



**Northamptonshire
County Council**

Northamptonshire Archaeology

**Archaeological Excavation
on Land to the South of
Cambridge Road, Bedford
November 2004 to June 2005**

Assessment Report and Updated Project Design



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Report 06/93 v.2

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(Front cover: Excavation of burial group on west side of henge)

**ARCHAEOLOGICAL EXCAVATION
ON LAND TO THE SOUTH OF
CAMBRIDGE ROAD, BEDFORD
OCTOBER 2006**

Assessment Report and Updated Project Design

Abstract

An archaeological excavation, commissioned by John Samuels Archaeological Consultants on behalf of Gazeley Properties Ltd, was carried out by Northamptonshire Archaeology prior to the development of a business/industrial park on land to the south of Cambridge Road, Bedford. The excavation investigated remains dating from the late Neolithic/Bronze Age to the Saxon period. The main components of the site were: a late Neolithic/early Bronze Age henge and barrow; an Iron Age enclosure and annexe; a triple ditch system; part of a Roman strip settlement; and dispersed Saxon settlement comprising a number of sunken feature buildings (SFBs) and associated features. This report presents an assessment of the findings and outlines recommendations for further post-excavation work leading to publication.

1 INTRODUCTION

Northamptonshire Archaeology (NA), acting on behalf of John Samuels Archaeological Consultants (JSAC), carried out an archaeological excavation and watching brief on land to the south of Cambridge Road, Bedford (site centred on NGR TL 0756 4807; Fig 1). The work, which commenced in November 2004 and continued until June 2005, was undertaken prior to and during the construction of a business/industrial park by Gazeley Properties Limited (planning application ref. 98/00975/OUT).

The development site was located within an area of archaeological interest and was known to contain prehistoric and Roman remains. Consequently, Bedfordshire County Council Heritage and Environment Section (BCCHEs) advised that a condition be applied to the consent for planning, requiring that a programme of archaeological investigation should be carried out prior to the development of the land. The archaeological background and mitigation strategy was set out in the *Archaeological Management Plan* issued by JSAC (2004). A *Project Design for Archaeological Excavation* was prepared by NA (2004) in accordance with the requirements of the management plan.

The *Archaeological Management Plan* identified four specific areas of archaeological importance affected by the development (Fig 2):

Area 1: Two, possibly three, ring ditches thought to mark the locations of late Neolithic or early Bronze Age burial mounds.

Area 2: An enclosure of possible Iron Age date.

Area 3: An extensive Romano-British strip settlement, partly excavated during the construction of the A421 Bedford Bypass

Area 5: A triple ditch system, traditionally dated to the later prehistoric period, although previous investigations have suggested that this feature may have been established in the Roman period.

During works two further areas were designated: **Area 7**, an extension of **Area 3**; and **Area 8**, the remainder of the site not covered by the other areas and subject to a watching brief.

This Updated Project Design was prepared to meet the requirements of the *Archaeological Management Plan* (JSAC 2004) and has been designed in accordance with *Appendix 5 of Management of Archaeological Projects* (EH 1991) and appropriate national standards and guidelines, as recommended by the Institute of Field Archaeologists (IFA).

2 BACKGROUND

2.1 Topography and geology

The application area (approximately 20.8 hectares) covered a single, large arable field on the south-eastern outskirts of Bedford. It comprised a triangular block of land bounded to the north by Cambridge Road, to the west by the A600 Hitchin Road, and to the south by the A421 Bedford Southern Bypass.

Situated on the post-Anglian terrace gravels between the River Great Ouse and the Elstow Brook, the ground was generally flat. At the eastern end of the site the ground sloped slightly to the east and north-east then levelled off on to the floodplain of a silt-filled palaeochannel. The site lay at approximately 27m aOD, dropping to c 25m at the eastern end.

Very slight rises and dips in the ground surface across the area reflected undulations in the underlying substrate, which comprised gravel, sand and silt overlying Oxford Clay (BGS 1996). The gravels were overlain by alluvial silt at the east end of the site. The soils in this area were mostly well-drained fine loamy soils of the Efford 1 soil association, which are typically associated with river terrace gravel (SSEW 1983).

2.2 Archaeological and historical background

Previous archaeological investigation of the site comprised a geophysical survey (Bartlett 1997) and an aerial photographic assessment (APS 2004). A review of existing archaeological information relevant to the site was prepared by Lisboa (1998) in a statement of the site's archaeological potential. Archaeological features, largely identified from cropmarks shown on aerial photographs, included:

- Two, possibly three ring ditches, interpreted as prehistoric funerary monuments, similar to others in the region that have been dated to the Neolithic and early Bronze Age periods. One of the three was visible as a cropmark on aerial photographs, but it was not located by the geophysical survey.

- A sub-rectangular enclosure of possible Iron Age date, with a large pit or concentration of smaller pits near the centre. The enclosure was situated on the line of the triple ditch system (see below).
- A triple ditch system extending across the site from north to south. A section of the ditches was investigated prior to the construction of the A421 Bedford Southern Bypass (BCCAS 1993), and a Roman date for their construction, or at least continued maintenance, was indicated.
- The northern edge of an extensive Romano-British strip settlement, the greater part of which was excavated prior to the construction of the A421 Bedford Southern Bypass (BCCAS 1993). The settlement, which was occupied throughout the Roman period, comprised a number of buildings and associated pits, ditches and enclosures, a corn-drier, a pottery kiln, a pit containing iron slag and human burials.

3 EXCAVATION METHODOLOGY

The location of the archaeological areas (Areas 1, 2, 3, 5 and 7; Fig 1) was surveyed by sub-contractors acting on behalf of the principal contractor. The areas were stripped under archaeological supervision using a 360° tracked mechanical excavator fitted with a toothless ditching bucket. The topsoil and subsoil were removed to reveal any significant archaeological remains or, where these were absent, the natural substrate. The topsoil and subsoil was moved to the edge of the site in 30-tonne dumper trucks and stored separately in temporary and permanent bunds.

Once the areas had been opened up and the archaeological surface cleaned sufficiently to enhance the features, a grid was established and related to the Ordnance Survey National Grid. The limits of excavation, the site grid and major features were surveyed using a total station. Plans were hand drawn at a scale of 1:100, and selected features were planned at a scale of 1:20.

Discrete features were sectioned and where they were shown to form part of recognisable structures, contain deposits of particular value or significant artefact or environmental assemblages, they were fully excavated.

Intersections were investigated to establish stratigraphic relationships. Representative sections of linear and curvilinear features were sample excavated away from intersections with other features or deposits, to obtain unmixed samples of material. Sections were drawn at a scale of 1:10 or 1:20, as appropriate. All levels have been related to Ordnance Survey Datum.

On completion of hand excavation and recording and with the consent of BCCHES, the major ditches in Areas 1, 2 and 5 and the pit complex in Area 2 were fully excavated using a JCB-type excavator to maximise finds retrieval and clarify the stratigraphic sequence.

Artefacts and ecofacts were collected by hand and retained, receiving appropriate care prior to removal from site. Unstratified animal bones and modern material were not collected. The excavated area and spoil heaps were scanned with a metal detector to ensure maximum finds retrieval.

All finds were recorded on site, following NA guidelines. The majority of finds were recovered by hand, while smaller numbers were located by a metal detector. Metal detecting was carried out at regular intervals throughout the excavation, by undertaking the systematic coverage of the exposed surface of the site and scanning the spoil heaps. The position of all excavated finds was recorded by three-dimensional co-ordinates, and the metal detected finds were given co-ordinates where possible.

All the individually recorded finds have been entered on to a computerised database (ACCESS). A basic catalogue has been compiled, comprising material type and object identifications, together with stratigraphic information. All finds have been boxed by material type, in numerical small find order.

Samples of a minimum of 20 litres were taken for flotation from dateable contexts with a potential for the recovery of charcoal and carbonised plant remains. Specialist environmental advice was provided by Dr Helen Keeley.

Human remains were excavated following notification of the relevant authorities, and were removed under Home Office licence.

A photographic record of the project was maintained using 35mm black and white negative and colour transparency film, supplemented with digital images. All records were compiled during fieldwork into a comprehensive and fully cross-referenced site archive.

The project was overseen by John Samuels Archaeological Consultants (JSAC), who acted as archaeological consultants to the developers, Gazeley Properties Ltd. JSAC were responsible for liaison with the curatorial authority (BCCHES), who monitored the works, to ensure that all aspects of the project were undertaken to a satisfactory standard. All works were conducted in accordance with the *IFA Standards and Guidance for Archaeological Excavations (1994, revised 1999)* and the *Code of Conduct* of the Institute of Field Archaeologists (1985, revised 2000). In addition, all works complied with the guidelines detailed in *Standards for Field Archaeology in the East of England* (Gurney 2002).

4 SUMMARY OF EXCAVATION RESULTS

4.1 Site chronology

The excavation demonstrated human activity on the site from the late Neolithic/early Bronze Age periods through to modern times. Archaeological remains dating to the late Neolithic/early Bronze Age, Iron Age, Roman and Saxon periods were located in discrete areas across the site, the shifting focus of settlement and ritual/funerary activity reflecting not only a response to environmental and economic changes, but also to changes in the cultural interpretation and adaptation of the landscape. The archaeology has been summarized as follows:

- **Phase 1, Late Neolithic/early Bronze Age funerary monuments**
- **Phase 2, Iron Age enclosure and annexe**
- **Phase 3, Triple ditch system**
- **Phase 4, Romano-British settlement**

- **Phase 5, Early Saxon settlement**
- **Phase 6, Medieval ridge and furrow**
- **Phase 7, Post-medieval quarry**

A summary of the archaeology associated with each of the above headings is given below. The provisional phase plan is presented in Figure 2.

4.2 Phase 1, late Neolithic/early Bronze Age funerary monuments

Activity dating to the late Neolithic and early Bronze Age periods was concentrated at the western end of the site, on a low gravel rise adjacent to a palaeochannel. The palaeochannel is unlikely to have been active at the time the monuments were constructed, but the low lying ground is likely to have been seasonally flooded. The three principal features in this area were a henge, a barrow and a substantial linear ditch. There were several pits associated with or in close proximity to the henge.

The henge

The henge, which was roughly circular in plan and had an external diameter of *c* 40m, was constructed in three phases. In the second phase the henge was probably remodelled to form a barrow, and was recut in the third phase to re-instate its original henge form. Due to variations in the width of the ditches associated with each phase, the internal measurements were 34m from east to west and 30m from north to south. The area enclosed by the ring ditch measured approximately 0.08ha.

There was no clear evidence from the excavated ditch sections to indicate whether there was a bank, internal or external, associated with any of the phases of the monument. The absence of slumping and gravel tip lines in the ditch deposits may be explained by there having been a wide berm between the bank and the ditch. However, a spread of dark soil, probably the remains of a low turf mound, across the western half of the interior, suggests that the bank, if there was one, was probably external; had there been an internal gravel bank, traces would have been preserved beneath the mound.

The elements of each phase of the monument are as follows:

Phase 1a: The earliest phase comprised a circular enclosure, *c* 40m in diameter, with a wide opening on the western side. The enclosure was defined by a steep-sided, flat-bottomed ditch with a U-shaped profile, approximately 2m wide and 1.2m deep. Largely truncated by later phases of the monument, only remnants of the base of the Phase 1a ring ditch survived and there was no clear evidence for a bank or mound. The fills were very stony, indicating rapid infilling, most likely as a result of weathering and the collapse of the steep ditch sides. The only artefact from this phase was a fragment of deer antler from the primary fill.

