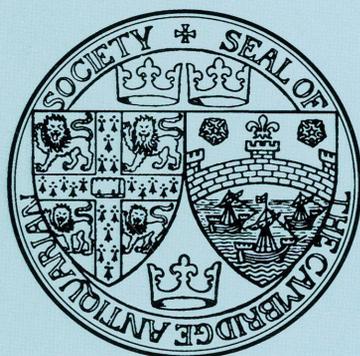

Proceedings of the Cambridge Antiquarian Society

(incorporating the Cambs and Hunts Archaeological Society)

Volume XCV
for 2006



**Proceedings of the
Cambridge Antiquarian Society**

(incorporating the Cambs and Hunts Archaeological Society)

**Volume XCV
for 2006**

Editor Alison Taylor

Published by the Cambridge Antiquarian Society 2006

ISSN 0309-3606

Officers & Council, 2005–2006

President

Nicholas James DipEA, MA, PhD

Vice-Presidents

Derek Booth PhD, MIBiol, CBiol

Tony Kirby MA

Honor Ridout MA

Disney Professor of Archaeology

Professor Graeme Barker MA, PhD, FBA, FSA, MIFA

Curator of the University Museum of Archaeology and Anthropology

Professor David Phillipson MA, PhD, FSA, FRGS, FBA

County Archaeologist

Adrian Tindall MA, MIFA

Ordinary Members of Council

Liz Allan BA, MA

Alison Dickens BA, MIFA

Mark Hinman BA

Anne Holton-Krayenbuhl BA

Victor Lucas BA, CEng

Philip Saunders BA, DPhil

(Hunts Loc Hist Soc)

Andrew Westwood-Bate CEng, FINucE

Secretary

Janet Morris BA

21 High Street, West Wickham, Cambridge CB1 6RY

Tel: 01223 290863

email: jmmorriss@jmmorris.plus.com

Treasurer

Cyril Pritchett MA

66 Gough Way

Cambridge CB3 9LN

Registrar

Valory Hurst

43 South End, Bassingbourn

Royston, Hertfordshire SG8 5NL

email: registrar.cas@btinternet.com

Editor

Alison Taylor BA, MIFA, FSA

40 Hertford Street

Cambridge CB4 3AG

Tel: 01223 500431

email: alison.taylor@archaeologists.net

Conference Secretary

Susan Oosthuizen MA, PhD, PGCE

Institute of Continuing Education

Madingley Hall, Madingley, Cambridge CB3 8AQ

email: smo23@cam.ac.uk

Hon. Librarian and Assistant Editor

John Pickles MA, PhD, FSA

c/o Haddon Library

Faculty of Archaeology and Anthropology

Downing Street, Cambridge CB2 3DZ

Representative of the Cambridgeshire Local History Society

Michael Farrar MA

Hon. Auditor

R E Seaton CIPFA, IIA

Contents

A late Roman cemetery at <i>Durobrivae</i> , Chesterton Rebecca Casa Hatton and William Wall	5
Romano-British and medieval saltmaking and settlement in Parson Drove, Cambridgeshire Phil Andrews	25
Roman tumuli or medieval industry? Moulton Hills, Bourn, reconsidered David Baxter	49
A late Roman Cemetery at Watersmeet, Mill Common, Huntingdon Kate Nicholson	57
A Romano-British temple complex and Anglo-Saxon burials at Gallows Hill, Swaffham Prior Tim Malim	91
An Anglo-Saxon settlement at Cherry Orton Road, Orton Waterville, Peterborough James Wright	115
Landscape History, Observation and Explanation: the missing houses in Cambridgeshire villages Christopher Taylor	121
Conservation of early 17th Century allegorical wall paintings in St John's College, Cambridge Tobit Curteis	133
Huntingdonshire Bell Frames Robert Walker	139
Changes in the landscape of west Cambridge after Enclosure 1805–1870 Philomena Guillebaud	159
<i>Archaeological Notes</i>	
Romano-British buildings at Tunbridge Lane, Bottisham TL 5453 6095	171
Medieval land reclamation and subsequent occupation on High Street, Ramsey TL 2870 8506	175
Animal carcasses in a Roman ditch, West End, Haddenham, TL 4613 7552	179
Fieldwork in Cambridgeshire 2005 Sarah Poppy, Elizabeth Popescu and James Drummond-Murray	183
Obituaries	199
Reviews Anne Holton-Krayenbuhl, Tony Kirby, Alison Taylor	201
<i>Index</i>	205
<i>Abbreviations</i>	211
Recent Accessions to the Cambridgeshire Collection Chris Jakes	213



Plate 13. Watercolour of the Cambridge Observatory by Richard Banks Harraden, showing the landscape of west Cambridge in the 1840s. By kind permission of Prof Lord Martin Rees.

