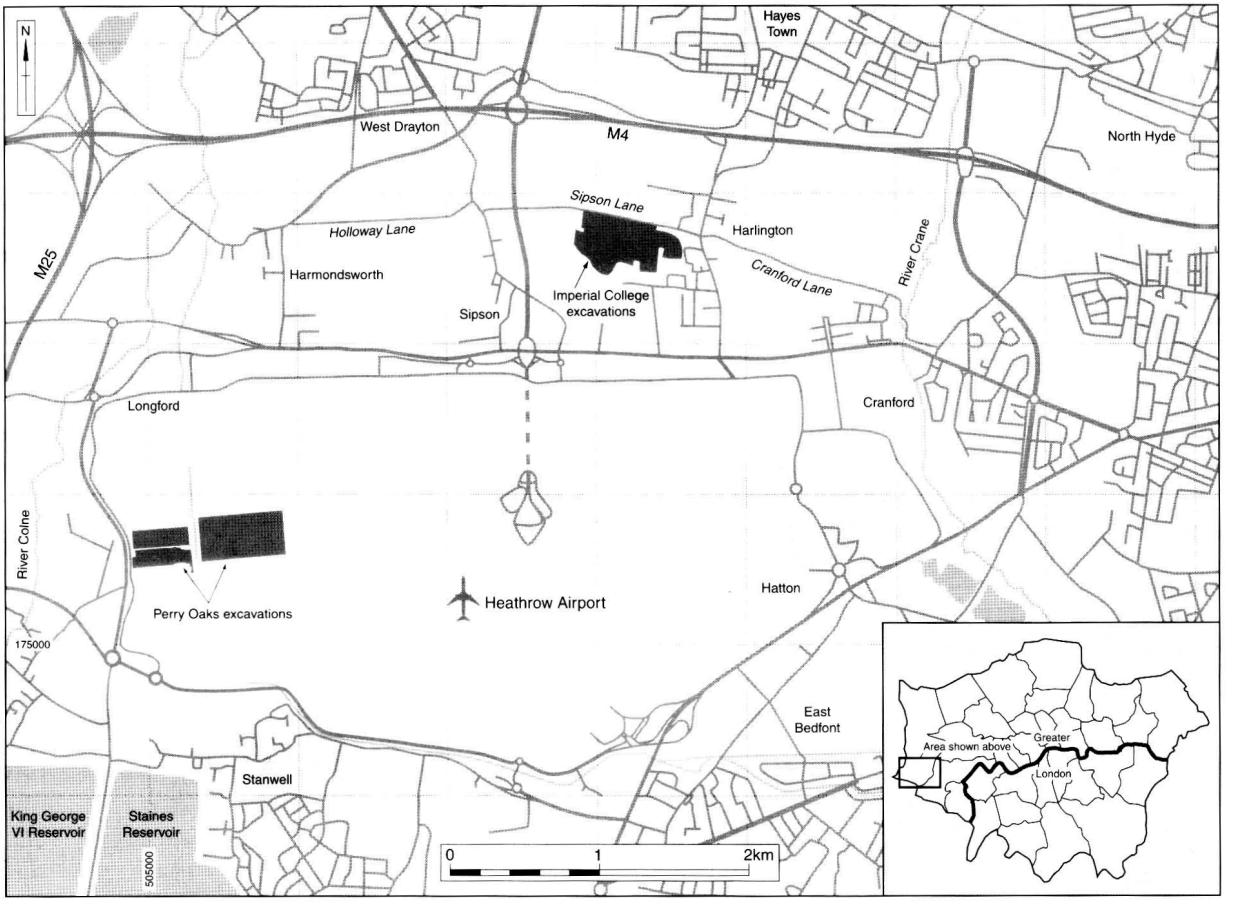

Fig. 1: site location

The archaeological landscape of Imperial College Sports Ground part 1, prehistoric

Andrew Crockett

Introduction

THE SITE, covering an area of *c.* 19 hectares, is located between the M4 motorway and Heathrow Airport, on the south side of Sipson Lane, Harlington, in the London Borough of Hillingdon (TQ 0825 7765; Fig. 1). Following the submission of proposals from Henry Streeter Ltd (Sand and Gravel) to extract gravel from the site, an archaeological evaluation in early 1996 by the Museum of London Archaeology Service[1] identified a range of features dating from Neolithic through to the Romano-British period. These remains were concentrated towards the eastern limit of the site, but persisted throughout the entire area. On the basis of these results, Wessex Archaeology was commissioned by Henry Streeter Ltd to carry out an archaeological excavation of the site over a period of five years.