Phase 1b: The monument was extensively remodelled, probably to form a traditional ring ditch, with the entrance on the western side effectively blocked by a narrow ditch which presumably extended around the full perimeter of the monument. It was cut into the top of the Phase 1a ditch, but any traces would have been removed along much of its perimeter by the Phase 1c ditch.

It was probably as part of this phase that a grave containing a triple burial was placed near the former entrance to the monument. The grave contained the remains of two

adults and a child, and sherds of late Bronze Age pottery were recovered from the fill of the grave. A dark soil covering the western half of the interior and comprising the main fill of the Phase 1b ditch may be the remnants of a turf mound placed over the burial. If this is the case, the burial was not placed centrally but off-centre, on the western side of the mound. A number of small pits or postholes, possibly the remains of a small mortuary structure, were found near the centre of the ring ditch, but due to extensive plough damage it was not clear if these pre- or post-dated the construction of the mound. However, a narrow slot, aligned from east to west, was clearly cut into the mound on its northern side. The date of this feature is unknown.

Phase 1c: In the latest phase of the monument the ditch was recut to re-establish its original henge form, with an opening 12m wide on the western side. The new ditch was broad and shallow; the silty fills indicate the gradual accumulation of soil over time, and contained finds ranging in date from the Bronze Age to the early Iron Age. This phase of the monument probably remained a visible part of the landscape until the medieval period, when it was ploughed out.

Immediately to the south of the henge there were a number of small pits and two larger pits, a flint scraper coming from one of the latter.

The proximity of Saxon settlement and the recovery of an early Saxon brooch from the topsoil on the southern side of the henge suggests that the monument may have been the focus of ritual activity in the early Saxon period, although the evidence for this is too slight to assign a further phase.

The barrow

The barrow was sited approximately 55m to the south-west of the henge, again constructed on a very slight rise of the gravel, close to the edge of a palaeochannel. The ring ditch had an external diameter of *c* 10m and the ditch was approximately 1.2m wide. The ring ditch comprised two C-shaped lengths of ditch, with two opposing gaps, less than 0.5m wide, between the terminals. The gaps were situated on the north-east and south-west sides of the ring ditch, and aligned on the henge to the north-east, suggesting that the barrow post-dates the construction of the henge. Slump deposits and tip lines in the ring ditch indicate that there was a central mound over the burial, although ploughing had removed all trace of the mound.

In the centre of the barrow a large, shallow, oval pit was cut by an oval, flat-bottomed shaft 1.6m deep containing a complex sequence of fills, at the bottom of which was a crouched inhumation burial. The monument probably dates to the late Neolithic or early Bronze Age periods.

The ditch

Approximately 40m to the south and south-west of the barrow there was a large linear ditch. It was aligned from east to west and had a rounded terminal at its eastern end; it extended *c* 60m to the west before passing beneath the embankment of the Hitchin Road. A finely worked flint ovate scraper was recovered from the eastern end of the ditch. A large, steep-sided, flat-bottomed pit was located *c* 5m to the north of the terminal.

4.3 Phase 2, Iron Age enclosure and annexe

The Iron Age enclosure and annexe was situated close to the northern edge of the site, c 90m to the east of the henge. The northern part lay beneath a permanent bund and was not excavated. However, from aerial photographs the full plan of the enclosure and annexe can be determined; sub-rectangular with an entrance on its south-eastern side; and an adjacent annexe to the west, partly enclosed by a large ditch with an opening to the south. The absence of settlement remains, the presence of a burial in a square mortuary enclosure near the centre of the annexe, and the open eastern side of the annexe suggests that this monument may have been used for ritual and ceremonial functions rather than for settlement or defensive purposes.

The main enclosure measured approximately 55m from north-west to south-east and 41m from north-east to south-west, enclosing an area of c 0.23ha. There were no internal divisions or pit groups. The ditch enclosing the western annexe extended south-westwards from the western corner of the main enclosure, turned south-south-east and then turned again to the east. The annexe was open on its eastern side, with a gap of 30m between the south corner of the sub-rectangular enclosure and the squared terminal of the annexe ditch. There was a second opening 7m wide on the southern side, close to the south-west corner of the annexe ditch.

Near the middle of the annexe there was a small, square mortuary enclosure with rounded corners, with a central extended burial, aligned from north-east to south-west. To the north and west of the enclosure there was a shallow arc of postholes, possibly the remains of a structure, for example a screen, possibly associated with the mortuary enclosure. Approximately 4m to the south-west of the central burial and outside of the enclosure was a satellite burial in a small rectangular grave.

The only other significant features associated with the enclosure and annexe was a large well or waterhole, a gully, several small pits and a scatter of postholes in the area around the well.

The well lay to the south of the sub-rectangular enclosure, at a point close to the intersection between the projected lines of the north-eastern side of the enclosure and the southern side of the annexe. It was oval in plan and had steep, almost vertical sides and a roughly flat base. It contained an assemblage of animal bone, including a horse skull, sherds of early Iron Age pottery, and chips and slivers of wood, probably carpentry waste. The well, which had been recut several times, may have had a ritual function and based on the pottery evidence, probably pre-dates the enclosure; charcoal/wood samples from the well and enclosure will be submitted for radiocarbon dating to clarify this.

4.4 Phase 3, Triple ditch system

Extending 220m from north-west to south-east across the site and passing through the centre of the Iron Age annexe there were three roughly parallel ditches. From cropmarks visible on aerial photographs and excavation carried out during the construction of the A421 Bypass, they are known to extend southwards to the Elstow Brook. No archaeological record of their extension to the north of Cambridge Road was made prior to the construction of a modern industrial estate in this area, but in likelihood they extended to the River Great Ouse. The triple ditch system would therefore have formed the western boundary demarcating a large, triangular block of land between the confluence of the Elstow Brook and the River Great Ouse.

The western ditch varied in width and profile, and was fairly sinuous. It was composed of several lengths of ditch, probably all roughly contemporaneous. There was a marked kink in the line of the ditch where it passed through the southern entrance in the Iron Age annexe ditch. The reasons for the deviation are unclear, but it may have been to avoid a natural obstacle, such as a cluster of trees; and this is suggested by a number of crescent-shaped tree boles in the area to the west of the ditch. Alternatively, it may have been shifted to avoid the surviving earthwork defining the western edge of the annexe, which might explain why the new ditch passed through its southern opening.

The central ditch was the largest of the three. Unlike the western ditch, it appeared to have been cut in one continuous length. Just to the south of the point where it cut through the annexe ditch there was a worn hollow roughly lined with pebbles, with fence lines on either side of the ditch. This probably denotes a crossing point over the ditch. Roman pottery was recovered from the hollow.

The ditch cut several isolated prehistoric pits along its length and it was cut by a large complex of pits near the centre of the Iron Age annexe (see 4.5 below).

The eastern ditch was similar in size to the western ditch, though it was far less sinuous. At the northern end, inside the Iron Age annexe, there may have been a wide opening that was subsequently blocked by a slightly curved length of ditch.

None of the ditches provided any clear evidence for the position of any banks. The ditches, which were probably lined with hedges, were too slight to be defensive, but probably served as a visible land boundary.

The age and sequence of development of the triple ditch system is problematic and will require closer scrutiny of the field records and fabric analysis of the pottery before it can be correctly phased. The pottery assemblage from the triple ditch system suggests a late Bronze Age/early Iron Age date for its construction, but stratigraphically it clearly post-dates the annexe ditch which has been dated to the early/middle Iron Age. Roman pottery was found in the upper fills of the triple ditch system, suggesting that it was still a landscape feature in the Roman period. The triple ditch system also cut a number of smaller features that contained late Iron Age and possibly Roman pottery. It is therefore likely that the ditch system had a long and complex history, with sections of the ditch being recut as late as the Roman period.

4.5 Phase 4, Romano-British settlement

Extending along the central southern edge of the site was the northern fringe of the Romano-British settlement of Eastcotts, the main part of which was excavated in the mid 1990s prior to the construction of the A421 Bypass (BCCAS 1993), which has yet to be published in full. This had identified a strip settlement, dating from the late Iron Age/early Roman period but predominantly dating to the 2nd and 3rd centuries AD.

The dating and phasing of the northern part of the settlement broadly corresponds to the provisional findings of the main excavation undertaken in the 1990s (BCCAS 1993). The current excavation identified three phases:

Phase 4a Late Iron Age/early Roman

Phase 4b 2nd/mid 3rd century AD

Phase 4c Late 3rd/4th century AD

The part of the settlement investigated by the current excavation revealed a possible driveway or shifting boundary, aligned from north-east to south-west, defining the northern limits of the settlement. It comprised a sequence of discontinuous lengths of ditch.

Perpendicular to and extending to the south-east of this boundary were a number of gullies and ditches, seemingly forming rectangular enclosures or plots within the settlement. Three of the ditches intersected with large, waterlogged pits, finds from which included the remains of a leather shoe, leather scraps, a wooden, double-sided comb and a wooden bobbin. Also within the settlement boundary were a number of smaller pits, one of which contained a residual Neolithic polished stone axe (in association with sherds of Roman pottery); another, a large assemblage of Roman pottery dating to the late 2nd to early 3rd century AD. There was no evidence for any buildings or other structures, indicating that this was a 'backyard' area. A significant number of kiln bars were found within this area, indicative of pottery production in the immediate vicinity. A possible well was located at the southern edge of the site.

Beyond the northern boundary of the settlement there were a number of associated features dating to the Roman period. These included: a stone-lined well; a probable watering hole for livestock; a large pit and a number of smaller pits; and an extended inhumation burial.

The settlement terminated at its eastern end at the edge of the overbank deposits of a palaeochannel, where the ground dipped slightly onto the floodplain to the north-east. This low-lying area was probably unsuitable for habitation and was probably seasonally flooded. The slightly dirty silts on the floodplain of the palaeochannel suggest that there may even have been a stream in this area in the later prehistoric and Roman periods. On the silts immediately to the east of the settlement there was a concentration of amorphous pits which may have been used as waterholes, and/or possible quarry pits. Some of these pits produced Roman pottery dating to the 2nd and early 3rd centuries AD.

Close to the centre of the Iron Age annexe and just to the south of the square mortuary enclosure, there was a complex of inter-cutting pits. Sherds of Roman pottery were recovered from several of the pits in the complex. The pits cut the central ditch of the triple ditch system. The purpose or function behind the pits is unclear, but it is possible that there may have been a prehistoric monument in this location, possibly a barrow, which was deliberately grubbed out. This was suggested by the truncated remnants of two opposing C-shaped lengths of ditch, similar to those forming the barrow to the south-west. However, the evidence for this is very tentative.

4.6 Phase 5, Early Saxon settlement

An area of dispersed Saxon settlement was present, situated mainly between the henge and the Iron Age enclosures, close to the northern edge of the site. It comprised: three sunken feature buildings (SFBs), one of which contained fragments

of a loomweight; a cremation burial; several small pits; three ditches; and an arrangement of postholes, possibly the remains of a small, rectangular building. A fourth SFB lay 160m to the south of the main settlement, adjacent to a linear ditch that extended northwards and terminated just short of the henge. A fifth SFB was located c 140m to the south-east, close to the triple ditch system, and an isolated pit lay close to the Roman settlement on the east side of the site. Pottery recovered from the features dates the settlement to the 5th/6th centuries AD.

