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THE DISTRIBUTION PATTERNS OF BRONZE AGE ROUND BARROWS IN NORTH-EAST KENT

DAVE PERKINS

INTRODUCTION

by Gerald Moody, Deputy Director, Trust for Thanet Archaeology

It is a pleasure to add this brief introduction to the following article by Dr David Perkins, former Director of the Trust for Thanet Archaeology. The article is based on research Dr Perkins carried out for a Ph.D., awarded in 1999. Building on the work of the Isle of Thanet Archaeological unit, his thesis encompassed many years of research and fieldwork on the prehistory of the Isle of Thanet carried out by the Isle of Thanet Archaeological Society and the Trust for Thanet Archaeology under his direction. Dr Perkins was uniquely qualified to provide a synthesis of the prehistoric period in the Isle of Thanet, having contributed a significant proportion of the primary data in the form of a long series of published excavations. The work combined the application of the classic analysis of the morphology of round barrows, derived from research published on Wessex, to the significant number of these features discovered and excavated in Thanet. The research went beyond cataloguing and refining the interpretation of the known examples of round barrows into the sphere of a general theory of the spatial distribution and social implications of the development of the barrow rite in prehistoric Kent.

The basis of this study was a painstaking identification of the distinctive circular crop marks on transcripts of aerial photographs of east Kent published by the RCHME. It is perhaps not widely known that Dr Perkins made his own regular sorties over Thanet to take his own series of aerial photographs. Even within the constraints of the limited capacity of computers in the 1980s, Dr Perkins and his brother Charles developed a simple computer program to rectify and plot this valuable series of images. The data that underlies the density plots contained in the following article is a centre, hand-plotted on a large scale map for each ring ditch identified over the Isle of Thanet. From this data Dr Perkins derived his identifications of barrow cemetery groups and, in places, super cemeteries with very many

of these funerary monuments. Drawing on the well known research from Wessex, he was able to create matching figures that implied that the funerary landscape of prehistoric Thanet was in the short term comparable with that of Wessex and in the long term was rich enough to generate interpretations and variations that qualified it as a centre of significance for prehistoric Britain that justified it as a focus of research in its own right.

Dr Perkins' work on the round barrows of Thanet was a seminal piece of landscape research whose significance is perhaps only recently being fully appreciated as the Trust for Thanet Archaeology continues to build on the data and to make it known to other researchers. Since Dr Perkins first assembled this data there have been many advances in the technology available to render large data sets and to compare them rapidly with other influential factors within the landscape. In recent years the staff of the Trust for Thanet Archaeology have digitised Dr Perkins' original database and integrated it with layers of landscape information available on the Trust's GIS system. The maintenance of this database of round barrows is now an ongoing process, testament to Dr Perkins' observations that the aerial photographs of hundreds of possible round barrows had only scratched the surface of the number that had originally been present. Recent excavation within urban areas on the fringes of the Isle of Thanet, where the aerial photography coverage has not penetrated. confirm that his distribution models are, if anything, conservative. The stripping of very large areas associated with road schemes, pipelines and agricultural projects in recent years has demonstrated further that the round barrows that have been identified as crop marks are a small proportion of those that remain obscured. Continued discoveries of new round barrows with new evidence of complex morphologies support Dr Perkins recognition that the barrow landscape of the Isle of Thanet is a worthy subject of study in its own right. One can only guess at the results that he could have achieved if he had been able to access such research aids and was able to apply them with the diligence and enthusiasm with which he applied the technology that was available to him.

During the late 1980s and much of the 1990s, the writer undertook a programme of study encompassing most aspects of human activity in Kent throughout the last two millennia of prehistory. The distribution of cropmark evidence played a large part in this, and in particular, the distribution of ring ditches as revealing evidence of Bronze Age funerary practice. In reviewing this, two major ritual landscapes were identified, one in the Isle of Thanet; the other just west of the Wantsum.

By far the most numerous of Kent's prehistoric cropmark sites are the ring ditches. In the Kent Sites and Monuments Record [now the Heritage Environment Record] they are recorded in Lists 19-23, and 51. Sites in Lists 19, 20 and 21 are interpreted as being the ditches around ploughed-

off Bronze Age bowl, bell and disc barrows, while those in List 51 are thought to be similar sites showing as large spots of continuous growth (maculae) where enough of the mound survives within the in-filled ditch to produce an all-over cropmark. Sites in Lists 22 and 23 are considered – on the basis of their diameter (less than 10m) – to be Dark Age Anglo-Saxon barrows. It has been shown that this assumption is not safe (Perkins 2004, and see below).

A concise history of barrow studies and excavations from William Stukeley in 1722 to the 1970s has been presented by Leslie Grinsell (Grinsell 1979). Conventionally, a round barrow is a dome-shaped earthen mound raised to contain or cover one or more inhumation or cremation burials, and ringed by a concentric ditch from which the mound material was excavated. Exceptionally, as in disc or saucer barrows, there may be an outer concentric bank; these types are however fairly rare. Lastly, pond barrows are a complete reversal of barrow design, as if their construction makes an important statement. In this type the mound is replaced by a bowl-shaped excavation, and the ditch by a bank. The external forms of the British barrow types have been shown in section by Paul Ashbee (Ashbee 1960, 24-29).

While the barrow-burial rite was an occasional practice of the Roman, Saxon, and Viking periods, the great majority of these monuments are attributed to the Bronze Age, say roughly 2000 - 600 BC. In Britain the rite evolves in the later Neolithic and is subsequently associated with the appearance of Beaker pottery and copper artefacts, this occurrence being thought to mark either profound social change, or constituting a new expression of social complexity. The elaborate Neolithic rituals of mortuary enclosures and charnel house chambers within long barrows, in some cases seemingly on a communal scale, are replaced by individual burials (Thorpe and Richards 1984), either beneath barrow mounds, or as unassuming inhumations with perhaps a marker post.

Since barrow building involves inordinate effort for the number of interments the monuments commonly contain, they are thought to represent the prestigious funerary rites of an élite. The identity of the prime individuals involved, whether a new class of entrepreneurial chieftains, or a priesthood evolving new symbols of power, is a matter of speculation (Barrett 1994). Whatever their social role, these persons could command communal effort on a considerable scale. As an illustration of the labour involved in barrow building, the writer designed a full-scale replica of a round barrow as a long term environmental experiment (Jay 1993). Construction was monitored, and the person-hours expended carefully recorded. These data allow the relative importance of ring ditch sites in terms of human effort to be estimated, and the demographic implications of this are discussed in **Appendix 1**. A corpus of ring ditch sites excavated in Kent to 1993 is given as **Appendix 2** and sections of the sites are shown in **Fig. 1**.

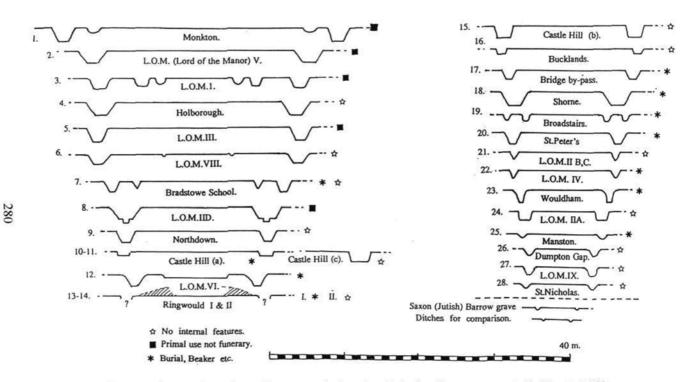


Fig. 1 Median sections of round barrows and other ring-ditched enclosures excavated in Kent to 1993.

