

# Landscape, Settlement and Materiality

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Aspects of Rural Life in Kent during the  
Roman Period

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## 10 Ceramics

### 10.1 Introduction

The substantial body of sites of Roman date in Kent include a relatively large number that have been excavated within the last two decades and it might therefore be expected that there would be many published ceramic assemblages suitable for analysis and comparison. Unfortunately this is not the case. There are a number of obstacles.

In the first place, even though the potential of understanding Kent's Roman pottery has been recognised for over two decades and it is the subject of detailed monographs (Monaghan 1987; Pollard 1988), there is no established universal fabric series for the county. That established by Canterbury Archaeological Trust (CAT; Macpherson-Grant et al. 1995) is the most commonly employed, often a requirement specified by the Kent County Council Planning Archaeologists, although it is not entirely comprehensive, particularly for the west of the county. Another disadvantage, noted by Booth (2009) is that the series has no hierarchical structure for linking fabrics into larger related groups.<sup>i</sup> Given the nature of current developer-led archaeology, a number of commercial archaeological contractors have worked in the county and hence several different fabric series have been utilised, including that established by the Museum of London and even that of the City of Lincoln Archaeology Unit. Pollard's study comprised a detailed discussion of chronology and distribution but it is not a straightforward text and, thirty years on from that research, it cannot be drawn upon significantly for this analysis.

Comprehensive, quantified assemblages are regrettably few in number. The HS1 scheme (Booth et al. 2011) has provided a corpus of data on (mostly modest) rural sites and one villa (Thurnham). These have fully quantified pottery assemblages, itemised according to CAT codes and sorted into broad ware groups. Northfleet Villa was likewise subject to excavation in association with HS1; here CAT codes were not used although it is possible to assign these to most of the quantified fine and specialist wares for comparative purposes. Other villas are more poorly served. As already established, many of these were excavated long before current levels of pottery recording and analysis were established. No ceramic data at all are available for a number of villas and associated buildings excavated in the last decade or so; others such as Snodland (Birbeck 1995) and The Mount, Maidstone (Kelly 1992; Houlston 1999) have assemblages which are only partially described and are not

quantified to currently recognised standards. Further excavations at Snodland (Dawkes 2009a) await analysis and publication as do those conducted by Maidstone Area Archaeological Group. It is unlikely that resources will permit full analysis of the pottery from the latter. The pottery assemblage for Minster Villa is published (Lyne 2011) but the report covers only those assemblages large enough to be quantified by Estimated Vessel Equivalents (EVEs). In this case it was possible to obtain the original breakdown of all pottery by sherd count and weight from the Trust for Thanet Archaeology.<sup>ii</sup> Pottery quantifications from the probable villa estate at Grange Farm Gillingham are available from the post-excavation report but for the largest assemblages only (Gerrard and Lyne 2008).

Data for this thesis comes also from interim and often partial sources (e.g. various zones of the East Kent Access road scheme). The majority of published 'lesser' sites, particularly those excavated by voluntary bodies, do not have usefully quantified assemblages.

Larger nucleated settlements are represented by Westhawk Farm (published and quantified; Lyne 2008) and Springhead (Seager Smith et al. 2001). The very large quantities of pottery recovered from the latter led to a strategy aimed at characterising the entire assemblages via detailed scans; no breakdown by individual fabric codes was attempted although it is again possible to assign codes to certain fine and specialist wares. There have been some problems in reconciling the data from Springhead with the methodology used here and throughout, particularly in regard to the relative composition of assemblages, figures for this site should be taken as good approximations rather than completely accurate. Smaller nucleated settlements are probably represented by Maydensole Farm (Letterbox Field; Redding 1997) where ceramic data derive from fieldwalking and from the unusual settlement of sunken-featured buildings at Monkton in Thanet (Hicks 2008).

Kent's Romano-British coarse pottery is particularly problematic. Although broad geographical patterns of tempering tradition are widely recognisable, there is wide variation within these fabric groups. Many (perhaps most) are not well understood or sourced and meaningful inter-site comparison from the available data is not possible. The early bias of many assemblages is reflected in the widespread presence of grog-tempered vessels of forms traditionally referred to as 'Belgic', particularly in the east of the county and from sites excavated in the HS1 corridor. The following discussion will be based on the fine and specialist ware components of site assemblages only.

## 10.2 Ceramic assemblages and site character: background and method

Booth (1991; 2004) has successfully used the composition of quantified ceramic assemblages from sites in Warwickshire and the Upper Thames Valley as an index of relative socio-economic status. In the Upper Thames Valley he found that Late Iron Age and Early Roman sites perceived on morphological and other factors to be of low status had levels of fine and specialist wares of below 5% or even 1%. Percentages of 5 and above were found to be potentially indicative of 'higher status' sites: in the Upper Thames Valley, these consisted of villas, proto-villas and major settlements (2004, 49-50). In the Late Roman period, proportions of fine/specialist wares increased markedly (ranging between 11% and 30%) owing to the development of the Oxfordshire pottery industry.

Applying similar principles to assemblages from HS1, however, he found much less differentiation between site assemblages in terms of proportions of fine/specialist wares, suggesting that this indicated a well-integrated market economy with little indication of socially-embedded control of the distribution of imported material.

Similar data have been collated here for a range of sites in Kent including the majority (but not all) of Booth's HS1 sites<sup>iii</sup> as well as a number of other sites of varying natures (Table 10.1). Pottery has been quantified by sherd count only; this allows for easy comparison both across assemblages and with Booth's earlier findings. All methods of pottery quantification have their own inherent biases, but these are likely to be similar across different sites. Sherd counts may cause considerable distortion of the perceived relative quantities of wares in the case of the recovery of shattered but largely complete vessels; this, however, appears comparatively uncommon in domestic (as opposed to funerary) assemblages. Where sherd count was not available but there was a comprehensive list of fabrics, this information was gathered in order to compare fabric diversity between sites.

An anomaly that may partially account for the relatively low levels of fine/specialist wares found by Booth amongst a number of the HS1 assemblages is that fine local (Upchurch/Thameside) fabrics were not classified as fine wares. This point will be returned to; regrettably reliable figures for these fabrics are unavailable for a significant number of sites, including Northfleet Villa and Springhead.



HER no/other identifier	Site	Source	Site classification	Notes	Date range	Sherd count
TQ 94 NE 56; NE 267; NE 270; NE 273; NE 266	Beechbrook Wood	Lyne 2006c	Uncertain	HS1	LIA-2C	3775
TR 36 NE 450	Bleak House	Lyne 2010b; Willis 2010	Building(s)		Mid 2C - early 3C	1950
TR 03 NE 203	Bower Road	Brown 2006a	Uncertain	HS1	LIA-4C, mostly 1-2C	4175
TR 35 NE 3	Dickson's Corner	Lyne 2000	Unenclosed settlement	Contexts quantified differently or not at all; Samian lost	Mid 1C - early 3C	
EKA 7	EKA 7	Seager Smith and Brook 2011	SFBs and features respecting earlier enclosure	No figures for local (Upchurch/Thameside) fine wares	Transitional	438
EKA 10	EKA 10	Seager Smith and Brook 2011	Developed settlement	“ ”	Late Iron Age/Early Roman	2218
EKA 14	EKA 14	Seager Smith and Brook 2011	Developed settlement	“ ”	Late Iron Age-?Mid Roman	140
EKA 20	EKA 20	Seager Smith and Brook 2011	Developed settlement	“ ”	?Middle Roman	6416
TQ 76 NE 425	Grange Farm	Gerrard and Lyne 2008	Probable villa	Largest assemblages only; no figures for local (Upchurch/Thameside) fine wares	Mid 1C-mid/late 4C	8853
TQ 67 SW 549	Hazells Road	Every 2006	Field system, corn-drier, trackway	HS1	3-4C	432
TQ 67 SE 327	Henhurst Rd, Tollgate	Brown 2006b	Field system	HS1 (“Tollgate” in HS1 reports)	LIA-late 4C , possibly peaking late 1C-mid 2C	453
TQ 75 NE 376	Hockers Lane	Lyne 2006d	Enclosed settlement	HS1	M/LIA-1C	724
TQ 94 NE 233	Leda Cottages	Lyne 2006a	Enclosed settlement	HS1	LIA-mid/late 3C	1882
TR 34 NW 239	Mayensole Farm (Letterbox Field )	Redding 1997	(Smaller?) local centre	Field walking; no quantification	LIA-late 4C , possibly peaking late 1C-mid 2C	
TR 36 SW 67	Minster	Lyne 2011	Villa	Figures from archive	Mid 1C -late 3C; reoccupied mid 4C	28190
TR 36 NW 238-9	Monkton	Savage, Dickinson and Taylor 1988	(Smaller?) local centre		LIA-mid 3C	33043
TQ 75 NE 28	The Mount	Kelly 1992; Savage 1999	Villa	Information for fine & specialist wares .only; not usefully quantified	Mid 2C-late 3C/early4C	1852

Table 10.1 Sites included in survey (continued overleaf)

HER no/other identifier	Site	Source	Site classification	Notes	Date range	Sherd count
TQ 67 SW 38	Northfleet Villa	Seager Smith, Marter Brown and Mills 2011	Villa	No figures for local (Upchurch/Thameside) finewares	Mid 1C-late 4C	9594
TQ 67 SW 547	Northumberland Bottom WNB 98 A/B	Every 2006a	Developed settlement	HS1 'East of Downs Rd'	LIA-mid 2C, predominantly later C1	3412
TQ 67 SW 548	Northumberland Bottom WNB 98 C	Every 2006a	Developed settlement	HS1 'West of Wrotham Rd'. Southern part of settlement excavated on A2 widening (TQ 67 SW 464)	LIA-mid 2C	1557
TQ 75 SE 128	Queen Elizabeth Square	Biddulph 2004	Uncertain		LIA-early 2C	436
TR 13 NE 210, TR 13 NE 217, TR 13 NE 218 and TR 13 NE 220	Saltwood Tunnel	Every 2006b	Trackway & cemetery associated with settlement outside excavation area	HS1; includes pottery from burials	LIA-4C, mostly 1-2C	4765
TQ 85 NW 122	Snarkhurst Wood	Lyne 2006e	Enclosed /Developed settlement	HS1	LIA-mid 3C, mostly 1C	1426
TQ 76 SW 23	Snodland (ASE excavation)	Doherty 2009	Villa	No quantification	Mid 1C-late 4C	8970
TQ 76 SW 23	Snodland Villa (Birbeck)	Seager Smith 1995		Finewares and amphorae quantified only (Birbeck 1994, Appendix 2)		115
TQ 67 SW 6	Springhead	Seager Smith, Marter Brown and Mills 2011	Small town and religious centre	No figures for local (Upchurch/Thameside) finewares	LIA-4C, mostly 1-2C	121564
TQ 67 SW 222	Swanscombe	Rayner and Goffin	Uncertain	Shrine site later becoming farmstead?	2-3C	513
Thanet PI 8	Thanet Earth Plateau 8	Lyne 2010a	?Linear/developed		1-2C	159
TQ 75 NE 374	Thurnham Villa	Lyne 2006b	Villa	HS1	LIA-4C, mostly 1-2C	13911
TQ 67 SW 464	A2 Pepperhill-Cobham Site D	Biddulph 2012	Developed settlement	Northern part of settlement excavated on HS1 ('West of Wrotham Rd': TQ 67 SW 548)	Mid C1-mid C3	1768
TR 36 NE 449	Upton House	Lyne 2007	Uncertain	Possible building in vicinity	Early Roman; increased activity from late 3C	1210
TR 04 SW 117	Westhawk Farm	Lyne 2008	Roadside settlement	Includes pottery from burials	Mid 1C-mid 4C, mostly mid 1C-mid 3C	73035

Table 10.1 Sites included in survey (cont.)

As far as possible, fabrics have been quantified according to CAT code and all fine/specialist wares have been assigned to ware groups following those used by Booth. These are:

- Samian ware (S)
- Fine wares (F)
- Amphorae (A)
- Mortaria (M)
- White wares other than mortaria (W)
- White-slipped wares (Q)

Information has also systematically been gathered on quantities of early and late fine wares.

### 10.3 Chronological considerations

One of the problems of broad inter-site comparisons such as this is that one is once again faced with material that represents a palimpsest of activities potentially spanning several centuries. As already noted, there is a strong bias towards the earlier Roman period in the Kentish evidence which goes some way to ameliorate this; however there are also, particularly amongst the villas, some very long-lived sites. Two particular chronological anomalies are provided by Hockers Lane which is almost entirely of Late Iron Age date and was superseded in the mid-1<sup>st</sup> century by the pre-villa settlement at Thurnham and by Hazells Road Diversion which is almost entirely of Late Roman date.

As the supply of fine/specialist wares altered over time, it is reasonable to expect the composition of ceramic assemblages to reflect this. Figure 10.1 shows the relative proportions of samian ware, early fine wares (*Terra Nigra*, *Terra Rubra* and Arretine wares) and Late Roman fine wares (predominantly Oxford colour coated wares) within quantified fine ware assemblages organised in an approximately chronological sequence. Samian ware dominates the vast majority of assemblages, particularly in the upper (earlier) part of the chart. Early fine wares are uncommon and restricted to only four sites, dominating the fine ware assemblage at Hockers Lane. Late fine wares become more prominent in the lower half of the chart, but rarely exceed samian in quantity, the late Hazells Road being the most

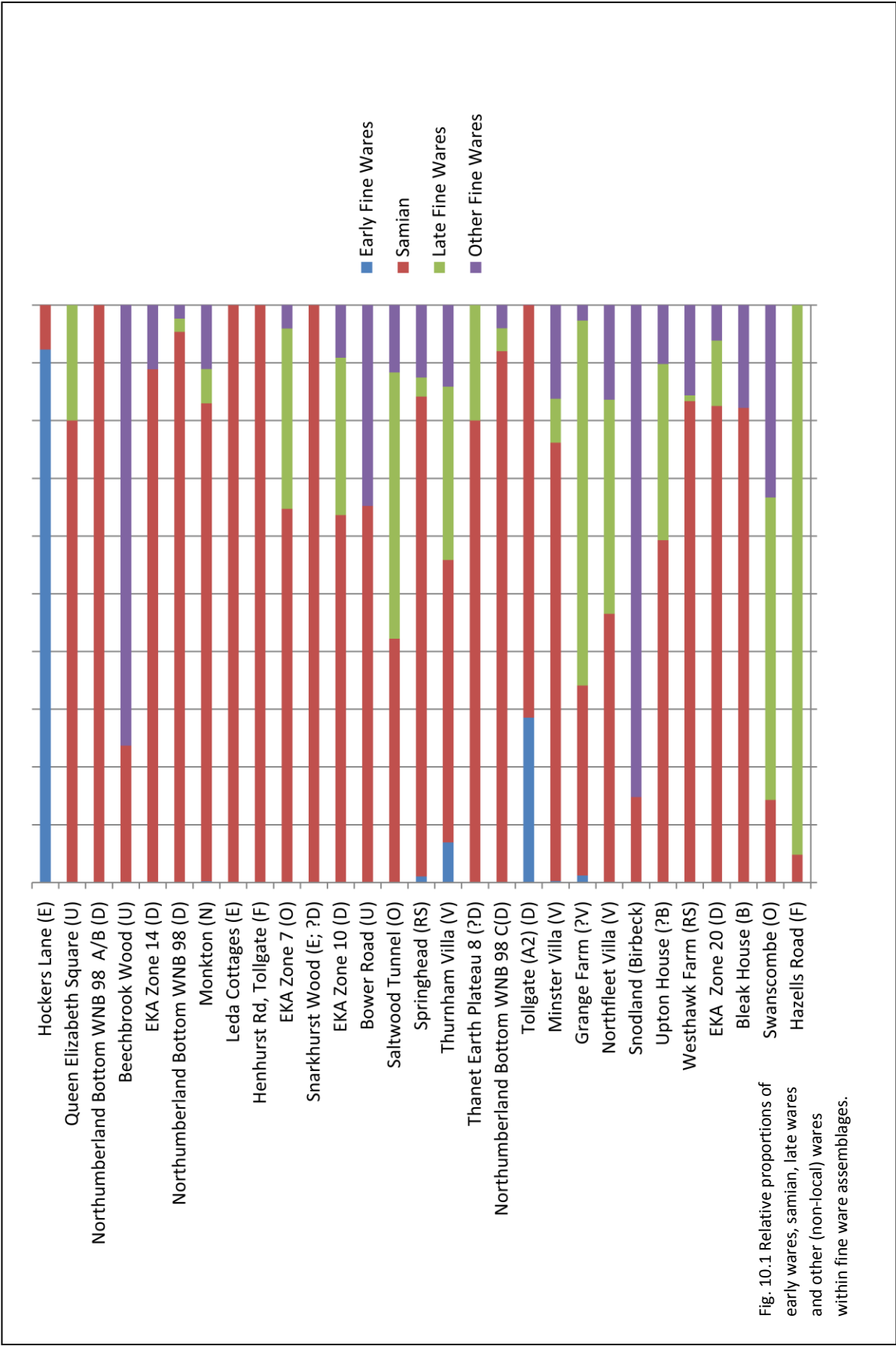


Fig. 10.1 Relative proportions of early wares, samian, late wares and other (non-local) wares within fine ware assemblages.

prominent exception. Late fine wares were not differentiated at Snodland, accounting for its anomalous appearance.

This approach, focussing solely on the fine ware assemblages themselves, does nothing to disentangle potential status from chronology. One way to approach this problem is to ascertain how far the percentages of samian and Late Roman fine wares on individual sites deviate from the mean by a process similar to that pioneered by Reece (1991, 1995) to analyse coin-loss patterns. The production of samian conveniently (for this purpose) ceased shortly before the earliest production of Oxfordshire colour-coated wares. In addition the latest, East Gaulish wares generally form only a small component of samian assemblages in Kent (as elsewhere in Britain) in comparison to the earlier South and (particularly) Central Gaulish wares.<sup>iv</sup> Samian is thus the most characteristic fine ware of earlier assemblages (leaving aside problems of curation/residuality), whilst Late Roman (predominantly Oxfordshire) fine wares characterise assemblages post-dating AD 250.

Hazells Road was left out of these calculations as it is clearly a chronological anomaly and has a distorting effect, particularly on the figures for late wares. The mean percentage of samian as a proportion of the entire assemblage (not just fine wares as in the table above) was calculated for all remaining 26 quantified assemblages in the ceramic dataset with the addition of information from Birbeck's excavation at Snodland (1995). At 2.1% this is reasonably close to the 2.2% by weight calculated from data for those sites where weights were readily available<sup>v</sup> and correlates well with the low levels of samian (predominantly 2% and under by weight) recorded from British rural sites by Willis (2011, 186). As only those sites which produced both samian and late fine wares were to be compared, the mean percentage for late Roman fine wares (1.0%) was calculated from those 16 quantified assemblages (excluding Hazells Road) which produced such wares. Figure 10.2, in roughly chronological order, was then produced by subtracting these means from the actual values for samian and late fine wares for these 15 sites. As with Reece's coin plots, the chart does not have intrinsic meaning, but is a tool for exploring the composition of site assemblages and for comparing the profiles of sites.

As the foundation and main period of use of the sites moves from earlier (top) to later (bottom), all things being equal, one would expect levels of samian to be on or above average (0% deviation) in the upper part of the chart and later fine wares to be on or above

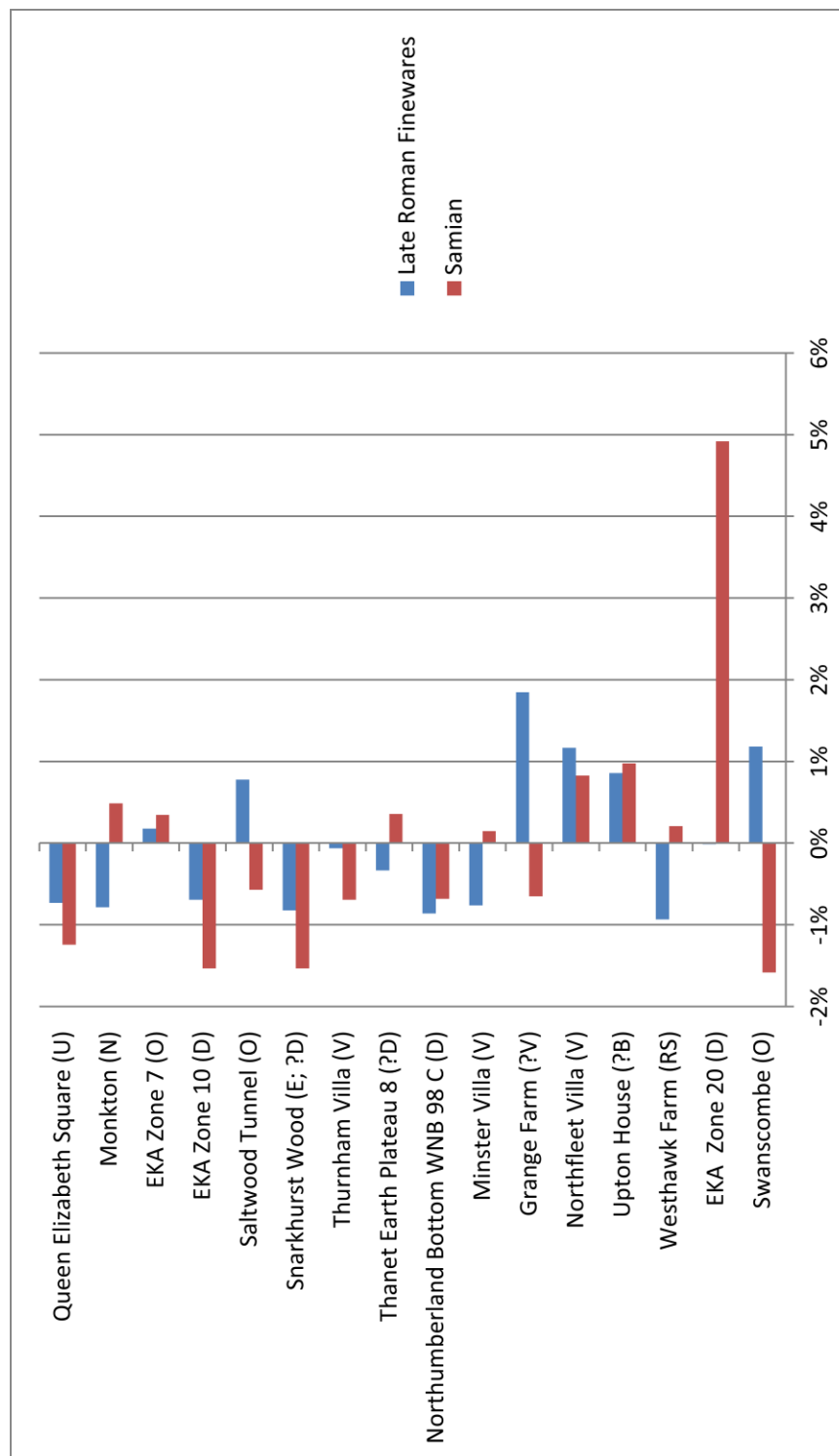


Fig. 10.2 Late Roman fine wares and samian: deviation from their Kent means

average in the lower part of the chart. Although a number of sites 'behave' in this respect, more do not; this must partly be due to the crude nature of dating, to whole site level only, rather than to site phases.

Another expectation might be that sites of lesser socio-economic status would fall below the mean and those of higher status would fall above. This appears to be the case at Northfleet Villa, where both samian and late fine wares are above the mean, and might have implications too for the status of Upton House. Grange Farm, almost certainly part of a villa estate complex, has particularly high levels of later fine wares; low levels of samian suggest that it may not have been an early foundation and indeed the first building in the excavated area was raised not before AD 120, possibly considerably later (Seddon 2008, 5). Minster Villa has relatively high levels of samian but is below the mean for late fine wares, reflecting its abandonment in the mid-3<sup>rd</sup> century and change in character when reoccupied in the 4<sup>th</sup> century (Lyne 2011).

The plots for Westhawk Farm and Springhead reflect their importance as nucleated settlements in the earlier Roman period and their later apparent decline in prominence. The plot for Swanscombe appears to reflect its history as a non-domestic walled enclosure (possible shrine) replaced by a small farmstead (Mackinder 2010,16).

Thurnham Villa appears anomalous in having low levels of both samian and later fine wares even in comparison to other sites in Kent. It is joined in this respect by East Kent Access Zone 10 and Thanet Earth Plateau 8, both apparently examples of developed/linear settlements. Preliminary results of the Roman Rural Settlement Project have found that such settlements are more commonly associated with objects regarded as more 'Roman' than native (Brindle 2013) suggesting that this is again an anomalous result. The developed/linear settlement at East Kent Access Zone 20 meanwhile has a significantly higher percentage of samian than any other site in this group (7.1% by sherd count, 6.6% by weight; see Table 10.7). As with other sites on this scheme, full analysis and publication is awaited. Proximity to Richborough is likely to be a partial explanation for such high levels although it would not explain why this site apparently received much more than others in the area and thereby raises questions as to the nature of consumption at this site.

## 10.4 Fine/specialist wares and site character: analysis of site assemblages

### 10.4.1 Initial correlation with site type

Following Booth (1991; 2004) figures for specialist/finewares expressed as percentages of total site assemblages have been calculated and are displayed as Figure (10.3). Although the figures cannot be directly compared to Booth's findings as it has not been possible to isolate specifically Early and Late Roman assemblages, some indication of date range is shown (see also Table 10.1). Sites with some degree of 4<sup>th</sup> century evidence are spread right across the range although the *floruits* of most of these are in the earlier Roman period. Sites with such 4<sup>th</sup> century activity are responsible for three of the six assemblages with a fine/specialist ware component of over 11%, but only one of these is a specifically Late Roman site; Springhead's *floruit* was in the 1<sup>st</sup> to 2<sup>nd</sup> centuries. Indeed, the highest proportions of fine/specialist wares are from Thanet sites of predominantly early date with no Late Roman activity. The bottom of the chart (below Booth's 5% cut-off) is, however, dominated by such early sites, mostly excavated on the HS1 route.

When compared to site character as perceived from morphology, there seems in many cases to be relatively little correlation between site classification and percentage of fine/specialist wares. The lowest percentage (0.4%) is fittingly associated with a field system, while Hockers Lane enclosed settlement has only 2.1%, conforming to Brindle's findings that these have a less 'Roman' material culture footprint than linear/developed settlements. The assemblage from the agricultural site at Hazells Road has a much higher fine/specialist ware component than one might expect; Booth suggests that this is an anomaly associated with the late date of the site. This would be consonant with his findings in the Upper Thames Valley where ready access to Oxfordshire ware (which dominates the Hazells Road assemblage) appeared to tend towards higher fine/specialist ware levels (minimum 11%) on sites with a late Roman component. This tendency would contrast with Evans' (1993) conclusion that rural site assemblages become markedly more utilitarian from the mid-2<sup>nd</sup> century onwards. Evans' work concerned rural sites in the north of Britain so there is almost certainly a regional aspect at play: indeed Evans notes that his results were the direct opposite of Millett's (1979) for three southern towns (Evans 1993, 98). Significantly, the Oxfordshire type red-slip wares (which are prominent in Kentish Late



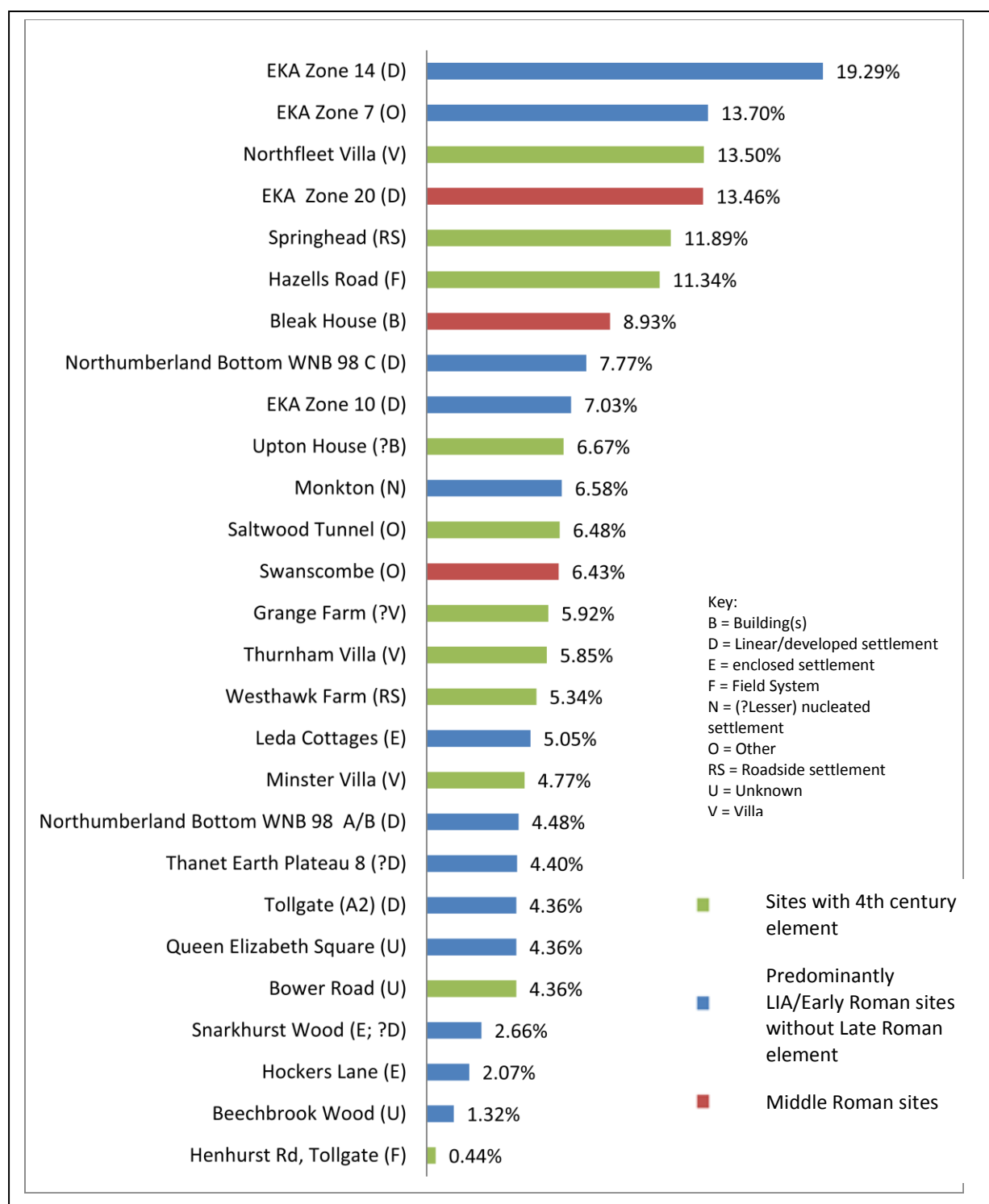


Fig. 10.3 Fine/specialist wares as percentage of total site assemblage

Roman assemblages) appear to have virtually died out in the north of England by the end of the 3<sup>rd</sup> century (ibid., 111).

By far the highest percentage of fine/specialist wares (19.3%) derives, perhaps unexpectedly, from the developed settlement at East Kent Access Zone 14. This is, however, a small assemblage (just 140 sherds) so the figure probably has little significance.

The villas and probable villas are spread across the field, as are the developed/linear settlements. Of the villas, only Northfleet (13.5%) has an assemblage comprising over 10% fine/specialist wares. Thurnham and Grange Farm are in the mid-range at 5.9%, whilst Minster has just 4.8% (despite its proximity to Richborough).

Only a small area of settlement was exposed at East Kent Access Zone 7, but this produced an assemblage containing 13.7% fine/specialist wares, slightly higher than Northfleet Villa (13.5%). The Zone 7 assemblage may have been relatively small (438 sherds) but it also produced a greater variety of fine/specialist wares than many sites with much larger assemblages (see section 10.4.8 below).

As regards the larger nucleated settlements, Springhead's assemblage has over twice the fine/specialist component (11.9%) of Westhawk Farm's (5.3%). One might assume that this has much to do with the provision of hospitality to pilgrims to the sanctuary at Springhead in contrast to the more industrial nature of the settlement at Westhawk Farm.

The developed settlement at Pepperhill-Cobham Site D was associated with several high status Early Roman burials, including the two richest burials of this period so far found south of the Thames and east of Hampshire (Allen and Powell 2013, 478). Nevertheless, the site had only 4.4% fine/specialist wares amongst its non-funerary assemblage (reflecting a wider similar trend of burial to settlement composition identified by Willis (2005, 9.4 and 9.10). When the southern part of the settlement was excavated as part of the HS1 scheme, it was perceived as being no more than a rural farmstead. If the assemblage for Northumberland Bottom WNB 98 Area C is isolated, however, it produces a somewhat higher figure of 7.8%, which would place it within the range of Booth's (1991; 2004) 'higher status' sites.

The somewhat mixed results revealed by the present survey raise doubts as to whether proportions of fine/specialist wares are significant on their own as indicators of socio-economic status in Kent. One reason for these results may be that fine wares in particular were subject to different use and disposal strategies. Willis (2011, 189) for instance has

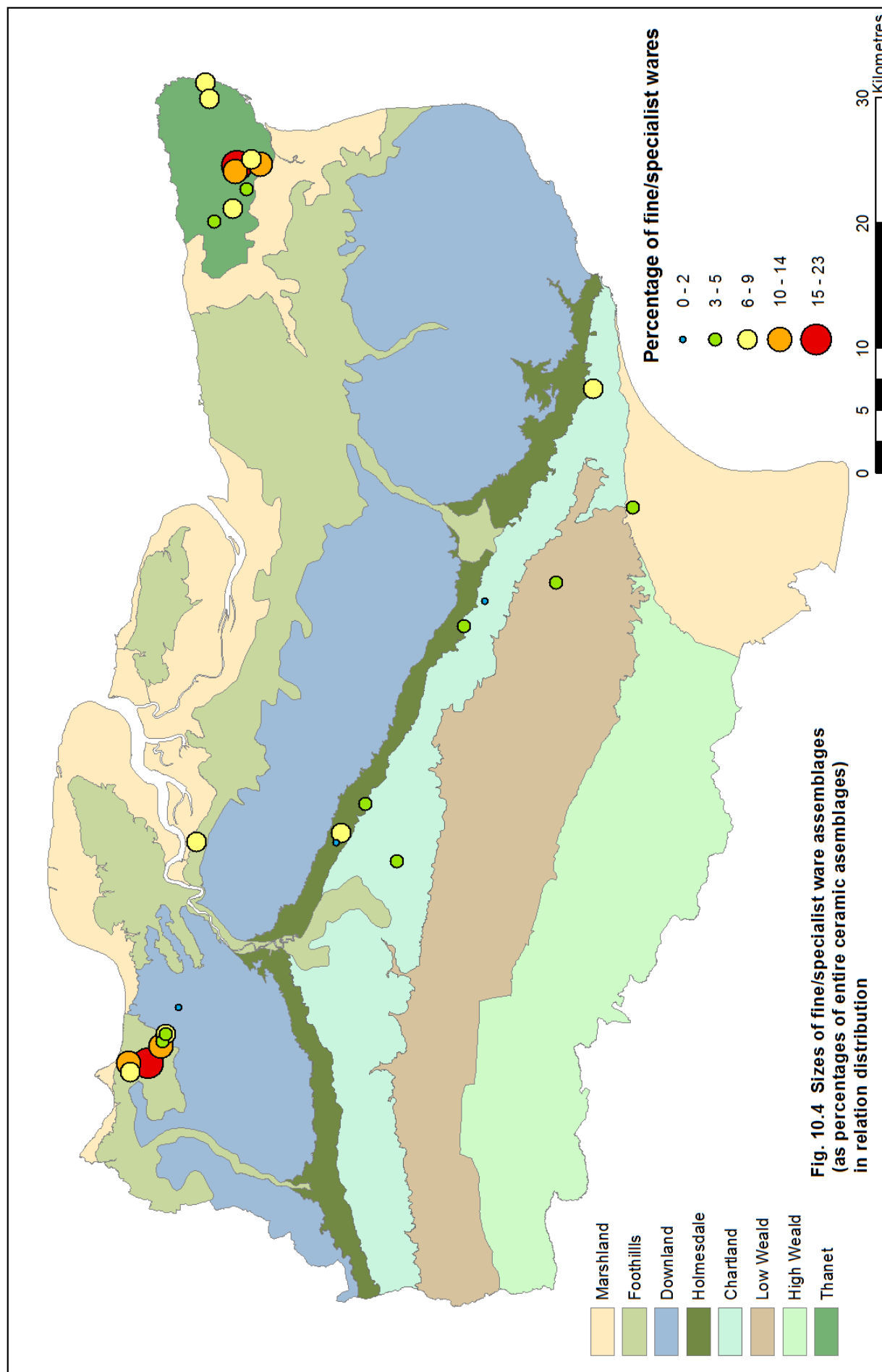
suggested that the careful curation of samian vessels might have meant that whilst moderate numbers of vessels were in circulation their 'turnover' was slow and over a protracted period. In other words, site deposits are underrepresenting the numbers in use or on shelves at any one time in the earlier Roman period; in addition, samian was selected preferentially for inclusion in burials and special deposits (Willis 2005) and therefore a smaller proportion would have found its way into general domestic refuse than otherwise might have been the case for less valued pottery types. The same may well be true of other fine wares and the comparison of domestic and funerary assemblages (particularly if associated with the same settlements) would be instructive. Although such figures have not been collected, there do seem to be indications of a tradition of placing other fine wares in burials, including sometimes an apparent preference for Nene Valley types (e.g. Payne 1911); late Roman fine ware assemblages collated here from non-funerary contexts are almost exclusively dominated by Oxfordshire wares with much smaller proportions of Nene Valley and/or Rhenish type wares.

#### **10.4.2 Geography and fine/specialist ware assemblages**

Although it is difficult to make correlations between the perceived character of sites and the relative sizes of their fine/specialist ware assemblages, there are indications of some geographic variations. Booth has suggested that the relatively even distribution of fine and specialist wares encountered on the HS1 sites was the result of physical characteristics of the distribution system and predicted that more distantly derived fabrics might be concentrated in a possibly very limited number of principal distribution centres (2009, 18). The distribution map presented here (Fig. 10.4) is (because of the availability of suitable data) already skewed, as has been noted above. In respect of Booth's theory, however, it is interesting to note that within the limits of this evidence the assemblages with the largest proportions of fine/specialist wares are concentrated in two areas: around the Ebbsfleet Valley in the north west of the county and in the area of Thanet roughly opposite Richborough. Minster Villa seems not to have played an influential part in this distribution despite its location, with a fine/specialist ware component of only 4.8% in contrast to the Ebbsfleet Valley's Northfleet Villa with a fine/specialist ware component of 13.5%. Chronology may of course have played a part in this: Northfleet has considerably higher proportions of Late Roman fine wares, mortaria and late white wares than Minster. There

is no evidence to suggest that vessels of glass and/or metal were employed at Minster at the expense of fine ceramics, though its samian does include some rare decorated beakers.

The distribution map may change again with analysis of the pottery from Folkestone Villa. This site was clearly of great importance for the importation of continental fine wares and amphorae in the Late Iron Age (Selkirk and Parfitt 2012; Parfitt 2013) but it is not clear as yet whether this position was maintained into the Roman period. On the other hand the ceramic evidence presented here might support the theory that the importance of the prehistoric Folkestone-North Downs Way axis was superseded in the Roman period by the dominance of routes of entry via the Wantsum and the rivers disgorging onto the north Kent coast.



### **10.4.3 The composition of fine/specialist ware assemblages**

Sufficient data are not available across the entire dataset to allow an analysis of the pottery in functional terms. On the HS1 sites, as might be expected, a higher incidence of open forms tended to be associated with higher levels of fine/specialist wares and any independent pattern was not distinguished (Booth 2009, 18-19). Likewise, it is difficult to find any meaningful pattern in the composition of fine/specialist ware assemblages (Tables 10.2 – 10.4).

White slipped wares are the least frequently encountered, occurring in only 14 of 27 quantified assemblages; they make up over 10% of the fine/specialist ware assemblage in just half of these, with a maximum of 36.8% at Springhead (mean = 6.1%). In terms of percentage of entire assemblage, they range between 0.2% and 4.4% (mean = 0.5%). Westhawk Farm, in contrast to Springhead, produced no white slipped wares. As white slipping is strongly associated with flagons this again reinforces the contrast between the natures of the services provided at these two nucleated sites.

White wares, mostly in the form of flagons and beakers, are more commonly encountered, however, being absent from only the field system at Henhurst Road, Tollgate, Thanet Earth Plateau 8 and the early site at Hockers Lane. Where they do occur, there is a wide variation in the proportion that they make up of the fine/specialist assemblages (0.8% at Grange Farm to 65.29 % at Northumberland Bottom WNB 98 C; mean = 17.34%). White wares make up between 0.05% (Grange Farm) and 5.07% (WNB 98 C) of total site assemblages (mean = 1.17%). Again there is no discernible correlation between levels of white wares and types of sites.

Site	Sherd Count							
	All	Fine wares	Samian	Amphorae	Mortaria	White slipped wares	White wares	Fine and specialist total
EKA Zone 14 (D)	140	1	8	17	0	0	1	27
Thanet Earth Plateau 8 (?D)	159	1	4	1	1	0	0	7
Hazells Road (F)	432	40	2	0	4	0	3	49
Queen Elizabeth Square (U)	436	1	4	2	0	0	12	19
EKA Zone 7 (O)	438	6	11	18	7	5	13	60
Henhurst Rd, Tollgate (F)	453	0	2	0	0	0	0	2
Swanscombe (O)	513	18	3	4	1	0	7	33
Hockers Lane (E)	724	12	1	0	0	2	0	15
Upton House (?B)	1210	22	32	9	4	0	1	68
Snarkhurst Wood (E; ?D)	1426	0	9	0	8	1	20	38
Northumberland Bottom WNB 98 C (D)	1557	2	23	2	0	15	79	121
Pepperhill-Cobham Site D (D)	1768	16	40	3	0	0	18	77
Northumberland Bottom WNB 98 A/B (D)	1852	0	18	41	0	2	22	83
Leda Cottages (E)	1882	0	51	8	19	10	7	95
Bleak House (B)	1959	18	83	27	16	0	88	232
EKA Zone 10 (D)	2218	8	14	122	3	16	10	173
Beechbrook Wood (U)	3775	29	9	9	0	0	3	50
Bower Road (U)	4175	44	79	12	10	0	37	182
Saltwood Tunnel (O)	4765	104	76	44	16	5	74	319
EKA Zone 20 (D)	6416	96	454	118	42	108	46	862
Grange Farm (?V)	8853	273	134	57	44	12	4	524
Northfleet Villa (V)	9594	330	287	135	173	270	100	1295
Thurnham Villa (V)	1391 1	213	214	128	37	89	148	819
Minster Villa (V)	2819 0	206	650	255	103	2	128	1344
Monkton (N)	3304 3	182	876	886	49	0	182	2175
Westhawk Farm (RS)	7303 5	349	1732	910	212	0	698	3901
Springhead (RS and sanctuary)	1215 64	851	4191	1351	618	5315	2069	14457

Table 10.2 Fine and specialist ware sherd counts

	As percentage of fine/specialist wares					
	Fine wares	Samian	Amphorae	Mortaria	White slipped wares	White wares
EKA Zone 14 (D)	3.70%	29.63%	62.96%	0.00%	0.00%	3.70%
Thanet Earth Plateau 8 (?D)	14.29%	57.14%	14.29%	14.29%	0.00%	0.00%
Hazells Road (F)	81.63%	4.08%	0.00%	8.16%	0.00%	6.12%
Queen Elizabeth Square (U)	5.26%	21.05%	10.53%	0.00%	0.00%	63.16%
EKA Zone 7 (O)	10.00%	18.33%	30.00%	11.67%	8.33%	21.67%
Henhurst Rd, Tollgate (F)	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
Swanscombe (O)	54.55%	9.09%	12.12%	3.03%	0.00%	21.21%
Hockers Lane (E)	80.00%	6.67%	0.00%	0.00%	13.33%	0.00%
Upton House (?B)	32.35%	47.06%	13.24%	5.88%	0.00%	1.47%
Snarkhurst Wood (E; ?D)	0.00%	23.68%	0.00%	21.05%	2.63%	52.63%
Northumberland Bottom WNB 98 C (D)	1.65%	19.01%	1.65%	0.00%	12.40%	65.29%
Pepperhill-Cobham Site D (D)	20.78%	51.95%	3.90%	0.00%	0.00%	23.38%
Northumberland Bottom WNB 98 A/B (D)	0.00%	21.69%	49.40%	0.00%	2.41%	26.51%
Leda Cottages (E)	0.00%	53.68%	8.42%	20.00%	10.53%	7.37%
Bleak House (B)	7.76%	35.78%	11.64%	6.90%	0.00%	37.93%
EKA Zone 10 (D)	4.62%	8.09%	70.52%	1.73%	9.25%	5.78%
Beechbrook Wood (U)	58.00%	18.00%	18.00%	0.00%	0.00%	6.00%
Bower Road (U)	24.18%	43.41%	6.59%	5.49%	0.00%	20.33%
Saltwood Tunnel (O)	32.60%	23.82%	13.79%	5.02%	1.57%	23.20%
EKA Zone 20 (D)	11.11%	52.55%	13.66%	4.86%	12.50%	5.32%
Grange Farm (?V)	52.10%	25.57%	10.88%	8.40%	2.29%	0.76%
Northfleet Villa (V)	25.48%	22.16%	10.42%	13.36%	20.85%	7.72%
Thurnham Villa (V)	26.01%	24.91%	15.63%	4.52%	10.87%	18.07%
Minster Villa (V)	15.33%	48.36%	18.97%	7.66%	0.15%	9.52%
Monkton (N)	8.37%	40.28%	40.74%	2.25%	0.00%	8.37%
Westhawk Farm (RS)	8.95%	44.40%	23.33%	5.43%	0.00%	17.89%
Springhead (RS and sanctuary)	5.89%	28.97%	9.34%	4.27%	36.76%	14.76%
<b>Mean</b>	<b>21.65%</b>	<b>32.57%</b>	<b>17.41%</b>	<b>5.70%</b>	<b>6.13%</b>	<b>17.34%</b>

Table 10.3 Composition of fine/specialist ware assemblages



	As percentage of entire assemblage					
	Fine wares	Samian	Amphorae	Mortaria	White slipped wares	White wares
EKA Zone 14 (D)	0.71%	5.71%	12.14%	0.00%	0.00%	0.71%
Thanet Earth Plateau 8 (?D)	0.63%	2.52%	0.63%	0.63%	0.00%	0.00%
Hazells Road (F)	9.26%	0.46%	0.00%	0.93%	0.00%	0.69%
Queen Elizabeth Square (U)	0.23%	0.92%	0.46%	0.00%	0.00%	2.75%
EKA Zone 7 (O)	1.37%	2.51%	4.11%	1.60%	1.14%	2.97%
Henhurst Rd, Tollgate (F)	0.00%	0.44%	0.00%	0.00%	0.00%	0.00%
Swanscombe (O)	3.51%	0.58%	0.78%	0.19%	0.00%	1.36%
Hockers Lane (E)	1.66%	0.14%	0.00%	0.00%	0.28%	0.00%
Upton House (?B)	2.16%	3.14%	0.88%	0.39%	0.00%	0.10%
Snarkhurst Wood (E; ?D)	0.00%	0.63%	0.00%	0.56%	0.07%	1.40%
Northumberland Bottom WNB 98 C (D)	0.10%	1.48%	0.13%	0.00%	0.96%	5.07%
Pepperhill-Cobham Site D (D)	0.90%	2.26%	0.17%	0.00%	0.00%	1.02%
Northumberland Bottom WNB 98 (D)	0.00%	0.97%	2.21%	0.00%	0.11%	1.19%
Leda Cottages (E)	0.00%	2.71%	0.43%	1.01%	0.53%	0.37%
Bleak House (B)	0.92%	4.24%	1.38%	0.82%	0.00%	4.49%
EKA Zone 10 (D)	0.36%	0.63%	5.50%	0.14%	0.72%	0.45%
Beechbrook Wood (U)	0.77%	0.24%	0.24%	0.00%	0.00%	0.08%
Bower Road (U)	1.05%	1.89%	0.29%	0.24%	0.00%	0.89%
Saltwood Tunnel (O)	2.18%	1.59%	0.92%	0.34%	0.10%	1.55%
EKA Zone 20 (D)	1.50%	7.08%	1.84%	0.65%	1.68%	0.72%
Grange Farm (?V)	3.08%	1.51%	0.64%	0.50%	0.14%	0.05%
Northfleet Villa (V)	3.44%	2.99%	1.41%	1.80%	2.81%	1.04%
Thurnham Villa (V)	1.53%	1.47%	0.92%	0.27%	0.64%	1.06%
Minster Villa (V)	0.73%	2.31%	0.90%	0.37%	0.01%	0.45%
Monkton (N)	0.55%	2.65%	2.68%	0.15%	0.00%	0.55%
Westhawk Farm (RS)	0.48%	2.37%	1.25%	0.29%	0.00%	0.96%
Springhead (RS and sanctuary)	0.70%	3.45%	1.11%	0.51%	4.37%	1.76%
<b>Mean</b>	1.40%	2.11%	1.52%	0.42%	0.50%	1.17%

Table 10.4 Fine and specialist ware groups as percentage of entire assemblage

#### 10.4.4 Mortaria

Mortaria derive from 19 of the 27 assemblages, but in small numbers (as is often the case across much of the province) and, where present, make up between 1.7% and 21.1% of the fine/specialist assemblages (mean = 5.7%). Of the ten sites falling above the mean, three are villas/ probable villas, two are buildings/probable buildings and two may be developed settlements. Hazells Road (8.2%) is (as usual) anomalous, as is Leda Cottages (20%).

