

A Middle Neolithic enclosure and mortuary deposit at Banbury Lane, Northampton: an interim report

by

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SUMMARY

A triple-ditched circular enclosure, 23m in diameter with a central space 7.8m in diameter, was excavated in advance of new housing. The outer two ditches had single entrances to the north-west. A possible narrow entrance through the inner ditch had been blocked by an elongated pit, which was packed from bottom to top with a dense mass of disarticulated human bone, from perhaps 130 individuals. Only selected bones, particularly the femur with lesser quantities of the other major limb bones, had been collected for deposition in the pit. Fragments of skull are present in some quantity but vertebra and ribs are rare, and there are no hand or foot bones. Initial examination of the bone has recorded the presence of frequent lesions around the major limb joints, suggesting that the deposited material may have come from partially decayed corpses that had been forcibly dismembered to separate the major long bone joints. However, it will require much further analysis before the full story of the burial rite and the treatment of the individuals will be more fully understood. Initial radiocarbon dates indicate that the bone deposit was the product of a single event occurring in the Middle Neolithic (3360-3100 cal BC), although a more extensive programme of dating will be needed to establish the chronology of the whole monument in relation to the mortuary deposit.

INTRODUCTION

The Banbury Lane site lies to the south-west of Northampton, at the foot of the western slope of Hunsbury Hill within a loop of Wootton Brook, which joins the River Nene 700m to the north (Fig 1: NGR SP 725 582). The development site covers 6.9ha and is bounded by Banbury Lane to the north, Wootton Brook to the south, the modern A43 dual carriageway to the east and the Northampton Arm of the Grand Union Canal to the west. Ground levels within the site lie between 65m and 70m aOD, with Hunsbury Hill to the east at 115m aOD.

The proposed development site was subject to desk-based assessment (Flitcroft 2010). This was followed by a geophysical survey, which located a triple-ditched monument near the northern boundary of the site, alongside Banbury Lane, and linear ditch systems to the south (Simmonds and Butler 2011). These features were subject to evaluation by trial trenching in early 2011 (Albion 2011), which confirmed that the triple-ditch system dated to at least the Early Bronze Age.

Open area excavation was carried out in July and August 2011. The excavated area around the circular monument measured 119m east-west by 45m north-south, 0.47ha, and the work here comprised the excavation of the triple ditch system, the mortuary pit containing the mass of human bone and other features in the environs of the monument. A later complex of ditch systems to the south was examined in a second open area, measuring 1.92ha, the two totalling 2.39ha.

ACKNOWLEDGEMENTS

The work at Banbury Lane reflects the collaborative, as well as the competitive nature of present day commercial archaeology. The project is managed by Myk Flitcroft of CgMs Consulting, acting on behalf of the developer, David Wilson Homes, and while the geophysical survey and the open area excavation were carried out by Northamptonshire Archaeology, the intervening trial trench evaluation was by Albion Archaeology, from Bedford.

For Northamptonshire Archaeology the project is being managed by Adam Yates and Mark Holmes, and the fieldwork team was supervised by Yvonne Wolframmmurray. Particular mention should be made of Rob Smith who excavated the pit containing the disarticulated human bone. Andy Chapman has drafted the interim report in consultation with the project managers.

Anwen Caffell and Malin Holst of York Osteoarchaeology have carried out the initial assessment of the human bone to establish its analytical potential. The next stage will be the production of a full assessment report and an updated project design to guide the process of analysis and reporting. As the project progresses there is likely to be input from a wide range of specialists.

BACKGROUND

The Hunsbury Hill area, flanking the south side of the River Nene to the south of Northampton, has a long history of archaeological investigation. In the late 19th century much of the interior of the Hunsbury Iron Age hillfort, which lies 1.2km to the east of Banbury Lane, was lost to ironstone quarrying, but large quantities of finds, largely derived from numerous pits, were recovered, and there have been various further small scale investigations of the site up to the present day (Dryden 1885; Jackson and Tingle this volume).