TYPES OF RING DITCH ENCLOSURES IN EAST KENT

a) possible small henge monuments

It is difficult to find a better term than henge to describe these enigmatic enclosures. They are circular enclosures of between 20 and 40m in diameter, often having one or more causeway entrances, or bearing evidence that such existed and were later slighted. Their ditches are always of truncated-V profile, between 3 and 4m wide by 2m deep, with flat floors about 1m across. Although in some cases there is evidence that a mound was raised within them covering a central and peripheral burials, this activity appears secondary, as:

either the mound material appears to have been gained by excavating one or more concentric internal ditches;

or it was carried out by quarrying the ditch at a stage when it had largely infilled by natural processes.

The sites were therefore abandoned some considerable time before being adapted to a funerary function. As an example, at Lord of the Manor I (Site 3 in Appendix 2 and Fig. 1) an internal horizon containing domestic Beaker sherds was cut by two internal ditches associated with crouched burials and a cremation contained in an urn of Food Vessel type. At the same time a causeway entrance through the main ditch was cut away. Sites in this category are listed in Appendix 2 at 1, 2, 3, 5, 6 and 8; also possibly 4. Outside Kent similar sites defined as 'henge-barrows' have been observed and recorded (Ashbee 1960, Grinsell 1941).

b) conventional round barrows constructed as funerary monuments These fall into two types:

Oval plan ditches cut in a series of segments. They appear to be associated with beaker burials and beaker sherds, urn-contained cremations, incense cups, etc. Sites represented are: 9, 11, 20, 22, 23, 24 and 25. Sites 13, 14 and 29 may also belong in this group.

Circular, sometimes double-ditched, and of V-section. They may have central urn-contained cremations, but are more often associated with crouched burials in pits cut in chalk or in ditch fills. Sites represented are: 6, 10, 17, 18 and 19. Site 12 is unique in being a pond barrow.

c) non-funerary barrows

Such sites have been identified after excavation at West Heath, West

Sussex, where of nine barrow mounds, only two held evidence of burials (Drewett 1990), and in Kent at Ringwould (Site 14). They are presumed to have had cultural significance as territorial markers or the like (Drewett 1990, 83). Other Kentish sites that may represent this type in the corpus are: 15, 16, 21, 24, 26, 27 and 28. It is, of course, possible that some of these once held burials contained in mounds above chalk level.

The way in which monuments in each of the above three classes of ringditched enclosures form distinct groups when the relationship of ditch diameter/volume is plotted is given in **Fig. 2**. Work to date on barrows excavated in east Kent suggests that chronologically classes a-c above divide into four period groups. Date estimates for the groups as outlined below are calendar (BC).

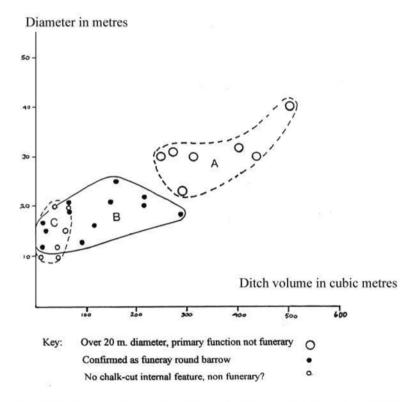


Fig. 2 Scattergram showing the relationship between ditch diameter and ditch volume in the writer's ring-ditch types a, b, and c.

Period 1

Large circular ditched enclosures constructed in the Late Neolithic Period, the primary function of which was not funerary. The writer and N. Macpherson-Grant, both of whom have excavated such monuments, believe them to be ritual enclosures that can be described as henges. Ring ditch 1 (Appendix 2) belongs in this class as do Sites 2, 3 and 8. As yet dating evidence consists of finds and ditch stratigraphy. The latter demonstrating that the outer ditches of these monuments had infilled almost totally by natural processes before recuts and internal modifications associated with Beaker pottery take place. This sort of metamorphosis has been observed elsewhere than in Thanet, and has recently been discussed by Bradley (1998).

Period 2

Small oval-plan ring ditches constructed in five segments, and enclosing pits with crouched burials and beakers. Radiocarbon dates for two sites are $c.2000~\rm BC$ (see **Appendix 3**). They are sometimes associated with flat graves, and inserted inner ring ditches and ditch re-cuts in the monuments of Period I. Similar monuments attributed to the Late Neolithic period are to be found in East Yorkshire, with a sprinkling in Wessex and the Cotswolds (Kinnes 1979).

Period 3

Ring ditches with crouched burials and cremations, the developing east Kent barrow tradition of the Early - Middle Bronze Age, conventionally dated to c.1800 - 1400 BC.

Period 4

Ring ditches of the Deverel-Rimbury period, and a little later, with cremations contained in Bucket Urns, conventionally dated to c.1200 - $900~\rm BC$. They are comparable in size and ditch profile with the nonfunerary monuments, and in one case, Ringwould (Appendix 2, nos 13-14) formed a pair.

SAXON BARROWS

In considering Kent's prehistoric ring-ditches, Anglo-Saxon barrows might at first seem to present a problem. When compiling the KSMR, RCHME adopted the policy that ring ditches of between 5 and 10m diameter were considered Anglo-Saxon (RCHME 1989, tables 22 and 23). The danger of this assumption is illustrated by the presence among twenty-eight excavated prehistoric ring-ditches of four (Appendix 2, nos 25-28), that could easily by their diameter be misinterpreted. East Kent has several Saxon barrow cemeteries such as that at Barham Downs.

Cropmarks reveal the ring ditches to be characteristically about 7.0m in diameter, circular and penannular. Such cemeteries are unmistakable as the barrows are so closely grouped that the ring ditches almost touch. Saxon barrow graves are also encountered in mixed-custom cemeteries among a variety of grave-structures. Taking seventeen examples from the Finglesham, Ozengell, and St Peter's cemeteries, the ditches were all oval plan, penannular, and between 3.9 and 6.0m across at their widest point. In only one case was the ditch section wider than 0.60m and they are usually no more than 0.30m deep. With the large rectangular grave pit taking up most of the ditch interior, these graves exhibit (when the ditch shows at all) a most distinctive cropmark. On this evidence, it seems reasonable to accept ring-ditches of 8.0m diameter and above as Bronze Age unless there are good grounds for suspecting otherwise.

THE DISTRIBUTION OF BARROWS, BARROW GROUPS, AND BARROW CEMETERIES IN KENT

In Kent the recorded distribution of all ring-ditch cropmarks (for convenience hereafter described as barrows) is very localised. Of the 804 sites, 356 are in the Sutton Wedge area (see Fig. 3, and defined below), and 380 in Thanet. Only 68 (8.4%) being found throughout the rest of the county, mostly on the high ground west of the Medway. Within the two barrow-rich areas, these sites appear singly, as groups and in 'barrow cemeteries', a pattern indicative of the density and nature of human settlement in these landscapes, and what can be inferred from the dissimilarities between them (see below).

Before proceeding to assess the two landscapes, critical consideration of the cropmark data is necessary and some rules must be drawn up. Firstly, both areas are scattered with lone barrows, pairs, and what might seem to be groups spaced a few hundred metres apart. In Kent barrows were being constructed throughout much of the Bronze Age. Calibrated radiocarbon dates from Sites 25 and 17 (Appendix 3) were Cal. 2027 BC and Cal. 980 BC respectively. There is room enough in that time span for a number of monuments to be individually constructed within a given area, to erode with plough and weather, or to be disguised by encroaching trees. Thus unless possessing oral traditions, new builders may have had no idea of the presence of earlier barrows. Nor can we assume that the ubiquitous grassy mounds dotting their hills were objects of any consideration. Unless barrows cluster closely together, or are arranged in linear progression or geometric pattern, contemporaneity cannot safely be assumed.

