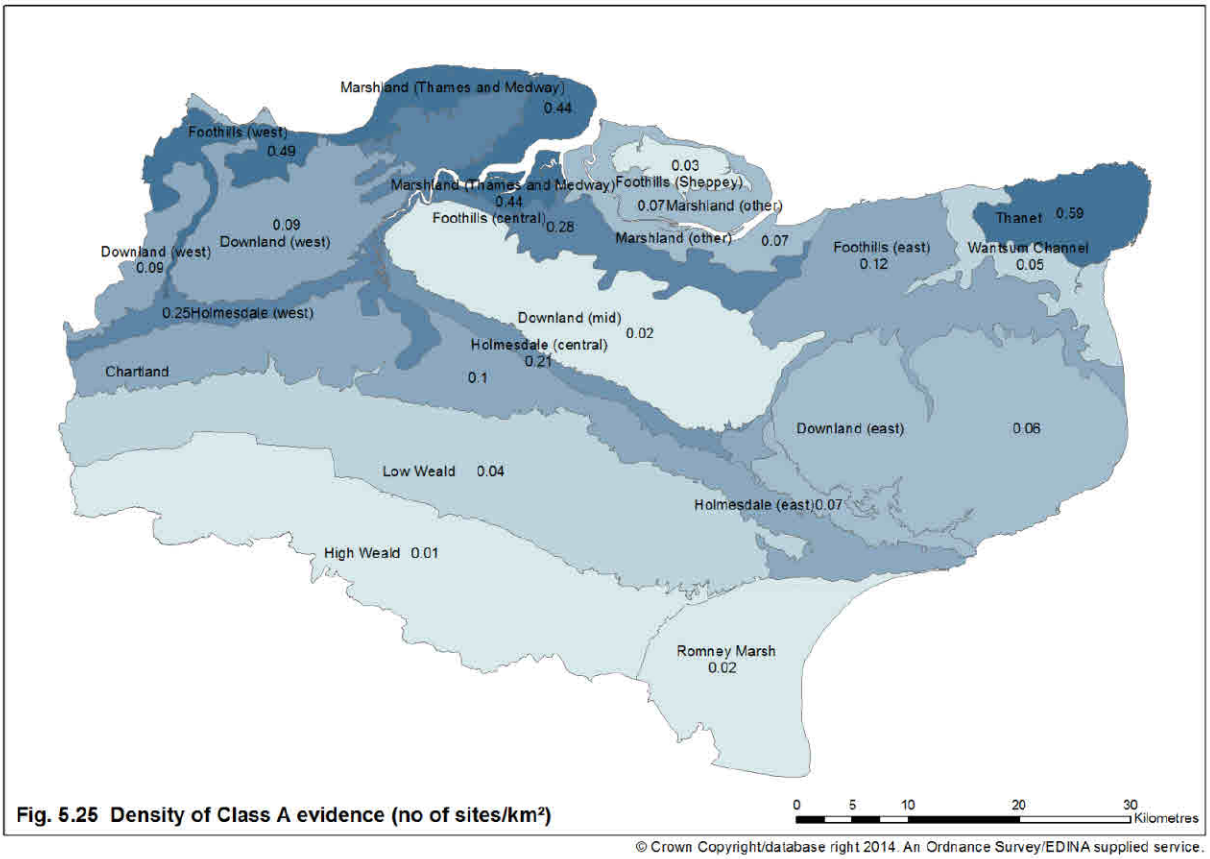


Fig. 5.25 Density of Class A evidence (no of sites/km²)

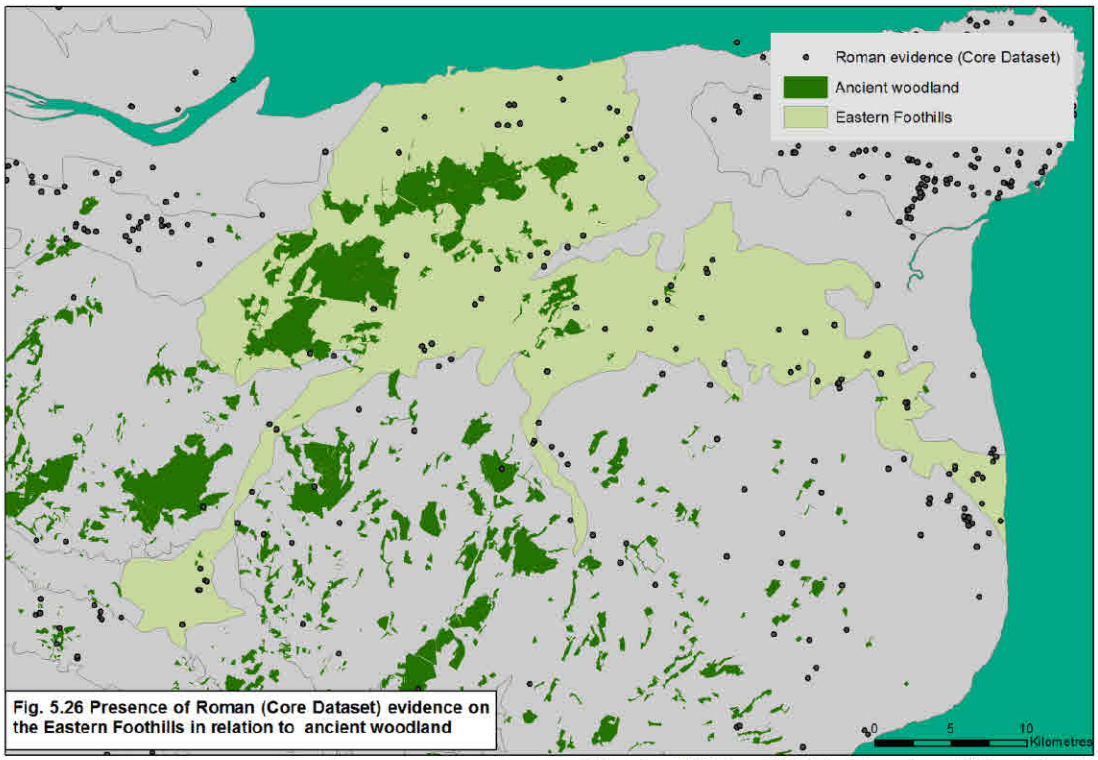


Fig. 5.26 Presence of Roman (Core Dataset) evidence on the Eastern Foothills in relation to ancient woodland

The marshlands of North Kent also show considerable variation with the Thames and Medway marshes having the second highest density, whilst the rest of the north Kent Marshes have a density lower than that of the Eastern Foothills and Downs. This may have as much to do with the complex formation (deposition and erosion) forces at play in these areas as it does with the original extent of occupation, although as occupation of Sheppey in general seems to have been minimal it may be a true reflection. Fig. 5.25 analyses the Class A site data in a similar manner, showing some subtle differences. The central Downland and Sheppey Foothills have densities similar to that found in the Wealden area; the eastern Foothills are now distinguished from the eastern Downs with double the density of the latter.

Although these maps are nuanced, they are based on what in the majority of cases are vanishingly small densities of sites/km^2. A much simpler picture is given by using the statistical package within ArcMap to map the density of evidence by standard deviation (Figs. 5.27; 5.28). The concentration of settlement in certain specific physiographic regions is emphasised by the fact that where the Core Dataset is concerned (Fig. 5.27), 59.6% of the county has densities of below -0.5 standard deviation. Only the western and central Foothills, the Thames and Medway Marshes and Thanet have densities of 0.5 standard deviation or higher and amongst

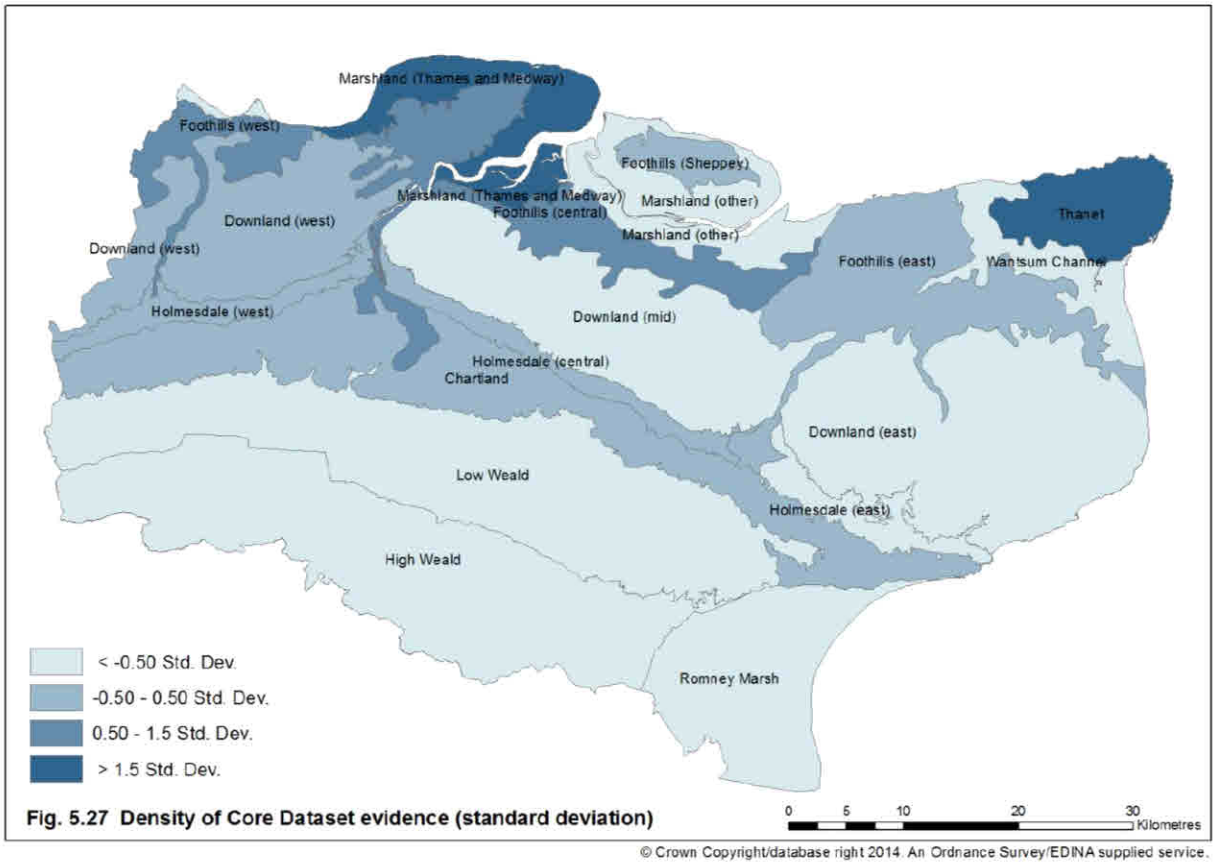


Fig. 5.27 Density of Core Dataset evidence (standard deviation)