In terms of percentage of total site assemblage (mean = 0.4%) those sites falling above the mean are more mixed and in fact include representatives of all categories. Northfleet has the highest percentage (1.8%). All villas produce mortaria, but both Thurnham and Minster fall below the mean. Springhead accounts for 45% of all the mortaria recorded in the dataset (Table 10.5). When the vast size of its assemblage is taken into account, however, it appears more modest in its consumption (4.3% of fine/specialist wares; 0.5% of total assemblage). This is probably at least in part a chronological phenomenon as Springhead's *floruit* was in the 1<sup>st</sup> to 2<sup>nd</sup> century; thus it received relatively few of the late Roman mortaria which dominate the assemblages at Northfleet and Grange Farm. It is, however, responsible for the vast majority of identified Colchester and Verulamium region mortaria in the dataset, in addition to a large proportion of imported North Gaulish products (Table 10.5). Nevertheless, mortaria were seemingly not a vital part of food preparation, suggesting that more traditional foodways may have characterised life at this site; we have already seen a possible conservatism in the composition of Springhead's animal bone assemblage.

Alias	CAT code	Description	Date range	Entire dataset sherd count	Springhead sherd count
NOG WH 4		North Gaulish mortaria (inc. Gillam 238 Group II; Bushe-Fox 22-30)	65-150	99	99
		Gillam 238	60-160	27	
NOG WH 4		North France/SE England mortaria		5	
NOG WH 4	R61	?Gaul/SE England fabric 1 mortaria	M-L1C	85	
	R63	?Colchester/Kent mortaria	M1C-2C	37	
		Verulamium region white ware mortaria	M1C-2C	242	237
CNG OX		Massif Centrale Mortaria (Central Gaulish [Rhone Valley] oxidised)	50- E2C	7	6
	R65	?Verulamium fabric 8 mortaria	70-200	85	
	LR21	Castor/Stibbington fabric 5 mortaria	110-4C	1	
	LR20	Colchester mortaria	140-200	147	128
		Lower Rhine (Soller) mortaria	150-220	2	
	R64	?Rhenish fabric 67 mortaria inc Soller	?2c-mid 3C	55	10
		Wiggonholt mortaria	150-250	8	5
		Nene Valley white ware mortaria	110-4C	4	1
		Hadham oxidised mortaria	3-4C	68	1
	LR22	Oxon fabric 3 (white) mortaria	250-400	113	27
	LR23	Oxon fabric 4A (white slip) mortaria	250-400	13	1
OXS RS		Oxon CC mortaria	250-400	31	12
		Oxon mortaria undifferentiated	250-400	44	
		Gillam 255		17	
	R62	?Kent fabric 2 mortaria		18	
	R99	Unidentified mortaria		266	91
		Total		1374	618 (45%)

Table 10.5 Comparison of Springhead's mortarium assemblage with figures for entire dataset.

N.B. fabrics overlap owing to inconsistent recording methods and the propensity for different specialists/fabric codes to 'lump' or 'split' fabrics. Date ranges derive from a number of sources, primarily those in Booth (2006) Table 4.3, supplemented by information from individual site reports.

#### 10.4.5 Amphorae

Amphora sherds appear to be a little more widely distributed than mortaria and derive from 23 of the 27 sites with quantified assemblages, being absent only from the field system assemblages at Henhurst Road and Hazells Road, the early enclosed settlement at Hockers Lane and the enclosed/developed settlement at Snarkhurst Wood. Elsewhere they account for between 1.7% and 70.5% of fine/specialist ware assemblages (mean = 17.4%) and 0.1% and 12.1% of total assemblages (mean = 1.5%).

As amphorae have often been noted even when suitable quantified data are not available, information is in fact available for further sites not included in Tables 10.2-10.4 above (Table 10.6). This shows that amphorae are present on 26 of 30 sites<sup>vi</sup> whose morphology and/or material culture have been examined in more detail in this thesis.

Dressel 20 sherds are by far the most common and widely distributed,<sup>vii</sup> being absent only from the Pepperhill-Cobham Site D amphora assemblage and in fact make up 81.7% of the amphora sherds from all quantified assemblages. Various Gallic amphorae (predominantly Gauloise 4/Pélichet 47) form the next highest grouping (12.2%). The dominance of Dressel 20 is to be expected as it is the most common type found in Britain (Seager Smith et al. 2011, 41). As these very large and robust vessels are frequently represented by only small numbers of sherds, it is by no means certain by what route they reached some sites and they are certainly not unequivocal evidence for a universal consumption of olive oil on rural settlements. In Kent, as noted above (Chapter 9) adapted Dressel 20s were used as cinerary containers on at least 14 sites. Lyne (2008, 251) has suggested that the Dressel 20 and Gauloise 4 amphorae present at Westhawk Farm may have been imported empty for use as plunge pots in the iron production process. Such useful containers must certainly have been reused for various purposes (Callender 1965, 23-36; Peña 2007).

Other amphora types present in small numbers include Dressel 2-4, Dressel 7-11, Camoludunum types 184, 186 and 189, Pélichet 46 and Kapitan II, between them representing the import of wine, fish products, dates and possibly *defrutum*. Rarer types include sherds of late North African olive oil amphorae at Northfleet and Snodland Villas,<sup>viii</sup> three sherds of a Late Roman Lusitanian Almagro 50 (also from Northfleet), 17 sherds tentatively identified as London 555 at Springhead and two further London 555 sherds from East Kent Access Zone 20. A number of quantified assemblages contain amphora sherds which have so far defied identification. These include groups from Monkton,

Site	Sherd count amphora	Amphorae as % of total assemblage	Amphorae as % of fine/specialist ware assemblage	Min no of amphora wares	Dressel 20 present	Amphorae of note
Beechbrook Wood (U)	9	0.24%	18.00%	1	Y	
Bleak House (B)	27	1.38%	11.64%	2	Y	
Bower Road (U)	12	0.29%	6.59%	2	Y	
Dickson's Corner (Un)				2	Y	
EKA Zone 20 (D)	118	1.84%	13.46%	3	Y	London 555
EKA Zone 10 (D)	122	5.50%	70.52%	2	Y	
EKA Zone 14 (D)	17	12.14%	62.96%	1	Y	
EKA Zone 7 (O)	18	4.11%	30.00%	1	Y	
Grange Farm (?V)	57	0.64%	10.88%	3	Y	
Hazells Road (F)	0	0.00%	0.00%	0	N	
Henhurst Rd, Tollgate (F)	0	0.00%	0.00%	0	N	
Hockers Lane (E)	0	0.00%	0.00%	0	N	
Leda Cottages (E)	8	0.43%	8.42%	2	Y	
Minster Villa (V)	255	0.90%	18.97%	5	Y	
Maydensole Farm (Letterbox Field) (N)				2	Y	
Monkton (N)	886	2.68%	40.74%	7	Y	
Northfleet Villa (V)	135	1.41%	10.42%	6	Y	North African; Almagro 50
Northumberland Bottom WNB 98 A/B (D)	41	2.21%	49.40%	2	Y	
Northumberland Bottom WNB 98 C (D)	2	0.13%	1.65%	2	Y	
Queen Elizabeth Square (U)	2	0.46%	10.53%	2	Y	
Saltwood Tunnel (O)	44	0.92%	13.79%	3	Y	
Snarkhurst Wood (E; ?D)	0	0.00%	0.00%	0	N	
Snodland (ASE - no quantification)				5	Y	Africana II
Snodland (Birbeck) (V)	9	0.88%		3	Y	
Snodland combined				6	Y	Africana II
Springhead (RS and sanctuary)	1351	1.11%	9.34%	8	Y	London 555
Swanscombe (O)	4	0.78%	12.12%	2	Y	
Thanet Earth Plateau 8 (?D)	1	0.63%	14.29%	1	Y	
The Mount Villa (V)				1	Y	
Thurnham Villa (V)	128	0.92%	15.63%	5	Y	
Pepperhill-Cobham Site D (D)	3	0.17%	3.90%	3	N	
Upton House (?B)	9	0.88%	13.24%	2	Y	
Westhawk Farm (RS)	910	1.25%	23.33%	4	Y	

Table 10.6 Amphorae

Springhead and Westhawk Farm, all recent sites whose assemblages have been assessed by specialists, thus indicating the challenges still posed by this class of vessels.

However they reached their final points of deposition, amphorae appear to be *relatively* well integrated into Kent's rural pottery supply (although it is difficult to find good comparative evidence). Both Evans (2001) and Booth (2004) pick out amphorae as good indicators of site type. Evans points out that high rates of amphorae characterise military sites (approximately 2.5% - 11% on his Figure 11). Small towns have much lower percentages while four of the six basic rural sites he charts have no amphora fabrics at all. Elsewhere (2008, 58) he states that it is most unusual for a rural site to yield anything near 1% amphorae by sherd count. In the Upper Thames Valley Booth found that the larger nucleated settlements at Asthall and Alchester had percentages of 1.3% and 1.9% respectively, that proportions at villa sites were erratic and that on sites of low or uncertain status they never exceeded c. 0.3-0.4% of total sherd count.

Westhawk Farm's 1.3% and Springhead's 1.1% are thus not particularly large for larger nucleated settlements, but more or less fit the pattern. More striking is the 2.7% derived from the settlement at Monkton (higher than the percentage shown by Evans for the fort at Binchester).

As found by Booth, results for villas are variable: the highest proportion derives from Northfleet (1.4%), Thurnham and Minster fall just under 1% and Grange Farm trails at 0.6%. Some of the developed/linear settlements have rather higher percentages, however, particularly those found on the East Kent Access Road scheme. Zone 20 (total assemblage 6416 sherds) has just 1.8% but Zone 10, with a total assemblage of 2218 sherds has 5.5% amphorae while Zone 7 has 4.1%. Only eight of the 33 sites have less than 0.3%. These include the enclosed settlement at Hockers Lane, the two field systems and Snarkhurst Wood, which produced no amphora sherds. The others comprise two sites which are more difficult to classify (Beechwood Brook and Bower Road) and the developed settlement at Pepperhill-Cobham Site D/Northumberland Bottom WNB 98 C. The relatively small quantity of amphorae at these latter sites is interesting. Bower Road produced evidence of a substantial timber building and has been considered as potentially part of a villa settlement whilst the Pepperhill-Cobham Site D/Northumberland Bottom WNB 98 C settlement is associated with high status burials. Interestingly the adjacent Northumberland Bottom WNB 98 A/B assemblage produced one of the higher proportions of amphorae (2.21% of total assemblage; 49.4% of fine/specialist wares) suggesting that it may have been the

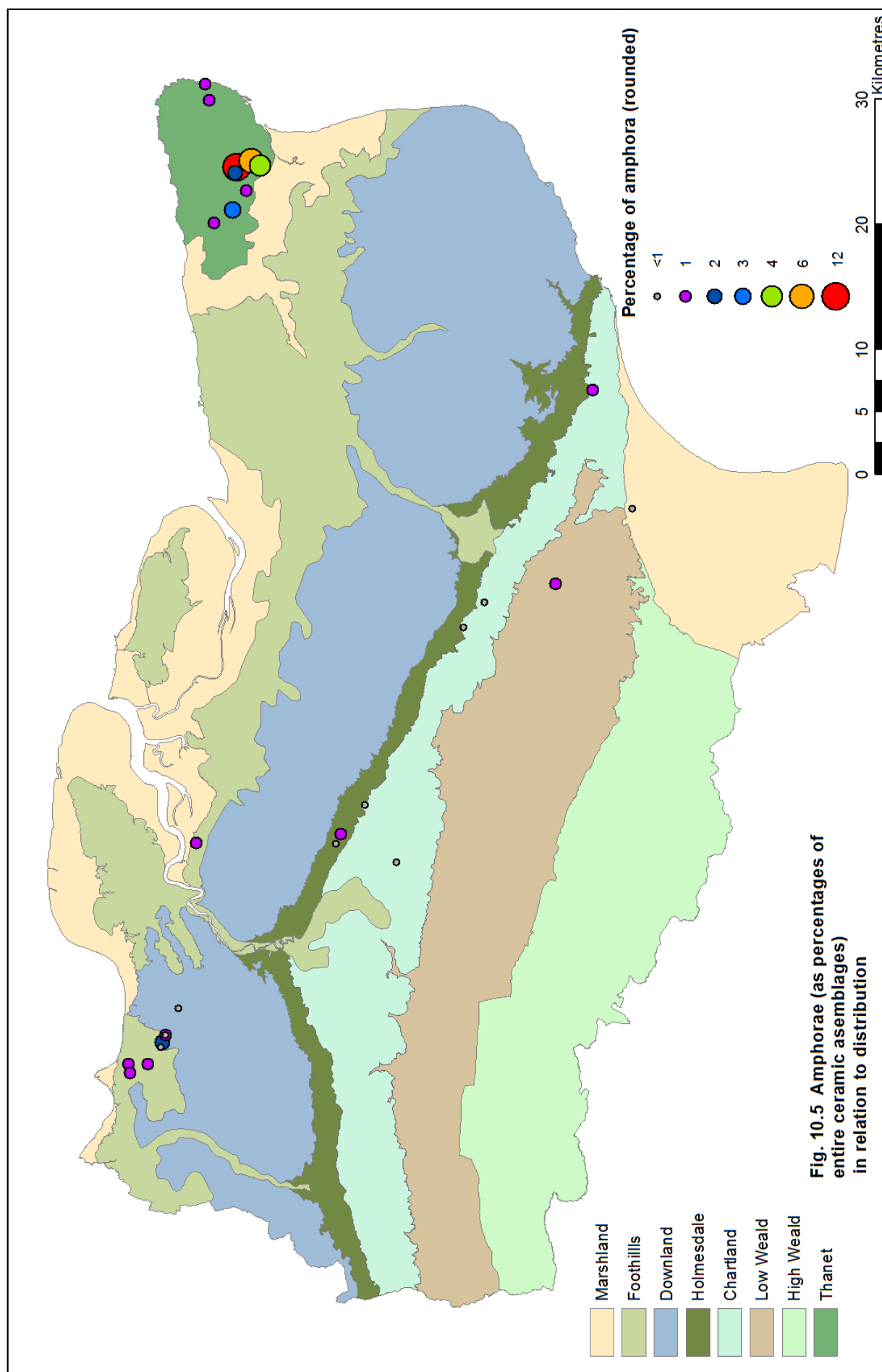


Fig. 10.5 Amphorae (as percentages of entire ceramic assemblages) in relation to distribution

recipient of wares initially consumed at Pepperhill-Cobham Site D/WNB 98 C.

What is very clear when the incidence of amphorae is mapped (Fig. 10.5) is that the larger percentages cluster on Thanet; proximity to Richborough may be responsible in this case. Both at Monkton and on the East Kent Access scheme, high proportions of amphorae are associated with settlements characterised by 'un-Roman' architectural types: most commonly sunken-featured buildings. Lamps do not seem to have featured amongst any of these assemblages, so unless the inhabitants had discovered the culinary delights of olive oil courtesy of their military neighbours, it seems likely that the elevated levels largely indicate secondary use of containers initially imported by/for the military.

#### **10.4.6 Samian**

Samian wares are universally present, although in considerably varying quantities and proportions. These are presented as Table 10.7 in order of total assemblage size and, visually, as Figure 10.6 where sites are arranged in approximately descending order of perceived socio-economic status (with sites of unknown or 'other' status at the bottom). It has been possible to add data from Birbeck's (1995) excavations at Snodland Villa to these figures. Figures for Springhead are derived from Seager Smith et al. (2011) Tables 2 and 12. As one would expect, the presence of samian is stronger in the upper part of Fig. 10.6, though rarely exceeding 3%.

Samian accounts for between 0.1% (Hockers Lane) and 7.1% (East Kent Access Zone 20) of total pottery assemblages by sherd count (mean = 2.1%). As with amphorae, there is a geographic bias towards Thanet and particularly East Kent Access Zones 14 and 20 and it is again tempting to speculate that these sites were obtaining supplies of samian from the military who often consumed relatively large quantities of the product (Willis 2011, 182). If all Thanet sites are excluded, the mean for mainland Kent is just 1.5%.

The weights of samian assemblages allow more direct comparison with Willis' figures. By this measure, East Kent Access Zone 20 is the only Thanet site that truly stands out with a percentage of 6.6% of total assemblage by weight; this is higher than the vast majority of smaller civil centres and towards the lower end of the range for extramural occupation at military sites (*ibid.*, Table 1). This is not to suggest that there was any formal relationship



Description	Sherd count complete	Sherd count samian	Samian as percentage of fine/specialist wares (sherd count)	Samian as percentage of total assemblage (sherd count)	Samian as percentage of total assemblage (weight)
EKA Zone 14 (D)	140	8	29.63%	5.71%	3.11%
Thanet Earth Plateau 8 (?D)	159	4	57.14%	2.52%	-
Hazells Road (F)	432	2	3.85%	0.46%	0.14%
Queen Elizabeth Square (U)	436	4	21.05%	0.92%	0.38%
EKA Zone 7 (O)	438	11	18.33%	2.51%	1.74%
Henhurst Rd, Tollgate (F)	453	2	100.00%	0.44%	0.22%
Swanscombe (O)	513	3	9.09%	0.58%	-
Hockers Lane (E)	724	1	6.67%	0.14%	0.18%
Snodland Villa (Birbeck) (V)	1023	115	-	1.96%	1.32%
Upton House (?B)	1210	32	47.06%	3.14%	4.23%
Snarkhurst Wood (E; ?D)	1426	9	23.68%	0.63%	1.09%
Northumberland Bottom WNB 98 C (D)	1557	23	19.01%	1.48%	1.32%
Pepperhill-Cobham Site D (D)	1768	40	51.95%	2.26%	2.91%
Northumberland Bottom WNB 98 A/B (D)	1852	18	21.69%	0.97%	1.12%
Leda Cottages (E)	1882	51	53.68%	2.71%	6.96%
Bleak House (B)	1959	83	35.78%	4.24%	-
EKA Zone 10 (D)	2218	14	8.09%	0.63%	0.38%
Beechbrook Wood (U)	3775	9	18.00%	0.24%	0.16%
Bower Road (U)	4175	79	43.41%	1.89%	1.97%
Saltwood Tunnel (O)	4765	76	23.82%	1.59%	1.41%
EKA Zone 20 (D)	6416	454	52.55%	7.08%	6.64%
Grange Farm (?V)	8853	134	25.57%	1.51%	-
Northfleet Villa (V)	9594	287	22.16%	2.99%	3.33%
Thurnham Villa (V)	13911	204	22.16%	1.47%	1.29%
Minster Villa (V)	28190	650	48.36%	2.31%	0.86%
Monkton (N)	33043	876	40.28%	2.65%	1.58%
Westhawk Farm (RS)	73035	1732	44.40%	2.37%	2.70%
Springhead Sanctuary	55366	1792	32.57%*	3.24%	2.43%
Springhead Roadside Settlement	64329	2060		3.20%	2.27%
<b>Mean</b>			<b>32.70%</b>	<b>2.14%</b>	<b>2.02%</b>
<b>Mean omitting Thanet sites</b>			<b>30.32%</b>	<b>1.53%</b>	<b>1.57%</b>

\* Figure only available for combined assemblage

Table 10.7 Samian

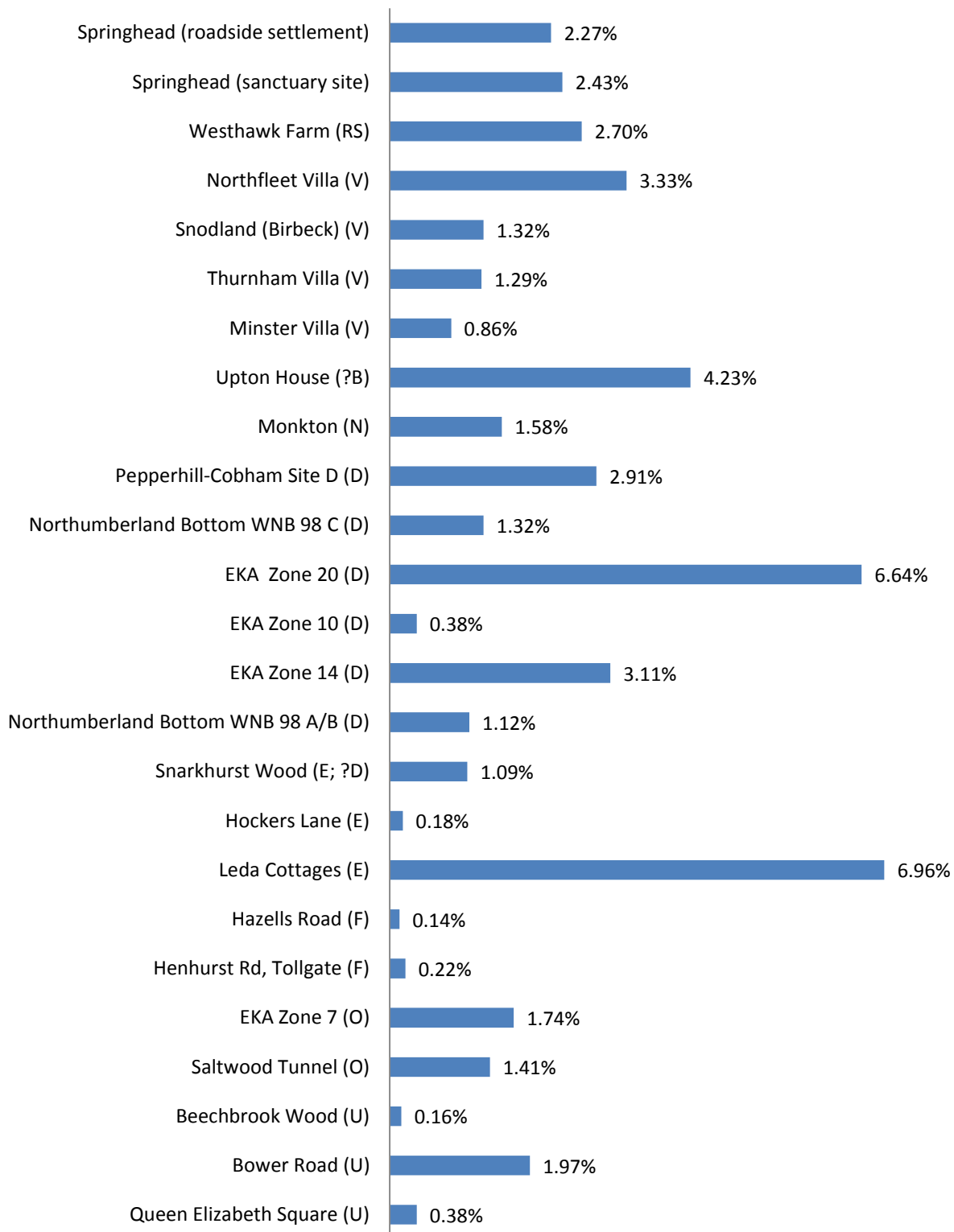


Fig. 10.6 Samian as percentage of total assemblage (by weight)

between settlement at East Kent Access Zone 20 and Richborough, but that the settlement's occupants may for instance have been engaged in trade or other forms of association with the nearby fort.

The percentages of samian from Kent's rural sites, although low in themselves, are in fact quite robust in comparative terms. Willis' (2011) figures covering sites from across the province reveal that amongst 39 groups of pottery from rural sites in Britain, less than half had as much as 1% samian by weight. For the Kentish assemblages for which weights are available, two thirds have over 1%. Only six out of the 39 groups in Willis' corpus have over 2%, compared with six out of 22 for Kent (omitting the roadside settlements at Westhawk Farm and Springhead). Similarly, five out of the 22 Kent assemblages have over 3% samian by weight compared with three out of 39 samples collected by Willis. In terms of means, Kent's 1.7% is rather higher than the 1.5% found by Willis (*ibid.* 188); this figure drops to 1.6% if the Thanet assemblages are omitted, suggesting that abnormally high levels of samian consumption on the Isle have an inflationary effect on the figures. Indeed, the mean proportion of samian by weight for the seven Thanet assemblages is 2.65%.

On the mainland, the roadside settlements have proportions of samian rather higher than the mean (2.3% at Springhead overall and 2.7% at Westhawk) and fit well within the range for smaller civil centres, for which the mean is 3.6 (*ibid.*). At Springhead the sanctuary site appears to have a slightly higher percentage of samian than the roadside settlement.<sup>ix</sup> Amongst villas, Northfleet stands out with 3.3% samian by weight. As can be seen from the above, this modest figure appears to be rather large in comparison to rural sites in general but does not seem to have been distorted by, for instance, any incidence of structured deposition.

Amongst lesser sites, Leda Cottages stands out as having a very high percentage (7%) of samian by weight. At this site, samian outweighs fine grey Upchurch fabrics and indeed every other fabric except for 'Belgic' coarse grog tempered wares B2 and B2.1. Nevertheless, it accounts for only 2.7% by sherd count and Lyne (2006a) comments on the paucity of samian and other continental imports. It seems likely that figures are distorted by the presence of some unusually large sherds.

It is regrettably not possible to make any meaningful inter-site comparison of the composition of samian assemblages in terms of form at this point. Data from Northfleet (Seager Smith et al. 2011, Table 23) indicate that open forms predominate; the equivalent

tabulated information for Springhead seems to be missing from the published data. Although systematic specialist reporting of samian from the HS1 assemblages was carried out only for Pepper Hill cemetery (Booth 2001, 161), quantification by EVE is available for most though not all of the HS1 sites in the online specialist ceramic reports. These indicate that in most assemblages, bowls and dishes/platters outnumber cups.

The most significant exception to this is Thurnham. Amongst South Gaulish samian, cups made up 52.1%, dishes/platters 40.6% and bowls comprised just 7.3%. Amongst Central Gaulish samian, cups made up 55.9%, dishes/platters 33% and bowls 11%. Compared to data collected by Willis for rural sites (albeit measured by number of vessels rather than EVE [2011, 216]) the proportion of cups is rather high. Likewise, the representation of decorated bowls is particularly low with Drag. 29 and 37 forms accounting for just 1.8% of South Gaulish samian and 7% of Central Gaulish samian.; Willis finds that the proportion of decorated vessels at rural sites is around 20% (2011, 204). As Lyne (2006b, 32) points out, poverty is an unlikely explanation for the lack of decorated wares at this villa; poor communications and access to supply might, he suggests, account for the phenomenon but that seems doubtful. At 1.3% by weight, however, proportions of samian ware are distinctly within the range of the samian groups from which Willis derives his figures for decorated wares even if the site's overall quantities of samian seem slightly depressed in relation to the mean for Kent.

#### **10.4.6.i Sources of samian**

For most Kent sites, samian is not closely sourced, but assigned to the three main areas of origin in South, Central and Eastern Gaul. Arretine ware occurs in extremely small quantities at Springhead and at Thurnham while minute quantities of Pulborough samian ware are also recorded from just a few sites: Springhead roadside settlement, Bower Road and Pepper Hill cemetery (not otherwise considered here).

In the majority of cases Central Gaulish samian is the most frequently occurring (Table 10.8), comprising over 70% of samian in 14 of 25 assemblages for which data are available. No breakdown is published for Monkton, but Central Gaulish wares make up the majority of the assemblage (Savage et al. 2008, 183). Overall, mean percentages are 28.5% for Southern Gaulish, 60.6% for Central Gaulish and 4% for Eastern Gaulish sources, which are

Site	Arretine	Southern Gaul	South /Central Gaul	Central Gaul	Central /Eastern Gaul	Eastern Gaul	Misce-llaneous	Central Gaul > Southern Gaul?
Beechbrook Wood (U)		77.91%		22.09%				No
Bower Road (U)		2.69%		71.54%	0.51%	22.82%	2.44%	Yes
EKA Zone 20 (D)		2.14%		86.62%		11.24%		Yes
EKA Zone 10 (D)		100.00%						No
EKA Zone 14 (D)		21.74%		78.26%				Yes
EKA Zone 7 (O)				84.67%	14.60%	0.73%		Yes
Hazells Road (F)				100.00%				Yes
Henhurst Rd, Tollgate (F)		18.75%		81.25%				Yes
Hockers Lane (E)				100.00%				Yes
Leda Cottages (E)				99.18%		0.82%		Yes
Minster Villa (V)		19.54%		72.92%		7.23%	0.31%	Yes
Monkton (N)				"majority"				No
Northfleet Villa (V)		6.13%		78.50%		15.36%		Yes
Northumberland Bottom WNB 98 A/B (D)		92.08%				7.92%		No
Northumberland Bottom WNB 98 C (D)		82.30%		15.74%		1.97%		No
Queen Elizabeth Square (U)		52.63%	42.11%	5.26%				No
Saltwood Tunnel (O)		5.24%		89.13%		5.05%	0.58%	Yes
Snarkhurst Wood (E; ?D)				100.00%				Yes
Snodland (Birbeck)(V)		17.39%		63.48%		0.87%	18.26%	Yes
Springhead (sanctuary site)	0.02%	28.12%		62.58%	0.18%	9.11%		Yes
Springhead (roadside settlement)	0.01%	41.61%		50.42%	0.57%	7.10%		Yes
Thanet Earth Plateau 8 (?D)				100.00%				Yes
Thurnham Villa (V)	1.09%	55.04%		43.86%				No
Pepperhill-Cobham Site D (D)		98.57%		1.43%				No
Upton House (?B)				100.00%				Yes
Westhawk Farm (RS)		17.90%	0.05%	67.24%		14.72%	0.09%	Yes
<b>Mean</b>		<b>28.45%</b>		<b>60.55%</b>		<b>4.04%</b>		

Table 10.8 Composition of samian assemblages by weight (sources of fabrics)

much as to be expected (S. Willis pers. comm.).

In six cases, South Gaulish samian outnumbers Central Gaulish. These are almost all early sites, often with Late Iron Age origins and which either do not outlive, or have their *floruit* in, the 1<sup>st</sup>-2<sup>nd</sup> centuries. Notable amongst these is Thurnham Villa, which was an early foundation. Overall levels of samian at Thurnham are below the mean, so this does not indicate a particularly large import of South Gaulish samian, but rather a diminution in supply in the 2<sup>nd</sup> century.

Statistics for the roadside settlement and sanctuary sites at Springhead appear to differ in an interesting manner that may have implications for the character of the settlement's earliest phases. At the sanctuary site, the proportions of South Gaulish to Central Gaulish samian are much as one might expect. In terms of proportion of entire ceramic assemblage, the proportion of Central Gaulish samian is more than double that of South Gaulish. At the roadside settlement, however, levels of South and Central Gaulish samian stay more or less constant as proportions of the overall assemblage. Within the samian assemblage itself, levels of South Gaulish fabrics appear elevated and Central Gaulish slightly depressed (Table 10.9).

	South Gaulish samian as % total ceramic assemblage	South Gaulish samian as % samian	Central Gaulish samian as % total ceramic assemblage	Central Gaulish samian as % samian
Roadside settlement	0.94	41.61	1.2	50.64
Sanctuary	0.7	28.12	1.5	62.58

Table 10.9 South and Central Gaulish samian as percentages of assemblages at Springhead roadside settlement and sanctuary sites

This discrepancy between the two sites is heightened by the fact that the overall sizes of the two samian assemblages are similar, as are the sizes of the Central Gaulish component (Table 10.10); it is in the South Gaulish assemblage that the major inconsistency lies, with the settlement having nearly double the weight found at the sanctuary.

	Samian assemblage (wt)	South Gaulish samian	Central Gaulish samian
Roadside settlement	27420g	11409g	13885g
Sanctuary	22660g	6371g	14180g

Table 10.10 Relative weights of South and Central Gaulish samian assemblages at Springhead roadside settlement and sanctuary sites

A military connection might go some way to explain these high levels of the earlier South Gaulish products at the roadside settlement. None is particularly apparent although it has been suggested that an early enclosure at the head of the Ebbsfleet (from which the earliest post-Conquest samian, including five Claudian vessels and a concentration of Claudian coins derived) might have formed a small fort or temporary supply base (Andrews and Smith 2011, 194-5), whilst Biddulph (2006) has suggested that a mid-late 1<sup>st</sup> century *busta* at Pepper Hill cemetery might suggest that a military unit from the Rhineland/Danube regions was stationed in the vicinity.

#### **10.4.6.ii Samian in relation to other non-local fine wares**

Samian is by far the most common fine ware on the sites examined. On 19 out of 27 sites for which figures are available, it outnumbers all other non-local fine wares by sherd count and on 15 of these by a factor of more than 2:1 (Table 10.11). Sites where samian does not outnumber other fine wares include the early site at Hockers lane, where *Terra Rubra* accounts for 12 of 13 sherds of fine ware and Hazells Road, which is late in date and where the two sherds of samian are residual.

Three of the remaining six sites are, or are likely to be, villas. The presence of a larger proportion of non-local fine wares may reflect not only aspects of status/interest in acquiring 'Roman' material culture but also longevity and thus access to the influx of (particularly) Oxfordshire wares in the 4<sup>th</sup> century when many rural sites were in decline or had gone out of use. At Thurnham and Northfleet other non-local fine ware sherds only slightly outnumber samian, whilst at Grange Farm they do so by a factor of 2:1; Grange Farm, as we have already seen, is likely to be a later foundation so chronology almost certainly plays a part in this.

The similarity in the relative proportions of samian to other non-local fine wares at Thurnham and at Northfleet is interesting. Although samian levels at Thurnham are not untypical of villa assemblages the fact that both samian and other fine ware levels are both approximately half those at Northfleet does suggest that either, as Lyne (2006b, 32) posits, it was ill-positioned to benefit from the passage of imported wares through the county, or else that its inhabitants had a certain lack of enthusiasm for embracing foreign items. As a

Site	Fine ware sherds count	Fine ware as % of entire assemblage	Samian sherds count	Samian as % of entire assemblage	Samian count greater than fine ware?	Samian count more than 2x fine ware?	Samian count more than 4x fine ware?
Bleak House (B)	18	0.92%	83	4.24%	Y	Y	Y
EKA Zone 20 (D)	96	1.50%	454	7.08%	Y	Y	Y
Monkton (N)	182	0.55%	876	2.65%	Y	Y	Y
Westhawk Farm (RS)	349	0.48%	1732	2.37%	Y	Y	Y
Springhead (RS and sanctuary)	851	0.70%†	3852*	3.22%*	Y	Y	Y
Henhurst Rd, Tollgate (F)	0	0.00%	2	0.44%	Y	(Y)	(Y)
Leda Cottages (E)	0	0.00%	51	2.71%	Y	(Y)	(Y)
Northumberland Bottom WNB 98 A/B (D)	0	0.00%	18	21.69%	Y	(Y)	(Y)
Snarkhurst Wood (E; ?D)	0	0.00%	9	0.63%	Y	(Y)	(Y)
EKA Zone 14 (D)	1	0.71%	8	5.71%	Y	(Y)	(Y)
Northumberland Bottom WNB 98 C (D)	2	1.65%	23	19.01%	Y	(Y)	(Y)
Pepperhill-Cobham Site D/ West of Wrotham Rd (HS1) (D)	16	0.90%	40	2.26%	Y	Y	N
Minster Villa (V)	206	0.73%	650	2.31%	Y	Y	N
Queen Elizabeth Square (U)	1	0.23%	4	0.92%	Y	(Y)	N
Thanet Earth Plateau 8 (?D)	1	0.63%	4	2.52%	Y	(Y)	N
Bower Road (U)	44	1.05%	79	1.89%	Y	N	N
EKA Zone 7 (O)	6	1.37%	11	2.51%	Y	N	N
EKA Zone 10 (D)	8	0.36%	14	0.63%	Y	N	N
Upton House (?B)	22	2.16%	32	3.14%	Y	N	N
Hockers Lane (E)	12	1.66%	1	0.14%	N	N	N
Swanscombe (O)	18	3.51%	3	0.58%	N	N	N
Beechbrook Wood (U)	29	0.77%	9	0.24%	N	N	N
Hazells Road (F)	43	9.26%	2	0.46%	N	N	N
Saltwood Tunnel (O)	104	2.18%	76	1.59%	N	N	N
Thurnham Villa (V)	213	1.53%	204	1.47%	N	N	N
Grange Farm (?V)	273	3.08%	134	1.51%	N	N	N
Northfleet Villa (V)	330	3.44%	287	2.99%	N	N	N

Table 10.11 Samian in relation to other non-local fine wares

†Calculated from published total for combined sites (Seager Smith et al. 2011, Table 1)

\*Calculated from totals for sanctuary and settlement sites (Seager Smith et al. 2011, Table 2)

(Y) = in presence of fine ware sherds count of 0-2



villa, its position is untypical, being situated close to an ancient line of communication (the North Downs Way) but adjacent to neither a larger river nor a Roman road.

By contrast, there are a number of sites where samian outnumbers other non-local fine wares by more than 4:1. When those sites that have only 0-2 sherds of other fine wares are discounted, a potentially significant group is left: Springhead, Westhawk Farm, Monkton, East Kent Access Zone 20 and Bleak House, Broadstairs. Of these, three sites are on Thanet; Bleak House and East Kent Access Zone 20 have particularly large percentages of samian *per se* and may, as has been suggested, have benefitted from the proximity of military supplies. Monkton is also situated on Thanet, but has more 'normal' levels of samian for a rural settlement. The other two assemblages are from the larger roadside settlements. The samian figure for Westhawk Farm in particular is inflated by vessels included in burials, although these were not large in number. At Springhead, the figure reflects the combined assemblages from both the roadside settlement and the sanctuary site, as does the published overall pottery quantification (Seager Smith et al. 2011, Table 1). Nevertheless, it appears that samian was selected preferentially as a fine ware at these nucleated settlements. For Monkton, the question is whether its pottery supply was influenced by proximity to Richborough or by its status as a lesser nucleated settlement (or some combination of the two).

#### 10.4.7 Non-local fine wares other than samian

Although fine wares reached Kent from a wide range of sources in southern Britain and the near continent, few appear to have achieved widespread distribution (Table 10.12). Chief amongst these were products of the Oxfordshire industry, numerically most frequent (833 sherds/23.9% of quantified non-local fine ware assemblages) and present on 18 out of 31 sites.<sup>x</sup> Despite its wide distribution it is only found in any quantity on a small number of sites, principally villas (unsurprisingly, given their longevity in comparison to other site types): Thurnham, Northfleet and Grange Farm between them account for over half the recorded sherds.

Lower Rhineland (Cologne) colour-coated ware, strongly associated with drinking beakers, is the next most significant import, with 325 recorded sherds and 14 recorded sites. It is the roadside settlements which have the greatest quantities of this fabric (101 sherds/ 11.9% of non-local fine wares at Springhead and 96/27.5% at Westhawk) with the lesser nucleated settlement at Monkton in third position with 32 sherds (17.6%). That these settlements should have greater quantities of this ware in comparison to Oxfordshire wares makes sense given their chronologies, but it is less clear why they are present in such modest numbers on most of the villa sites. At Northfleet, Minster and Grange Farm, Nene Valley colour coated ware (253 sherds/8.6%; 14 sites; also strongly associated with beakers) is more prevalent than the Lower Rhineland fabric (perhaps because of its greater longevity); at Grange Farm, no Lower Rhineland fabric is recorded, at least from the assemblages so far quantified. Amongst villas, only Thurnham has more of this ware than of Nene Valley; this appears to reflect the particular history of this site which had lost any previous status as an elite residence by the end of the 3<sup>rd</sup> century.

Colchester colour-coated wares derive from eleven sites (203 sherds/ 6.9%). These have a more restricted distribution, being recovered almost exclusively from nucleated settlements and villas, the exceptions being the unenclosed settlement at Dickson's Corner, Worth and Bower Road, speculatively part of a villa estate. Their highest incidence is at Westhawk Farm (77 sherds/22.1% of non-local fine wares).

Another late ware, Hadham Oxidised Ware, occurs on ten sites, but in smaller quantities (129 sherds/4.4%); Northfleet has the only significant quantity (20.3% of non-local fine wares); there is none from Monkton.

Site	Fabric	Central Gaulish colour-coated (white cream fabric)	Central Gaulish 'Rhenish'	Mica-dusted	Moselkeramik	Much Hadham oxidised	Colchester colour-coated (not early variants)	Lower Rhineland Fabric 1 (Cologne colour-coated)	Nene Valley colour-coated	Oxfordshire red/brown colour-coated
	Date range (AD)	50-100	130-200	M1C-2C	150-250	3-4C	70-200	Mainly 2C	L2C-4C	250-400
Thurnham Villa	Sherd count	6	3	1	1	3	7	21	5	113
	Percentage of non-local fine ware assemblage	2.82%	1.41%	0.47%	0.47%	1.41%	3.29%	9.86%	2.35%	53.05%
Minster Villa	Sherd count	63	0	1	1	4	21	23	38	23
	Percentage of non-local fine ware assemblage	30.58%	0.00%	0.49%	0.49%	1.94%	10.19%	11.17%	18.45%	11.17%
Northfleet Villa	Sherd count	0	3	19	0	67	15	7	45	157
	Percentage of non-local fine ware assemblage	0.00%	0.91%	5.76%	0.00%	20.30%	4.55%	2.12%	13.64%	47.58%
Grange Farm, largest assemblages only	Sherd count	1	1	0	5	13	3	0	33	203
	Percentage of non-local fine ware assemblage	0.37%	0.37%	0.00%	1.83%	4.76%	1.10%	0.00%	12.09%	74.36%
Monkton	Sherd count	5	1	24	0	0	10	32	4	54
	Percentage of non-local fine ware assemblage	2.75%	0.55%	13.19%	0.00%	0.00%	5.49%	17.58%	2.20%	29.67%
Westhawk Farm	Sherd count	42	14	1	37	3	77	96	11	10
	Percentage of non-local fine ware assemblage	12.03%	4.01%	0.29%	10.60%	0.86%	22.06%	27.51%	3.15%	2.87%
Springhead	Sherd count	89	50	158	10	23	48	101	87	79
	Percentage of non-local fine ware assemblage	10.46%	5.88%	18.57%	1.18%	2.70%	5.64%	11.87%	10.22%	9.28%
All quantified assemblages	Sherd count	207	75	212	64	129	203	325	253	833
	Percentage of non-local fine ware assemblage	7.05%	2.55%	7.22%	2.18%	4.39%	6.91%	11.07%	8.61%	28.36%
<b>No of sites</b>		<b>7</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>10</b>	<b>11</b>	<b>14</b>	<b>14</b>	<b>18</b>

Table 10.12 Principal non-local fine wares

Mica-dusted wares, possibly from the Verulamium/London area, make up 7.2% of all non-local fine wares (212 sherds), but come from only eight sites; 74.5% of these sherds come from Springhead where forms are dominated by beakers and bowls (Seager Smith et al. 2011, 48).