Cover: Watercolour of the Cambridge Observatory by Richard Banks Harraden, showing the landscape of west Cambridge in the 1840s. By kind permission of Prof Lord Martin Rees.

A late Roman cemetery at *Durobrivae*, Chesterton

Rebecca Casa Hatton and William Wall

with contributions by Nina Crummy, Corinne Duhig,
Adrian Popescu and Mark Wood

More than fifty burials represent a portion of a late Romano-British cemetery outside the southwest gate of the Roman town of Durobrivae, near Peterborough. Pre-dating the cemetery were parallel ditches demonstrating rural activity (livestock management) during the mid to late 3rd century. Towards the end of the 3rd century the land was used for burial. Disturbed inhumations of at least 57 individuals were recorded, of both sexes and all ages. The graves lay on various alignments. Some had been placed in wooden containers and two in stone coffins, with a possible instance of stone-packing. There were two possible cases of decapitation. The burials appeared to be unfurnished, with the exception of a child who was accompanied by copper alloy and ivory armlets, as well as amber and glass beads from a necklace. The cemetery appears to have remained in use throughout the 4th and into the early part of the 5th century. The presence of undated headlands associated with ridge and furrow systems suggests that the site reverted to agricultural use during the medieval to post-medieval periods.

Introduction

Cambridgeshire County Council Archaeological Field Unit (CCC AFU), funded by the Highways Agency, undertook rescue recording in 1998 during maintenance work along the western edge of the northbound carriageway of the A1 (Casa Hatton & Wall 1999; TL 1221 9655). The site lies opposite the area known as 'The Castles', between Water Newton and Chesterton, Peterborough (Fig. 1).

Inhumations were observed in both sides of the modern drain; most were damaged in the 1950s during construction and maintenance of the A1 trunk road (former Great North Road). Land to the west and east appeared to be relatively undisturbed, having been under cultivation since the medieval period, while cropmarks (Upex 1995) attest the preservation of archaeology in the area as a whole. The site lies on first terrace gravels overlying the Grantham Formation of the Inferior Oolite Group.

The area between Water Newton and Chesterton has been known to be of archaeological signifi-

cance since the pioneering work of local antiquarian Edmund Artis (1828). The site of 'The Castles' on the eastern side of the A1 is a scheduled ancient monument which includes the Roman town of *Durobrivae*; its history and archaeology have been detailed elsewhere (eg Burnham and Wachter 1990; Mackreth 1995; Fincham 2004).

Burials at the 1998 site relate to a major cemetery outside the southwest gate of the town defences, within a road triangle between Ermine Street and a branch road (Fig. 2). This cemetery was discovered during construction of the Great North Road in the mid 18th century when urns and vessels, together with stone and lead coffins, were found. Later excavations by the Ancient Monuments Inspectorate under Ernest Greenfield in 1956–57 revealed Roman defences (Site 1), suburban occupation to the west of Billing Brook (Site 2), suburban occupation south of the Roman town (Sites 3–4) and an adjacent cemetery (Greenfield nd; Anon 1958; Anon 1959) (Fig. 2). In 1957 plans to by-pass Water Newton prompted investigations by the Water Newton Excavation Committee (later Nene Valley Research Committee; Areas 1–5) which revealed pottery kilns spanning the mid 1st century to the first half of the 4th century (Perrin 1999, *passim*).

Infant and adult graves were located on the extreme western limit of Greenfield's Site 3. One included a female with a necklace of jet beads and a bronze bangle (Greenfield nd). Six infants dated to the 2nd century were found along the inside edge of a 2nd century timber barn later replaced by a wider stone building. Finally, evidence emerged for infants in pits beneath a mid 3rd century building destroyed by fire in the late 4th century.