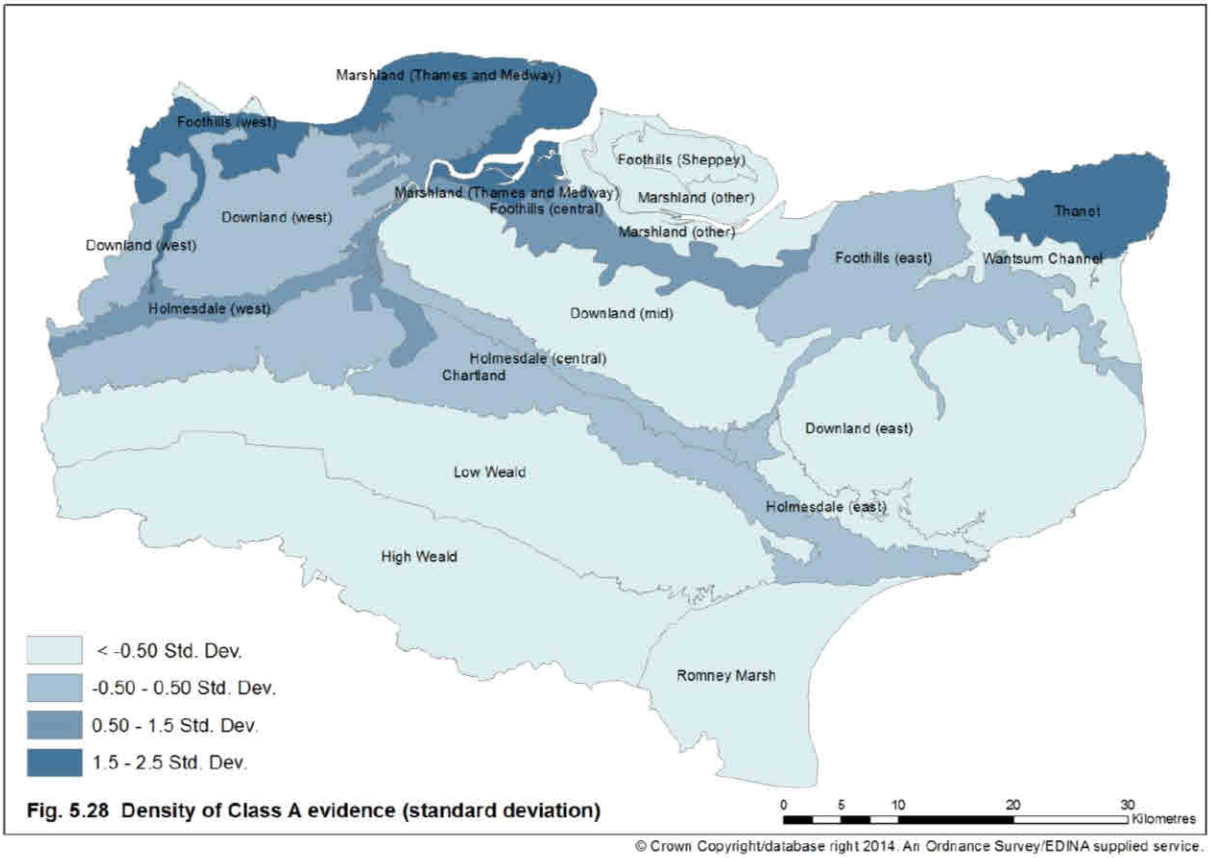


Fig. 5.28 Density of Class A evidence (standard deviation)

these, Thanet appears a lone outlier in the east, the main thrust of evidence appearing in the north-west.

The emphasis changes slightly for Class A evidence (Fig. 5.28): the density for the Thames and Medway Marshes reduces, reflecting the large number of more ephemeral sites, frequently associated with pottery manufacture or salt-winning, on the marshes; the western Foothills become more prominent not least because of the nature of settlement in the Darent valley. In both distributions, the Chartland and Holmesdale provide a transverse band across the county at -0.5 to 0.5 standard deviation.

5.5 Supplementary sources of evidence

Although this study focusses on evidence from the HER, it would be disingenuous not to consider some other sources of evidence which might complement or challenge it. Kent was one of the first counties to be covered by the Portable Antiquities Scheme, which is now well established and was also one of the four pilot areas for the National Mapping Programme.

5.5.1. The Portable Antiquities Scheme

All records of finds of potentially Roman date were downloaded from the PAS website in November 2011, those with the six-figure grid references needed for mapping numbering 3605 in total.[iii] Dating is of various degrees of precision; those potentially dating to the 5th century or beyond were excluded, as were records of vessel potsherds and building materials. This reduced dataset comprises 3479 finds associated with 1351 individual grid references; the vast majority (2883) are coins (including four coin hoards). As might be expected, almost all of the remaining 596 records are metallic.

The same provisos made in the previous chapter regarding biases in collection and recording and the accuracy of grid references apply. The distribution of Roman finds is broadly similar to that of Iron Age ones (Fig 5.29; compare Fig. 4.19), with find spots clustering in similar areas, although strangely there appears to be a much reduced number of find spots on Thanet. The distribution complements that of Core Dataset HER evidence, extending the geographical range of evidence and sometimes indicating 'hot spots' in areas where HER data are less

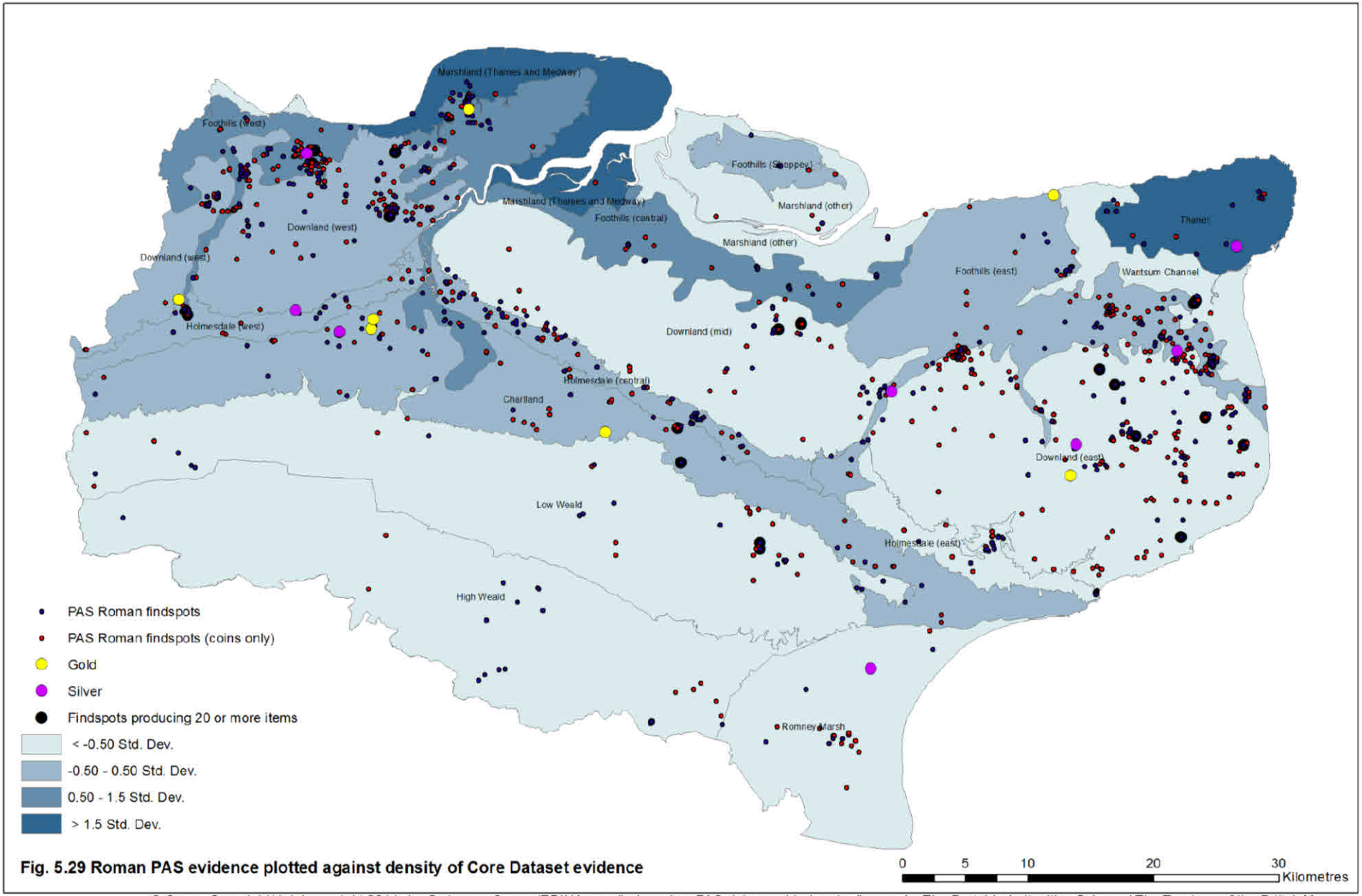


Fig. 5.29 Roman PAS evidence plotted against density of Core Dataset evidence

common, for instance in the easternmost sector of the western Foothills and in a number of regions of the Downs.

By contrast, not only Thanet but also the North Kent Plain seem to have much lower densities of Roman PAS finds than one might predict from the density of HER evidence in those regions. PAS finds for the North Kent Plain seem to be generally low (300 in total [iv]) of which 83 are Roman in date, an average of just one find per HER record in the same area. To put this into perspective, there are 63 Core Dataset records for the western Foothills, a region comparable in terms of major Roman sites (e.g. 'villas') but 400 Roman PAS finds, whilst the Mid Downs, with only 36 Core Dataset records has 286 Roman PAS finds. There is no immediate explanation for this paucity on the North Kent Plain; although this is a fruit growing region, the Countryside Survey 2000 Land Cover Map shows tracts of rotational arable land (Fig. 5.30) which would be suitable for metal detecting and one can only assume that restricted access and/or lack of reporting are responsible.[v]

The situation on Thanet, with 143 Core Dataset sites, is even more inexplicable as there is no general shortage of PAS data but a mere 25 out of the 720 finds situated there are dated to the Roman period .

Twenty-six individual find spots are associated with twenty or more finds: the majority of these are coins. These include four in the hinterland of Richborough Fort and one in the hinterland of Dover as well as others associated with the Darent Valley. Others are in less predictable spots, such as Offham in the Chartland and Great Chart (Ashford) in the Low Weald.

Findspots producing multiple finds of objects other than coins are rare: throughout the county just seven have six or more.

