

Following the finding of the brooches and moulds the area was subject to a geophysical survey and partial excavation. No archaeological features were located. It was also notable that the topsoil was devoid of any pottery or other associated finds which would indicate settlement here during the Roman period. The apparent isolation of these metal finds, including the vessel foot, brings into question the circumstances of these objects' deposition in this area. It seems probable that these are merely accidental losses. The brooch moulds and brooches suggest that the items almost certainly belonged to a metalworker: the cauldron foot, being broken, may have been carried ready for re-smelting and re-use when necessary.

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ACKNOWLEDGEMENTS

Thanks are due to Mr. D. Harty, the finder of this object, for bringing it to our attention. Ralph Jackson of the British Museum undertook initial identification. The illustration is by Steven Ashley.

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HEACHAM: EARTHWORK VESTIGES OF NORFOLK'S OYSTER INDUSTRY?

by Brian Cushion

Introduction

The features (SMR Site 1460) were brought to the attention of Norfolk Landscape Archaeology (NLA) in 1997 by an application to expand facilities at a holiday complex at Hunstanton, which owns the area and had proposed a new golf course on land to the east. Investigation of the SMR and air photographs by NLA staff had led to suggestions that the earthworks were extant salt pans on former salt marsh. This had been Rainbird Clarke's interpretation of the series of small rectangular pond-like depressions when they were noted on 1946 RAF air photographs.

The author was asked to investigate, and to undertake an earthwork survey if the features were still identifiable. This duly took place in March 1998. It was appreciated that the absence of the saltern mounds normally seen near salt-production sites necessitated a re-interpretation of the function of the features.

Discussions with RCHM staff at Cambridge led to the realisation that the features resembled oyster beds at various places on the Essex coast, although the latter still lie within salt marsh. Later communication with D. Strachan of Essex County Council further confirmed their likely function as former tidal ponds associated with fish, although not necessarily oysters.

Two further areas of similar features further south in Heacham parish (Sites 1461 and 1462) had also been noted from RAF photography, but have since been destroyed by levelling for caravan parks.

