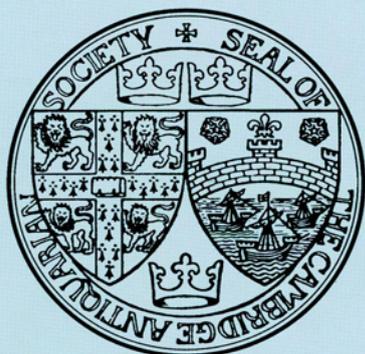

Proceedings of the Cambridge Antiquarian Society

(incorporating the Cambs and Hunts Archaeological Society)

Volume XCVII
for 2008



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Cambridge Antiquarian Society**

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**Volume XCVII
for 2008**

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Excavation of a Middle Iron Age enclosure at Bushmead Road, Eaton Socon, Cambridgeshire

Daniel Stansbie

with contributions by Rebecca Devaney, Denise Druce,
Elizabeth Stafford, Ruth Shaffrey and Lena Strid

Excavation by Oxford Archaeology, on behalf of CgMs Consulting (acting for George Wimpey North Thames), at Bushmead Road, Eaton Socon, Cambridgeshire, revealed a Middle Iron Age enclosure with associated ditches and pits. The enclosure represents the remains of a small settlement, probably on the periphery of the larger settlement recorded to the north. A small assemblage of pottery and animal bone was recovered. Environmental evidence suggests that the inhabitants of the enclosure practised mixed farming in an open landscape.

Introduction

Site location and geology (Fig. 1)

Work in advance of development at Bushmead Road was carried out by Oxford Archaeology (OA) between July and August 2006, on behalf of CgMs Consulting (acting for George Wimpey North Thames). The development site comprises an area of c. 1.146 hectares, located in west Eaton Socon at NGR TL 164 593. The site is bounded to the north by Bushmead Road, to the east by properties fronting Bushmead Road, by Bushmead Infants School to the south and by the A1 to the west. The site is located on relatively flat ground, at a height of approximately 31m OD. The underlying geology of the area is 1st-terrace river gravels, overlying grey mudstones with infrequent stone bands (British Geological Survey 1:50,000 series, Sheet 187).

Archaeological and historical background

Earlier prehistoric

The only evidence of Palaeolithic activity from St Neots is a single flint axe (CB14470). Although this artefact was probably redeposited in the river terrace gravels, it may indicate activity near the site. Evidence for Neolithic activity is also scarce, comprising a handful of flint tools from Eaton Socon (CB01919) suggesting a Neolithic presence, although this may have been transitory. Bronze Age evidence is restricted to a single bronze adze from Eaton ford (CB00407), again suggesting not very extensive activity in this period.

Later prehistoric

A ditch containing Iron Age pottery was found during house construction in 1962, c. 200m north of the site. Aerial photographs taken during the 1990s revealed cropmarks on the western side of the A1 (BHER 16781). A further enclosure with entrance, associated with four early Iron Age roundhouses, was found during the construction of the A1; these were overlain by a group of Late Iron Age ditches (CB00370; English Heritage NMR Excavation Index for England).

Roman

First and third century AD pottery, glass, coins and a trumpet brooch were found c. 200m to the north of the site. In addition a rectangular aisled building, and a number of pits containing pottery, animal bone and metal slag were found during the construction of the A1 (CB00370; English Heritage NMR Excavation Index for England). Further aerial photography revealed cropmarks of sub-rectangular and curvilinear enclosures c. 500m to the north-west of the site (BHER 8572). Unfortunately these remain undated, along with further cropmarks to the west and south-west of the site.

Saxon and medieval

The site is located to the west of the Saxon settlements of Eaton Socon and St Neots and would probably have been put to agricultural use during this period. During the medieval period the site would probably have been within the agricultural holdings of Eaton Socon. However, no Saxon or medieval material is recorded within the vicinity of the site.

Post-medieval

The Eaton Socon enclosure map of 1799 shows the site as part of a field. By 1884 the first edition Ordnance Survey map shows the site within a larger field and with part of Bushmead Road running through its north-eastern corner. The OS 1:2500 map shows that by 1970 the original Bushmead School and playing fields had been constructed on the site. Episodic