Several Roman stone coffins have also been found in this area (Taylor 1984, 20). One is preserved on Helpston green. A further stone coffin was excavated by members of the Nene Valley Research Committee in 1983. Records in Peterborough Museum and Art Gallery indicate that more stone coffins were found in 1958: Greenfield records a site located at TL 121 966, close to the 1998 site, where six stone coffins and several unfurnished inhumation burials were uncov-

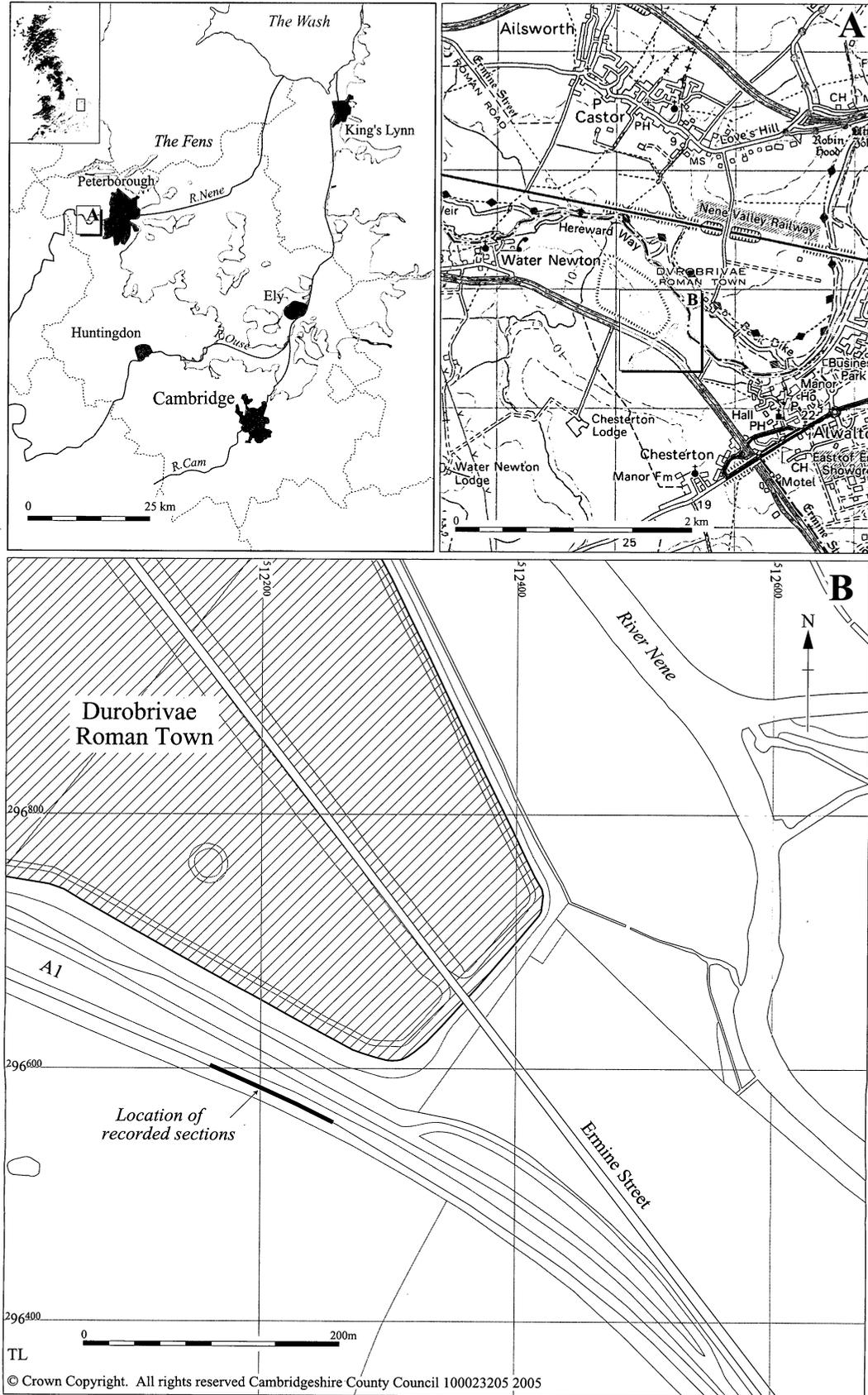


Figure 1. Site location.