The ditch terminating just to the south of the henge produced no artefactual dating evidence. However, a similar ditch associated with the main focus of Saxon settlement approached and terminated just to the east of the henge, suggesting that they are of the same period. It is clear that the henge was still visible as an earthwork at this time, and may even have been a focus for ritual activity in the early Saxon period. This is tentatively suggested by the recovery of a 5th/6th century Saxon brooch from the topsoil overlying the henge ditch on its southern side.

4.7 Phase 6, Medieval ridge and furrow

Plough furrows, aligned from north-west to south-east, were recorded at the western end of the site and in an area near the centre, adjacent to Cambridge Road. The furrows ran parallel to hedgerows, long since removed, shown on the 1st edition Ordnance Survey map of 1888. The furrows probably date to the later medieval period, but the open field system of ridge and furrow, prevalent in much of the Midland region, could have been maintained into the post-medieval period (Rackham 1986, 167-180).

4.8 Phase 7, Post-medieval quarry

A large post-medieval quarry, probably dating to the 18th/19th century, was located close to Cambridge Road, near to the centre of the site.

4.9 Undated features

The majority of the archaeological features could be dated, either from artefactual evidence, feature type, stratigraphic relationships or by association with other features. Other than a handful of isolated pits and postholes, there are only two significant features that remain undated. The first of these was a large pit, probably a waterhole, c 30m to the north of the Roman settlement. This feature was only partly investigated due to contamination by foul water from a drain. The second was an L-shaped field boundary to the north of the Romano-British settlement.

4.10 Quantification; the site archive

Site records

Plans: 49 A2 sheets at 1:50 and 1:100

Sections: 63 A2 sheets at 1:10 and 1:20

Contexts: 2136 on individual *pro-forma* record sheets

Supporting records: 123 on individual *pro-forma* record sheets

Colour slides: 1071

Black and white: 33 films

Finds

Prehistoric pottery (boxes): 1
 Roman pottery (boxes): 21
 Early Saxon pottery (boxes): 1
 Animal bone (boxes): 8
 Human bone (boxes): 6 (7 skeletons, 1 cremation)
 Other finds (boxes): 6
 Small finds (boxes): 2 (small)

Environmental and dating samples

Bulk soil samples (20 litre): 59
 Radiocarbon samples (to be obtained from charcoal in soil samples and bone)

5 FINDS ASSESSMENT**5.1 Worked flint by Andy Chapman**

A total of 370 flints was recovered from the excavation of all areas of the site. Only 18 of these are from features within Area 1, the focus of Neolithic/Bronze Age ritual/funerary activity. Most of the remainder are therefore residual in features of Iron Age, Roman and Saxon dates. A small proportion derives from isolated pits of probable Neolithic date, although this proportion has not been identified as part of the assessment.

The flint is typically of fresh appearance, comprising grey or brown vitreous flint, with a white to light brown cortex. This material has generally provided a range of flakes and blades up to 50mm long. However, a proportion of larger implements, typically worked on blades 50-85mm long, are in a white to grey granular, opaque flint.

The full assemblage has been quickly scanned to establish its general character, but it has not been fully quantified, and the number of retouched implements and cores is only an initial estimate. The distribution of flint across the excavated areas is shown below:

| Site Area | Quantity of flint | Provisional number of implements & cores | Percentage retouched |
|---------------------------------|-------------------|--|----------------------|
| Area 1: Neolithic/Bronze Age | 18 | 5 | 28% |
| Area 2: Iron Age enclosure | 175 | 27 | 15% |
| Areas 3 and 7: Roman settlement | 112 | 24 | 27% |
| Area 5: Triple ditch system | 15 | 1 | 7% |
| Area 8: Watching brief area | 50 | 10 | 20% |
| Totals | 370 | 67 | 18% |

The assemblage is dominated by flakes, but this includes a number of elongated blade-like flakes and, in addition there is a good representation of true blades, many of which have been utilised or are either serrated or have been retouched to form knives. Cores are scarce, and those present are irregular, and certainly not the source for the blades, or many of the flakes, which have evidently come from well-prepared cores. The high proportion of blades, including the serrated blades, indicates that the assemblage is predominantly of Neolithic date.

The most common implement type is the scraper, with the majority of these being end and side scrapers, although there are some composite implements comprising an end scraper and a retouched cutting edge. The predominance of end and side scraper provides a further indication that the assemblage is largely of Neolithic date. There is also a broken, finely worked ovate.

Notched implements and awls are present, but scarce. There are only two arrowheads: a fine and large transverse arrowhead of chisel-ended form, with a hook at one end of the cutting edge that would have formed a simple barb; and a barbed-and-tanged arrowhead. Both of these would be considered to be of later Neolithic date, suggesting that there was at least some later activity in the area.

However, it is still suggested that the majority of the material is of Neolithic date, and most probably broadly contemporary with the development and use of the Neolithic monuments. The low level of material within the Neolithic features indicates that the majority of the flint deposition had been onto the ground surface across the area adjacent to the monuments, with a proportion of this material becoming incorporated into cut features of later dates.

5.2 Neolithic stone axe *by Andy Chapman*

A complete, but small, polished Neolithic stone axe was recovered from a Roman pit. It is 83mm long, up to 48mm wide and 23mm thick. Visual examination indicates that it is a fine-grained green-grey stone, which appears to be an epidotised tuff (Group VI), which has its principal source in the central fells of the Lake District, around Langdale, Cumbria.

5.3 Bronze Age and Iron Age pottery *by Andy Chapman*

The nature of the prehistoric pottery assemblage is summarised within the area groups from which it was recovered.

Area 1: The Neolithic/Bronze Age funerary monuments

The features of the Neolithic/Bronze Age funerary monuments produced a total of only 39 sherds of pottery, weighing 187g. A number of small, plain body sherds in fabrics typically containing varying quantities and sizes of angular flint inclusions, are well preserved and are probably of Iron Age date, being the same as the material from Area 2, and come from the upper fills of the major prehistoric ditches.

Material from only three contexts is likely to date to the Bronze Age, or earlier. Context 152, the upper fill of the henge ditch, contained two sherds weighing 31g, from a single vessel; context 170, the deposit immediately below context 152, contained one sherd weighing 21g, from a coil-made vessel; and context 241, the

secondary fill of the group burial within the henge, contained 22 sherds weighing 62g from a single vessel. These vessels are all poorly-preserved, with eroded surfaces and voids from leached calcareous inclusions. The fabrics all have reduced, dark grey cores and the sherd from context 152 has a reduced inner surface and an oxidised, brown outer surface. The pottery from the other two contexts has oxidised, brown inner and outer surfaces. The material from contexts 152 and 170 comprises plain body sherds, while the vessel from context 241 is a carinated or shouldered bowl with a flat base, apparently with a simple foot ring, and a simple out-turned rim. The foot ring would suggest that the earliest probable date for this vessel would be the late Bronze Age/early Iron Age, and therefore much later than the likely construction date for any of the components of the monument complex.

Area 2: The Iron Age enclosure

A total of 358 sherds weighing 2093g was recovered from contexts in Area 2, with a further 66 sherds weighing 1451g coming from the fills of a well (see below). There are three principal fabrics:

Flint tempered: containing from moderate to dense angular flint

Sandy: containing frequent small rounded quartz inclusions

Shelly: a few vessels contain sparse shell (and a single context contains sherds with dense shell inclusions).

The well

The fills of the primary cut of the well and the fills of the later recut produced a good quality pottery assemblage. These contexts have an average sherd weight of 22g, contrasting with the average sherd weight of less than 6g for the material from the rest of the area.

The character of the material and the frequency and the style of the decoration suggest a date in the early Iron Age, with the material belonging to the nationwide shouldered jar tradition of the early Iron Age. It perhaps has with affinities to the Ivinghoe-Sandy group identified by Cunliffe and dated to the 6th century BC (Gibson and Woods 1997, 194-195), and can be directly compared with material from the early Iron Age activity at the Bunyan Centre, Bedford (La Niece and Slowikowski 1999).

Other features in Area 2

The rest of the assemblage from the area comprises 358 sherds weighing 2,093g, with an average sherd weight of less than 6g. The material comes from a total of 47 contexts, an average of less than 50g per context. It comprises largely small body sherds with few rim sherds or other diagnostic features. The paucity of decorated sherds (there is a single rim with fingertip impressions), so common in the group from the well pit, and the presence of a single sherd of scored ware, suggest that a broad early middle to middle Iron Age date can be given to the assemblage, but with little prospect that further analysis could lead to a refinement of that date.

Area 5: The triple ditch system

Contexts in this area produced a total of 128 sherds weighing 723g, with an average sherd weight of 5.6g, indicating that the material is generally similar in its small sherd size to the majority of the assemblage from Area 2. However, there is a distinct difference in the fabrics, with an absence of the flint tempered ware so common in Area 2, with sherds with leached calcareous inclusions being the most common fabric.

Much of this material comes from the fills of the triple ditch system, with further sherds from other nearby features. Three groups from the triple ditch system, out of 14 contexts in the area, produced more than 100g of pottery.

The general balance of the assemblage from the triple ditch system is suggestive of an early date, either early Iron Age, or even late Bronze Age/early Iron Age, and probably pre-dating the material from the well in Area 2.

Area 7: Roman settlement

Three contexts in Area 7 produced small quantities of handmade pottery of probable broad prehistoric date. The total comprises only 11 sherds weighing 47g, and there are no diagnostic features to permit any closer dating. The sherds are probably residual.

Area 8

Nine contexts in Area 8 produced handmade pottery of broad prehistoric date, a total of 74 sherds weighing 817g. Six of these are very small groups, but three contexts produced groups of larger sherds with total weights of between 120g and 405g. Among these groups a fabric with leached calcareous inclusions dominates, and the general character of the assemblage is similar to the material from the triple ditch system, all suggesting a late Bronze Age/early Iron Age date.

5.4 Roman pottery by Andy Fawcett

Introduction

The assemblage from each context was given a brief examination and subjected to basic quantification (a sherd count and weight per context). No attempt at detailed fabric description or comparison with material of a similar nature has been undertaken. A date range has been provided for each context and where appropriate, comments are made as to the condition of the pottery.

A total of 8647 sherds with a weight of 135,505g have been recorded from the combined areas of excavation; each is dealt with separately below.

Area 2 (66 sherds, totalling 298g)

The data from this area is quite mixed and accurate dating is hampered, firstly by the lack of diagnostic sherds, secondly by the small number of sherds contained in each context and finally the presence of mostly long-lived fabrics. However, the pottery is generally only slightly abraded and on the face of it the ceramics represent periods from the Iron Age to the later Roman era and possibly the early Saxon period (the latter is tentatively suggested by the presence of organic tempered wares). Only a more detailed fabric analysis will determine an accurate date for those with a multi-period range.