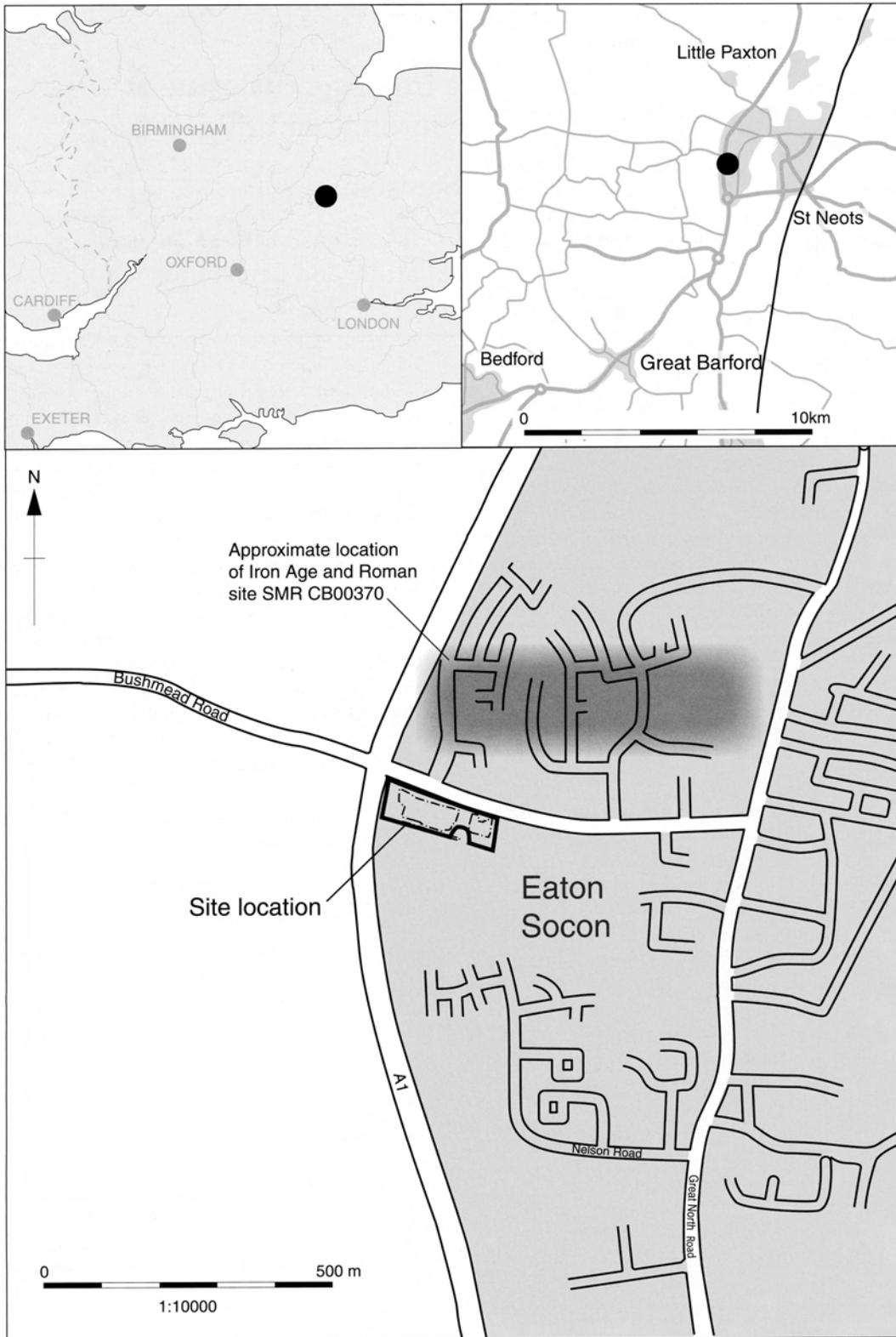


Figure 1. Site location.

redevelopment has occurred around the site during the last three decades of the 20th century.

Excavation methodology

The development site, comprising two areas (A and B; see Fig. 2), was stripped of topsoil and subsoil down to the archaeological horizon, using a 360° tracked excavator fitted with a toothless ditching bucket. Features were hand-cleaned and planned, and a sample were investigated. This comprised 50% of discrete features and a maximum of 25% of linear features. Environmental samples were taken from features deemed to have good potential for environmental investigation. All recording was carried out according to OA guidelines (Wilkinson 1992).

The Middle Iron Age settlement (Figs 2 & 3)

General summary

Archaeological evidence recovered from the site at Bushmead Road indicated the presence of settlement during the Middle to Late Iron Age (400–1BC). In area A, a partially exposed ditch (1032) probably represented the remains of a sub-rectangular enclosure orientated NE/SW, with a north-east facing entrance. Just inside the entrance was an isolated pit (1025) containing pottery, which was the only evidence for contemporary activity within the enclosure. Abutting enclosure 1032 at its north-western corner was a ditch (1033) orientated north-east/south-west, which ended in a rounded terminus at the point where it abutted

the enclosure ditch and was cut away by a substantial pit (1027) at its north-eastern end. Approximately 60m to the south-east of enclosure 1032, in area B, was a group of isolated features probably related to the settlement. These comprised a short stretch of ditch (5016), recut as 5009, which ended in a rounded terminus to the south-east and ran beyond the limit of the excavation to the north-west. Other features identified included a tree-throw hole (5003) in the north-western corner of area B and an isolated pit (5005) at its eastern end.

Area A

Enclosure 1032 was only partially exposed within the limits of the excavation. However, the exposed part suggests that it comprised a sub-rectangular enclosure, orientated north-east/south-west and measuring 42.80m NW/SE by at least 28.20m SW/NE. A gap, defined by two opposed termini in the north-eastern side, formed an entrance 2.80m in width. The ditch averaged 1.41m in width by 0.59m in depth and varied in profile, being V-shaped, with a narrow flat base and steeply sloping sides on the north-western side and more U-shaped, with a wider more rounded base and concave sides on the north-east. The ditch fills (1046 and 1045) comprised silty clay, with moderate inclusions of gravel. The north-western arm of the enclosure ditch contained a tertiary upper fill (1044), averaging 0.71m in width by 0.26m in depth and consisting of silty clay, with frequent inclusions of gravel. The fills contained substantial deposits of Middle Iron Age pottery, including parts of four slack-shouldered jars, and animal bone, including cattle and sheep/goat.