A glance at plotted cropmarks in the two 'Barrow Landscapes' of Kent (see Fig. 3) at once reveals clusters usually referred to by the undefined synonyms 'barrow groups' and 'barrow cemeteries'. The writer here offers

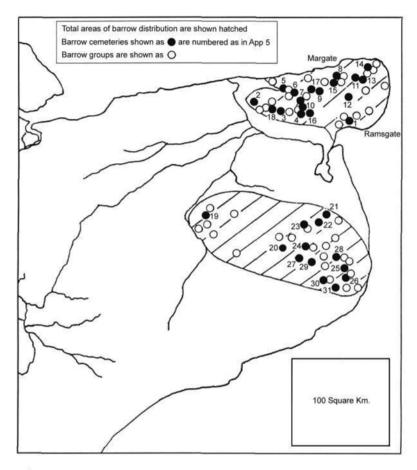


Fig. 3 The two barrow landscapes of Thanet and the Sutton Wedge based on ring-ditch cropmark identification. Total areas of barrow distribution shown hatched

definitions for both, which albeit arbitrary, fit the data well. In application there are few if any borderline cases, and the distinction between group and cemetery is visually obvious on the cropmark plotted maps. The distinction drawn between barrow groups and cemeteries is based on the composite of numbers, distance between barrows, and a maximum joining distance allowed for outlying components. Thus a group may hold as many barrows as an adjacent cemetery, but it is attenuated whereas the cemetery is concentrated.

The definitions are:

A barrow group: three or more barrows spaced no more than 200m apart, although a maximum joining distance of 300m is allowed for sub-groups and outlying singles. Their morphology may be:

nucleated – clustering around a central barrow area – evenly dispersed throughout an area

linear – as a special case, 'attenuated linear' groups may have barrows spaced 300m apart

geometric - arranged in a recognisable pattern, e.g. a double row.

Such groups could represent the use of a favoured location such as a hilltop or ridge, or the arrangement of the barrows may respect a tradition (linear, geometric), or relate to territorial boundaries.

A barrow cemetery: five or more barrows spaced no more than 100m apart, with a maximum joining distance of 200m. Cemetery morphology may be nucleated, area, linear, or geometric. These cemeteries may represent the concentrated and continual use of a designated area by a populous settlement, and/or a fairly dense peripheral population.

Super cemeteries: this term has been adopted to describe concentrated clusters of groups and cemeteries occupying areas of distinct geology and topography, and separate from other groupings.

LANDSCAPES

The Sutton Barrow Landscape

The area of cropmark concentration referred to herein as the Sutton Wedge occupies a part of the chalk upfold of the North Downs (Fig. 3). It does not extend to the boundaries of the chalk exposure, the great cropmark display being contained in an area of about 234km² lying along the truncated centre and north-eastern downfold of the anticline between the Stour Valley near Canterbury and the Channel cliff-line from Deal south to Dover. Within this, the barrow landscape is smaller still, the barrows being distributed throughout a roughly elliptical area of about 151 km². In elevation most of the barrows are situated at between 45 and 90m od, although some cemeteries and groups along the northern periphery are as low as 15m.

Single barrows

Of the 356 barrows revealed as cropmarks in the Sutton Wedge landscape, 198 (55%) are single isolated monuments. These are fairly evenly distributed, save for an empty strip running north-east between Nonington and Staple.

Barrow groups

The Sutton groups range in number of barrows from three to six, and in area between 0.3 and 10ha. Few are situated more than a few hundred metres from a cemetery.

Barrow cemeteries

Numbers of barrows range from five to eight, and cemetery areas are between one and eight hectares [1 and 8ha]. There are about as many of the Sutton barrows in cemeteries (22.4%) as in groups (23.0%).

The cemeteries and groups are rather localised, occurring in two concentrations. By far the largest cluster lies within a 4.5km radius of Sutton. It consists of twelve cemeteries and fifteen groups. Where in these cemeteries and groups the barrows arrangement is linear, or a distinct axis can be seen, there is a pronounced bias towards a north-easterly alignment, this orientation being shared by 61% of the cemeteries and 71% of the groups. One reason for this would appear to be topographical. An examination of the contour map shows the Downland around Sutton to be cut by a number of valleys, all running north-east into the syncline once filled by the Wantsum Channel. The orientation of the barrow cemeteries and groups may therefore be to a certain extent determined by their occupying the ridges between these valleys.

The smallest cluster is situated east of Patrixbourne and Kingston on the Downland rise above the valley of the Nailbourne at an elevation of roughly 45m. It consists of one cemetery and six groups. Of these seven, two have no discernible axis, one is aligned north-west, and four are on the north-eastern orientation. This although there appears to be no contributing topography as in the case of the eastern grouping around Sutton.

The Isle of Thanet Barrow Landscape

Unlike the Sutton Wedge area which lies within secure land boundaries except for about 6km of chalk cliffs north-east of Dover, Thanet has suffered considerable weathering and human diminution over the last 4,000 years. North, east, and south of the Island, the cliffs have been eroding at a rate estimated as at about 30m per century (Perkins 1987), so that something like 1.2km of coast has been lost in a band of 21km. In area this is 25.2 km² (9.27 square miles) about 20% of the original island.

To the west, where the chalk dips into a syncline, much land was at first taken by rising sea levels after the last glaciation, so forming the Wantsum Channel, and later buried under alluvium as the channel both naturally silted and was reclaimed. Thanet's barrow landscape area therefore

occupies all the existing chalk anticline, including areas obscured by deep deposits where cropmarks cannot form, although barrows may be present.

Single barrows

Fifty-nine of Thanet's current register of barrow cropmarks are isolated monuments, representing 15% of the Island's total. The barrows are thinly but fairly evenly distributed throughout Thanet, being scattered across the central plateau where there are comparatively few cemeteries or groups. Over half of Thanet's double- and triple-ring ditched barrows occur as singles. When found in cemeteries they are either central, or terminal to linear concentrations, suggesting that these large and complex monuments became foci for barrow building activity.

Barrow groups

There are twenty-two barrow groups in Thanet, ranging in number of barrows between three and ten, and in area from 1 to 30ha. Fourteen of the groups are situated on west or south-west facing Downland slopes overlooking valleys or the coast. One group (**Appendix 4**, East Northdown, 7) is on a gentle north-east slope cut by the cliffs of Foreness point, and six (11, 15, 17, 18, 20 and 22) are on comparatively level ground within Thanet's central plateau. One group (Minnis Bay, 2) is on low level ground close to the shoreline, and would have been no more than a few hundred metres back from it when the barrows were constructed. No particular orientation is detectable among the groups, and 54% have no discernible axis. In all but four cases the groups accompany a barrow cemetery.

Barrow cemeteries

Thanet has eighteen barrow cemeteries. In numbers of barrows they range between five and thirty-three, and in area between 2 and 47ha. In general the cemeteries and their associated groups are situated on west or south-west facing Downland slopes. These are above the coastal plain of the Wantsum, above the Brooksend-Acol, Dane, and Shottendane onetime river valleys, and Hollins Bottom, a dry valley cut by the cliffs south of Ramsgate. Two cemeteries are, exceptionally, on north-east facing slopes. One (Appendix 5, Updown Farm, 11) lies above the Dane river valley. The other (East Northdown, 14) is a special case in that it and its associated group are arranged among a system of field ditches, enclosures (three of which may once have enclosed long barrows) and the ubiquitous and enigmatic 'staple enclosures'. A plan of these cropmarks produced by the writer appears as fig. 2 in the account of the excavation of one of the East Northdown barrows (Smith 1987). Four of the cemeteries (Appendix 5, nos 9, 10, 17 and 18) are situated within Thanet's central plateau on fairly level ground. The cemeteries appear to have no particular orientational bias with 44% having no discernible axis.