In the 1970s during the planned development of the southern district of Northampton across farmland on

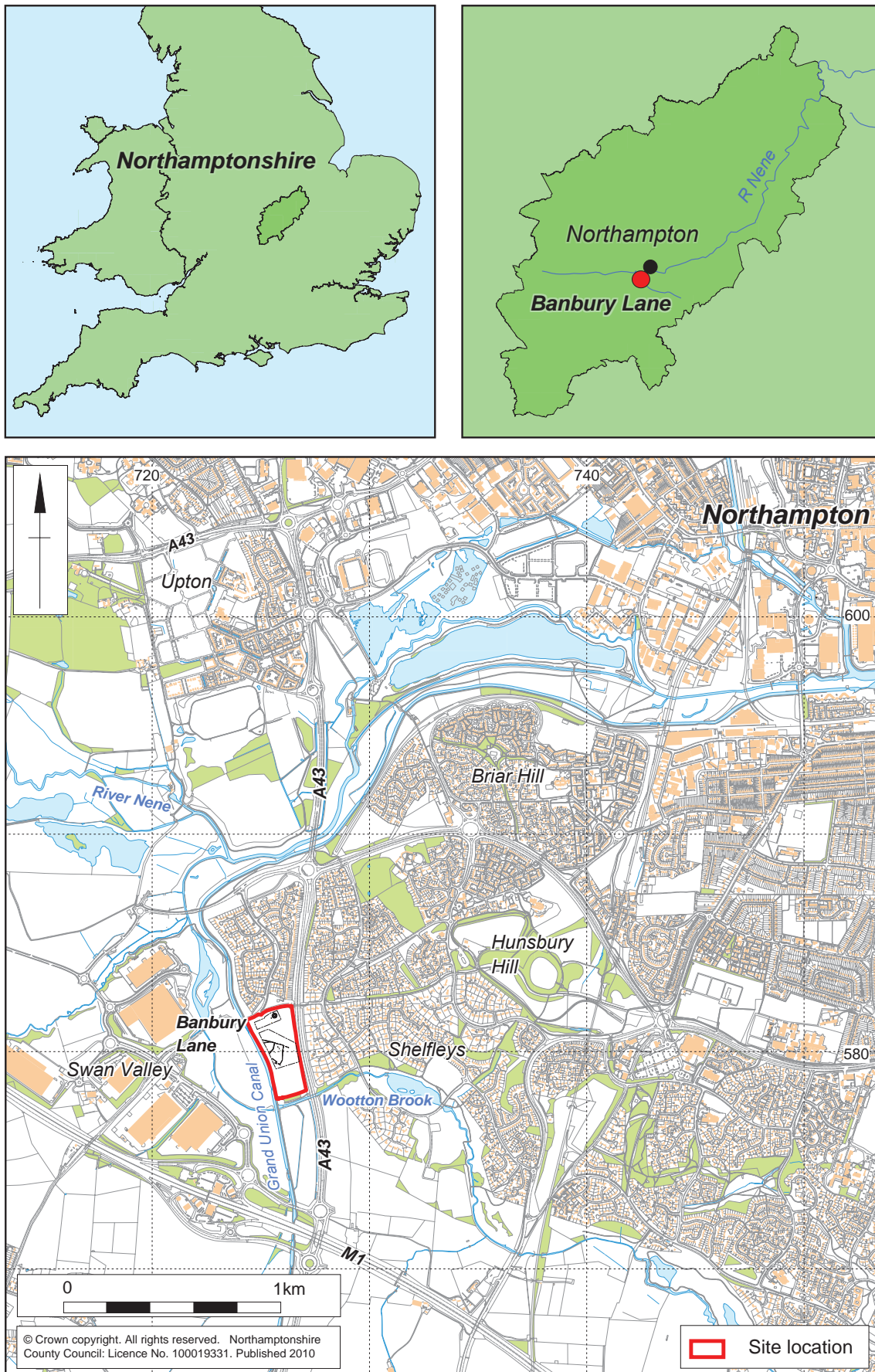


Fig 1 Banbury Lane site location

the flanks of the Hunsbury ridge, the Northampton Development Corporation Archaeological Unit carried out a four-year programme of excavation at the Briar Hill Neolithic causewayed enclosure (Bamford 1985), which lay 1.5km to the north-east of Banbury Lane. This was the first causewayed enclosure outside of southern England to be so extensively excavated. The enclosure had its origin in the Early Neolithic, but usage of the site continued through the Middle and Late Neolithic, with Peterborough ware coming from the upper ditch fills while a horseshoe-shaped timber structure was associated with Grooved ware. Small quantities of Beaker pottery show a continuation of activity into the Early Bronze Age and a Middle/Late Bronze Age urnfield cemetery was located within the, by then, ancient enclosure. An undated pit alignment respected the outer ditch of the enclosure and pit alignments further east were dated to the Late Bronze Age/Early Iron Age (Jackson 1976).