Pit 1025 was sub-circular in plan, U-shaped in profile and

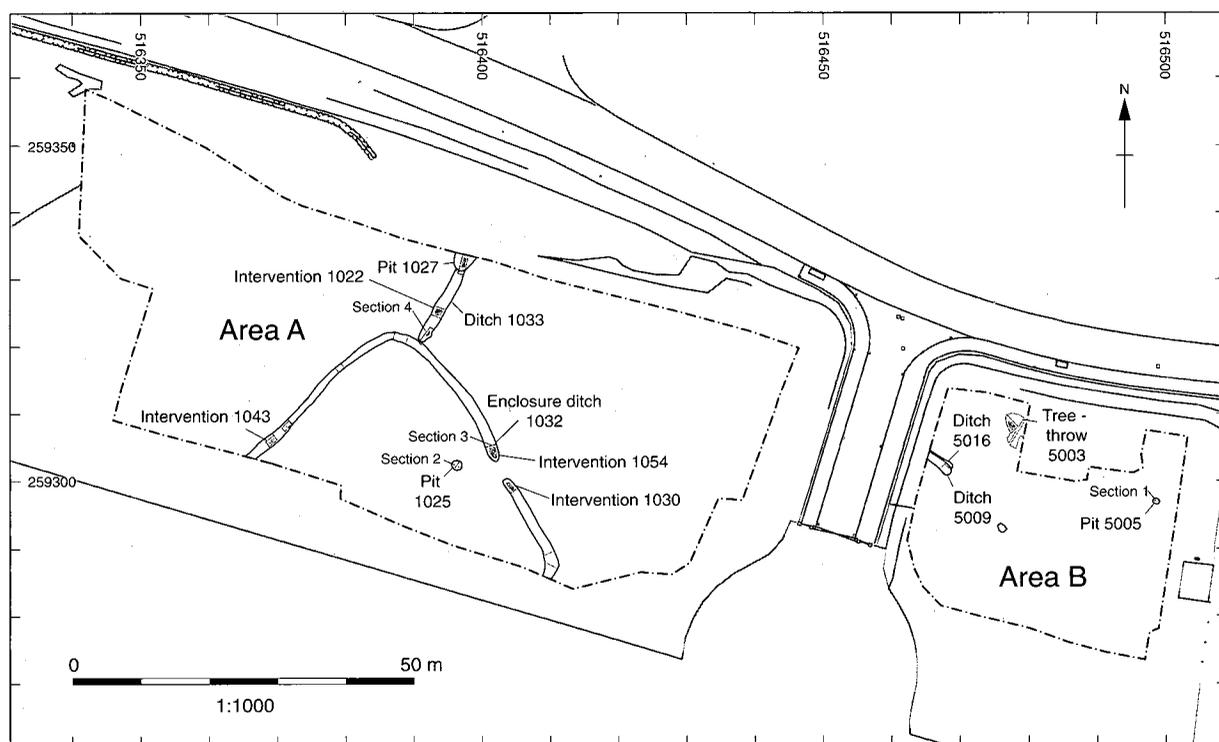


Figure 2. Middle Iron Age enclosure 1032 and associated features.

measured 1.5m in diameter by 0.45m in depth. The pit fill (1026) was a silty clay, with frequent inclusions of gravel and moderate inclusions of charcoal. Finds from the pit included a substantial assemblage of Middle Iron Age pottery, including rim sherds from two slack-shouldered vessels, a small amount of animal bone, fragments of fired clay loom-weight or oven furniture and a small hammerstone or processor.

Ditch 1033 was orientated NE/SW, measured approximately 12m in length by 1.1m in width and 0.41m in depth and had a shallow irregular profile. The ditch fills (1024 and 1023) were both sandy clays, with frequent inclusions of gravel. Both fills produced a substantial assemblage of Middle Iron Age pottery, including a potentially complete slack-shouldered jar, and a substantial assemblage of animal bone, including cattle and sheep/goat.

Pit 1027 was only partially exposed within the limits of the excavation, but was probably oval in plan and measured 2.8m by 2.5m (exposed area) and 0.68m in depth. The pit was U-shaped in profile and had two fills of sandy clay (1028 and 1029), with frequent inclusions of gravel and occasional flecks of charcoal. Another possibly complete slack-shouldered jar was recovered from the primary fill, along with some body sherds of Middle Iron Age date, and the bones of cattle and sheep/goat.

Area B

Ditch 5016 was only partially exposed within the limits of the excavation, running for approximately 4m on a SE/NW axis, from the north-western edge of the excavation, before ending in a rounded terminus. In profile the ditch had a narrow flat base and steeply sloping sides and it was filled by a sandy clay (5017), with frequent inclusions of gravel, but no finds. Cutting ditch 5016 was ditch 5009, which followed the same alignment and also ended in a rounded terminus. It measured approximately 4m in length by 1.31m in width and 0.34m in depth with a rounded profile. The ditch fills (5010 and 5011) comprised sandy clay, with frequent inclusions of gravel. The upper fill (5010) produced a small assemblage of pottery, including rim sherds from a slack-shouldered jar/bowl, and some animal bone.

Pit 5005 was sub-circular in plan, measured 0.96m in diameter by 0.06m in depth and had concave sides and a flat base. The pit fill (5006) comprised a silty sand, with frequent inclusions of charcoal. A small assemblage of Middle Iron Age pottery and some charred plant remains including wheat and barley were recovered from the fill.

Tree-throw 5003 was sub-circular in plan, measured 3.8m in length by 2.5m in width and 0.3m in depth and had a flat base, with concave sides. The single fill comprised a silty clay, with frequent moderate inclusions of gravel. A substantial assemblage of Middle Iron Age pottery and animal bone was recovered from the fill.

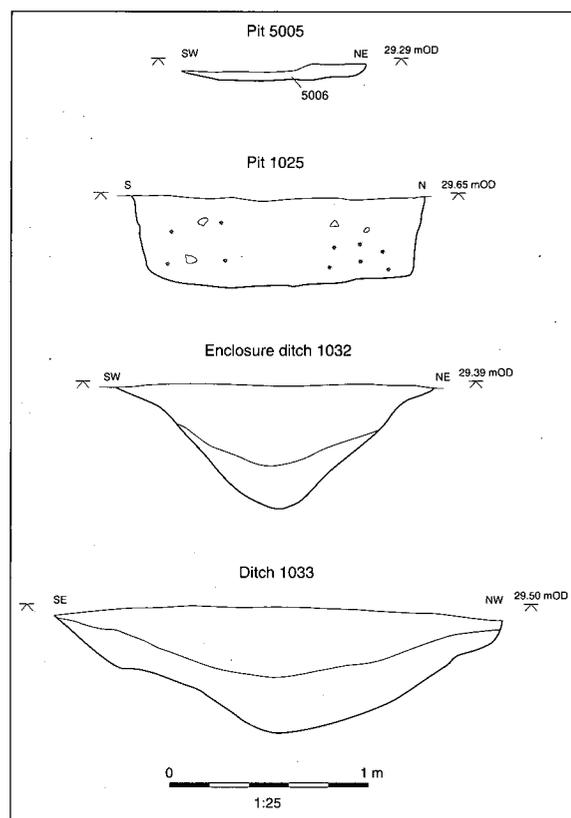


Figure 3. Sections through enclosure ditch 1032, ditch 1033, and pits 1025 and 5005