The site is generally flat at a height of *c.* 26m above OD, and situated to the north of the River Thames on Late Devensian Langley Silt Brickearth, which overlies the Pleistocene Taplow Gravel terrace. It is approximately centrally located between the River Colne to the west and the River Crane to the east.

1. Museum of London Archaeology Service [MoLAS], 1996, 'Imperial College Sports Ground, Sipson Lane, Harlington, London Borough of Hillingdon - An Archaeological Evaluation' unpublished client report no. IMP96

Before the excavation, the land was used for both market gardening and as overspill pitches for the adjacent Imperial College Sports Ground to the north.

The results presented below represent an interim statement regarding the archaeology of Imperial College Sports Ground. Detailed analysis is currently programmed to start (late 2001 or early 2002) after the completion of nearby investigations that are critical to the final interpretation of the site. As a result, some details may alter during final analysis.

Palaeolithic, Mesolithic and Early Neolithic (500,000 to 3000 BC)

Virtually no Palaeolithic, Mesolithic or Early Neolithic remains were identified, with the exception of a few rolled probable Lower/Middle Palaeolithic waste flint flakes recovered from the terrace gravel, and a fine example of an Early Neolithic leaf-shaped arrowhead (Fig. 3) recovered from a Bronze Age pit. The arrowhead may reflect transient and/or small scale Early Neolithic activity in the area, which has left little or no trace in the archaeological record. Its presence within a Bronze Age pit may not, however, be coincidental. Sufficient evidence has now been recorded from excavations elsewhere in the vicinity (and most notably the Perry Oaks site at Heathrow[2]) to suggest the possibility that this may be a curated artefact, or heirloom.

Later Neolithic (3000 to 2400 BC)

The Later Neolithic period sees the first real impact by man on the landscape in the area, with the construction of a number of monuments and the excavation of pits (Fig. 2). Although it is likely that some tree clearance occurred in association with such activity, the extent of such clearance is open to interpretation, as discussed below.

The monuments comprise a subrectangular east to west aligned enclosure, a double ring-ditch and a large (votive?) well. The enclosure, which is considered to be some form of mortuary enclosure (although no human bone was recovered), measured approximately 40m by 15m, and was sub-divided into two areas by a single internal ditch. The enclosure ditch was recut at least once during its use, although possibly with a period of abandonment between each phase. Limited evidence was recorded to suggest an internal bank or mound. There are no known excavated parallels to this enclosure within the area, although a number of features identified from aerial photographs in the vicinity of the Stanwell Cursus are of similar form and size. Further afield similarities can be made with the East Anglian group of Neolithic rectilinear enclosures, and in particular the

2. J C Barrett, J S C Lewis and K Welsh 'Perry Oaks – a history of inhabitation, part 2' *London Archaeol* 9, no. 8 (2001) 221-7 [224].