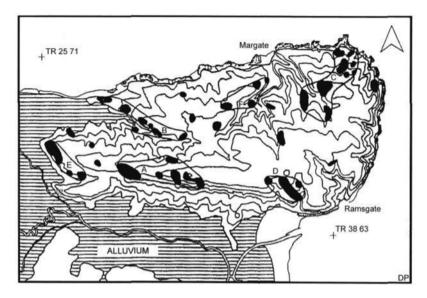


Fig. 4 The barrow 'super-cemeteries' of the Isle of Thanet shown in bold outline enclosing cemeteries and groups of barrows (solid black).

Contour intervals 25ft.

Super-cemeteries

The Thanet landscape holds six large clusters, containing between them most of the islands forty cemeteries and groups, only four cemeteries and six groups being isolated. This situation is illustrated by **Fig. 4**. The clusters are:

Monkton - Minster

This contains Barrow Cemeteries 3, 4, 10, and 16, and Barrow Groups 1 and 18, in all 85 barrows. The total area 4.4km^2 . The maximum distance between any two component cemeteries or groups is 500m. This cluster runs for 4km along the ridge and slope of a Downland escarpment that descends to the one-time shoreline of the Wantsum sea channel. The barrows share their east-west line with ancient 'Dunstrete' (the A253) and with a linear cropmark that was recorded by HBMCE workers as a possible cursus. It was remarked that some of the barrows appear to be aligned with the cropmark.

Minnis Bay - Brooksend

Barrow Cemeteries 5, 6, 7, and Barrow Groups 2, 16, and 19. belong in this cluster of 47 barrows, in a total area 2.73km². The maximum

distance between any two components is 700m. Beginning at Minnis Bay the barrows occupy a gentle south-west facing slope bordering what was once the mouth of a tidal creek. Where the creek narrowed into a small river valley (the brook ran until last century) one group is on the south bank. The other barrows are spread along the northern escarpment nearly to Acol where the valley peters out. Just south of the convergence creek and valley an oval group of cropmarks several hundred metres across indicates a dense concentration of pits, hut circles, and ditches.

Dane Valley - Foreness

This is comprised of Barrow Cemeteries 11, 13, 14, and Barrow Groups 7, 8, 9, and 11, totalling 57 barrows in an area 3.98km². The maximum distance between any two components is 700m, but there is photographic and other evidence that a number of barrows were destroyed, unrecorded, during building work in the 1960s. These would have united the three cemeteries. Moving north-west, the barrows occupy both the southern and northern slopes of Dane Valley (a river valley until the eighteenth century), and spread northward up over a downland ridge and down a gentle slope to the cliff-line at Foreness Point. In this last kilometre the barrows share the landscape with ditched enclosures, three of which may have belonged to long barrows.

Ozengell - Pegwell

This contains Barrow Cemetery 1, and Barrow Groups 4, 13, 14, in all 37 barrows within a total area of 1.15km². The maximum distance between any two components is 300m. The barrows are distributed along the crest and false crest of a Downland escarpment east of a broad shallow valley known as Hollins Bottom. This runs southeast for about two kilometres and is cut by the cliffs of Pegwell Bay. Four thousand years ago however, before the loss of some 1,200m of land to erosion, the valley floor probably descended to the beach. A sondage cut by the writer during evaluation work in 1988 revealed stream-bed strata with prehistoric sherds above the chalk of the valley bottom under 2.5m of colluvial deposits.

St Nicholas:

This is comprised of Barrow Cemetery 2, and Barrow Groups 21 and 22 containing 24 barrows in a total area of 1.13km². The maximum distance between any two components is 600m. The barrows occupy a gentle Downland rise from the alluvial plain of the former Wantsum Channel and lie parallel to the shore-line of Roman times. The rise of the chalk down is cut by a valley watered by a spring-fed stream. Where this enters the alluvium at Down Barton, the line of the old shore is broken by what must have been quite a large natural harbour.

Shottendane Valley

This cluster contains Barrow Cemeteries 8, 15 and Barrow Groups 5, 15. It is comprised of 26 barrows in a total area of 1.66km². The maximum distance between any two components is 700m. It is situated on both escarpments of a valley running north-east. At Margate the valley swings north-west, exiting to the sea through what was until the mid-nineteenth century a marsh some 50ha in extent which gave Margate (Meregate) its name. A spring-fed stream once flowed down the valley, and a remnant of this survives as the Tiyoli Brook

DISCUSSION

The two barrow landscapes of east Kent constitute impressive phenomena. In area concentration they are directly comparable with the most densely barrow-populated areas of Wessex as presented by Cunliffe (Cunliffe 1993, fig. 3, 13.). The latter figure shows barrow densities depicted within 'contours' enclosing areas with more than two barrows per sq. km. and more than five per sq. km. When the east Kent landscapes are so treated, then the whole of the Sutton landscape falls within the first contour, and the whole of Thanet within the second, see Fig. 5. Indeed the Thanet landscape seems to have no equal in terms of density. Even the area extending ten kilometres on all sides of Stonehenge (Cunliffe 1993, fig. 3) only has a barrow density of 0.80 barrows per sq. km. (333 barrows in 414km²). Compare this with the Thanet density of 5.89 barrows per sq. km. (380 barrows in 64km²). Of course, the Kent landscapes lack the accompanying great monuments found in Wessex, but imagine the appearance of Thanet's rural landscape if the barrows had retained their mounds.

As can be seen from foregoing data the Sutton and Thanet barrow landscapes are dissimilar. Over half the Sutton barrows are lone monuments, and the concentration of barrows per square kilometre is only half that of Thanet. A typical Sutton cemetery or group is smaller in both number of barrows and area than its Thanet counterpart. This is most marked in the cemeteries, which on average have less than half the barrows and are only one fifth of the area of those in Thanet. Their morphology is predominantly linear, whereas that of the Thanet groups is overwhelmingly 'Area' type. Unlike Thanet's cemeteries and groups which have no particular orientation, those in the Sutton area have a marked bias towards a north-east/south-west alignment, although this may have the topographical explanation given previously.

What do the barrow groupings mean in social terms? An obvious interpretation of isolated barrows or pairs is as marking the transient existence in the landscape of a small community, perhaps a farmstead,

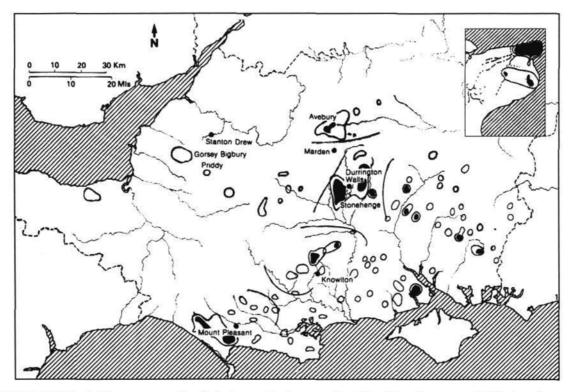


Fig. 5 Barrow densities in Wessex compared with the barrow landscapes of east Kent (inset to same scale). Enclosed areas reflect more than two barrows per sq. km. Solid black areas indicate a density of five or more barrows per sq. km. (after Cunliffe 1993).

whose inhabitants were sufficiently numerous as to afford the effort of constructing a monument. Similarly, barrow groups might be situated at the focus of several such small communities, and barrow cemeteries might hold the élite dead of communities that were larger (villages) or occupied for longer, or both. An imponderable factor in the spatial distribution of barrows is what impact did the location of the monuments have on husbandry. Would they have been seen as wasting land in the deep easily tilled valley soils, or a welcome presence, homes to ancestor guardians of the crops? Were they relegated to the thin soils of chalk upland pastures? On the existing evidence this last would seem likely.