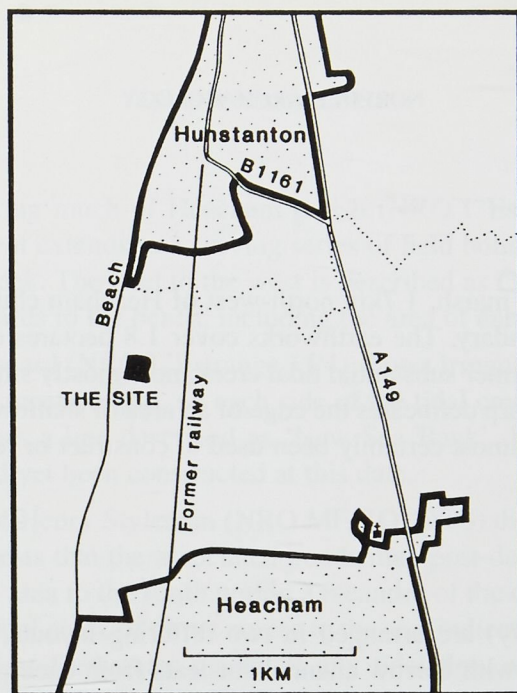


Fig. 1. Location of Site 1460

HEACHAM SMR 1460

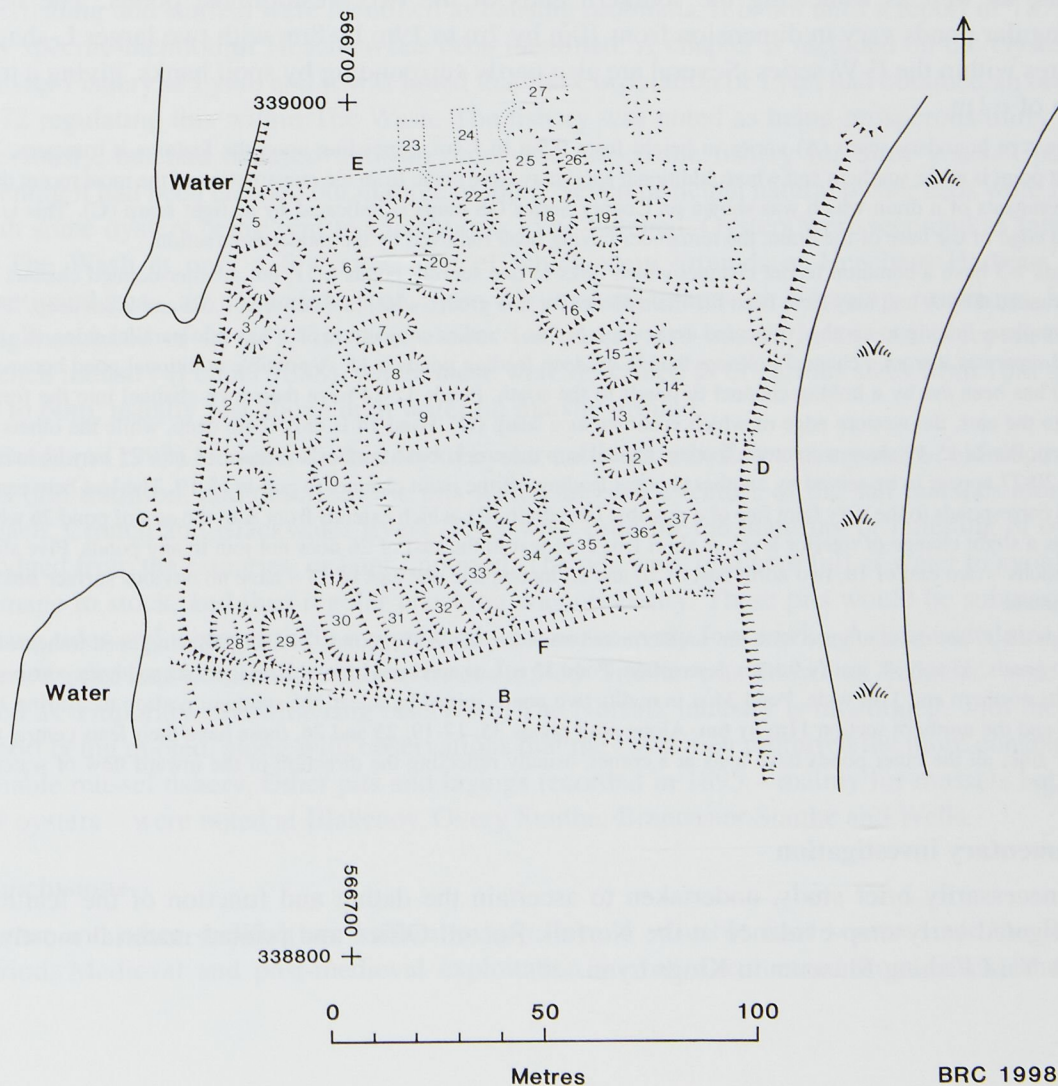


Fig. 2. Plan of the earthworks

The earthworks

Location

(Fig 1)

The site lies on former salt marsh, 1.7km north-west of Heacham church and only 400m from the Hunstanton parish boundary. The earthworks cover 1.8 hectares of rough grazing and are bounded on the east by a former substantial tidal creek, now mostly silted up and reed-filled. On the west side a bounding scarp delineates the edge of an area of shallow extraction, partly water-filled. Spoil from this has almost certainly been used to construct or repair the sea bank, which lies 60m further to the west.

Description

(Fig 2)

The ponds (now mainly dry) are arranged in two differing layouts, mostly in at least three different dendritic patterns with narrow channels or leats from each pond linking to a sinuous feeder channel. At least two of these feeder channels link to the former tidal creek to the east; a third may have been truncated by the extraction to the west, although a link does extend southwards into the other layout. This second layout is a series of ponds arranged in an east-to-west row, each connected by a leat with a drain which formed the southern boundary of the group and also led into the creek to the east. A more recent drain has cut across the western end of this, as well as truncating the southern ends of the two westernmost ponds. The near-rectangular ponds vary in dimension from 10m by 7m to 19m by 8m, with two larger L-shaped features within the E-W series. Several are also partly surrounded by spoil banks, giving a total depth of *c.* 1m.

The western boundary scarp (**A**) varies in height from 0.5m to 1.4m, depending upon the features it truncates. The highest point is at the southern end where additional spoil may have come from the construction of the most recent drain (**B**). Remnants of a drain which was shown on County Series OS maps is indicated by a slight scarp (**C**). This is the eastern edge of the base of the drain, the remainder having been removed by the modern extraction.

Ponds 1-3 have a common feeder channel which links to one serving ponds 6-11, but a better-defined channel has been truncated by **A** and may have been the main feeder for this group, which are between 0.6m and 0.8m deep. Pond 4 is complete, linking to another truncated depression 5; this is rather conjectural as it has non-parallel sides. A small mound separates it from a channel no more than 0.2m deep feeding ponds 6-11. A possible additional pond between 9 and 10 has been cut by a linking channel to ponds to the south. Ponds 12-14 have their own channel into the former creek to the east, the western edge of which is shown as a scarp (**D**). Pond 14 is only 0.4m deep, while the others are 1m deep. Ponds 15-19 share a common feeder channel into the creek, but a further leat from 18 into 25 may be later as ponds 20-27 appear to be served by another channel leading off the main channel to ponds 15-19. The leat between 25 and 26 corresponds to the very faint line of a possible land drain (**E**), which extends from **A** to the east of pond 26 where it forms a slight change of interior level. A short length of leat to the east of 26 does not join to any ponds. Five slight depressions – two east of 19, two north-east of 26 and an incomplete one east of 15 – have no obvious surface links to other ponds.