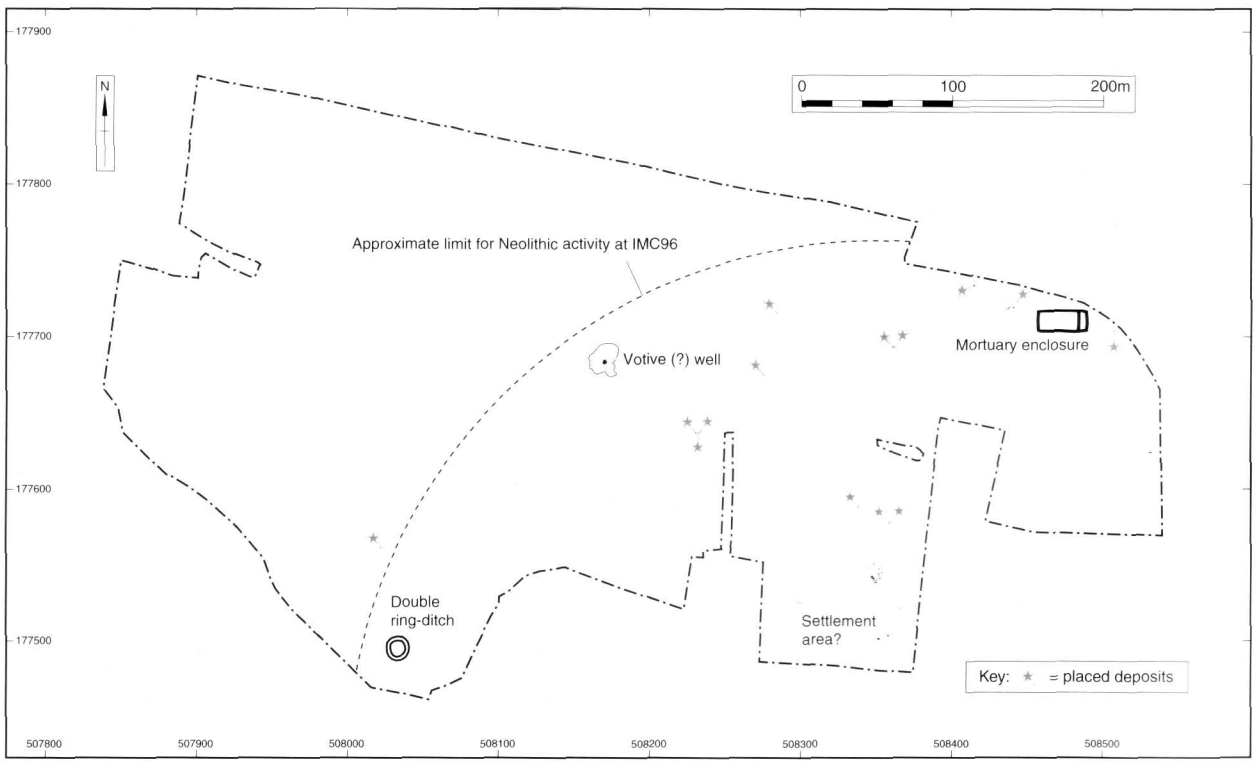

Fig. 2: distribution of Neolithic remains

Rivenhall enclosure.[3] Similarities are also evident with the Long Enclosure at Dorchester-on-Thames[4] and, to a lesser degree, the interrupted ditch forming the Normanton Down mortuary enclosure[5].

The ring-ditch measured approximately 17m in diameter, and whilst the inner ditch had a relatively shallow unremarkable profile, the outer ditch was constructed from a series of steep-sided and flat-bottomed conjoining pits. The markedly differing profiles of the two ditches may suggest that they are not contemporary, although this could not be demonstrated stratigraphically. Although a number of cremations were recorded within the innermost enclosed area, including a single central cremation, it is possible that these are all Bronze Age insertions into a monument that may not have originally contained internal features. Remnant subsoil containing much gravel (presumably derived from the deeper outer ditch) obscured much of the central and north/north-west quadrant of the ring-ditch, suggesting the monument originally incorporated an internal mound. Segmented/interrupted ring-ditches, although not common, are a recurrent feature of the Neolithic landscape, and the Imperial College Sports Ground example can be compared, for instance, with the Staines Road Farm interrupted ring-ditch,[6] although current dating evidence suggests that the Imperial College example is perhaps later.