Dress accessories form by far the most common category of artefact after coins (380 items); 290 of these are brooches. This category may be supplemented by items from the 'Fastenings' category which is dominated by buckles, although these may belong to other items such as pieces of harness. In general, dress accessories make up between 57% and 79% of non-coin PAS finds in any one subdivision of the *pays* (Fig.5.31).

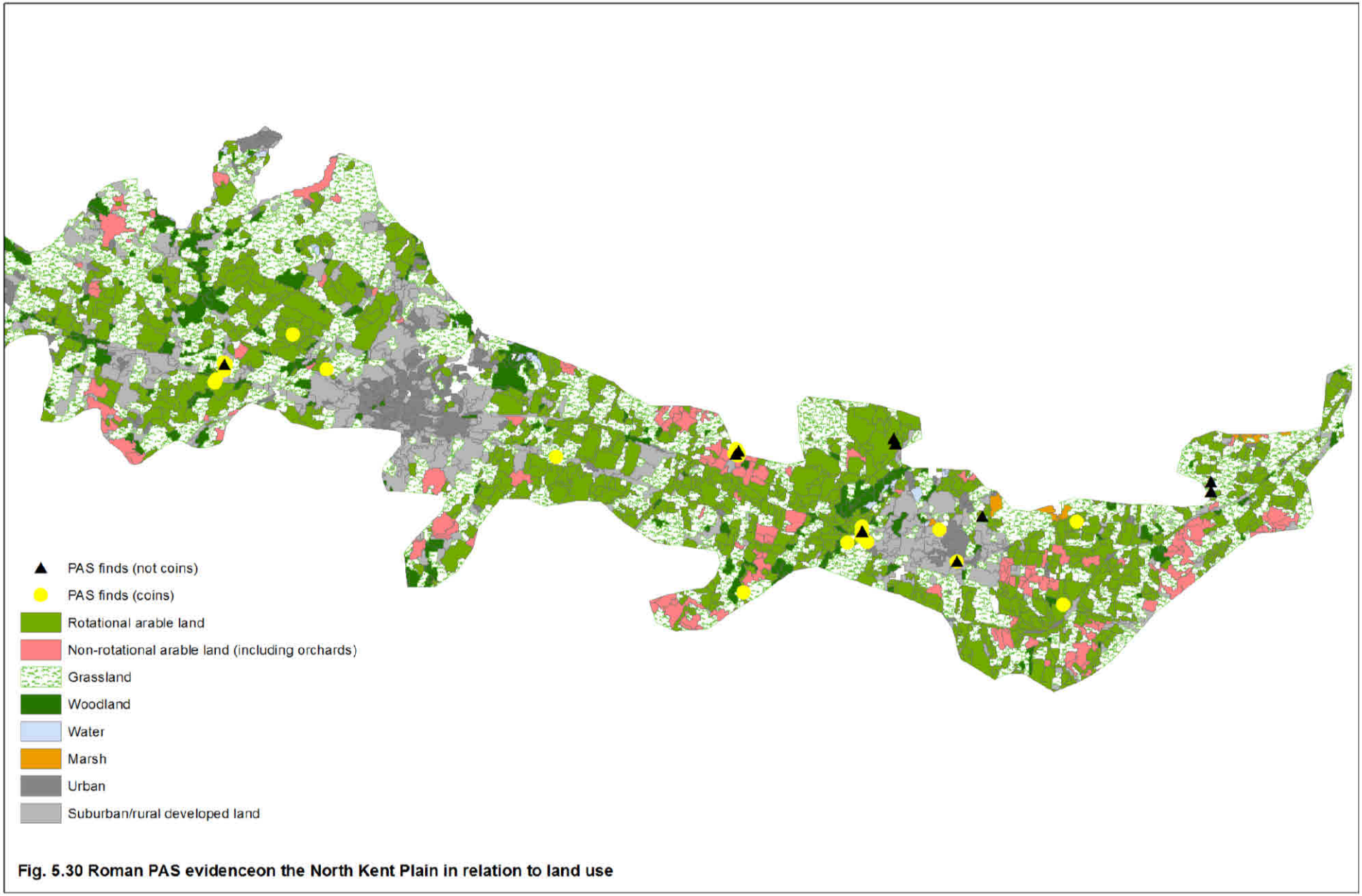


Fig. 5.30 Roman PAS evidenceon the North Kent Plain in relation to land use

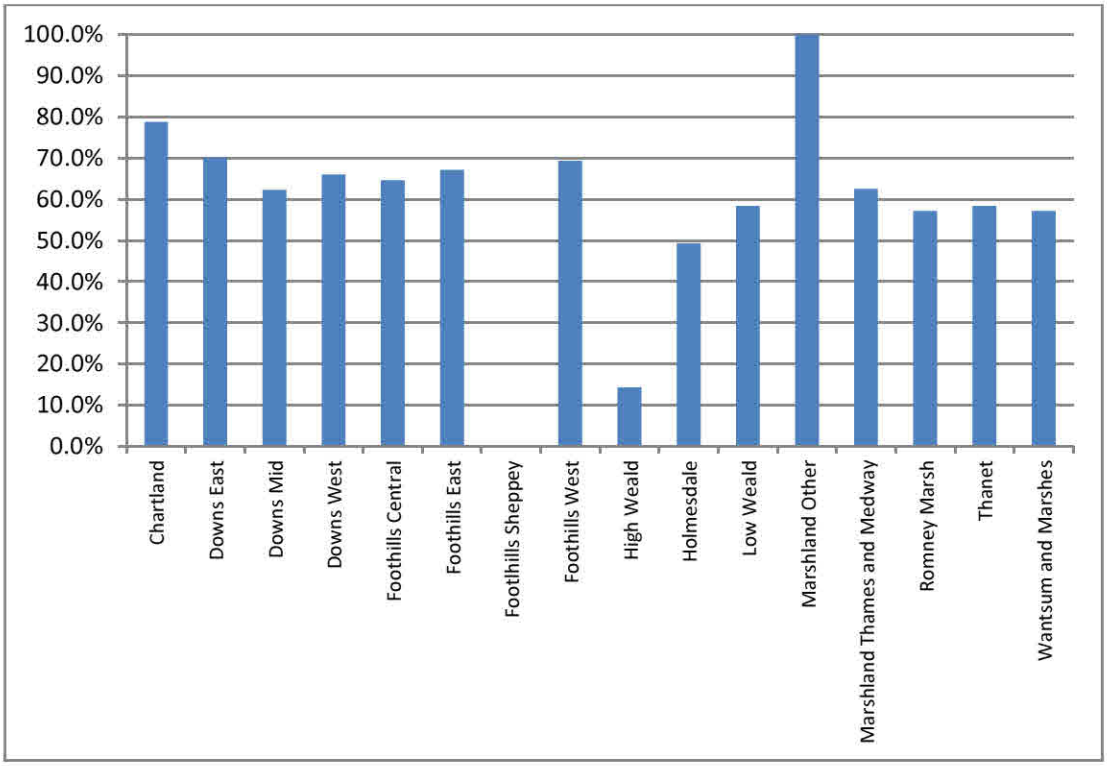


Fig. 5.31 Dress accessories as percentage of non-coin PAS finds/area

Anomalous results for Sheppey and the Marshland can be explained as being results of very small samples, whilst the 14 finds from the High Weald are dominated by 8 household items (Table 5.13).

Weights and keys dominate the 60 household objects. There are just two styli to represent literacy, whilst religious objects comprise seven votive miniatures, an amulet and a possible curse tablet. Toilet articles include items such as scoops, nail cleaners, 'woad grinders' and possible medical implements, 'Fittings' are predominantly in the form of mounts and the 'Miscellaneous' category is dominated by copper alloy and lead figurines. These, of course, might be religious in function.

The vast majority of objects (523) are manufactured from copper alloy; there are few finds of precious metals. The seven gold objects are all finger rings as are five of the seven silver objects, the others being a brooch and a spoon. In addition a small hoard of gold and silver ingots of probable Roman date has been recovered.

	Dress	Fastening	Fitting	Harness	Hoard	Household	Industry	Lighting	Literacy	Miscellaneous	Mount	Recreation	Religion	Toilet	Tools	Unidentified	Weaponry
Total	380	21	21	11	1	60	1	1	2	35	1	3	9	21	2	24	3
Chartland	37	1	1	1	0	2	0	0	0	2	0	0	0	1	0	1	1
Downs East	54	4	2	1	0	4	0	0	0	3	0	1	3	2	1	2	0
Downs Mid	28	1	2	1	0	6	0	0	1	2	0	0	0	1	0	2	1
Downs West	62	2	2	2	0	9	0	0	1	5	0	2	1	3	0	5	0
Foothills Central	31	0	1	1	0	2	0	0	0	1	0	0	2	2	0	8	0
Foothills East	51	3	2	1	0	8	0	1	0	2	0	0	1	7	0	0	0
Foothills Sheppey	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Foothills West	43	1	4	2	0	3	0	0	0	3	0	0	0	3	1	2	0
High Weald	2	0	0	2	0	8	1	0	0	1	0	0	0	0	0	0	0
Holmesdale	34	5	2	0	0	11	0	0	0	9	1	0	1	2	0	3	1
Low Weald	14	1	3	0	0	3	0	0	0	2	0	0	1	0	0	0	0
Marshland Other	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marshland Thames Nd Medway	5	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
Romney Marsh	4	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
Thanet	7	1	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0
Wantsum and Marshes	4	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0

Table 5.13 Categories of PAS (non-coin) finds by area

The dates of the non-coin items (as taken from PAS records) can be summarised by as follows (Fig. 5.32):

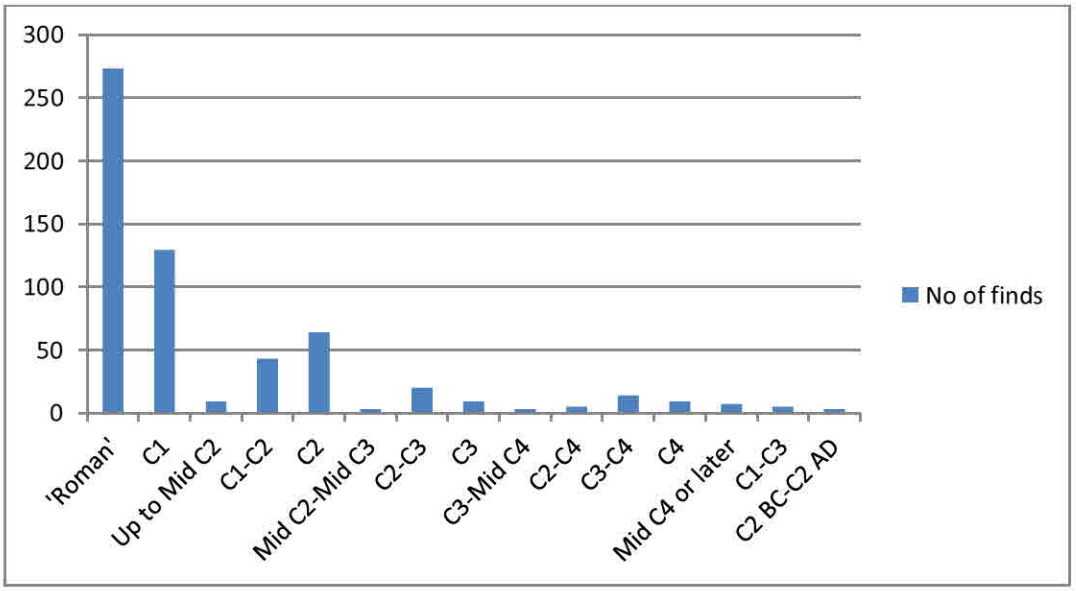


Fig. 5.32 Dates of Roman PAS (non-coin) finds

Almost half of the finds have been assigned only a generic 'Roman' date and many of the other ranges overlap; nevertheless, it is clear that the majority of dated finds (245) belong to the 1st to 2nd centuries. This is consonant with the large proportion of brooches within the PAS data, since these are more frequently early than late finds, as is the case here (Fig. 5.33).