Ponds 28-37 are those aligned with the southernmost boundary ditch (**F**), ponds 28 and 29 having been truncated by **B**. Two ponds, 33 and 34, justify further description. Pond 33 is L-shaped and in total 22m long, its southern portion 7m wide, its northern end 11m wide. Pond 34 is in reality two ponds joined by a leat, the southern portion measuring 17m by 8m and the northern section 11m by 6m. Along with ponds 35, 17-19, 25 and 26, these have their leats central to a shorter side; all the other ponds have leats at a corner, usually reflecting the direction of the inward flow of water as required.

Documentary investigation

This necessarily brief study, undertaken to ascertain the dating and function of the features, investigated early map evidence at the Norfolk Record Office and printed material mostly at True's Yard Fishing Museum in Kings Lynn.

Map evidence

A 1592/1623 map covering much of Heacham parish (NRO L'Estrange OB2/OC2) does not show this specific area, but extends to a curving series of field boundaries approximately 100m to the east of the tidal creek. The land to the west is described as Common, and is presumed to cover all the land westwards to the beach, including the area of earthworks.

The 1781 Enclosure Award (NRO L'Estrange EP4) shows irregular enclosures on the former common, presumably of recent origin, on each side of the tidal creek. This is shown extending to the west, cutting across a line described as 'New Sea Bank'. It is unclear from this as to whether the sea bank had yet been constructed at this date.

An 1820 Estate Map of Henry Styleman (NRO MF/RO 490/8) displays the first indication of boundary F, which suggests that the associated ponds may post-date 1781. The field is named Old Salt Marsh, with the area to the south within a meander of the creek named as New Marsh. The beach deprives the tidal creek of direct access to the sea, indicating that by now the marshes are probably considered as freshwater marsh. If any tidal flow reaches the ponds then it is probably by way of a sluiced channel.

The 1839 Tithe Map and Award (NRO MF 749 & 764) provide similar information to the above.

Written references

Hillen (1978) notes that oyster scalps were mentioned in the reign of Elizabeth I, when overfishing and starfish were identified as causing problems. It is not until a report of 1875 that any specific mention of Heacham has been identified. A chapter is included on the Oyster and Mussel Fishery at Lynn, and it was noted that the Corporation of Lynn had obtained an order in 1872 regulating this within The Wash. The fishery was noted as being prosperous thirty years previously, but had decayed until an order had closed the fishery for three years. Upon re-opening it had been cleaned out in three months! Seven principal natural oyster beds were noted, with some oysters being sent to Cleethorpes to be fattened. Oysters were recorded as fattening in The Wash at only a few sites, one of which were grounds at Heacham Harbour. Also mentioned was an 'abundance of room for making clares or fattening reservoirs in the neighbourhood of Lynn'. The term claires (or parcs) also occurs in an earlier report on the French industry (Pennel 1868), where these were described as of various sizes from 10m square up to 60m, usually just above high water on marshy ground.

Benham (1993) recounts the history of oyster cultivation in Essex using maps, old documents and oral tradition, and describes the pits which are still a feature of the salt marshes along the Roach, Crouch and Blackwater rivers. They were used for the maturing or fattening of oysters dredged from the estuaries, or later imported. The pits were best kept full of water to avoid frost damage to stock, and thus regular checking was necessary. These pits would be submerged at spring tides and were partially replenished with water every few weeks. A dam and sluice at the narrow inlet leat would allow this to be controlled. Smaller pits known as 'ledgens' were often used as temporary overwintering reservoirs. The Norfolk industry is mentioned, with the 1875 report being quoted, along with observations that the Lynn men preferred the more constant and reliable mussel fishery. Other pits and layings recorded in 1895 – mainly for mussels but often for oysters – were noted at Blakeney, Overy Staithe, Brancaster Staithe and Wells.

Conclusions

Oyster and other shellfish are known to have been a valuable food source since the Roman period. Medieval and post-medieval exploitation is well documented from Essex, and both

layout forms mapped here compare with examples there which have been interpreted as overwintering pits. The dating of the features is not wholly clear, but ponds 28-37 certainly relate to the adjacent drain. Although first recorded in 1820, this may be a pre-existing feature that was not deemed significant enough to record on the earlier maps, although its straightness does not suggest a medieval date. The fact that the area was common in 1592 does not preclude usage for fishponds then or until enclosure, since Essex has several salt marshes which were common land and upon which oyster pits are known. It is also interesting that all the Essex examples are still on saltmarsh. This reflects the very different nature of the land reclamation on the Wash coastline to that within the Essex estuaries, and possibly the very different fortunes of the respective shellfish industries. The dendritic pattern of ponds does perhaps suggest a more random construction: these may be earlier features being much more dependent on the tidal inflow, given their meandering feeder channels of 'natural' appearance. The sea bank construction noted on the 1781 map suggests that these features must have been in use before that date to have utilised any significant tidal inflow. Although a sluiced feeder channel is possible after this date, the resultant salt water influx into what was becoming freshwater marsh seems unlikely.

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ACKNOWLEDGEMENTS

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