

AN ENCLOSURE ON BROOME HEATH, DITCHINGHAM, NORFOLK

An Earthwork Survey by
The Royal Commission on the
Historical Monuments of England

INDUSTRY AND ENCLOSURE IN THE NEOLITHIC

January 1995



1. INTRODUCTION

In late January 1995, the Royal Commission on the Historical Monuments of England surveyed the earthworks in the vicinity of the enclosure on Broome Heath (National Grid Reference TM 3430 9115), as part of the project to record Enclosure and Industry in the Neolithic Period. Excavations carried out in 1966-71 demonstrated the existence of Neolithic settlement on the site, though the enclosure itself is not certainly contemporary. The enclosure is recorded in the National Monuments Record as TM 39 SW 7 and is a Scheduled Ancient Monument (NORF 282). A long barrow, two round barrows and a number of twentieth century military earthworks were also recorded in the course of the survey.

Broome Heath is an area of some 30ha of heathland lying between the villages of Broome and Ditchingham in South Norfolk and partly within both parishes. The natural topography is slight, ranging from c.8m-10m above OD. The podsolised topsoil on the Heath is thin and overlies deep deposits of sand and gravel which have been extensively quarried from the nineteenth century onwards.

Figure 1: Location map

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1. INTRODUCTION

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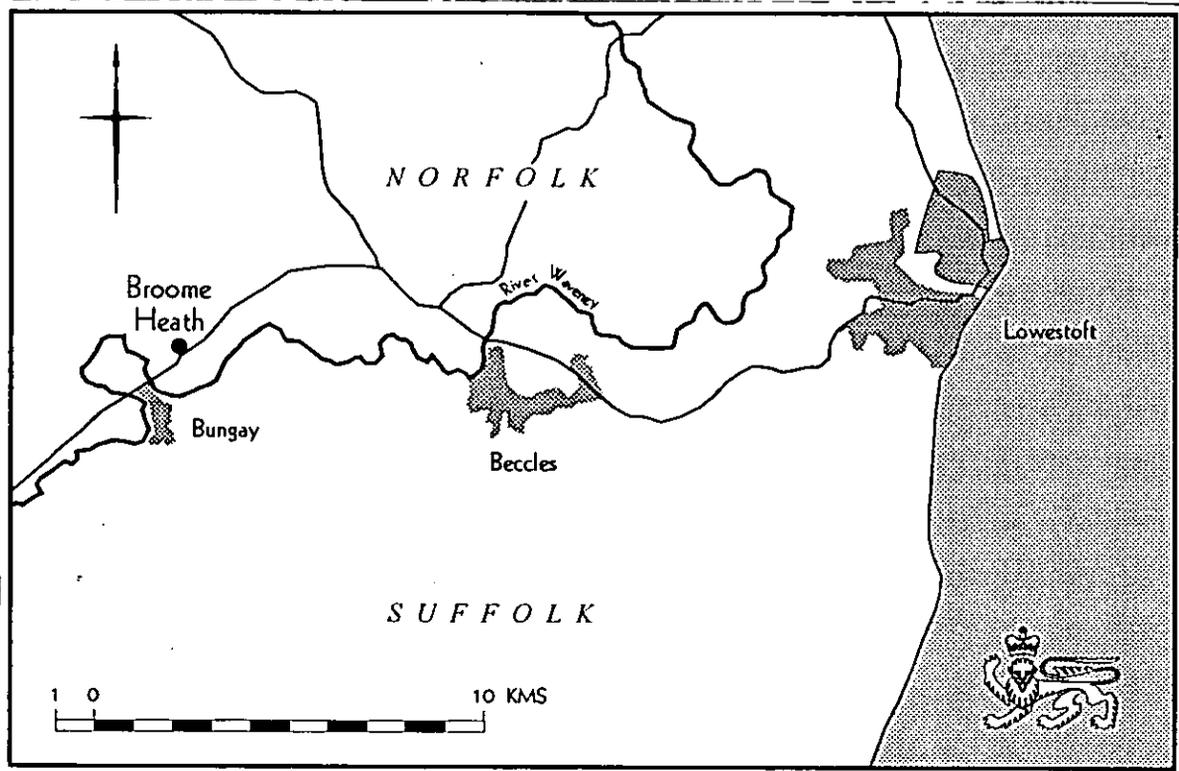


Figure 1: Location map

2. ARCHAEOLOGICAL HISTORY

The enclosure

The enclosure was recorded on the Ordnance Survey First Edition of 1885 (surveyed 1884) and subsequent editions. Wainwright notes in passing that Rainbird-Clarke carried out excavations along the enclosure earthwork in 1961 or 1962, the results of which were not published. Following development proposals, Wainwright himself carried out a series of area excavations (May 1966, April-May 1970, September 1970-March 1971), which have been fully published (Wainwright 1972) and are indicated on Plan 1. These revealed that the enclosure was C-shaped, formed, at least in part, by two lines of bank and ditch, but apparently open on the east. The more massive inner earthwork was examined in three places and the much slighter outer bank and ditch were encountered in trenches M1-v and L1-v.