The Sutton landscape; an interpretation

The Sutton barrow groups and barrow cemeteries form two clusters. That to the east makes demographic sense, in that during the period of barrow construction, it overlooked a fertile and well watered coastal plain. In part this fronted the English Channel, curving north-west into the Wantsum Channel. Although later subject to marine inundation, from which it was reclaimed by nature and human agency, there is abundant evidence of human occupation during the Beaker period. Settlement remains in a fenland setting appear widespread. Communities so situated had only to follow streams feeding the fens up through the chalk valleys to reach the ridges where the cemeteries and groups are located. One or two cemeteries on the south-west fringe of the cluster may, however, have served communities in the valley of the Dour which runs north-west from the breach in the cliffs at Dover.

A much smaller western cluster occupies the eastern rise of the valley of the Nailbourne, a stream that becomes the Little Stour. The one barrow cemetery and six barrow groups are situated on high thin-soiled chalk Downland overlooking the well watered meadows about Bekesbourne and Kingston. It is interesting that while one would expect a similar density of barrow distribution in the Stour valley between Chislet and Wye, few if any have been recorded there. Perhaps this seeming cessation of barrows, and therefore presumably of barrow-building communities, has a topographical explanation. Modern OS maps show large areas of woodland surviving on both sides of the Stour valley, the Blean, Challock, and Lyminge forests being still some 103km² in extent. These could be relics of the eastern boundary of Anderida, Kent's great primeval forest.

To summarise, large areas of fertile downland in the Sutton Wedge area hold only isolated barrows. So that by interpretation, much of the area, if exploited at all by humans during the Early Bronze Age, was occupied only by small and transient communities, perhaps single farmsteads. The cemeteries and groups align with major river valleys, or valleys running down to the sea. A picture emerges of a population concentrated on

the coastal plain with a few river-side settlements. With sheltered well watered farmland, fishing, trade, and salt extraction, these communities relegated the chalk hills to winter grazing and the monuments of their ancestors.

The Thanet barrow landscape; an interpretation

As described above, the Thanet barrows cluster densely above either the sea shore, or valleys leading to the sea. Cemetery morphology may relate to movement through the landscape as much as to settlement location, and in some areas cemeteries may have been central to scattered communities which they served. Thanet's island identity and topography placed constraints, however, on where the barrow builders could live. Unless they crossed from mainland Kent to construct the monuments, a possibility touched on below, space for settlement between the cemeteries was limited. If the number of barrows reflects population, then topographical necessity suggests fairly concentrated settlement in the fertile deep-soiled valleys below the cemeteries, or on the colluvial slopes between Downland and shore where fishing and gathering could have been important activities.

What can be deduced demographically from the number of Thanet barrows? This question was examined by Cunliffe (1993, 117), who for Wessex accepted a barrow-buried population of 16,000 over period of say 2500-1500 BC, sixteen burials per year. He rejected this death rate as far too low to represent total deaths in any one year, as taking an annual death-rate of 40 deaths per 1,000 as reasonable, the total Wessex population would have been no more than 1,000! He goes on to say:

The conclusion must surely be that the barrows represent the burial of only a small segment of the population presumably selected by rank or status, the rest being disposed of by some method of which little recognisable trace remains.

For the Thanet barrows we may reasonably follow the same path, while stressing that any figures arrived at are estimates derived from approximations.

Thanet's present known barrow population is 380. Cunliffe proposes that 25% of the Wessex barrows will have been destroyed without trace by ploughing and other anthropogenic factors. Thanet's archaeological and historical evidence points to early clearance and to heavy and sustained arable farming over the last four thousand years, so that the percentage of barrows lost by these means should be at least as great as in Wessex. If 25% is accepted as a reasonable figure for destruction, then the number of Thanet's barrows goes up to 475. To this must be added an estimate of those lost with the erosion of a 25km² coastal strip.

At the Thanet concentration of 5.89 barrows per sq. km. this gives 147, bringing the estimated Thanet total to 622. Excavation has thus far given a Thanet average of two burials per barrow, so that during say, 1,000 years of barrow construction there were 1,244 burials, 1.2 per year. Taking an annual mortality rate of 40 per 1,000, a living 'barrow-rite élite' population of just 30 persons is indicated. That this was the total population is an absurd proposition, as it would not have a labour force big enough to bury its dead.

Before we can construct a demographic model, we must take as a starting point a factor that could never be determined, and must be remembered to be an estimate, that is, what did the individuals considered worthy of the barrow-rite represent as a percentage of the whole population? Their numbers must surely have been small, and limited to prime members of an élite or elect group and their immediate family. While beneath 'barrow élite' rank there could be considerable social stratification, the élite would confine the symbols of power to a narrow lineage as self preservation. In any polity a venerated line of leaders can, by proliferation of its class or caste, quickly become resented as an over-privileged minority.

Very little theoretical research has been published on this subject, but Renfrew and Bahn (1991) quote C. Peebles' work on a fifteenth-century Mississippian Culture enclosure at Moundsville, Alabama. At this site 2,053 burials were examined, and considerable social stratification was observed in terms of grave goods and burial practice. Of the total of burials only 117 graves (6%) were in Peebles' 'Class A', being buried under mounds and with copper tools and ornaments. This is useful evidence albeit from another continent and era. Although there are various Neolithic studies, it is unfortunate that in Britain we lack the physical remains of a Bronze Age general populace to allow similar calculations; however, the writer feels it reasonable to suppose that the barrow élite constituted something in the order of 5% of the community.

The above figure (5% = 30/0.05) raises the Thanet population estimate to 600 persons. As to the proportion of males to females among the burials, this has to be regarded as more or less an imponderable. Many of Britain's barrows were opened in the pre-scientific era, and in any case Bronze Age skeletal material is often in such a condition as to render the determination of sex rather subjective. Grave goods evidence would seem to indicate that the majority, say 75% of graves containing them, were male burials (Ashbee 1960, Clarke 1970), but this must be balanced by the fact that large numbers of barrow burials are un-accompanied by artefacts. What can be said is that the burials are predominantly those of adults. Tables of mortality among the English rural community of the seventeenth century (Cox 1976, 173) show that hardly more than 50% of the population survived past twenty years of age, this bringing our theoretical Thanet population to 1,200.

There is yet another factor to consider. Seven flat-grave Beaker burials have been found in Thanet, two with multiple inhumations. They can be positively identified as flat-graves and not relics of ploughed-out barrows by factors such as their complete departure from the local barrow grave tradition in terms of depth, shape, care of construction, and the presence of wooden planked coffins (P. Bennett et al. 2008). All were found by pure chance, as were also four of the nineteen barrows excavated in the Island, the others all being investigated as observed cropmarks. Many more flat-graves may exist or have been destroyed un-noticed, as construction workers would find them hard to spot. These two admittedly small samples suggest that the barrow rite élite may have found flat graves an acceptable alternative. If so, then our élite may double in size and the population estimate expands to 2,400 persons living in the Island at any one time during the barrow building period. All this is extremely conjectural. The élite could have been considerably greater than 5% of the population, or much less. If only 2%, then the logical progression followed above gives a population of 6,000.

Is an Early Bronze Age population running into thousands reasonable in terms of space and food production? It would appear so. Thanet's Downland soil is of a highly productive and self perpetuating rendzina profile, light and easily cultivated. From Tudor times the island has exported grain. and inshore fishing was carried out on a large scale until the second half of the last century. The writer's excavations and researches in the Pagan Jutish burial grounds in Thanet (Perkins 1991b; and Ozengell Anglo-Saxon Cemetery (Thanet Archaeological Society and Trust archive) has produced direct evidence from grave numbers of an AD 600 population of 1,500 persons. This supposes that the whole population used these cemeteries, and that no sub-group co-existed using the cremation rite or separate and undiscovered cemeteries. Neither does it allow for constant migration into mainland Kent. Some 250 years later Bede, describing Thanet, stated that it was home to 600 families, presumably something between 3,000 and 6,000 persons. Muster rolls for a Thanet Militia at the time of the Armada are indicative in that only fit males between say, 16 and 50 years of age, would be of use, and the numbers suggest a population of about 5,000. One hundred and thirty years later John Lewis (Lewis, 1723, 25) calculated the Thanet population as 8,800 souls, and in 1801 a census registered 12,000 inhabitants.