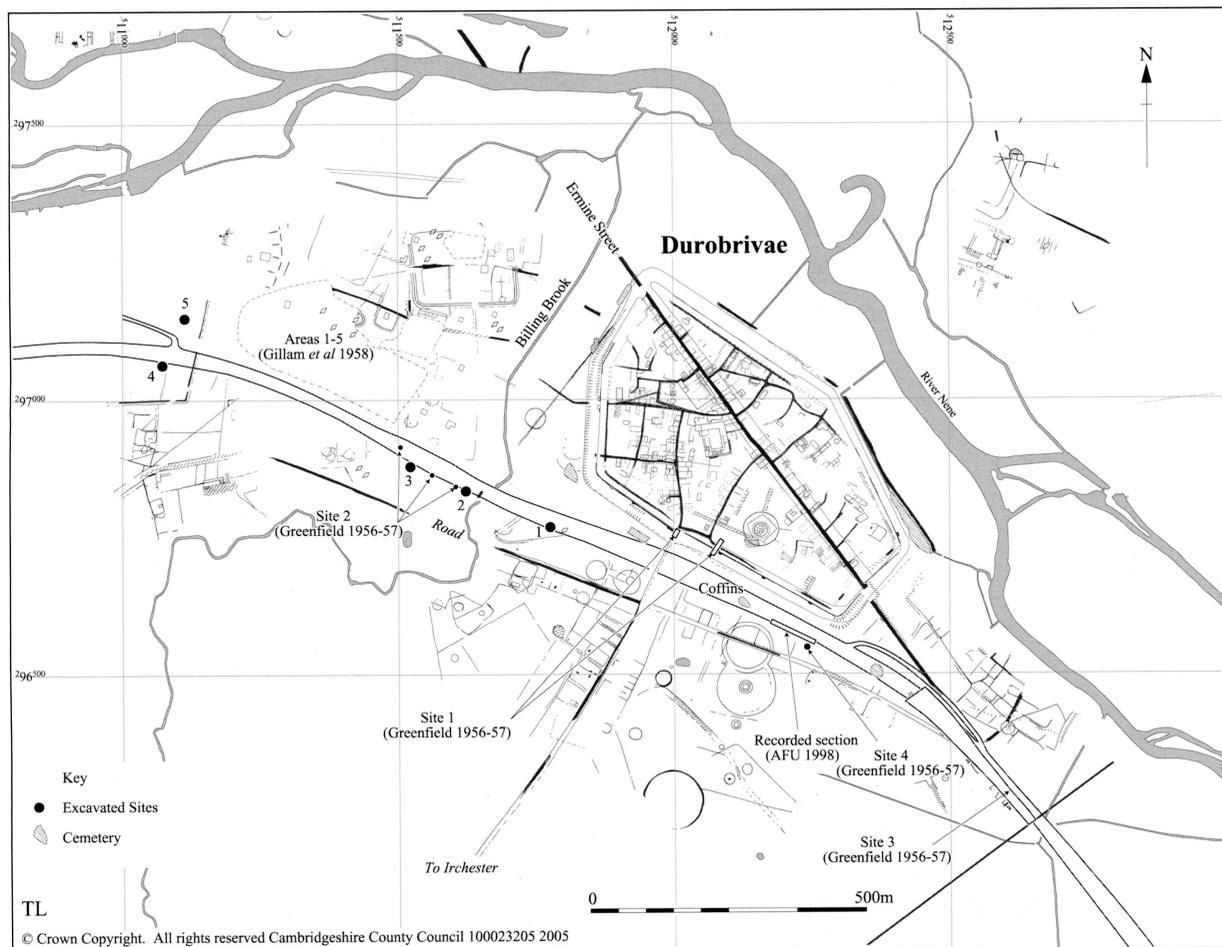


Figure 2. Roman *Durobrivae*, with cropmarks and location of excavations (after Mackreth 1995).

ered (near Site 4). These coffins were rescued: two are in Peterborough Museum and two at the Norris Museum, St Ives (Fig. 8). Other coffins had been discovered previously in this field, known locally as 'the Coffin Field', during agricultural activities (Greenfield *nd*).

The excavation

The initial objective was to record exposed burials and to rebury a stone coffin uncovered during work associated with the roadside drainage ditch. During this work, a second stone coffin and adjacent burials were revealed. Slight alterations to the position of the retaining walls permitted preservation of both coffins *in situ*.