Area 3 (4845 sherds, totalling 76,506g)

The ceramic assemblage from this area may be described as on average only slightly abraded. There are many quality groups with good dates that demonstrate the potential for more accuracy. Equally the diagnostic element is also good with large

numbers of, for instance, reed rim bowls and lid seated jars, an interesting possibility is the presence of cremation sets. Unlike those dining vessels identified in Area 7, here a number of contexts contain 'classic' combinations often associated with funerary sets. Even in a broken state this may consist of jar, beaker/cup, flagon dish/bowl. Naturally, these may represent more kitchen/dining waste therefore the percentage of these occurrences will have to be looked at in more detail to enable a more consistent interpretation.

The overall dating range covers mainly the 2nd to early/mid 3rd century AD; a number of contexts are dated to either side of this span.

The main sources identified demonstrate a diverse pattern of supply with the south and east of the country being favoured, nonetheless it is the locally made shell gritted fabrics that dominate most assemblages.

The continental input consists mainly of central and eastern Gaulish samian wares, with only isolated examples of Gaulish and Baetican *amphorae* fabrics.

Area 5 (32 sherds, totalling 212g)

This area is only represented by a small number of contexts. One fill holds organic tempered sherds relating to an urn and may well be Early Saxon.

Area 7 (3553 sherds, totalling 56,233g)

The main period of activity is undoubtedly the second and earlier part of the third century AD. There is scant evidence for Roman activity either side of these dates nonetheless, some of the samian fabrics upon a more detailed analysis may reveal more information with regard to the later-1st century AD.

As noted in Area 3 the pottery is drawn from a varied number of sources from within the country, the emphasis being mainly to the east and south, the furthest travelled being Dorset BB1. The largest portion of pottery in most of the contexts is the locally produced shell tempered fabrics.

The continental aspect mainly consists of samian fabrics, which appear to be predominantly central and eastern Gaulish. There is also the possibility of a small number of foreign colour coated wares present; however, *amphorae* fabrics are virtually non-existent.

The pottery seems to indicate a settlement with a fairly prosperous status, although perhaps it is the activity that the ceramics represent that is most interesting. The assemblage contains a high number of dishes, beakers, cups and bowls alongside flagons and jars which all indicate waste from dining and/or kitchen activity. Again, these vessels are drawn from a wide geographical area and they also include several mica-dusted vessels imitating samian forms.

Area 8 (151 sherds, totalling 2,256g)

The pottery from this part of the site is largely of poor quality, being mostly undiagnostic, constructed of long-lived coarsewares and with few sherds in each context.

5.5 Anglo-Saxon pottery by Paul Blinkhorn

Introduction

The pottery assemblage comprised 225 sherds with a total weight of 2,790g. Some of the Anglo-Saxon material is decorated, thus dating it to the early part of the period, in this case both the 5th and 6th centuries.

Fabrics

Where appropriate, the codings and chronology of the Bedfordshire County Archaeology Service type-series were used.

Early/Middle Saxon

The following fabric types were noted:

F1: Moderate to dense sub-angular quartz < 0.5mm. Rare angular flint up to 3mm. 34 sherds, 354g, EVE = 0.23.

F2: Sandstone. Sparse to moderate sandstone, some iron-rich, up to 2mm, sparse to moderate sub-angular calcareous material up to 2mm. 95 sherds, 1,295g, EVE = 0.42.

F3: Quartz and organic. Sparse to moderate sub-rounded quartz up to 1mm, sparse organic voids up to 5mm. 10 sherds, 125g, EVE = 0.05.

F4: Quartz. Sparse to moderate sub-angular quartz up to 1mm, sparse to moderate calcareous material (oolitic limestone?) leached out. 13 sherds, 104g, EVE = 0.

F5: Few visible inclusions other than sparse quartz < 0.5mm, and a few voids. 21 sherds, 66g, EVE = 0.05.

F6: Moderate sub-angular ironstone and rare to moderate quartz up to 2mm. 1 sherd, 27g, EVE = 0.

The early-middle Saxon pottery is generally undateable other than to within the broad period, except for decorated sherds. This assemblage produced fragments from four such vessels. Two small stamped sherds are likely to be of 6th century date. A number of extremely small fragments showed evidence of rosette or fingertip decoration, and also of a raised slashed collar. Both appear to be from the same vessel, which is highly likely to be of 5th century date. Finally, one sherd was bossed and incised; this is likely to be of later 5th century date.

5.6 Leather objects by Ian Meadows

Two leather items were recovered from waterlogged deposits associated with the Roman settlement in Area 3. The first of these comprised four fragments of leather which may originally have been joined. Whilst possibly part of a shoe, the pieces are perhaps more likely to be part of some other item. The second item was most of the right sole of a shoe, comprising two layers of leather plus an insole. The shoe would have been in modern sizes no more than an adult size 4.

5.7 **Wooden objects** by *Ian Meadows*

Three wooden objects were recovered from features associated with the Roman settlement. These were as follows:

- A decorated wooden object comprising two hemispherical ends (53mm dia. and 29mm long) linked by a circular shaft (23mm long and 21mm dia.), all turned from a single piece of wood. These pieces are frequently described as bobbins (Curle 1911, 311) on the grounds of their shape but the nature of wear is not in accordance with a use in weaving, although thread was found adhering to an example from Bar Hill (Robertson, Scott and Keppie 1975, 54 & 57 no 16).
- Three joining fragments of a plain, double-sided, wooden comb, 100mm long.
- A fragment of round wood, perhaps a leg of a piece of furniture.

At present the waterlogged organic material is immersed in water, double-bagged and being kept at a constant low temperature to reduce deterioration until a decision on conservation has been made.

5.8 **Metal objects** by *Tora Hylton and Ian Meadows*

Coins

Eight coins were recovered, six from stratified deposits in Area 3 and two from topsoil and subsoil overlying Area 5. The coins range in date from the late 1st through to the mid 4th century AD. The preservation of the coins ranges from poor to good and they are in a stable condition; cleaning and conservation is considered unnecessary.

Copper alloy

The copper alloy objects are in a stable condition, but one Roman brooch may require cleaning to reveal decorative detail.

Roman

With the exception of the coins and an undiagnostic fragment of sheet metal, the only identifiable object is an unstratified brooch recovered by a metal detector. The brooch is a Hod Hill type, dated to AD 43-70 (DF Mackreth pers comm). This piece is heavily corroded, limiting the visible surface detail. The pin is missing and the catch plate severely truncated. The bow preserves traces of a single groove along each edge towards the head. The middle part of the bow is characterised by three transverse grooves defining central mouldings. The foot narrowed with traces surviving of further mouldings.

Saxon

A small-long brooch was recovered; this particular example is incomplete, the upper corners of the head plate are missing, together with the lower section of foot and the pin. Brooches of this type have three distinct zones, head plate, bow and foot. The head plate is plain with a small raised square panel flanked by a flat border; on the rear of the head plate is a perforated lug heavily encrusted in corrosion products, to which the pin would have been attached. The bow is plain, convex with a triangular cross-section and the upper section of the foot is ornamented with transverse

mouldings and there is a catch-plate on the underside. Brooches of this type are not uncommon; they are predominant in the Mid-Anglian Region and they were in use in the late 5th and 6th centuries (Lucy 2000, 31-33).

Medieval

There are three copper alloy objects of medieval date. They include: a strap loop with internal projections (cf Egan and Pritchard 1991, fig 149,1258); a "paw" like foot from a copper alloy vessel; and a fragment of a plain and simple one-piece folded buckle plate (cf Egan and Pritchard 1991, fig 73, 519).

In addition a half cut jetton/token was recovered. It is very worn and difficult to identify, therefore it will need to be identified by a specialist.

Iron

In total 46 individual or group recorded iron objects were recovered from Roman deposits; of that number 15 are undiagnostic strap/sheet and rod fragments, which are difficult to identify with any degree of certainty, and 15 are structural nails most probably for use with buildings etc. The remainder include structural fittings: holdfast, a loop-headed spike and a fragment of an angle binding; tools: knife, cleaver and reaping hook; together with a small group of hob nails discovered during soil sieving.

Lead

There are two objects of lead: a perforated conical weight and a rolled fragment of sheet lead. They are probably Roman in date.

5.9 Glass by Tora Hylton

There are two small pieces of Roman vessel glass. Both are fragments from the bases of vessels, one an undiagnostic sherd in colourless glass and the other in blue glass and probably from a square bottle. In addition, two undiagnostic slivers of opaque glass were recovered during soil sieving.

5.10 Worked bone by Tora Hylton

There is one piece of worked bone, a worn fragment of a circular sectioned shank, most probably from a pin. The object is in a good condition and requires no further work.

5.11 Querns and millstones by Andy Chapman

There are ten individual finds from querns or millstones, while a further piece is from a rubbing stone. For the querns and millstones there are two geological types. There are six pieces of coarse sandstone, which has been visually identified as Millstone Grit, and there are four pieces of an unidentified gritstone conglomerate (not Hertfordshire puddingstone).

5.12 Fired clay by Pat Chapman and Tora Hylton

Tile

The assemblage comprises 59 fragments of Roman tile, weighing 10.96kg. The majority of the tile was recovered from Areas 3 and 7, the main area of Roman activity

There are 18 pieces of roof tile, of which 13 are *tegulae* and 6 are *imbrices*, with 12 fragments of either brick or *pedalis* type tile from a floor or hypocaust system. One of the tegula is curved in two directions, the flange is bowed side to side while the base curves up from the back forwards. The remaining 28 fragments are body sherds, probably from *tegulae*, and one possible loomweight fragment described below.

The predominant fabric for the roof tile and body sherds is shellyware, whilst that for the brick/*pedalis* type is a hard, coarse, orange or red to dark red fabric with occasional large inclusions of flint.

The brick or tile fragments are probably the *pedalis* type from hypocaust pillars, or alternatively from *lydion* bricks, a large rectangular brick used by the Romans for walls as well as floors (Ward 1999, 43). The thickness of the tile, between 33mm and 38mm, could fit with either interpretation. There was also one grey stone *tessera*, c 20mm square.

The tile indicates the presence of a Roman building in the vicinity. However, given the small size of this assemblage and the lack of associated structures, no further analysis is required.

Kiln material

This assemblage comprises 178 fragments, weighing 3.67kg, derived mostly from Area 3. The majority of the pieces are small, hard amorphous lumps, made from a slightly sandy clay. However, there are a few pieces that were used structurally, probably for an oven or kiln as indicated by the colours caused by the high temperatures they were subjected to.

From one context there were over 100 pieces with smoothed outer surfaces and many wattle impressions, c 10mm in diameter, often very close together. The fragments are hard fired with pink brown surfaces, some with black cores and are generally flattish and about 20mm thick.

Two further contexts contained the debris from perforated kiln plates. These are made from hard, slightly silty clay laminating from being poorly mixed, and perforations surviving with diameters of up to 30mm.

The structural elements, linked to the recovery of the kiln bars and the small scale and short lived iron smelting, indicate that the fired clay came from industrial rather than domestic structures and their surroundings.

In total there are 44 individual fragments of ceramic kiln bar with a combined weight of 3.86kg. They have been manufactured from sparsely tempered clays and shaped by hand to form "cigar-shaped" elongated rods which taper at the terminals. Although similar in outline and size, the bars have either square (c 28-33mm wide) or circular (c 29-35mm in diameter) cross-sections; the former predominate, making up 84% by

number. There are no complete examples, but fragments recovered measure up to 175mm in length. Some bars are reduced and others oxidised, a reflection of where they were located within the kiln superstructure during firing. There are no other forms of kiln furniture. All the pieces appear to have been manufactured from a similar fabric.