The possible votive well comprised a large irregular relatively shallow depression measuring between 17m and 22m across, predominantly originally excavated to the upper surface of the Taplow gravel, but with a central well shaft, *c.* 2.5m in diameter, descending at least 2m into the gravel. The central shaft contained the fragmentary remains of both an antler and a possible aurochs horn, although little in the way of secure dating evidence was recovered in association with these finds. Although the evidence is less clear, the animal remains hint at a feature type reminiscent of the dismembered aurochs pit burial recorded at nearby Holloway Lane.[7] However, the presence of six barbed-and-tanged arrowheads in the Holloway Lane pit suggests that although possibly originating from the very latest Neolithic, it is more likely to be Early Bronze Age in date.

The Neolithic pits at Imperial College appear to form two distinct types; isolated archaeologically-rich features, containing many fine examples of pottery, worked flint, worked stone, burnt flint etc. (ritually placed-deposits?), and larger clusters of pits containing relatively few finds. Dating for all the Later Neolithic features is predominantly based on the identification of Peterborough Ware pottery. Some of the pottery was of very high quality, and in near pristine condition when discarded in the placed-deposit pits (Fig. 4). Late Neolithic settlement sites within Greater London are rare, and where seen are often characterised by little other than shallow pits,[8] broadly comparable to those found at Imperial College Sports Ground.

Fig. 3: Early Neolithic leaf-shaped arrowhead

It is therefore possible that both ritual (i.e. the monuments and isolated placed-deposit pits) and domestic (i.e. the pit clusters) activity is represented at the site. The distribution of such evidence is of note; the

3. D G Buckley, H Major and B Milton 'Excavation of a possible Neolithic long barrow or mortuary enclosure at Rivenhall, Essex, 1986' *Proc Prehist Soc* 54 (1988) 77-91 [figs. 10 & 11].
4. A Whittle, R J C Atkinson, R Chambers and N Thomas 'Excavations in the Neolithic and Bronze Age complex at Dorchester-on-Thames, Oxfordshire 1947-1952 and 1981' *Proc Prehist Soc* 58 (1992) 143-201 [fig. 4].
5. F de M Vatcher 'The Excavation of the Long Mortuary Enclosure on Normanton Down, Wilts.' *Proc Prehist Soc* 27 (1961) 160-73 [fig. 2].
6. J S C Lewis 'The Neolithic Period' in *The archaeology of Greater London: An assessment of archaeological evidence for human presence in the area now covered by Greater London* (2000) 63-80 [69].
7. N Brown and J Cotton 'The Bronze Age' in *The archaeology of Greater London: An assessment of archaeological evidence for human presence in the area now covered by Greater London* (2000) 81-100 [86].
8. *Op cit* fn 6, 69.

ritual monuments and placed-deposit pits are apparently located in a broad arc aligned approximately from south-west to north-east across the site, whilst the cluster of possible settlement pits are towards the centre of the arc to the south. No Neolithic remains have yet been identified at Imperial College to the north or north-west, beyond the perceived 'ritual' zone. In terms of the landscape and woodland clearance, it would be tempting to therefore suggest that the distribution of all Neolithic remains represents an area clear of woodland during this period, with ritual activity concentrated towards the edge of the clearing and settlement activity towards the centre. However, there are other interpretations to explain the distribution of Neolithic remains (see below).

Mid/Late Bronze Age to Early Iron Age (1500 to 400 BC)

A very small quantity of Early Bronze Age pottery (possibly Collared Urn) was recovered, but no other evidence to indicate sustained activity from the Later Neolithic into the Early Bronze Age. However, the possibility that Early Bronze Age activity of a predominantly aceramic nature occurred at the site cannot be wholly discounted, and it is possible that detailed analysis of the worked flint may identify more material associated with this period. Furthermore, as discussed above, there is a possibility that some or all of the Later Neolithic monuments (i.e. the 'votive' well) may at least continue into (if not belong to) the very earliest Bronze Age.

As with many other sites on the West London gravel terraces, activity during the Mid/Late Bronze to Early Iron Age is characterised by a range of features, including settlement enclosures, field systems, cremations and other funerary monuments, pits and water-holes (Fig. 5) indicating relatively intensive occupation of the landscape. The settlement enclosures are apparently spaced at fairly regular intervals throughout the landscape, with between 250m and 320m separating any two enclosures. Few structural remains were recorded to determine the precise nature of occupation, although the enclosure features have generally produced significantly more domestic refuse (i.e. pottery, worked flint, and in one instance a cache of 16 loom weights) than the field systems beyond. There was virtually no evidence for either the enclosure ditches or field systems being recut once established, nor is there any evidence for a realignment of the entire landscape at any point during this period.