During the course of the development of the southern district during the late 1970s and early 1980s rescue excavations were carried out when groundworks revealed obvious archaeological remains, such as the Wootton Roman villa (RCHME 1985, fig 3 & plate 3) or a group of Roman pottery kilns (Shaw 1979). However, there were no resources to provide a systematic coverage of this area to identify other possible smaller scale sites that had not appeared on aerial photographs, and much must have been lost unrecorded. This is emphasised by the more recent discoveries of Middle Neolithic cremation burials within a Roman settlement at Milton Ham to the south, and Bronze Age round barrows and a pit at Wootton Fields to the east during an extensive pre-development survey comprising geophysical survey and extensive trial trenching, both on areas just beyond previous developments (Carlyle and Chapman, Chapman and Carlyle this volume).

There can be little doubt that the Briar Hill causewayed enclosure had acted as a local focal point through the

Neolithic and Bronze Ages, with a series of lesser sites clustered on the slopes to the west, south and east, and further activity to the north of the Nene, as is emerging through recent investigations at Upton, such as the stray Collared urn cremation burial just north of the river (Foard-Colby 2008).

The Hunsbury ridge was to remain a focus for settlement through the Iron Age, with the hillfort providing the new focal point (Jackson and Tingle this volume).

CHRONOLOGY AND ASSOCIATIONS

Before the importance of the site and the mortuary deposit could be assessed, it was necessary to be able to provide a basic chronology. As there was insufficient material evidence, radiocarbon dates have been obtained from bones at the bottom and top of the mortuary pit (Table 1). These initial dates indicate that the bone deposit was the product of a single event occurring in the Middle Neolithic, sometime between 3360-3100 cal BC. Unfortunately, irregularities in this part of the calibration curve produce broad date ranges that span the entire Middle Neolithic.

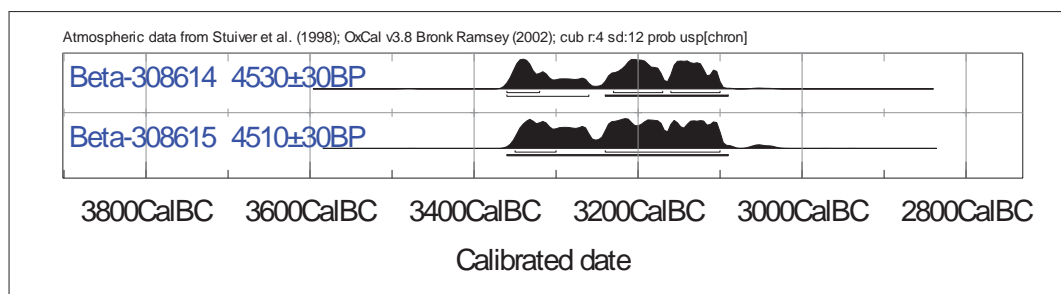
It will require a further programme of dating to determine the chronology of the whole monument and to firmly establish the place of the bone deposit within the broader history of the triple-ditched enclosure.

It may be of interest and relevance that the C13/C12 ratio for these bones is more depleted than normal, at -21.4 and -21.9, as the typical range for most animals is between -9 and -21 (Beta Analytic pers comm). High negative values can indicate the presence of contamination from more recent humic acids, which would tend to bias the date to a more recent value. However, depleted ratios can also be caused by other factors, including starvation, disease and partial heating or cooking of the bone. There is no apparent evidence for heating or cooking, but the

Table 1: The radiocarbon determination

Laboratory & Sample No.	Context	Sample details	C13/C12 N15/N14	Conventional Radiocarbon Age BP	Cal BC intercept 95% confidence
Beta-308614 NBL/19201	Pit 192 Layer 1 (Bone 18)	Human bone (clavicle) 10g	-21.9 10.6	4530+/-30	3360-3260 3240-3100
Beta-308615 NBL/19216	Pit 192 Layer 16 (frags)	Human bone (fibula) 14g	-21.4 -2.5	4510+/-30	3360-3090

Laboratory: Beta Analytic, Miami, Florida, USA
Calibration: INTCAL04 Radiocarbon Age Calibration