Loomweights

Iron Age/Roman

One very large piece could be the corner of a loomweight. It is 30mm thick on both sides and the base. There is a longitudinal impression for a perforation (rather than a wattle) 25mm in diameter down one edge, and another similar, but very worn impression at a different angle in the corner. The fabric is very hard, slightly coarse sandy clay, orange to pale brown in colour.

Early/Middle Saxon

There are three incomplete loomweights made from a poorly fired coarse clay fabric; the exterior surfaces are mainly oxidised and the core black. All have circular/sub-circular cross-sections and have been made by forming a ring and smoothing it with fingers. They range in diameter from 110-130mm and stylistically they display similarities to Dunning's Type 1, which are called 'annular', where the central hole is as wide as or wider than the ring of clay around it (Dunning *et al.*, 1959, 23-24). Loomweights of this type are generally recovered on Saxon sites of the 5th/6th centuries.

5.13 Metalworking debris by Andy Chapman

A small quantity of fuel ash slag and ferrous slag was recovered from features of Roman date.

Three contexts produced a few small pieces (total weight 32g) of light, vesicular fuel ash slag as debris from high temperature burning.

Six contexts produced small quantities of ferrous slag, with a total of 51 pieces weighing 1.44kg. One context contained an oval cake of dense slag, 105mm by 95mm by 35mm thick, weighing 612g. The underside is smoothly convex, while the upper surface is more irregular and either near level or slightly concave. This piece appears to be a smithing hearth bottom, indicating that some secondary smithing was being carried out at some stage in the occupation of the settlement. The other five contexts contained small irregular pieces of vesicular undiagnostic ferrous slag. The small total quantities would suggest that this was a short-lived episode that never formed a significant part of the economy of the settlement.

6 FAUNAL AND ENVIRONMENTAL EVIDENCE

6.1 Human remains by Teresa Hawtin

Seven skeletons and two cremations were the subject of macroscopic osteological assessment.

Four skeletons of late Neolithic/early Bronze Age date were highly fragmented and erosion of the surface of the bone may have masked any pathological conditions that

had been present. Two of the three individuals from a late Neolithic or early Bronze Age burial group within the henge were considered to be young adults (HB1 and 3), one a possible female, and the third individual was a child of 10-12 years (HB2). The single inhumation (HB4) from the late Neolithic or early Bronze Age barrow was a female of 30-50 years of age.

The Roman inhumations were generally in better condition and consisted of a young-mid adult female (HB7), a 25-35 year-old female (HB6) and a male aged over 40 years (HB5). The male displayed extensive joint degeneration, a healed fracture of the right lower leg and strong muscle attachments, suggesting that he was involved in heavy manual labour. He also had extensive *ante-mortem* tooth loss and several other dental pathologies. The 25-35 year-old female had suffered from sinus infections in the area behind the right ear (the mastoid process) and appears to have been subjected to surgical intervention in the form of a trephination hole. The healing at the edges proves that she survived this operation. Unusual defects on her teeth may suggest periods of stress or illness during childhood, when the enamel was being laid down.

One of the two cremations (HB8), thought to date to the Saxon period, was of an individual aged less than 24 years, but no pathological conditions were observed. The second cremation is likely to represent animal bone collected at the bottom of a hearth rather than cremated human bone.

6.2 Animal bone by Matilda Holmes

Methodology

Bones were identified using the author's reference collection, and further guidelines from Bass (1995), Cohen and Serjeantson (1996), Hillson (1992) Prummel (1988) and Schmid (1972). Due to anatomical similarities between sheep and goat, bones of this type were assigned to the category 'sheep/goat', unless a definite identification using guidelines from Prummel and Frisch (1986) or Payne (1985) could be made. Bones that could not be identified to species were, where possible, categorised according to the relative size of the animal represented (small: rodent /rabbit sized, medium – sheep/pig/dog-sized; or large: cattle / horse-sized). Ribs were not identified to species.

Tooth wear and eruption were noted using guidelines from Grant (1982) and Silver (1969), as were bone fusion (Amorosi 1989, Silver 1969), metrical data (von den Driesch 1976), anatomy, side, zone (Serjeantson 1996), pathology, butchery, bone working and condition (Lyman 1994) of the bones.

All the animal bones were hand collected, no sieved samples were noted and all fragments were recorded. The bones have been grouped into approximate phases, based on area – Neolithic – Bronze Age, Iron Age, Iron Age – Roman, Roman and Saxon. More precise contextual phasing will be integrated once it becomes available.

Taphonomy and Condition

The bones were varied in their condition, although most were good to fair depending on the environmental conditions at the site of deposition. Taphonomic factors affecting the material were recorded including burnt, gnawed, butchered and recently broken bones. Less than 1% of the fragments recorded had been burnt, gnawed, butchered or showed signs of fresh breaks. However, a large number of bones had fragmented post-depositionally, of which 333 fragments were conjoined to make a

total of 34 refitted fragments. Three articulated carcasses were found in Roman contexts, a small dog skeleton from a grave in Area 3, and partial dog and foal skeletons from pits in Area 7.

The absence of sieved samples may lead to a negative bias in the number and variety of small mammals, fish and bird bones recorded in the assemblage.

Basic description of findings

Approximately 45% of the fragment count of animal bones was identified to species. Cattle were the most common animals in all phases, other species being relatively scarce, although fragments of antler were significant in the early prehistoric phases. Sheep/goats were found in significant numbers in the Roman period, when horse remains also became more common.

There was a small but useful group of fusion and tooth wear data from Roman and Iron Age periods, which may be useful for investigating mortality patterns. A small amount of metrical data was also recorded, from which a few shoulder heights may be calculated to compare the morphology of animals found on this site with others from the region.

6.3 Plant macrofossils and snails by Val Fryer

Samples for the extraction of the plant macrofossil assemblages were taken from across the excavated area, and forty-two were submitted for assessment.

The samples were bulk floated and the flots were collected in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils and other remains noted are listed. Nomenclature follows Stace (1997). Whilst the majority of plant remains were charred, waterlogged/de-watered assemblages were noted within samples taken from the Roman settlement. Seventeen samples contained only charcoal fragments and/or other materials and these have been listed separately. Modern contaminants including fibrous roots, seeds and arthropods were present throughout.

Results

Plant macrofossils

Cereal grains/chaff, seeds of common weeds and wetland plants and tree/shrub macrofossils were recorded at low to moderate densities in twenty-two assemblages. Preservation of the charred remains was moderately good, although a high number of the grains were puffed and distorted, probably as a result of combustion at very high temperatures. The waterlogged/de-watered macrofossils were extremely well preserved with, somewhat unusually, good preservation of cereal chaff as well as seeds and root/stem.

Oat (*Avena* sp.), barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains were recorded, with wheat being predominant throughout. Of the wheat grains recorded, most were of an elongated 'drop-form' shape typical of spelt (*T. spelta*), although a small number of more rounded hexaploid type grains were also present. Chaff was relatively scarce, but spelt glume bases were recorded along with rare specimens of bread wheat (*T. aestivum/compactum*) type rachis nodes.

With the exception of the waterlogged/de-watered assemblages weed seeds were generally rare. Most charred specimens were either of common cereal crop weeds (including knotgrass (*Polygonum aviculare*), wild radish (*Raphanus raphanistrum*) and scentless mayweed (*Tripleurospermum inodorum*) or grassland herbs (namely medick/clover/trefoil (*Medicago/Trifolium/Lotus* sp.), dock (*Rumex* sp.), ribwort plantain (*Plantago lanceolata*), vetch/vetchling (*Vicia/Lathyrus* sp.) and indeterminate grasses (Poaceae). The waterlogged/de-watered assemblages contained a wide range of weed seeds. These included common ruderal species (namely musk thistle (*Carduus nutans*), hemlock (*Conium maculatum*), henbane (*Hyoscyamus niger*) and stinging nettle (*Urtica dioica*), cornfield weeds (orache (*Atriplex* sp.) and poppy (*Papaver argemone*) and grassland plants (including fumitory (*Fumaria officinalis*) and buttercup (*Ranunculus acris/repens/bulbosus*).

Seeds/fruits of wetland/aquatic plants and tree/shrub macrofossils occurred at mostly low densities in only eight samples. Taxa noted included sedge (*Carex* sp.), gipsy wort (*Lycopus europaeus*), blinks (*Montia fontana*), reedmace (*Typha* sp.) and elderberry (*Sambucus nigra*). One sample contained a single fragment of charred hazel (*Corylus avellana*) nutshell and a small, immature oak (*Quercus* sp.) fruit/acorn.

Charcoal fragments were present throughout, but other plant macrofossils, including pieces of charred root/stem and indeterminate tubers, occurred less frequently.

Molluscs

Although specific sieving for molluscan remains was not undertaken, shells were noted at a low density in eight assemblages. Open country or catholic species were predominant (cf Evans 1972), although a small number of marsh/freshwater slum molluscs (mostly *Vertigo* sp.) were also recorded along with shells of the freshwater obligate species *Anisus leucostoma* and *Lymnaea peregra*.

Other materials

The fragments of black porous and tarry material are probable residues of the combustion of organic remains (including cereal grains) at very high temperatures. Other remains were particularly scarce, but did include bone fragments and small mammal or amphibian bones.

Summary of evidence

The samples from features of Neolithic, Bronze Age, Iron Age and early Saxon date all contain very low densities of material (<0.1 litres in volume) and, with the exception of charcoal fragments, plant macrofossils are entirely absent. As none of the assemblages contain sufficient material to be indicative of primary deposition, it would appear most likely that the few remains recorded are derived from scattered refuse, which accidentally became incorporated within the feature fills.

Samples were taken from two main areas of Roman activity, namely from a group of three parallel ditches within Areas 2, 3 and 5 and from a concentration of features at the eastern end of the excavation within Areas 3 and 7. Although occasional cereal grains and weed seeds are present, the remaining ditch assemblages are primarily composed of small quantities of charcoal, almost certainly indicating small accumulations of scattered or windblown refuse within the ditch fills.

The focus of activity during the Roman period appears to have been towards the eastern end of the current site. Although few, if any of the assemblages are derived from primary deposits of material, the composition of the assemblages indicates that activities such as cereal processing/consumption were focused within this area. Other

assemblages contain concentrations of grassland herbs, charred root/stem and tubers, and may be derived from small quantities of fuel or hearth waste. The moderately large number of flax (*Linum usitatissimum*) seeds noted within one sample could also be indicative of food waste, as the seeds are edible if carefully roasted prior to consumption. The waterlogged/de-watered assemblages are of particular interest as they almost certainly contain both plant material and mollusc shells derived from the local environment. These appear to indicate that the area was largely composed of dry grassland, although some parts may have been slightly overgrown with colonising weeds and shrubs such as elderberry, hemlock, nettles and henbane. Both features may have been sufficiently damp to support a very limited number of wetland plants.