The high concentration of barrows in Thanet compared with the Sutton area, and Kent in general, admits of two explanations:

 that they held the dead élite of much of Kent, brought over into Thanet for burial in what was regarded as a sacred island. This possibility considered as an explanation of the origin of 'Thanet' as 'Thanatos' has already been discussed (Elworthy and Perkins 1987). Were this so, however, would not the barrows share their landscape with other larger manifestations of religious belief, sites similar to the great monuments of Wessex. Apart from the supposed cursus that cuts cemetery-group cluster A, no site in that order of magnitude has yet been discovered.

ii) the way in which the Thanet barrows are distributed suggests that while some of the inhabitants were dispersed in farming communities, the great majority of them lived adjacent to their cemeteries, along the shore or in river valleys leading to the sea. If the population numbered anything like the estimate above, say 2,000–3,000 persons, then a likely scenario distributes the people in a few fairly large villages. The settlement pattern that emerges is very similar to that known for Dark Age and Medieval Thanet, and what is suspected for the Later Bronze and Iron Ages. Given this picture, it would not seem unreasonable to conjecture that the barrow-builders were, like their Medieval descendants 'fishermen with ploughs', on their way to becoming seamen and merchant venturers.

APPENDIX 1

The labour involved in cutting ring-ditches and demographic deductions

Using the record of labour expended in building the Monkton barrow replica (see Jay in Perkins 1993) it is possible to calculate an approximation in terms of individual labour-days of the labour involved in barrow/henge construction. Estimates based on this are given below (Table 1). That the estimates are at least reasonable is evidenced by the fact that when in 1977 the writer excavated Site III at Lord of the Manor, Ramsgate (Site 5 in Appendix 3.2), 1,200 individual labour-days were expended in removing a ditch fill of earth, hard chalk silt, and chalk rubble. Would a prehistoric workforce considerably out-perform volunteer archaeologists? Perhaps, but surely tribal labour did not partake of the cyclopean energy displayed by nineteenth-century navvies (see Table 1).

At these estimations the construction of the small henge-type monuments required considerable collective effort, the local community having to keep a labour-force of ten or so at the site for something like a hundred days. In the case of a barrow of quite modest dimensions, it would seem that the person interred was the subject of obsequies requiring a labour outlay far beyond the resources of their immediate family. The implication of this being that the bereaved commanded a sufficient labour pool, perhaps by means of family wealth or religious/administrative status.

TABLE 1. ESTIMATES OF THE LABOUR (PERSON-DAYS) REQUIRED TO CUT DITCHES IN HARD CHALK

Site No.	Vol.	Man days	Site No.	Vol.	Man days	Site No.	Vol.	Man days
	m.			m.			m.	
1	508	1,814	11	154	551	21	60	216
2	409	1,461	12	221	791	22	23	81
3	282	1,007	13	nd	14	23	95	339
4	443	1,583	14	nd	14	24	47	169
5	319	1,141	15	143	510	25	14	48
6	252	900	16	41	146	26	45	163
7	166	592	17	74	266	27	45	163
8	295	1,055	18	295	1,043	28	9	30
9	202	724	19	18	67	29	71	256
10	52	188	20	102	365			

APPENDIX 2

(see opposite)

APPENDIX 3

Radiocarbon date estimates: Laboratory Information

Lab Ref.	Site	Result BP	Calibrated Ag by Probability (Pearson and Calendar BC	
			68% confidence	95% confidence
BM-2642	Manston	3630 ± 50	2120 - 2080	2140 - 1885
Harwell 376	Bridge Bypass		980 ± 60	
BM-2975	Dumpton Down	3630 ± 45	2120 - 2080	2135 - 1895
BM-2940	barrow burials	3560 ± 50	2020 - 2000	2100 - 2085
BM-2864		3520 ± 40	1920 - 1870	1965 - 1745

APPENDIX 2: A CORPUS OF NEOLITHIC/BRONZE AGE RING DITCHES (ROUND BARROWS) EXCAVATED IN KENT TO 1993

The ring ditches are shown in Fig. 1 where they are arranged in order of diameter. Ordnance Survey co-ordinates for Lord of the Manor (L.O.M.) Ramsgate, sites I to VI are identical as they are grouped within 100m.

	Site	District	NGR	Type	Dia	Ditch section	Width	Depth	Comments
1	Monkton	Thanet	TR 289656	?Henge	40+ 32	trune V trune U	3.0	2.0 0.6	Ditches sectioned in 1992 ahead of highway development (Perkins 1993, unpublished report to Kent County Council). Round, double concentric ditches. Heavy plough attrition with total loss of ancient horizons and perhaps 0.40m of chalk bedrock. Cropmarks of two similar sites nearby have causeway entrances
2	Lord of the Manor V	Ramsgate	TR355653	Henge?	32.5	trune-V	3.8	1.6	Excavated 1981 (Perkins unpublished). Round, ploughed off, off centre ox burial, small central 'charnel-pit' contained selected remains of five persons. Spaced re-cuts to ditch fill and sides. Thought to have been a small henge converted to a barrow with a small low mound which was just visible in 1978. Roman chalk pit cutting the ditch may have destroyed an entrance causeway

	Site	District	NGR	Type	Dia	Ditch section	Width	Depth	Comments
3	Lord of the Manor I		TR 355653	?Henge	30 19 12	trunc V x 3	3.0 2.0 1.5	1.5 1.2 0.8	Excavated 1976 (N. Macpherson- Grant 1976 interim). Round, triple ditched, ploughed off. Outer ditch thought to pre-date inner ditches as an enclosure with causeway entrance, later slighted. Central grave pit with double crouched burial and burials in inner ditch fills. Cremation in urn with tanged and barbed arrowhead
4	Holborough		TQ 696625	?Barrow		trune V	4.0	1.9	Excavated 1953 (V. Evison 1956) Round, no internal features, no trace of mound (ploughed off?) but no Saxon graves from surrounding cemetery within ditch
5	Lord of the Manor III		TR 355653	?Henge	30	trunc V	3.0	1.7	Excavated 1977 (Perkins 1981, interim) Round, single ditch, causeway entrance, ploughed off. Collared um burial at centre, spaced recuts to ditch fill and sides. Ditch had been excavated into causeway narrowing it from 4.0 to 0.60m. Decreasing depths of intrusive AS burials indicated central mound. Interpreted as a small henge, abandoned, then converted to barrow when ditch infilled

6	Lord of the Manor VIII		TR 350652	Type: ?Henge	30	trunc V	3.7	1.1	Part excavated 1985 (Perkins unpublished) No internal features
7	Bradstowe school	Broadstairs	TR 395673	?Barrow	25 12	trunc V U	2.2 1.2	1.5 0.8	Excavated 1911 (H. Hurd 1913). Round, double concentric ditches, no internal features, crouched burials in ditch fills
8	Lord of the Manor II		TR 355653	?Henge	23	trunc V	4.0	1.6	Excavated 1976 (N. Macpherson-Grant 1981 interim) Round, single ditch with a series of slots cut into the floor and slot areas marked out but not cut. Causeway entrance, and central pentagonal structure with ?entrance corridor formed by post holes (rebut). The pentagon framed a hearth, and both it and the post holes were sealed under a horizon containing a crouched burial. Interpreted as a small henge re-used for burials in the Early Bronze Age but no evidence for a mound
9	Northdown	Margate	TR 385704	?Barrow	22	trune V	3,0	1.5	Excavated 1984 (G. Smith 1987) Sub-circular, no prehistoric internal features, evidence for an external bank, beaker and Late Bronze Age sherds. Site interpreted as a disc barrow.