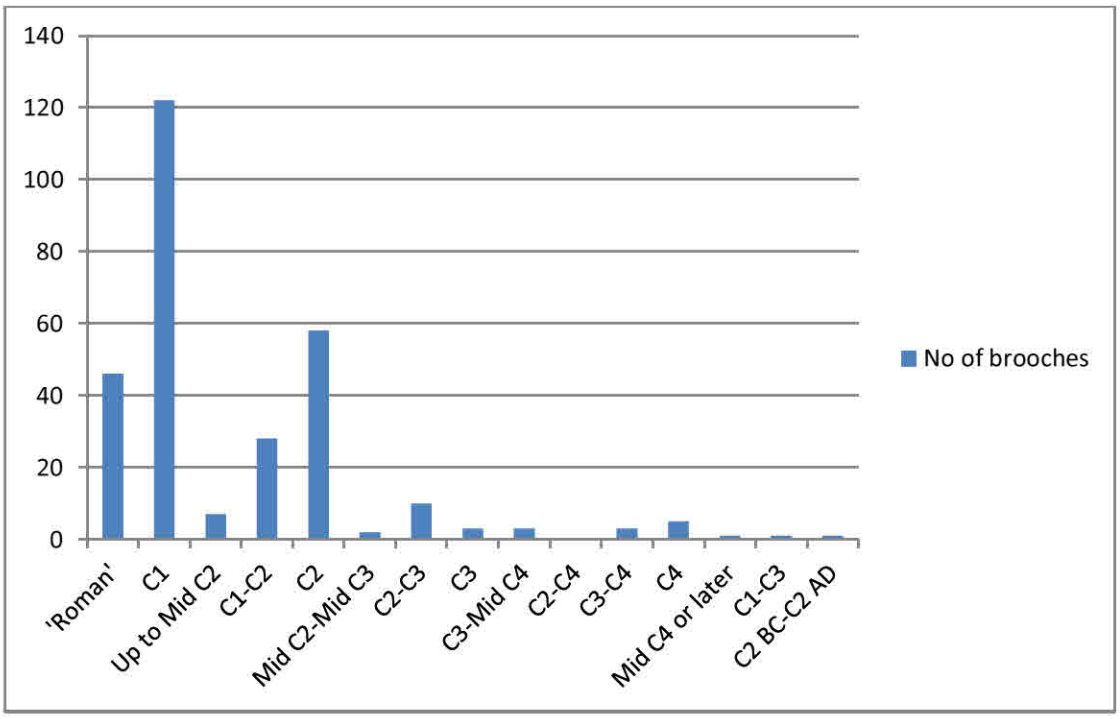


Fig. 5.33 Dates of Roman brooches (Kent PAS finds)

Coins, on the other hand, tend generally to be more strongly represented in the archaeological record in the Late Roman period (Reece 2002, 93). This is generally the case with the Kent PAS finds where 1160 of the 1522 coins which can be assigned to Reece periods (Reece 1995) belong to Period 13 (AD 260-AD 275) onwards (see discussion on dating below).

5.5.2. The National Mapping Programme

Kent was the focus of an aerial photographic survey undertaken by the Air Photography Unit of the Royal Commission on the Historical Monuments of England during 1986-1987; the resulting 1:10,000 scale transcriptions were used to develop a system for the classification of cropmarks (RCHME 1989). The survey lists 4831 cropmark sites, contained within 735

complexes. As the resulting report makes clear (1989, 2.1), the overall distribution of cropmarks in Kent is heavily dependent on soil type, being strongly associated with calcareous soils and brown earths overlying Cretaceous Chalk, particularly in the east and north west of the county (1989, Map 1). The distribution is biased by at least three factors: the non-responsiveness of certain soil types (particularly the Wealden Clays), the existence of negative areas caused by features such as woodlands, orchards and urban areas, and bias in survey methods such as less intensive survey of areas known to be less responsive (1989, 1.3).

The resulting cropmarks were classified and provisionally dated on the basis of morphology and or/association. Amongst sundry enclosure fragments, field systems, ditches, pits and occupation floors of suggested Roman date are 164 possible enclosed settlements, four hut circles, three villas, three temples and the *vicus* associated with Richborough Fort (Fig. 5.34). Excepting the villa and *vicus* sites, few of these appear to be identified as Roman sites on the HER. The 'villa' sites are all on Thanet; one is at Abbey Farm, Minster ('Minster Villa'), now fully excavated, one is recorded as a villa cropmark (TR 26 NE 7) and one (TR 36 NE 123) is now thought more likely to be a medieval manor.

The distribution of these possibly Roman sites poses some questions. Although one might predict significant numbers on Thanet, the sites in the north west of the county appear peripheral to the HER Core Dataset evidence, occurring on the Downland rather than on the western Foothills. This anomaly can be explained in terms of soil susceptibility and there is in addition a reasonable amount of settlement evidence from the area: 59 Core Dataset entries are complemented by 22 enclosed settlement cropmarks. More surprising is the density of possible Roman cropmarks on the eastern Downs (red rectangle) where 74 enclosed settlement and seven hut circle/building cropmarks slightly outnumber 72 Core Dataset entries. If these truly represent Roman settlement sites, then this clearly has significant implications for our understanding of settlement density and distribution in eastern Kent at the least and possibly for other areas less susceptible to aerial survey. In terms of the present study, the question is whether the eastern Downs were much more heavily occupied than the HER evidence implies *in relation to other areas* or whether the susceptibility of the soils in the area to aerial survey suggests that we should except other areas of the county to be more 'filled up' than they at present appear. One serious proviso is that without investigation on the ground, the Roman date of these enclosures cannot be confirmed; nevertheless, one of the few that has (TR 15 SW 14 at Swarling) has indeed provided evidence not only of an enclosure but also a potential building of Roman date (Philp 1960). It is possible that, contrary to the

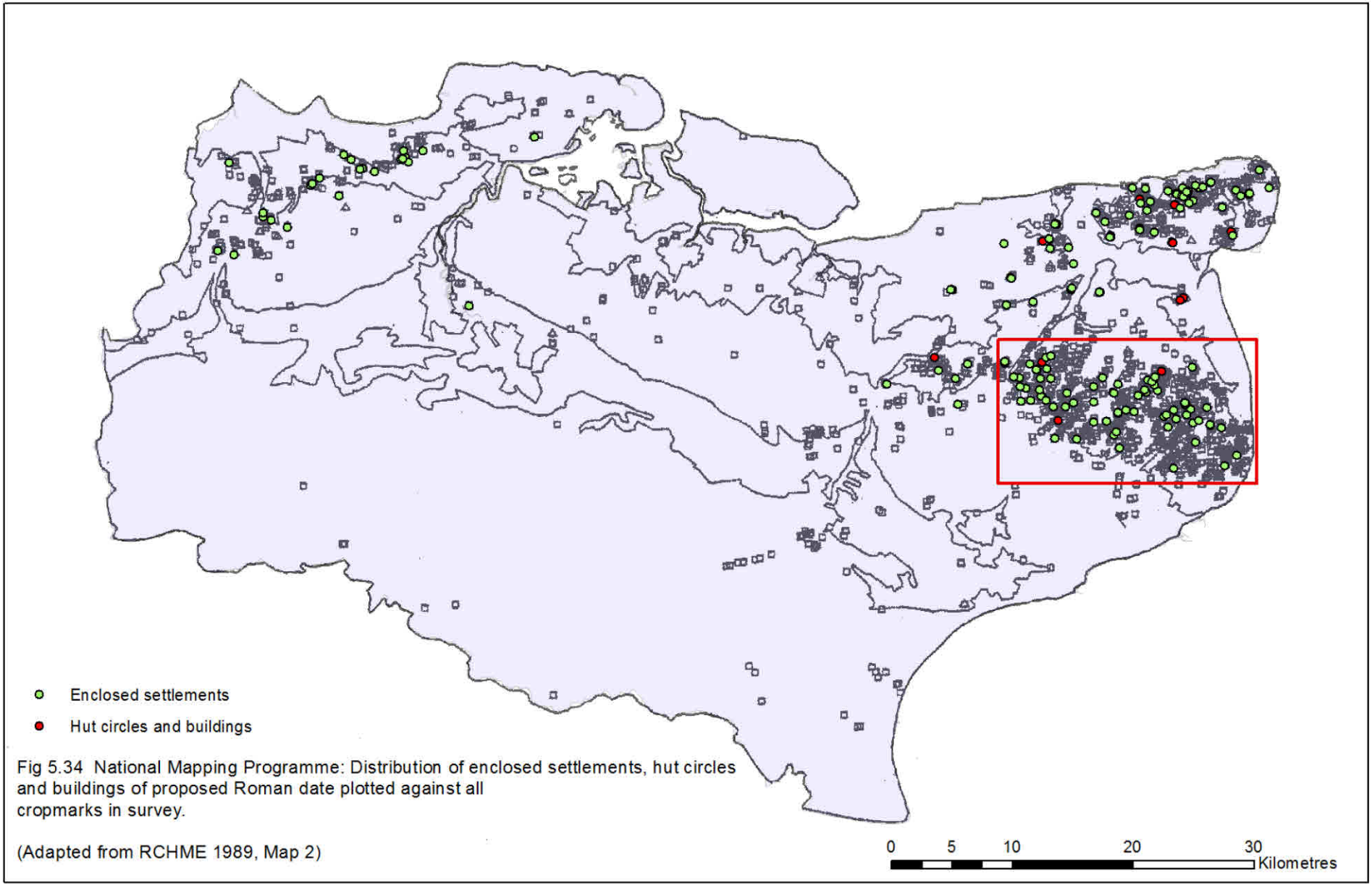


Fig 5.34 National Mapping Programme: Distribution of enclosed settlements, hut circles and buildings of proposed Roman date plotted against all cropmarks in survey.