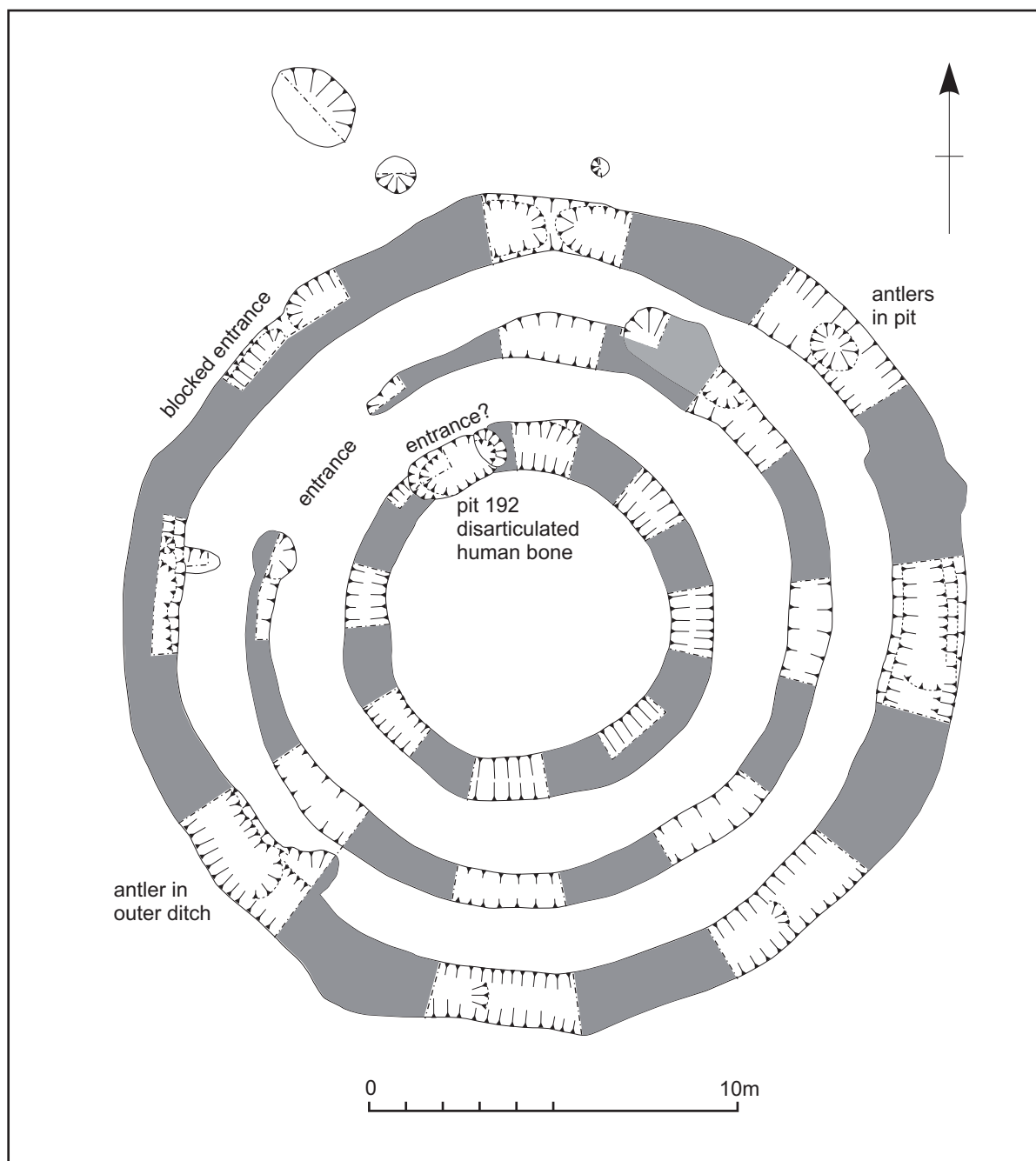


Fig 2 The triple-ditched monument

possibilities of starvation and/or disease may be factors that will contribute further to the understanding and interpretation of these individuals in the mortuary pit, as analysis progresses.

THE TRIPLE-DITCHED ENCLOSURE

The circular enclosure, which was up to 23m in diameter, comprised three closely-spaced concentric ditches, separated by berms 2m wide. The inner ditch enclosed a central space 7.8m in diameter, where there were no surviving cut features (Figs 2 and 3).