	Site	District	NGR	Type	Dia	Ditch section	Width	Depth	Comments
10	Castle Hill	Folkestone (a)	TR 214377	?Barrow	21	trunc V	2.0	0.6	Excavated 1991 (J.Rady 1993) Round with causeway entrance, crouched burials, beaker sherds
11	Castle Hill	Folkestone (c)	TR 214377	?Barrow	21	trunc V	3.0	1.2	Excavated 1991 (J.Rady 1993) Oval, incomplete circuit respects ditch of 10 (Site 104), no internal features.
12	Lord of the Manor VI		TR 355653	?Pond barrow	20	trunc V	4.0	1.4	Excavated 1982 (Perkins unpublished) Round, single ditch, centre has shallow bowl-shaped pit. Collared urn buried just within ditch is evidence for inner bank. Interpreted as pond barrow.
13	Ringwould I		TR 364470	Barrow	20				Ditch not excavated. Excavation of mound only 1872 (C.H.Woodruff 1872) Round, surviving mound, primary cremation in collared urn, secondary cremations in inverted urns, one biconical with slotted incense cup.
14	Ringwould II		TR 364470	?non- funerary barrow	20				Ditch not excavated. Excavation of mound only 1872 (C.H.Woodruff 1872) No internal features.
15	Castle Hill	Folkestone (b).	TR 214377	?non- funerary barrow	20	trunc V	2.3	1.5	Excavated 1991 (J.Rady 1993) No internal features.

16	Bucklands	Dover	TR 310430	?non- funerary barrow	20	trunc V	1.2	0.8	Excavated 1951 (Evison 1987) No internal features.
17	Bridge by- pass	(Barham Down)	TR 193532	Вагтом	19	trunc V	2.1	0.9	Excavated 1974 (Macpherson- Grant 1980) Round, 10 (presumed secondary) Late Bronze Age cremations, 5 in urns.
18	Shorne		TQ 680716	Barrow	18,6	trunc V	4.0	2.0	Excavated 1899 (G. Payne 1900) Round, central crouched burial, others in ditch.
19	King Edward Av,	Broadstairs	TR 394675	?Barrow	17.5 11.6	V trunc V	1.0 1.7	0.7 0.8	Excavated 1909 (Hurd 1913) Double concentric ditches, central cist with Late Bronze Age urn (inverted).
20	St Peter's AS cem	Broadstairs	TR 377693	Barrow	16.5	trunc V	2.0	1.5	Excavated 1970 (Hogarth 1973) Oval, ditch cut pit containing beaker burial, other beaker sherds found.
21	Lord of the Manor II		TR 355653	?non- funerary	15 recut	trunc V	2.5	0.8	Excavated 1976 (Macpherson Grant 1981) Round, single ditch (re-cut), ploughed off, no internal features.
22	Lord of the Manor IV		TR 355653	Barrow	15	V	1.0	1.0	Excavated 1978 (Perkins 1981) Oval, ploughed off, uncontained cremation with incense cup.

_	Site	District	NGR	Type	Dia	Ditch section	Width	Depth	Comments
23	Wouldham, Hill Road		TQ 724644	Barrow	13	trune V	2.0	1.8	Excavated 1982 (Cruse and Harrison 1983) Oval, wide causeway entrance, cremation in biconical urn, secondary burial.
24	Lord of the Manor IIa		TR 355653	?non- funerary	12	U	1.6	1.2	Excavated 1976 (Macpherson Grant 1981) Oval, ploughed off, no internal features, deliberate backfill of ditch suspected.
25	Lord of the Manor VII		TR 351652	Barrow	11.7	trunc V	1.1	0.5	Excavated 1987 (Perkins 1990). Oval, ploughed off, beaker burial (long-necked) with flint knife and jet button. Secondary burial. Radiocarbon estimation for burial is c. 2000 BC ± 50.
26	Dumpton Gap	Broadstairs	TR 395664	?non- funerary	10	trunc V	1.5	1.5	Excavated 1907 (Hurd 1909) Round, no internal features.
27	Lord of the Manor IX		TR 350652	?non- funerary	10				Part excavated 1987 (Perkins unpublished) Round, ploughed off, no internal features. Examined without ditch excavation during emergency evaluation work.

28	St Nicholas at Wade		TR 253671	?non- funerary	9.8	trunc V	1.2	0.35	Part excavated 1987 (Perkins interim 1987). Round, ploughed off, no internal features but severe plough damage. The following is almost certainly a round barrow, diameter reconstructed from four sections over 20 m. (about 1/3 of probable circuit.
29	North Foreland Ave.	Broadstairs	TR 399692		?24.0	trunc V	1.4	1.0	"Central feature held 'Pigmy Urn'. Crouched burials and intrusive 'Marnian' burials (Perkins 1981).

APPENDIX 4: THE BARROW GROUPS OF KENT

M	NGR	District	Name of site	Morph- logy	No.	Area (ha)	Conc.	Orient.	Comments
1	TR 2965	Thanet	Monkton - Minster	Atten. linear	12	33	0.36	E-W	i) see comments for cemeteries 3 and 4 in Appx 5, ii) four of the sites show as maculae, since plough attrition in the locality makes mound survival impossible these are probably pond barrows.
2	TR 2869	Birchington	Minnis Bay	area	4	3	0.75	E-W	
3	TR 2967	Birchington	Brooksend	area	4	1.5	2.6	-	
4	TR 3564	Ramsgate	Little Cliffsend Farm	linear	3	1.75	1.7	NE-SW	Two maculae also present, ?pond barrows.
5	TR 3469	Margate	Westbrook	area	4	2	2	NW-SE	One incomplete ring ditch of 50m diameter.
6	TR 3469	Margate	Half Mile Ride	area	1	8	0.12	NW-SE	Associated Jutish cemetery re-using two barrows.
7	TR 3870	Margate	East Northdown	linear	3	5	0.6	NE-SW	
8	TR 3870	Margate	George Hill, Northdown	area	3	1	3	-	
9	TR 3870	Margate	White Ness, Kingsgate	area	4	8	0.5	-	
10	TR 3969	Broadstairs	North Foreland, Kingsgate	area	4	5	0.8	-	Associated with large multivalatte hilltop enclosure. Much of the area masked by pre-air photo development.