(Adapted from RCHME 1989, Map 2)

conclusions drawn earlier, in East Kent at least there was sufficient pressure on land to require exploitation of the thinner and less fertile soils of the Downs.

Those areas of the Downs (all sections) with little or no cropmark evidence of any period represent zones of Clay-with-Flints and/or woodland. The Brown Earth Soils of the North Kent Plain are argillic, rather than calcareous and overlie the Thanet Sands rather than Chalk and hence are unfortunately unresponsive to aerial survey; even more than with the PAS evidence, aerial survey is unable to supplement knowledge gleaned from excavation and field survey in this area.

5.6 Dating

As has been stated, mapping changes in the distribution of settlement over time is a hazardous pursuit, but some attempt must be made.

Of the 1056 records in the Core Dataset, only 535 have sufficient dating information to be used in this exercise (Appendix 3); these include 250 of the 397 records of Class A evidence. No attempt has been made at either re-dating or dating from scratch from information contained within records; date ranges used are those suggested by the excavators and as many of these are from reports still in various stages of refinement, even the most recent data may be open to change.

A broad chronological framework has been constructed by breaking the period down into 50 year spans. Whilst this means that the accuracy of some data may be blurred (e.g. a site said to be founded in the last quarter of the 1st century AD would show as starting between AD 50 and AD 100), the majority of sites are not dated with sufficient accuracy to warrant closer definition. Indeed it is important to remember that, given the provisional nature of much of the dating and the lack of reassessment of older excavations in the light of more recent understanding of ceramic chronology, this is a somewhat rough and ready guide to the development of settlement in the county during the Roman period.

The results are presented in Figs. 5.35-5.37. Fig 5.35 shows the numbers of sites (including Class B supplementary evidence) which appear to be in existence/use in any one 50 year period. This does not mean that all the sites concerned necessarily operated contemporaneously: some records, such as those of individual burials, refer to individual short

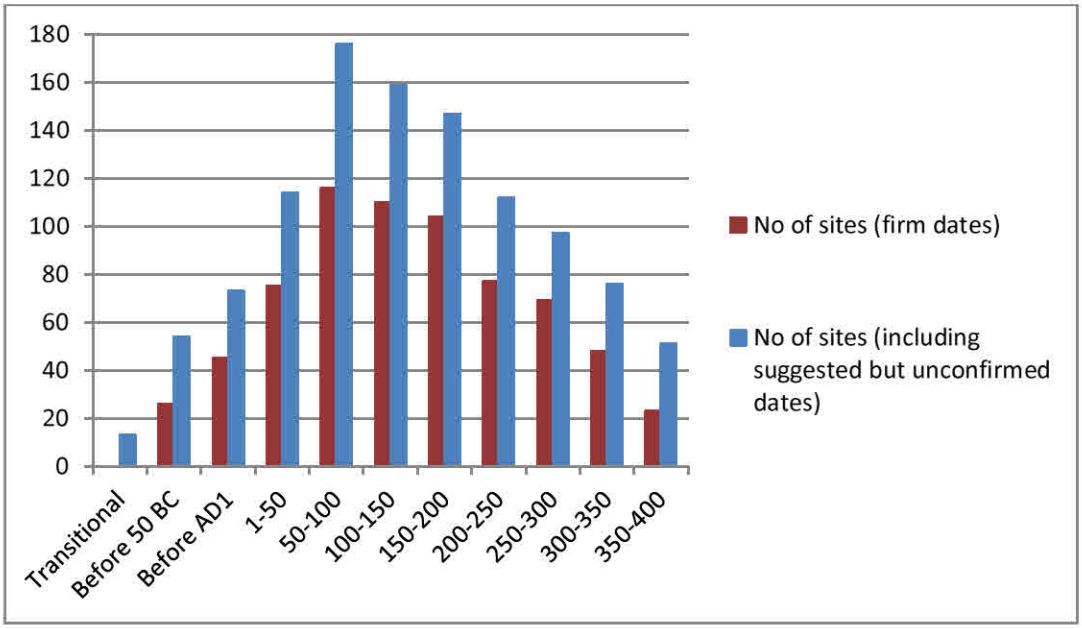


Fig. 5.35 Dating of Core Dataset evidence (absolute numbers)

episodes of activity within a 50 year period, albeit that they may have continued to be visited, whilst kiln evidence may refer to an episode as brief as a single firing. Moreover, existence and use are not synonymous: for example, sites may go through periods of abandonment that are not always clearly defined and these are not reflected in this overview. By contrast, the final abandonment of sites is reflected despite the fact that buildings in particular would have remained as features in the landscape. The data suggest that activity rose quite sharply through the Late Iron Age and the latter part of the 1st century AD before a gradual decline (slightly sharper in the early 3rd century) reaching levels similar to those seen in the Late Iron Age by the 4th century.

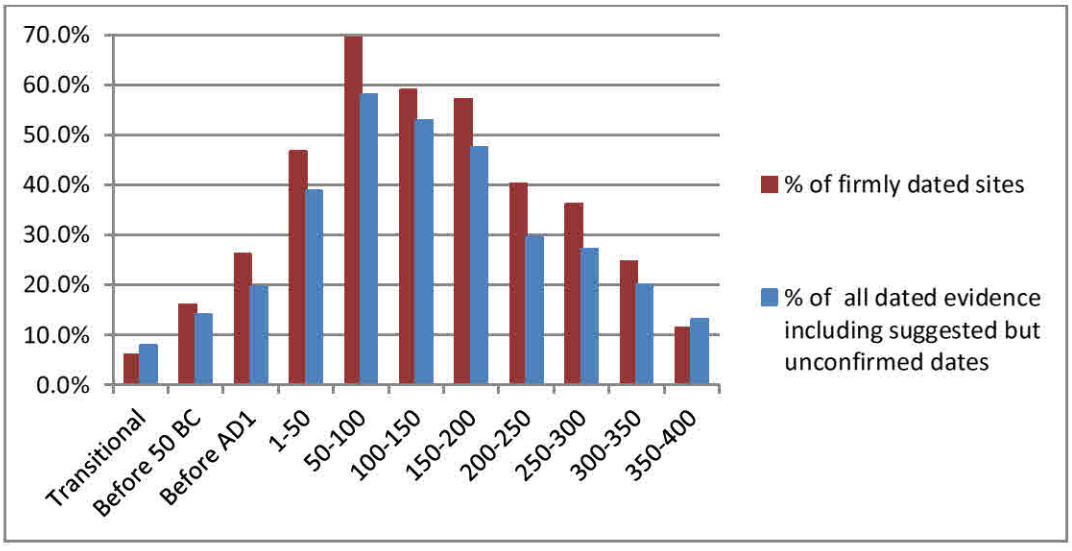


Fig. 5.36 Dating of Core Dataset evidence (percentages)

Fig. 5.36 presents the same data in percentage terms and shows that up to 69% of the firmly dated evidence was in existence during all or part of the latter half of the 1st century AD. Figures for Class A data only follow a very similar curve (Fig. 5.37):

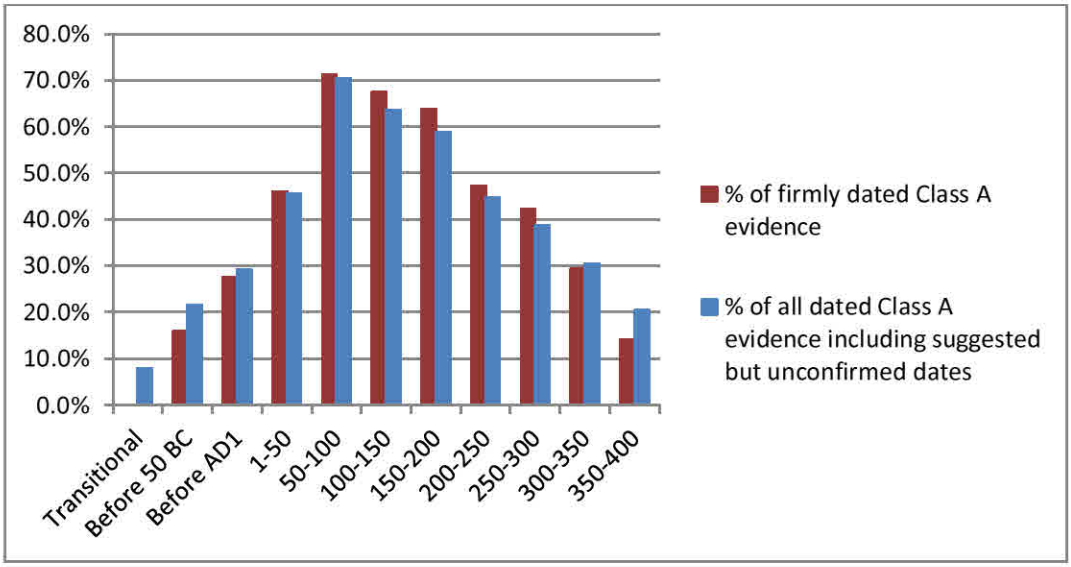


Fig. 5.37 Dating of Class A evidence (percentages)

The data have also been analysed in terms of the genesis and abandonment of sites. For this exercise, only Class A data have been used.

Fig. 5.38 presents the data for the earliest known dates of sites. The first column represents cumulative data for all sites continuing into the Roman period which have Iron Age origins (including the less firmly dated 'Transitional'): this comprises 40.2% of the evidence and encompasses the evidence summarised in the next two columns. Not only were the majority of dated Core Dataset sites in existence during the second half of the 1st century AD, but the largest proportion of dated Class A sites (29.1%) came into existence in that 50 year period; this is almost exactly the same proportion of sites coming into existence in the previous century. There is a significant drop in the number of sites being founded in the 2nd century and only one (cemetery) site appears to have been founded in the 4th century.