This no doubt is largely down to Springhead's location and easy access to the London region via Watling St as well as the Thames. Other wares associated with the Verulamium/London area (London Stamped Ware, London Marbled Ware, Ring-and-Dot Beaker fabric) are also more common here.

Moselkeramik and Central Gaulish ('Rhenish', second half of 2<sup>nd</sup> century) colour-coated fabrics achieve a moderate distribution (8 sites) but in modest quantities. Over half the Moselkeramik sherds derive from Westhawk Farm, with few from Springhead, whilst the reverse is true for Central Gaulish wares. Earlier Central Gaulish ware of the later 1<sup>st</sup> century occurs on seven sites but only significantly at Westhawk Farm, Springhead and Minster Villa. Pollard (1988, 209) found that this fabric is rare and mainly confined to urban sites. At both Westhawk Farm and Springhead it forms the third largest component of the non-local fine ware assemblage, whilst it is curiously the largest component of that at Minster, perhaps suggesting significant earlier Roman activity at this villa whose chronology is poorly understood due to truncation.

Early fine wares (*Terra Nigra* and *Terra Rubra* variants only; fine white ware butt beakers have been included with white wares/oxidised wares in the HS1 and related reports) occur on eight sites and in small quantities. At Pepperhill-Cobham Site D and Hockers Lane they form the only non-local fine wares apart from Samian; amongst larger assemblages, however, they only form a significant proportion at Thurnham. At the latter, they represent 6.9% of fine wares including samian (29/417 sherds), reflecting the site's early origins and probable connections with Hockers Lane. At Springhead, early fine wares make up 7.7% of the non-local fine wares. Seager Smith et al. note that the *Terra Nigra* assemblage is dominated by platters of Cam 16 type, often associated with the military (Rigby 1973) so again suggesting a possible military presence during the earliest Roman phase of this settlement.

#### 10.4.8 Diversity of pottery supply

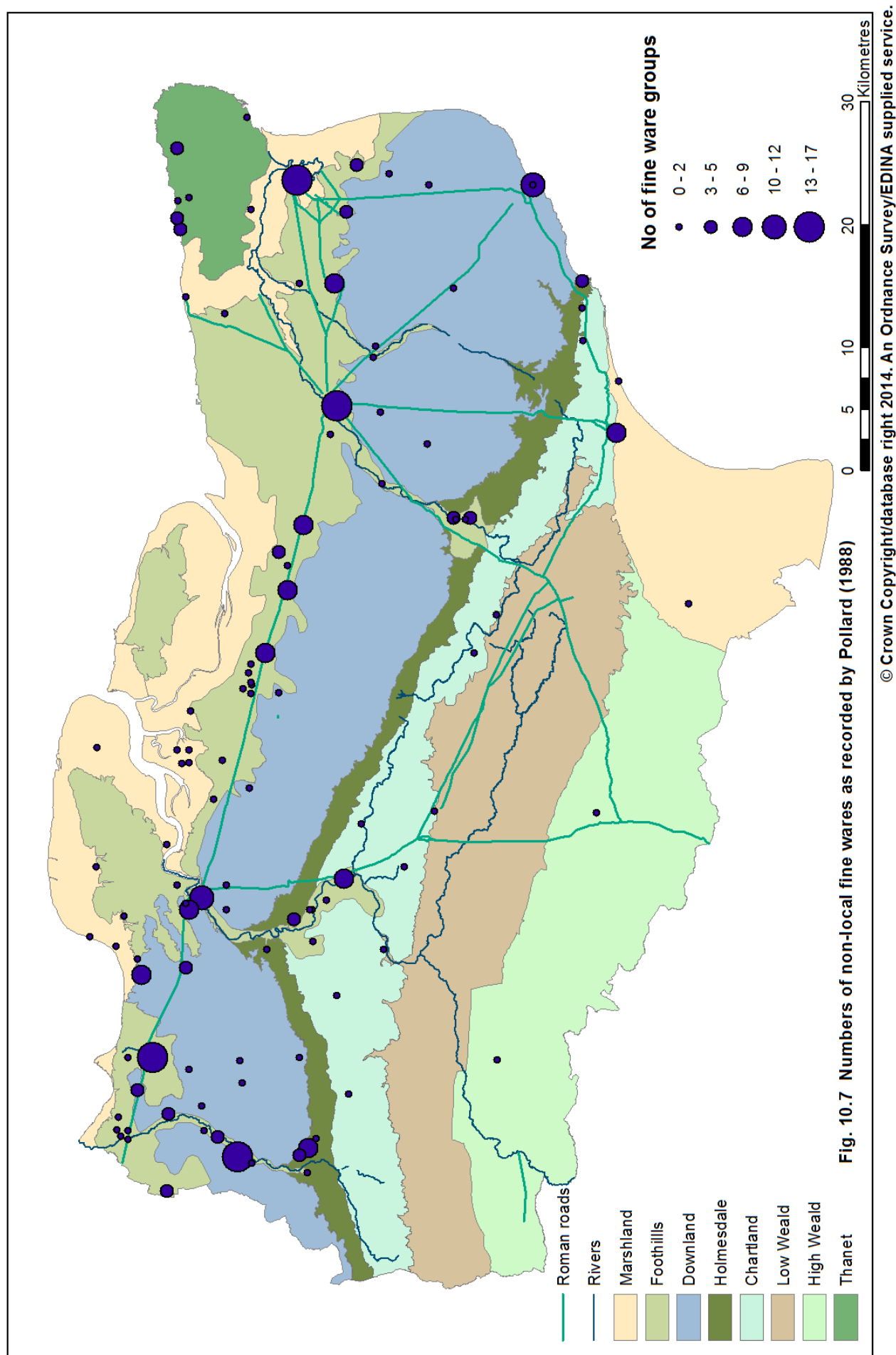
The absolute quantity (or proportion) of fine and specialist wares found on any individual site in Kent appears to be a poor indication of its nature. This is no doubt in part due to the lack of sufficient chronological information: ideally one would be working with phased groups and overall assemblage data blur finer detail. Nevertheless, even when chronology is taken into account, there appear to be some anomalous findings, as in the case of East Kent Access Zones 7 and 14. Can any more be told by the diversity of wares encountered? <sup>xi</sup>

As apparent from the sections above, and as one might expect, the variety of fabrics encountered on any one site differs tremendously. Amongst the sites discussed above, numbers of non- local fine wares vary from zero to 24. The median figure is just three and only six sites have ten or more fabrics (Table 10.13).

In order to put this into context, it is useful to compare these results with those of Pollard (1988). Pollard's pottery classifications do not entirely mesh with the CAT codes used here, but he aggregates fabrics into larger groups (largely based on source) and it has been possible to group the fine ware fabrics from the present study similarly. Figures for Pollard sites are presented graphically as Fig. 10.7 and for the present study as Fig. 10.8. It is possible that some of Pollard's figures, particularly for assemblages from older excavations which Pollard did not examine personally, are slightly depressed if certain fabrics were not recognised; nevertheless, the aggregate approach of grouping to source should do something towards ameliorating this.

For Pollard's data, it is clear that the more varied assemblages favour the Roman road and river systems. The most diverse assemblages occur mainly at towns and military installations (Canterbury, Dover, Rochester, Richborough and Springhead) but also at Lullingstone Villa. The next rank of sites (9-12 ware groups) almost all hug the roads/ivers and comprise sites like the fort at *Portus Lemanis*, the probable roadside settlement at Brenley Corner and villas such as Chalk, The Mount and Wingham. Further away from the infrastructure, the variety of fine wares is minimal, whilst other coastal sites and riverine sites have low but not minimal levels.

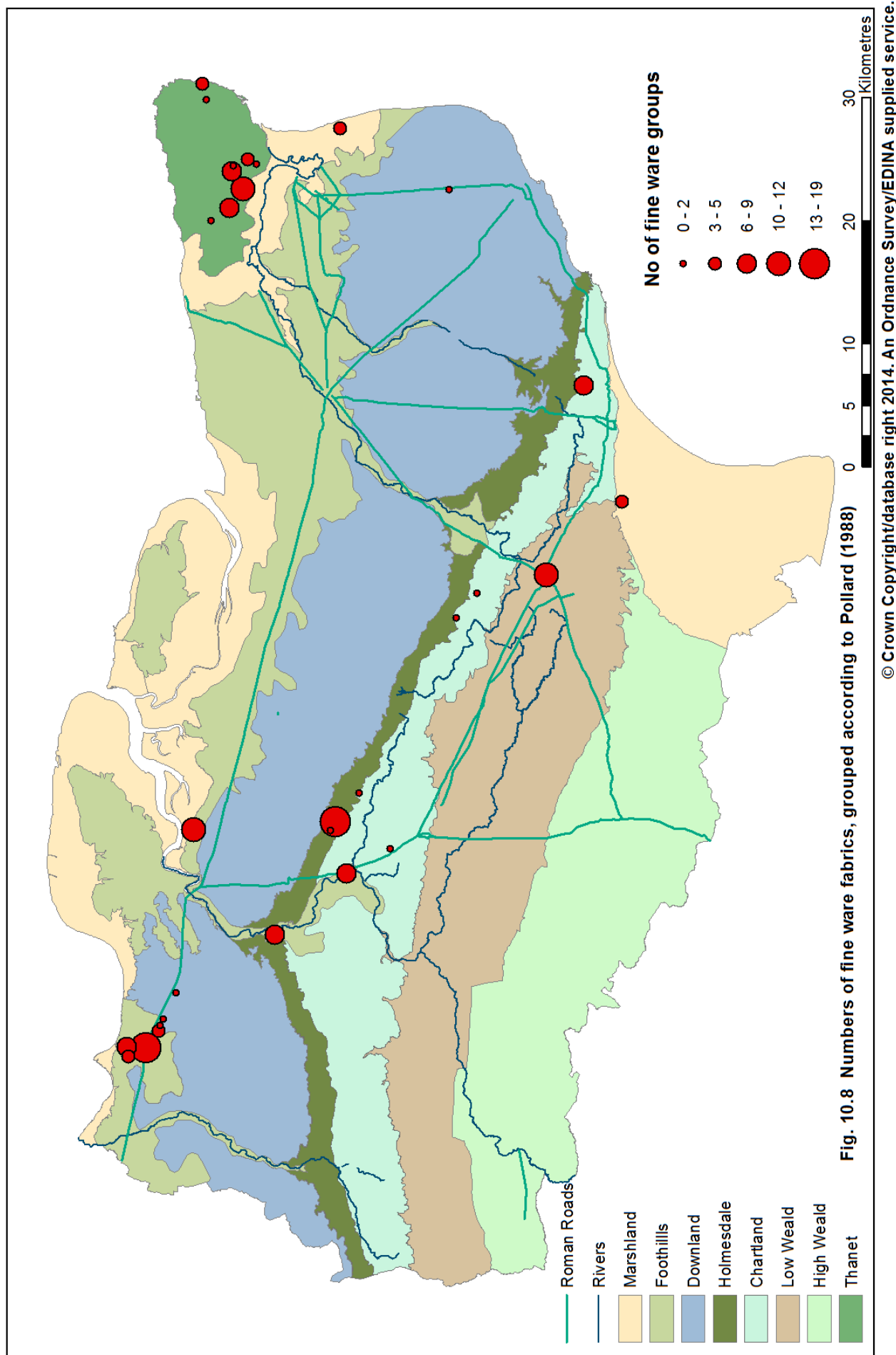
The data strongly suggest the importance of the roads as opposed to the rivers or coastal routes in the distribution network, with major nucleated settlements and military bases acting as nodal points.



Turning to Fig. 10.8, the picture seems a little less clear cut although this is in part due to the uneven geographical distribution of the data. Amongst prominent sites, Springhead is again notable. Westhawk Farm, occupying a nodal point fields a respectable variety of fabrics (similar to Brenley Corner). Grange Farm, Gillingham, appears slightly anomalous, although its position on the Medway estuary is advantageous and it would not be surprising if there were a commercial aspect to this site which produced lead weights, a possible balance arm and a possible stylus as well as items of military equipment (Gaimster and Gerrard 2008, 216). Nevertheless, Thurnham, away from the apparent main distribution network, also has as wide range of fabrics.

Put together, it appears that although the overall *proportions* of fine/specialist wares are not a good indicator of site status in Kent, the *variety* of fine wares is a more sensitive index, as demonstrated by Thurnham Villa and Grange Farm from the present data and Lullingstone from Pollard's data: all these sites have diversities of fine wares otherwise only found among sites on the road network.

This exercise can be expanded to include the variety of all fine/specialist wares with similar results. The figures used are constructed by totalling the minimum number of fine wares, white wares, white-slipped wares, amphora fabrics, mortaria sources and samian sources (Table 10.13; Fig. 10.9). It is more difficult to make direct comparisons with Pollard's data for this wider selection of fabrics, so the figures for the first three categories have been calculated for fabrics rather than fabric groups. They range from just 2 at Henhurst Road, Tollgate (field system) to 55 at Springhead. Sites recognised as larger nucleated settlements or villas tend to have 20 or more wares. The Mount, Maidstone, has a lower quantity, but seems to have been occupied for an unusually short time; this is reflected in an unusual assemblage where fine wares (other than Upchurch types) appear to consist entirely of beakers in Colchester colour-coated, Central Gaulish 'Rhenish', possibly Early Nene Valley, Lower Rhineland 'Cologne' and unsourced fine buff wares. The low quantity of samian was remarked upon by Kelly (1992, 225), whilst the general scarcity of pottery of mid-1<sup>st</sup> to early 2<sup>nd</sup> century date was noted by both Kelly (ibid., 193) and Savage (1999, 119).





While it is no surprise that nucleated settlements and villas should have wider ranges of fine and specialist wares than sites that are either smaller or less elite, the significance lies in the fact that - at least in Kent – it is variety rather than quantity that appear to act as an index of potential site status. With the exception of The Mount, the villas now firmly occupy the top of the table/chart instead of being spread around as they are when measured by *proportions* of fine/specialist wares (compare with Fig. 10.3).

Three sites not identified as villas or nucleated settlements lie within the 20+ wares range. Bower Road already stands out for having a substantial post-built building and this statistic supports speculation that it forms part of a villa estate. The site at Saltwood Tunnel with its two small cremation cemeteries is likewise thought to lie at the edge of a settlement and we might speculate on the ceramic evidence that this might be either a villa or a smaller nucleated site. Similarly, unlike the majority of rural sites, both show evidence of activity into the 4<sup>th</sup> century, albeit on a reduced level which, as has already been demonstrated, is also a characteristic of Kent's villas. Bower Road has a relatively high incidence of open forms (bowls/dishes) as opposed to jars (a little below Thurnham but above most of the HS1 sites; Booth 2009, Fig. 12; 2011, Fig. 5.55) as, more spectacularly, does Saltwood, although Booth notes that this total was boosted by two complete vessels (Booth 2011, 332).

East Kent Access Zone 20 has already been flagged for its large proportion of samian for which some kind of connection with Richborough has been postulated as an explanation. Its wide range of fine and specialist wares, however, suggests that it may be part of a nucleated settlement and in fact the post excavation assessment draws attention to possible similarities between trackside occupation here (which continued into neighbouring Zone 29 to the north-west) and the settlement at Monkton, next to which it ranks in number of fine/specialist wares.

Between the ranges of 10 and 16 wares lie a varied group all of which are distinctly rectilinear and (except for East Kent Access Zone 7 where only a relatively small section of the enclosed area was exposed) have characteristics of linear/developed settlements or masonry structures.

Site	Minimum number of wares						
	Non-local fine wares	Samian	Amphora	Mortaria	White-slipped wares	White wares	Total
Springhead (RS)	24	5	8	12	3	3	55
Thurnham Villa (V)	19	3	5	7	3	14	51
Minster Villa (V)	16	3	5	8	1	6	39
Westhawk Farm (RS)	15	3	4	8		5	35
Monkton (N)	9	3	6	10	3	6	34
Northfleet Villa (V)	11	3	7	7		6	34
EKA Zone 20 (D)	9	3	3	8		3	26
Saltwood Tunnel (O)	7	3	3	4	1	6	24
Grange Farm (?V)	11	3	3	1	1	2	21
Snodland (V)	8	3	6	3			20
Bower Road (U)	6	3	2	5		4	20
Bleak House (B)	4	3	2	4		3	16
The Mount (V)	9	2	1	3			15
Swanscombe (O)	5	2	2	1		3	13
EKA Zone 10 (D)	3	1	2	2		3	11
Northumberland Bottom WNB 98 C (D)	2	3	2		2	2	11
Northumberland Bottom WNB 98 A/B (D)		2	2		2	5	11
EKA Zone 7 (O)	2	2	1	3		2	10
Leda Cottages (E)		2	2	2	1	2	9
Pepperhill-Cobham Site D (D)	2	2	3			1	8
Dickson's Corner (Un)	5		2				7
Hazells Road (F)	3	1		1		2	7
Upton House	1	1	2	1		1	6
Queen Elizabeth Square (U)	1	2	2			1	6
Maydensole Farm (Letterbox Field) (N)	1	1	2			1	5
Beechbrook Wood (U)	1	2	1			1	5
Snarkhurst Wood (E; ?D)		1			1	2	4
Hockers Lane (E)	1	1			1	1	4
Thanet Earth Plateau 8 (?D)	1	1	1	1			4
EKA Zone 14 (D)	1	2	1				4
Henhurst Rd, Tollgate (F)		2					2

Table 10.13 Numbers of fine/specialist wares

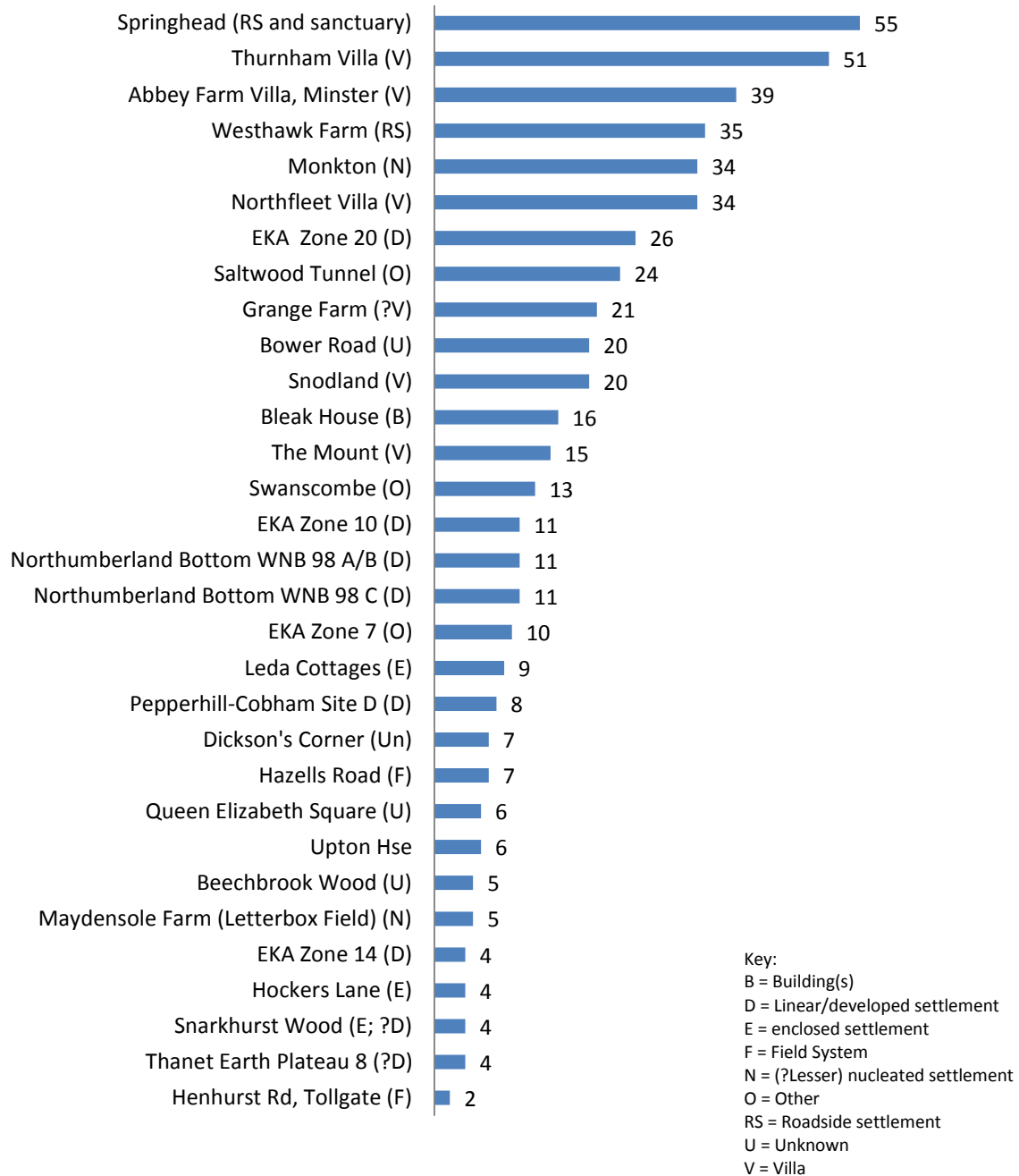


Fig. 10.9 Minimum numbers of fine/specialist wares

Below this level lie a mixed group of sites whose fine and specialist ware levels seem to be more dependent on date and longevity. Of the most prolific four (7-9 wares) Hazells Road is the latest, producing pottery almost exclusively of late date. Leda Cottage, Pepperhill-Cobham Site D and Dixons Road all persisted into the 3<sup>rd</sup> century. Below this, with the exception of the possible building at Upton House and East Kent Access Zone 14 (dating uncertain at present, although the pottery assemblage appears early) all the sites had their floruits in the 1st to 2<sup>nd</sup> centuries, often in the earlier part of that range.

It might be objected that the phenomenon is chiefly a result of assemblage size: logic suggests that the larger the assemblage, the higher the likelihood of a greater variety of fabrics. Whilst assemblage size, just like chronology must have an influence, it does not appear to be definitive, as can be demonstrated by examination of assemblages of similar size (Table 10.14).

Site	Assemblage size	Number of fine/specialist wares	Site	Assemblage size	Number of fine/specialist wares
Springhead (RS and sanctuary)	121564	55	Leda Cottages (E)	1882	9
Westhawk Farm (RS)	73035	35	Northumberland Bottom WNB 98 A/B (D)	1852	11
Monkton (N)	33043	34	Pepperhill-Cobham Site D/West of Wrotham Rd (HS1) (D)	1768	8
Minster Villa (V)	28190	39	Northumberland Bottom WNB 98 C (D)	1557	11
Thurnham Villa (V)	13911	51	Snarkhurst Wood (E; ?D)	1426	4
Snodland combined	≥10000	20	Upton House (?B)	1210	6
Northfleet Villa (V)	9594	34	Hockers Lane (E)	724	4
EKA Zone 20 (D)	6416	26	Swanscombe (O)	513	13
Saltwood Tunnel (O)	4765	24	Henhurst Rd, Tollgate (F)	453	2
Bower Road (U)	4175	20	EKA Zone 7 (O)	438	10
Beechbrook Wood (U)	3775	5	Queen Elizabeth Square (U)	436	6
EKA Zone 10 (D)	2218	11	Hazells Road (F)	432	7
Bleak House (B)	1959	16	EKA Zone 14 (D)	140	4

Table 10.14 Variety of fine/specialist wares in relation to assemblage size

It is undeniable that the very largest assemblages have the greatest diversity, however even here there are anomalies, as Thurnham Villa has a considerably greater variety than the much larger assemblages at Westhawk Farm, Monkton and Minster. At the lower end of the spectrum, the four sites having assemblages sized between 432 and 453 sherds have fine/specialist ware counts varying between 2 and 10. Leda Cottages (1882 sherds) has a ware-count of 9, whereas the only slighter larger assemblage from Bleak House (1959 sherds) has one of 16, higher than several larger assemblages.

A large assemblage may be the result of either the excavation of a large volume of soil or a high density of recovered pottery. Sites with high consumption of fine/specialist wares (and therefore, implicitly, other wares) may produce larger assemblages for that very reason. Within the sample examined here, the roadside settlement and villa sites have also been subject to far more extensive excavation than most of the lesser sites, further complicating the issue. Ideally, one would like to be able to compare the variety of wares in relation to volume of soil excavated, but such information is infrequently recorded (see Eastaugh et al. 2006 for a rare example).

When figures for individual wares are examined, it is possible to suggest at what point each becomes a potential indicator of a site's status as a villa or nucleated settlement. These are: eight more varieties of non-local fine ware, the presence of all three samian sources, the presence of three or more amphora fabrics, the presence of five or more mortaria sources, the presence of white slipped ware and the presence of three or more white ware sources.

#### **10.4.9 The influence of 'Upchurch' ware on assemblage composition**

One question that has not been considered is the effect of the local Thameside/Upchurch industry. Quantified data for these fabrics are available for only 19 sites. Table 10.15 displays the effects of adding 'Upchurch' wares (CAT codes R16-18.2) to the percentages of a) fine wares and b) fine and specialist wares. Also shown is the ranking of the sites in terms of a) percentage of fine wares, b) percentage of fine and specialist wares, c) percentage of fine/specialist and 'Upchurch' wares and d) number of fine/specialist wares (excluding 'Upchurch' wares).

Of the sites for which data are available, only three (highlighted) seem to be significantly affected by the addition of ‘Upchurch’ wares. Upton House, Broadstairs, has the thirdhighest percentage of fine/specialist wares without the addition of ‘Upchurch’ wares, but ranks thirteenth with these.

The addition of these wares has the opposite effect at Pepperhill-Cobham Site D and Minster Villa which move from ranks 13 and 10 to 3 and 5 respectively. It would be very useful to be able to repeat this experiment for a greater number of sites. ‘Upchurch’ wares

Site	Fine wares as percentage of total assemblage	Fine/specialist wares as percentage of total assemblage	Fine/specialist ware (%) rank	Upchurch type wares R16-R18.2	Fine and Upchurch type wares as percentage of total assemblage	Fine and Upchurch type ware rank	Fine/specialist and Upchurch type wares as percentage of total assemblage	Fine/specialist and Upchurch type rank	Fine/specialist ware (no of wares) rank
Bleak House (B)	0.92%	8.93%	1	21.90%	22.82%	2	30.83%	1	8
Monkton (N)	0.55%	6.58%	4	19.78%	20.33%	4	26.36%	2	4
Pepperhill-Cobham Site D (D)	0.90%	4.36%	13	21.38%	22.28%	3	25.74%	3	12
Northumberland Bottom WNB 98 C (D)	0.10%	7.77%	2	16.25%	16.35%	8	24.02%	4	9=
Minster Villa (V)	0.73%	4.77%	10	18.22%	18.95%	6	22.97%	5	2
Grange Farm (?V)	3.08%	5.92%	6	16.11%	19.19%	5	22.03%	6	6
Saltwood Tunnel (O)	2.18%	6.48%	5	14.33%	16.51%	7	20.81%	7	5
Westhawk Farm (RS)	0.48%	5.34%	8	13.93%	14.41%	9	19.27%	8	3
Thurnham Villa (V)	1.53%	5.85%	7	12.29%	13.82%	10	18.14%	9	1
Leda Cottages (E)	0.00%	5.05%	9	13.02%	13.02%	11	18.07%	10	11
Thanet Earth Plateau 8 (?D)	0.63%	4.40%	12	29.56%	30.19%	1	15.70%	11	16=
Queen Elizabeth Square (U)	0.23%	4.36%	14	9.17%	9.40%	12	13.53%	12	13=
Upton House (?B)	2.16%	6.67%	3	5.49%	7.65%	13	11.34%	13	13=
Bower Road (U)	1.05%	4.36%	15	4.50%	5.55%	15	8.86%	14	7
Beechbrook Wood (U)	0.77%	1.32%	18	4.98%	5.75%	14	6.30%	15	15
Northumberland Bottom WNB 98 A/B (D)	0.00%	4.48%	11	0.70%	0.70%	19	5.18%	16	9=
Snarkhurst Wood (E; ?D)	0.00%	2.66%	16	1.47%	1.47%	18	4.13%	17	16=
Henhurst Rd, Tollgate (F)	0.00%	0.44%	19	3.09%	3.09%	16	3.53%	18	19
Hockers Lane (E)	1.66%	2.07%	17	0.55%	2.21%	17	2.62%	19	16=

Table 10.15 Fine/specialist wares with the addition of ‘Upchurch’ fine wares

achieved a wide circulation and there is no discernible geographical factor to explain why these three sites should be affected or why in contrasting manners. It may be to do with chronology as Pepperhill-Cobham Site D and Minster are both sites of some status with little or no activity in the Late Roman period. The presence of Central Gaulish colour-coated wares at Minster hints that the *floruit* of the site was earlier in the Roman period. It may be then that these local fine wares, which declined in the 3<sup>rd</sup> century, have a greater impact on assemblages with a lesser Late Roman component. This would be consonant with the negative impact of adding 'Upchurch' wares to the figures for Upton House, where there was minimal activity until the Late Roman period.

Within the limited number of assemblages available for consideration, however, it is noticeable that the upper range of the rankings for fine/specialist wares *including local fine wares* as a proportion of total assemblage is dominated by nucleated sites and by others characterised by the presence of buildings or other indicators of status.

## 10.5 Discussion

The underlying question considered in this chapter is whether the application of simple methods of statistical analysis can help us, in the case of the assemblages from sites in Kent, to understand or predict the nature of a site from its pottery assemblage alone. The answer appears to be yes, although with important qualifications, of which the most important is that chronology must always be taken into account. The nature of the data available has necessitated analysis at entire assemblage level rather than (as one would wish) by dated phases. The method seems to work particularly well for assemblages from long-lived sites, particularly those with a mid-Roman component.

Within these limitations, however, it has been demonstrated that the variety of fine/specialist wares in an assemblage is a good indicator of site status and that, in particular, the presence of 20 or more fine/specialist wares is likely to indicate the presence of a villa, whilst 30 or more are associated with villas/nucleated settlements. Sites with 10 or more wares tend to be associated with buildings or rectilinear enclosures. Below this level, the number of fine/specialist wares depends more on chronology than on status.

Levels have been suggested at which the varieties of different classes of ware become significant indicators of a potential developed settlement/building/nucleated settlement:

- eight or more non-local fine ware fabrics
- the presence of samian from all three main sources
- the presence of Mortaria from five or more sources
- the presence of white-slipped ware
- the presence of three or more white ware sources.

The majority of sites falling into these categories conform to these levels for at least two types of ware.

Other indicators of possible status (for sites which are not exclusively late in date) concern the levels of samian in relation to other non-local fine wares. Lower levels of samian than other non-local fine wares are found at Thurnham and Northfleet Villas and Grange Farm. The same feature occurs at Saltwood Tunnel for which a number of other markers of status have been noted and at Hockers Lane, the precursor or Thurnham Villa.

Conversely, samian proportions which are higher than other non-local fine wares by a factor of 4:1 or more appear to be associated with nucleated settlements and/or sites which may have been obtaining supplies in some way from the military.

Finally, amongst the sites examined here, early fine wares (*Terra Rubra* and *Terra Nigra*) occur only at nucleated sites (Springhead, Monkton), sites that become villas (Thurnham, Minster, Folkestone) and the villa precursor site at Hockers Lane.

Booth urged caution in the interpretation of the HS1 assemblages precisely because many excavated areas did seem to be peripheral to potential main areas of occupation (which were not explored owing to the excavation brief). Nevertheless, at Bower Road and Saltwood, the ceramic assemblages when analysed in this manner give strong support to speculations about the nature of those settlements. The same might be said of East Kent Access Zone 20.

In sum, as long as used with sensitivity to the various provisos outlined above, this method of analysis may have some utility for assessing the potential character of sites by the rapid scanning of sherds from evaluations, field walking assemblages, or indeed the revisiting of



records of sites with unquantified assemblages, or where methods of quantification available for published sites make inter-site comparison difficult.

In itself this principle is hardly surprising and might even seem obvious. The same might, however, be said of the prediction that fine/specialist assemblages would be more significant in proportional terms as found by Booth in Warwickshire and the Upper Thames area. Although this appears to be less clearly demonstrable in Kent, there are indications that when local fine wares are included, the proportions of fine/specialist wares in an assemblage may indeed be an indicator of site status. In the present sample, assemblages from nucleated settlements, those having stone founded buildings or, in the case of Pepperhill-Cobham Site D /Northumberland Bottom WNB 98 C, richly furnished burials, all have fine/specialist ware proportions of over 18%.

In the end, however, there can be no substitute for site assemblage studies that present fully quantified data by date/phase, which, if pursued in Kent by those reporting archaeological interventions in the future, will facilitate a more refined view of the trends.

## Notes

<sup>i</sup> This fact reflects the long evolution of the series from a time when approaches were less systematic.

<sup>ii</sup> My thanks to Ges Moody for this.

<sup>iii</sup> The pottery report for Northumberland Bottom WNB 98 (Every 2006a) combines material from Areas A/B (including settlement 'East of Downs Road' [TQ 67 SW 547] and C (including settlement 'West of Downs Road' [TQ 67 SW 548]) as one assemblage. For the purposes of this analysis the components forming this aggregated assemblage have been separated out into specific site-area groups representing Areas A/B (TQ 67 SW 547) and Area C (TQ 67 SW 548).

<sup>iv</sup> NB Argonne ware, whilst technically a form of samian is counted here, as by Booth, as a Late Roman fine ware.

<sup>v</sup> WNB 98 A/B; WNB 98 C; Henhurst Road, Tollgate; Hockers Lane, Thurnham; Snarkhurst Wood; Leda Cottages; Beechbrook Wood; Bower Road, East Kent Access Zones 7,10,14 and 20; Queen Elizabeth Square; Monkton; Westhawk Farm; Springhead; Northfleet Villa; Pepperhill-Cobham Site D (A2)/West of Wrotham Rd (HS1).

<sup>vi</sup> There are 33 entries on the table, of which three relate to Snodland Villa, whilst Northumberland Bottom WNB 98 C and Tollgate (A20) are components of the same settlement.

<sup>vii</sup> These are, rarely, noted as being of the late BAETL fabric. As the various Dressel 20 fabrics are not distinguished in the vast majority of cases, however, here all have been lumped together.

<sup>viii</sup> Africana II amphorae also derived from Holborough Barrow, almost certainly associated with Snodland Villa.

<sup>ix</sup> More generally, figures for Springhead have been calculated from Seager Smith 2011, Table 1, which lumps together pottery from all areas. There does appear to be an error on this table in regard to samian, where row 1 (which adds up to 4191 sherds/52475g) has been incorrectly totalled as 3389sherds/50,957g. This error is, however, not reflected in the imported fine wares total or the overall sherd count/weight totals, which appear to be calculated on the basis of 4191 sherds/52475g.

The total sherd count for samian on Table 2 is 3909, minus 57 sherds of Argonne = 3852 which is slightly closer to the recalculated figures for Table 1 (4191 sherds) than to the printed figure. The Table 2 total for samian (including Argonne) by weight appears to be that printed as the total for samian (without Argonne) in Table 1.

<sup>x</sup> For these figures sites for which fabrics are known but where quantification is either absent or incompatible have been added. These are Maydensole Farm and Dickson's Court; in addition, the fabrics from the Snodland ASE excavation have been added to those from Birbeck's.

<sup>xi</sup> An exercise similar to this was undertaken by Millett (1980) for sites in West Sussex, although this looked at the variety of forms within samian, Oxfordshire and New Forest wares.

## 11 Coinage

### 11.1 Introduction

This chapter examines coin assemblages from the county using the methods established by Reece (1991; 1995) to compare coin-loss profiles from different sites with a provincial mean. The plots produced are not straightforward and need interpretation: the 21 British villa-related assemblages plotted by Reece (1995) for instance, are spread across twelve different perceived coin-loss patterns.<sup>1</sup>

Kent has a number of assemblages amenable to this type of analysis. Several (Eccles, Lympne, Richborough, Lullingstone and four from Canterbury) feature in Reece's (1995) plots. A further 15 sites can now be added to these (Table 11.1; Fig. 11.1). Amongst these there is a small degree of overlap with sites whose ceramic assemblages have been discussed above. The sample available now includes recently published figures from both the Springhead roadside settlement and sanctuary, Northfleet Villa (Cooke and Holman 2011a), Westhawk Farm (Guest 2008), Thurnham Villa (Booth 2006b) and Minster Villa (Holman and Parfitt 2005). Figures for the military sites at Richborough and Lympne, four urban assemblages from Canterbury (Ca A, Ca B, Ca C and Ca FM) and Lullingstone Villa are taken from Reece 1991. Figures for East Kent Access Zone 6 are from the post excavation assessment (Oxford Wessex Archaeology 2011). All other figures have kindly been provided by David Holman.

Few excavated rural sites have produced any significant numbers of coins and there are some anomalies which seem strange at first sight. Maydensole Farm, apparently a nucleated settlement, as we have seen, had a ceramic assemblage (albeit derived from field walking) that was far less varied than one would expect for such a site. Nevertheless, it has produced 360 coins. Monkton, on the other hand, a nucleated settlement with a comparatively rich ceramic assemblage, produced only a handful of coins (four 2<sup>nd</sup> century and ten 4<sup>th</sup> century, mostly metal detected). Likewise, East Kent Access Zone 10, which scores highly in terms of ceramic diversity, produced only four (4<sup>th</sup> century) coins. A large proportion of the non-villa settlements produced no coins whatsoever, of which the recently excavated site at Downlands, Walmer (Jarman 2010) is a case in point.

Reece Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Total
to AD 41	41-54	54-69	69-96	96-117	117-138	138-161	161-180	180-192	192-222	222-238	238-260	260-275	275-296	296-317	317-330	330-348	348-364	364-378	378-388	388-402		
Site																						
Broom Bungalows	0	0	0	0	2	0	0	1	1	0	2	63	53	0	5	54	14	11	0	0	206	
Ca A	2	4	3	7	0	3	4	2	0	1	0	3	50	62	1	11	92	85	44	1	42	262
Ca B	1	3	1	2	1	1	6	1	0	5	2	4	40	83	1	4	18	12	16	0	61	262
Ca C	4	3	1	14	4	2	4	6	0	7	14	8	147	217	8	33	119	24	26	0	9	650
Ca FM	4	13	7	24	21	18	22	19	8	21	5	11	514	265	31	30	377	318	85	1	92	1886
East Farleigh	0	0	0	2	1	0	1	3	0	0	0	2	5	6	2	3	38	27	20	1	13	181
East Kent Access Zone 6	0	2	1	3	1	2	4	1	1	1	0	0	3	3	1	3	22	9	17	2	3	79
Eccles	6	3	0	2	4	3	7	3	2	0	1	11	22	40	1	6	45	13	10	0	4	124
Goodnestone	10	1	16	37	12	21	24	25	15	30	15	23	297	331	43	107	617	280	239	13	67	2223
Lullingstone	0	1	0	1	4	4	3	1	0	2	0	3	15	17	2	33	112	71	37	1	20	327
Lympne	0	0	0	0	0	0	1	0	0	0	0	0	29	63	15	14	66	1	2	0	0	191
Maydensole Farm	2	1	1	1	1	2	4	1	3	0	1	3	101	65	10	21	115	22	6	0	0	360
Minster	0	0	0	4	3	2	6	1	1	1	0	2	6	4	3	0	30	24	33	2	2	124
Northfleet	0	0	0	2	3	1	3	1	0	0	1	0	11	32	1	10	38	11	21	0	0	135
Richborough	184	404	142	386	93	76	112	37	14	53	13	39	4759	4099	351	855	10127	3237	2849	115	22822	50767
Ringlemere	0	0	0	1	0	2	0	1	0	2	0	0	0	6	1	8	39	7	14	4	6	91
Ringwould	1	1	0	3	0	2	4	3	0	3	0	0	12	17	21	39	89	30	55	1	3	284
Sholden	0	0	0	3	2	0	1	0	0	0	0	0	3	5	1	0	6	2	4	0	2	29
Springhead R-S	4	22	6	33	7	18	15	9	2	8	3	8	127	156	7	15	163	33	75	4	16	731
Springhead sanctuary	10	24	10	38	14	10	11	3	2	7	6	6	25	42	7	13	80	20	55	1	6	390
Thurnham	0	5	1	1	1	0	1	0	0	1	0	0	2	6	4	7	4	4	3	0	1	41
Westhawk	4	0	1	10	13	13	27	32	9	5	2	4	2	3	1	0	0	0	0	0	0	126
Worth	3	1	3	3	1	2	3	1	1	2	1	64	50	12	14	4	46	20	22	8	1	262
Total	235	488	193	577	186	184	263	150	59	150	64	193	6283	5587	526	1221	12297	4264	3644	154	23170	59731
Total - R'boro	51	84	51	191	93	108	151	113	45	97	51	154	1524	1488	175	366	2170	1027	795	39	348	8964

Table 11.1 Roman coins from 23 sites in Kent

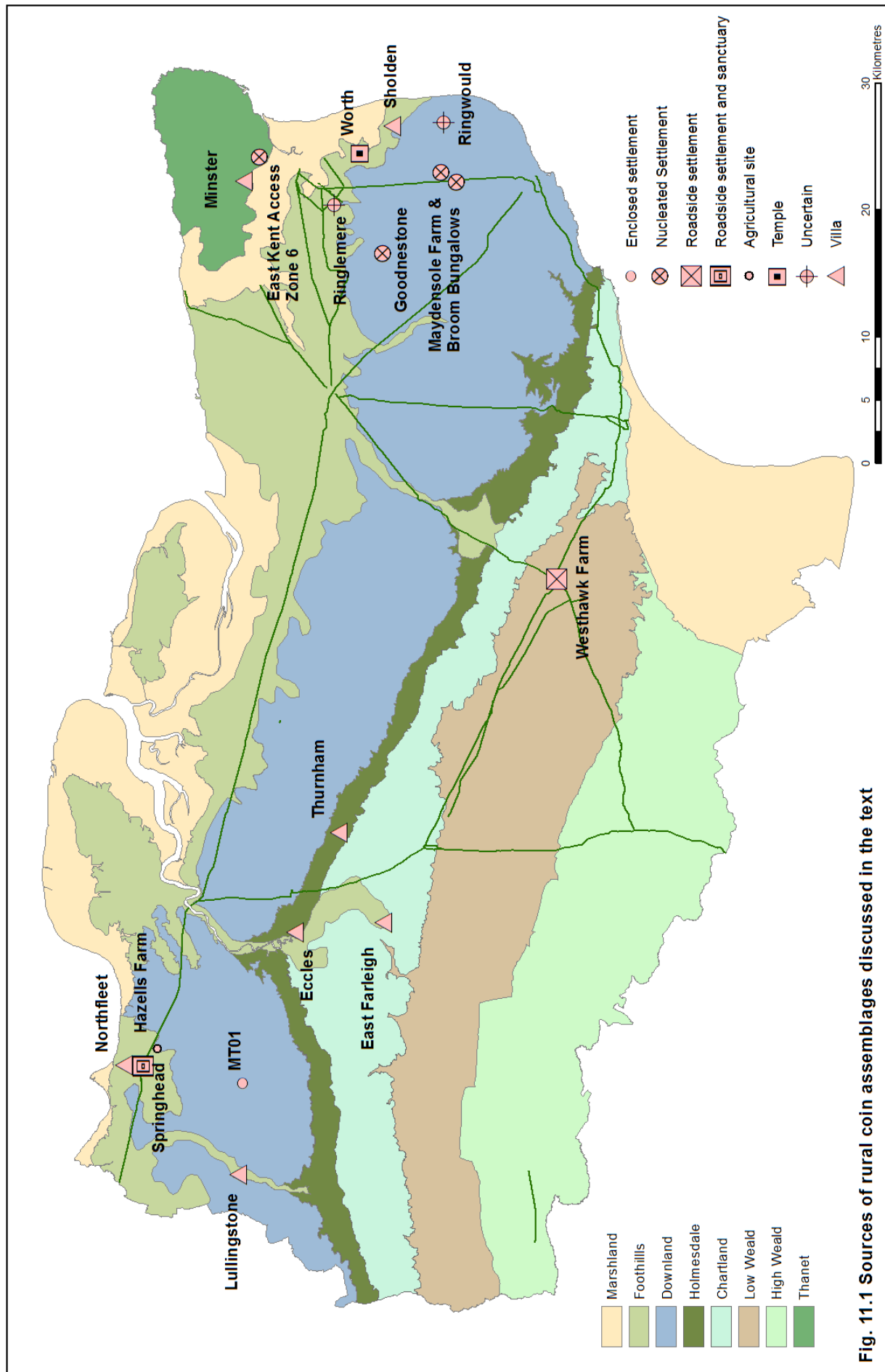


Fig. 11.1 Sources of rural coin assemblages discussed in the text

The assemblages discussed here have originated in different manners which may have impacted on their composition. Those from Goodnestone, Maydensole Farm, Broom Bungalows, Ringlemere, Ringwould and Worth derive from metal-detecting alone. Others derive from excavations of recent date on which metal detectors have aided hand-excavation (Springhead, Westhawk Farm and the villas at Northfleet, East Farleigh, Minster, Sholden and Thurnham). These are likely to have been more sensitive to the presence of easily-overlooked small Late Roman issues than older excavations (e.g. Eccles, Lullingstone) from the days before metal detection was routine on archaeological sites.