The layout of the field system is perhaps best observed within the western half of the site, demonstrating a fairly regular pattern of approximately north to south aligned segmented ditches, generally 60 to 62m apart, divided into smaller units by discontinuous east to west divisions. The distribution of the field system, which is predominantly (but not exclusively) beyond the limit of earlier Neolithic activity offers a number of interpretations. For instance, the Neolithic occupation may have exhausted the soils within that area, forcing the Bronze Age farmers to clear additional areas beyond. However, the distribution of the Bronze Age field system may question the basic assumption that the limit of earlier Neolithic activity represents the outer limit of woodland clearance. It is possible that the Neolithic activity focused within an area that remained wooded, with the area beyond (later exploited by the Bronze Age farmers) cleared of woodland.

Despite the apparent hiatus between Neolithic and Bronze Age occupation of the landscape, there are further instances where Neolithic activity appears to dictate the organisation of the landscape at least during the Middle (and possibly even Late) Bronze Age period. For instance, Middle Bronze Age ritual activity is focused on a small cremation cemetery to the west of the earlier Neolithic mortuary enclosure and a penannular east-facing cremation enclosure exactly due north of the earlier double ring-ditch. Moreover, on the basis of enhanced magnetic susceptibility readings the Neolithic monument may also have been utilised as a pyre site for at least some of the Bronze Age cremations. Furthermore, the Bronze Age enclosures and field system are co-aligned with the subrectangular Neolithic enclosure, and a number of features appear to specifically intersect or align with the earlier monument (including a large pit or well cutting through the south-west corner of the enclosure ditch). An east to west aligned rectangular enclosure was also constructed during the Bronze Age against the east side of the Neolithic double ring-ditch, and the possible votive well is framed by two of the later field system ditches.

Discussion

From the results of the excavation a pattern has emerged of a landscape that through human inter-