The original ground surface was preserved beneath both banks, and in places survived to a height of c.0.4m above the level of the gravel subsoil in the interior. Examination of the buried soil revealed that, in contrast to the modern podsol, the Neolithic soil profile was probably a brown earth. Pollen analysis suggests that the enclosure stood in an area of acid grassland which was possibly under pasture rather than cultivation. Also preserved within the inner bank were intermittent traces of two lines of stakeholes, c. 2m apart, one running along the middle of the bank and the other along its outer edge. The former was interpreted as a fence running along the top of the earthwork and the latter as a revetment. In trench Lv, where the stakeholes were absent, a rectangular arrangement of four post-holes was tentatively interpreted as some form of platform or watch tower.

No surface or excavated traces of any kind of earthwork, palisade or fence completing the circuit on the east were observed. However, Wainwright noted that on the evidence of the old ground surface beneath the inner bank, up to 0.4m may have been eroded away, resulting in the loss of any shallow features.

Wainwright stripped an area of approximately 1.3ha within the earthwork and extending further to the north-east. In total, 7 postholes, 67 pits and 36 'bowl hearths' were excavated, as well as three areas where concentrations of artefacts were observed during the removal of the topsoil. No coherent settlement plan could be recognised from the distribution of the various features. The pits, although several distinct clusters were

observed, were scattered across the whole of the excavated area and not just within the confines of the earthwork. One pit was observed on the quarry edge near the long barrow c.190m east of the Broome Heath enclosure. Wainwright implies that this is an outlier of the Neolithic distribution, although the evidence supporting this is not given. Importantly, one pit was sealed beneath the enclosure bank. The pit fills generally contained variable quantities of pottery and flint, and some were exceptional; for example, Pit 40 produced c.45% of the potsherds from the pits. The hearths were described as generally being shallow depressions filled with a quantity of calcined flints. They were distributed in two main groups in areas where pits were largely absent and numerous waste flakes and occasional potsherds were found around them. The three areas which were rich in artefacts produced dense concentrations of flint flakes and implements. One was associated with sherds from the base of a Beaker, and another with 221 small and fragmented Neolithic sherds. The remainder of the interior produced a random scatter of flints, potsherds and other artefacts.

In all, 9326 sherds of pottery, representing a minimum of 418 vessels, were recovered. In addition to the Neolithic material and the base sherds of the East Anglian Beaker, a small number of Bronze Age sherds were also recovered from the interior. The pottery recovered was described as 'an essentially homogeneous and extensive collection of Neolithic bowls, characterised by their simplicity of form and almost total lack of any decoration' (Wainwright 1972, 22). A total of 22252 struck flints were recovered, the raw material for which appears to have been obtained entirely from local gravels. The bulk of the assemblage is considered Neolithic; implement types represented include a range of core and scraper types, polished flint axes (both whole and fragmentary), leaf-shaped arrowheads and transverse arrowheads (Green 1980, 384-5 provides further analysis of the arrowheads). Two areas, including that which produced Beaker sherds, were interpreted as '...knapping sites which specialised in the production of the small scrapers favoured by the Beaker people...'. In addition, a possible small Mesolithic component was identified on the basis of 'a single microlith and various notched blades and flakes which may be mis-hits from the manufacture of microliths by the microburin technique'. Other finds included saddle querns and rubbing stones. Due to acid soil conditions, no human or animal bone survived. A number of cereal impressions on potsherds were identified (emmer and einkorn wheat, barley) and small quantities of hazelnut shells came from two of the pits.

Four radiocarbon determinations were obtained from the excavation:-

(1) 3474±117 bc (BM-679) oak charcoal from base of fossil soil beneath enclosure bank.

(2) 2573±67 bc (BM-756) oak charcoal from Pit 29, layer 4.

(3) 2629±65 bc (BM-757) oak charcoal from Pit 40, layer 6.

(4) 2217±78 bc (BM-755) charcoal from surface of fossil soil beneath enclosure bank.