Before looking for patterns, it is necessary to establish a base line (a mean) against which deviations in coin-loss rates can be set. Reece established such a mean for Britain (1991), but it is pertinent to ask how far Kent as a whole conforms to this pattern. The mean coin-loss for Kent, calculated from 23 sites and expressed in terms of coins/1000 (permills) is plotted against the British mean in Fig. 11.2.

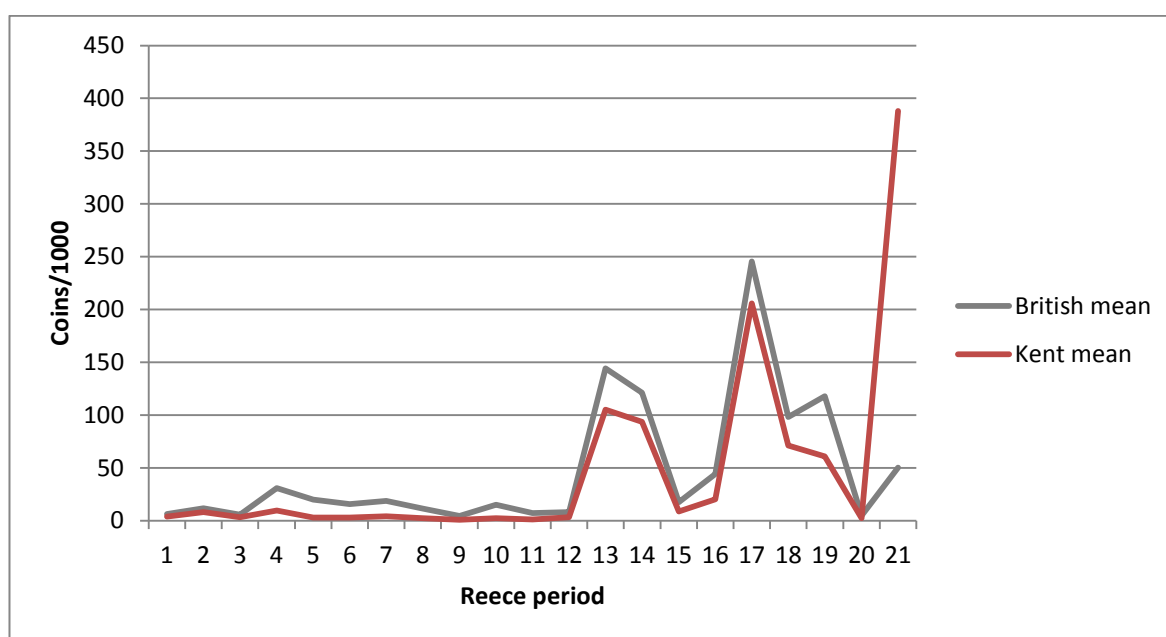


Fig. 11.2 Kent mean Roman coin loss plotted against British mean

This plot shows that the mean for Kent has some rather exaggerated spikes, including a phenomenally large one between periods 20 and 21. On examination of the figures, it is clear that the Kent mean is being unduly influenced by the very large number of coins from Richborough (85% of total coins recorded from these assemblages). If Richborough is

removed from calculations, the Kent mean conforms more closely to the national trend (Fig. 11.3).

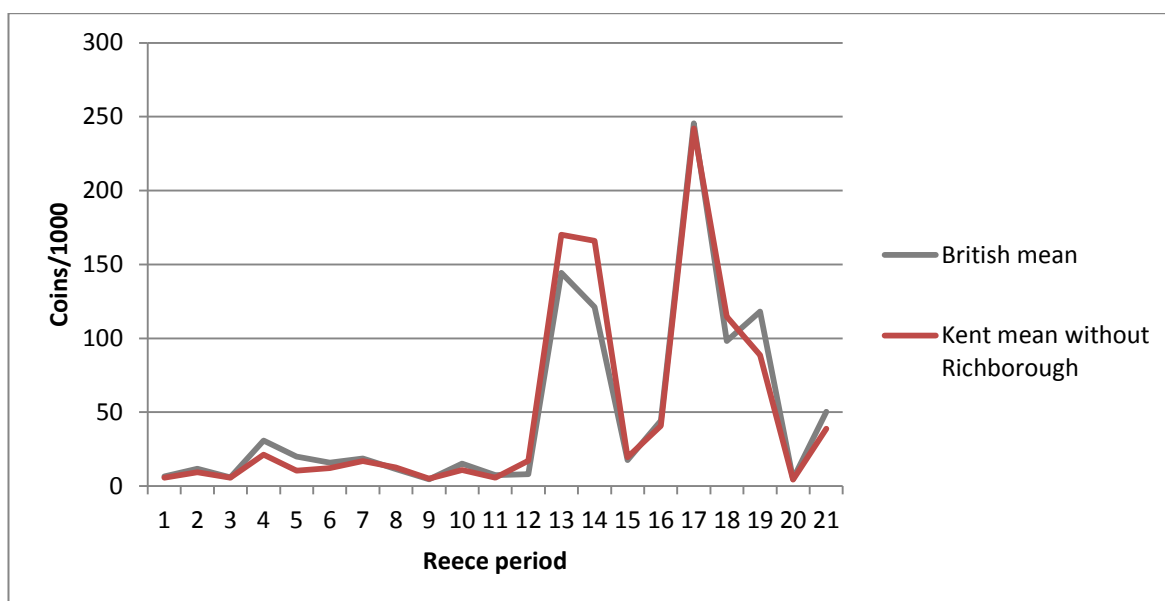


Fig. 11.3 Kent mean adjusted to take account of the high rate of coin loss at Richborough

This shows that, perhaps surprisingly, given that Kent was an area familiar with the concept of coinage even before the Conquest, the Kent mean is a little below the provincial norm for most of the time from periods 1-15, although following a similar pattern of rise and fall. Between AD 330 and 348 (period 17) it reaches the same high, but although the diminution in rate of coin-loss slows a little between period 18 and 19, the Valentinianic spike visible in the British mean (period 19) is absent. The profile contrasts somewhat with that presented for PAS data (cf. Fig. 5.41) which shows a slightly higher level of coin-loss in the early period, a depressed rate of loss in the radiate period and a distinct Valentinianic spike. Why this should be is not immediately clear but it is a feature that warrants further examination.

Reece's comparison plots are based on cumulative data, with the coins per thousand ('permills') for each period added to the sum of those which precede it. These do not then give the absolute rate of coin-loss in any one period, but they do indicate more clearly variations in the *rate* at which coins are being lost and allow for easier comparison between sites. The final plots illustrate the way in which site coin-losses deviate from the cumulative British mean by the simple step of subtracting the latter from the former. Sites producing similar plots are not necessarily of the same type, as demonstrated by Reece's villa plots but show similar rates of coins loss indicating that they may have been subject to similar

influences or have similar periods of increased or decreased economic activity. Although it might seem more pertinent to use the Kent mean as a base line, as Reece points out (1995, 190), whatever mean is used the relationship of individual site profiles to each other will remain constant. The British mean is therefore used here in order to allow better comparison with sites from outside Kent.

Values for Kent sites (minus Richborough) are given in Table 11.2 (coins/1000), 11.3 (cumulative coins/1000) and 11.4 (cumulative coins/1000 minus British mean).

The sites listed for completeness include four urban assemblages from Canterbury and one military installation. It is the other sites which are of chief concern here. These comprise seven excavated villas: Minster, East Farleigh, Eccles, Lullingstone, Northfleet, Sholden and Thurnham (East Farleigh is here taken to be a villa, despite its main range not being located) and two excavated roadside settlements at Westhawk Farm and Springhead, the latter with separate figures for the settlement and sanctuary elements of the site. Information is available for nearly 300 coins from the Worth temple enclosure area, but these represent only the tip of a much larger numismatic iceberg: Holman (pers. comm.) estimates that there may be 2000-3000 Roman coins from this site. Further nucleated sites include East Kent Access Zone 6 (excavated but still awaiting publication), two linked eastern downland sites at Maydensole Farm and Broom Bungalows (north of Whitfield, Dover) which have been subject to some excavation, as yet unpublished (D. Holman pers. comm.) and a large area of cropmarks, unexcavated but partially geophysically surveyed, at Goodnestone. Sites at Ringlemere and Ringwould have produced quite substantial coin assemblages, but have not been subject to archaeological investigation; hence their natures remain to be clarified. The data are skewed to the East of Kent at least in part because of the expertise of David Holman to whom finds from the area tend to be submitted.



Reece Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	to	41-54	54-69	69-96	96-117	117-138	138-161	161-180	180-192	193-222	222-238	238-260	260-275	275-296	296-317	317-330	330-348	348-364	364-378	378-388	388-402
Site	AD 41																				
Broom Bungalows	0.00	0.00	0.00	0.00	0.00	9.71	0.00	0.00	4.85	4.85	0.00	9.71	305.83	257.28	0.00	24.27	262.14	67.96	53.40	0.00	0.00
Ca A	4.80	9.59	7.19	16.79	0.00	7.19	9.59	4.80	0.00	2.40	0.00	7.19	119.90	148.68	2.40	26.38	220.62	203.84	105.52	2.40	100.72
Ca B	3.82	11.45	3.82	7.63	3.82	3.82	22.90	3.82	0.00	19.08	7.63	15.27	152.67	316.79	3.82	15.27	68.70	45.80	61.07	0.00	232.82
Ca C	6.15	4.62	1.54	21.54	6.15	3.08	6.15	9.23	0.00	10.77	21.54	12.31	226.15	333.85	12.31	50.77	183.08	36.92	40.00	0.00	13.85
Ca FM	2.12	6.89	3.71	12.73	11.13	9.54	11.66	10.07	4.24	11.13	2.65	5.83	272.53	140.51	16.44	15.91	199.89	168.61	45.07	0.53	48.78
East Farleigh	0.00	0.00	0.00	16.13	8.06	0.00	8.06	24.19	0.00	0.00	0.00	16.13	40.32	48.39	16.13	24.19	306.45	217.74	161.29	8.06	104.84
East Kent Access Zone 6	0.00	25.32	12.66	37.97	12.66	25.32	50.63	12.66	12.66	12.66	0.00	0.00	37.97	37.97	12.66	37.97	278.48	113.92	215.19	25.32	37.97
Eccles	32.79	16.39	0.00	10.93	21.86	16.39	38.25	16.39	10.93	0.00	5.46	60.11	120.22	218.58	5.46	32.79	245.90	71.04	54.64	0.00	21.86
Goodnestone	4.50	0.45	7.20	16.64	5.40	9.45	10.80	11.25	6.75	13.50	6.75	10.35	133.60	148.90	19.34	48.13	277.55	125.96	107.51	5.85	30.14
Lullingstone	0.00	3.06	0.00	3.06	12.23	12.23	9.17	3.06	0.00	6.12	0.00	9.17	45.87	51.99	6.12	100.92	342.51	217.13	113.15	3.06	61.16
Lympne	0.00	0.00	0.00	0.00	0.00	0.00	5.24	0.00	0.00	0.00	0.00	0.00	151.83	329.84	78.53	73.30	345.55	5.24	10.47	0.00	0.00
Maydensole Farm	5.56	2.78	2.78	2.78	2.78	5.56	11.11	2.78	8.33	0.00	2.78	8.33	280.56	180.56	27.78	58.33	319.44	61.11	16.67	0.00	0.00
Minster	0.00	0.00	0.00	32.26	24.19	16.13	48.39	8.06	8.06	8.06	0.00	16.13	48.39	32.26	24.19	0.00	241.94	193.55	266.13	16.13	16.13
Northfleet	0.00	0.00	0.00	14.81	22.22	7.41	22.22	7.41	0.00	0.00	7.41	0.00	81.48	237.04	7.41	74.07	281.48	81.48	155.56	0.00	0.00
Ringlemere	0.00	0.00	0.00	10.99	0.00	21.98	0.00	10.99	0.00	21.98	0.00	0.00	0.00	65.93	10.99	87.91	428.57	76.92	153.85	43.96	65.93
Ringwould	3.52	3.52	0.00	10.56	0.00	7.04	14.08	10.56	0.00	10.56	0.00	0.00	42.25	59.86	73.94	137.32	313.38	105.63	193.66	3.52	10.56
Sholden	0.00	0.00	0.00	103.45	68.97	0.00	34.48	0.00	0.00	0.00	0.00	0.00	103.45	172.41	34.48	0.00	206.90	68.97	137.93	0.00	68.97
Springhead R-S	5.47	30.10	8.21	45.14	9.58	24.62	20.52	12.31	2.74	10.94	4.10	10.94	173.73	213.41	9.58	20.52	222.98	45.14	102.60	5.47	21.89
Springhead sanctuary	25.64	61.54	25.64	97.44	35.90	25.64	28.21	7.69	5.13	17.95	15.38	15.38	64.10	107.69	17.95	33.33	205.13	51.28	141.03	2.56	15.38
Thurnham	0.00	121.95	24.39	24.39	24.39	0.00	24.39	0.00	0.00	24.39	0.00	0.00	48.78	146.34	97.56	170.73	97.56	97.56	73.17	0.00	24.39
Westhawk	31.70	0.00	7.90	79.40	103.20	103.20	214.30	254.00	71.40	39.70	15.90	31.70	15.90	23.80	7.90	0.00	0.00	0.00	0.00	0.00	0.00
Worth	11.45	3.82	11.45	11.45	3.82	7.63	11.45	3.82	3.82	7.63	3.82	244.27	190.84	45.80	53.44	15.27	175.57	76.34	83.97	30.53	3.82

Table 11.2 Coins/1000 (permills)

Reece Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	to AD 41	41-54	54-69	69-96	96- 117	117- 138	138- 161	161- 180	180- 192	193- 222	222- 238	238- 260	260- 275	275- 296	296- 317	317- 330	330- 348	348- 364	364- 378	378- 388	388- 402
Site																					
Broom Bungalows	0.00	0.00	0.00	0.00	0.00	9.71	9.71	9.71	14.56	19.42	19.42	29.13	334.95	592.23	592.23	616.50	878.64	946.60	1000	1000	1000
Ca A	4.80	14.39	21.58	38.37	38.37	45.56	55.16	59.95	59.95	62.35	62.35	69.54	189.45	338.13	340.53	366.91	587.53	791.37	896.88	899.28	1000
Ca B	3.82	15.27	19.08	26.72	30.53	34.35	57.25	61.07	61.07	80.15	87.79	103.05	255.73	572.52	576.34	591.60	660.31	706.11	767.18	767.18	1000
Ca C	6.15	10.77	12.31	33.85	40.00	43.08	49.23	58.46	58.46	69.23	90.77	103.08	329.23	663.08	675.38	726.15	909.23	946.15	986.15	986.15	1000
Ca FM	2.12	9.01	12.73	25.45	36.59	46.13	57.79	67.87	72.11	83.24	85.90	91.73	364.26	504.77	521.21	537.12	737.01	905.62	950.69	951.22	1000
East Farleigh	0.00	0.00	0.00	16.13	24.19	24.19	32.26	56.45	56.45	56.45	56.45	72.58	112.90	161.29	177.42	201.61	508.06	725.81	887.10	895.16	1000
East Kent Acces Zone 6	0.00	25.32	37.97	75.95	88.61	113.92	164.56	177.22	189.87	202.53	202.53	202.53	240.51	278.48	291.14	329.11	607.59	721.52	936.71	962.03	1000
Eccles	32.79	49.18	49.18	60.11	81.97	98.36	136.61	153.01	163.93	163.93	169.40	229.51	349.73	568.31	573.77	606.56	852.46	923.50	978.14	978.14	1000
Goodnestone	4.50	4.95	12.15	28.79	34.19	43.63	54.43	65.68	72.42	85.92	92.67	103.01	236.62	385.52	404.86	452.99	730.54	856.50	964.01	969.86	1000
Lullingstone	9.09	12.15	12.15	15.21	27.44	39.67	48.85	51.90	51.90	58.02	58.02	67.19	113.07	165.05	171.17	272.09	614.60	831.72	944.87	947.93	1000
Lympne	0.00	0.00	0.00	0.00	0.00	0.00	5.24	5.24	5.24	5.24	5.24	5.24	157.07	486.91	565.45	638.74	984.29	989.53	1000	1000	1000
Maydensole Farm	5.56	8.33	11.11	13.89	16.67	22.22	33.33	36.11	44.44	44.44	47.22	55.56	336.11	516.67	544.44	602.78	922.22	983.33	1000	1000	1000
Minster	0.00	0.00	0.00	32.26	56.45	72.58	120.97	129.03	137.10	145.16	145.16	161.29	209.68	241.94	266.13	266.13	508.06	701.61	967.74	983.87	1000
Northfleet	0.00	0.00	0.00	14.81	37.04	44.44	66.67	74.07	74.07	74.07	81.48	81.48	162.96	400.00	407.41	481.48	762.96	844.44	1000	1000	1000
Ringlemere	0.00	0.00	0.00	10.99	10.99	32.97	32.97	43.96	43.96	65.93	65.93	65.93	65.93	131.87	142.86	230.77	659.34	736.26	890.11	934.07	1000
Ringwould	3.52	7.04	7.04	17.61	17.61	24.65	38.73	49.30	49.30	59.86	59.86	59.86	102.11	161.97	235.92	373.24	686.62	792.25	985.92	989.44	1000
Sholden	0.00	0.00	0.00	103.45	172.41	172.41	206.90	206.90	206.90	206.90	206.90	206.90	310.34	482.76	517.24	517.24	724.14	793.10	931.03	931.03	1000
Springhead R-S	5.47	35.57	43.78	88.92	98.50	123.12	143.64	155.95	158.69	169.63	173.73	184.68	358.41	571.82	581.40	601.92	824.90	870.04	972.64	978.11	1000
Springhead sanctuary	25.64	87.18	112.82	210.26	246.15	271.79	300.00	307.69	312.82	330.77	346.15	361.54	425.64	533.33	551.28	584.62	789.74	841.03	982.05	984.62	1000
Thurnham	0.00	121.95	146.34	170.73	195.12	195.12	219.51	219.51	219.51	243.90	243.90	243.90	292.68	439.02	536.59	707.32	804.88	902.44	975.61	975.61	1000
Westhawk	31.70	31.70	39.60	119.00	222.20	325.40	539.70	793.70	865.10	904.80	920.70	952.40	968.30	992.10	1000	1000	1000	1000	1000	1000	1000
Worth	11.45	15.27	26.72	38.17	41.98	49.62	61.07	64.89	68.70	76.34	80.15	324.43	515.27	561.07	614.50	629.77	805.34	881.68	965.65	996.18	1000
Kent mean	6.47	18.2	24.1	54.95	74.84	90.63	109.3	120.82	125.48	140.66	147.95	156.03	300.33	421.57	439.06	483.19	728.73	826.95	944.95	949.75	1000

Table 11.3 Cumulative coin loss/1000

Reece Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
to AD 41	41.54	54.69	69.96		96-117	117-138	138-161	161-180	180-192	193-222	222-238	238-260	260-275	275-296	296-317	317-330	330-348	348-364	364-378	378-388	388-402
Site																					
Broom Bungalows	-6.47	-18.20	-24.10	-54.95	-74.84	-80.92	-99.59	-	-	-	-	-	34.62	170.66	153.17	133.31	149.91	119.65	55.05	50.25	0.00
Ca A	-1.67	-3.81	-2.52	-16.58	-36.47	-45.07	-54.14	-60.87	-65.53	-78.31	-85.60	-86.49	-	-83.44	-98.53	-	-	-35.58	-48.07	-50.47	0.00
Ca B	-2.65	-2.93	-5.02	-28.23	-44.31	-56.28	-52.05	-59.75	-64.41	-60.51	-60.16	-52.98	-44.60	150.95	137.28	108.41	-68.42	-	-	-	0.00
Ca C	-0.32	-7.43	-11.79	-21.10	-34.84	-47.55	-60.07	-62.36	-67.02	-71.43	-57.18	-52.95	28.90	241.51	236.32	242.96	180.50	119.20	41.20	36.40	0.00
Ca FM	-4.35	-9.19	-11.37	-29.50	-38.25	-44.50	-51.51	-52.95	-53.37	-57.42	-62.05	-64.30	63.93	83.20	82.15	53.93	8.28	78.67	5.74	1.47	0.00
East Farleigh	-6.47	-18.20	-24.10	-38.82	-50.65	-66.44	-77.04	-64.37	-69.03	-84.21	-91.50	-83.45	-	-	-	-	-	-	-57.85	-54.59	0.00
East Kent Access Zone 6	-6.47	7.12	13.87	21.00	13.77	23.29	55.26	56.40	64.39	61.87	54.58	46.50	-59.82	-	-	-	-	-	-8.24	12.28	0.00
Eccles	26.32	30.98	25.08	5.16	7.13	7.73	27.31	32.19	38.45	23.27	21.45	73.48	49.40	146.74	134.71	123.37	123.73	96.55	33.19	28.39	0.00
Goodnestone	-1.97	-13.25	-11.95	-26.16	-40.65	-47.00	-54.87	-55.14	-53.06	-54.74	-55.28	-53.02	-63.71	-36.05	-34.20	-30.20	1.81	29.55	19.06	20.11	0.00
Lullingstone	2.62	-6.05	-11.95	-39.74	-47.40	-50.96	-60.45	-68.92	-73.58	-82.64	-89.93	-88.84	-	-	-	-	-	4.77	-0.08	-1.82	0.00
Lympne	-6.47	-18.20	-24.10	-54.95	-74.84	-90.63	-	-	-	-	-	-	187.26	256.52	267.89	211.10	114.13	162.58	55.05	50.25	0.00
Maydensole Farm	-0.91	-9.87	-12.99	-41.06	-58.17	-68.41	-75.97	-84.71	-81.04	-96.22	-	-	143.26	95.10	105.38	119.59	193.49	156.38	55.05	50.25	0.00
Minster	-6.47	-18.20	-24.10	-22.69	-18.39	-18.05	11.67	8.21	11.62	4.50	-2.79	5.26	-90.65	-	-	-	-	-	22.79	34.12	0.00
Northfleet	-6.47	-18.20	-24.10	-40.14	-37.80	-46.19	-42.63	-46.75	-51.41	-66.59	-66.47	-74.55	-	179.63	172.93	217.06	220.67	125.34	55.05	50.25	0.00
Ringlemere	-6.47	-18.20	-24.10	-43.96	-63.85	-57.66	-76.33	-76.86	-81.52	-74.73	-82.02	-90.10	137.37	-21.57	-31.65	-1.71	34.23	17.49	55.05	50.25	0.00
Ringwould	-2.95	-11.16	-17.06	-37.34	-57.23	-65.98	-70.57	-71.52	-76.18	-80.80	-88.09	-96.17	-	-	-	-	-69.39	-90.69	-54.84	-15.68	0.00
Sholden	-6.47	-18.20	-24.10	48.50	97.57	81.78	97.60	86.08	81.42	66.24	58.95	50.87	198.22	259.60	203.14	109.95	-42.11	-34.70	40.97	39.69	0.00
Springhead R-S	-1.00	17.37	19.68	33.97	23.66	32.49	34.34	35.13	33.21	28.97	25.78	28.65	58.08	150.25	142.34	118.73	96.17	43.09	27.69	28.36	0.00
Springhead sanctuary	19.17	68.98	88.72	155.31	171.31	181.16	190.70	186.87	187.34	190.11	198.20	205.51	125.31	111.76	112.22	101.43	61.01	14.08	37.10	34.87	0.00
Thurnham	-6.47	103.75	122.24	115.78	120.28	104.49	110.21	98.69	94.03	103.24	95.95	87.87	-7.65	17.45	97.53	224.13	76.15	75.49	30.66	25.86	0.00
Westhawk	25.23	13.50	15.50	64.05	147.36	234.77	430.40	672.88	739.62	764.14	772.75	796.37	667.97	570.53	560.94	516.81	271.27	173.05	55.05	50.25	0.00
Worth	4.98	-2.93	2.62	-16.78	-32.86	-41.01	-48.23	-55.93	-56.78	-64.32	-67.80	168.40	214.94	139.50	175.44	146.58	76.61	54.73	20.70	46.43	0.00

Table 11.4 Cumulative coin loss/1000 minus British mean

## 11.2 Coin-loss patterns at villa sites

The cumulative coin-losses for the villas, expressed in terms of deviation from the British mean, are plotted in Fig. 11.4. As can be seen, there is some considerable variation, just as found by Reece. The feature that most of these villas' plots have in common with Reece's is a tendency for the profiles to fall at various points both above and below the mean. This in itself is less important than the shapes of the profiles but does indicate that Eccles starts from a rather high point in period 1, reflecting its early origins, whilst Thurnham starts from a particularly high level of coin-loss in period 2, around the period of the pre-villa settlement.

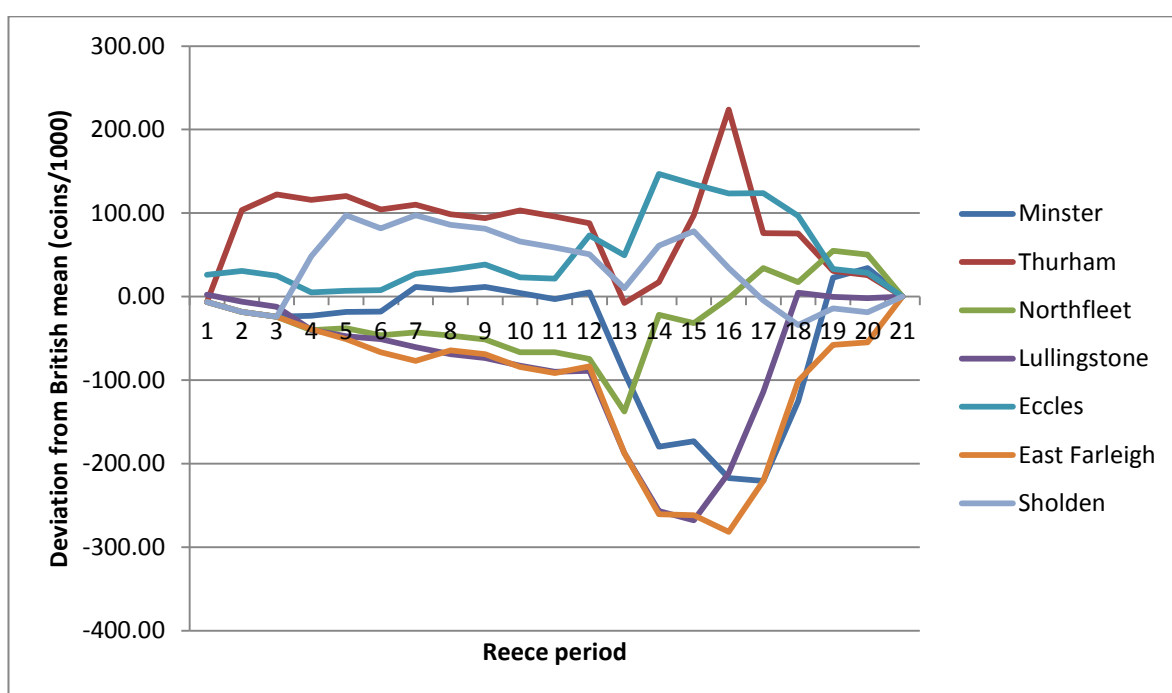


Fig. 11.4 Cumulative Roman coin loss from Kent's villas, as deviation from the British mean

Lullingstone, East Farleigh and Minster Villas have very similar profiles (Fig. 11.5); in particular, East Farleigh's is strikingly like Lullingstone's. Reece (1995) suggests that it is the pagan temple/Christian shrine aspect of Lullingstone that accounts for its profile owing to its similarity to the West Country temples at Nettleton (Wiltshire), Lamyatt Beacon and Uley. It has been suggested that Building 5 at East Farleigh started life as a temple (e.g. Tomlin 2012, 401). The common feature shared by all three of these villas, however, is a

period of abandonment in the 3<sup>rd</sup> century, followed by reoccupation in the 4<sup>th</sup>. Lullingstone seems to have enjoyed an earlier resurgence of activity compared to Minster and East Farleigh. Sholden is likewise said to have seen abandonment followed by late 4<sup>th</sup> century reoccupation (D. Holman pers. comm.) but few details are as yet available for this site and its coin profile is somewhat different.

Of the three remaining villas, Thurnham and Northfleet (Fig. 11.6) are in some ways quite similar. Both move very slightly down in comparison to the British mean during the 1<sup>st</sup> to mid-3<sup>rd</sup> centuries, before plummeting briefly in period 13. Their recovery following this is slightly different with Thurnham in particular adding a large number of coins between periods 14 and 16.

This type of coin-loss plot is useful, as Reece has pointed out, for comparing a number of sites on the same chart; however it is also instructive to chart coin-loss simply in terms of permills. This method demonstrates very close similarities between Northfleet and Eccles with the major exception of a large Valentinianic spike for Northfleet (Fig. 11.7). In fact coin-loss patterns for Northfleet follow the British mean quite well (Fig. 11.8) although with exaggerated spikes for periods 14 (the late radiate period), 17 and 19 and a total lack of coins in the latest periods (AD 378-402) when nationally there is a small resurgence in the loss of coins. Plotting in terms of permills also emphasises the similarities between Lullingstone and East Farleigh from period 11 (AD 222-238) onwards (Fig. 11.9). At both these sites there is no Valentinianic spike (although a slight kink occurs in the line for East Farleigh) and the radiate level is low compared to the British mean (and Northfleet).

Thurnham has a rather idiosyncratic pattern of coin-loss in terms of permills (Fig. 11.10) with high incidences of mid-1<sup>st</sup> century and early 4<sup>th</sup> century coins. The former include a rare *quadrans* of Claudius as well as four certain or probable Claudian copies; such are also found at Lullingstone and at Keston Villas, sites of mid-1<sup>st</sup> century activity (Booth 2006b, 39). The expected dip in period 15 (AD 296-317) occurs but is followed by an unusually early high point in period 16; Booth notes a wide distribution of early 4<sup>th</sup> century coins in above average condition across the site. This is after the main 'villa' phase of occupation, when the bath house had either collapsed or been demolished, the boundaries were not maintained and the main room of the villa had been converted into a smithy.

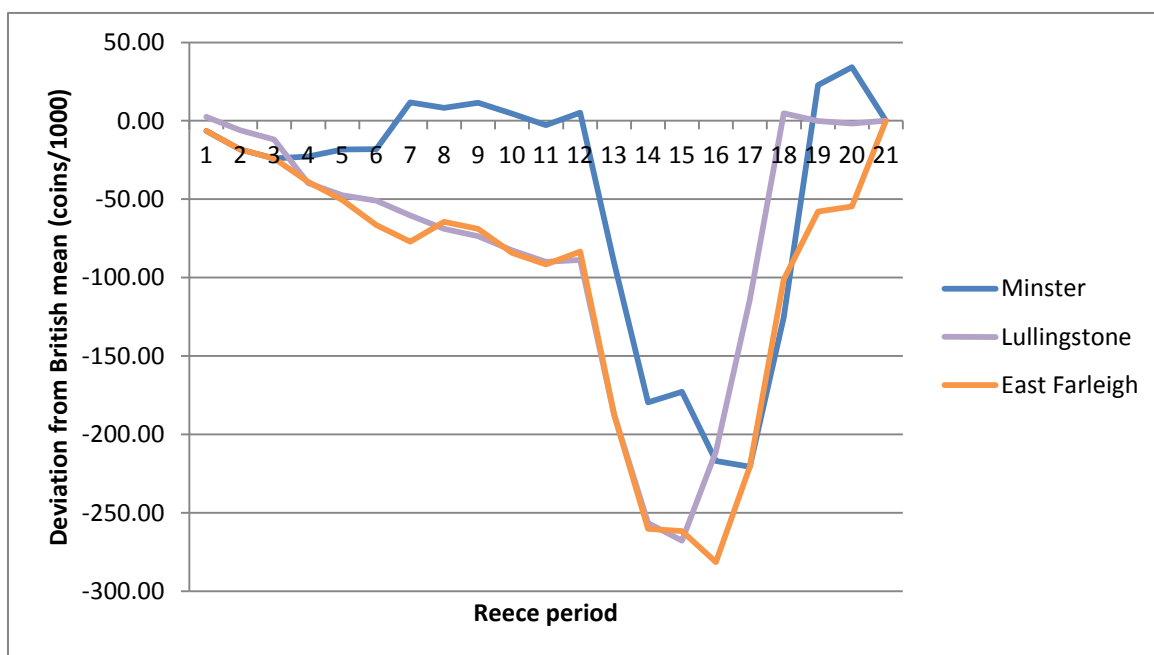


Fig. 11.5 Cumulative Roman coin-loss at Minster, Lullingstone and East Farleigh Villas, as deviation from the British mean

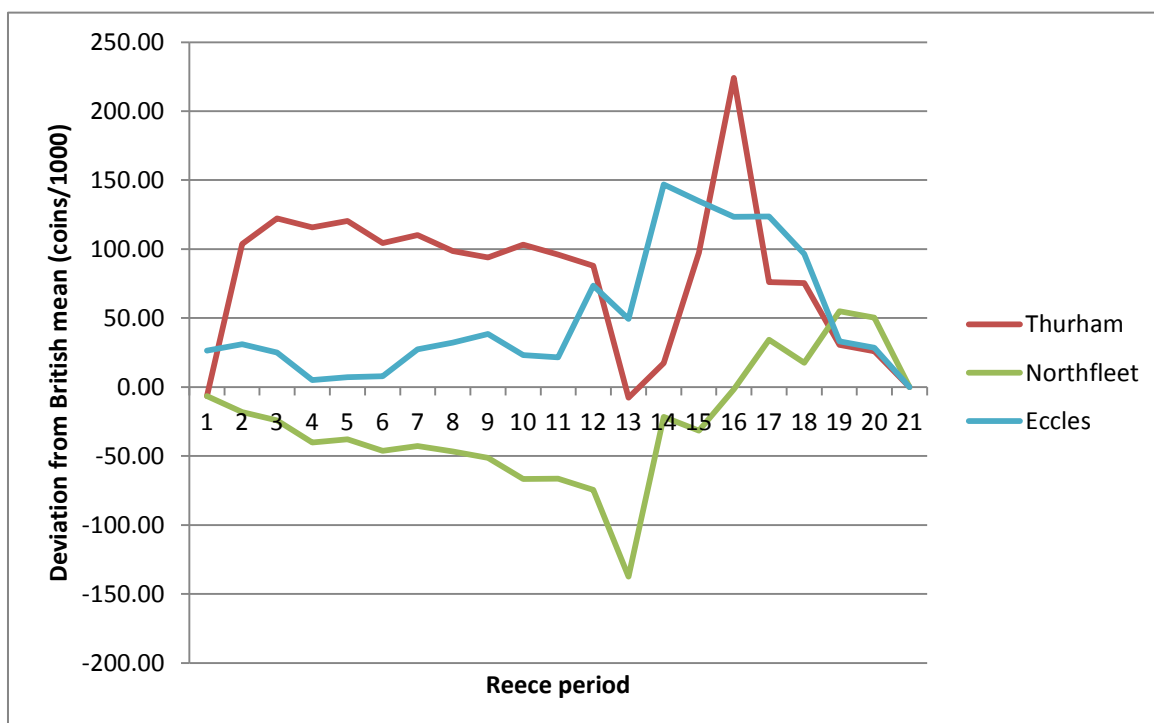


Fig. 11.6 Cumulative Roman coin-loss at Thurnham, Northfleet and Eccles Villas, as deviation from the British mean

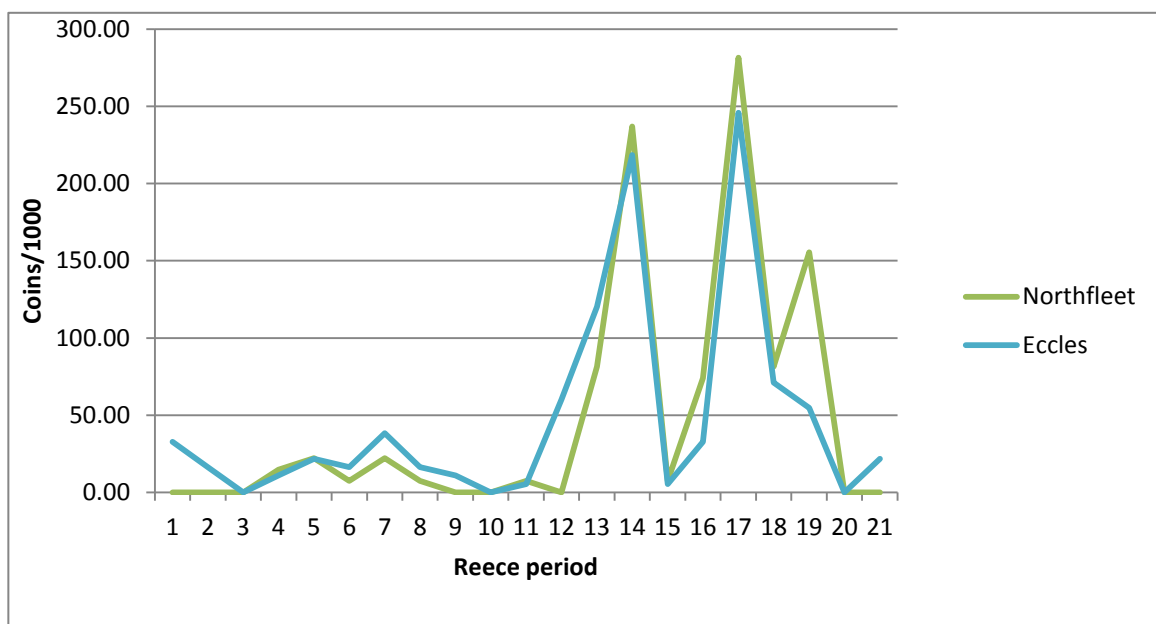


Fig. 11.7 Roman coin-loss at Northfleet and Eccles Villas, expressed in permills

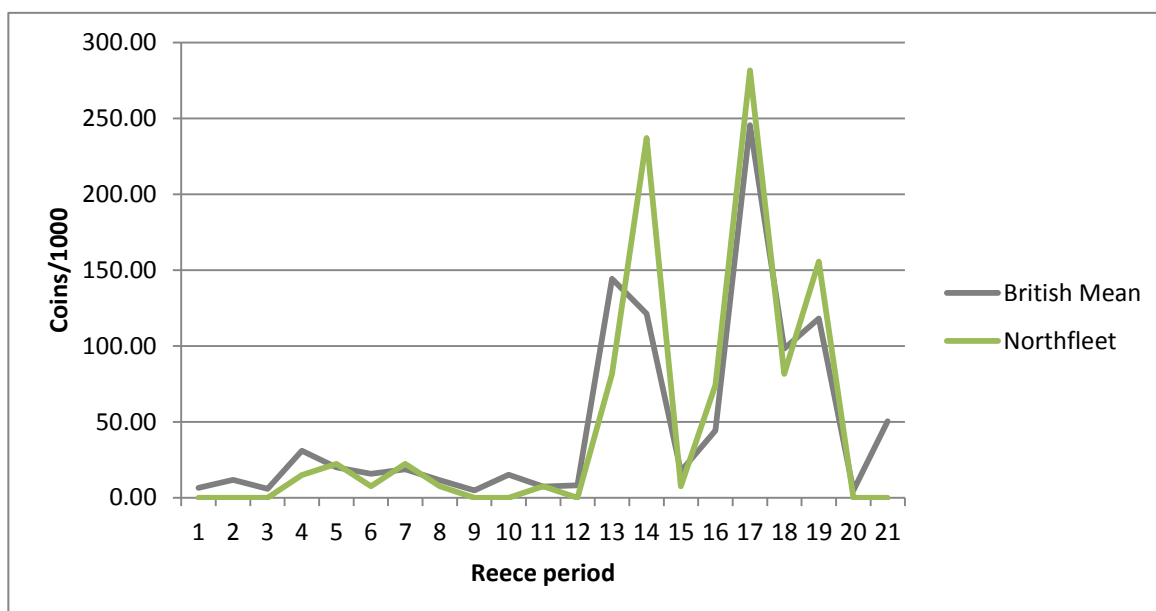


Fig. 11.8 Roman coin-loss at Northfleet Villa, expressed in permills in comparison to British mean

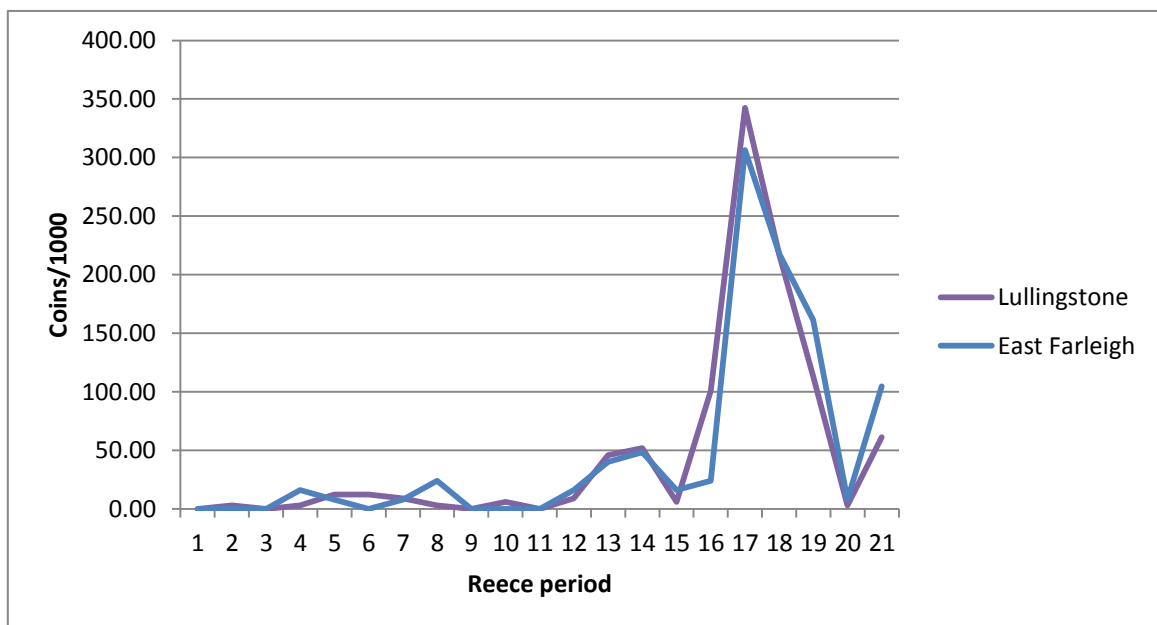


Fig. 11.9 Roman coin-loss at Lullingstone and East Farleigh Villas, expressed in permills

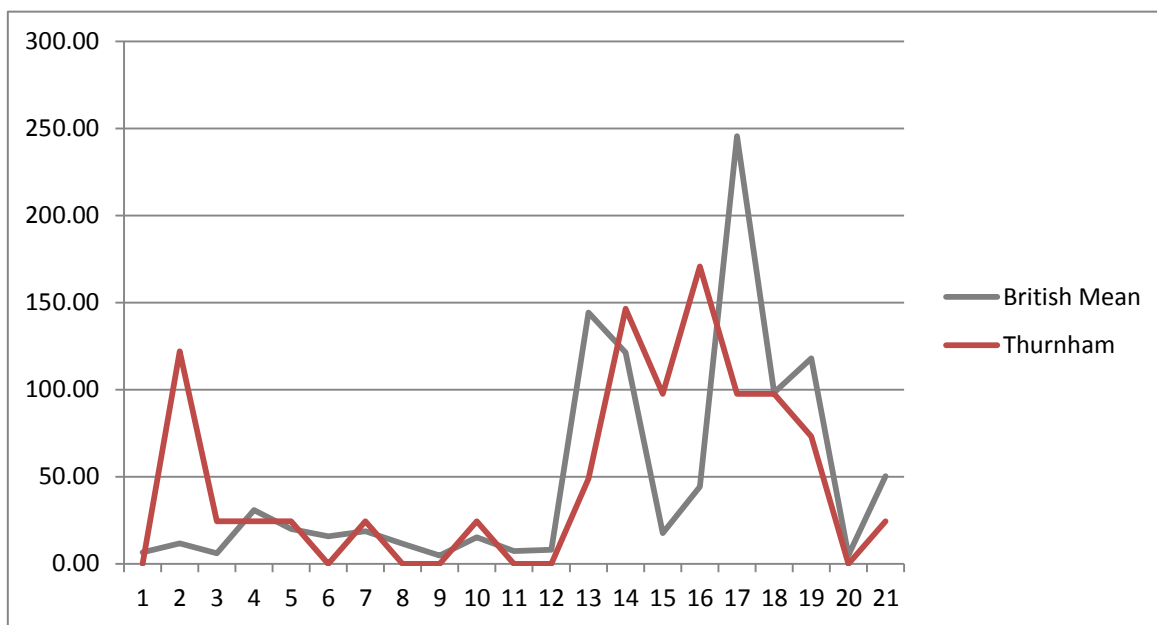


Fig. 11.10 Roman coin-loss at Thurnham Villa, expressed in permills in comparison to British mean



Plotting all of Kent's villas together in terms of per mill coin-loss leads to a rather congested chart (hence the usefulness of Reece's method); nevertheless, some instructive comparisons can be made (Fig. 11.11).