Finds

Middle Iron Age pottery

Daniel Stansbie

Introduction

The excavations at Bushmead Road produced a small assemblage of 533 sherds, weighing 2415 g. The pottery was recovered from a sub-rectangular enclosure and associated ditch, several pits and tree-throws and a ditch terminus; the average group contained 30 sherds and weighed 134 g. The assemblage comprises hand-made pottery, some of which is decorated with scoring, with vessels exclusively of the slack shouldered jar/bowl type. Such material is dated to between the 4th/5th centuries BC and the 2nd century BC by Knight (2002, 133–4); although he notes that it may have continued in use into the 1st century AD in some parts of the region (*ibid.*, 134). However, the absence of any so-called 'Belgic' (grog-tempered and wheel thrown) material from the assemblage suggests that occupation did not continue beyond the end of the 1st century BC. The material from Bushmead Road can, therefore, be placed within the period 400BC–1BC with some confidence. Following a discussion of the methodology employed and the condition of the material, this report discusses the pottery in the context of the site and then goes on to consider

the assemblage in its local and regional context.

Methodology

The assemblage was sorted macroscopically into fabric groups based on surface appearance and major inclusion types. A binocular microscope at x20 magnification was employed to aid fabric identification where necessary. The pottery was recorded according to standard OA procedures (Booth 2004) and in line with PCRG (1997) recommendations.

Condition

With an average sherd weight of 4.5g the pottery was in moderate condition, with surfaces and decoration surviving reasonably well.

Fabrics

Five different fabrics are represented in the assemblage. There is a fabric with shell and ironstone inclusions (SI2); a sandy and calcareous fabric (AC2); a shelly fabric with clay pellets (SP4); a sandy fabric with mica (AM2), and a shelly fabric with limestone (LS3). Of these the sandy and calcareous fabric (AC2) is most common, contributing 51% by weight, with the shelly fabric (SP4) contributing 23% and the other three contributing minor amounts, of no more than 10% by weight. All five fabrics are likely to be of local origin, with fabric SI2 being identical to a fabric common on sites along the A421 Great Barford Bypass (Webley 2007) and described in the Bedfordshire fabric type series, based at Albion Archaeology, under code F37. Fabric SP4 probably derives from Jurassic (Oxford) clay deposits, which were commonly used for the manufacture of pottery in the region, from the early Iron Age until the post-medieval period. The remaining three fabrics are probably specific to the site, or its immediate area.

Table 1. Middle Iron Age pottery

Fabric Type	Sherd count	Sherd %	Weight (g)	Weight %
AC2	366	68.6	1225	50.7
AM2	62	11.6	198	8.1
LS3	25	4.6	232	9.6
SI2	16	3	212	8.7
SP4	64	12	548	22.6
Total	533	100	2415	100

Fabric descriptions

SI2: Black to brown surfaces, with a grey core and a sandy texture. The fabric contains a moderate frequency of fine shell, average size c. 0.1–1.0mm and frequent red iron ore, average size c. 0.5–2.5mm, which is clearly visible on the surface of the sherds.

AC2: Black to brown surfaces, with a black core and a sandy texture. The fabric contains sparse fine to moderate calcareous inclusions, average size c. <1mm and frequent sub-rounded quartz grains, average size c. <1mm.

SP4: Brown to orange surfaces, with a buff/orange core and a slightly soapy texture. The fabric contains a common frequency of coarse fossil shell, average size, c. 0.2–3.0mm and occasional clay-pellets, average size c. <1.0mm.

AM2: Black to brown surfaces, with a black core and a medium sandy texture. The fabric contains common silver mica and fine sub-rounded quartz grains, average size c. <1.0mm.

LS3: Brown to black surfaces, with a brown/grey core and a soapy texture. The fabric contains common inclusions of moderate shell, average size c. 0.1–2.0mm and occasional coarse sub-angular lumps of limestone, average size c. 2.0–5.0mm.

Surface treatment

Scoring occurs on sherds from two contexts: the fill of pit 1025 and the north-west facing terminus of the entrance to enclosure 1032, representing 3.37% of the assemblage by sherd count and 14.4% by weight. Scored body sherds from pit 1025 occur in all fabrics, apart from the sandy and calcareous material (AC2). In addition scoring is present on a rim sherd from a jar/bowl in sandy and micaceous fabric (AM2).

Vessel form

Rim sherds are present from nine different vessels, all of which are of the slack-shouldered jar/bowl type; rim and shoulder sherds from two of these vessels suggest a slightly more globular profile. Three of the slack-shouldered jars were potentially complete when deposited, rim sherds from these vessels being associated with large groups of body sherds in the same fabric. Such vessels are typical of the Middle Iron Age in the region (Knight 2002, fig. 12.3; Webley 2007).

Decoration

Apart from the scored vessels described above, the vessels were largely undecorated. The only exception was a slack-shouldered jar with fingertip impressions on the top of the rim.

Distribution

Fabrics of sandy and calcareous type (AC2) were distributed fairly evenly between the ditch of enclosure 1032, ditch 1033, ditch 5009 and pits 5005 and 1027, although there was a particularly strong concentration in ditch 1033. There do not appear to be any strong patterns in the distribution of the remaining fabrics, although sandy and micaceous fabrics (AM2) are absent from features other than enclosure ditch 1032 and pit 1025, which also contains a relatively low proportion of sandy and calcareous fabric (AC2). Given the ubiquity of sandy and calcareous fabrics on the site, this gives the assemblage from pit 1025 a relatively 'exotic' character, and this coupled with its position close to the entrance of the enclosure may indicate some kind of structured deposition within the pit. Rim sherds were largely concentrated in the fills of enclosure ditch 1032 and ditch 1033 and were relatively scarce in the tree-throw holes and pits.

Worked stone

Ruth Shaffrey

A single small hammerstone or processor (SF 3), with percussion marks on one side resulting from pounding, is the only identifiable piece of utilised stone recovered. This was found in the fill of pit 1025, just inside the entrance to the Middle Iron Age enclosure (1032).