Wainwright argued that because determination (4) was associated with unweathered artefacts on the ground surface immediately below the enclosure bank, then 'the earthwork was constructed within the date range expressed by BM-755.' Determination (1) was obtained from charcoal in a horizon which also produced pottery similar to that associated with (4). He argued that the pottery assemblage from the site therefore represents a long-lived ceramic style spanning the period 3474-2217 bc. The other two determinations suggested that Pits 29 and 40 also predated the enclosure. This, along with the apparent homogeneity of the pottery assemblage and the presence of one pit beneath the bank prompted the suggestion that all pits and postholes predated the construction of the earthwork, with the caveat that the 'unchanging character' of the pottery assemblage made it difficult to determine whether any pits were contemporary with the earthwork. Wainwright concluded that '...no evidence could be found for a settlement contemporary with the earthwork.' The Beaker sherds and associated material plus the Bronze Age sherds from the interior were interpreted as complementing the evidence provided by the barrow cemetery for Bronze Age activity in the area.

Wainwright described the undecorated ceramic assemblage as broadly characteristic of the Grimston style. Herne's (1988) reassessment of Grimston pottery involved a degree of reinterpretation of Wainwright's conclusions on the date of occupation at Broome Heath. Herne argued that of the four radiocarbon determinations, only (2) and (3) were from contexts certainly contemporary with the deposition of the pottery assemblage, while the other two could easily represent redeposited material. Herne concluded that Broome Heath, instead of a domestic site in use over two millennia, with no discernible changes in pottery style, could more reasonably be interpreted as an open settlement dated securely to the Middle Neolithic.

The barrows

Although Hogg (1941) credited Rainbird-Clarke with the identification of the long barrow, the depiction of the barrow on the Ordnance Survey First Edition of 1885 (surveyed 1884) suggests that its form had already been recognised. The barrow is generally regarded as an outlier of the Chiltern/East Anglia distribution.

Chester (1859) records that '...on the heath on the borders of Broome and Ditchingham, several tumuli existed until recently, when, with one or two exceptions, they have been carried away.' One of these, thought by Mann (1934) to be the long barrow, was apparently excavated by Chester in 1858. He dug down from the top of the barrow, discovering a human skeleton, aligned north-east to south-west, with the head to the south-west, 'lying on a bed of gravel at the level of the natural soil' c.1.8m from the top of the mound. One side of the skull was stained green, suggesting the presence of some item of copper or bronze. Chester suggested a pagan Saxon date, although no datable material was recovered. One or two other tumuli produced quantities of charcoal while being 'removed', but no artefacts were observed (see also Meaney 1964, 170; Smith 1901, 336).

WG Clarke (1913) commented that Neolithic implements, potsherds and pot-boilers were common finds in the area around the long barrow. He first recorded the bank extending south-westwards from the long barrow. Clarke (1960) notes that 'pottery of Windmill Hill type has been discovered on the surface of the mound', but gives no further details. Wainwright (1972) records that sherds of plain Neolithic pottery were recorded from the surface of the long barrow in 1966. Healy (1984) recovered a sherd of Neolithic pottery from the surface of the barrow in 1977, which she describes as unparalleled in East Anglia and conforming most closely to Manby's definition of Towthorpe ware.

Both the surviving round barrows have been described frequently, but no excavation has been documented. Lawson (1981) records stray finds of struck flints on the surface of the bell barrow and suggests locations for those barrows removed in the nineteenth century.

Other finds in the vicinity

Chester (1855) states that 'celts have been found at...Ditchingham...'. These are recorded in the NMR as stone axes (TM 39 SW 26), although this is by no means certain, as Chester grouped stone and bronze artefacts together. Mann (1934) records that polished flint axes and a triangular knife have been found on Broome Heath; these axes may well be the celts referred to.

Chester (1859) refers to 'a small Roman urn...filled with minute copper coins of the Lower Empire' being found on the borders of the Heath.

Woodward (1856) exhibited 'three rude urns, said to be of the Anglo-Saxon period', found on the Heath to the Society of Antiquaries in May 1856. An Anglo-Saxon

cinerary urn with a large portion of a second one, and a 'barbed' flint arrowhead, found at Broome Heath were shown to the Suffolk Institute of Archaeology in July 1861 (Anon 1861). Clarke (1941) states that all the urns (and presumably the arrowhead) have since disappeared. It is uncertain whether or not they represent secondary use of the barrows, though this must be a possibility.

3. DESCRIPTION OF THE EARTHWORKS

Terms and letters in bold script used in the text refer to the plan surveyed at 1:1000 scale. Aerial photographic coverage of Broome Heath is adequate but adds little to the interpretation of the earthworks.