Until period 7 (AD 138-161) most of the villas lie below the British mean. After a strong start, this applies even to the early foundations, Eccles and Thurnham. Coin-loss between periods 4 and 5 seems particularly high at Sholden, but little can be said about this site as yet.

There is an exaggerated peak in coin-loss for period 7 (AD 138-161) at Minster, Eccles and Sholden. Thurnham and Northfleet also peak at this point although only slightly exceeding the British mean in absolute terms. This more or less coincides with the aggrandisement of the east range and construction of the detached bath house at Northfleet and is a little later than the proposed construction of the early 2<sup>nd</sup> century house at Thurnham, possibly coinciding with the construction of its aisled building. It coincides with second phase alterations at Eccles. A note of caution is sounded by Holman (2005): many of the coins of this period from Minster are worn and a number were found in late contexts.<sup>ii</sup> Booth (2006b) likewise notes the poor condition of most of the 1<sup>st</sup> and 2<sup>nd</sup> century coins at Thurnham so it perhaps unwise to read too much into this spike.

The spike in the British mean between periods 13 and 14 (AD 260-296) marks an apparent change in the coin supply to Britain. The peak of period 13 is associated with large numbers of low value radiates (Reece 2002, 46). Period 14 is associated with Aurelian's monetary reforms; these dispensed with low value coinage and provoked widespread copying of the earlier low-denomination coins (resulting in the so called 'Barbarous Radiates'; Reece 2002, 48). For Kent's villas (as indeed for the majority of Kent sites), the spike is clearly associated with period 14, rather than period 13.

Rather than being a true anomaly, however, this probably represents an error introduced into the British mean by a) the difficulty of distinguishing good copies (period 14) from period 13 coins and b) the fact that many copies are smaller and lighter and so more easily overlooked. This is a particularly important consideration for the older excavations from which the British mean was constructed as metal detecting was not then routine on archaeological sites; it is likely that the British mean should actually be higher for period 14 and lower for period 13 (D. Holman pers. comm.). The important factor is the presence/absence and magnitude of the period 13-14 peak, not its shape.

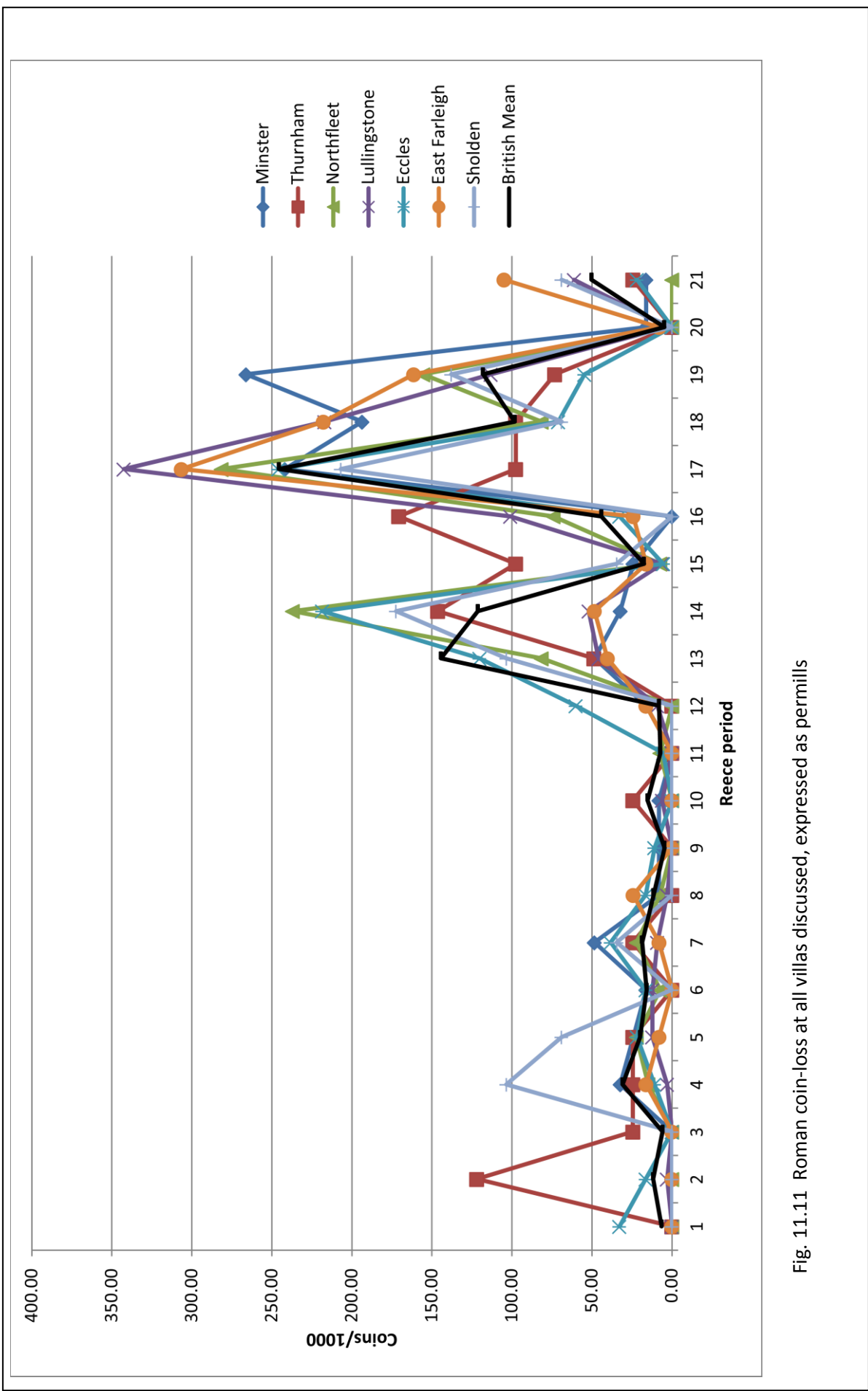


Fig. 11.11 Roman coin-loss at all villas discussed, expressed as per mille

Lullingstone, East Farleigh and Minster, as indicated above, all had breaks of occupation in the 3<sup>rd</sup> century and these are reflected in low levels of coins during the radiate period.

All the villas except Thurnham (as noted above) show a sharp increase, mostly beyond that of the British mean, in period 17 (AD 330-348). Only Minster, Northfleet and Sholden display the Valentinianic peak; that at Minster is particularly high and Holman (2005) notes that only five sites listed by Reece exceed it. This seems anomalous in view of the decline of the villa but the coins may reflect commercial activity connected with the late Roman kiln (and possibly brewing). Thurnham, Minster and Northfleet end the Roman period with coin levels below the British mean despite continued evidence of activity of some kind. Sholden, Lullingstone and (in particular) East Farleigh have a relatively strong showing of the latest issues used indicating activity into the 5<sup>th</sup> century.

### **11.3 Coin-loss patterns at nucleated and other non-villa sites**

When the other non-urban, non-military coin assemblages are plotted in terms of cumulative coin-loss minus British mean (Fig. 11.12), sites are again broadly divided between those which are well above the mean for the later part of the chart and those which are well below. Westhawk Farm has been omitted from this particular plot as its profile is quite distinct and difficult to include at the same scale.

Amongst these sites, there are two temple/sanctuary sites: Springhead and Worth. Their plots are quite different, reflecting the early Roman emphasis of the Springhead sanctuary site as against the later Roman bias of coins at Worth (Fig. 11.13). When plotted as permills (Fig. 11.14), there are more similarities visible between the two sites, both of which more or less follow the fluctuations of the British mean though with variations in magnitude. The main differences are the large numbers of coin-losses in the Early Roman period at Springhead and Worth's early radiate spike.

That Worth, with its Iron Age antecedents should have such lower coin-losses in the Early Roman period may seem surprising; we are comparing, however, what may well have been a regionally important religious centre, situated on the main route in and out of the south east, with a rural shrine, near the coast but not on the road system. In fact, although

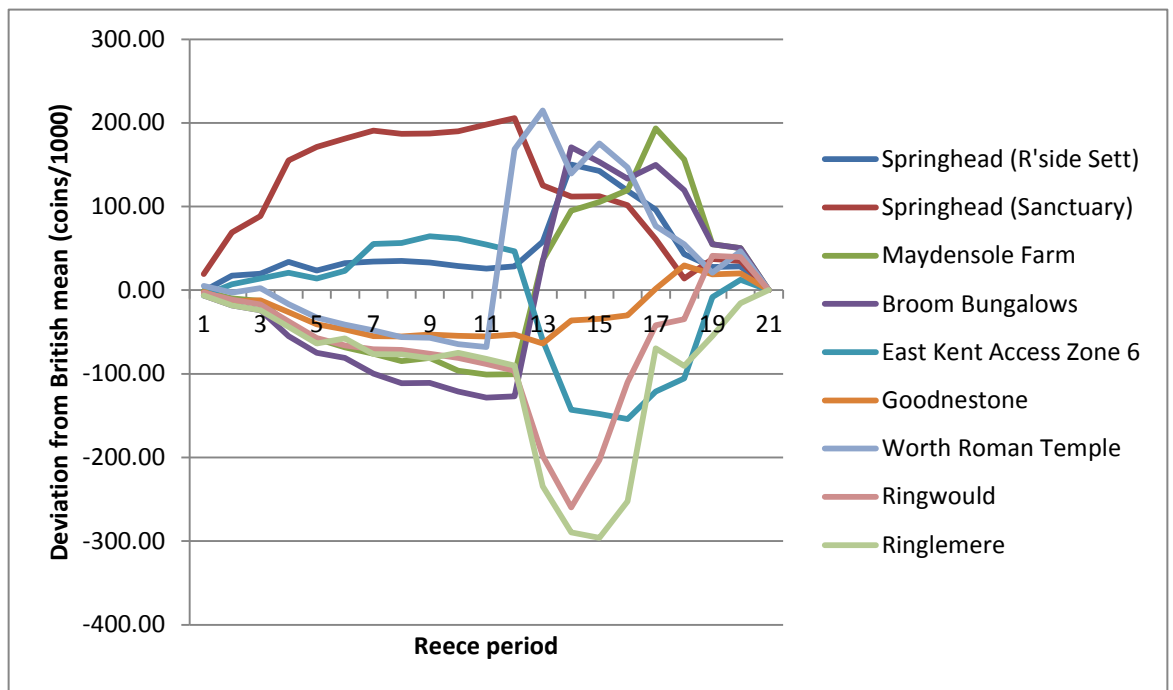


Fig. 11.12 Cumulative Roman coin-loss at non-villa, non-urban, non-military sites as deviation from the British mean

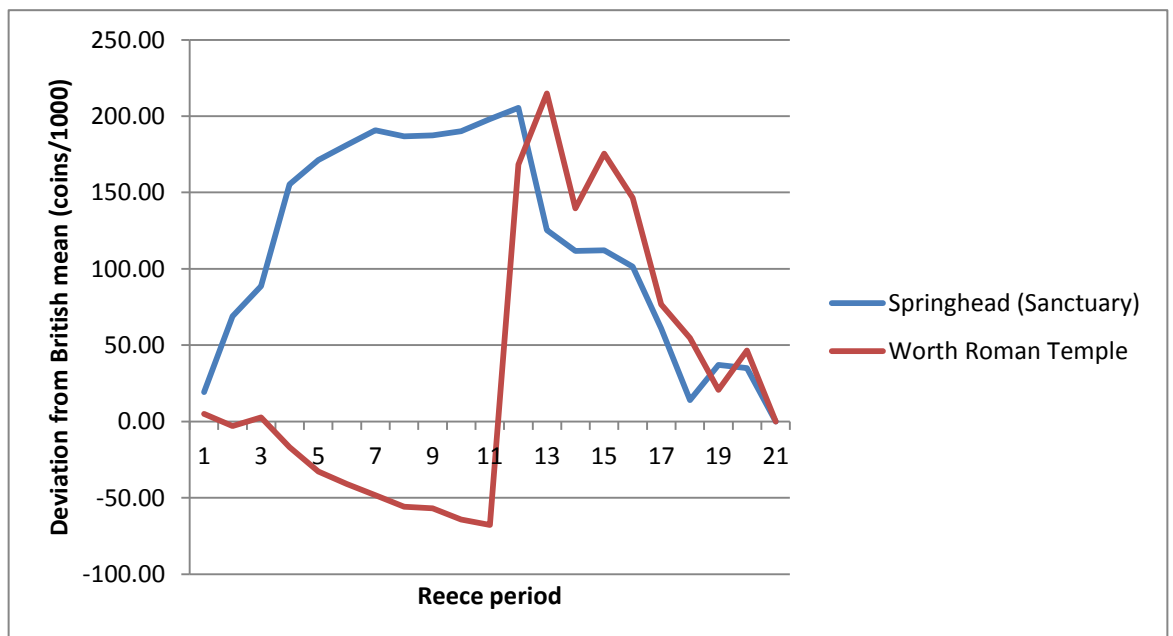


Fig. 11.13 Cumulative Roman coin-loss at Springhead Sanctuary and Worth Roman Temple as deviation from the British mean

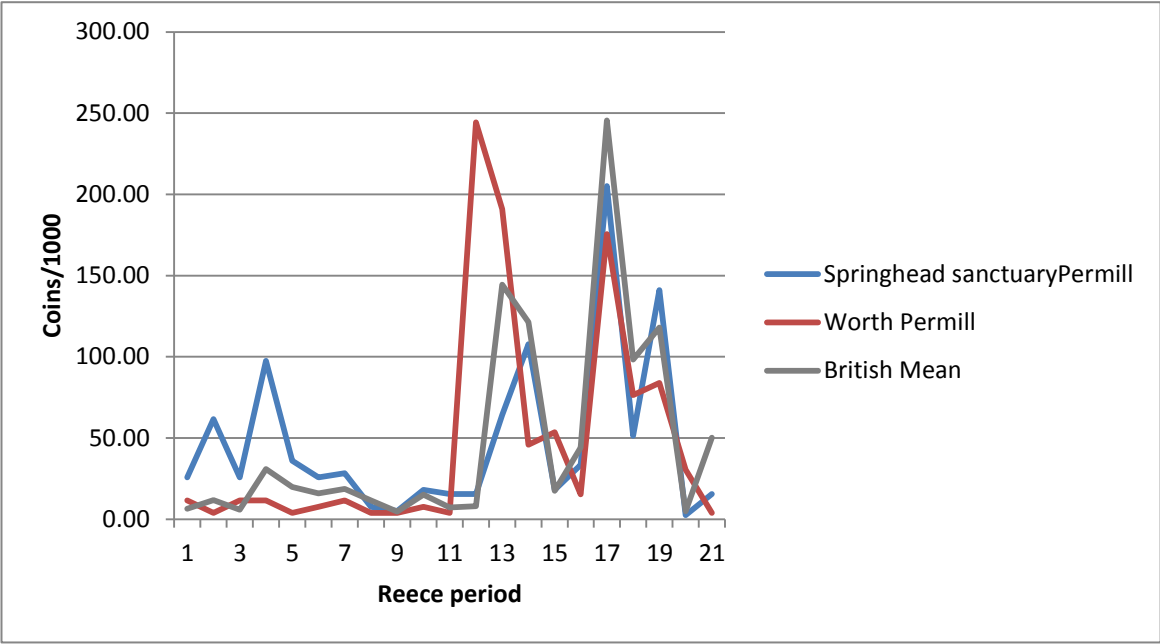


Fig. 11.14 Comparative Roman coin-loss at Springhead Sanctuary and Worth Roman Temple expressed as permills and compared with the British mean

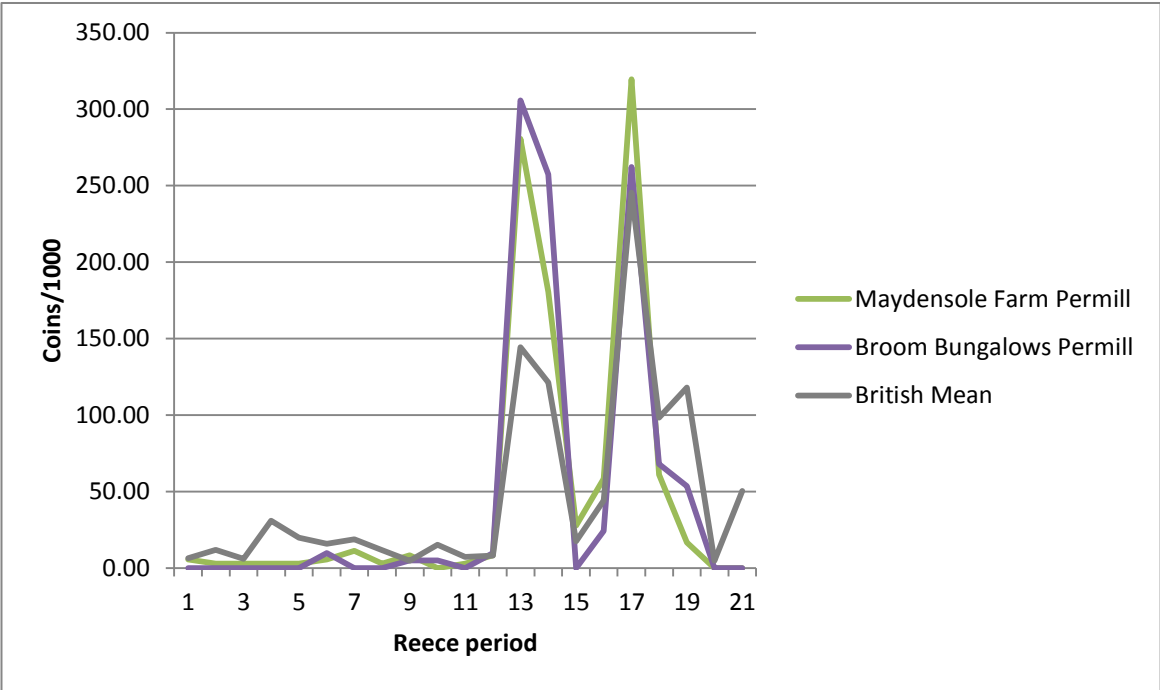


Fig. 11.15 Comparative Roman coin-loss at the linked downland sites at Maydensole Farm and Broom Bungalows, expressed as permills and compared with the British mean

peaking earlier in the radiate period, Worth's (cumulative loss-British mean) profile is not unlike those of the linked downland settlements at Maydensole Farm and Broom Bungalows (Fig. 11.15), so perhaps this at least partially reflects coin-loss in the East Kent Downs area, again chiming with Plouviez' findings in Essex regarding the importance of geography as an influence on the composition of coin assemblages (1995, 74).

The similarities between Broom Bungalows and Maydensole Farm are as might be expected, marked, with very low levels of coin-loss before period 13 when there is a large peak in the radiate period. The sites lack the Valentinianic peak and produce no coins in periods 20 and 21.

Nothing is known of the Ringwould and Ringlemere sites other than their metal detected finds, predominantly coins. When charted by deviation from the British mean (Fig. 11.16) they fit in very well with the profiles of Lullingstone and East Farleigh Villas suggesting that they too may be villas with periods of 3<sup>rd</sup> century abandonment. When charted in terms of permills (Fig. 11.17) they are clearly below the mean during the radiate period but peak highly in periods 17 and 19.

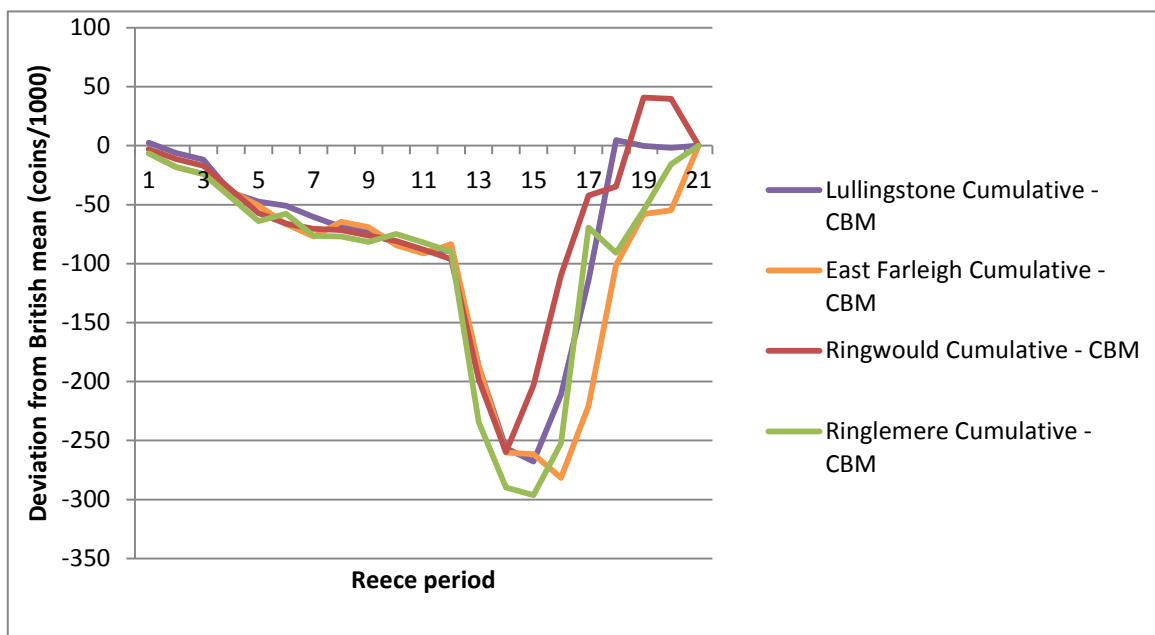


Fig. 11.16 Deviation from the British mean in cumulative coin-loss at Ringwould and Ringlemere compared with Lullingstone and East Farleigh Villa sites

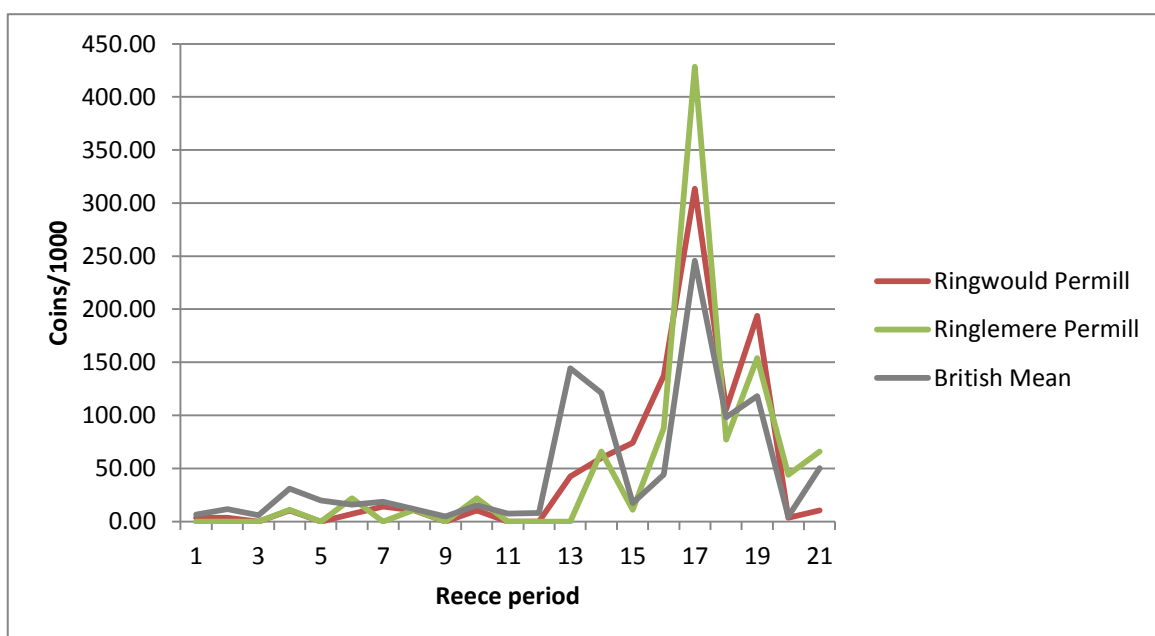


Fig. 11.17 Comparative Roman coin-loss at Ringwould and Ringlemere, expressed in permills and compared with British mean

There remain four nucleated settlements, all with very different profiles (Figs. 11.18-11.21). The roadside settlements at Springhead and Westhawk Farm (Fig. 11.18) are both notable for the relatively large quantities of early coins which keep both profiles above the mean for the entire Roman period. Other than that they are quite different. Springhead produced four pre-Conquest Roman coins, although these are likely to have been lost subsequent to the Conquest (Cooke and Holman 2011a, 162). It also produced 22 Claudian coins including a *denarius*, an unusual find in Britain suggestive of early post-Conquest activity (ibid.). There was continued robust coin-loss and deposition into the 5<sup>th</sup> century (Fig. 11.19) and the cumulative coin-loss profile would fit in quite well with the group of towns and eastern settlements in Reece's Fig. 9. (1991). The profile actually disguises a much more complex situation described by Cooke (ibid. 163 and Fig. 66), as it is made up of distinct patterns of coin-loss from different areas of the site.

Westhawk Farm's cumulative loss profile (Fig. 11.20) can be compared to those of sites on Reece's Fig. 6 (1991) which include Southwark, London Guildhall Museum, Ribchester, Coventina's Well, Brecon and Fishbourne, an ostensibly eclectic mix of sites linked by having known, or possible, early military connections (e.g. the suggested early military supply base at Fishbourne; Reece 1991, 190; Guest 2008, 139). Guest has also been able to add the *Classis Britannica* fort at Dover and the sacred spring at Bath to this pattern. These sites all have in common a high number of early coins followed by lesser levels of loss from the 3<sup>rd</sup> century onwards (ibid. 139). As shown in Fig. 11.21, Westhawk Farm's coin plot in terms of permills is virtually the reverse of the British mean, with low levels of loss during the radiate period and only one (issued AD 317) in the 4<sup>th</sup> century. That the sites other than Westhawk Farm tend to be military in nature or to have had definite or postulated early military connections suggests that Westhawk Farm too might have had some early military influence, or perhaps have benefitted in some way from associations with the military.

Suggestions of military connections at Westhawk Farm have focused on the site's proximity to Lympne with the latter potentially a base of the *Classis Britannica* in the earlier Roman Period (cf. Cunliffe et al. 1980, 227; Millett 2007, 175); the *Classis Britannica* is widely thought to be associated with iron working sites (Cleere 1975; Cleere and Crossley 1985) and Westhawk Farm produced tiles in a fabric associated with ones found elsewhere bearing CLBR stamps (Booth et al. 2008, 390-1). This would not explain the strong early showing of coins, however: Cunliffe's excavations at the Stutfall 'Saxon shore' fort at Lympne (Cunliffe et al. 1980) produced only one coin predating period 10 (AD 279-275) and only one coin struck prior to 260 (from Roach Smith's



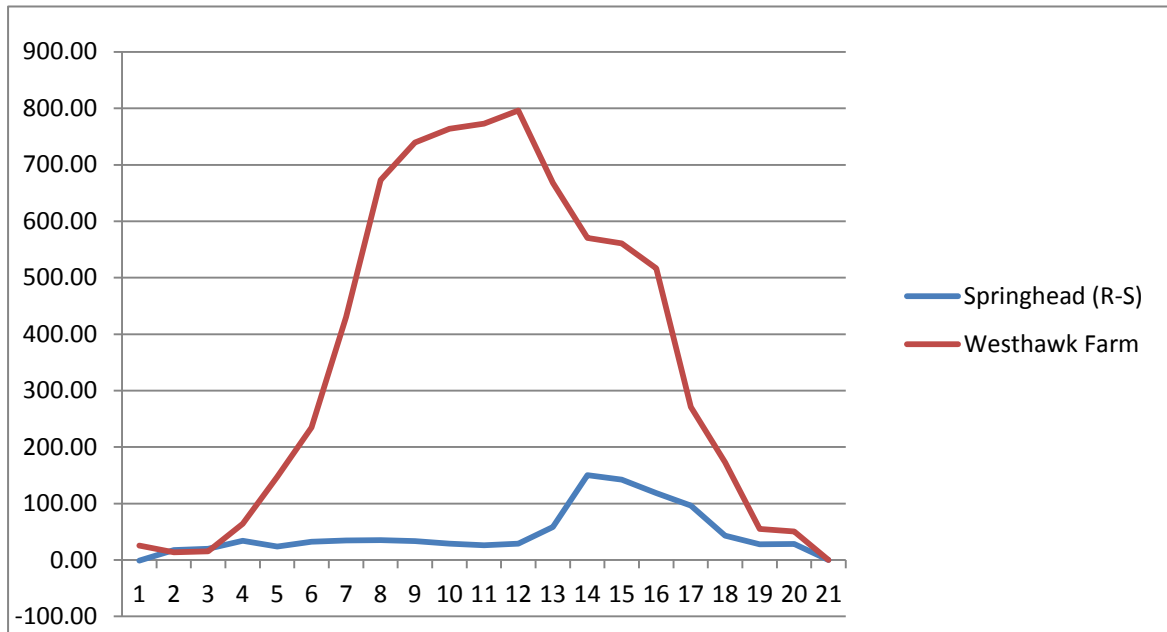


Fig. 11.18 Cumulative Roman coin-loss at Springhead roadside settlement and Westhawk Farm as deviation from the British mean

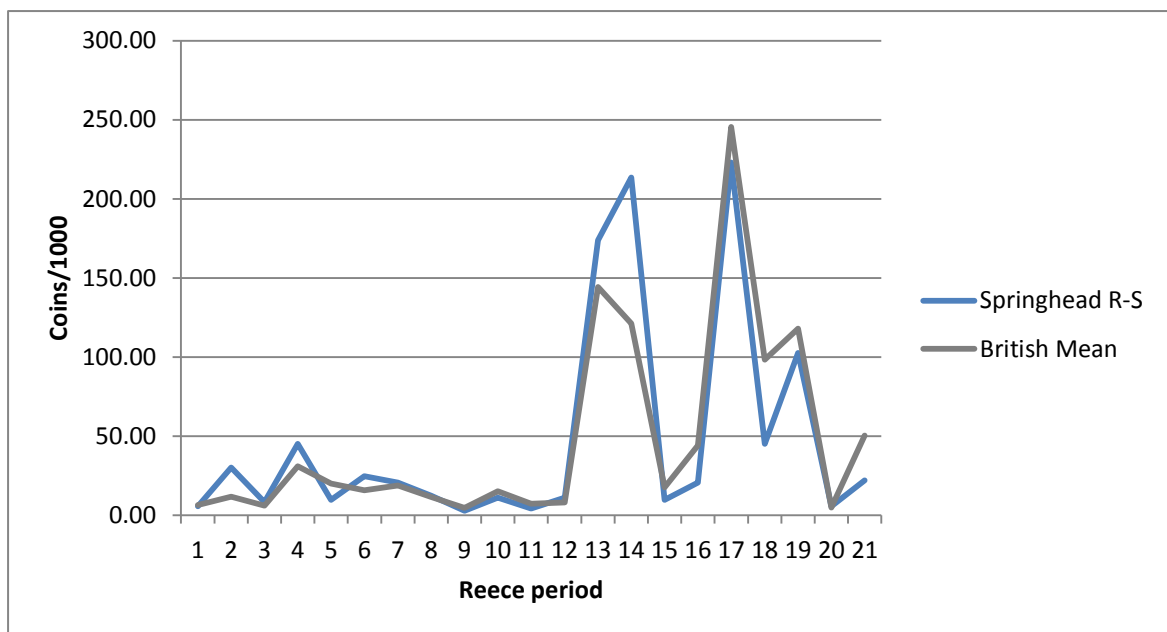


Fig. 11.19 Roman coin-loss at Springhead roadside settlement, expressed in permills and compared with British mean

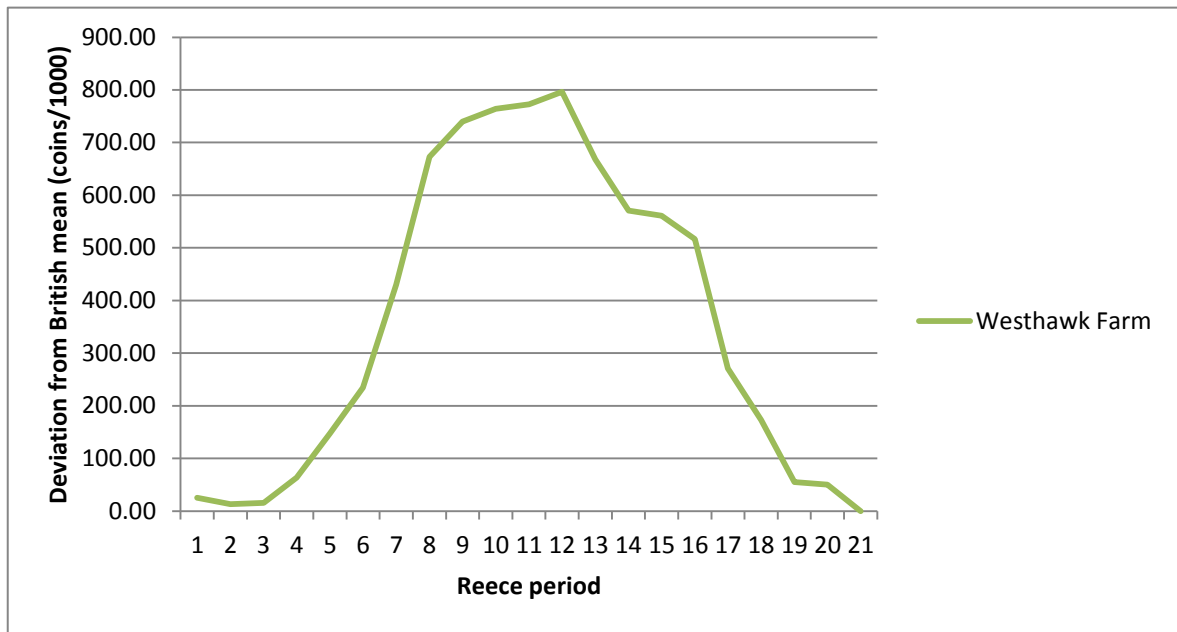


Fig. 11.20 Cumulative Roman coin-loss at Westhawk Farm as deviation from the British mean

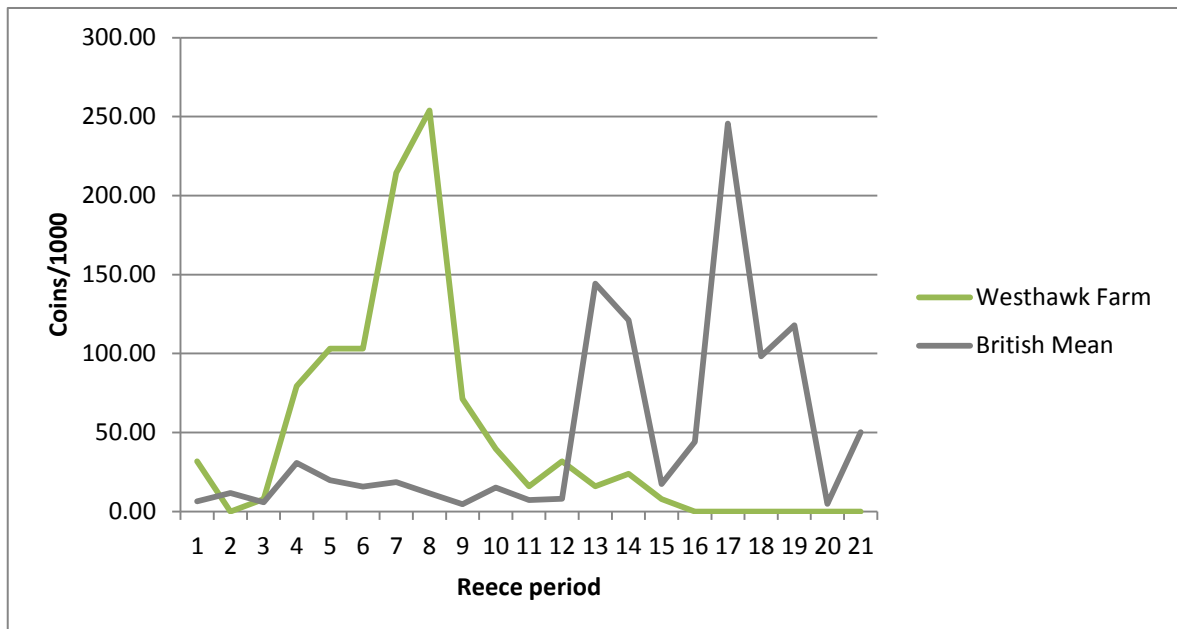


Fig. 11.21 Roman coin-loss at Westhawk Farm, expressed in permills and compared with British mean

excavations) is known from the site (ibid., 263). It is strongly suspected, however, that an earlier *Classis* base was in the vicinity (possibly lost to coastline change) on the evidence of stamped *Classis Britannica* tiles and an altar to Aufidius Pantera, thought on onomastic evidence to date to the earlier 2<sup>nd</sup> century (RIB 66; ibid., 285). It is of course possible that there was a military installation in the area still earlier and given the particular pattern of coin-loss, Booth et al.'s conclusion (2008, 391) that,

...those elements of the population (of what has, on other criteria including aspects of the finds evidence, been characterised as a 'rural' settlement) who were using coin in the 1<sup>st</sup> and 2<sup>nd</sup> centuries were dependent on a characteristically 'military' pattern of supply

seems justifiable.

As far as East Kent Access Zone 6 is concerned, speculation has been made that the sequence of substantial Late Iron Age/Roman ditches at the north end of the zone may have defined a large enclosure at the neck of the Ebbsfleet peninsula, effectively cutting it off from the rest of the island (Oxford Wessex Archaeology 2011, 58). It has further been speculated (ibid.) that this may have initially been associated with Caesar's expedition of 54 BC, perhaps as a temporary camp that was re-established.

In terms of actual numbers, the Roman coin assemblage from Zone 6 is not particularly large (n = 87), but it does again have a relatively sizable proportion of earlier coins (Fig. 11.22) including two coins of Claudius (struck AD 41-54), one of Nero and three Flavian. Cooke (Cooke and Holman 2011b, 54) comments that the presence of a *denarius* of Vespasian in particular hints at coin use in the late 1<sup>st</sup> century AD as these coins were regularly withdrawn from circulation and this coin is unlikely to have remained in use much beyond the devaluation which occurred under Trajan. The low levels of coins perhaps argue against a direct military presence on the site, but may suggest, like the pottery on other zones of the East Kent Access road scheme,<sup>iii</sup> some military influence. Particularly low levels of loss during the radiate period might suggest a phase of abandonment; by the 4<sup>th</sup> century, however, loss in terms of permills is above the British mean and it continues into the 5<sup>th</sup> century. Perhaps significantly, the rate of coin-loss starts to pick up in Period 13, approximately at the same time as the 'Saxon Shore' fort was constructed.

The final site to consider is at Goodnestone (Fig. 11.23) which has a profile very close to the British mean with the exception of low levels of earlier coins (periods 1-7). The finds, which are

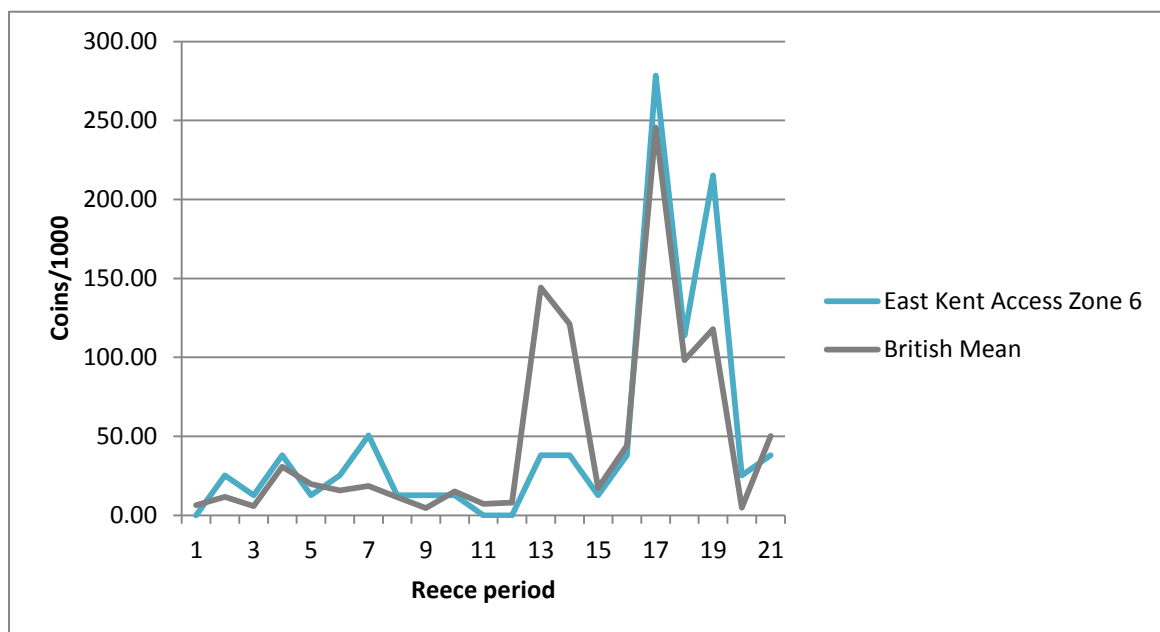


Fig. 11.22 Roman coin-loss at East Kent Access Zone 6, expressed in permills and compared with British mean

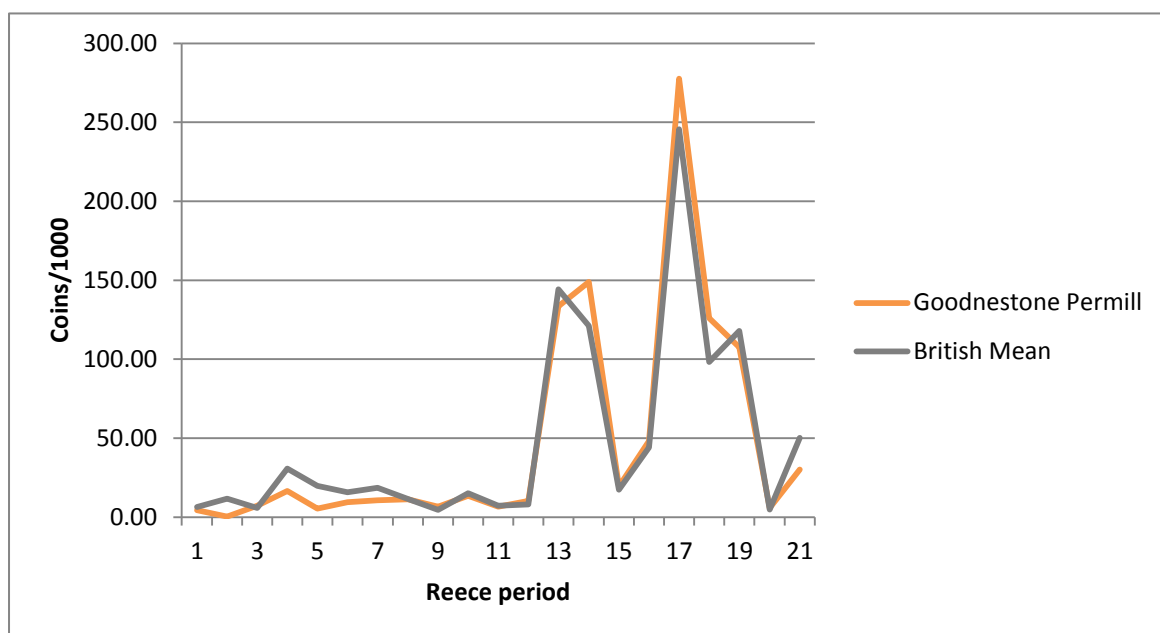


Fig. 11.23 Roman coin-loss at Goodnestone, expressed in permills and compared with British mean

very large in number (2223 coins), are associated with an extensive area of cropmarks between Goodnestone Wood and Nookets Wood and also with an enclosure cropmark to the east of Nookets Wood. Gradiometer survey of part of the area revealed evidence of a number of enclosures associated with a ditched trackway, pits and potential sunken-featured structures (Oxford Archeotechnics 1997). Potentially significant finds from the site include a lead sealing (Still 1997) and items of pre-Flavian military equipment (Bishop 1995). Field walking has recently produced pottery including *Terra Rubra* and Gallo-Belgic white ware beaker sherds (pers. comm. S. Willis).

There are also some significant features to the coin assemblage (D. Holman pers. comm.). It includes seven Republican coins (including the earliest bronze [89 BC] so far recorded in Britain along with its corresponding *denarius*), three other pre-Conquest coins (including an extremely rare Augustan moneyer issue *denarius*) and a number of other rarely seen issues. Of contemporary date with these coins is a recently recovered handle from a Dressel 1 amphora in Italian fabric (pers. comm. S. Willis). There is no Valentinianic spike, but the fall in the preceding period is correspondingly smaller; there are a large number of period 21 coins, suggesting activity into the 5<sup>th</sup> century.

It would appear that this must have been a successful and long lived settlement with tantalising hints of possible early official/military connections. Early issues may form a relatively low proportion of the assemblage, but throughout the 1<sup>st</sup> and 2<sup>nd</sup> centuries it produces consistently high actual numbers of coins in relation to other Kentish sites (Table 11.5), in most periods similar to or higher than Springhead Sanctuary and/or Westhawk Farm. Surface collected samian finds are consistent with this pattern (pers. comm. S. Willis; see also Reilly [2011] for a synthesis of information from this site).