Ceramic building material

Daniel Stansbie

A total of 12 fragments of undiagnostic and/or post-medieval fired clay and CBM weighing 1268 g were recovered from the excavations. Some of this material was recovered from the top of the fills of enclosure ditch 1032 and ditch 1033; the remainder came from the modern topsoil.

Fired clay

Daniel Stansbie

Seven fragments of fired clay, weighing 896 g, were recovered from the fill of pit 1025, just inside the entrance to enclosure 1032. This material possibly represents parts of a loomweight or oven furniture, in a sandy and shelly fabric. A further 13 fragments of very abraded material weighing 197 g were recovered from the fills of enclosure 1032 and pit 1025.

Environmental evidence**Animal bone (Table 3)**

Lena Strid

The animal bone assemblage from the site comprises 900 refitted fragments (922 g) deriving from ditches and pits dated to the Middle Iron Age. The bones were recovered through hand collection and from

Table 3. Anatomical distribution of all animal species, including NISP, MNI and weight. Skeletal element used for MNI is marked with an asterisk.

	Cattle	Sheep/ goat	Sheep	Pig	Horse	Red deer	Deer	small mammal	medium mammal	large mammal	Indeterminate
Antler							1				
Skull	1	1									
Mandible	7	11			1					3	
Loose teeth	15	37	3		2						
Atlas											
Axis	1										
Vertebra									2	5	
Sacrum					1						
Rib								1	1	7	
Scapula	2				1						
Humerus	4	3			1						
Radius	6*	2									
Ulna	1										
Carpal bones											
Metacarpal	1	6									
Pelvis	2			1							
Femur	5				1					1	
Patella											
Tibia	2	3			2*						
Fibula											
Calcaneus	1										
Astragalus		1			1						
Tarsal bones											
Metatarsal	3	5*	1			1					
Phalanx 1		3									
Phalanx 2		1									
Phalanx 3											
Indet. metapodial	1	1			1						
Long bone								1	63	17	
Indeterminate											655
Total (NISP)	52	78	4	1	11	1	2	2	66	33	655
MNI	4	2	1	1	2	1					
Weight (g)	2685	248	7	16	851	92	11	<1	108	341	922

wet sieved bulk samples (processed using a 500 µm residue mesh). Almost a third of the recorded bones derive from sieved contexts, and hence this group included a large number of small, unidentifiable fragments. A full record of the assemblage documented in a *Microsoft Access* database along with a full description of the methodology employed can be found with the site archive.

The assemblage

Of the 900 refitted fragments, only 143 (15.9%) could be determined to species (see Table 2). The presence of dog is evidenced only by gnaw marks on a cattle metacarpal.

The small assemblage is dominated by bones from cattle and sheep/goat, which is consistent with other sites in the vicinity (Hambleton 1999, 46–7; Maltby 1996, 20). Only one pig bone was recovered. Assuming both cattle and sheep/goat were eaten when slaughtered, cattle would have been the major meat provider owing to a larger body size. Judging from epiphyseal fusion (n: 16 for cattle, 4 for sheep/goat) and tooth wear (n: 3, 5) most cattle and sheep/goat were adult or sub-adult when slaughtered. The horse remains comprise disarticulated bones from adult horses.

The poor surface preservation of the bones (83% were grade 3) meant no butchery marks or pathologies could be discerned. Only three bones were measurable and these indicate that sheep/goat and horse were of average size for the time period (ABMAP database). Two bones from deer (antler and metapodial fragments, the latter from red deer) may represent the importation of raw material such as skins and antler, but it is probably more likely to reflect local hunting of a wild resource.

Charred plant remains

Denise Druce

Introduction

Six environmental bulk samples of between 20 and 40 litres were processed and an assessment made of their potential for the preservation of charred plant remains (CPR). Five of the samples (one from pit 1025, three from enclosure ditch 1032 and one from ditch 5016) contained very sparse CPR. However, the sixth sample, from the fill of pit 5005, contained very abundant charred cereal grains, which were analysed.

Results (Table 4)

The sample was very rich in whole cereal grains and indeterminate cereal fragments. The dominant determinate cereal grain was *Triticum* sp. (wheat), and an additional third of the cereal assemblage exhibited the linear compressions characteristic of a glumed variety such as *Triticum spelta* (spelt wheat). A number of grains (c. 35) exhibited a very high frontal ridge characteristic of *Triticum dicoccum* (emmer wheat), and approximately 30 grains were either short and plump with sunken sides, characteristic of *Triticum aestivum* (bread wheat), or exhibited a cellular-like surface pattern, an additional criterion recently put forward

by J. Huntley for the identification of bread wheat (J. Huntley pers comm). The sample also contained numerous *Hordeum vulgare* (barley) grains, of which many were hulled and asymmetric, suggesting the cultivation of the hulled six-rowed variety. A number of *Avena* sp./large Poaceae (oat/large grasses) were also recorded, although the presence of a single *Avena fatua* floret base suggests that the possible oat grains represent the wild variety.

Chaff remains were relatively sparse but included *Triticum spelta* glume bases and spikelet forks, and a single *Hordeum vulgare/Secale cereale* (barley/rye) rachis fragment. Numerous detached cereal embryos were present in the sample, which may represent spoilt grain or malting.

Charred weed seeds of typical arable plants, such as *Chenopodium album* (fat-hen) and *Bromus* spp. (bromes), which were probably harvested along with the crop, made up a very minor component of the CPR assemblage.

Discussion and conclusion

The evidence is consistent with other Iron Age charred cereal assemblages from the region. Spelt wheat is considered the chief cereal crop of the Iron Age in southern Britain, and as such its dominance is to be expected. Although spelt wheat appears to have superseded emmer wheat by the Early Iron Age, the latter is often recorded at sites in neighbouring Bedfordshire (Druce 2007; Pelling 2007), and as such is likely to represent the remains of a relic crop. The early cultivation of possible bread wheat at Bushmead Road is also consistent with similar records from Great Barford, Bedfordshire (Druce 2007) and Stansted, Essex (Carruthers forthcoming), and may represent a regional trend. Although records for the cultivation of barley are less common, this is also considered to have been an important Iron Age crop in the region (Robinson 2005).