The inner and middle ditches were both up to 1.2m wide, but while the inner ditch had a V-shaped profile and was 0.60-0.70m deep, the middle ditch was broad, flat-bottomed but only 0.10-0.25m deep. The outer ditch was the most substantial, at 1.5-2.0m wide and 0.50-0.60m deep, with a U-shaped profile and a broad flat bottom. There were broad entrances, 4m wide, to the north-west through the middle and outer ditches, but on the outer ditch the entrance had been closed by cutting a further length of ditch between the entrance terminals.

In the base of the outer ditch a number of stepped deepening suggest that it had been dug as a series of



Fig 3 General view of the site, looking west, at the beginning of the excavation

elongated pits. To the north-east an oval pit 0.25m deep, cut into the base of the outer ditch contained a deposit of four lengths of red deer antler. A further length of red deer antler lay diametrically opposite on top of the primary fill within the outer ditch.

The inner and outer ditches both had primary fills containing quantities of gravel, eroded from the ditch edges, but above this the fills were almost free of stone inclusions. In some of the outer ditch sections there appeared to have been greater quantities of gravel coming into the ditch from the inner edge, suggesting the possible presence of either an adjacent bank or a central mound, but this asymmetry was not evident in all sections. The sequence of ditch cutting cannot be established stratigraphically, and although radiocarbon dating may assist in determining the sequence, the shallow middle ditch produced little if any material evidence. To the north-east, the middle ditch was cut by a later pit.

THE MORTUARY PIT

An elongated pit, 192, 2.8m long by 1.4m wide and 0.4m deep, had been either cut through a length of the fully silted inner ditch or it had truncated the silted terminals at a narrow entrance, which was aligned slightly more northerly than those on the outer ditches. This pit was therefore not a primary feature of the monument, although it may have been part of an act of closure, perhaps blocking access to the central area and itself subsequently closed off by the blocking of the entrance through the outer ditch.

The contents of this pit make the Banbury Lane monument a unique site of national importance, and the most important Neolithic site to be excavated in Northampton since the nearby causewayed enclosure. From bottom to top the pit contained a dense mass of disarticulated human bone. As initially exposed only a little bone was visible, indicating that virtually the entire deposit has been recovered although a little was lost to a shallow pit cut into the top of the deposit (Fig 4). It was only on removing the thin layer of overlying pit fill and the fills of the disturbance that the extraordinary nature of the bone deposit became evident, with bones filling the pit from end to end in a tight tangled mass (Fig 5).

The surface of the exposed bone mass was cleaned and photographed, and then the bone was lifted as either individual or small groups of numbered bones within a layer designation. The underlying newly exposed bones were then cleaned, photographed and lifted. This process was repeated 16 times to empty the pit, by which time there were some 1350 numbered bags of bone, occupying 52 archive boxes.

THE BONE DEPOSIT

Preliminary assessment suggests a possible total of 7500 bones and 9400 bone fragments. The bone is generally in good condition, but has been highly fragmented so that complete long bones are rare, while substantial proportions of long bones, from a third to a half, are common.

An initial assessment of the minimum number of individuals (MNI) represented was obtained from the rapid



Fig 4 Uncovering the uppermost bone deposit in pit 192



Fig 5 Layer 6 of the 16 excavated bone layers

quantification of the major long bones, together with a qualitative assessment of the representation of other skeletal elements. This has shown the highly selective nature of the material collected and deposited.

The femur, thigh bone, is the most common bone, with similar numbers of right and left-sided femur heads present. This provides a minimum figure of some 130 individuals. The humerus, upper arm, is present in similar numbers, with an MNI of 115, while the tibia, lower leg, provides a much lower MNI of 82 individuals. The ulna and radius, the lower arm bones, are present in numbers probably somewhat less than the number of upper arm bones.

There are cranial vaults in some quantity, but no complete skulls, with a particular grouping at the western end of the pit, but there are nowhere near enough skulls to match the major limb bones. Lower jaws are all fragmentary and there are many loose teeth. Vertebra and ribs are present in small numbers, and hand and foot bones are near non-existent. It is clear, therefore, that there was a very selective process for the collection of the bone that was to be deposited.

No attempt has yet been made to age the individuals. However, while the majority were evidently adult it was observed during initial examination that smaller limb bones with unfused epiphyses are present, indicating the presence of sub-adults and juveniles, although there are no infant bones.

It is also evident that the process of bone collection had involved a considerable degree of force, as many of the bones display a pattern of lesions which seem most likely to have derived from the dismemberment of partially decayed corpses with the aid of tools. The heads of both the femur and the humerus frequently display these marks, and there is similar, but less frequent, damage at the knee and elbow and occasionally at the ankle.