6.4 Charcoal by Rowena Gale

Introduction

This report presents the assessment of a small assemblage of charcoal, mostly from Roman contexts but also including late Iron Age and Saxon deposits. The assessment is based on the detailed examination and species identification of three fragments selected from each sample and the overall observation of the character and condition of the remaining fragments to gauge their potential to provide data in the following categories:

- Environmental evidence
- Evidence of woodland management
- The economic use of woodland resources

Methods

Five out of the eight samples included <10 fragments. The samples mostly consisted of firm, well preserved fragments of charcoal. The selected fragments were prepared using standard methods (Gale and Cutler 2000). Anatomical structures were examined using incident light on a Nikon Labophot-2 compound microscope at magnifications of up to x400 and matched to prepared reference slides of modern wood. Where possible, the maturity of the wood was assessed (ie heartwood/sapwood/roundwood).

Discussion

Late Iron Age

Charcoal was obtained from the upper fill of the enclosure ditch terminal [2008]. The origin of the charcoal is unknown although burning *in situ* could not be ruled out. The species identified included oak (*Quercus* sp.), blackthorn (*Prunus spinosa*) and field maple (*Acer campestre*).

Roman

Samples came from pit deposits dating from various phases within the Roman period. Unless artefactual/ contextual evidence suggests otherwise, it is fairly safe to assume that dumps of charcoal in pits probably represent fuel debris and, in this instance, there was no evidence to suggest that this was other than domestic in origin. The taxa identified indicated the use of fuel obtained from a range of trees and shrubs including oak (*Quercus* sp.), blackthorn (*Prunus spinosa*), elder (*Sambucus nigra*), ash (*Fraxinus excelsior*), willow (*Salix* sp.) or poplar (*Populus* sp.) and *Viburnum*.

Although roundwood was fairly common, there was insufficient evidence to suggest the use of coppiced wood.

A sample 305 from the central ditch of a triple ditch system, may also represent fuel debris. This small sample included the hawthorn/*Sorbus* group (Pomoideae); the remainder was probably similar.

Another small deposit was obtained from under the remains of a human inhumation in Area 3. The purpose/function of this deposit is unknown but may have been of ritual/funerary significance. The charcoal included oak (*Quercus* sp.).

Saxon

Coming from a feature associated with a SFB in Area 2, the charcoal probably represents fuel debris. The charcoal consisted of thin flakes of material, the identified portion of which was named as oak (*Quercus* sp.). Although few growth rings were available for examination, these suggest moderate growth rates. The remainder of the sample appears to be superficially similar.

Environmental evidence

Despite the paucity of charcoal, the samples examined indicate that a relatively diverse range of trees and shrubs was growing in the vicinity of the site during the Roman period including: oak (*Quercus* sp.), ash (*Fraxinus excelsior*), field maple (*Acer campestre*), willow (*Salix* sp.) and poplar (*Populus* sp.), elder (*Sambucus nigra*), blackthorn (*Prunus spinosa*), hawthorn/ *Sorbus* group (Pomoideae) and *Viburnum*. Although roundwood was comparatively frequent, none of this material was sufficiently intact to indicate whether it originated from coppiced stems/managed woodland. Oak sapwood from the Roman and Saxon samples indicates moderate growth rates, which could imply origins from trees growing in fairly open or uncompetitive conditions.

7 SUMMARY OF POTENTIAL AND PROPOSALS FOR ANALYSIS

7.1 Review of original research objectives

The main aim of the archaeological excavation, as defined in the *Archaeological Management Plan* (JSAC 2004), was to 'effectively manage the archaeological remains within the areas affected by development both to the satisfaction of the local planning authority and to the standards set by the development team' (Section 3.3.1). The generic research objectives of the archaeological excavation were defined in the *Archaeological Management Plan* as follows:

- To investigate the origin and development of the agricultural landscape by:
 - i. determining the phasing of extant field systems by excavation
 - ii. investigate the changes in landscape flora by environmental sampling
 - iii. consideration of the wider geological/hydrological landscape as a mechanism for catalyzing settlement
- To investigate the origin and development of domestic occupation by:
 - i. analyzing the distribution of material culture
 - ii. investigating the form and function of structural features

- iii. comparing the assemblages of rubbish disposal deposits by period
- To investigate paleoeconomy and industry through time by:
 - i. examination and comparison of faunal remains
 - ii. analysis and comparison of soil samples from industrial contexts
 - iii. to identify possible crop regimes and staple food stuffs from environmental sampling
- To consider wider changes within the landscape and what these may infer regarding past effects on political and social structures by:
 - i. considering the change from a funerary/ritual to an agrarian landscape
 - ii. relationship between native and Romano-British settlement patterns

7.2 Revised research objectives

The assessment has demonstrated that the excavation has produced sufficient evidence to attend to the original research objectives, as outlined in section 7.1 above. This is with the exception of the environmental objectives, where assessment of environmental samples has shown only limited potential, due to the small size of the assemblages and the generally poor state of preservation of ecofacts.

In the light of the excavation and subsequent assessment, it is now possible to revise the original generic research objectives and focus on specific aspects of past social, cultural and economic activity associated with the archaeological remains on the site. With reference to regional research frameworks (Brown and Glazebrook 2000; Gurney 2002; Cooper 2006), these revised research objectives are as follows:

- i. With the assistance of stratigraphic analysis and radiocarbon dating techniques, refine the phasing of the late Neolithic/early Bronze Age henge and barrow and establish the relationship, if any, between the two monuments and their setting in the wider funerary landscape.
- ii. Investigate the alterations made to the form of the henge in relation to changes in funerary practice.
- iii. Examine the evidence for there having been a second barrow to the east of the henge, which was later grubbed out, probably in the Roman period.
- iv. Refine the phasing of the Iron Age enclosure and annexe and examine their relationship, if any, with the square mortuary enclosure and the well. Suggestions will be posited as to their possible status and function, assisted by comparisons with other Iron Age sites of this type in the vicinity.
- v. With the assistance of radiocarbon dating techniques and stratigraphic and pottery fabric analysis, refine the phasing of the triple ditch system. An attempt will be made to determine the period of its initial construction, to identify subsequent additions and alterations, and to understand its function in the landscape.
- vi. If possible, relate the current Romano-British site to the main part of the settlement excavated in the 1990s by BCCAS, and investigate the development of the settlement, its function and its status.

- vii. Set the Romano-British settlement in the wider Roman landscape and examine the transition periods from Iron Age to Roman and Roman to Saxon to study changes in the local settlement pattern.
- viii. Establish, if possible, the economic base of the Romano-British settlement.
- ix. Characterize the Saxon remains and relate them to the pattern of early Saxon settlement in the region. In addition, examine the relationship, if any, of the Saxon settlement with the prehistoric monuments.

7.3 Proposals for further analysis

The analysis of the structural, artefactual, faunal and environmental evidence will encompass the results of the excavation in their entirety.

Structural evidence

Assessment of the structural evidence from the excavation has identified five key periods of human activity associated with the past utilisation of the landscape that demands further analysis. These are as follows:

- Late Neolithic/early Bronze Age funerary monuments
- Iron Age enclosure and annexe
- Triple ditch system and pit complex
- Romano-British settlement
- Saxon settlement

Further analysis will comprise the refinement of phasing and structural groups on the basis of dating evidence, allied to stratigraphic and spatial analysis. Key groups will be described, and these descriptions will form the basis of the site narrative for publication. Period syntheses will comprise an integration of salient finds and relevant environmental evidence with the site narrative and an interpretation and overview.

A wider discussion of the site, with reference to relevant published and unpublished sources, and other county and regional comparisons will also be included.

Worked flint

The flint will be fully quantified to determine the overall balance of the assemblage in terms of the proportions of flakes and blades and the presence of specific implement types. A number of implements will be worthy of illustration, probably some 10-20 items.

As it is suggested that the flint has been deposited on the ground surface around the Neolithic monuments, the distribution of the flint should be analysed to see if the nature of the distribution pattern can be determined.

Stone axe

No further reporting is required, but the axe should be illustrated in the final report.

Bronze Age and Iron Age pottery

The assemblage needs to be fully quantified to fabrics and where applicable the codes of the Bedfordshire County Type Series will be used.

Area 1: the prehistoric monuments

The small quantity of material and its poor state of preservation, with no surviving decoration, means that the pottery can add little to the understanding of the prehistoric monument complex, and is certainly not an aid to the dating of these monuments. The probable late Bronze Age/early Iron Age vessel from context 241, and the probable Iron Age sherds do, however, say something about the state of the monuments at a later date, with this material presumably accumulating in the subsidence hollows of the larger ditches, suggesting that at least the henge ditch was still a visible earthwork into the middle Iron Age.

The vessel from context 241 will be illustrated.

Area 2: The Iron Age enclosure system

In Area 2, the fills of a recut well has produced a fine assemblage from a limited number of vessels of probable early Iron Age date, and the presence of shouldered jars, fingernail and finger tip decorated rims and lugs can be compared with material from the early Iron Age activity at the Bunyan Centre, Bedford (La Niece and Slowikowski 1999), which also included material from a well.

This pit group should be fully illustrated. There is also wood and bone from the fills, and a radiocarbon date for material likely to be contemporary with the pottery assemblage would be useful in helping to define the chronology of the range of vessels present in the assemblage.

The material from the rest of Area 2, presumably related to occupation of the ditched enclosure, comprises largely small, undiagnostic sherds, and only a broad middle Iron Age date has been postulated. It is suggested that radiocarbon dating, despite the problems with the calibration curve at this time, may offer the best opportunity to at least place the enclosure system within its broad context, which would appear to be the 4th to 2nd centuries BC.

Area 5: the triple ditch system

As with Area 2, the pottery assemblage is small and can only be suggestive of a broad date. In this case it indicates either a late Bronze Age/early Iron Age or an early Iron Age date for the triple ditch system, and it is recommended that radiocarbon dating would both provide a date for the ditch system and for the pottery from it, which would also help to refine the chronology of late Bronze Age to early Iron Age ceramics in the area.

The small assemblage of rim sherds should be illustrated, especially if a radiocarbon date is forthcoming.

Roman pottery

It is recommended that all of the fabrics and forms be recorded for the project archive. For publication, a selection of phased assemblages from Areas 3 and 7 will be subject to detailed research. These would be subjected to fabric, form and r.e.v.e (rim measurements) recording and presented where possible in comparable

percentages. The codes from the Bedford type series shall be utilised alongside those from the national system.

The dating procedure will be refined upon further analysis of both fabric and form. The identification of fineware form and fabric will be the principle lead in this strategy followed by *mortaria*, regional imports and thereafter clearly defined forms from across local and unsourced fabrics. An effort shall also be made to match coarseware fabrics to recently published kilns and major sites in the area.

A small number of partial samian stamps have been noted; however, with perhaps the exception of one, they are far too degraded. A single partial stamp on a VER WH *mortaria* has also been recorded and this will be identified if possible. Approximately 30 sherds are considered worthy of illustration.

A number of specific research goals should be sought from the phased groups. These are as follows:

- To present a percentage figure of regional, continental versus local and unsourced fabrics. This is to help interpret the economy of the site and produce data that will be comparable with sites of a similar age. An almost identical task can also be performed with form types, as an example using the pottery from pit 7023.
- To gather data to enable the production of an economic statement, alongside site function/activity and status interpretations in a manner that is easily comparable to other local, regional and national sites.
- Finally an important aspect of this assemblage is where it occurs in the dating scheme for Romano-British ceramics in the region. The change over from the late 2nd to early/mid 3rd century AD is frequently complicated and not often obvious, time and again relying on too few basic forms or fabrics, especially for the mid 3rd century AD. Several of these assemblages occur in this area of dating and a combination of fabric and form may add to our knowledge.