A total of 190 features recorded in the sides of the drainage ditch had been cut into natural sand and gravel (1002). Archaeological remains were severely truncated and disturbed in the 1950s and during subsequent maintenance work. Only those human remains and artefacts that were already loose or would be disturbed during the normal operations of drain clearance were removed.

Roman (mid 3rd to early 5th century)

Phase 1: Ditches (mid to late 3rd century) (Figs 3 and 4)
Linear ditches of varying sizes and profiles ran approximately perpendicular to the modern roadside drain and were characterised by a single fill of greyish brown clayey, sandy silt. The ditches appeared to be orientated approximately northeast to southwest, although two examples (193 and 531) on a north-north-west to south-south-east alignment could have formed elements of a separate field system. The ditches had evidently begun to silt up by the time the cemetery was laid out, many ditches having been cut through by graves. Dating evidence is limited: numerous sherds of late 3rd century Lower Nene Valley wares were recovered from the base of ditch 531, while ditch 123 produced only one, possibly residual, sherd of 2nd century Lower Nene Valley ware.

Phase 2: Burials (late 3rd to early 5th century) (Figs 3 and 4)

Some 170 grave cuts were recorded along both sides of the drain, though the remains of only 57 individuals could be positively identified (Table 1). Given the degree of truncation, no graves could be traced with certainty from one side of the drainage ditch to the

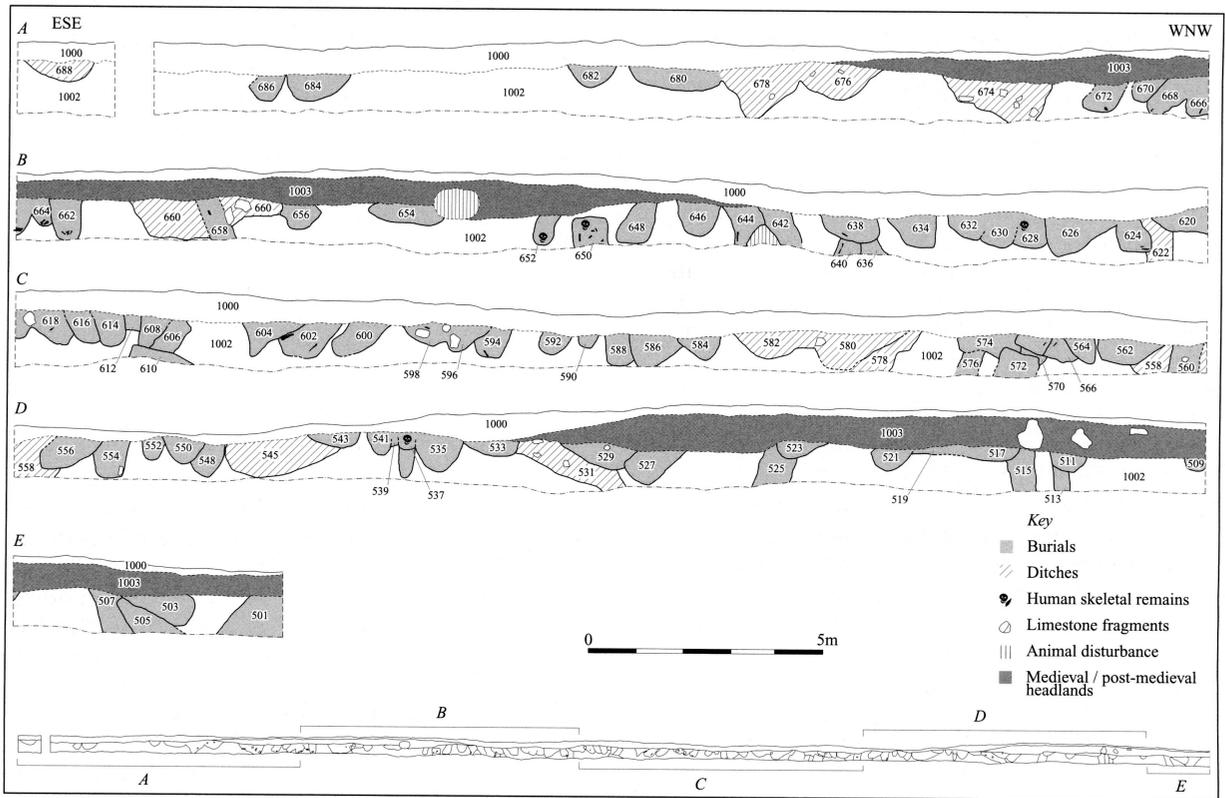


Figure 3. Northeast facing section of drainage ditch.