The enclosure TM 39 SW 7

TM 3430 9115 The enclosure describes a slightly ovoid C-shape, formed by two lines of bank and external ditch, of which only the inner survives as an earthwork. The opening on the east is some 150m wide and since excavation has demonstrated that there was never a complete earthwork circuit, the 'internal' dimensions of 150m north to south and approximately 105m east to west may be misleading.

The inner bank of the enclosure now survives to between 3.5m and 5.5m wide and up to 0.6m high, though the excavated sections survived to no more than 0.3m high. The bank is fairly continuous but damaged in places; it has been partially obscured by a bank of spoil along the edge of Green Lane and severely distorted by modern flower-beds etc. in the gardens of numbers 1-5 Loddon Road. Only two lengths of the adjacent ditch survive as earthworks, one 32.0m long on the west side and one 19.0m long west of Wainwright's excavation trench **Miv**; these average 3.0m wide and up to 0.3m deep. The excavated sections of ditch were 2.0m to 3.0m wide, 1.0m to 2.0m deep and of extremely variable profile. The earthwork ended completely some 12m beyond Wainwright's trench **Lv** and was certainly broken beyond **Mv**; however a very broad abraded scarp with a natural appearance may indicate its course beyond the interruption for a further 60m to the north. This scarp is evident on Wainwright's contour survey of the area, but he considered it to be natural. A break 2.3m wide on the western side of the enclosure appears to result entirely from modern vehicular erosion.

No trace of the much slighter bank and ditch which lay immediately outside the main earthwork can be seen on the surface. Wainwright's excavations recorded a denuded bank 0.1m high and up to 2.3m wide, with a ditch up to 1.5m wide and 0.8m deep outside it.

Long barrow TM 39 SW 6

TM 3448 9132 The long barrow is situated some 150m north-east of the enclosure. It is 46.0m long, aligned approximately north-east - south-west and is roughly oval in plan,

diminishing in width from 24.0m at its widest point near the south-western end to 20.0m near the north-eastern end. It maintains a fairly constant height of 1.8m. Slight traces of a ditch 1.4m wide and 0.1m deep on average survive on either side of the barrow. Mid-way along the south-eastern side, a broad scoop may result from antiquarian excavation or quarrying. The mound as a whole has been severely damaged by rabbits.

A low **bank**, first noted by WG Clarke (1913), extends to the south-west of the long barrow, on a very slightly different alignment, and as observed by Wainwright (1972), appears to overlie the base of the barrow. The bank is 42.0m long and maintains a width of 7.5m and height of 0.6m. It appears to have been stepped on the south-eastern side, with a slight ditch 0.1m deep extending along the north-western side. No interpretation for this feature has been proposed previously.

Bowl barrow TM 39 SW 37

TM 3441 9131 A bowl barrow lies some 60m to the west of the long barrow. It has a maximum diameter of 35.0m and height of 1.7m and has traces of a ditch up to 2.0m wide and 0.2m deep on the east; there is no berm. There is a possible excavation trench on the south-east and the barrow has also been disturbed by military digging (see below) and very severely by rabbits.

Bell barrow TM 39 SW 31

TM 3438 9105 A bell barrow lies some 60m to the south-east of the enclosure. The barrow itself measures 20.5m in diameter and up to 0.8m high. There is no berm separating it from the ditch which is 0.2m deep on average. Immediately outside this lies a bank up to 2.5m wide and 0.4m high, which has an overall diameter of 27.0m. The barrow is somewhat overgrown but is well-preserved, apart from the south-eastern third, which lies partly within private gardens and has been damaged both by the modern fence and by an older track and hedge-line along the parish boundary.

Of the four other round barrows given approximate grid references by Lawson (1981), three fall wholly within the quarried areas and have certainly been removed if they ever existed at those locations. No trace of the one which Lawson locates partly within the surveyed area (approximately mid-way between the **long barrow** and the **bowl barrow**) could be identified.

Military earthworks TM 39 SW 38

As noted by Wainwright (1972, 4), the Heath was used as a training ground during the First World War. Although Wainwright suggests that this activity was confined to the interior of the enclosure, a zig-zag trench some 78m long which cuts into the north-

western side of the **bank**, is overlain by a later foxhole trench and may also be of First World War date. A number of practise trenches remained open for some years after the War (personal communication from local resident), but were later backfilled and now survive to a maximum depth of 0.1m.