Anglo-Saxon pottery

This is quite an interesting assemblage despite its small size and is worthy of full publication. Fifth century pottery is extremely rare in the county, so a short report illustrating the sherds of interest and placing them in their regional context would of value.

Leather objects

Most of these pieces are typical finds from waterlogged Roman contexts. All need conservation to ensure long-term preservation. No further work is required, although a summary of the leather objects will be included in the final report.

Wooden objects

The wooden comb is of a long-lived type and is unlikely to contribute to the dating of the context. Other examples of wooden combs occur from Bath (Cunliffe 1988 24-6), Castleford (Cool and Philo 1998 340-1) and Bar Hill (Robertson *et al* 1975, 54 & 57). The 'bobbin' is worth further analysis to better identify possible function, as examples have been produced from several more recent excavations.

All need conservation to ensure long-term preservation and before any such treatment the wood species should be identified.

Metal objects

The ironwork is in a good state of preservation and the entire assemblage has been X-radiographed to aid identification and reveal technical details. Some pieces are heavily encrusted in corrosion products, making identification difficult, even with an X-ray, therefore one or two objects may require further cleaning. This will be undertaken by Buckinghamshire County Museum Conservation Service as required.

Glass

No further work required. A short summary of the glass will be included in the final report.

Worked bone

No further work required. A short summary of the worked bone will be included in the final report.

Fired Clay

The ceramic building material and other objects of fired clay, most notably the kiln bars and loomweights, are of a type typically found on Roman and Saxon sites and further analysis would contribute little to the information already gathered from the assessment. However, the corner fragment from the possible Iron Age/Roman loomweight is worthy of illustration as it is of an unusual type, if it is indeed a loomweight. Further research to look for similar examples of this form from other sites is recommended.

Querns and millstones

It would be desirable if a source for the conglomerate could be established.

Given the fragmentary nature of the stones and the general absence of specific features the majority do not need to be drawn for publication. The largest conglomerate fragment from a small rotary quern could be illustrated to characterise this group, while the large fragment from a millstone upper stone could also be drawn to show the raised band on the upper surface and cut grooves on the grinding surface.

Slag

The distribution and dating of these contexts should be checked to see if they define the location of a single focus of short-lived activity, or are more dispersed in time and space and perhaps denote that there was more than one such short-lived episode of on-site smithing.

Human bone

The high levels of fragmentation and degradation of prehistoric skeletons HB1, 2 and 3 mean that further osteological analysis of these individuals would be unlikely to reveal any additional information. Further analyses of the probable Romano-British skeleton HB7 and Saxon cremation HB8 are also unlikely to produce significant

results. However, skeletons HB4, 5 and 6 are complete enough to warrant more careful examination.

The pathologies visible on most of the skeletons examined here are mostly relatively common, such as degenerative changes and common dental disorders, so further investigation would probably not add to our knowledge of them. The exception to this is individual HB6, in which several pathological changes to the skull and teeth were observed. Although the skull is fragmented, a degree of re-fitting would be possible and would allow the full extent of the pathological changes to be investigated.

The vertical enamel defects noted in HB6 are particularly unusual and are worthy of further analysis under a high-powered light microscope or scanning electron microscope (SEM). The mechanism by which this type of defect occurs is not yet understood and it would be interesting to section the teeth and analyse the pattern of ameloblast (the cells that form enamel) deposition (P Nystrom *pers comm*).

Radiocarbon dating of the prehistoric burials by Accelerator Mass Spectrometry (AMS) would clarify the time periods from which the burials date.

Other analytical techniques, such as DNA analysis, are unlikely to reveal enough significant information to justify the allocation of resources.

Animal bone

Due to the relatively small sample sizes of material from Neolithic and Bronze Age contexts, detailed analysis is not considered worthwhile further than an acknowledgement of species present. The same may be said of assemblages from Iron Age and Saxon phases, but these may be more useful when comparing changes in species proportions through time with the more significant Roman assemblage. Remains from the Roman phase are considered worthy of a more detailed analysis into the animal husbandry, diet and economy of the site.

There is also potential to compare the faunal material from Cambridge Road with other local sites, and will provide a useful addition to the body of data already documented from the Bedford area. This is important when considering the economy and diet of the inhabitants of settlements in the area, and the development of consumer and producer relationships between the settlements and the surrounding area.

Plant macrofossils

With rare exceptions, the assemblages are all extremely small and contain insufficient material for quantification. Although sample 314 does contain a higher density of material, analysis of such an assemblage would add little additional data to that contained within this assessment and, as a result, no further work is recommended. However, a full written summary of this assessment should be included within any publication of data from the site.

Charcoal

The data obtained during the assessment stage of the eight samples leaves little scope for further work. Further examination of the three slightly larger samples is unlikely to yield significant results and thus it is recommended that no additional work should be undertaken.

Radiocarbon dating

Samples of bone, wood and charcoal will be submitted for AMS radiocarbon dating to Beta Analytic, Florida, USA. The proposed samples are as follows:

Bone

- i. Antler bone from primary fill of Late Neolithic/early Bronze Age henge
- ii. Late Neolithic/early Bronze Age group burial HB1, 2 and 3
- iii. Late Neolithic/early Bronze burial HB4
- iv. Probable Romano-British burial HB5
- v. Probable Romano-British burial HB6
- vi. Probable Romano-British burial HB7

Wood/charcoal

- i. Wood from base of prehistoric well (Area 2)
- ii. Triple ditch
- iii. Iron Age annexe terminal

8 REPORTING AND ARCHIVE

8.1 The report

The synopsis provided below will form the basis for both the full report and the report digest prepared for final publication.

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BIBLIOGRAPHY

APPENDICES

8.2 Provisional publication proposals

It is proposed to publish the results of the excavations in a future volume of the county journal *Bedfordshire Archaeology*, to be submitted by May 2008.

9 STORAGE AND CURATION

A microfilm copy of the site archive and narrative will be made to RCHME standards and submitted to the National Archaeological Record.

The site archive will comprise all written, drawn and photographic records, and all material finds and processed sample residues recovered from the excavation. The site archive will be accompanied by the research archive, which will comprise the text, tabulated data, the original drawings and all other records generated in the analysis of the site archive. The archive will be fully catalogued and stored to the requirements of BCCHES. It will contain material requiring special curation (leather and wood).

Bedfordshire County Council have agreed to the long-term storage of the site archive within the approved County store (Accession no. BEDFM.2005.326)

10 RESOURCES AND PROGRAMMING

10.1 Work completed

Work completed to-date includes the consolidation of the site archive, finds and environmental sample processing, assessment of structural evidence, finds and ecofacts, and the preparation of the assessment report and updated project design.

10.2 Proposed work and completion dates

| Tasks | Personnel | Timetable |
|-----------------------------------|-------------------|------------------|
| Structural site narrative | Simon Carlyle | Aug 2007 |
| Worked flint | Andy Chapman | May 2007 |
| Stone axe | Andy Chapman | Completed |
| Prehistoric pottery | Andy Chapman | May 2007 |
| Roman pottery | Andy Fawcett | May 2007 |
| Saxon pottery | Paul Blinkhorn | Dec 2006 |
| Other finds | Tora Hylton | May 2007 |
| Human bone | Teresa Hawtin | May 2007 |
| Animal bone | Matilda Holmes | May 2007 |
| Illustrations | NA drawing office | Feb 2008 |
| Integration of specialist reports | Simon Carlyle | Jan 2008 |
| Report digest and discussion | Simon Carlyle | Jan 2008 |
| Editing | Andy Chapman | Mar 2008 |
| Preparation of research archive | Simon Carlyle | Oct 2008 |

10.3 Key personnel

The key personnel associated with carrying out the tasks detailed in section 10.2 are as follows:

| | |
|----------------|---|
| Simon Carlyle | Project Officer, Northamptonshire Archaeology |
| Andy Chapman | Prehistoric pottery and worked flint specialist Senior Archaeologist, Northamptonshire Archaeology |
| Andy Fawcett | Specialist consultant, Roman pottery |
| Paul Blinkhorn | Specialist consultant, Saxon pottery |
| Tora Hylton | Finds manager, Northamptonshire Archaeology |
| Teresa Hawtin | Specialist consultant, human bone |
| Matilda Holmes | Specialist consultant, animal bone |

BIBLIOGRAPHY

Amorosi, T, 1989 *A post-cranial guide to domestic neo-natal and juvenile mammals*, BAR Int. series, 533

APS 2004 *Aerial Photographic Assessment of Cambridge Road, Bedford, area centred TL080479*, Air Photo Services, Report No. 2003/24

Arthur, JRB, 1985 A Bronze Age barrow cemetery and associated settlement at Roxton, in A Taylor and PJ Woodward, *Bedfordshire Archaeology*, 142, 73-149

Baker, D, Baker, E, Hassall, J, and Simco A (eds), Excavation in Bedford 1967 – 1977, *Bedfordshire Archaeology*, 13

Bartlett, ADH, 1997 *Land south of Cambridge Road, Bedford. Report on Archaeo-geophysical Survey*, Bartlett-Clark Consultancy

Bass, WM, 1995 *Human Osteology*, Missouri Archaeology Society, Columbia

BCCAS 1993 *The Bedford Southern Bypass Archaeological Evaluation*, Bedfordshire County Council Archaeological Service, report no. 93/11

BGS 1996 *British Regional Geology: London and the Thames Valley*, British Geological Survey, HMSO

Biddle, B, and Hutchins, E, 1996 The Environmental Evidence, in M Dawson, Plantation Quarry, Willington: Excavations 1988-1991, *Bedfordshire Archaeology*, 22, 14

Blinkhorn, PW, in print *The Ipswich Ware Project: Ceramics, Trade and Society in Middle Saxon England*, Medieval Pottery Res Group Monog

Brown, A, 1994 A Romano-British Shell Gritted Pottery and Tile Manufacturing Site at Harrold, Bedfordshire, *Bedfordshire Archaeological Journal*, 21, 19-107