Reece period	1	2	3	4	5	6	7	8	9	10
Site	to AD 41	41-54	54-69	69-96	96-117	117-138	138-161	161-180	180-192	193-222
Goodnestone	10	1	16	37	12	21	24	25	15	30
Springhead sanctuary	10	24	10	38	14	10	11	3	2	7
Westhawk Farm	4	0	1	10	13	13	27	32	9	5

Table 11.5 Coin-losses (numbers of coins) in Reece periods 1-10 at Goodnestone, compared to Springhead Sanctuary and Westhawk Farm

#### 11.4 Coin-loss patterns at smaller settlements

It is difficult to assess the impact of Late Roman low value coinage on smaller rural settlements in Kent as so many appear to have gone out of use before the radiate period. Only those known or speculated to be villas, nucleated settlements or temples seem to produce coins in any numbers and even some of these produce very few, seemingly also for chronological reasons: Monkton was probably abandoned prior to the radiate period and The Mount Villa (for which 14 coins are published, of which 12 are radiate copies) was abandoned by the earlier 4<sup>th</sup> century.

Of the non-villa, non-nucleated sites, only two produced coins in double figures. One of these (as might be predicted) was the Late Roman site at Hazells Road (Booth 2006c): the entire assemblage (n = 28) was of the (mostly mid-) 4<sup>th</sup> century and dominated by imitations. The other was on the Farningham-Hadlow pipeline (MT01) which produced 19 coins spanning the 1<sup>st</sup> to the 4<sup>th</sup> centuries. Of the 16 that can be assigned to Reece periods, eight are of period 13-14, one of period 15 and 4 of periods 17-18 (Wessex Archaeology 2010, 56-69). A high degree of residuality was noted in some contexts. Publication of this site is awaited but it was associated with fairly large amounts of smithing slag as well as scraps and off-cuts of sheet lead, suggesting that metal working of various types may have been undertaken here, perhaps on a commercial basis (ibid. 61-63).

#### 11.5 Discussion

Kent's rural sites are associated with a varied set of patterns of coin-loss amongst which some features be picked out.

There is a group of sites which are characterised by particularly low levels of coin-loss (compared to the British mean) in the radiate period. These include Minster, Lullingstone and East Farleigh Villas, East Kent Access Zone 6, Ringwould and Ringlemere. The villa sites are known to be associated with periods of abandonment in the 3<sup>rd</sup> century, followed by reoccupation of a somewhat different nature and it is reasonable to draw the same inference of abandonment or at least reduced levels of activity for the other three sites. Ringlemere and Ringwould in particular have cumulative coin-loss frequency profiles very similar to the villas and while it is unsafe to deduce from this fact alone that they *are* villas,

this must be a possibility. Although radiate levels are low at East Kent Access Zone 6, this is the point at which the rate of coin-loss starts to increase and it seems likely that that coin use at this site was closely linked to activity at Richborough.

Aside from these sites, coin-loss rates in the radiate period are above – and sometimes considerably above – the British mean (Table 11.6). For periods 13 and 14 (the periods of greatest loss) these include Springhead roadside settlement; Northfleet, Eccles and Sholden Villas; Maydensole Farm Broom Bungalows and Goodnestone nucleated settlements.

Nine of the 17 sites produce figures above the British mean for period 17 (AD 330-348), the next peak of coin-loss. As one might expect, because of the way the permill figures are calculated, it tends to be the early foundations (including Springhead settlement and sanctuary, Westhawk Farm, Minster, Thurnham) that are below the mean.

	<b>13 &amp; 14</b>	<b>17</b>	<b>19</b>
British Mean	265.54	245.54	118.00
Northfleet Permill	318.52	281.48	155.56
Broom Bungalows Permill	563.11	262.14	53.40
East Farleigh Permill	88.71	306.45	161.29
East Kent Access Zone 6	75.95	278.48	215.19
Eccles Permill	338.80	245.90	54.64
Goodnestone Permill	282.50	277.55	107.51
Lullingstone Permill	97.86	342.51	113.15
Maydensole Farm Permill	461.11	319.44	16.67
Minster Permill	80.65	241.94	266.13
Ringlemere Permill	65.93	428.57	153.85
Ringwould Permill	102.11	313.38	193.66
Sholden Permill	275.86	206.90	137.93
Springhead R-S Permill	387.14	222.98	102.60
Springhead sanctuary Permill	171.79	205.13	141.03
Thurnham Permill	195.12	97.56	73.17
Westhawk Permill	39.70	0.00	0.00
Worth Permill	236.64	175.57	83.97

Table 11.6 The three peaks of Roman coin-loss: Kent sites compared to the British mean (figures above mean highlighted)

The Valentinianic spike is present in eight of the plots and interestingly occurs on all those sites where lower than average rates of radiates are lost. This is not just an effect of the relative permill proportion of coin-loss at these two points, but like the British mean involves a peak in period 17, followed by a trough in period 18 before a further peak in period 19. By contrast, other sites have lower permill levels of coin-loss in period 19 than in period 18, albeit offered with a slight positive kink in the profile of the plotted line.

Reece has suggested (1987) that comparison of the ratio of coins of AD 260-296 (periods 13 & 14; Reece's phase B) to those of AD 330-401 (periods 16-21; phase D) is instructive. Sites in Reece's *Roman Coins from 140 sites in Britain* (1991) divided 66/74 into those with ratios of phase B to phase D of below and above 0.5. Amongst these, urban sites tend to have ratios of radiates above 0.5 and rural settlements and villas below 0.5, although there are a significant number of exceptions. A number of these seem to have a geographical basis, since most of the towns with lower ratios of radiates and most of the rural settlements and villa sites with higher ratios of radiates are found in the east of the country. It is no surprise then that over half of the 17 sites considered here have B/D ratios of >0.5 (Table 11.7) or that amongst the seven that are lower, three are villas known to have suffered periods of 3<sup>rd</sup> century abandonment. It would seem that all things being equal, one might *expect* rural settlements and villas in Kent which were not subject to periods of abandonment to have B/D ratios of 0.5 or above.

Site	B	D	B/D
Ringlemere	6	70	0.09
East Kent Access Zone 6	6	53	0.11
East Farleigh	13	99	0.13
Minster	12	91	0.13
Lullingstone	35	241	0.15
Ringwould	29	178	0.16
Springhead sanctuary	73	162	0.45
Goodnestone	651	1216	0.54
Sholden	8	14	0.57
Northfleet	43	70	0.61
Thurnham	8	12	0.67
Springhead R-S	291	291	1.00
Westhawk Farm	9	0	1.00
Eccles	73	72	1.01
Maydensole Farm	169	143	1.18
Worth	126	97	1.30
Broom Bungalows	118	79	1.49

Table 11.7 Ratio of coins of Phase B to those of Phase D



Worth additionally would not conform with Reece's temple sites, being comparable only with what he describes as the "strange" Henley Wood (1991, 103) but as we have seen, it has a pattern of loss similar to other sites on the eastern downs. Worth is below the British mean on all counts, notwithstanding its status as a temple, although it must be recalled that the coins listed are probably but a small proportion of those which have been recovered from the site.

It is generally held (e.g. Millett 1990, 169) that later Roman period changes to the monetary system involving the import of large numbers of low denomination issues enabled wider access to coinage. This brought it into use for everyday transactions among the civilian and rural populations. Esmonde Cleary (1989, 96) points to the production of counterfeit radiates, suggesting that they were minted and used as small change because the civilian population wanted and needed them. Walton (forthcoming) suggests, as an alternative, that it might reflect changes in the way that the Roman administration exploited the countryside, reflecting the pay of officials and soldiers responsible for extracting taxes in kind such as the *annona militaris*.<sup>iv</sup> Kent's potential for arable production might certainly have been exploited in such a way leading to its relatively high levels of radiates and periods 17 and 19 coinage.

If this is the case, then it is at the villas and nucleated settlements that these transactions were taking place. Certainly one might envisage communities such as Goodnestone or Maydensole Farm/Broom Bungalows as performing a market function. By this point the character of a number of villas had changed and it is possible that some such sites were taken over by the authorities as collection points. Hazells Road with its corn-drier (of the type otherwise strongly associated with villa sites), Late Roman fine wares and 28 Late Roman coins might also relate to such a function. Nevertheless, a number of these sites (e.g. Goodnestone) are away from the main road system making them seem less likely points for official contact.<sup>v</sup>

In sum, coins were lost in quantity on only a small number of Kent's rural sites. Clearly the area excavated/investigated is of relevance: a large area of cropmarks subject to extensive metal-detecting or a substantially excavated villa will represent a far greater volume of examined soil than the rural settlement partially clipped during linear schemes such as HS1 or the East Kent Access scheme.

Chronology is also important: low levels of coin-loss on smaller rural sites also largely reflect the demise of these sites prior to high levels of coin use. By contrast there are a number of nucleated sites which have been subject to little or no archaeological intervention but which on coin evidence appear to have survived well into the 4<sup>th</sup> century or beyond. This suggests that a pattern of nucleation may have been underway in Kent (at least in the east, for which both numismatic and cropmark evidence is better) by the 4<sup>th</sup> century, with more isolated site being abandoned in favour of villages. The villas which remained under occupation may have performed a similar function for their dependent workers. There could be a number of explanations for such a move, including internal and/or external political instability or increased taxation demands encouraging greater efficiency through the pooling of resources. This reduction in the number of rural settlement sites also ties in with development in Northern Gaul, as will be discussed in Chapter 13.

## Notes

<sup>i</sup> Although more technical methods of coin analysis have been developed (Lockyear 2000) Reece's methods are still widely applied (e.g. Brindle 2014) and have the advantage of being transparent. Their use allows comparison with his findings and with those for other Kent sites analysed in a similar manner.

<sup>ii</sup> It should also be noted that only three coins dated to before AD 330 came from the main period of excavation at the site. Nearly half the recovered coins from the site were found by metal detecting between 1990 and 1992.

<sup>iii</sup> The particularly large pottery assemblage from Zone 6 had not been assessed at the point that the post-excavation report was assembled.

<sup>iv</sup> Reece (2003, 142) points out that although soldiers and officials were paid in gold, this probably had to be converted at a moneychanger's into small change for everyday transactions (thus allowing the state to recoup its bullion).

<sup>v</sup> The finds (including ceramics) from Goodnestone are certainly anomalous in this respect. The site is on a direct line projected between Lympne and Richborough but no Roman road seems so far to have been discovered/conjectured for this alignment.

## **12 Rotary Querns and Millstones**

### **12.1 Introduction**

The near ubiquity of quernstones has already been mentioned (Chapter 8): they were a requisite for the grinding of grain on a daily basis so one might indeed expect to find evidence of them on all settlement sites excavated to any significant extent. This chapter will summarise the known data for Kent before analysing grinding stone assemblages from a subset of 30 sites in a manner analogous to that used for pottery in Chapter 10 above. The subset comprises all those sites surveyed in Chapter 10 for which there is information on quern-/millstones (25/31) plus five further sites whose morphology was discussed in Chapter 7 but for which there was insufficient ceramic data for analysis.

Querns and millstones are artefacts which lend themselves to classification both of form and material. There are relatively limited numbers of lithologies which are suitable for the manufacture of efficient grinding stones; this has led to the development of regional types of quern and their dissemination over sometimes wide areas. Theoretically it should be possible to provenance stones as accurately as pottery, but stone specialists with the relevant skills are few; moreover the similarities between certain related lithologies and conversely variation within outcrops of the same stone mean that there is often uncertainty about provenance.

### **12.2 The range of quern- and millstones found in Kent**

There are four main grinding-stone lithologies found in Kent; greensand, lava, Millstone Grit and puddingstone (or conglomerate).

Lava querns and millstones were widely imported into Roman Britain from the Mayen area of Germany (Crawford and Roder 1958, 68) and possibly from the Volvic hills of the Auvergne (Peacock 1980, 49). Examples manufactured from lava occur throughout the entire period and has previously been estimated to occur on 70% of sites in Kent (Roe 1998, 29) although this appears to have been from a relatively limited sample. By 2008, Roe

had recorded lava from 22 sites out of 32 with known quern and millstone finds. This writer has recorded the presence of quern/millstones on 100 sites/findspots in Kent (all types, not just rural),<sup>i</sup> of which lava occurs on just 56; nevertheless, it is still by far the most widely distributed grinding stone fabric found in Kent. Lava is probably under-represented, particularly in terms of causal finds, because its friable nature and propensity for weathering makes it unlikely to survive in plough soil. Even when carefully excavated it has a tendency to disintegrate; it may therefore go unrecognised and hence unreported.

Greensand querns occur throughout Kent. Copt Point, East Wear Bay, Folkestone is well established as the source for many of these (Keller 1998; 1989) and well over 300 Folkestone Beds Greensand examples in various states of completion/fragmentation have now been found from the foreshore, from stratified deposits and from Folkestone villa itself (ibid.; Winbolt 1925; Blanning 2006; Parfitt 2012, 6). These seem to date to somewhat earlier than the foundation of the villa itself. It seems that there must be another, later production site as greensand querns and indeed millstones exist in forms that are not found at East Wear Bay and which are more 'Roman' (i.e. disc- or drum-shaped as opposed to the more 'beehive'-like earlier forms). It is far from clear what proportion of greensand querns in Kent derive from the Folkestone Beds, still less from the outcrop at Copt Point. Of the types manufactured at East Wear Bay, the supposedly earlier variety, Kent 2 (Ingle 1989, 139-40) appear to occur more frequently outside the county than within, whilst the more common Kent 1 form occur chiefly in east Kent (Blanning 2006, 5).

A number of greensand querns from Thanet, particularly from prehistoric contexts,<sup>ii</sup> seem to be of a rather coarser greensand which has been identified as Folkestone Beds (P. Golding pers. comm.) but is very similar to Spilsby Sandstone from Lincolnshire. Given the distances over which quern and millstones are wont to travel, this would not be surprising, particularly as the rotary quern industry in Kent does not seem to have developed before the second half of the 1<sup>st</sup> century BC and there is scant evidence for pre-Roman rotary querns use elsewhere in the county (ibid. 24). Lodsworth Greensand has recently been recognised at Springhead (Shaffrey 2011a) and Westhawk Farm (Roe 2008) and may account for others previously thought to originate at East Wear Bay or that have been classified generically as 'greensand'.

Greensand querns/millstones occur on 35 of the 100 sites; they are particularly prevalent in Canterbury (all findspots counted as one site).

Puddingstone (a silcretised Palaeocene flint conglomerate) is associated especially with the plum-pudding shaped beehive querns particularly prevalent in East Anglia ('Hertfordshire Puddingstone'), although Green and Peacock (2011) have now shown that some were being imported from France. Observations by this writer and by Shaffrey (2007) suggest that there may well be a source in Kent, particularly as a variety of ferruginous, ferricrete-bonded puddingstone seems particularly common at Springhead.<sup>iii</sup> This site has an unusually large assemblage of 33 puddingstone querns representing nearly half of the 73 presently known from Kent. The remaining 41 derive from 31 sites, only four of which have more than one example. They therefore occur on 32% of the Kent sites known to have produced quernstones. Although Green and Peacock (2011) have found evidence for Late Iron Age importation of French puddingstone querns (and indeed suggest that there may be a pre-Roman source in Kent or Surrey) there appears at present to be no compelling evidence for the use of puddingstone querns in Kent prior to the Roman period.<sup>iv</sup>

Millstone Grit/probable Millstone Grit, usually sourced from Derbyshire, occurs on 27 of the 100 sites, a result which contrasts quite strongly with Roe's finding of occurrences on 16/32 sites (2008). It has been suggested that Millstone Grit was imported into Kent exclusively in the form of millstones (ibid., 192); Roe associates it with the movements of the *Classis Britannica*, noting that dateable finds tend to fall within the period during which it was transporting iron to the north, although a possible quern fragment apparently dating to before AD 70 has recently been found on Site B of the Pepperhill-Cobham road scheme (Shaffrey 2012).

Twenty five sites have produced stones of other/less well identified lithologies, often alongside the more common stone types: most frequently these are 'other sandstones'. In some cases this designation is used to distinguish them from identified greensand or Millstone Grit, in other cases they may include stones of these lithologies.

### **12.3 General distribution**

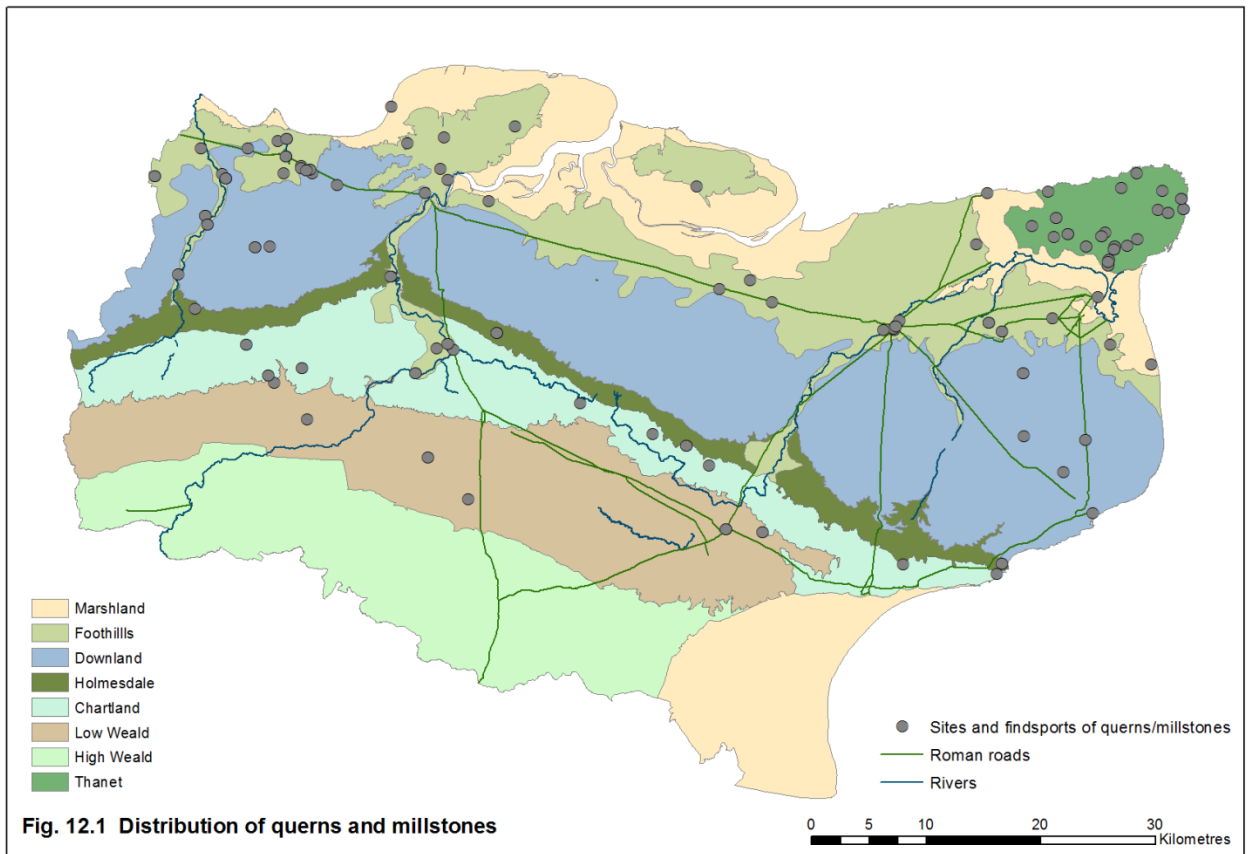
There is a gap in our knowledge of the grinding stones used in central Kent (Fig. 12.1) although this makes a convenient division point. In terms of sites, Lava, Millstone Grit and conglomerate stones are fairly evenly split between east and west of the county, with only greensand favouring the east at the expense of the west. As far as actual numbers are concerned, lava (Fig. 12.2) appears still to be fairly evenly distributed between east and

west<sup>v</sup>, greensand (Fig. 12.3) even more heavily favours the east (111 out of 145 examples, Folkestone Villa and East Wear Bay not included). There also seems to be an eastern bias to the occurrence of Millstone Grit (75 out of 123 examples; Fig. 12.4), whilst Puddingstone (Fig. 12.5) is slightly more frequent in the west even without the strong presence at Springhead (33 at Springhead; 22 in rest of west; 18 in east).

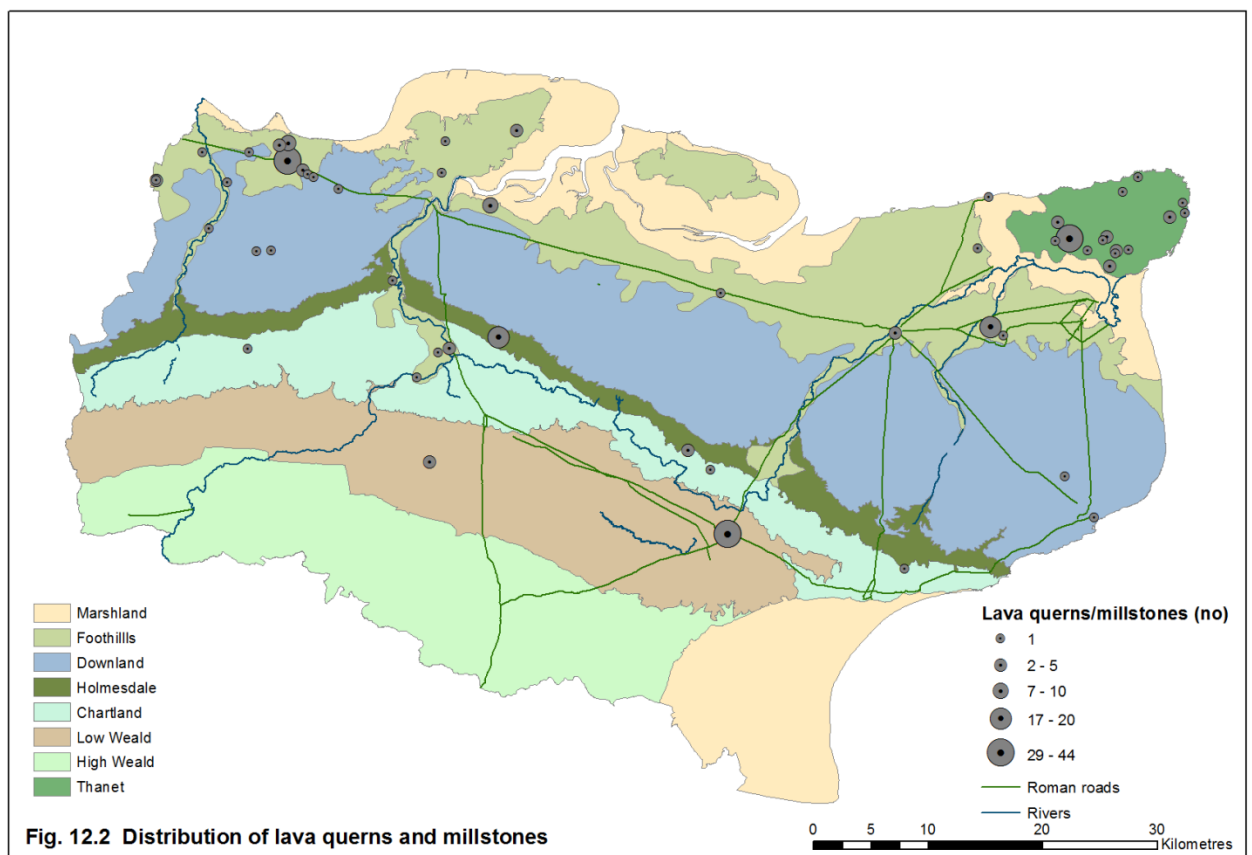
These biases probably tell us something of the distribution networks. The stones which probably originate in Kent (Folkestone Bed Greensand and putative local puddingstone) are distributed over relatively limited areas. The more standard Hertfordshire Puddingstone finds its way to both east and west, probably via coastal routes. Imported lava, which is light and easily transportable, achieved a wide distribution. Millstone Grit must have arrived by sea from the north and both Thanet and the Ebbsfleet valley received large quantities. The millstones which predominate would have been hard to transport overland and would presumably only have been required where milling in bulk was undertaken (but see below). If they are associated with the *Classis Britannica* then access may have been restricted. There are thus a number of factors influencing their distribution.

The overall distribution, unsurprisingly, is similar to the distribution of stone-founded buildings (see Fig. 7.7). It is thus initially rather surprising that the incidence of querns and millstones seems so rare on the North Kent Plain. This at least in part reflects the nature of the data for the area, comprising a combination of documentary evidence, antiquarian investigations, field survey and modern excavations which mostly await final publication.

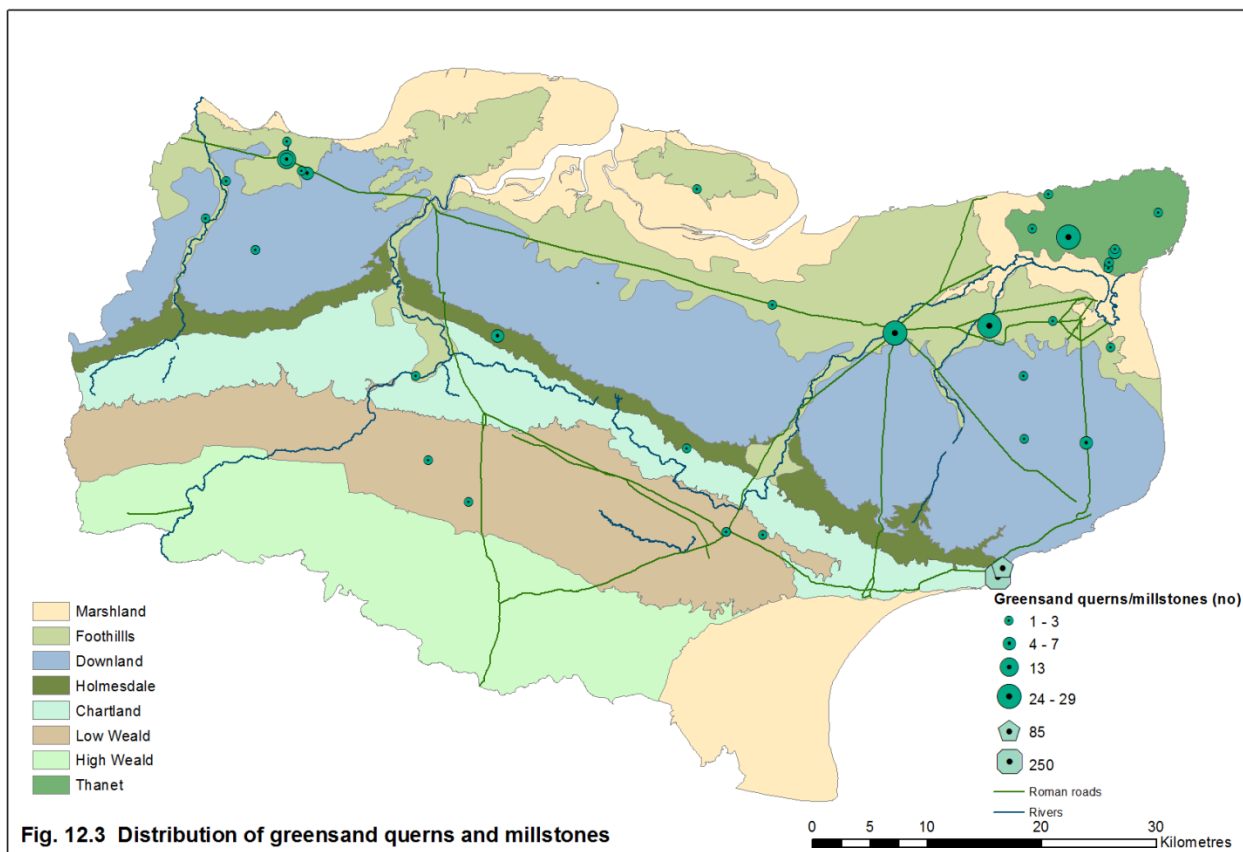
This, then, is the background against which to set the data from the 30 sites in this chapter's dataset which have produced rotary querns/millstones of identified lithologies.



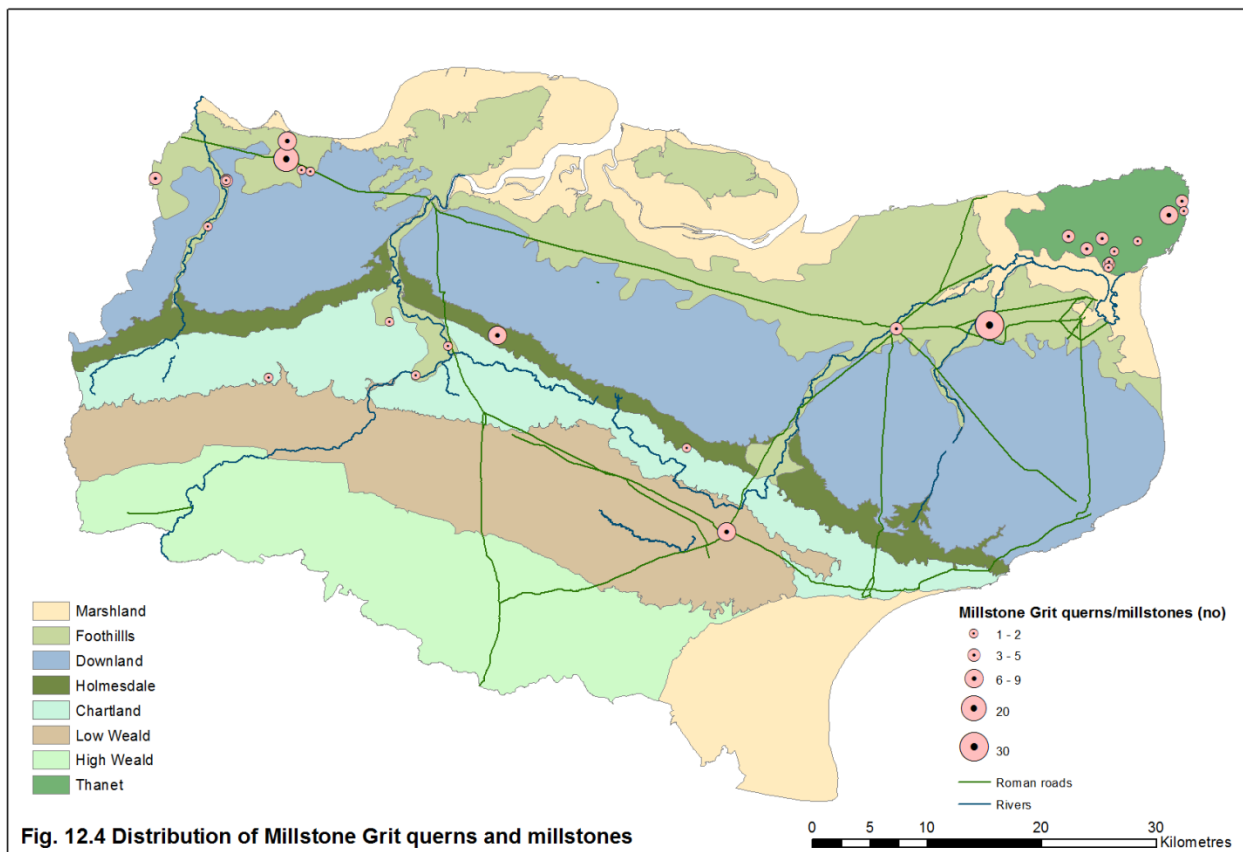
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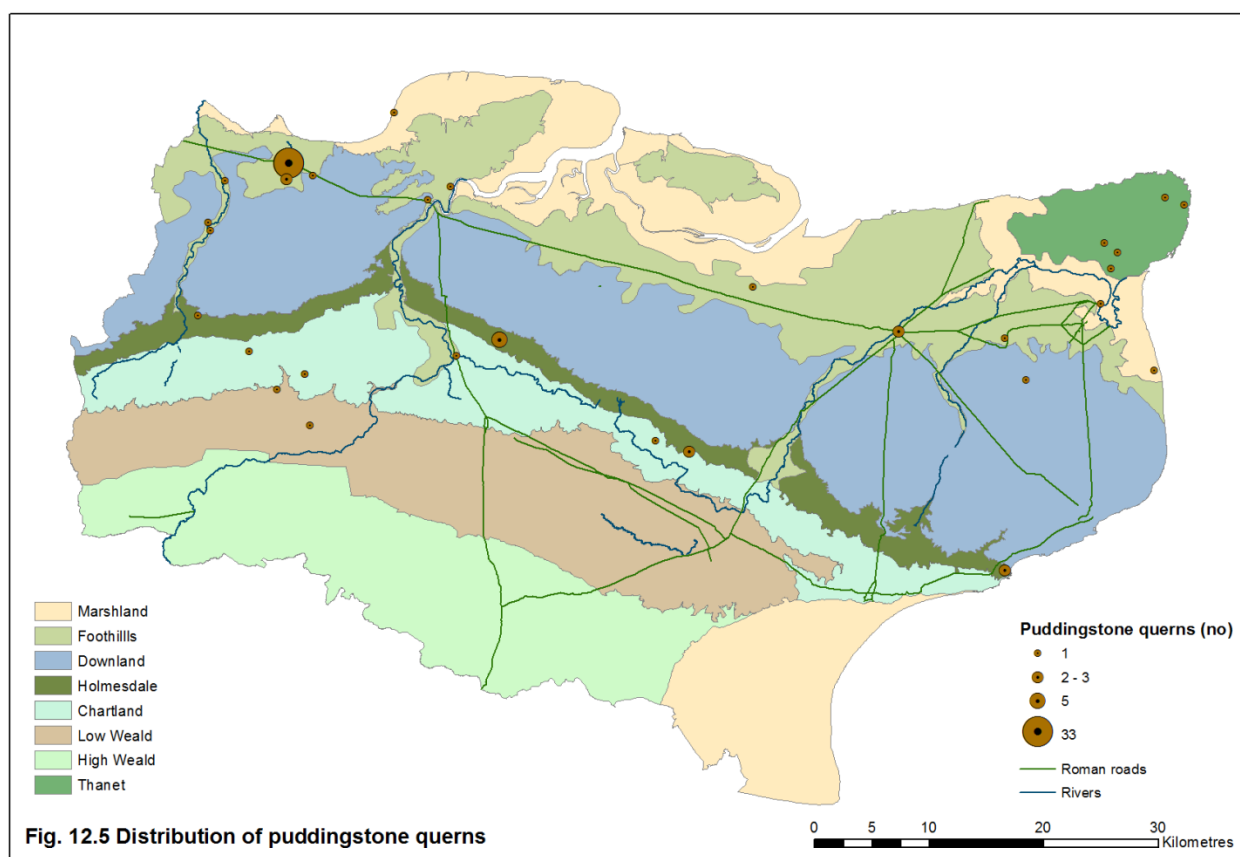


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## 12.4 Querns/millstones from the 30 sites

Data for the 30 sites are summarised in Table 12.1. As with pottery above, the data have been organised according to the minimum number of different lithologies present on each site. Sources of data for these sites are listed at the end of the chapter (Table 12.4).

There are some anomalies in the data. It seems highly unlikely that a villa such as The Mount should have produced such paltry numbers of grinding stones. One therefore suspects lack of reporting and/or lack of recognition, although it is possible that querns from the site were deposited outside the excavated areas. Greensand quern fragments in particular may be easily overlooked amongst Ragstone building rubble, although lava quern material should have been recognised and recorded even if the artefacts themselves disintegrated. Amongst these 30 sites, lava is by far the most widely spread fabric, occurring on 25 sites (83%). Aside from Runhams Farm and The Mount, it is the sole fabric

HER No/other identifier	Site	Date range	Min no lithologies	Greensand	Conglomerate	Lava	Millstone Grit	Lodsworth	Other	Millstone	Total no stones represented
TQ 67 SW 6	Springhead (RS and sanctuary)	LIA-4C; mostly 1-2C	7	13	33	44	20	4	5	Y	119
EKA 6	EKA Zone 6 (N)	Late Iron Age - Late Roman	5	2	1	4	4		3	Y	14
TQ 75 NE 374	Thurnham Villa (V)	LIA-4C, mostly 1-2C	5	7	5	20	6		3	Y	41
EKA 10	EKA Zone 10 (D)	Late Iron Age/Early Roman	4	4		1	1		1		7
TQ 94 NE 233	Leda Cottages (E)	LIA-mid/late 3C	4	1	2	8			1		12
TR 36 NW 238-9	Monkton (N)	LIA-mid 3C	4	28		29	4		13		74
TQ 67 SW 38	Northfleet Villa (V)	Mid C1-late C4	4	1		7	6		1	Y	15
TR 04 SW 117	Westhawk Farm (RS)	Mid 1C-mid 4C, mostly mid 1C-mid 3C	4	2		34	9	3		Y	48
TR 35 NE 3	Dickson's Corner (Un)	Mid 1C - early 3C	3	1		1	1			Y	3
TQ 67 SW 547	Northumberland Bottom WNB 98 A/B (D)	LIA-mid2 C	3	5		1			1		7
EKA 20	EKA Zone 20 (D)	?Middle Roman	3		1	1	4			Y	6
TR 36 NE 450	Bleak House (B)	Mid 2C - early 3C	2			1	1			Y	2
TQ 74 NW 100	Broad Forstal (U)	1-early 3C	2	1		2					2
EKA 7	EKA Zone 7 (O)	Transitional	2	1			1			Y	2
TQ 67 SW 549	Hazells Road (F)	3-4C	2	1			1			Y	2
TR 34 NW 239	Maydensole Farm (Letterbox Field) (N)	LIA-late 4C, possibly peaking late 1C-mid 2C	2	4					1		5
TR 36 SW 67	Minster Villa (V)	Mid 1C-late 3C; reoccupied mid 4C	2			1	4			Y	2
TQ 76 SW 23	Snodland Villa (V)	Mid 1c-late 4C	2			1			2/3	?	3
Thanet PI 8	Thanet Earth Plateau 8 (?D)	1-2C	2			2			16		18
TQ 75 NE 28	The Mount (V)	Mid 2C-late 3C/early4C	2			2			2	Y	3
TR 36 NE 449	Upton House (?B)	Early Roman; increased activity from late 3C	2			2	7			Y	9
TQ 94 NE 56; NE 267; NE 270; NE 273; NE 266	Beechbrook Wood (U)	LIA-2C	1			1					1
EKA 14	EKA Zone 14 (D)	Late Iron Age - Roman	1			1					1
Farningham - Hadlow MT01	Farningham - Hadlow MT01 (E)	Late Iron Age/Early Roman	1			1					1
TQ 67 SE 327	Henhurst Rd, Tollgate (F)	?LIA-mid 2C	1			1					1
TQ 67 SE 68	Hillside (D)	1-2C	1		1						1
TQ 85 SE 312	Runhams Farm (E / O)	10BC - 4C	1						2		2
TR 13 NE 217	Saltwood Tunnel (O)	LIA-4C, mostly 1-2C	1			2					1
TQ 67 SW 222	Swanscombe (O)	2-3C	1			1					2
TQ 67 SW 548/SW 464	Pepperhill-Cobham Site D (D)	Mid C1-mid C3	1			1					1

Key: RS = roadside settlement; N = nucleated site; V = villa; B = building(s); D = developed settlement; E = enclosed settlement; Un = unenclosed settlement; F = field system; O = other; U = unknown

Table 12.1 Summary of querns and millstones from the 30 sites

on all those sites producing only one quern lithology and is found on sites of all types. This strengthens the impression given by the wider dataset: lava querns were readily available, easily transported and penetrated all levels of society, suggesting that they were affordable and an item of choice.

In terms of the east/west split (Fig. 12.2) there are two statistics which need explanation.

	Greensand	Conglomerate	Lava	Millstone Grit	Other
East (16 sites)	8	3	14	11	5
West (14 sites)	6	3	10	5	6

Table 12.2 Quern and millstone presence on the 30 sites divided geographically

Greensand querns appear on rather fewer sites in the east than more general statistics would suggest. The large numbers in the whole county dataset are influenced by particularly large quantities of greensand querns at Canterbury and Monkton and of both querns and millstones at Ickham. Away from nucleated settlements, greensand querns appear to have penetrated the countryside in only limited numbers.

Conversely, puddingstone querns occur on only three sites in the west (although these have the county's largest assemblages and between them these account for 38 examples). As conglomerate querns are generally thinly spread and so few sites are concerned, there can be no statistical significance to this.

#### 12.4.1 The use of Millstone Grit in Kent

Figures for Millstone Grit from the 30 sites are extracted in Table 12.3. As expected, the highest number of *sites* producing Millstone Grit is in the east, chiefly on Thanet (sites highlighted). The largest numbers of Millstone Grit *artefacts* derive from the roadside settlements at Springhead (20) and Westhawk Farm (9), whilst the nucleated settlements at Monkton and East Kent Access Zone 6 have four apiece. Millstone Grit is also strongly associated with villas and buildings, occurring at Thurnham, Minster, The Mount and Northfleet villas and the sites of probable or potential buildings at Upton House and Bleak House, Broadstairs. If Millstone Grit indicates the presence of millstones, this seems logical as such settlements are likely locations for mills in terms of having dependent populations and/or cereal production of sufficient size either to warrant communal milling or to act as

market centres. The proviso about the difficulty of storing the resulting product (Chapter 8) must be born in mind: the bulk production of flour or grist points to the bulk production of bread or ale and such is strongly suggested at Springhead and Northfleet Villas which both produced strong evidence for ale production.

Confirmed millstones are known at all of these sites. The evidence is, however, less certain at Monkton, where the Millstone Grit is apparently in the form of quern fragments (Riddler 2008, 210). Assuming that the Millstone Grit arrived in the form of millstones, these may have been refashioned from ones used on the site, or could represent opportunistic use of discarded Millstone Grit from elsewhere. The absence of an obvious watercourse is a potential problem at Monkton as for most sites on Thanet (although Moody [2008, 39] states that until recently spring-fed streams were present in some of the island's truncated valleys). Alternatively animal or human traction may have been used: Peacock (2013) suggests that given the frequency with which Roman millstones are found in areas with no substantial water supply, the majority of Romano-British mills were probably powered in this way.

The frequency of Millstone Grit on Thanet and indeed of actual millstone fragments associated with grain processing waste (e.g. Stone Road,<sup>vi</sup> and Upton House, Broadstairs (Moody 2005; 2007) does suggest that large scale grain-processing was taking place. Moody (2007, 5.3.3) notes that the evidence from the Broadstairs sites suggests that this suffered a major disruption in the late 3<sup>rd</sup> century, at a time when a number of rural sites were being abandoned. Nevertheless, the presence of confirmed millstone fragments does not prove the existence of a mill. Millstone Grit was a useful stone: Spain and Riddler (2010) note that at Ickham, Millstone Grit was preferentially chosen for secondary use as whetstones, whilst fragments are not uncommonly used as building stones (e.g. at Darenth Villa; Philp 1973, 143-4) or for posthole packing. There is no structural evidence for any mill on Thanet although this is less of a problem if we discount water power: the bases of animal or human powered mills would leave a small footprint. It could be that Thanet was simply conveniently situated for incoming shipments of millstones arriving at Richborough from the north and that these were obtained opportunistically for the purpose of re-fashioning into hand querns, whetstones, etc., particularly as no stones suitable for the manufacture of quernstones appear to occur naturally on the island. Several of the millstone fragments at Stone Road, Broadstairs (Moody 2005, 6.5, not amongst the 30 sites) had been repurposed: one possibly as a whetstone, one possibly as a hand rubbing

stone, two as parts of a kiln structure and only one retained a grinding surface.

On the East Kent Access scheme sites, only Zones 6 and 7 produced confirmed millstone fragments; there is no proof that mechanically driven milling was occurring in the immediate vicinity.

Beyond Thanet, potential Millstone Grit millstone fragments have been found at Hazells Road and Dickson's Corner. Both are heavily worn and reported to have handle holes on their upper surfaces, although a more likely explanation is that the holes held pins which jogged the hopper, automating the passage of grain (R. Shaffrey pers. comm.; Spain 1984b, B3).

As Hazells Road is the site of a rectangular corn-drier, it is quite possible that milling may have been taking place somewhere in the vicinity. Dickson's Corner produced a large assemblage of grinding stones (estimated to represent at least twelve different quernstones). The character of its coastal location surrounded by sand dunes (Parfitt 2000, 145) makes it an unlikely location for intensive milling, however, and grain for use on the site must have been brought from some distance away.