The relatively sparse cereal chaff and weed seed assemblage suggests that the grain was fully processed. The evidence for partially germinated grain suggests that part of the assemblage is made up of either spoilt grain, which was subsequently destroyed, or represents brewing activity at the site.

Land and freshwater mollusca

EC Stafford

Introduction

A total of 17 samples were taken during excavation for the retrieval of molluscan assemblages. Of these, 12 samples were examined from three interventions through enclosure ditch 1032, including both termini (intervention 1030) and (intervention 1054). Three samples were examined from ditch 1033 (intervention 1022), and a further two from pit 1027 which truncated 1022. All features are dated to the Middle Iron Age. Overall preservation of shell was moderate to poor in the 17 samples examined, averaging only 26 identifiable individuals per kilogram of sediment. Despite this, however, some general observations can

	Context No	5006
	Sample	4
	Feature	Fire pit
	Sample size - Litres	30
Charred Cereal Grain		
<i>Triticum</i> sp.	Wheat	460
<i>Triticum</i> cf. <i>spelta</i>	cf. Spelt wheat	130 (6 ger)
<i>Triticum</i> cf. <i>dicoccum</i>	cf. Emmer wheat	35
<i>Triticum</i> cf. <i>aestivum</i>	cf. Bread wheat	30
<i>Hordeum vulgare</i>	Barley undiff.	80 (45 asym/30 st)
<i>Hordeum vulgare</i>	Barley hulled	95 (80 asym/5 st)
<i>Avena</i> sp./large Poaceae	Oats/large grasses	60
Cerealia indet.	Indeterminate grains	250
	Total Cereal Grain	1140
Cerealia indet. frag. $\leq 1/2$ grain		1000s
Cerealia indet. frag. $<1/4$ grain		1000s
Charred Cereal Chaff		
<i>Triticum spelta</i>	Spelt wheat glume base	13
<i>Triticum spelta</i>	Spelt wheat spikelet forks	8
<i>Hordeum/Secale</i>	Barley/Rye rachis frag.	1
<i>Avena fatua</i>	Wild oat floret base	1
Culm nodes		1
	Total Chaff	24
Glume bases/fragments		61
Detached embryos		205
Charred Weed Seeds		
<i>Chenopodium album</i>	Fat-hen	11
Caryophyllaceae	Pink family	1
<i>Centaurea</i> sp.	Knapweeds	1
<i>Polygonum aviculare</i>	Knotgrass	4
<i>Rumex obtusifolius</i>	Broad-leaved Dock	1
<i>Rumex acetosa</i>	Common Sorrel	1
<i>Rumex acetosella</i>	Sheep's Sorrel	2
<i>Brassica</i> sp.	Cabbage/mustard family	1
Fabaceae Melilotus-type	Melilots	2
<i>Plantago lanceolata</i>	Ribwort Plantain	1
<i>Veronica</i> spp.	Speedwells	1
Poaceae <2mm	Grass family	6
Poaceae 2-4mm	Grass family	3
<i>Bromus</i> spp.	Bromes	22
Indet CPR		6
	Total Charred Weed Seeds	63
Other*		
Charcoal		5
Waterlogged seeds		4

Table 4. Charred Plant Remains: Context 5006. Figures given are actual counts except * where numbers are scored on a scale of 1–5 where 1=<5 items, 2=5–25, 3=25–50, 4=50–100, and 5=>100 items.

ger = germinated grains, asym = asymmetric grains, and st = straight grains

be made regarding the local environment of the site during the period of occupation.

Method

All samples were processed at OA. One kilogram of sediment from each sample was disaggregated in water, floated and sieved onto 0.5mm mesh and then air-dried. The flots were scanned under a low power binocular microscope at x10 and x20 magnification

and whole shells and apical fragments were identified and counted. The fine residues from the samples were then rapidly scanned for additional identifiable shells. Nomenclature follows Kerney (1999) and habitat information follows Boycott (1934; 1936) and Evans (1972). The shell counts are presented in Table 5.

	Ditch 1022			Pit 1027			Ditch 1030			Ditch 1054			Ditch 1043				
Sample number	7	8	9	6	5	17	16	15	14	18	19	20	21	10	11	13	12
Context number	1024	1023	1023	1028	1029	1031	1031	1031	1031	1046	1046	1045	1045	1052	1052	1044	1044
Taxa																	
<i>Carychium</i> sp.		17	30	1	3	1			10				3			5	
<i>Lymnaea</i> sp.					1								1	1			
<i>Lymnaea truncatula</i> (Müller)	9	14	2	1				8									
<i>Anisus leucostoma</i> (Millet)			1														
<i>Oxyloma/Succinea</i> sp.		1															
<i>Cochlicopa</i> sp.	3	5	2						1							1	
<i>Vertigo pygmaea</i> (Draparnaud)			1					1	2								1
<i>Pupilla muscorum</i> (Linné)								2	4				2				
<i>Vallonia</i> sp.	4	10	17	9	5	1	1	13	8	1		3	7	1		6	2
<i>Vallonia costata</i> (Müller)		2	5	1				1	1				3				
<i>Vallonia excentrica</i> (Sterki)	6	6	7	4	1		2	5	2				3			3	
<i>Vallonia pulchella</i> (Müller)		1			1			2			1						
<i>Acanthinula aculeata</i> (Müller)			1													1	
<i>Punctum pygmaea</i> (Draparnaud)	3	1	3	2	1								1				
<i>Discus rotundatus</i> (Müller)			1														
<i>Vitrea contractor</i> (Westerlund)			8														
<i>Nesovitreia hammonis</i> (Ström)	1	1	4														
<i>Aegopinella pura</i> (Alder)		1															
<i>Aegopinella nitidula</i> (Draparnaud)	1	9	4	3	1	1			1							1	
<i>Oxychilus cellarius</i> (Müller)			3						1								
Clausiliidae indet.			1													1	
<i>Cochlodina laminata</i> (Montagu)			1														
<i>Clausilia bidentata</i> (Ström)													2				
<i>Helicella itala</i> (Linné)			1	1						1							1
<i>Trichia hispida</i> (Linné)	10	28	14		7	2		3	9			4	8	2	2	4	6
<i>Cepaea/Arianta</i> sp.			1										1				
<i>Cepaea</i> sp.			+														
Minimum number of individuals	37	96	107	22	20	5	3	35	39	2	1	7	31	4	2	22	10