- Brown, N, and Glazebrook, J, 2000 *Research and Archaeology: a framework for the Eastern Counties, 2. Research Agenda and Strategy*, East Anglian Archaeology Occasional Paper, 8
- Cohen, A, and Serjeantson, D, 1986 *A Manual for the Identification of Bird Bones from Archaeological Sites*, London
- Cool, HEM, and Philo, C, (eds) 1998 *Roman Castleford Excavations 1974-8, Volume I The Small Finds*, Yorkshire Archaeology, 4
- Cooper, NJ, (ed) 2006 *The Archaeology of the East Midlands: An Archaeological Resource Assessment and Research Agenda*, Leicester Archaeology Monog, 13
- Crick, J, and Dawson, M, 1996 Archaeological excavations at Kempston Manor, 1994, *Bedfordshire Archaeology*, 22
- Cunliffe, B, (ed) 1988 *The Temple of Minerva at Bath, Vol 2. The finds from the sacred spring*, OUCA Monog, 16
- Curle, J, 1911 *A Roman frontier post and its people; the fort of Newstead in the parish of Melrose*, Glasgow
- Dawson, M, 1996 Plantation Quarry, Willington: Excavations 1988-1991, *Bedfordshire Archaeology*, 22
- Dawson, M, (ed) 2000a *Prehistoric, Roman and Post Roman landscapes of the Great Ouse Valley*, CBA Res Rep, 119
- Dawson, M, 2000b Iron Age and Roman settlement on the Stagsden by-pass, *Bedfordshire Archaeology Monog*, 3,
- Denham, V, 1985 The Pottery, in JH Williams *et al* (eds), 1985 *Middle Saxon Palaces at Northampton*, Northampton Development Corporation Monog, 4, 46-64
- Dunning, GC, Hurst, JG, Myres, JNL, and Tischler, F, 1959 Anglo-Saxon Pottery: a symposium, *Medieval Archaeology*, 3, 1-78
- Egan, G, and Pritchard, F, 1991 Dress Accessories c 1150 – c 1450, *Medieval Finds from excavations in London*: 3
- Evans, J, 1972 *Land Snails in Archaeology*, London
- Fawcett, AR, 2005 The Roman Pottery, in *Archaeological Investigations on the Biggleswade Reinforcement Water Main: Cardington to Toplers Hill, Bedfordshire*, Bedfordshire Archaeological Journal, Vol XX
- Fawcett, AR, 2005 The Roman Pottery, in *Archaeological Excavations off the High Street, Meppershall, Bedfordshire*, Bedfordshire Archaeological Journal, Vol XX
- Gale, R and Cutler, D, 2000 *Plants in Archaeology*, Otley, London: Westbury Publishing and Royal Botanic Gardens, Kew
- Gibson, A, and Woods, A, 1997 *Prehistoric Pottery for the Archaeologist*, Leicester University Press

- Glazebrook, J, 1997 *Research and Archaeology: a framework for the Eastern Counties, 1. Resource Assessment*, East Anglian Archaeology Occasional Paper, 3
- Grant, A, 1975 The animal bones, in J Hassall, Excavations at Willington, 1973, *Bedfordshire Archaeology*, 10, 38-39
- Grant, A, 1979 The animal bones from Bedford, in D Baker *et al* (eds), Excavation in Bedford 1967–1977, *Bedfordshire Archaeology*, 13, 286-288
- Grant, A, 1982 The use of tooth wear as a guide to the age of domestic ungulates, in B Wilson *et al* (eds), 1982 *Ageing and sexing of animal bones from archaeological sites*, BAR British Series, 109, 91-108
- Gurney 2002 *Standards for Field Archaeology in the East of England*
- Halstead, P, 1985 A study of mandibular teeth from Romano-British contexts at Maxey, *East Anglian Archaeology*, 27, 219-24
- Hassall, J, 1975 Excavations at Willington, 1973, *Bedfordshire Archaeology*, 10
- Hillson, S, 1992 *Mammal Bones and Teeth*, Institute of Archaeology, London
- Hurst, JG, 1976 The Pottery, in DM Wilson (ed), 1976 *The Archaeology of Anglo-Saxon England*, 283-348, Cambridge
- Hutchins, E, 1996 The faunal evidence, in J Crick and M Dawson, Archaeological excavations at Kempston Manor, 1994, *Bedfordshire Archaeology*, 22, 92-4
- Hutchins, E, 2005 The charred plant remains, in A Maull and A Chapman (eds), *A Medieval Moated Enclosure in Tempsford Park*, Bedfordshire Archaeology Monog, 5
- JSAC 2004 *Archaeological Management Plan; land south of Cambridge Road, Bedford and Associated Flood Alleviation Works*, JSAC 805/04/01 rev D
- Knight, D, 2002 A Regional Ceramic Sequence: Pottery of the First Millennium BC between the Humber and the Nene, in A Woodward and JD Hill (eds), *Prehistoric Britain: The Ceramic Basis*, Prehistoric Ceramic Research Group Occasional Publication, 3, 119-142
- La Niece, J, and Slowikowski, A, 1999 *The Artefacts*, in S Steadman, A later Neolithic and Bronze Age mortuary complex and Iron Age settlement at the Bunyan Centre, Bedford, *Bedfordshire Archaeol* 23, 19-24
- La Niece, J, 1999 The Finds, in D Shotliff and J Crick, Iron Age settlement within the Oxford Clay Vale at Beancroft Road, Marston Mortaine, *Bedfordshire Archaeology* 23, 36-41
- Lisboa, D, 1998 *Archaeological Desk-top Assessment for Cardington Cross, Cardington, Bedford in connection with the park and ride and associated developments*, AC3034/D1
- Lucy, S, 2000 *The Anglo-Saxon Way of Death: Burial Rites in Early England*
- Lyman, RL, 1994 *Vertebrate Taphonomy*, Cambridge University Press

- Marney, PT, 1989 *Roman and Belgic Pottery from Excavations in Milton Keynes, 1972-82*, Buckinghamshire Archaeol Soc Monog, **2**
- Mauil, A, and Chapman, A, 2005 (eds), *A Medieval Moated Enclosure in Tempsford Park*, Bedfordshire Archaeology Monog, **5**
- MPRG 1998 *Guide to the Classification of Medieval Ceramic Forms*, Medieval Pottery Res Group Occ Paper, **1**
- MPRG 2001 *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*, Medieval Pottery Res Group Occ Paper, **2**
- NA 2004 *Land South of Cambridge Road, Bedford; Project Design for Archaeological Excavation, Plot 10, Sites AAS1, AAS 2, AAS 3 and AAS 5*, Northamptonshire Archaeology report
- Needham, S, and Spence, T, 1996 (eds) *Refuse and disposal at Area 16 East Runnymede*, Runnymede Bridge Research Excavations **2**, British Museum Press
- Orton, C, 1998-99 Minimum Standards in Statistics and Sampling, *Medieval Ceramics*, 22-23, 135-8
- Payne, S, 1973 Kill-off patterns in sheep and goats: the mandibles from Asvan Kale, *Anatolian Studies*, **23**, 281-303
- Payne, S, 1985 Morphological distinctions between the mandibular teeth of young sheep and goats, *Journal of Archaeological Science*, **12**, 139-147
- Prummel, W, and Frisch, H, 1986 A guide for the distinction of species, sex and body side in bones of sheep and goat, *Journal of Archaeological Science*, **13**, 567-577
- Prummel, W, 1988 Distinguishing features on postcranial skeletal elements of cattle, *Bos primigenius* f. *Taurus*, and red deer, *Cervus elaphus*, *Schriften aus der Archäologisch-zoologischen Arbeitsgruppe Schleswig-Kiel*, Heft **12**, Keil
- Rackham, O, 1986 *History of the Countryside*, 167-180
- Roberts, AF, 2000 The animal bone assemblages, in M Dawson, Iron Age and Roman settlement on the Stagsden by-pass, *Bedfordshire Archaeology Monog*, **3**, 116-122
- Robertson, A, Scott, M, and Keppie, L, 1975 *Bar Hill: A Roman Fort and its Finds*, BAR British Series, **16**
- Serjeantson, D, 1996 The animal bones, in S Needham and T Spence (eds) *Refuse and disposal at Area 16 East Runnymede*, Runnymede Bridge Research Excavations **2**, British Museum Press
- Schmid, E, 1972 *Atlas of Animal Bones*, Elsevier
- Shotliff, D and Crick, J, 1999 Iron Age settlement within the Oxford Clay Vale at Beancroft Road, Marston Mortaine, *Bedfordshire Archaeology*, **23**
- Silver, IA, 1969 The ageing of domestic animals, in D Brothwell and ES Higgs (eds), *Science in Archaeology*, London, Thames and Hudson

Slowikowski, AM, 1995 Pottery Studies in Bedfordshire, in R Holgate (ed) *Chiltern Archaeology, Recent Work: A Handbook for the Next Decade*, 153-157, Dunstable

Slowikowski, AM, and Dawson, M, 1997 An Early Roman Period Pottery Kiln at Warren Villas Quarry, Upper Caldecote, Bedfordshire, *Journal of Roman Pottery Studies*, 6, 37-49

Smith, W, and Moffett, L, (nd) *Crops and weeds from the Saxon and Medieval settlements at Stratton, Bedfordshire*, unpublished report

Stace, C, 1997 *New Flora of the British Isles*, second edition, Cambridge University Press

Steadman, S, 1999 A later Neolithic and Bronze Age mortuary complex and Iron Age settlement at the Bunyan Centre, Bedford, *Bedfordshire Archaeol*, 23, 2-31

Swann, VG, 1984 *The Pottery Kilns of Roman Britain*, RCHM, Supplementary Series: 5, HMSO

Thompson, I, 1982 *Grog-tempered 'Belgic' Pottery of South-Eastern England Parts I, II & III*, BAR British Series, 108

Von den Driesch, A, 1976 *A guide to the measurement of animal bones from archaeological sites*, Harvard University Press

Ward, C, 1999 *Iron Age and Roman Piddington: The Roman Ceramic & Stone Building Materials 1979-1998*, Upper Nene Archaeological Society, 4

Webster, P, 1996 *Roman Samian Pottery in Britain*, Practical Handbook in Archaeology 13, Council for British Archaeology, York

Williams, JH, Shaw, M, and Denham, V, (eds), 1985 *Middle Saxon Palaces at Northampton*, Northampton Development Corporation Monog, 4

Wilson, B, Grigson, C, and Payne, S, (eds), 1982 *Ageing and sexing of animal bones from archaeological sites*, BAR British Series, 109

Wilson, DM, (ed), 1976 *The Archaeology of Anglo-Saxon England*, Cambridge

Woodward, A, and Hill, JD (eds), 2002 *Prehistoric Britain: The Ceramic Basis*, Prehistoric Ceramic Research Group Occasional Publication, 3

Maps

SSEW 1983 *Soils of England and Wales*, Sheet 3, Soil Survey of England and Wales

APPENDIX 1

Summary of features

Abbreviations

F flint; P pottery; T tile; Br brick; FC fired clay; G glass; Sg slag; B bone; S shell

LBA late Bronze Age; EIA/MIA/LIA early/middle/late Iron Age; ER early Roman; >2nd C, Roman 2nd C AD or later; <2nd C, Roman 2nd C AD or earlier; e/m/l, early middle/late; ES early Saxon

r recut; m recovered during machining; u/s unstratified; 222 related sections

Area 1, the prehistoric henge and barrow

| Context no. | Feature type | Comments | Finds | Date of pottery | Date of feature |
|--|------------------------------|---|-------|-----------------|-----------------|
| 1 | Topsoil | | F | | |
| 2 | Subsoil | | | | |
| 3 | Natural substrate | | | | |
| 4 [5] | Pit/posthole | | | | Undated |
| 6 [7] | Pit | | | | Undated |
| 8 [9] | Furrow | | | | Medieval |
| 14 [15] | Posthole | | | | Undated |
| 16 [17] | Posthole | | | | Undated |
| 18 19 [20] 255 256 [258] 266 267 [268] 277 [278] 281 [282] 326 [327] | Ditch | Six sections: [20], [257], [268], [278], [282] (terminal) and [327] | | | Saxon? |
| 27 [28] | Pit | | | | Undated |
| 29 [30] | Posthole | | | | Undated |
| 31 [32] | Posthole | | | | Undated |
| 33 45 46 47 48 49 52 53 54 [34] | Henge ring ditch (Section C) | | F | | Bronze Age |
| 35 [36] | Posthole | | | | |
| 37 38 39 [40] 148 | Ditch | Two sections: [40] and [150] (terminal) | | | |