Perhaps the most common form of lesion is a curved facet, often with a smoothed and polished surface to the compressed and crushed bone surface. How these lesions were created is unknown at the moment, but it would appear that some form of gouge with a smooth curved under-surface, perhaps of antler or bone, had been driven into the joints to prise the limb bones from their sockets (Figs 6-9), invariably fracturing the pelvis or the scapula across the socket in the process. Damage to the lesser and greater trochanters, the muscle attachment points around the femur head,



Fig 6 A femur from layer 16 showing a compressed facet on the femur head (v)



Fig 7 Opposite side of the same femur showing another curved facet and a chop mark on the femur head (V)



Fig 8 Head of humerus showing a sharply curved facet in section



Fig 9 The same humerus showing the facet in plan, with compressed and damaged bone



Fig 10 A femur head from layer 11, showing the destroyed greater trochanter (left), a curved facet on the lesser trochanter (right), and a circular compressed facet on the femur head (top)

may indicate that remnant tendons and ligaments had been cut through before the joints were prised apart (Fig 10).

In addition to the curved facets there are chop marks from a sharp-edged implement on some bones, and other damage may have come from a heavier blunt instrument. Much of the breakage of the long bones probably occurred during this process, rather than following deposition in the pit. It may require experimental replication to examine the detail of these processes.

The near absence of hand and foot bones suggests that the hands and feet were already detached through decay when the dismemberment took place, and the lack of the atlas and axis vertebra would suggest that the heads were also detached at this time as well, given an indication of the state of decay at the time of dismemberment.

OTHER CONTEMPORARY ACTIVITY

In addition to the bone within the pit, the nearby upper fills of the inner ditch contained the occasional piece of disarticulated human bone, presumably as stray material from the main deposit. To the north-east, above the pit containing antlers, there were the partial remains of a child, perhaps an incomplete secondary inhumation.

A satellite burial, a poorly-preserved tightly-crouched inhumation, lay 30m to the south of the monument. In the second excavation area, 100m to the south of the monument, a shallow pit contained half of a highly decorated Peterborough ware bowl. Very little pottery was recovered from the monument itself, just a few sherds of probable Collared Urn from the final fills of the outer ditch, indicating that there was perhaps reuse of the monument in the Early Bronze Age.

OTHERS ASPECTS OF THE SITE ARCHAEOLOGY

The southern excavation area contained a rectilinear system of ditches and enclosures dating to the Iron Age, and a single pit contained a small assemblage of Anglo-Saxon pottery.

CONCLUSIONS

Any detailed discussion of the monument and the bone deposit must await further analysis, but it is appropriate at this stage to seek parallels that may provide a context for the Banbury Lane enclosure. A preliminary interpretation of the enclosure as perhaps falling within the henge tradition may be discounted given the Middle Neolithic date for the bone deposit, and the plan form of the monument does not lie within the bounds generally recognised as forming the henge tradition.

In fact, there is no text book monument type that it does fit within, lying as it does in the difficult Middle Neolithic period, lying between the demise of the causewayed enclosures and long barrows of the Early Neolithic and the appearance of the stone and timber circles and the henge monuments of the Late Neolithic and Early Bronze Age. It may therefore be placed within the rather mixed group of Middle Neolithic oval barrows, as defined by the English Heritage monument class descriptions.

However, there is one site that does provide a very close parallel, Site XI of the Dorchester henges, excavated by Atkinson in the later 1940s (Atkinson *et al* 1951, 60-63 & fig 24). The form of the ditches is remarkably similar, with the middle ditch the shallowest and the outer ditch both the deepest and excavated as a 'series of contiguous pits', along with deposits of red deer antler (Fig 11).