HER No/other identifier	Site	Date range	Min no lithologies	Millstone Grit (min no)	Millstone
TQ 67 SW 6	Springhead (RS and sanctuary)	LIA-4C; mostly 1-2C	7	20	Y
TR 04 SW 117	Westhawk Farm (RS)	Mid 1C-mid 4C, mostly mid 1C-mid 3C	4	9	Y
TR 36 NE 449	Upton House (?B)	Early Roman; increased activity from late 3C	2	7	Y
TQ 67 SW 38	Northfleet Villa (V)	mid C1-late C4	3	6	Y
TQ 75 NE 374	Thurnham Villa (V)	LIA-4C, mostly 1-2C	5	6	Y
EKA 20	EKA Zone 20 (D)	?Middle Roman	3	4	Y
EKA 6	EKA Zone 6 (N)	Late Iron Age - Late Roman	5	4	Y
TR 36 SW 67	Minster Villa (V)	Mid 1C -late 3C; reoccupied mid 4C	2	4	Y
TR 36 NW 238-9	Monkton (N)	LIA-mid 3C	4	4	
TQ 75 NE 28	The Mount (V)	Mid 2C-late 3C/early4C	1	2	Y
TR 36 NE 450	Bleak House (B)	Mid 2C - early 3C	2	1	Y
TR 35 NE 3	Dickson's Corner (Un)	Mid 1C - early 3C	3	1	Y
EKA 10	EKA Zone 10 (D)	Late Iron Age/Early Roman	4	1	
EKA 7	EKA Zone 7 (O)	Transitional/Roman	3	1	Y
TQ 67 SW 549	Hazells Road (F)	3-4C	2	1	Y

Table 12.3 Millstone Grit from the 30 sites

#### **12.4.2 The use of puddingstone querns in Kent**

The unusual number of puddingstone querns at Springhead calls for comment. Shaffrey (2006b) notes that puddingstone is a difficult stone to fashion and likely only to have been used if there was no alternative. A possibility is that these querns served a very particular purpose other than the grinding of flour. Shaffrey (2011, 365) suggests that this may have been the grinding of malted grains for brewing. This theory is corroborated by Ingle (1989) who points out that other sedimentary rocks and lava used for grinding stones tend to wear in such a way as to maintain the cutting quality of their grinding surfaces. The tendency of puddingstone is to polish with use; this means it would tend to crush rather than cut the grain. This in turn suggests that puddingstone querns would be inefficient for flour production, but ideal for crushing malt prior to mashing. Although ale can be made from both ground and crushed malt, there are advantages to the latter (Roberts 1847, 49-53). It is possible that the low levels of puddingstone querns found on other sites reflect domestic ale making and complement finds of lava and other sedimentary grinding materials which were used for the preparation of flour.

It is notable that, in Kent at least, puddingstone is rarely the sole quern lithology reported from excavated sites. Only 16 of the 100 Kent sites in the database have puddingstone as the sole lithology, of which eleven relate to finds made in the 19<sup>th</sup> or earlier 20<sup>th</sup> centuries. Of these, three were apparently found in association with Romano-British cemeteries, one as a placed deposit in a dene hole, while several were casual finds made in the course of agriculture or grave-digging. In fact none is securely associated with a settlement site. Only five come from excavated sites and it seems highly unlikely that on three of these (Faversham Roman Villa, Otford Progress Villa and Richborough Fort) the single examples found represent the only querns in use on the site.

#### **12.4.3 Variety within grinding stone assemblages**

As shown in Table 12.1 the minimum numbers of lithologies represented on any one site vary between 1 and 7. Only a minority (10 sites) have just one; in nine cases, this is lava. Seven sites have produced at least four different lithologies and these tie in quite well with those that top the table for fine/specialist pottery wares.

Springhead has examples of all the quern/millstone materials more commonly found in Kent in addition to Lodsworth Greensand and two examples of igneous stones. As with pottery, it seems that its nodal location gave it access to a wide range of sources, although the assemblage is dominated by (possibly local) puddingstone and lava, each of which make up approximately one third of the assemblage.

East Kent Access Zone 6 and Thurnham Villa have both produced a minimum of 5 different stone types. Amongst villas, Thurnham tops the table for variety of milling stones just as it does for variety of fine/specialist ceramics. Shaffrey (2006a) indeed comments on the unusually wide variety of stone present on the site (indicating connectivity) but also on the fragmentary nature of the assemblage, most of which was derived from secondary sources. This, she suggests, indicates a considerable amount of recycling and therefore pressure on resources. Her conclusions mesh well with the ceramic evidence, both of these suggesting access to a wide range of resources, but only in limited quantities. Although in terms of number of stones represented, Thurnham is well above other villas in the dataset, this has to be taken in the context of the surprisingly low numbers at Minster, The Mount and Snodland.

East Kent Access Zone 6 appears to have produced a relatively modest number of quern fragments for a lesser nucleated site, but it is difficult to say much about this until more information is available.

Monkton and Westhawk Farm both produced relatively large number of stones in a minimum of four lithologies; unsurprising results for nucleated sites which one would expect to have wide connections and relatively substantial populations. Monkton interestingly produced a larger number (74) than Westhawk Farm (48); this could be because of the large number of greensand querns at Monkton as compared to Westhawk Farm where lava was the most frequent lithology and therefore likely to be underrepresented for taphonomic reasons.

Leda Cottages produced a perhaps surprising range and number of querns for a settlement classified as enclosed, although the number of lava examples is conjectural as most were reduced to fragments unrecognisable in form (Shaffrey 2006b). Again, this meshes with the pottery from the site which falls above the mean in terms of fine/specialist wares. These figures may be associated with the industrial nature of the site which was producing iron, if

only on a small scale. It is unfortunate that comparable data for other iron producing sites in Kent are lacking.

## 12.5 Discussion

The ubiquity and limited range of grinding stones means that they are not as useful an index for site characterisation as pottery. In particular, lava, which might otherwise be regarded as an exotic import, is present on the vast majority of sites in the dataset, whatever their status, demonstrating that access to imported goods was available to most (if not all) and in this case widely adopted. This was probably because of the material advantage of the product which performed the same task as more local products but which was lighter and easier to handle and possibly, in view of the large numbers imported, cheaper. It would certainly be easier for anyone dealing in such items to reach local communities and markets with these wares than with heavy loads of greensand.

More local products, such as greensand and puddingstone querns received a more limited distribution. Puddingstone querns are here suggested to have had a specialist use in the brewing process, hence their strong presence at Springhead but low numbers on other rural sites. Greensand querns seem preferentially to have been traded with nucleated sites in the east of Kent with only a few examples found on other rural sites. The presence of Millstone Grit seems to be governed by two factors: location and site status, being preferentially found near probable ports of entry and on villa and nucleated sites where large scale milling was taking place in association with baking and/or brewing.

The majority of sites have only one or two lithologies of quern/millstone, normally including lava, and very few have four or more: aside from the eight identified on Table 12.1, the only others in Kent appear to be Canterbury (sites combined) and Ickham. Wider varieties of stones are clearly associated with nucleated settlements, normally situated at nodal points and with wider connectivities, although there are some exceptions, such as Leda Cottages and Thurnham which test this rule. Disappointingly little is known about quern/millstone usage on the majority of villa sites; even at Lullingstone (Meates 1979, Vol. 2) there is no mention of querns or millstones amongst the finds. The two villa sites which have produced good assemblages are quite distinct in character: Thurnham has an eclectic mix of stone but Northfleet's assemblage is dominated by imported lava and Millstone Grit



despite, as Shaffrey points out (2011a, 372), its proximity to Springhead with its wide range of grinding materials. This fact points to quite different stratagems for sourcing material: a site where access to many materials was possible, but apparently deliberately controlled and one where access may have been more difficult and stones were thus perhaps obtained opportunistically as circumstances allowed.

HER No/other identifier	Site	Source
TQ 67 SW 6	Springhead (RS)	Roe 1998; Shaffrey 2007; Shaffrey 2011a
EKA 6	EKA Zone 6 (N)	Shaffrey 2011b
TQ 75 NE 374	Thurnham Villa (V)	Shaffrey 2006a
EKA 10	EKA Zone 10 (D)	Shaffrey 2011b
TQ 94 NE 233	Leda Cottages (E)	Shaffrey 2006b
TR 36 NW 238-9	Monkton (N)	Riddler 2008
TQ 67 SW 38	Northfleet Villa (V)	Shaffrey 2011a
TR 04 SW 117	Westhawk Farm (RS)	Roe 2008
TR 35 NE 3	Dickson's Corner (Un)	Jones 2000
EKA 20	EKA Zone 20 (D)	Shaffrey 2011b
TR 36 NE 450	Bleak House (B)	Moody 2010a
TQ 74 NW 100	Broad Forstal (U)	Vince 2003
EKA 7	EKA Zone 7 (O)	Shaffrey 2011b
TQ 67 SW 549	Hazells Road (F)	Keily and Richardson 2006
TR 34 NW 239	Maydensole Farm (Letterbox Field)(N)	Redding 1997
TR 36 SW 67	Minster Villa (V)	Author's database (objects seen)
TQ 67 SW 547	Northumberland Bottom WNB 98 A/B (D)	Keily and Richardson 2006
TQ 76 SW 23	Snodland Villa (V)	Barber 2009
Thanet PI 8	Thanet Earth Plateau 8 (?D)	Bevan 2010
TQ 75 NE 28	The Mount (V)	Kelly, 1992; Riddler 1999
TR 36 NE 449	Upton House (?B)	Moody 2007
TQ 94 NE 231	Beechbrook Wood (U)	Shaffrey 2006c
EKA 14	EKA Zone 14 (D)	Shaffrey 2011b
Farningham -Hadlow MT01	Farningham -Hadlow MT01 (E)	Wessex Archaeology 2010
TQ 67 SE 327	Henhurst Rd, Tollgate (F)	Keily 2006
TQ 67 SE 68	Hillside (D)	Philp and Chenery 1998
TQ 85 SE 312	Runhams Farm (E / O)	Philp 1994
TR 13 NE 217	Saltwood Tunnel (O)	Riddler and Ager 2006
TQ 67 SW 222	Swanscombe (O)	Wardle 2010
TQ 67 SW 548/SW 464	Pepperhill-Cobham Site D (D)	Shaffrey 2012

Table 12.4 Bibliographic sources of quern data

## Notes

<sup>i</sup> Data derive from earlier studies (Blanning 2006, 2008b) as well as from information systematically gathered in the course of the present work. Canterbury sites have been consolidated, as have multiple interventions on the same settlement site (e.g. Thurnham, Springhead).

<sup>ii</sup> Unpublished, but examined by author at the Trust for Thanet Archaeology.

<sup>iii</sup> A possible outcrop may be at nearby Shorne Wood (Chandler 1923) where a similar type of stone seems to have been used in the footings of Cobham Roman Villa (Tester 1961). Green and Peacock (2012) believe the source to be Worms Heath, Surrey.

<sup>iv</sup> Curwen (1941) cites a puddingstone quern from Oldbury Hillfort which appears otherwise to be absent from the literature and which cannot now be traced.

<sup>v</sup> Lava numbers are difficult to estimate owing to the fragmentary nature of much of the material. Here any context containing lava quern fragments has been counted as the equivalent of one quern/millstone.

<sup>vi</sup> These appear from the report to be millstone fragments, although not particularly large and have yet to be confirmed as Millstone Grit.

## **13 Characterising rural settlement in Kent during the Roman period: local trends and wider contexts**

### **13.1 Introduction**

The data presented in the forgoing chapters enable us to begin to characterise the nature of rural settlement in Kent during the Roman period in chronological, geographical (physical and human) and cultural terms. We will be able to outline defining characteristics of Kent's archaeological record and begin to answer questions relating to specific chronological and spatial aspects of the evidence from the county.

### **13.2 Distinctive features of Kent's archaeological record for the Late Iron Age and Roman period**

We have seen that there are a number of distinctive features of Kent's archaeological record. Some of these are broad and will be discussed separately. These include the chronological trajectory of settlement, spatial aspects of the evidence and the visible consequences of incorporation within the Roman empire. This section highlights more specific defining trends within the evidence from Kent.

#### **13.2.1 Buildings**

The first feature of note is the relative invisibility of vernacular buildings (round houses) and indeed of non-stone-founded building of any type throughout both the late Iron Age and Roman periods. This may reflect a regional tradition of timber framing without the use of earth-fast posts, possibly with mass or cobb walling. Alternatively (or in addition) it may reflect the truncation of Roman and latest prehistoric levels.

There is an increasingly recognised tradition of sunken-floored structures which occur especially, but not exclusively, on Thanet. There is at present no convincing explanation for this other than as a localised indigenous development. Such structures are well known

from the Anglo-Saxon period and it would be tempting to suggest that these suggested a Germanic connection, but this seems unfeasible on chronological grounds. In Kent they occur from the Late Iron Age onwards and at Monkton peak in the mid-2<sup>nd</sup> to early 3<sup>rd</sup> centuries AD. Although Van Ossel and Ouzoulias (2000, 149) find that they occur frequently on Roman period sites in Gaul, they also find that that there they are almost entirely absent before the 3<sup>rd</sup> century, the date at which they appear in the north west part of *Germania Libera*. These from Kent therefore seem to represent a home-grown development.

Kent's villas include a small number of early, well-appointed establishments; the majority, however, are relatively modest. Elaborate reception rooms are uncommon but there is a marked predilection for extensive and wide porticuses which may have been used as reception areas. Amongst ancillary buildings there appears to be a regional trait for two celled buildings with wide porticuses enclosing two or three sides (the so-called 'concentric buildings'). Cellars occur relatively frequently. There are a significant number of detached bath houses, a very few of which appear to fall into the category of 'isolated bath houses'.

Although villas form long-lasting foci in the landscape and are disproportionately represented amongst Class A sites in the 4<sup>th</sup> century, few have late embellishments. Lullingstone is the only villa house in Kent with securely dated 4<sup>th</sup> century mosaics, in marked contrast to the situation in the Cotswolds, the south-west and central-southern regions of England (Scott 2000). Eccles was in possession of an exceptionally large bath house in the 4<sup>th</sup> century and at Bax Farm an elaborate octagonal bath house with mosaics appears to have been constructed. More generally, the 4<sup>th</sup> century seems to have been characterised by a change in the character of villa occupation, with evidence of industrial/agricultural activities being brought into former reception rooms.

### **13.2.2 Agriculture and subsistence**

Evidence from Kent is not out of kilter with the evidence for agriculture and subsistence from Roman Britain more generally; however there is a suggestion of conservatism in the sustained importance of emmer wheat cultivation and of sheep husbandry. The former has been suggested (Ch. 8) to indicate the continued intensive cultivation of small plots. The importance of sheep husbandry may reflect both the greater suitability of the Downs for sheep rather than cattle grazing and, possibly, the demands of the military for wool (and other products such as cheese or lanolin).

There are few granaries in south-east Britain (Black, 1987, 57) so the large granaries of the Darent valley are significant. The T-shaped 'corn-driers' which appear, from the work of Morris (1979) to be the commonest form, are absent; instead, particularly in the Late Roman period, Kent has a number of substantial rectangular masonry structures. These are not unique to Kent, but do seem to form a coherent group and can be compared to others in the east of England (e.g. Longthorpe and Orton Longueville, Cambridgeshire; Foxholes, Hertfordshire; Morris *ibid.*, 101 and Fig. 11).

### **13.2.3. Burials**

Kent's Late Iron Age funerary record is well known for its distinctive 'Aylesford-Swarling' cremation burial tradition. Less well-recognised, perhaps, is the fact that a strand of inhumation burial persisted throughout the Late Iron Age and Roman periods; although most spectacularly seen in the (just) pre-conquest Brisley Farm 'warrior' burials, the most compelling evidence comes from Pepper Hill, where inhumation was practised throughout the life of the cemetery (AD 43-AD 260+) and was the dominant rite for most of that time. At the same time there is some evidence to suggest that cremation may have still occasionally been practised in the Late Roman period.

Other notable features of the burial record include the use of barrows and walled cemeteries (the latter often in conjunction with mausolea). Over half of the walled cemeteries listed by Jessup in 1959 are situated in Kent (including that at Keston) with the rest occurring in Cambridgeshire, Essex and Hertfordshire. These are also the counties with the greatest numbers of confirmed Roman barrows (Dunning and Jessup 1936). These are not, then, uniquely Kentish traits, but tie Kent into traditions more associated with the east of England (south of the Wash) and (in the case of barrows) with the region between Bavay and Cologne (Crowley 2011). One of Kent's barrows (Holborough) is unusually late in date.

Although comparable data are not readily available, Kent appears to have a relatively large number of burials in lead coffins and there are indications that these are disproportionality associated with children and/or young females. Kent also has a significant number of cremations interred within adapted Dressel 20 amphorae (Philpott 1991 and Table A6).

### 13.2.4 Kent: an eastern county

As long ago as 1982, Cunliffe pointed out that in cultural as well as geographical terms Kent belonged to eastern, rather than southern Britain. His focus was on the pre-Roman period, although he suspected that this was a “simple geographical truth” that lingered into the Roman period but “rendered less evident by a veneer of more unifying cultural factors” (1982, 40). The evidence presented in preceding chapters suggests that for the Roman period it is a truth perhaps more evident than he supposed.

Although Kent’s Roman-period archaeology has a number of emblematic traits, most of these are not exclusively Kentish. It is instructive to compare the evidence from Kent with that for Essex, summarised by Going (1996) and more recently in the light of commercial archaeology, by Holbrook (2010).

In both counties, villas avoid the London Clay. Aspects of villa chronology are similar: Going (1996, 103) finds that those in Essex reached their apogee in the 2<sup>nd</sup> century with most villas being built in the Hadrianic and Antonine periods (just as in Kent) and an absence of new building or elaboration (such as mosaics) in the later Roman period. Holbrook, though, feels that this (conventional) view may be overstated, being unduly influenced by Rivenhall (2010, 5): evidence from Great Holts indicates a villa constructed in the 3<sup>rd</sup> or early 4<sup>th</sup> century, although this may be an exception.

As in Kent, roundhouses are usually indicated only by fragments of drip gully. Holbrook (*ibid.*, 9) mentions only the problems of truncation in this regard, although it may indicate that in both areas there was a tradition of mass walling. There is some evidence in Essex for sunken floored structures of Roman date (e.g. Strood Hall; Timby et al. 2007 and Little Oakley; Barford et al. 2002) although at present in lesser numbers than in Kent.

The closest parallels to Kent’s masonry corn-driers are in Cambridgeshire and Hertfordshire, whilst both Kent and Essex have similar salt and pottery production traditions straddling the Thames Estuary. Coin-loss patterns tend to show traits which Reece associates with the east.

As highlighted above, a number of the features of Kent’s burial record, including barrows and walled cemeteries have a predominantly eastern distribution. The same is true for amphora burial, a tradition which Philpott finds has pre-conquest origins north of the

Thames, becoming well-established in Kent only in the 2<sup>nd</sup> century AD. Holbrook (ibid., 10) also notes examples of early inhumations from Essex (Purfleet, Mucking and elsewhere) as well as occasional late cremation.

Although there are significant differences between Kent and Essex in the Roman period (for instance the far greater number of masonry villas in Kent) there is sufficient to suggest that culturally and in chronological trajectory, Kent meshes far better with other counties in eastern England than it does with more westerly southern counties. Cultural ties with the former Eastern Kingdom appear to have been maintained throughout the period, given the later adoption of amphora burial in Kent and the sharing of 4<sup>th</sup> century corn-drier types.

### **13.3 Space and Place: the geography of Roman Kent**

#### **13.3.1 *Pays***

The traditional *pays*, as defined by Everitt (1986) have been used as a basic unit of analysis. They have been shown to have had relevance as areas where physiographic characteristics of the landscape interacted with and influenced settlement patterns, but it has also been noted that there is considerable variation in settlement density within the individual *pays*. Everitt found that the earliest zones of Early Medieval occupation were the Foothills (including Thanet) and the Holmesdale. This is also true for the Roman period, if the density pattern of Roman evidence is compared to that of the population recorded in the Domesday Book (Lawson 2004), however, the detail appears quite different. Particularly striking is the high density of Domesday evidence within the eastern Foothills, which in the Roman period appears to have been the least populated area of the larger *pays*. The nature of the landscape certainly influences land use, but cultural and economic factors also play a part and are historically contingent.

Space does not permit an extensive analysis of all the *pays* and their subdivisions. Nevertheless, examining two of those with the highest densities of evidence (the Foothills and the Marshland of North Kent) may serve to emphasise the importance of landscape in determining settlement patterns during the Roman period.

For this exercise the central Foothills have been divided again, into one unit consisting of the Medway Valley and Isle of Grain and another of the North Kent Plain, making five units

in all (Figs. 13.1-13.2). Sheppey at present has very little evidence (all class B) from the period.

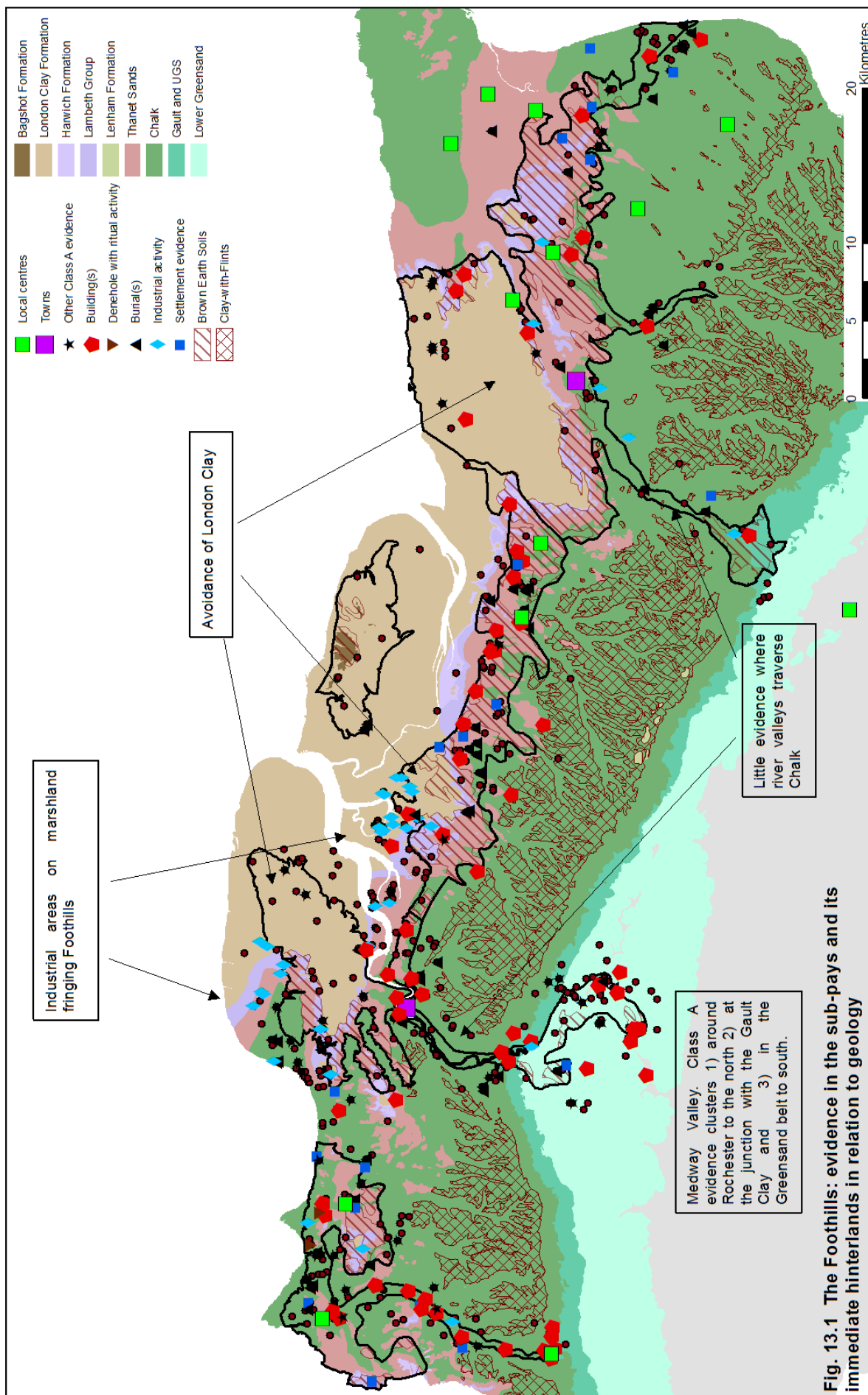
Three of the remaining four sub-divisions (the eastern and western Foothills and the Medway Valley/Grain) are penetrated by major river valleys which act as isthmuses extending through the Chalk Downs. The Medway valley extends the *pays* all the way through the Gault Clay and Upper Greensand, into the Lower Greensand and the Stour, as far as the edge of the Lower Greensand. The North Kent Plain differs in lying parallel to its major waterways (the Swale and Thames estuaries) to which it is connected by creeks.

These four subdivisions of the Foothills all show internal variations in density and types of evidence and appear largely to be dependent on the same factors. The London Clay is avoided, especially by Class A evidence, whereas the Eocene deposits of the Thanet Sands, Harwich Formation and Lambeth Group are favoured (Fig. 13.1). In terms of topography (Fig. 13.2), Class A evidence in particular tends towards the lowest elevations. In the western Foothills, therefore, evidence clusters in the Darent and Ebbsfleet valleys and the low-lying areas lying between their estuaries. There is little evidence, mostly Class B, from the central part of the Isle of Grain, which is both elevated and on the London Clay. On the North Kent Plain, the slightly elevated clayland area between Boxted and Milton Creek appears deserted, whilst to the east, that between Canterbury and the north Kent coast, much of which is covered by remnants of the Forest of Blean, is for the most part occupied only towards its fringes. In all areas, villas and stone-founded buildings cluster in ways that have previously been described (Chapter 6): in river valley (with the notable exception of the Stour) and in areas adjacent to changes in bedrock.

One cannot consider the evidence from a well-occupied *pays* in isolation without considering its hinterlands. In the case of the narrow river valleys in particular, activity must almost certainly have been connected to that on the surrounding hills. In this context, it is likely that the light downland soils on either side of the Darent provided grazing and arable land for the occupants of the valley's villas, reflecting more recent land use. The valley's granaries and large storage facilities are suggestive of a landscape of agricultural plenty. As noted in Chapter 5 (Fig. 5.40) there are a number of minor sites in the hinterlands that go out of use by the end of the 1st century, possibly absorbed by larger farming units.

In the case of the Medway valley, there is a low density of evidence (including a complete absence of Class A) in the stretch that passes through the Downs and the few sites in the





**Fig. 13.1 The Foothills: evidence in the sub-pays and its immediate hinterlands in relation to geology**

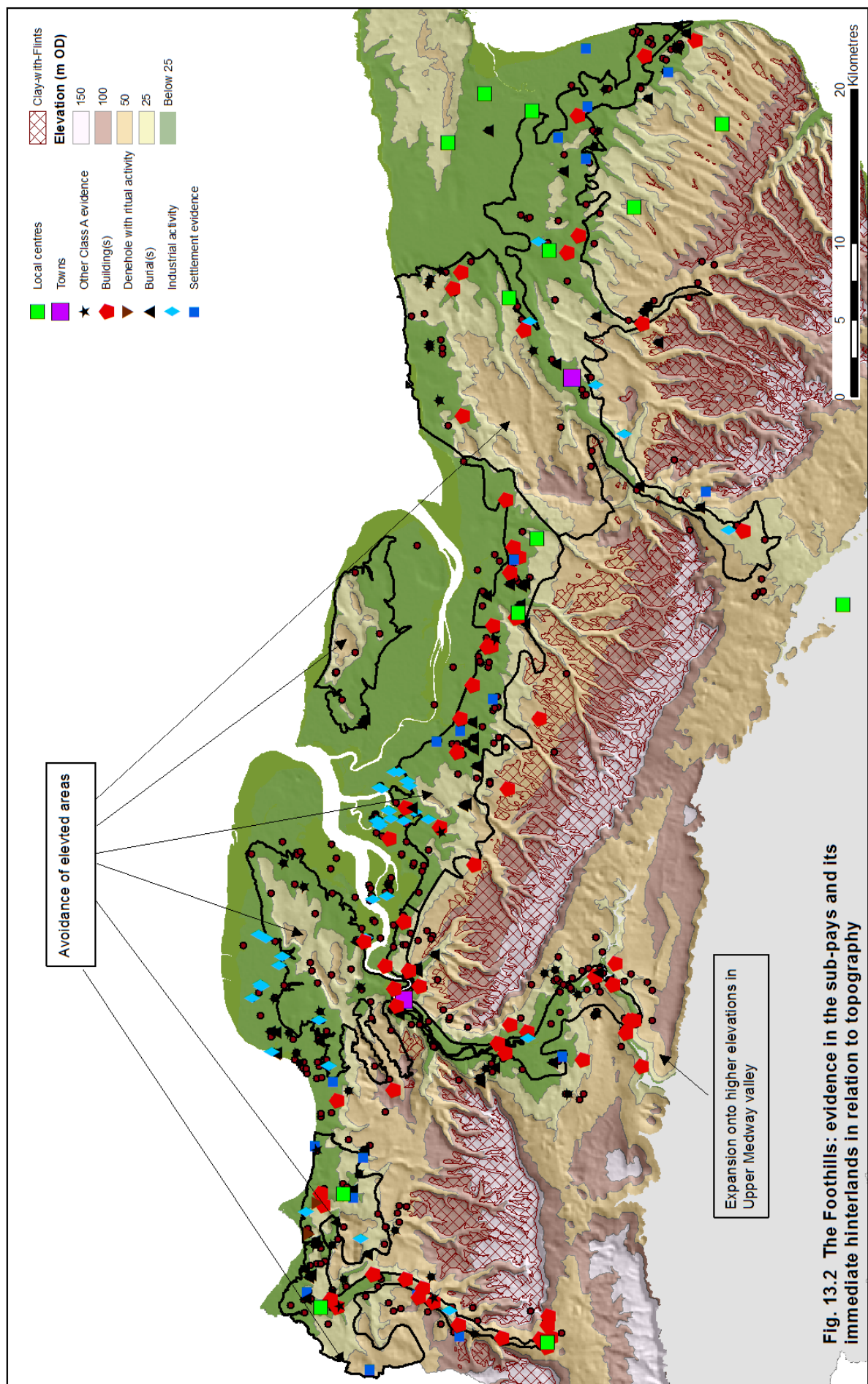


Fig. 13.2 The Foothills: evidence in the sub-pays and its immediate hinterlands in relation to topography

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hinterlands are mainly funerary in nature. By way of contrast, the upper Medway valley passes through the Lower Greensand and here there is a concentration of evidence for villas and other buildings but relatively little (again mainly funerary) from the hinterlands.

Following soil improvement this area is today largely agricultural in nature; historically, however, it has been an important source of building stone in the form of Kentish Rag. This was extensively used in the Roman period, both locally and further afield, famously for the construction of the walls of *Londinium*, c. AD 200 (Blagg 1990) as well as for the theatre at Gosbecks, Colchester, c. AD 150-200 (Dunnett and Reece 1971). It was still being worked in the 3<sup>rd</sup> century as witnessed by its use in several of the 'Saxon Shore' Forts and the London riverside wall (Pearson 2006, 44). Rag was clearly being quarried at much earlier date for incorporation into more local buildings; such quarrying must have commenced prior to c. AD 65 in order to provide the footings for the first phase of Eccles Villa and geological analysis of stone used for a London town house suggests that deep quarries were in existence by the 2<sup>nd</sup> century (Worssam and Tatton-Brown 1993). It is highly likely that at least some of the wealth that contributed to the construction of villas in the upper Medway valley derived from such industrial, rather than agricultural, enterprises. Locating the quarries is problematic, as more recent extraction tends to destroy evidence of ancient workings. Elliot (2011) believes that the remains of at least one very large quarry are still extant (at Dean Street, close to East Farleigh).

The North Kent Marshes present their own set of problems. These result both from the sequences of erosion and deposition that have led to their formation and from the difficult nature of the terrain, much of which can only be accessed by boat, making exploration hazardous. This may have biased the distribution of the known data, nonetheless at present, just as for the Foothills, the distributions for the most part favour those areas overlying the Chalk, Thanet Sands and Harwich Formation rather than those on the London Clay. An exception to this rule is provided by the high concentration of evidence from the Upchurch marshes.

Aside from the omnipresent burials, the evidence from the Marshes is primarily industrial in nature, attesting pottery production and salt winning. It is often quite ephemeral, despite the prominence of the 'Upchurch'/BB2 type wares produced in the area. Butchery and dairying are also witnessed, with Burntwick island in particular producing fragments of cheese presses (Wessex Archaeology 2005, 14).

Areas bordering the Thames and Medway estuaries were evidently intensively used but it is not clear if occupation was permanent or seasonal or indeed, for the most part, where those undertaking these various activities lived. Nevertheless, the marshes have produced rare evidence of preserved timber/wattle buildings: a roundhouse floor with preserved withies at Lower Halstow (Burchell 1957) and a late 2<sup>nd</sup>-early 3<sup>rd</sup> century wattle structure associated with salt winning on Nor Marsh (Anon. 1970).

In both *pays*, it is possible to see patterning which to a large extent reflects the nature of the bedrock geology; the Thanet Sands and Harwich formation and their junctions with the Chalk are particularly favoured and the London Clay avoided, except for an area of salt and pottery manufacture on the Medway estuary. Within the Foothills there is further patterning relating to topography.

Whilst the Foothills might be regarded as providing the prime real estate of Roman-period Kent with evidence of elite residences and wealth derived from agriculture and mineral extraction, the Marshland provided an industrial hinterland, being the location of two important manufacturing industries: pottery and salt production. These may not just have coincided in the same areas but have been more formally connected. The two industries exist side by side not only in Kent but on the south and east coasts of Essex and at Poole Harbour. In Essex, it has been suggested that locally manufactured very coarse shell-tempered storage jars may have been used for the storage and transport of salt (Rodwell 1979, 161), whilst Gerrard (2008) suggests the same for BB1 from Dorset. It is possible that North Kent shell-tempered storage jars and/or BB2 vessels performed a similar function.

In any event, the Marshland provides evidence for a suite of linked activities: potting, salt production, dairying and meat production (the latter two dependent on salt). Whether these industries were organised on a large scale or were in the hands of many individuals is unknowable. Gerrard (*ibid.*, 123), however, envisages an Early Roman economy in Somerset and Dorset primarily concerned with provisioning the army, with herds collected as tax in kind being driven to central points where they were slaughtered and the meat preserved (salted) before being transported. This is certainly a scenario that could have been acted out on the North Kent Marshes, with BB2 (whether containing salt or not) travelling to the north alongside the preserved meats.

### 13.3.2 Evidence for regionality within the canton

We have seen that there is evidence from the Late Iron Age, both textual and archaeological, to suggest that the area now known as Kent was divided into at least three different socio-economic territories. Cunliffe (2003, 166) suggests that these were centred on the major river valleys, whilst Holman (2000, 220) uses numismatic evidence to suggest that the rivers themselves formed the boundaries between territories. In the absence of documentary evidence, the question of whether Cantium was formally divided into smaller units (*pagi*) is moot; however, it is not unlikely that the canton was divided. Rochester, which commands the point where Watling Street crosses the River Medway is commonly supposed to have acted as *pagus* capital of west Kent. Tantalisingly little is known of Rochester's archaeology, although evidence pointing to the existence of a Late Iron Age mint (Harrison 1992) suggests that it was a significant pre-Roman settlement.

#### 13.3.2.i Material culture

There are a number of features of the archaeological record that support the notion of sub-territories within the county. Perhaps the most persuasive of these is provided by pottery. Although the uptake of fine and specialist wares may be influenced by status, the distribution of utilitarian coarse wares, particularly those of local manufacture is likely to be more indicative of local distribution networks and cultural preferences as has been noted for other areas such as Roman Yorkshire (Evans 1988). In the case of Kent Pollard (1988) has demonstrated that there is marked differentiation between east and west Kent in terms of coarse wares (Fig. 13.3).

A graphic demonstration of this is supplied by the contrasting distributions of two groups of products of Kentish manufacture: Patch Grove ware and Canterbury sandy wares (Fig. 13.4, derived from Pollard's [1988] data). Patch Grove ware has a wide distribution in the west of Kent, not just along the rivers and Watling Street, but penetrating into the hinterland; it achieves a very limited circulation east of the Medway, however. By contrast, Canterbury sandy wares occur widely in east and mid Kent and only sporadically on the roads and rivers of west Kent.

In terms of other forms of material culture, we have seen that the distribution of quernstones also displays a degree of spatial patterning. Greensand querns favour the east of the county (and in the late Iron Age, appear to have been traded up the East coast [Blanning 2006]). Puddingstone querns, generally believed to be imports from Hertfordshire, have been suggested to have had some specialist use (possibly crushing malt) prior to mashing and they are (geographically) relatively evenly distributed between east and west. It is possible that there was a local source of puddingstone in north-west Kent, and indeed these variant stones are much more strongly associated with west Kent.

### **13.3.2.ii Structural remains**

Large granaries and substantial corn-driers are more strongly associated with west Kent, but this may have less to do with territory per se than with the distribution of villas in Kent, although this distribution of villas itself may have a cultural dimension (see below). As far as other building types are concerned, sunken-floored structures appear to be strongly associated with east Kent, more particularly with Thanet.

Walled cemeteries have so far been found only in west Kent, but these are less directly associated with villas than with the road system. Tumuli, whilst found in west Kent are more frequently found in the east where they are strongly associated with the road system, in contrast to the situation in the west.

### **13.3.2.iii The distribution of villas and lesser nucleated settlements**

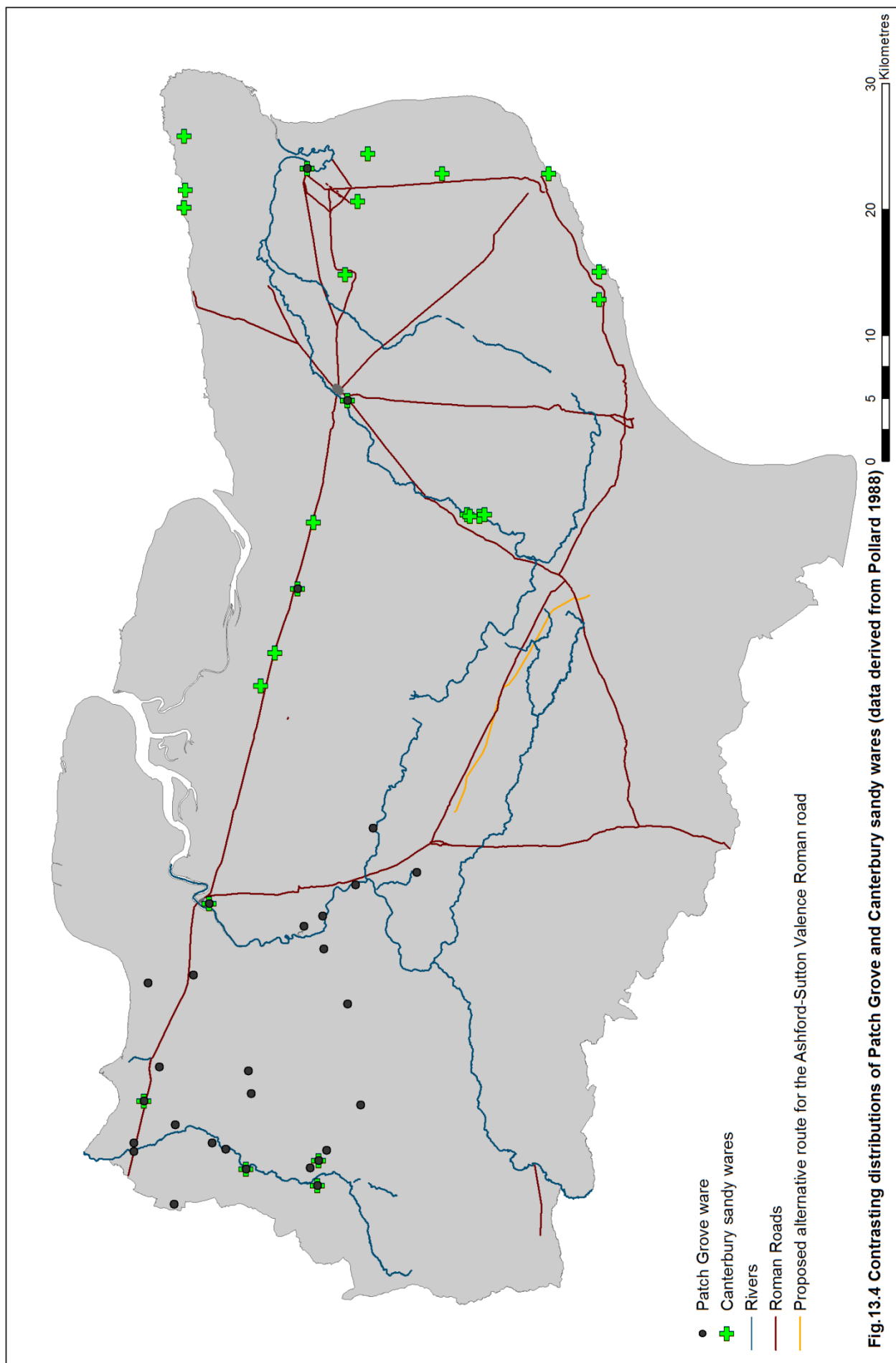
As pointed out in Chapter 6, the distribution of villas in Kent - and particularly the apparent lack of villas in the environs of Canterbury - is a topic of continued debate.

It seems clear that in Kent, as in Northern Gaul (e.g. Roymans and Derks 2011), it is appropriate to talk about 'villa-' and 'non-villa landscapes'. Roymans and Derks (ibid., 3) define a villa landscape as one that is, "dominated by villa settlements, if not in a numerical sense, then at least in terms of how they are perceived by rural populations in the light of their monumental status and social status". They define non-villa landscapes as

Key	
West	
West (limited) distribution)	
East	
East (limited) distribution)	
East and West	
East and West (limited) distribution)	

Pollard code	Name	LC1B	EC1	MC1	LC1	EC2	MC2	LC2	EC3	MC3	LC3	EC4	MC4	LC4	EC5
2	'Alice Holt type'														
3A	BB1 Dorset														
3B	BB1 'East Kent'														
4	BB2														
5	Brockley Hill-Verulamium buff sandy ware														
6A	'Stuppington Lane' sandy (Canterbury)														
6B	'North Gaulish' grey sandy														
6C	'Canterbury' reduced and oxidised sandy														
9	'Aylesford-Swarling' flint -tempered														
10	Late Roman flint-sand-tempered														
11A	'Aylesford-Swarling' grog-tempered														
11B	Late Roman grog-tempered														
11C	'Port Lympne'														
12	Mayen ware														
15	Native Coarse Ware														
16	North Gaulish grey sandy 'Arras' ware														
18	'Patch Grove' ware														
19	'Portchester "D"' ware														
22B	Lower Thames grey sandy wares														
23A	Early Shelly wares including Cooling														
23B	'Thames Estuary' storage jars														
23C	'Late Roman' shelly wares														
25	'Tilford'														

Fig. 13.3 Coarse pottery distribution in East and West Kent



**Fig.13.4 Contrasting distributions of Patch Grove and Canterbury sandy wares (data derived from Pollard 1988)**



“one[s] in which traditional settlements with post-built houses make up the vast majority of rural sites (more than 95%)”. This latter definition cannot be applied to Kent because of the lack of evidence for post-built structures. Here, a ‘non-villa landscape’ can only be defined in terms of a lack of villas which is less satisfactory, not least because of an insidious implication that (as noted in Chapter 6) the development of villas is the expected outcome of a process of Romanization and that non-villa landscapes are thus deviant or, from a different theoretical standpoint, “resistant” (Mattingly 2006, 252-4). If we are to talk about villa landscapes in Kent, this is to talk of the Darent and Medway valleys and of the North Kent plain. Villas are spread fairly evenly along the Darent Valley and within easy reach of Watling Street in the North Kent Plain. The North Kent Plain group may be expanded to include a number of examples on the south side of Watling Street, situated on the lower dip slope of the Downs. On the Medway, they seem to fall into smaller groupings, one perhaps focussing on Rochester, another (perhaps with agricultural emphasis) on the Gault vale and one on the upper Medway, perhaps exploiting the mineral resources of the Greensand belt, below Maidstone.

It has been demonstrated that certain features of the landscape (notably proximity to changes in bedrock geology and access to waterways) predispose towards the presence of villas. Could these partially explain the apparent low number of villas around Canterbury?

In order to test this hypothesis, 10 mile buffer zones were created around the towns of Canterbury and Rochester (Fig. 13.5).<sup>i</sup> There are 20 villas within the Rochester buffer zone, but only 6 within Canterbury’s. Nevertheless, the two areas in fact have much in common in terms of factors hitherto identified as predisposing towards/against the location of villas (Table 13.1)

Both areas have similarly sized substantial tracts of London Clay which are devoid of villas. The Canterbury Buffer zone actually has a greater area underlain by the Thanet Sands, Lambeth Group and Harwich Formation, but this has only two villas as opposed to four on similar bedrock in the Rochester buffer. The Rochester buffer zone has a slightly higher area of land within 500m of a change in bedrock geology but a disproportionately higher density of villas within that area. Both zones’ major rivers flow through the Chalk Downs in areas that are villa-free.