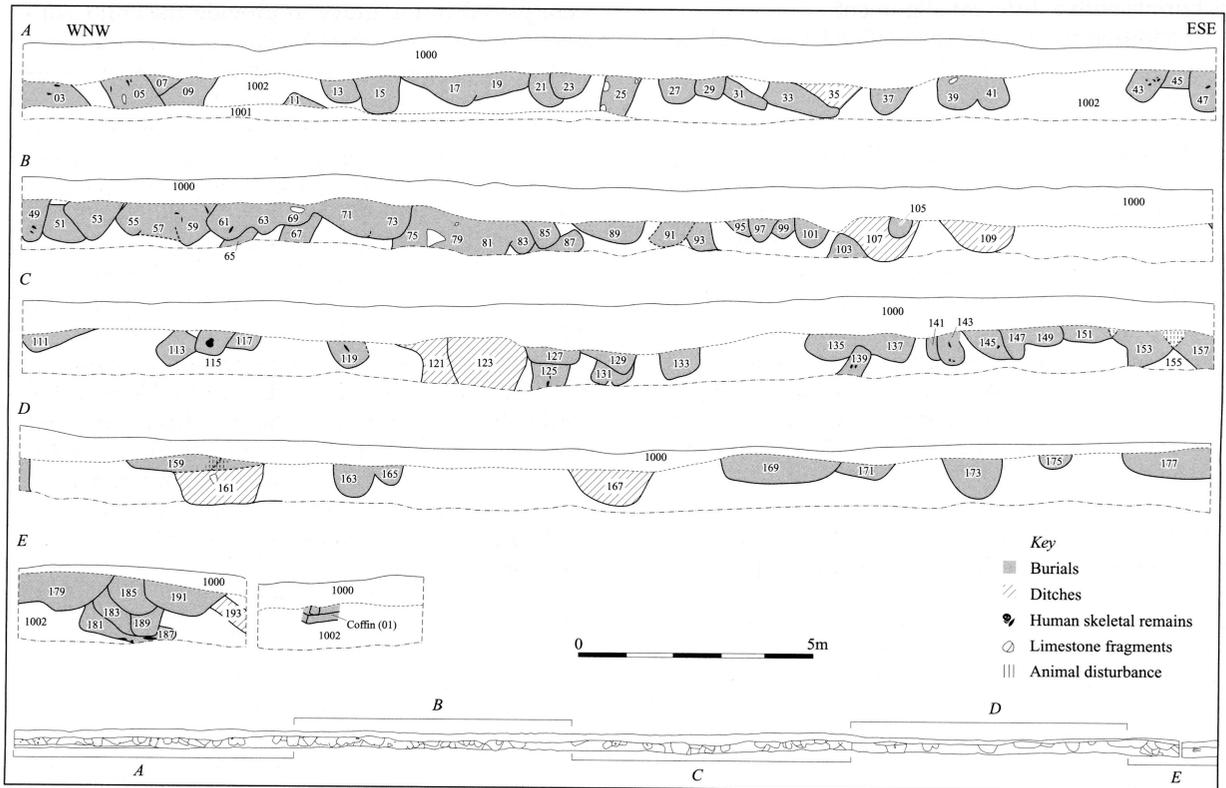


Figure 4. Southwest facing section of drainage ditch.

other. The grave cuts appeared fairly regular and two main shapes were identified (rectangular with round corners and oval), measuring between 0.5m and 0.7m wide and over 2m long. The top of the grave cuts ranged between 0.30m and 1.30m from the modern ground surface, the average depth being some 0.70m. Grave fills were often contaminated and uniformly consisted of greyish brown sandy silt.