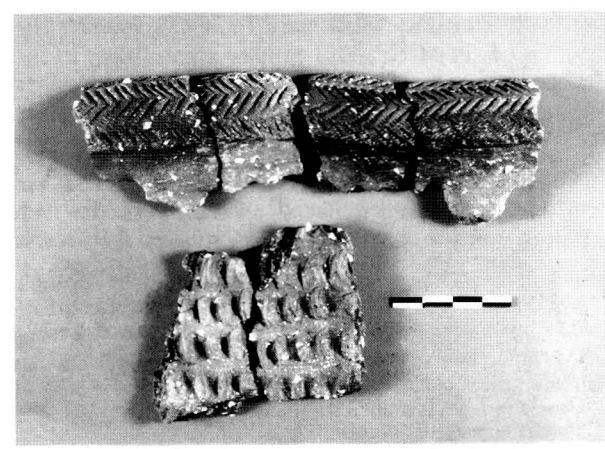

Fig. 4: decorated Later Neolithic Peterborough Ware pottery

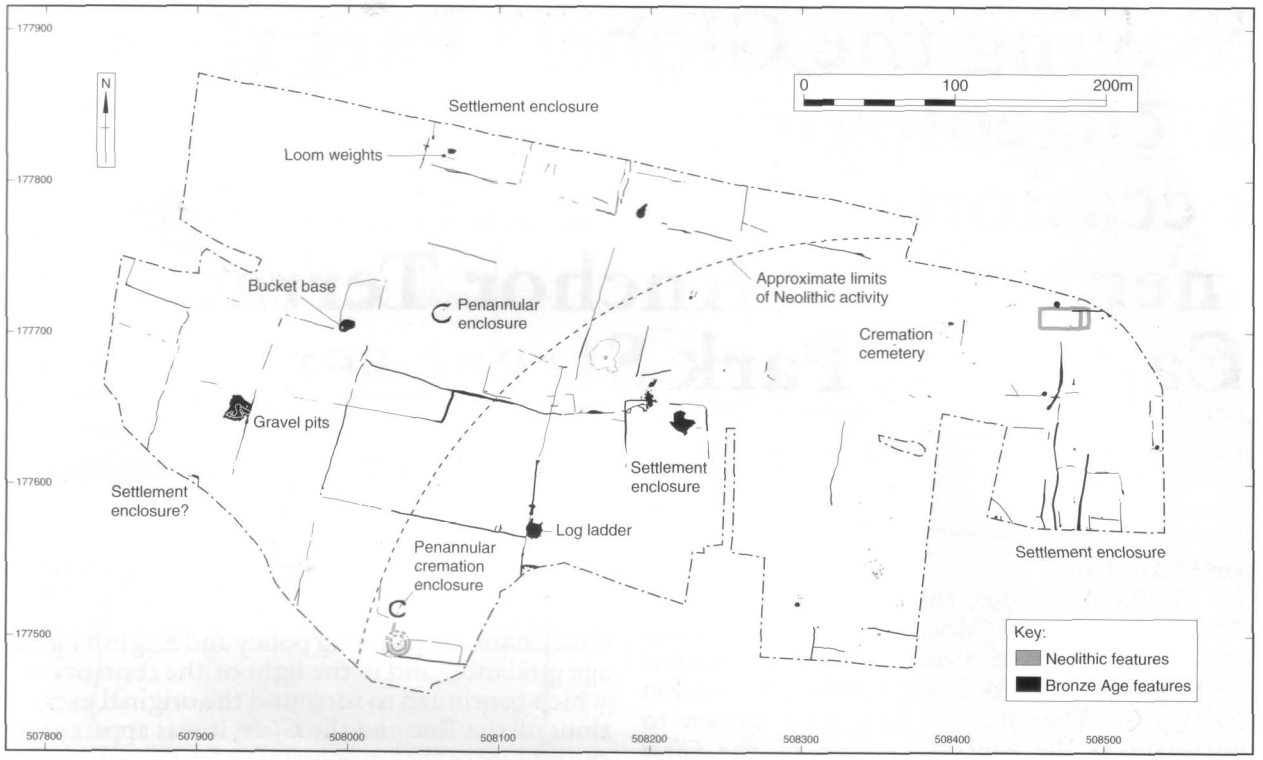

Fig. 5: distribution of Mid/Late Bronze Age to Early Iron Age remains

vention and management has evolved to reflect differing needs and/or beliefs over time. This pattern clearly emerges in the Later Neolithic, perhaps reflecting changes elsewhere as the countryside shifted from a wooded environment towards open fields. There is sufficient evidence at Imperial College to suggest that although the Neolithic farmers may have been responsible for the earliest woodland clearances, they may still have preferred to live in wooded environments. Does this reflect an awareness of their 'hunter-gatherer' heritage, and therefore a desire to remain in touch with the past, or is it a more basic fundamental need to be near to exploitable commodities (i.e. food, timber etc.)? The location of ritual monuments and features along the boundary between the 'old' and the 'new' can be seen as a means of defining the monument builder's place in the landscape.

Whether these are valid interpretations or not remains to be seen. What cannot be dismissed is the fact that despite an apparent period of abandonment in the area between the Later Neolithic and Middle Bronze Age periods, the Bronze Age settlers clearly viewed the landscape and their place in it, in a similar vein. Furthermore, on the basis of the excavation results, it is likely that the pattern of land use established during the Neolithic period survived both as extant features, and possibly also as some form of inherited folklore or tradition.

What is clear is that by the end of this period of occupation, almost certainly during the Early Iron Age, the gradual intensification of activity at Imperial College had reached its peak. As will be seen in the next issue, the site appears to be abandoned during the Middle Iron Age, with Late Iron Age settlers imposing a wholly new re-aligned agricultural regime on the landscape that was maintained throughout the Romano-British period.

Acknowledgements

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