The main difference is that Rochester’s buffer zone encompasses substantial tracts of the Gault Clay and Upper and Lower Greensand; almost half of the zone’s villas are sited on

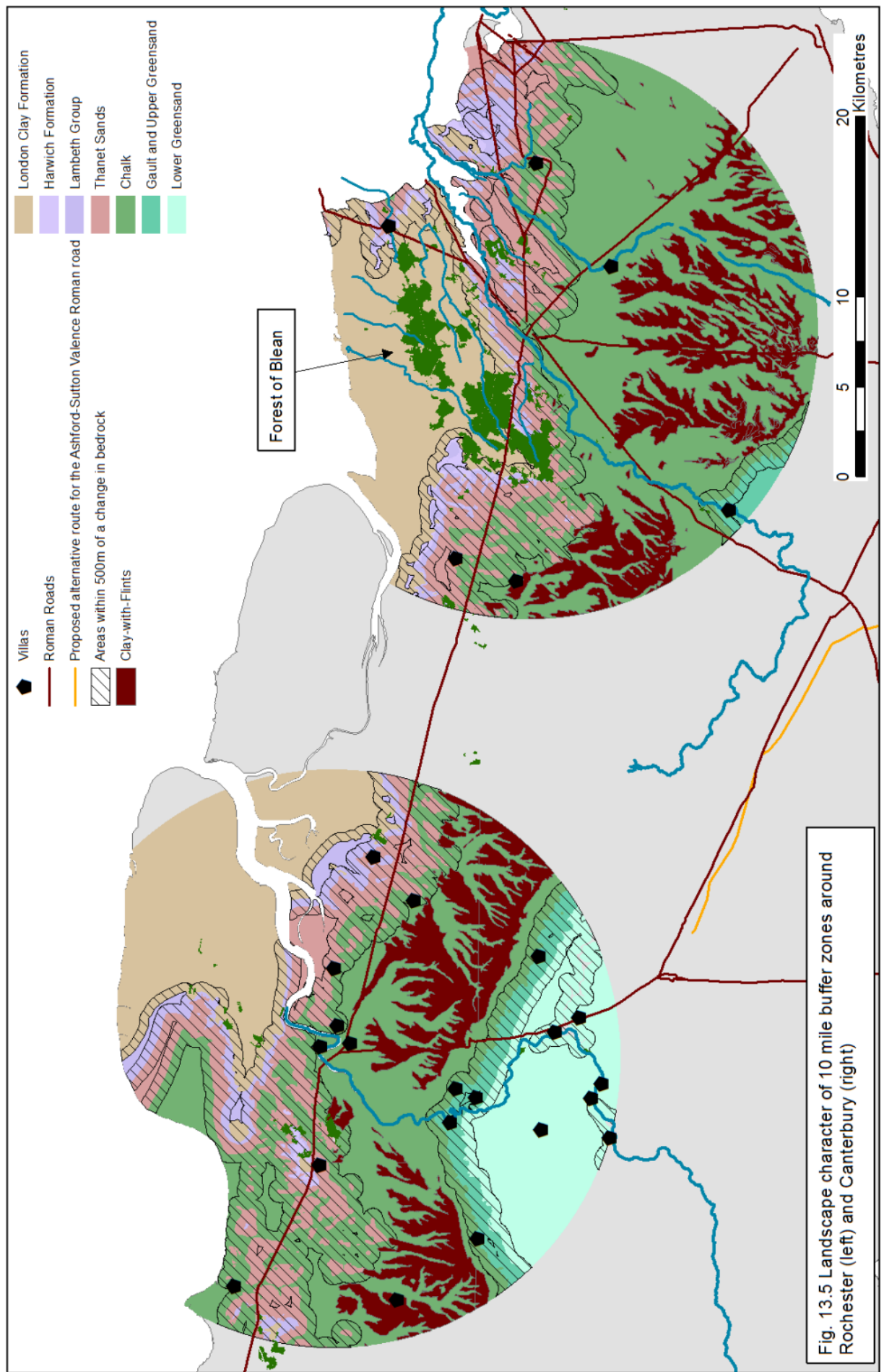
	Rochester			Canterbury		
	Area (ha)	% of buffer zone	Number of villas	Area (ha)	% of buffer zone	Number of villas
<b>Total area of mainland within buffer zone</b>	936.1	100.0%	20	858.6	100.0%	6
<b>Within 500m of change in bedrock</b>	264.9	28.3%	11	204.1	23.8%	4
<b>London Clay</b>	131.8	14.1%	0	135.5	15.8%	0
<b>Thanet Sands, Lambeth Group and Harwich Formation</b>	110.8	11.8%	4	124.1	14.5%	2
<b>Chalk</b>	304.7	32.5%	7	387.0	45.1%	3
<b>Gault and Upper Greensand</b>	23.2	2.5%	3	7.8	0.9%	1
<b>Lower Greensand (&amp; outcrop of Weald Clay)</b>	100.7	10.8%	6	0.0	0.0%	n/a

Table 13.1 Characteristics of 10 mile buffer zones around Rochester and Canterbury

these. This is, however, the only area in Kent underlain by these geologies that does have any significant density of villas and (as suggested above) the value of Ragstone for construction is likely to account for the number on the Lower Greensand. Again we are in a situation where one can postulate landscape-based reasons for villas being present in certain areas but are unable to explain their absence from others in the same terms. Currently it appears that in east Kent there was ample land of the type that in mid and west Kent attracted the development of villas but that here such houses were constructed in lesser numbers.

Is this then a cultural phenomenon backing up the suggestion of separate *pagi*? A potentially related phenomenon is the apparently higher density of lesser nucleated settlements in east Kent. A certain amount of caution must be exercised in this regard as it is possible that this in part reflects biases introduced into the record by modern development patterns and the greater incidence of crop mark evidence in east Kent. Nevertheless, it is possible that we are seeing a different kind of societal organisation.

There are a number of ways that this could be interpreted as we have no way of knowing the status of those who occupied the nucleated settlements and little indication of how most of these related to the surrounding countryside. They may have acted as market



centres, foci for the collection of taxes, villages of free *coloni* or the centres of estates whose owners were absent or chose to live 'in town'. In Chapter 11 above, it was suggested that these settlements were part of a pattern of nucleation in the later Roman period. Certainly Ickham seems to have been at its zenith in the 4<sup>th</sup> century (Bennett 2010, 342) and the other nucleated settlements provide evidence of Late Roman occupation in the midst of general rural settlement decline. Most, however, also provide evidence of much earlier foundation giving the overall impression of retreat to settlements that were already in existence and exercising a centripetal attraction.

In other parts of southern Britain, the decline of towns in the 3<sup>rd</sup> century is accompanied by the rise of the villa in the surrounding countryside (Reece 1980). Chronology may play an important part here. We have seen that Kent's villas tend to have earlier foundations and that, where dating evidence is available, none seems to have been founded later than the 2<sup>nd</sup> century. If earlier Roman settlement in east Kent followed a different pattern to that of the west, with the elite choosing town- over country-life then in the Late Roman period, it appears to have joined in a wider sub-regional trend: villas were simply not constructed in Kent during the supposed 'Golden Age' (Haverfield 1912, 24) of Roman Britain.

## **13.4 The effects of the Roman occupation on the physical and social landscape of Kent**

### **13.4.1 The annexation of Kent**

As has been noted, AD 43 is archaeologically invisible in Kent, beyond, perhaps the Claudian ditches at Richborough. In the Late Iron Age, the area was already changing, dynamic and connected: to the continent, almost certainly to the Eastern Kingdom and very probably, through client kingship and the *obsides* system to the heart of empire itself. There are no obvious signs for radical changes in land boundaries or for anything other than the transition to Roman rule being peaceful, as one might indeed expect if the area were already ruled by client kings.

The events of AD 43 have been the subject of lively debate in recent years (summarised by Manley 2002 and Frere and Fulford 2001). Richborough is generally accepted as being the landing point for at least part of the invasion force and Frere and Fulford argue forcefully that the river battle between Plautius' troops and the British opposition indeed took place on the Medway (as traditionally held). If there was serious opposition to the Roman annexation in Kent, this must have been quickly quashed as there is little evidence for a substantial sustained military presence. Indeed if the Kentish aristocracy were already (as suggested by the circulation of Late Iron Age coinage) under the thumb of the Eastern Kingdom and if (as suggested in Chapter 4) their *relative* poverty were caused by the latter monopolising prestige imports, then they may even have viewed the invasion as a kind of liberation and an opportunity to enter into relationship with Rome on a more equal footing.

How one views the annexation of Kent must influence one's interpretation of the evidence from west Kent. If there was serious resistance by the elites of west Kent, then it is certainly striking that this area has such a dense concentration of villas. As already pointed out (Ch 6), Black (1987, 9) has suggested that lands in the west were confiscated as punishment for resistance encountered at the Medway and taken over by lesser landowners, including Gaulish immigrants (a landscape of indigenous resistance thus transformed into one of opportunity for incomers, as with the lands around Tongeren following the Caesarean conquest). The alternative is that they did not resist, and that if the Medway was the site of the battle the opposition was provided by forces from beyond the Kentish kingdoms. Black's argument may receive some support from the evidence for sites in the Darenth region going out of use in the 1<sup>st</sup> century. This is far from conclusive, however, and the advent of native-owned villas in the valley in any case might predispose towards the same result.

#### **13.4.2 The 'Imperial Gaze'. Impositions on the landscape: towns, roads and the question of centuriation**

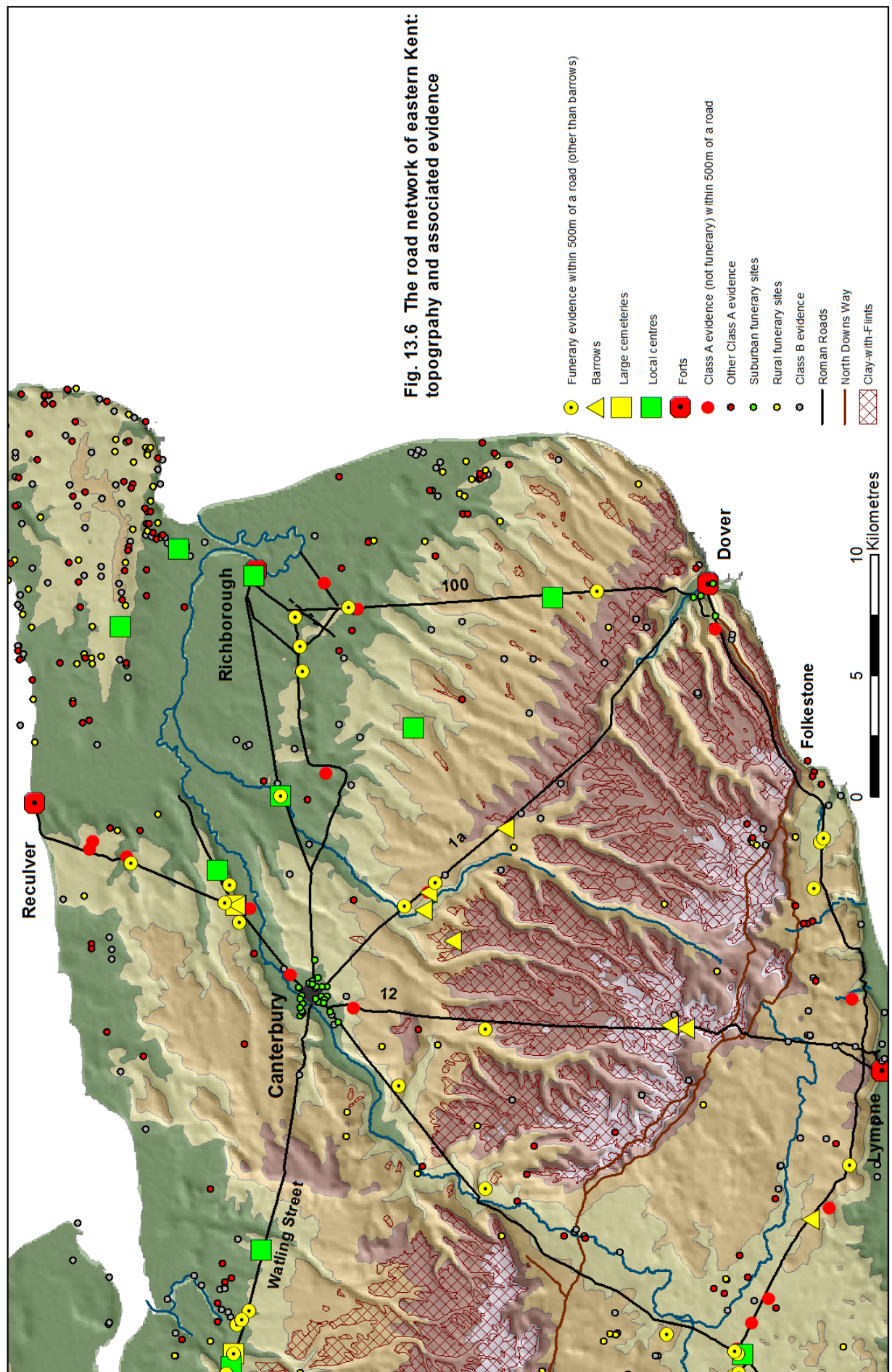
More certain are the effects that the administration had in terms of built infrastructure. In the earlier Roman period this included the transformation of settlements at Canterbury and Rochester into recognisable 'Roman' towns and the beginnings of the road system. As centres of officialdom, ultimately (in Canterbury's case at least) provided with the usual

suite of civic buildings, the towns required a new set of behaviours which would be played out in the countryside in that new theatre of social relationships, the villa. Although we must assume that vernacular buildings were still commonplace, Kent would appear very different in the 2<sup>nd</sup> century compared to the Late Iron Age. A traveller through the county would now see, in some areas at least, villas, the smoke from their bath houses and sometimes very visible funerary monuments punctuating the landscape. Meanwhile, the development of Richborough and, later, of Dover as principal ports of entry appears to have dislocated the county's traditional axis of communication leading from Folkestone to the interior via the North Downs Way. The coastal installations at Dover, Reculver and *Portus Lemanis* would govern the road layout in east Kent.

One might question who actually used these roads. In Chapter 5, it was established that the vast majority of evidence for the period is situated in proximity to rivers and the coast and that outside of this coastal-riverine zone, the roads themselves attract little evidence of settlement.

The road system was developed with the needs of the state, rather than the indigenous population, in mind. Watling Street was the prime route into the province from Gaul. The fact that its route through Kent coincides with some of the county's most desirable land must contribute to the fact that it has the highest level of associated settlement evidence. By contrast, other roads of eastern Kent for the most part pass through less hospitable environments with much lower densities of evidence of occupation. In particular, those connecting Lympne to Canterbury (Margary's Route 12) and Dover to Canterbury (Route 1a) and Richborough (Route 100) pass over elevated sections of downland and, in the case of the Lympne road in particular, extensive areas of Clay-with-Flints (Fig. 13.6). It is likely that much of this was covered by woodland and one might imagine it a potentially hazardous route. Nor is it obvious why a civilian would particularly want to take either that route, or, indeed that from Dover to Richborough, although that such movements did take place might be suggested by the presence of the nucleated settlements at Maydensole Farm/Broom Bungalows on the latter route.

There is little Class A evidence immediately adjacent to these routes and what exists is mainly funerary in nature. Perhaps significantly, on the Lympne and Dover roads, these include a number of barrows of potential Roman date. If these routes were used primarily for troop movements, then they might form fitting locations for the burial of members of the military of Germanic origin.



In the Weald, there is virtually no evidence directly associated with the road network other than at road junctions, notably at Westhawk Farm and less securely at Benenden. At Sutton Valence a substantial walled cemetery and a poorly understood building sit at unusually elevated locations on the edge of the Chartland, overlooking the Weald and about 2km from Amber Green, where Margary's Route 131 (to Dover) splits from the Rochester to Hastings road (Route 13). Elevation may be the reason that there is no evidence of a roadside settlement at this junction. The impression is that these were simply routes from A to B, in this case linking both east and west Kent with the iron making regions of the Weald, whilst Route 131 made an overland link to west Kent from Dover (perhaps a more southerly and vehicle-friendly alternative to the North Downs Way).

Roads are less prominent features of the geography of west Kent. Although the immediate vicinity of the Rochester-Maidstone road has a higher density of evidence than the roads of east Kent, it is still mainly funerary. Instead, the rivers of west Kent appear to form an important part of the infrastructure. In recent historical times the Medway was not navigable upstream of Maidstone until the 17<sup>th</sup> century, when improvements were made to facilitate the carriage of timber, iron and ordnance from the Weald to Chatham Dockyard. It only became navigable as far as Tonbridge after the establishment of the Medway Navigation Company in the 18<sup>th</sup> century (Ormrod 1994, 166). Elliot (2011; 2014), however, argues that there is evidence for the Medway's being controlled and made navigable at least as far as the Ragstone quarrying areas in the Roman period by means such as dams, locks and weirs. Both the scale of Ragstone extraction and the demands of river management pose questions. Elliot suggests that this industry and the accompanying engineering were controlled by the state via the *Classis Britannica*. Certainly the skills required would initially have been found within the military community rather than the indigenous population, but there is no proof of official state involvement and even the *Classis Britannica* tiles so often cited as evidence of the state's control of the iron industry are absent. There seems no ostensible reason why the control of quarrying and river management should not have been in the hands of civilian entrepreneurs employing those with the requisite knowledge and experience.

The Roman administration certainly imposed roads on the landscape of Kent. There are those who argue that it also imposed a system of land division. Centuriation in Kent has been proposed by Nightingale and Stevens (1952), Peterson (2002; 2006) and Wilkinson (2009b).



Nightingale and Stevens proposed that a stretch of road and field system on the Hoo peninsula was divided into 20 actus squares aligned on the Rochester to Maidstone road south of the Medway. The authors themselves admit that there are many instances of “warping” where the roads do not entirely conform to the proposed grid and the whole system has been critiqued and found wanting by Ward (1999). A slightly more convincing case has been made by Wilkinson (2009b) for centuriation into 20 actus squares around Hog Brook and Deerton Street. Here there are certainly a good number of straight land divisions that lie perpendicular or parallel to Watling Street, although this writer has to be convinced that they actually represent 20 actus squares. The problem with any exercise like this is that it is easy to pick the divisions that (more or less) fit the required measurement.

The most comprehensive system has been proposed by Peterson (2002; 2009) who has found elements of a system extending over the whole of Kent and beyond. If this system is laid over a digital elevation model of the county (Fig. 13.7), it is very clear that the north-east/south-west elements of the system line up with the lie of the land, as Peterson himself admits (2002). The cross axis he finds to be based on the Canterbury-Dover road (believed itself to be the basis of the Canterbury road grid [Wacher 1995, 191]), the whole system thus sharing its orientation with two roads leaving Canterbury at right angles.

Attractive as this proposal is, it seems to this writer that there are problems. To be detectable today, the roads, tracks, paths and boundaries which contribute to the pattern of centuriation must have been not only established in the Roman period but either to have been maintained or to have been substantial enough to have become relict features detectable either on the ground or by aerial survey. The cadastre as presented covers, in remnant form, the whole of Kent (and beyond), including areas known to be relatively densely occupied as well as those with no current evidence at all for activity during the Roman period. Even if these areas were apportioned, it seems unlikely that such permanent landscape features would result in many parts of the Weald or in those areas of the Downs capped by Clay-with-Flints, both of which were likely forested to a greater or lesser extent. Peterson (2002) argues for cadastration of Romney Marsh, taking into account the ages of its different soil types which he believes demonstrate differential preservation and a higher degree of organisation of the “Old Marsh”. When plotted against Cunliffe’s soil-based reconstruction of the area, however, there are apparent traces of centuriation in what is believed to have been the lagoon, while *Portus Lemanis* is implicitly land-locked.

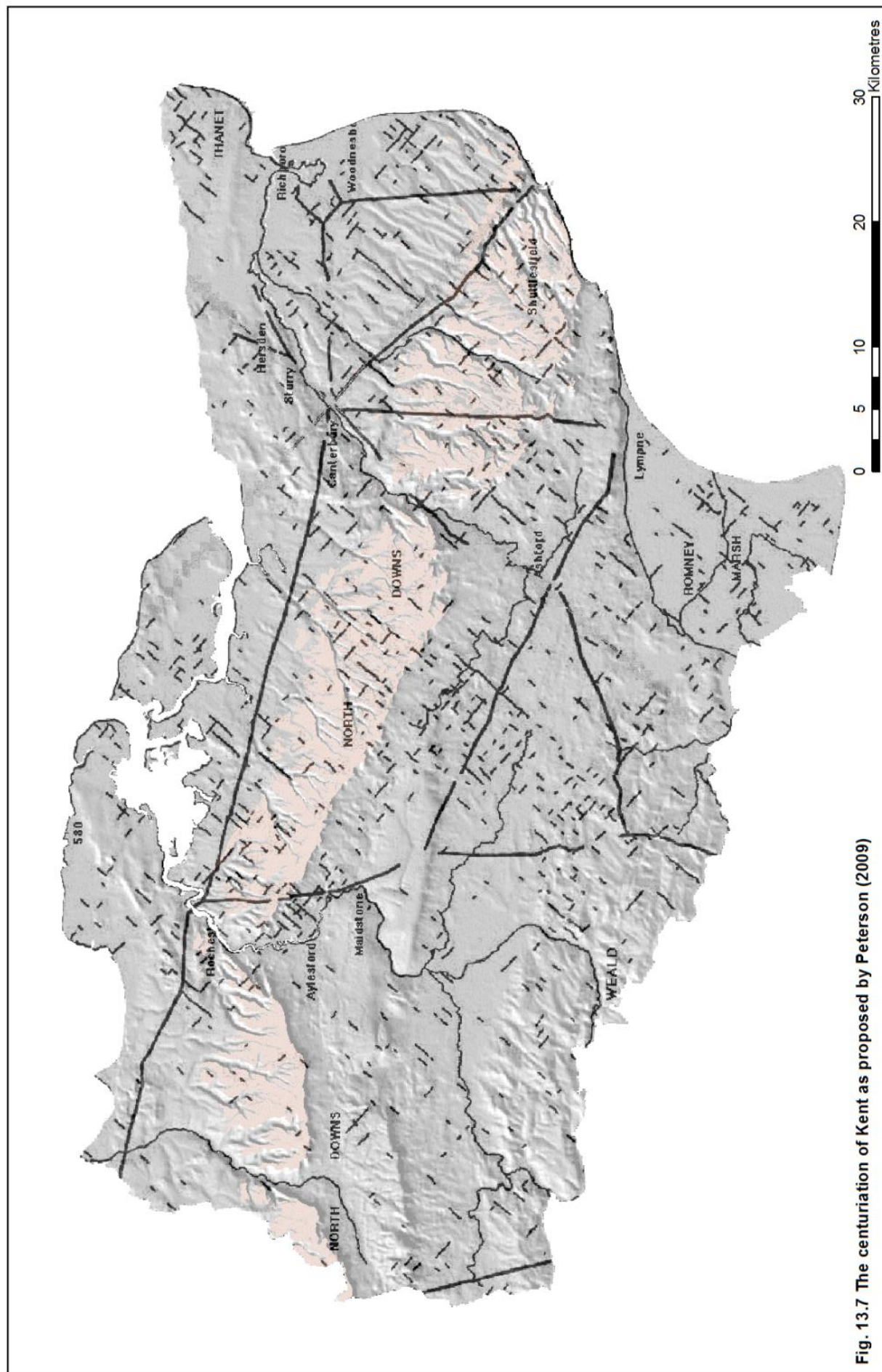


Fig. 13.7 The centuriation of Kent as proposed by Peterson (2009)

Peterson's and Wilkinson's grid orientations clash in the Swale areas, where Wilkinson's is at right angles to Watling Street and Peterson's more oblique. Both cannot be correct, although interestingly Wilkinson's squares 25 and 26 (which he centres on a road which changes direction to lead to Deerton Street Villa), share the alignment of Peterson's system. The lesson perhaps is that it is all too tempting to select evidence to fit in with a theory. Evidence of Roman surveying incontrovertibly exists in the landscape in the shape of the road system and it is highly likely that it exists elsewhere. It is only to be expected that fields and land holdings may have been measured out using Roman units but this does not equate to a formal system of centuriation as seen, for example, in the Po valley.

If Kent were formally centuriated we would have to ask why. Would it imply that the area had been requisitioned by the state, to be apportioned to new owners? This seems an unlikely scenario for Kent as a whole if the inhabitants *were* already in a formal client relationship with Rome. It might certainly be measured out for the purposes of taxation but again one would have to ask why tracts of land ostensibly uninhabited were so assiduously surveyed, presumably at some expense.

Wilkinson (2000) suggests state-imposed planning on the evidence of 19 possible Roman villa "estates" in the Swale district, placed more or less equidistantly along Watling Street. One could of course argue similarly for the distribution of villas in the Darent valley and whilst it is possible, it is also just as likely that it represents a natural infilling of the available land and is an economic expression. As land holding was not only a crucial marker of status in the Roman world but an essential qualification for the right to hold political office, the possession of a suitable tract of (preferably prime agricultural) land and of a house which declared one's understanding of Roman social mores became essential for the aristocracy. At the same time we need to be cautious in estimating the extent of these 'estates' as land holdings were not necessarily contiguous and may be made up of scattered parcels, even of tracts of land in different provinces as in the well-known (if very late) case of Melania the Younger (Jones 1985, 782) who held land in Britain. There are at present insufficient data available from the Swale area to trace the development of this landscape and to say whether the villas appeared simultaneously or over a period of time, or crucially, whether they represent continuity/discontinuity from the Late Iron Age.

### 13.4.3 The military presence

Although the initial military *occupation* of Kent itself appears to have been short-lived, with the supply base at Richborough developing into a civilian settlement/sanctuary site by the late 1<sup>st</sup> century, a military presence was maintained on the coast, at least sporadically, for most of the period. This is hardly surprising given the fact that Kent was the gateway into the province from Gaul and thus a critical link in the chain of supply to the garrisons further north. The *Classis Britannica* was periodically present, (probably not permanently stationed; Millett 2007, 176-7) at Dover, probably Lympne and possibly Richborough from the 1<sup>st</sup> to the 3<sup>rd</sup> century. The resulting installations, even when unoccupied, would have been a visible reminder of Kent's status as a Roman *civitas* for those living in the vicinity or entering/leaving Kent by those routes. In the later Roman period the so-called 'Saxon Shore' forts were constructed over a period of at least half a century (ibid. 180). In addition, as tasks such as tax collection and policing were performed by members of the military seconded as *Beneficarii*, there must have been some level of permanent (if more administrative) military presence.

It is not the purpose of this thesis to debate the nature of the military presence in Kent, but it is relevant to ask how it might have affected the rural population.

When the fleet or a garrison was in residence, it would need supplies. These might be requisitioned from nearby communities, being paid for by the state, but not necessarily at market rate (Kehne 2011, 326); this could clearly be a drain on the resources of communities or individual land owners, although Millett points out that the numbers of men involved, both in the *Classis* and later in the shore forts was probably never very great (2007, 180). In compensation, the troops themselves would buy supplies from local traders, possibly boosting the local economy or the fortunes of enterprising individuals.

These connections between the military and the local population are impossible to prove, but there are occasional hints of such. Although final results are awaited, preliminary findings from East Kent Access Zone 6 are interesting in this regard: there are elements of the coin loss pattern that closely mirror that at Richborough. There is a relatively high rate of loss in the earlier and late periods and although Cooke and Holman (2011b, 55) comment on the dearth of Period 13 and 14 coins in comparison with Richborough, in fact Richborough's permill level of loss is also below the provincial average at this point. Could the suggested hiatus in activity at this point be connected with the absence of military

activity at Richborough? In Chapter 8 it was suggested that the site's high level of sheep remains might be related to the supply of wool for the military; it also produced a relatively high proportion of pig bones.

Other sites on Thanet have also been suggested as trading with the military, with Monkton and sites on the Margate Pipeline possibly supplying wool; further evidence from the pipeline sites suggests that prime meat joints, including a high level of pork, were being selectively traded off-site. The obvious market here is Richborough, but also possibly the other east coast installations (Grimm 2009, 16). High levels of Dressel 20 amphora at Monkton and East Kent Access Zone 6 may be corollaries of such trading, representing the secondary use of vessels initially supplied to/for the military. It must be recalled, however, that Richborough appears to have been a thriving port/settlement even in the absence of a resident garrison and the Thanet settlements may have been benefitting from the proximity of this port of entry (albeit that it might be receiving goods for transshipment to the frontier) rather than directly trading with the military.

At Westhawk Farm, the possible presence of soldiers has been suggested on the basis of its coin profile (perhaps connected with an early installation at Lympe), whilst Claudian coins, an elevated level of South Gaulish samian and the presence of Cam 16 platters have been used to suggest some degree of early military presence at Springhead. At Goodnestone, the suite of early finds (including pre-Flavian military equipment, a lead sealing, Gallo-Belgic pottery, Dressel 1 amphora, early samian, and pre-conquest and Claudian coinage) appears both significant and all the more unusual for occurring at a distance from any known road. Possibly this represents a very early tax collection centre or trading post (perhaps based on wool production), which pre-dates the road system. In this respect it is relevant to note that it has been suggested that soldiers could have been present in Britain even prior to AD 43 just as they are documented to have been present in other friendly kingdoms (Creighton 2001, 7-11; 2006, 50-69; Manley 2002, 144).

A group of official lead seals 4<sup>th</sup> century date, were discovered at the site of a masonry building at Ickham ('Ickham Villa'). This discovery, combined with the presence of 'military' type crossbow brooches and belt fittings at the Ickham industrial settlement (approximately 1km to the north) initially led to the suggestion that the latter was an official works depot associated with the forts at Reculver and Richborough (Young 1981). This interpretation has been reassessed by Bennett (2010) who points out that no official seals came from the Ickham settlement itself, where their presence might be expected if it

were under state or military control. He suggests that the seals instead may suggest the location of a collection point, or a limited number of private transactions between the military and a local farmer. It is now well-recognised that 'military' dress accessories were also worn as marks of status by civilians (Swift 2000); Ager (2010) marshals the evidence to suggest that the belt fittings, mostly of not very high quality, may have been manufactured at Ickham, possibly for supply to military and officials at Richborough, Reculver and Canterbury, but comes to no firm conclusions.

### **13.5 The chronological trajectory of Kent's rural settlement in a wider context**

The general chronological trajectory of rural settlement in Kent has been outlined in Chapter 5. After an apparent hiatus in the Middle Iron Age, there is an increase in rural settlement evidence which starts in the Late Iron Age and rises, quite sharply in some areas, during the 1<sup>st</sup> century. The greatest amount of evidence dates to the latter part of the 1<sup>st</sup> century. There is a significant fall in the number of new sites founded in the 2<sup>nd</sup> century and the second half of that century has the highest rate of sites going out of use. Thereafter there is a steady fall in the number of sites in use so that only a quarter of securely dated sites are still occupied (sometimes after periods of abandonment) in the later 4<sup>th</sup> century. The majority of these sites are villas and the distribution suggests retrenchment to core areas of settlement (Fig. 13.8). There are of course methodological problems associated with the mapping of late Roman settlement (as pointed out by Van Ossel and Ouzoulias [2000, 135]): soil levels are likely to be more truncated, the latest levels of occupation may be poorly preserved and it may be difficult to identify structures which are no longer built in stone. The latter is of course a problem throughout the Iron Age and Roman periods in Kent and the difficulty of distinguishing Late Roman coarse wares can only exacerbate the problem.

Alongside the reduction in the amount of evidence for Late Roman occupation there is a change in its nature, at least at the villas, which are our chief source of information. The trajectory of the majority Kent's villas, as has been noted, is quite different from that seen in other areas of southern Britain, notably the Cotswolds. The prosperous Late Roman villa culture of central southern Britain is mirrored in south western Gaul and parts of Iberia.

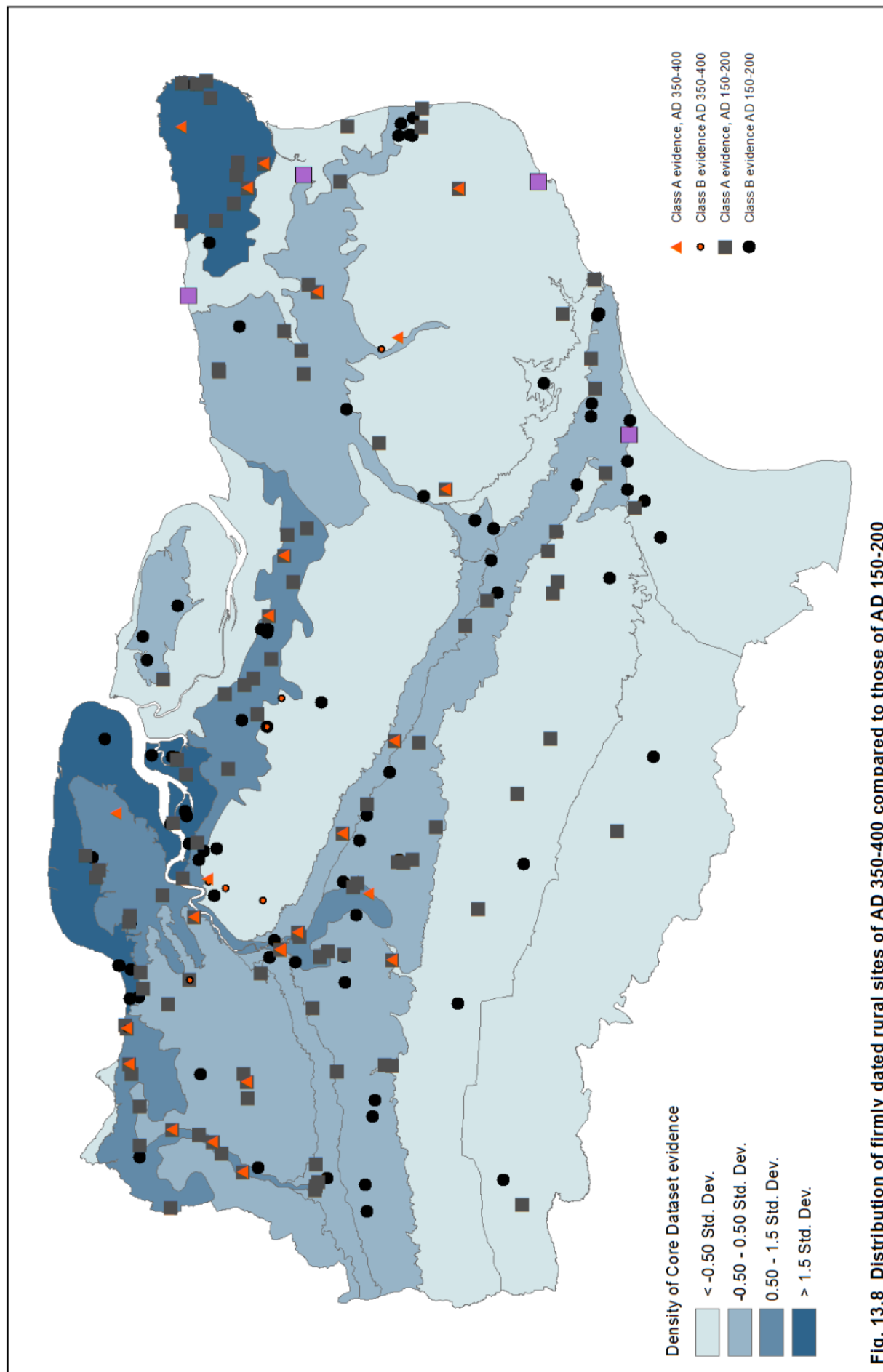


Fig. 13.8 Distribution of firmly dated rural sites of AD 350-400 compared to those of AD 150-200

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Esmonde Cleary (2013, 245-257) argues that the aristocracy of these latter areas were linked into the higher echelons of imperial service, supplying surpluses in return for state funds and that by analogy such close links may also have existed in Britain. The situation in northern Gaul was quite different. In Picardy and much of Gaul north of the Seine (Van Ossel 1992, cited by Esmonde Cleary and summarised in Van Ossel and Ouzoulias 2000), the number of villas declined in the later Roman period and, where they persisted into the 4<sup>th</sup> century, were marked by few signs of luxury. Timber was increasingly used for new constructions, buildings or parts thereof were abandoned and other areas were transformed and reused as kitchens, bakeries or for craft or agricultural purposes. Van Ossel and Ouzoulias note that these adaptations were almost always accompanied by the abandonment of heating systems and bath installations.

These are all trends that can be observed in Kent. In northern Gaul, conventional wisdom has argued that these changes were the result of the vicissitudes of the 3<sup>rd</sup> century: political instability, barbarian incursions and plague. Esmonde Cleary finds that the 'invasion hypothesis' has obscured multi-factorial causes of change which were played out over a much longer time-scale (2013, 23-30). Two of the traditional sources of archaeological evidence for the crisis are problematic: destruction deposits can rarely be tied to specific historical events and coin hoarding is notoriously difficult to interpret, but is frequently of low value issues, suggesting changes in coin usage rather than the need to secrete 'wealth' (ibid., 31-40, cf. Reece 2002, 77). Esmonde-Cleary (ibid., 458-9) also argues that although barbarian incursions and political instability existed in the 3<sup>rd</sup> century, other structural processes were at work and that by the end of the 2<sup>nd</sup> century the huge upsurge of cultural and economic activity of the Early Empire had reached a natural conclusion. From the early 3<sup>rd</sup> century there was a reorientation of cultural values and their economic expressions in part because of the settling down of the social order and a diminished need to proclaim status.

For Kent (which has been suggested above essentially to have been bound into the Roman Empire by political and economic ties even before its annexation) anxiety over status may have been less acute than in some other areas. It is true that the elite bought into the standard ways of expressing status, notably the villa, yet this was rarely undertaken in the most ostentatious manner. One or two of the earliest villas are remarkable for mosaics and elaborate (or implicitly elaborate) bathhouses but most appear relatively modest in their trappings. Villas were necessary spaces for conducting business and negotiating



relationships and for this it is the use of space that seems critical: Kent's villas tend not to include ostentatious *triclinia*, but they do exhibit proportionally large areas of *porticus* as well as detached bath houses where outsiders could be entertained without crossing into the private domestic domain. Late elaborations are found at only a few sites as mentioned above.

Lullingstone is in all periods a building exceptional in its design, positioning (set into the hillside), embellishment and in its evidence for cult activity. In the Late Roman period its mausoleum, set high on side of the valley, and its large granary would have been visible statements of power to those approaching by river. Identification of the Deep Room busts as Pertinax and his father combined with the discovery of an important intaglio bearing imperial imagery has prompted Henig (2007) to argue that rather than being an agricultural estate, Lullingstone was the out-of-town residence of Pertinax during his governorship of Britain (AD 185-186) and thus, potentially, of other governors. This site, then, potentially *did* have close connections with the Imperial system and it is (so far) alone in Kent in having a formal apsidal room with late mosaics. Although normally described as a dining room, this form of room, with audience chamber and apse is also an architectural form associated with seats of justice; such rooms found in domestic buildings might indicate the exercise of official duties from a private residence (Esmonde Cleary 2013, 238).

The elaborate form of the 4<sup>th</sup> century octagonal bath house at Bax Farm recalls buildings of similar date from the west of Britain (Holcombe, Devon and Lufton, Somerset). Unfortunately nothing is known of the other buildings on this site. Although agricultural processes were being brought within the main range at Eccles, the late baths included a cold pool over 13m in length. These few villas (along, perhaps, with Otford 'Progress' Villa which is poorly understood but has possible 4<sup>th</sup> century mosaics) thus stand out.

In certain areas of the West (e.g. Central Gaul) there was a reordering of the settlement hierarchy with the largest and richest sites becoming dominant (Esmonde-Cleary *ibid.*, 461). This does not exactly seem to be the case in Kent where most villas remain under occupation but even the richest suffer some depredations. The evidence may suggest, however, that a few sites were, as suggested for villas further west, in a more formal relationship with the Imperial system, perhaps able to monopolise the supply of grain and thus to generate a greater surplus that could be spent on the maintenance of hypocausts and baths and the purchase of mosaics. Their existence suggests that, for a few in Kent,

there was still some need for places where social or business transactions could be carried on in the old manner.

For others, these facilities seem to have become irrelevant or possibly no longer affordable. Either scenario implies a change in the social relationships of those living and working in these places. One possibility is that these were now (if not earlier) the properties of absentee landlords and that surpluses generated in Kent were (as Esmonde Cleary (ibid., 282) suggests for North Gaul) spent in other areas such as *Britannia Prima*.

We have little information as to where those not connected with the villas were living in the Late Roman period, at least in West Kent. In east Kent, as noted in Chapters 7 and 11, a number of lesser nucleated settlements still appear to have been occupied.

### **13.6 Concluding thoughts**

Kent has a rich history and a rich history of archaeology. The record for the Roman period is not without problems. In the past many important sites have been excavated and recorded to standards which are far below those deemed acceptable today; although there has been a huge increase in the quantity of data available since the implementation of PPG 16, there is much which still remains to be fully analysed and published. Lack of publication per se is not a great issue. The Kent HER holds a vast library of 'grey literature' which is easily accessible to anyone conducting research. The greater issue is the completion of these reports beyond interim or post-excavation assessment status and in particular the provision of specialist reports of a standard which is of genuine use to the researcher present and future. This can be a problem if funding is insufficient and to some extent depends on the good will and interest of developers to finance reports which go beyond the minimum requirements stipulated by planning permission. Whilst not wishing to denigrate the huge volumes of valuable work which by voluntary or smaller agencies (often [especially prior to PPG 16] as a response to immediate threat of development) funding is clearly an issue here too, as frequently noted in reports.

There are also implications for amateur archaeology: community involvement in archaeology is an essential aspect of public relations. It is essential that there is grassroots

understanding of the need for preservation/excavation of archaeological remains under threat. English Heritage (2001) believe that, “the voluntary sector is one of the strengths and distinguishing characteristics of British archaeology, which should be fostered and developed”; however it also sees scope for a voluntary Code of Conduct to ensure that all archaeological work is carried out to the highest possible standards. Sites in Kent are still excavated and recorded by amateurs (often with professional input) to a high standard; it is in post-excavation procedures that these endeavours may fall short. Given the increased awareness of the potential of artefactual and eco-factual remains which has come about in recent decades it is perhaps time to question whether sites should be investigated (however well on the ground) without sufficient planning and finance for adequate post-excavation analysis. Efforts might be better directed towards non-invasive archaeological survey.

For the point of view of a researcher working with published and ‘grey’ literature reports, one of the greatest needs is for the availability of raw data and for these to be standardised. Publication, although essential for wider dissemination and public understanding, sometimes seems to get in the way of this. The amounts of data generated by archaeological investigations, particularly those of the Roman period with its high degree of artefactuality, can be enormous and make for uncomfortably large publications. Technology means that this need not be so and the policies of units such as Oxford and Wessex Archaeology to provide synthetic volumes for certain projects, whilst placing datasets online (via ADS or their own websites) or on CD-ROM are to be encouraged. Investigations by smaller bodies, either self-published or published in local or national journals too often have only selective artefactual data, whilst environmental data often fares even worse. Meanwhile the need for a standardised pottery series for Kent has already been highlighted. Added to this are problems of storage and access to (particularly unreported) excavated material for independent assessment by researchers.

This thesis has been researched and completed at what may be considered to be turning point in Kentish archaeology, as witnessed by the number of publications produced during the project. Had it started even a few years earlier, there would have been considerably less information available, particularly in terms of quantified artefactual and ecofactual data and excavated minor settlements. Had it started later, it would have been possible to integrate more material from projects such as the East Kent Access Road scheme.

Nevertheless, it has been possible to start to characterise the nature of rural settlement in Kent during the Roman period. It has been possible to place Kent spatially and chronologically within a wider context. Kent is emphatically an eastern county with cultural and economic links to the old Eastern Kingdom and northern Gaul, with whom she shares a chronological trajectory. Although it would be foolhardy to suggest that Kent was not affected by periods of wider political instability, we do not need to invoke theories of disaster to explain the lack of a 'Golden Age' or the apparent reduction in the number of settlement sites from the later 2<sup>nd</sup> century onwards. It seems more accurate to view Kent's incorporation within the wider Roman Empire in terms of annexation rather than conquest, with this annexation formalising a situation that probably commenced during the Late Iron Age.

Finding the 'ordinary' man or woman of Roman Kent is challenging, although this is a situation that may change as further data emerge from recently excavated enclosed and developed settlements. We do not know the official status of the vast majority of those living in Kent. Roman society was deeply stratified and it is certain that the inhabitants of Kent were aware of their official status and of the different rights and obligations that accrued to these. What is certain is that the buoyant Early Roman economy was dependent on the unremitting labour of many of lower status entirely for the benefit of others. Whether estate employees were free, bonded or enslaved is something we cannot know: at various times and in various places all three situations probably pertained and indeed there is circumstantial evidence for slavery from a building at Chalk (Johnston 1972). Even if both were technically enslaved, a gulf must have existed between the experiences of the servant who attended his master in the bath house and the boy who cleaned out its hypocaust.

There were, however, opportunities to be had. As well as the chance for agricultural communities to trade with the military suggested above, the new built environment required a whole raft of new craft skills and consequently an artisan class to provide these. Even if we imagine general builders capable of all the skills necessary to build a house (construction in stone and tile, carpentry, plastering and decoration), there was still need for specialist tile-makers (such as Cabriabanus, who worked at Plaxtol), blacksmiths to provide the thousands of nails and fittings, and glass-makers to glaze windows. Large numbers must also have been employed in the quarries of the Medway valley, although

this may have been a worse (almost certainly more dangerous) alternative to work in the fields.

The adoption of a new suite of material culture, particularly by the elite, encouraged the production of specialist pottery alongside more utilitarian wares so that, for instance, at Hoo there seems to have been a workshop devoted specifically to the production of flagons (Applegate 2012). Towns, roadside settlements and posting stations would also provide alternative employment for those from the countryside to work in Britain's new service industries, providing hospitality to travellers, stabling or repairs to vehicles.

All of these groups would have suffered from the change in the character of settlement in the later Roman period. There was diminished need for domestic servants, buildings were for the most part not being maintained and the few new structures were typically constructed from recycled materials. Although the Black Burnished Ware industry persisted into the earlier 4<sup>th</sup> century and other coarse wares (sandy grey wares and grog-tempered wares) were still produced, the Upchurch fine ware industry was in decline from perhaps the 3<sup>rd</sup> century (Pollard 1988). Fine wares in the later Roman periods are dominated by imports, particularly of Oxfordshire products.

*Romanitas* had not been a mere veneer: its corollaries had deep impacts on the lives of people of all stations. Nevertheless, it a way of life that by the 4<sup>th</sup> century had nearly run its course in Kent The landscape bore its scars in the deserted quarries of the Medway valley and the crumbling ruins of buildings no longer maintained. Funerary monuments still stood by the roads, but these themselves may have been grassing over, as witnessed in later place names (Green Street). The *longue durée* of life based firmly on the land began to reassert itself as Kent prepared to enter a new era.

## Note

<sup>i</sup> Rivet (1955) states that almost all villas lie within 10 miles of a town.

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