Table 5. Molluscan assemblages. Non-apical fragments only indicated by '+

Results

The samples from the three interventions through enclosure ditch 1032 (1030, 1054 and 1043) were broadly consistent. Preservation was particularly poor in the lower part of the profiles probably due to rapid infilling with sediment from unstable edges immediately after the feature was cut. Further up the profile, however, shell was a little more abundant. Open-country terrestrial taxa predominated, particularly the *Vallonia* and the catholic species *Trichia hispida*. Occasional specimens of *Vertigo pygmaea* and the xerophile species *Helicella itala* and *Pupilla muscorum* were also noted suggesting an open environment, probably of short-turfed grassland. The latter species may suggest patches of bare soil. Shade-demanding species were fewer comprising occasional zonitids (e.g. *Oxychilus cellarius* and *Aegopinella nitidula*), apical fragments of a Clausiliidae and a single shell of *Acanthinula aculeata*. These may be residual shells representing a former environment when conditions were more enclosed at the site, or perhaps given they generally appear within the upper parts of the profiles, the presence of ranker vegetation such as long grass growing within feature as it infilled. *Carychium* sp. was particularly numerous in fill 1031 of enclosure ditch 1032 (sam-

ple 14). Although classed as shade loving, due to its small size it often inhabits the base of long grass. Both *Carychium tridentatum* and *Carychium minimum* were noted in the samples. Although attempts to distinguish between the two by exposing the parietal fold usually resulted in shell breakage, the majority of the shells examined belonged to the latter species which, along with *Vallonia pulchella*, generally prefers wetter habitats such as damp grassland on or close to floodplains. This together with the presence of the freshwater slum species *Lymnaea truncatula* in fill 1031 of enclosure ditch 1032 (sample 15) and the slightly deeper profile suggest the south-east terminus may have held seasonal shallow water.

Ditch 1033 (intervention 1022) immediately to the north of the enclosure was somewhat shallower in profile. Overall, shell preservation was moderately better than the enclosure ditch. The basal fills contained a greater abundance of freshwater slum species, predominantly *Lymnaea truncatula*. *Anisus leucostoma* was, however, also noted, along with *Succinea/Oxyloma* species. This would be consistent with the interpretation of the feature as a drainage ditch. The terrestrial component of the assemblage was similar to the enclosure ditch although shade-

demanding and catholic species were more numerous and diverse, particularly in the upper levels of the feature (sample 9). Additional species include *Discus rotundatus*, *Vitrea contractor*, *Aegopinella pura* and *Marpessa laminata*. Again this may suggest the growth of rank vegetation as the feature infilled, or perhaps scrub or a hedge line in the vicinity. The reduction in the abundance of freshwater species as the profile shallows may suggest progressively drier conditions as the feature infilled. The two samples from pit 1027 produced sparse assemblages of similar composition to the upper fills of ditch 1033 (intervention 1022).

Discussion

Settlement layout and function

Although no evidence of buildings was encountered during the excavation, the small assemblage of pottery from the enclosure ditch and the pit, along with a small quantity of animal bone and the setting of the enclosure on a low-lying gravel terrace, leaves little doubt that this was a settlement. This settlement comprised a sub-rectangular enclosure, possibly associated with an outlying field system and a pit and ditch terminus to the east. Any evidence of occupation, including structures and shallow pits, seems to have been truncated to the point of destruction, although it is possible that such evidence survives beyond the limits of the impact of development, to the south-west. The quantity and style of the pottery (slack-shouldered vessels in locally made fabrics and an absence of vessels with burnishing or elaborate decoration), along with the relatively small size of the enclosure, the small scale of the ditch and the lack of metalwork suggests a small farmstead, possibly for a single extended kinship group, with few if any wide-ranging contacts with the outside world. However, the NE/SW orientated ditch (1033) which abuts the enclosure possibly formed part of a similar enclosure to the north, which may have been the focus for a similar kinship group. Pottery and bone evidence from the enclosure ditch and pit 1025, especially jar rims from the pit and possibly complete vessels from the enclosure ditch, suggest structured deposition. Environmental evidence, including cattle and sheep/goat bone from the enclosure ditch and the remains of charred plant remains, including wheat and barley, from a pit outside the enclosure (admittedly 90 m to the north-east), suggests a mixed farming economy, with red deer antler and metapodial fragments indicating that hides were being worked. Molluscan evidence indicates that the immediate environment of the site was relatively open, with short-turfed grassland and rank vegetation in the ditches, while the site was in use. After the ditches filled up, a less open environment with some scrub may have developed.

The settlement in the wider landscape

The site may have been part of a larger Middle Iron Age settlement complex lying immediately to the

north. A large ditch and roundhouses, along with a ploughed out earthwork of Iron Age date, is recorded as lying c. 200m to the north of the site and this settlement apparently continued in use into the Roman period (CB00370; English Heritage NMR Excavation Index for England). However, it has proved difficult to find information on this site and the relationship between the two settlements, whether part of a single complex, or distinct farmsteads, is therefore difficult to elucidate. Recent work on the Iron Age of Britain has noted the expansion of settlement, involving the infilling of gaps around existing settlement and the settlement of larger areas of landscape in the Middle Iron Age (Hill 2007, 23). The lack of evidence for activity earlier than the Middle Iron Age at Bushmead Road suggests that the enclosure could have been part of this phenomenon. The nature and development of the settlement to the north almost certainly has a bearing on the question of why the enclosure at Bushmead Road was abandoned at the end of the Middle Iron Age. Possibly settlement shifted to the north around the beginning of the first century AD, for reasons to do with wider social and economic shifts at this time, and the continuity of the former site into the Roman period would seem to bear this out. The enclosure was similar to enclosures of the same date from Little Paxton, where a sub-rectangular enclosure was dated to the earlier Middle Iron Age, two others were dated to the later Middle Iron Age and one was dated to the Late Iron Age, although the latter three enclosures appeared to be more firmly tied into a system of enclosures than was the case with Bushmead Road (Jones 2000, 134–7). Another similar enclosure was excavated at Prickwillow Road, Ely, where the excavators argue that it represented a ‘small enclosed farmstead common in the eastern counties and elsewhere’ (Atkins and Mudd 2003, 49). Despite the limited scale of the evidence, the settlement may therefore be seen as typical for its region.