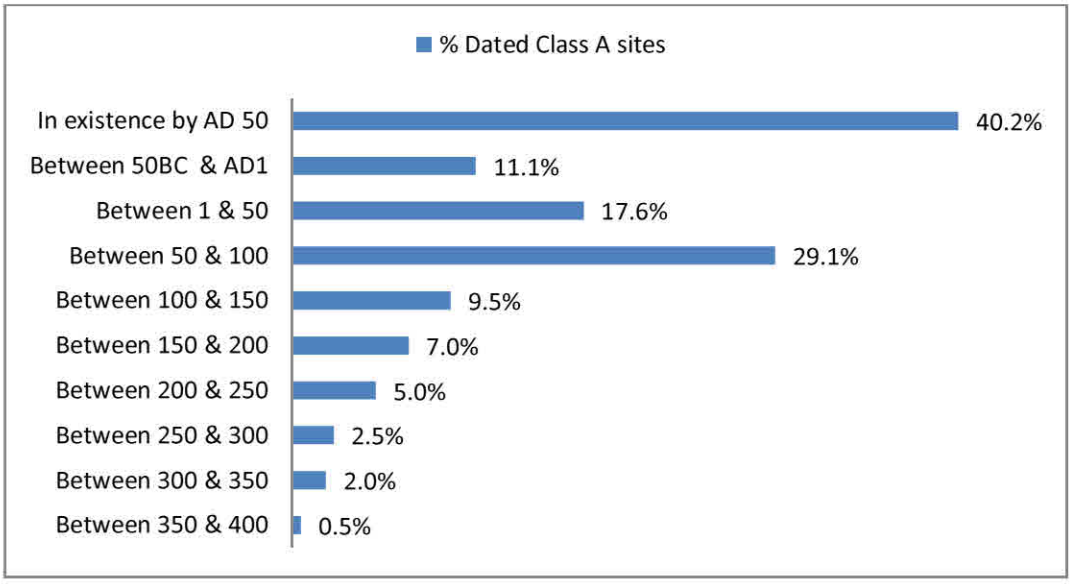


Fig. 5.38 Class A evidence: earliest known dates

The dates by which Class A sites went out of use can also be analysed (Fig. 5.39).

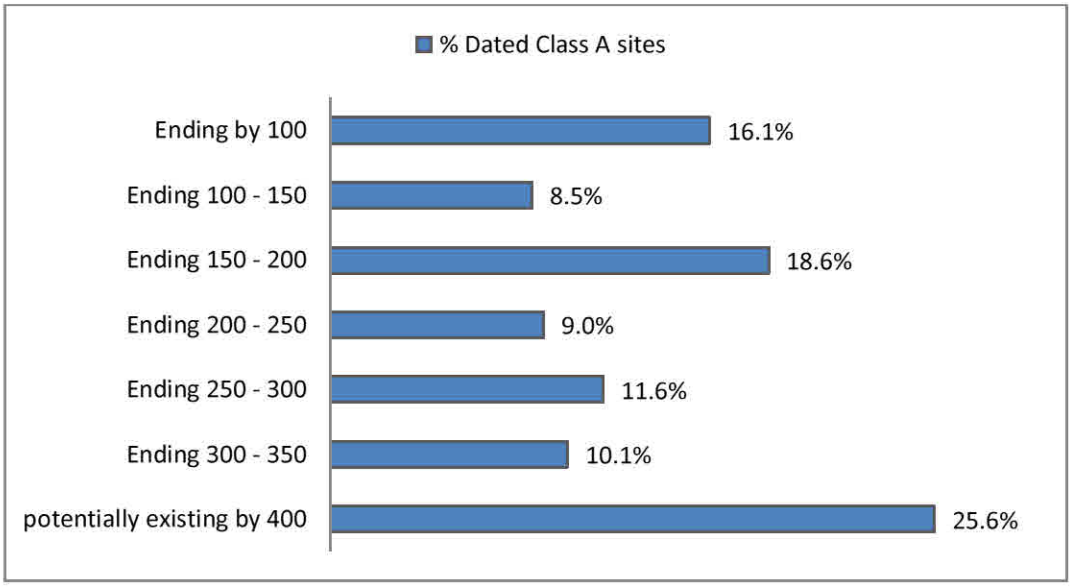


Fig. 5.39 Class A evidence: latest known/probable dates

This suggests that the peak period for sites going out of use was in the second half of the 2nd century AD, slightly later than the significant drop in site foundation noted above; almost as great a percentage of sites went out of use in the second half of the 1st century, however, and

this figure rises to 19.6% if sites which went out of existence by AD 50 are added. Between AD 200 and AD 350, approximately 10% of the total number of dated sites appears to have been abandoned per 50 year period.

Just a quarter of the dated sites were still under occupation (sometimes following periods of abandonment) in the later 4th century. Of the 32 sites known to have been occupied post AD 350, 20 are villas or possible villas, the majority of which trace their origins back to the 1st century AD and are thus longstanding foci of settlement.

The overall picture is thus one of rapid growth and change in the Late Iron Age and Early Roman periods, reaching a peak, at least in terms of numbers of sites, by the end of the 1st century AD. At the same time, significant numbers of sites seem to have gone out of use in the later 1st and 2nd centuries, perhaps as a result of changes of land tenure, changing agricultural practices or simply the failure of some newly founded settlements. In the Darent Valley and its hinterland, for instance, a number of sites that appear to have been (or to have been associated with) farmsteads seem to have gone out of use before the end of the 1st century, sometimes with ditches deliberately backfilled (Fig. 5.40). These must have gone out of use around the time that the much longer-lived villas were being constructed. Very occasionally, as at Hockers Lane (Lawrence 2006), settlement shift from a shorter-lived Late Iron Age - Early Roman settlement to an adjacent site can be observed. Whatever lay behind these changes, it appears to have been a dynamic period.

These findings are in broad agreement with those the HS1 excavations (Booth 2011, 252) where ceramic evidence suggested, "a heavy emphasis on settlement evidence in the Late Iron Age and Early Roman periods and more variable evidence for continuing activity from the mid-2nd century onwards". The evidence slightly differs from Booth's subsequent finding (ibid. 262) that the overwhelming majority of HS1 Roman sites have pre-conquest origins. This is undoubtedly true of the HS1 dataset; a majority of the 142 Class A sites in the present dataset recorded as being in existence between AD 50 and AD 100 also appear to have origins in the Late Iron Age; at 65%, however, this is a significant trend, but not overwhelming.

This evidence may be compared with that from the Portable Antiquities Scheme. We have already seen that where finds other than coins are concerned, there is a heavy emphasis on the 1st to 2nd Centuries AD and particularly on the 1st century, which is consonant with the findings above.

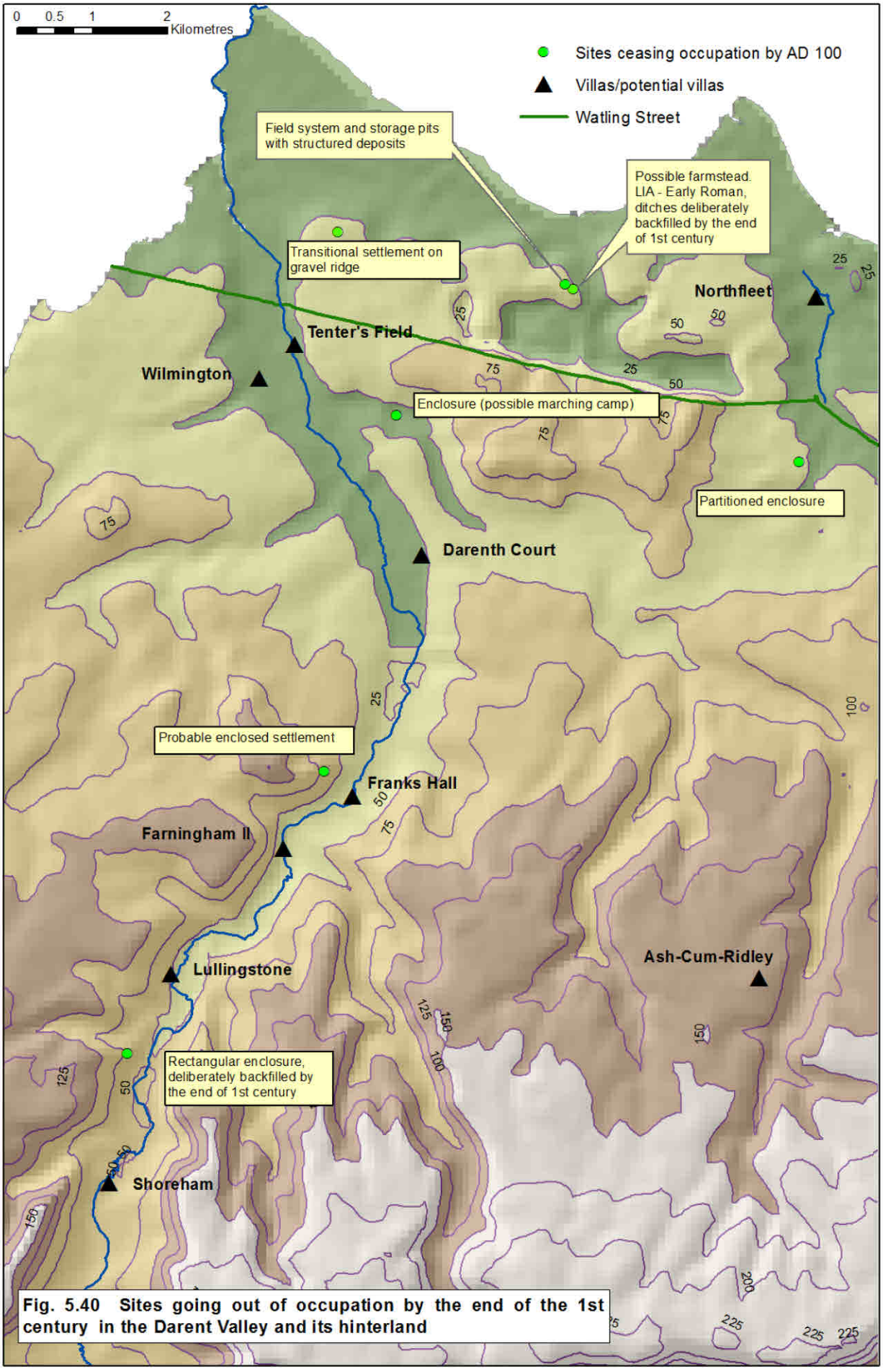


Fig. 5.40 Sites going out of occupation by the end of the 1st century in the Darent Valley and its hinterland

The number of PAS coins, as has been noted, and as is normal in Roman Britain, peaks in the Late Roman Period. It is thus necessary to compare the numbers of Roman coins from the Kent PAS record with the British Mean and the British PAS mean (Fig. 5.41).

This reveals that the Kent PAS mean is consistently higher than the British PAS mean for Periods 1-12 (pre AD 41-AD 260). From Period 13 onwards, however, the picture is somewhat different. The Kent mean is lower than the British PAS mean for Periods 13-16 (260-330) and 20-21 (378-402) but rallies in between, being higher from Periods 17-19 (330-378)[vi] before dropping to negligible levels for the latest periods even in comparison to the low numbers recorded nationally.