Fifteen foxhole trenches were identified in addition to numerous other small mounds and trenches. The foxholes are on average 1.8m long by 0.7m wide and 0.5m deep with the spoil thrown up to form a mound at the front. They are generally grouped in pairs and threes, and are deployed facing outwards around the south-western ends of the **bowl barrow** and the **long barrow**. A slightly larger square hole dug into the top of the bowl barrow and a number of minor disturbances at its base may also be military features. On the interior of the **enclosure** to the south of Wainwright's main excavation, an angular scarp may define the edge of a Second World War vehicle park. The area is thought to have been used as a supply compound and possibly a fuel dump (personal communication from local resident).

4. INTERPRETATION AND DISCUSSION

Herne's (1988) reinterpretation of the date range of Neolithic settlement on Broome Heath reinforces Wainwright's conclusion that there is no conclusive evidence to link the settlement and the earthwork enclosure. While Herne rejects Wainwright's fairly precise construction date of 2217 ± 78 bc, both agree on the relative dating sequence, and the probability that the enclosure post-dates some, if not all, of the settlement. However, given the paucity of Beaker and Bronze Age material and the absolute absence of Iron Age and Medieval finds, the general associations with the Neolithic settlement and the long barrow remain the best indications of the earthwork's date. It may be significant that the variable profile of the ditch as demonstrated by excavation seems to indicate the periodic selective re-cutting of short sections. Although clearly not diagnostic of any particular period, this appears to have more in common with our understanding of causewayed enclosures than with, for example, Bronze Age pastoral enclosures.

There are relatively few parallels for the C-shaped form of the enclosure. Although Wainwright observes that there may have been a palisade or other shallow feature on the eastern side lost through erosion, the absence of a continuous earthwork seems certain. It is possible that there may have been some form of earthwork for approximately 60m to the north of the interruption revealed by trench Mv, since although the abraded scarp recorded both by Wainwright's contour survey and RCHME has a natural appearance, its existence does not seem consistent with the underlying pure sand. The majority of superficially comparable enclosures are of Late Bronze Age date, for example Boscombe Down East and Preshute Down (Piggott 1942). The Angle Ditch in Cranbourne Chase (Pitt-Rivers 1898, 58-113) lies close to Wor Barrow, but is of Late Bronze Age date. However, these sites are all univallate and generally more angular than the Broome Heath enclosure, and the very small quantity of Bronze Age material recovered by Wainwright would not appear to support a re-interpretation of the date of the enclosure. Brigmerston Firs, the comparison thought to be closest by Wainwright, remains undated, and although it too lies in close proximity to a long barrow, the opening in the enclosure faces away from the barrow. Marden and the alleged henge at Waulud's Bank may be Neolithic examples of partial earthwork enclosures, but these both lie adjacent to river sources and are completed on the open side by the river channels themselves. As Wainwright observes, the Broome Heath enclosure therefore defies categorization.

The association with the long barrow may be of more significance than previously suggested. Although the broad span of the open side of the enclosure does not appear to relate directly to the barrow, the barrow does seem to be aligned precisely on the centre of the enclosed area, with the broader end (presumably the front) facing towards it. The date of the bowl barrow has not previously been discussed, but in view of its large size, the possibility of a Neolithic origin must be considered. The absence of faunal remains on the site make discussion of other possible non-settlement functions for the enclosure difficult, but it may be that the enclosure was connected with mortuary practise rather than settlement.

The date and function of the bank which overlies the long barrow remain unclear. It does not seem comparable to bank barrows or the bank projecting from the Neolithic barrow at Bryn yr Hen Bobl on Anglesey (Lynch 1991, Fig 17), which is considerably more massive (some 110m long and 12m wide) and was thought by the excavator to pre-date the barrow. There are occasional antiquarian references to rows of up to nine Anglo-Saxon burials in banks, for example at Bekesbourne in Kent (Roach Smith 1856, 144-59), and this may be a possibility given the Anglo-Saxon finds from Broome Heath. A less likely possibility is that the bank was used as a pillow mound for the farming of rabbits in the Medieval period.

5. METHOD

The earthwork survey was carried out by Alastair Oswald and Paul Pattison of the RCHME. Hard detail and the majority of the earthworks were surveyed using a Wild TC1610 Electronic Theodolite with integral EDM. Data was captured on a Wild GRM 10 Rec Module and plotted at 1:1000 scale via computer on a Calcomp 3024 plotter. Minor details of the earthworks were supplied with Fibron tapes using normal graphical methods. The report was researched and written by Martyn Barber and Alastair Oswald and edited by Peter Topping. The site archive has been deposited in the National Monuments Record, Kemble Drive, Swindon SN2 2GZ (reference TM 39 SW 7).

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