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Bibliography

ABMAP (Animal Bone Metrical Archive). <http://ads.ahds.ac.uk/catalogue/specColl/abmap/index.cfm>. Accessed 24 Jan 2007.

- Atkins, R & A Mudd 2003 'A Romano-British settlement at Prickwillow Road, Ely, Cambridgeshire, excavations 1999–2000', *PCAS* 92: 5–56
- Booth, P 2004 *Oxford Archaeology Roman pottery recording system: an introduction*. Unpublished, Oxford Archaeology
- Boycott, A E 1934 'The habitats of land mollusca in Britain', *Journal of Ecology* 22: 1–38
- Boycott, A E 1936 'The habitats of freshwater mollusca in Britain', *Journal of Animal Ecology* 5: 116–86
- Carruthers, W forthcoming 'The charred and mineralised plant remains' in Stansted Airport, Southgate-BAA SG 03
- Druce, D 2007 'The charred plant remains'. In J Timby, R Brown, A Hardy, S Leech, C Poole and L Webley, *Settlement on the Bedfordshire Claylands: Archaeology along the A421 Great Barford Bypass*. Oxford: Bedfordshire Archaeology Monograph 8, 365–82
- English Heritage NMR Excavation Index for England. <http://ads.ahds.ac.uk/catalogue/search/fr.cfm>. Accessed 30 Jan 2007.
- Evans, J G 1972 *Land Snails in Archaeology*. London: Seminar Press
- Evans, J G 1984 'Stonehenge—The environment in the late Neolithic and early Bronze Age and a beaker burial', *Wiltshire Archaeological and Natural History Magazine* 78: 7–30
- Hambleton, E 1999 *Animal Husbandry Regimes in Iron Age Britain: a Comparative Study of Faunal Assemblages from British Iron Age Sites*. Oxford: BAR Brit Ser 282
- Hancock, A 2003 'Little Paxton pottery'. In A Gibson (ed.), *Prehistoric Pottery: People and Purpose*. Oxford: BAR Int. Ser. 1156, 71–110
- Hill, J D 2002 'Just about the potter's wheel? Using, making and depositing middle and later Iron Age pots in East Anglia'. In A Woodward and J D Hill (eds), *Prehistoric Britain: the Ceramic Basis*. Oxford: PCRG Occasional Publication 3, 143–60.
- Hill, J D 2007 'The dynamics of social change in later Iron Age eastern and south-eastern England c. 300BC–AD43'. In C Haselgrove & T Moore (eds), *The Later Iron Age in Britain and Beyond*. Oxford: Oxbow Books, 16–40
- Hill, J D & L Horne 2003 'Iron Age and early Roman pottery'. In C Evans, *Power and Island Communities: Excavations at the Wardy Hill Ringwork, Coveney, Ely*. Cambridge: EAAReport 103, 145–84
- Jones, A 2000 'A river valley landscape: excavations at Little Paxton Quarry, Cambridgeshire 1992–6: an interim summary'. In M Dawson (ed), *Prehistoric, Roman and Post-Roman landscapes of the Great Ouse Valley*. York: CBA Res Rep 119, 131–44.
- Kerney, M P 1999 *Atlas of the Land and Freshwater Molluscs of Britain and Ireland*. Colchester: Harley Books
- Knight, D 2002 'A regional ceramic sequence: pottery of the first millennium BC between the Humber and the Nene'. In A Woodward & J D Hill (eds), *Prehistoric Britain: the Ceramic Basis*. Oxford: Prehistoric Ceramics Research Group Occasional Publication 3, 119–42
- Maltby, M 1996 'The exploitation of animals in the Iron Age: the archaeozoological evidence'. In T C Champion & J R Collis (eds), *The Iron Age in Britain and Ireland: Recent Trends*. Sheffield: J R Collins Publications, 17–27
- PCRG 1997 *The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication*. Oxford: Prehistoric Ceramics Research Group Occasional Publications 1 and 2
- Pelling, R 2007 'Charred plant remains'. In L Webley, J Timby & M Wilson, *Fairfield Park, Stotfold, Bedfordshire: Later Prehistoric Settlement in the Eastern Chilterns*. Oxford: Bedfordshire Archaeology Monograph 7, 117–28
- Robinson, M A 2005 'Macroscopic plant and insect remains'. In M Dawson, *An Iron Age Settlement at Salford, Bedfordshire*. Bedford: Bedfordshire Archaeology Monograph 6
- Stace, C 1997 *New Flora of the British Isles*, 2nd edn. Cambridge: Cambridge University Press
- Webley, L, 2007 'Later prehistoric pottery'. In J Timby, R Brown, A Hardy, S Leech, C Poole and L Webley, *Settlement on the Bedfordshire Claylands: Archaeology along the A421 Great Barford Bypass*. Oxford: Bedfordshire Archaeology Monograph 8, 365–82
- Wilkinson, D (ed) 1992 *Oxford Archaeological Unit Field Manual*. Unpublished, Oxford Archaeology
- Webley, L 2007 'Later prehistoric pottery'. In J Timby, R Brown, A Hardy, S Leech, C Poole and L Webley, *Settlement on the Bedfordshire Claylands: Archaeology along the A421 Great Barford Bypass*. Oxford: Bedfordshire Archaeology Monograph 8, 219–36
- Wilkinson, D (ed.) 1992 *Oxford Archaeological Unit Field Manual*. Unpublished, Oxford Archaeology