This data clearly do not tell a straightforward story and more detailed analysis is needed in terms of where, and in what quantities, coins of various periods were being lost as the overall picture may be distorted by particular foci of economic activity/coin loss: relatively high losses of Period 17 and 19 coins in the vicinity of Richborough, for instance must be associated with the continuing importance of this military site in the Late Roman period and Kent's strategic position vis à vis seaborne raids. Such factors may be distorting the coin record more generally for the later period, particularly in comparison to activity at lesser rural settlements. Geographical factors may also be hidden in the data: Plouviez (1995, 74) found that in Essex there was more variation between coin assemblages grouped geographically than between functional site groups. Nevertheless, the comparatively high rate of loss in the earlier periods is consonant with the picture of vibrant 1st to 2nd century settlement activity that appears from the HER records. The continued higher rate of loss of coins of the 3rd century, however, is another phenomenon that would bear further investigation.

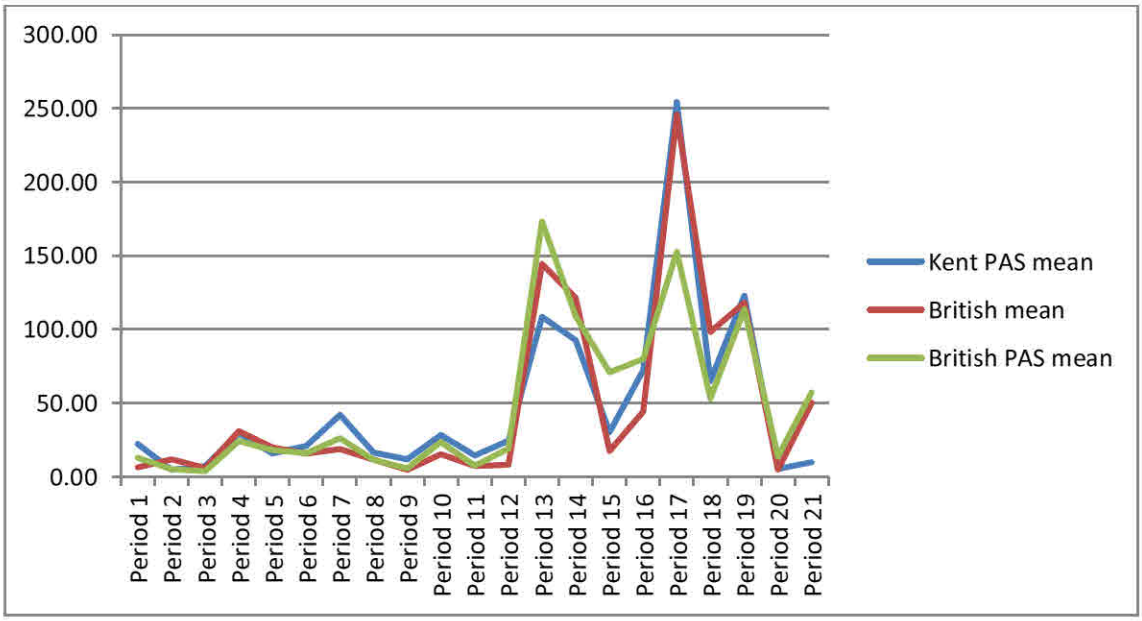


Fig. 5.41 Roman coins per thousand: Kent PAS records compared with British PAS record (taken from information on PAS website, 11.09.12) and British mean (as established by Reece 1995)

5.7 Infrastructure and connectivities

We have already seen that there is strong patterning in the distribution of Roman settlement evidence in Kent. Mapping the density of the evidence (Figs. 5.24-25; 5.27-28) strongly suggests two parallel corridors of east-west movement through the county, these being linked by three major river valleys (Darent, Medway and Great Stour). These main areas of habitation were largely established before the Conquest, when trackways and rivers would have been the principal means of overland travel and we have seen in particular (Ch. 3) the importance of the nexus of communication in central Kent formed by the North Downs Way and its parallel watercourses.

That this central area (Fig. 5.42) diminished in *relative* significance whilst still remaining part of the core area of settlement can be demonstrated statistically (Table 5.14). When figures for evidence of exclusively Roman date are compared to those for the Late Iron Age, it is evident that a greater proportion of the latter pertain to this central corridor. Moreover a greater proportion of Roman evidence in fact pertains directly to the River Medway which crosses at this point.

	Evidence from Roman period only	**Late Iron Age evidence**
Total	831	172
Within central corridor	96 (11.6%)	32 (18.6%)
Class A total	289	81
Class A within central corridor	29 (10%)	15 (18.5%)
Central corridor evidence within 500m of Medway	34 (4.1%)	2 (1.2%)
Central corridor Class A evidence within 500 m Medway	12 (1.4%)	1 (0.6%)

Table 5.14 Relative proportions of Late Iron Age and exclusively Roman evidence within the central corridor between the North Downs Way and its parallel watercourses

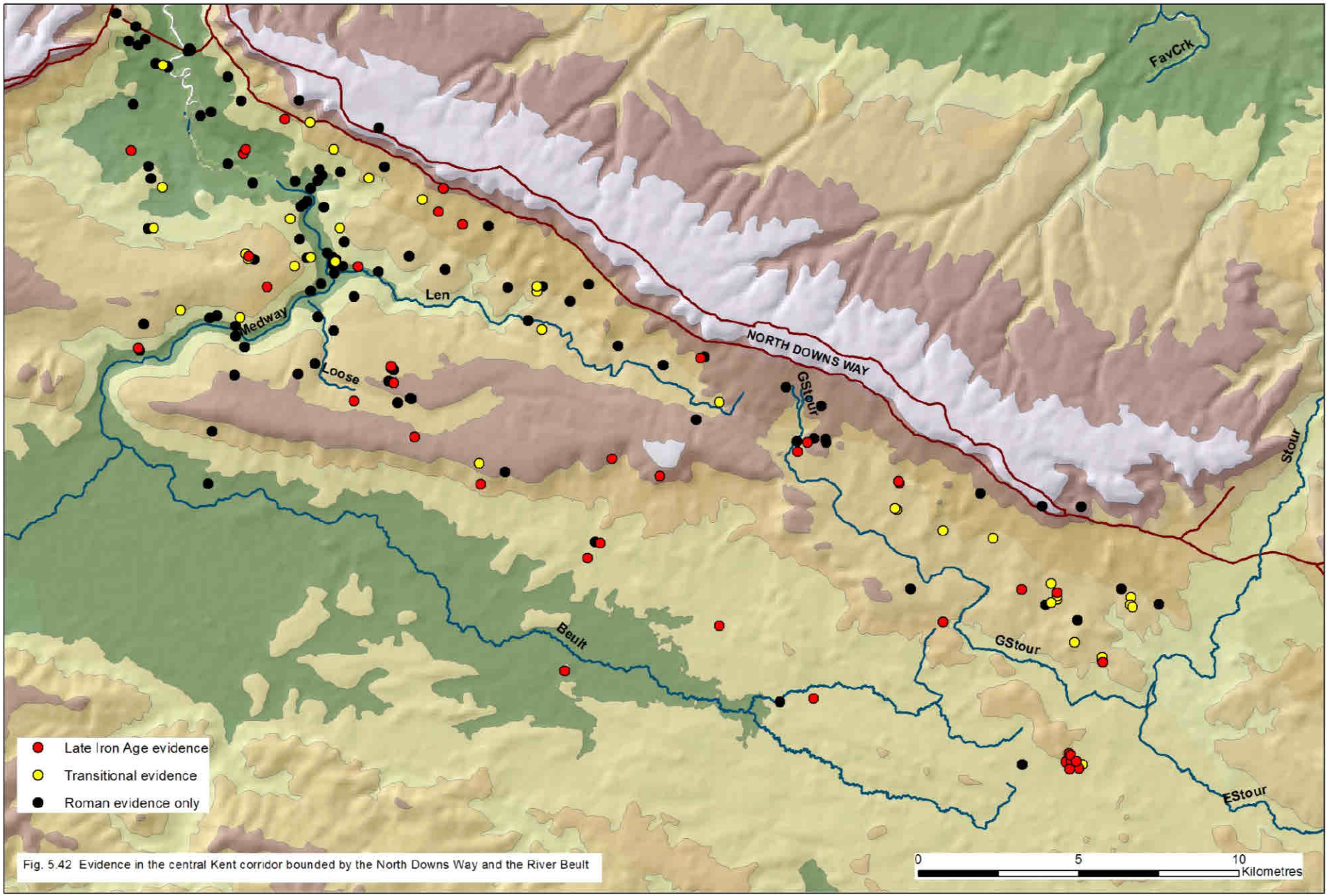


Fig. 5.42 Evidence in the central Kent corridor bounded by the North Downs Way and the River Beult

It has already been suggested that this corridor's significance as a trade route focused on Folkestone waned after the Roman conquest. Following this, Richborough appears to have become the major transhipment centre of the 1st century (Milne 1990, 82; Millett and Wilmott 2003), with the development of Dover harbour in the late 1st – 2nd centuries perhaps further diminishing Folkestone's significance.

Kent is, as Caesar (*De Bello Gallico* V) remarked, a maritime district, and one must also imagine that coastal routes were important. Coastal change makes it difficult to assess the amount of settlement actually *on* the coast; analysis, however, of distribution shows that over half of all Late Iron Age and Roman evidence occurs within 5km of the (projected Roman) coastline. The rivers are also, of course, significant and if a linked coastal-riverine zone comprising areas within 5km of the coast and 2km of a principal river is constructed, it encompasses over 80% of the evidence (Figs. 5.43-44) . Figures are remarkably consistent, whether the entire Core Dataset, Class A, Class B, Transitional or Late Iron Age evidence is chosen. The principal difference is that the coastal (as opposed to the riverine) part of the zone becomes relatively more important in the Roman dataset.

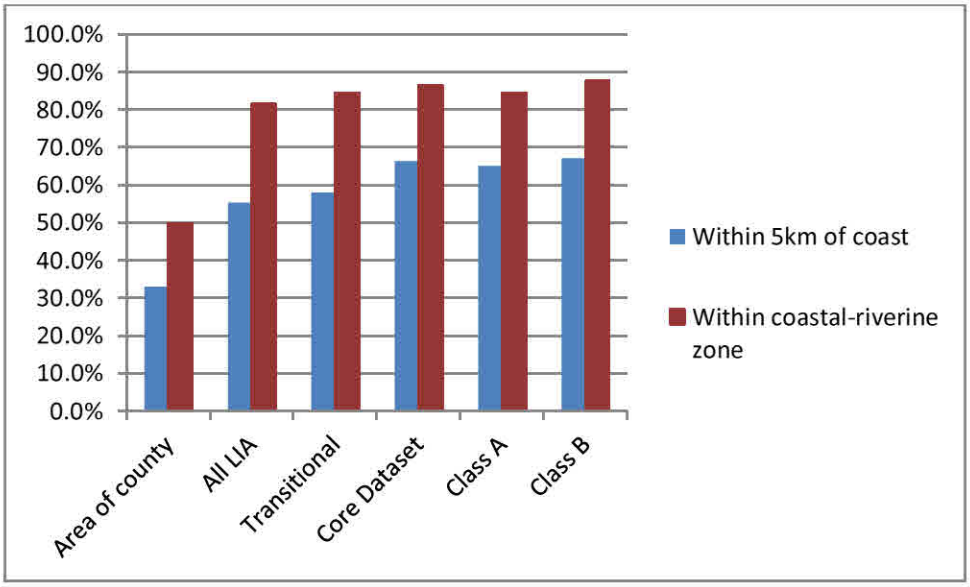


Fig. 5.43 Percentages of evidence within 5km of coast and within combined coastal-riverine zone

The North Downs Way itself has very little associated evidence except in areas which are also within the coastal-riverine zone. Beyond this, the few sites mostly represent burials. Interestingly, much of the Roman road system fits quite well into the coastal-riverine zone.