11	TR 3768	Broadstairs	Dane Court, St Peter's	area	7	18	0.38		
12	TR 3766	Ramsgate	Hollicondane	area	3	8	0.37	500	Middle Bronze Age bronzes, burials, settlement finds nearby.
13	TR 3665	Ramsgate	Nethercourt Farm	linear	4	3	1.3	N-S	
14	TR 3565	Ramsgate	E end of runway, Manston	area	3	4	0.75	•	one beaker barrow, one henge-type, one non-funerary.
15	TR 3268	Margate	Shottendane, Garlinge	area	10	50	0.2	-	
16	TR 3167	Birchington	Acol Hill, Acol	linear	5	5	1.0	NE-SW	
17	TR 3169	Birchington	King Ethelbert School	area	3	1	3.0	-	
18	TR 3066	Birchington	Cleve Court, Acol	linear	3	2	1.5	E-W	
19	TR 2968	Birchington	Brooksend Hill	linear	3	3	1.0	NW-SE	i) Associated with Appx 5 cemeteries 5, 6, and 7 in a single linear arrangement. ii) Maculae present.
20	TR 2767	Birchington	Shuart Farm, St Nicholas at W	linear	3	3	1.0	NW-SE	
21	TR 2665	Birchington	Down Barton Farm, St Nich.	area	3	1	3.0	+	
22	TR 2665	Birchington	St Nicholas Lodge	area	3	2	1.5	-	
23	TR 2055	Bekesbourne	Chalkpit Farm	area	5	10	0.49	*	Other barrows present but almost certainly A. Saxon.
24	TR 2354	Adisham	Basington	area	5	9	0,54	NNE- SSW	

	NGR	District	Name of site	Morph- logy	No.	Area (ha)	Conc.	Orient.	Comments
25	TR 2053	Kingston	Coldharbour Farm	area	3	0.25	12	-	very tight small group
26	TR 2152	Kingston	Ileden	linear	3	4.5	0.66	NE-SW	Three large ring ditches, two of 20m diameter, one of 50m.
27	TR 2349	Barham	Dennehill Farm	linear	4	4	1.0	NE-SW	One ring ditch of 50m diameter.
28	TR 2952	Tilmanstone	Thornton Farm	area	3	10	0.3	NE-SW	Three barrows associated with a double ring ditch enclosure of 200m diameter with a causeway entrance.
29	TR 2852	Tilmanstone	Kittington	area	4	1,2	3.3	NNE- SSW	
30	TR 1953	Bishopsbourne	Bourne Park	linear	4	2	2.0	NNW- SSE	Four 30m diameter ring ditches.
31	TR 3053	Eastry	Venson Farm	linear	3	0.45	6.6	NW-SE	
32	TR 3453	Finglesham	Foulmead Farm	linear	3	0.3	10.	NE-SW	
33	TR 3452	Northbourne	Great Mongeham	linear	4	5	0.8	N-S	7-3
34	TR 3250	Northbourne	Little Mongeham	area	4	1.4	2.8	NNE- SSW	Two double ditches.
35	TR 3150	Tilmanstone	Stoneheap Farm	linear	3	1.5	2.0	NNE- SSW	One double ditch.
36	TR 3549	Ringwould	Ripple Farm	area	3	0.6	4.5	-	
37	TR 3548	Ringwould	Ringwould	linear	4	1.5	2.6	NE-SW	
38	TR 3547	Ringwould	Martin Mill	linear	4	2.2	1.7	NE-SW	
39	TR 3545	St Margaret's	Wallets Court	area	3	1.5	2.0	ENE- WSW	

40	TR 3646	St Margaret's	Boockhill Farm	area	4	3.2	1.3	ENE- WSW	
41	TR 3249	Sutton	East Studdel Farm	linear	3	0.3	10	NE-SW	
42	TR 3248	Sutton	Sutton Downs	linear	3	0.9	3.3	ENE- WSW	One double ring ditch.
43	TR 3346	Langdon	Martin Mill	linear	3	0,45	6.6	ENE- WSW	
44	TR 3151	Betteshanger	Telegraph Farm	linear	4	5	0.8	ENE- WSW	Two Saxon barrows.

APPENDIX 5: THE BARROW CEMETERIES OF KENT

	NGR	District	Name of site	Morph- ology	No.	Area (ha)	Conc.	Orient	Comments
1	TR 3565	Ramsgate	Ozengell Lord of the Manor	linear	27	33	0.80	NW-SE	Follows south-west facing downland ridge and crest for 1200 m. At least six henge-type monuments
2	TR 2566	Birchington	St Nicholas Court Farm	area	18	33	0.53	NW-SE (est)	Possibly many more barrows at one time as site suffers acute plough attrition
3	TR 2865	Monkton	Seamark Hill	area	33	46	0.70	WNW-ESE	This cemetery is connected to the Mount Pleasant cemetery by an attenuated linear group (Appx 4, 1), distributed along both sides of a linear cropmark thought to represent a cursus
4	TR 3065	Minster	Mount Pleasant	area	13	26	0.48	N-S	i) See 3 above. ii) Cemetery divides into two distinct clusters (?cut by the cursus), and the upper hilltop cluster appears to be superimposed on a field system
5	TR 2868	Birchington	Upper Gore Farm	area	10	4.5	2.2	WNW-ESE	i) Two double concentric ditches, pairs of barrows joined by single and double linear marks. ii) Cemeteries 5, 6 and 7 are so close with intervening groups and single barrows that it is tempting to consider them as one super cemetery

6	TR 2968	Birchington	Great Brooksend Farm	linear	15	8	1.8	WNW-ESE	See 5, ii
7	TR 2967	Birchington	Crispe Farm	area	10	1.5	6.6	=	Associated enclosure ditch system
8	TR 3469	Margate	Westbrook	area	7	3	2.3	NW-SE	Associated group (Appx 4, 5) includes a ring ditch of 50m diameter
9	TR 3267	Birchington	Woodchurch, Acol	area	9	6	1.5	J.=	.=0
10	TR 3066	Birchington	Plumstone Farm, Acol	area	10	3.7	2.6	NW-SE	Henge-type ring ditches present
11	TR 3669	Margate	Updown Farm	area	10	7	1.4	NNE-SSW	
12	TR 3567	Ramsgate	Lydden	area	6	5.2	1.1	NE-SW	One barrow retains vestigial mound
13	TR 3769	Margate	Millmead - St Peter's	area	15	31	0.47	-	It is possible that but for railway construction, land-infill, and overbuild, this cemetery would be observed as linked with Updown Farm (11) and East Northdown Farm forming a super-cemetery
14	TR 3870	Margate	East Northdown	area	15	24	0.62	-	i) in a landscape with enclosures and ?long barrows
15	TR 3468	Margate	Hengrove	area	5	10	0.5	=	-
16	TR 3165	Minster	Telegraph Hill	area	14	50	0.28		Large attenuated cemetery follows line of Nos. 3 (Appx 4, 1), 4, or perhaps 'Dunstrete' (the A253), an ancient track
17	TR 3168	Birchington	Quex Park	area	7	14	0.5	=	One mound survives in woodland as a result of eighteenth-century landscaping

	NGR	District	Name of site	Morph- ology	No.	Area (ha)	Conc.	Orient	Comments
18	TR 2766	Birchington	St Nicholas Comer	area	5	3	1.6	_	
19	TR 2054	Bekesbourne	Shepherds Close	area	6	5	1.1	NNE-SSW (est)	
20	TR 2850	Eythorne	Elvington	linear	7	1	7.0	NNE-SSW	Very tight linear group, Saxon barrows also present
21	TR 3354	Finglesham	West Street	area	8	3.5	2.2	NNE-SSW	Four rings of about 30m diameter, one triple ring of 40m diameter
22	TR 3253	Finglesham	Updown Farm	area	6	8	0.75	-	Three close groups form a triangle, one ring of 50m dia
23	TR 3053	Eastry	Venson Farm	linear	5	2	2.3	NW-SE	
24	TR 3050	Tilmanstone	Barville Farm	linear	7	3	2.1	NE-SW	
25	TR 3547	Ringwould	Martin Mill	linear	6	1.7	3.4	E-W	
26	TR 3546	Ringwould	Oxney Court	geometric	8	9	0.9	NNE-SSW	All ring ditches appear to be 40m or more in diameter, they are arranged in two diverging lines of pairs
27	TR 3049	Eythorne	West Studdel Farm	linear	6	4	1.5	NE-SW	
28	TR 3449	Sutton	Ripple Court	area	5	3	1.6	N-S	
29	TR 3148	Sutton	Ashley	linear	6	1	6	NE-SW	
30	TR 3346	Langdon	Langdon	linear	5	5.5	0.9	NNE-SSW	
31	TR 3445	Langdon	Sutton Manor	linear	5	1.5	3.3	N-S	

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