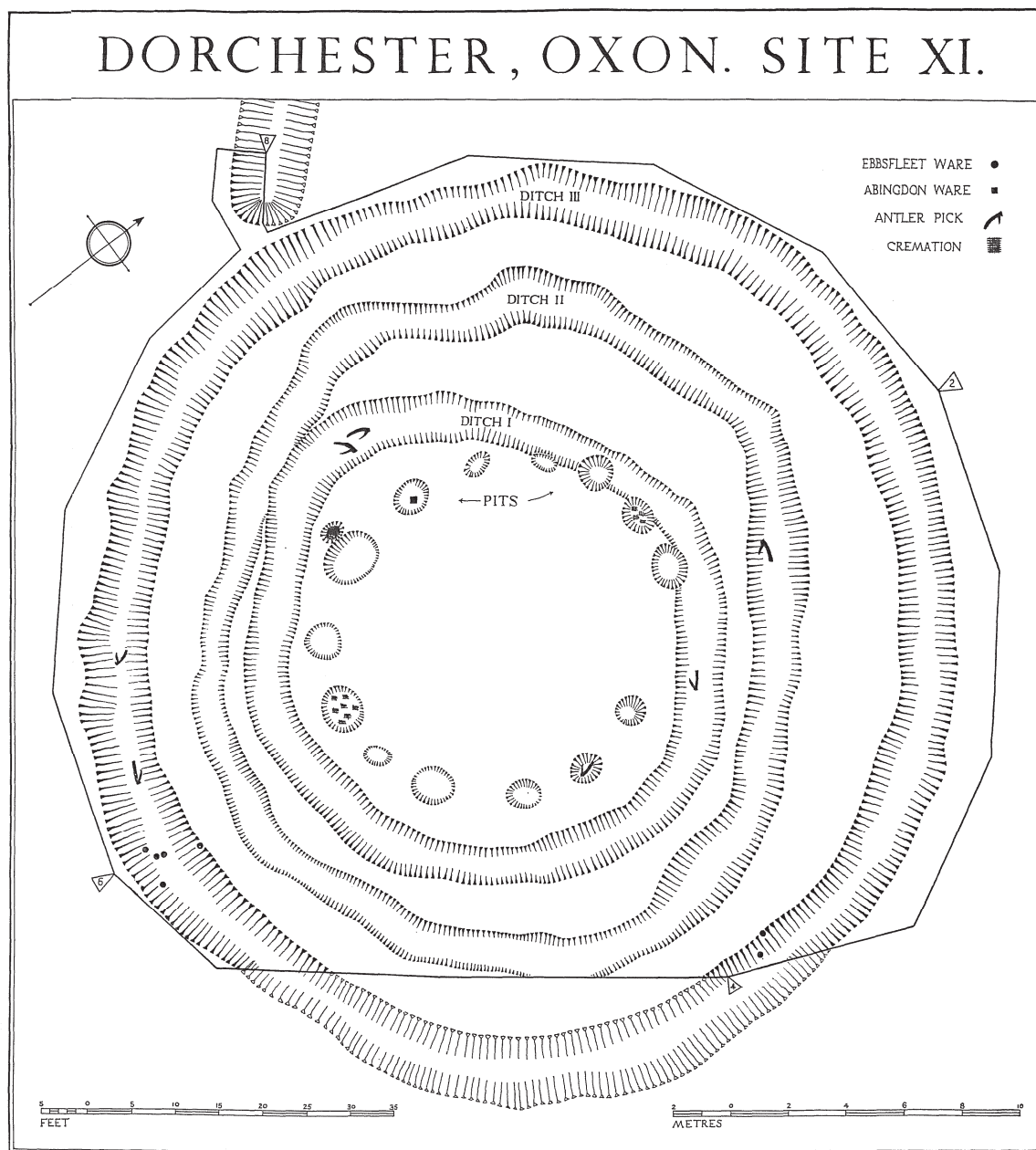


Fig 11 Site XI at Dorchester, Oxon (from Atkinson *et al* 1951, fig 24)

This is also the first major Neolithic monument to be discovered in the environs of the Briar Hill causewayed enclosure, so the enclosure itself is a major addition to the understanding of the Neolithic in the Northampton area.

The human bone from the mortuary pit will clearly provide the basis for much speculation and debate as to the story behind this remarkable assemblage, as it poses many questions. What event had created a group of at least 130 corpses, probably as a single event, when this would be a substantial population for the Middle Neolithic? Was the nature of their death related to the way in which their partial remains were collected as selected bones,

forcibly removed when the bodies were only partially decayed? Also, even though the pit contained a mass of bone, the material deposited is only a fraction of the whole assemblage of bone. We will probably never know what happened to the much larger group of remains that were not deposited in this pit.

However, this debate must properly await the results of much further analysis. What is clear at present is that the remains have the potential to provide new insights into Neolithic demography, health and mortuary ritual at a time, the Middle Neolithic, for which little skeletal material is available.

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