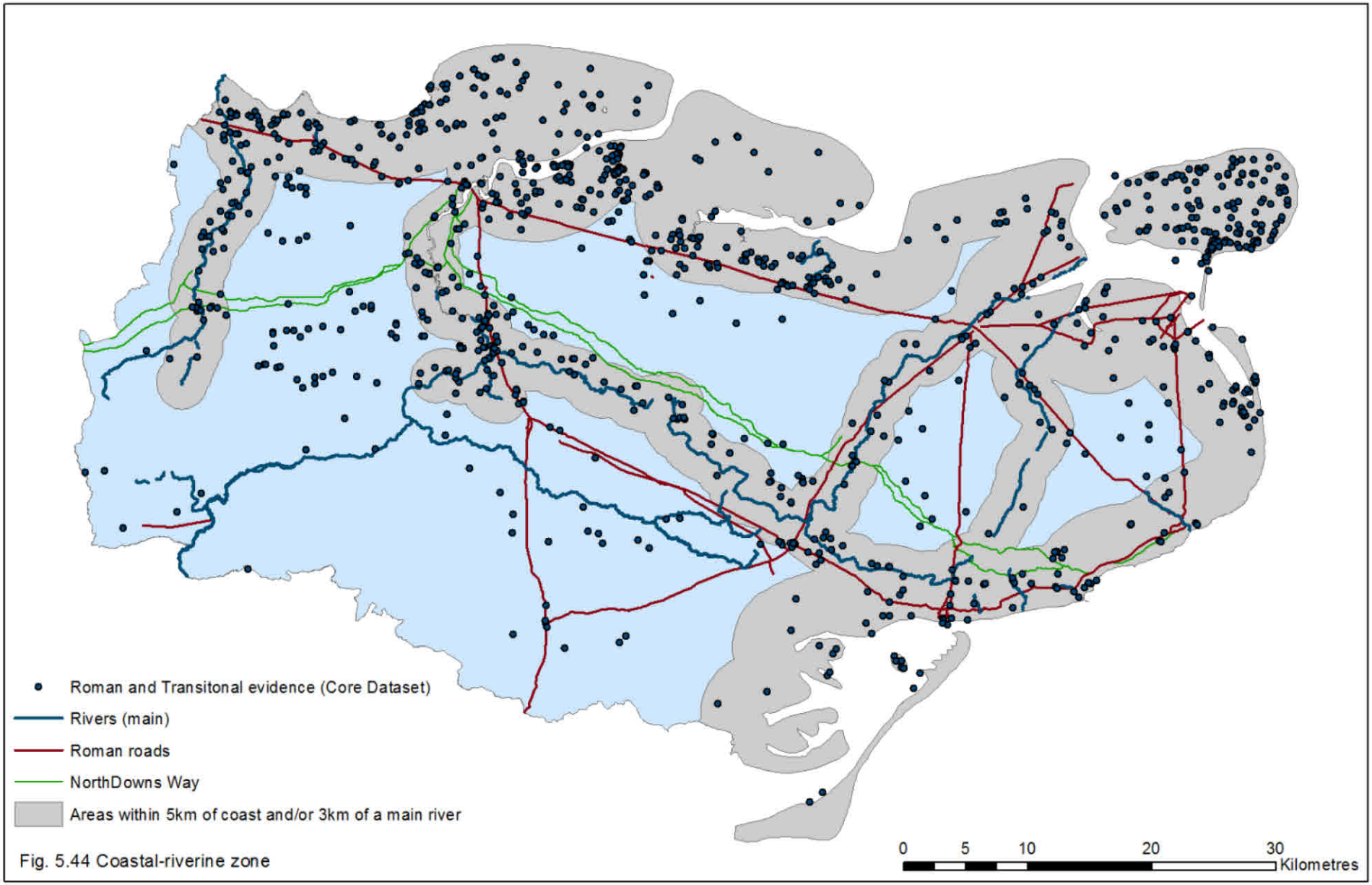


Fig. 5.44 Coastal-riverine zone

If Roman roads are substituted for rivers, 83.6% of the Core Dataset lies within 3km of a road or 5km of the coast. Nevertheless, examination of the map reveals that the roads have a much lower density of evidence in areas which are not within the coastal-riverine zone. Although 45.8% (n = 484) of Core Dataset evidence lies within 3km of a Roman road, only 14.7% of this subset of sites lie outside the coastal-riverine zone. It is difficult to make comparisons of the relative importance of the rivers and the roads as there are geographic biases. There are three clusters of evidence in areas which have good access (3km or less) to both road and rivers: around the lower Darent valley, the central Medway Valley and around Faversham Creek. Although similar conditions pertain over wide areas of east Kent, settlement evidence there appears less dense, except perhaps in the Ashford area. There are significant stretches of road crossing the Weald and the Eastern downs which at present have no known associated settlement. In the case of Stone Street (leading from *Portus Lemanis* to Canterbury) the section crossing the Downs passes straight through and outcrop of Clay-with-Flints which would make it unattractive for settlement or farming.

One pertinent question concerns the navigability of Kent's rivers. Selkirk (1983, 84) has argued that wide use was made of rivers of all sizes throughout the Roman empire; these were made navigable by the use of dams and locks. Whilst his 'Piercebridge formula' has been widely rejected in the case of the River Tees, the possibility of river level management elsewhere remains a matter for investigation. Work currently being undertaken by S. Elliot (pers. comm.) suggests that such modifications were made to the River Medway (chiefly to facilitate the transportation of Ragstone).

The road system of eastern Kent focuses on Canterbury, whilst connecting the military sites at Richborough, Dover and Lympne. It is this connectivity to Richborough and nodal position which Wacher (1995, 25) picks out as being in Canterbury's favour (over Rochester) in the choice of *civitas* capital. Canterbury is in many ways not a 'normal' *civitas* capital, however (ibid. 189-191), and its physical connections are notably dominated by military sites. It certainly exerted no 'pull' in the siting of villas.

Of all the roads, Watling Street runs through the highest density of occupation. This is unsurprising for a number of reasons. The route itself was significant as it was the starting point for any overland journey into the interior of Britannia from the near continent and it had the advantages of running through the North Kent Plain and western Foothills with their fertile soils, access to varying geologies and proximity to the sea and riverine routes.

5.8 Conclusions

This chapter has sought to bring together information from a number of diverse sources in order to paint an overall picture of the nature and distribution of Romano-British rural settlement in Kent. The data are variable in terms of the date of generation, degree of detail and publication status. Although a reasonably large proportion of Class A evidence in particular has been generated in the last two decades, much of this has not reached final report or publication stage and so interpretations and, crucially, phasing may be subject to change. Dating in particular is a problem for the dataset as a whole, although cautious attempts have been made to show trends in the foundation, occupation and abandonment of sites from suitably dated evidence.

The pattern that emerges is broadly one of continuation from the Late Iron Age. In general, the same areas of the county are occupied; there is a filling out of the settlement pattern and a rise in terms in the amount of settlement evidence from all areas. At the same time there is a shift in emphasis towards the Foothills and parts of the Marshlands of North Kent at the expense of the Chartland and Low Weald. Expansion onto the Marshlands seems to be primarily industrial in nature, whilst intensification of occupation in the fertile Foothills, particularly in conjunction with evidence of possible consolidation of settlement associated with the Brown Earth Soils of North Kent may suggest that arable farming took on an increased importance.

There appear to be two dominant positive factors in the siting of rural settlement: proximity to roads/rivers/the coast and access to the varied landscape resources afforded by changes in bedrock geology. Indeed 91.3% of all Core Dataset evidence lies within the combined area of the coastal-riverine zone and land within 500m of a change in bedrock, a statistic that rises to 95.8% (1012/1056 records) if sites all within 3km of a road or major river are added. Aside from a handful of isolated sites, there are just two groups of evidence (mostly Class B) which do not conform to these expectations. There are eight records pertaining to the western Downland and 17 of evidence on the eastern Chartland, which are predominantly funerary in nature but do include one building, probably of some quality, at East Malling (Anon 1957; Wacher 1965).

Although settlement density apparently increases from Late Iron Age levels, particularly in the Early Roman period, the HER evidence does not suggest that the landscape is 'filled up'; in other words there does not seem to be sufficient pressure on resources to require extensive

exploitation of less agriculturally viable land. Where such land is exploited, for instance on the Marshlands or the Low Weald, this tends to be (as in the preceding period) for specialist purposes: pottery- and salt-production and pastoralism on the marshes or iron-working in the Weald.

Information from the Portable Antiquities Scheme and National Mapping Programme both complements and challenges this conclusion. Whereas the PAS generally fills out areas of the distribution, suggesting use of (or movement across) interstitial areas between known areas of settlement, there are areas (Thanet and the North Kent Plain) where evidence is strangely lacking. The NMP data have their own particular biases but challenge perceptions of the landscape – in some areas at least - not being filled to capacity. It is necessary to know more about the nature of the evidence related to the East Downs before this information can be integrated into the narrative, but it provides a salutary reminder that we are always and everywhere dealing with only partial information and that our interpretations must always be open to change.

Notes

[i] These are necessarily to some extent arbitrary and open to interpretation. Dover, for instance, incorporates several phases of Fort and a town, but its primary function is here seen as military.

[ii] Thanet has been excluded as areas adjacent to changes in bedrock include what was in the Roman period the Wantsum Channel coastal area.

[iii] By Feb 2014 this number had risen to 4059, however, owing to time constraints a reanalysis has not been attempted.

[iv] The complete download of PAS records for Kent (17,132 records) has not been subject to the same scrutiny as the Iron Age and Roman data.

[v] An enquiry to the local Finds Liaison Officer brought forth no explanation.

[vi] The figure for Period 17 in particular has been augmented by the addition of Reece periods, where possible, for those entries on the PAS database which did not already have them. These were for the most part old entries made before the creation of the PAS central database and it may be that this period is similarly under-represented in the British data as a whole.