Two inhumations were in limestone coffins with lids (1 and 546) which were only partially visible in section. Burial 1 was still sealed, despite its lid being recently broken, and was on an east to west alignment. The coffin of burial 546 had been recently damaged and, through its broken lid, it was possible to see a complete skeleton of uncertain sex and age, the head to the west. The individual was extended and supine, with the arms slightly bent with hands on the pelvis. Although there were no visible grave goods, near the coffin was a scatter of unstratified and disarticulated bones from two or more burials which had been originally interred above the limestone coffin. Iron coffin nails suggest some burials were in wooden containers.

An attempt has been made to group burials by orientation: allocation of graves to particular groups is indicated in Table 1. Most graves were approximately north-north-east to south-south-west (Group 3) and east-north-east to west-south-west (Group 4). There were also instances of north to south (Group 1), west-north-west to east-south-east (Group 2) and east to west (Group 5) orientated graves (Figs 3 and 4). In some instances graves truncated, or were truncated by, burials with a different alignment.

In addition to these loosely defined groups, there were four cases of possible multiple (or stacked?) burials, eg 4a and 4b (grave 5); 70a and 70b (grave 71); 76a and 76b (grave 77); 665a and 665b (grave 666), and 663a and 663b (grave 664) (Figs 3 and 4). In all but one instance adults were associated with infants, children and juveniles. In the case of 663a and 663b (grave 664), two unsexed adults had been buried together. An additional grave (180/181), may have contained two individuals, one an adult male. Only one inhumation belonging to a child (114; grave 115) was furnished. The grave goods, of late 4th to early 5th century date, consist of a group of unworn copper alloy and ivory armlets, together with amber and decorated black glass beads (Figs 5–7; see Crummy below).

Six coins were found (Popescu below). With the exception of a mid 3rd century copy of Victorinus from burial 174 (grave 175), these were unstratified. Sherds of 3rd to 4th century pottery and fragments of animal bone were found in the disturbed fills of some of the graves. These are abraded and likely to represent residual finds dumped from the nearby town.

Medieval/Post-Medieval

Some of the Roman ditches and burials were sealed by a discontinuous and undulating layer of subsoil (1003) between 0.60m and 1m thick along the edge

of the field to the south (Fig. 3). The deposit was interpreted as possible headlands, 2.8m and 2m wide respectively, perpendicular to the present A1. Sealing earlier activity was a layer of loamy topsoil (1000) some 0.50 to 1.10m thick, associated with agricultural use of the land.

The finds

Grave Goods from grave 115

Nina Crummy

Eight copper alloy armlets, three or four ivory armlets, a necklace of ten amber and glass beads, and a possible earring were deposited with child burial 114 (grave 115), apparently placed in a pile close to the body. Similar piles of jewellery accompanied the remains of children and young females in other late Roman cemeteries, for example at Lankhills, Winchester, Hampshire (Clarke 1979, table 2), and Butt Road, Colchester, Essex (Crummy & Crossan 1993, 130). Sometimes deposited jewellery was wrapped in textile (Wild 1970, 1983), or in a leather pouch or bag (Crummy & Crossan 1993, 129). A grave deposit of jewellery in any quantity with a female juvenile or young adult may represent a dowry (ibid 130). Many of the armlets in this grave have a diameter more appropriate to an adult than a young child, making interpretation of the jewellery as a dowry particularly pertinent here. An alternative view might be that they were placed in the grave to provide the child with items she would require in the underworld. Items placed in some burials suggest that children were expected to continue to grow in the afterlife, a good example being an infant at Arrington, Cambridgeshire, which contained figurines that appear to represent the stages the child would pass through as it matured (Green 1993, 196–7).

Evidence from both inhumations and occupation sites suggests that the popularity of bangle-type armlets rose markedly in the 4th century (Clarke 1979, 301), and the change in burial rite from cremation to inhumation has aided preservation of these artefacts. From the bangles at Lankhills, Winchester, Clarke (ibid) suggests that those of iron, bone and shale were more common in the first half of the 4th century and those of copper alloy more common in the second half. However, a more accurate view appears to be that, while bangles of all materials were deposited with burials throughout the 4th century, they were more frequently deposited in the second half of the century (Crummy & Crossan 1993, 136–7). How far this reflects a rise in fashion as opposed to an increased incidence of a burial rite is uncertain.

Copper alloy armlets of the 4th century were decorated in a variety of ways. While simple wire, cable and cable-imitative forms can usually be easily paralleled, where the decoration consists of incised or stamped patterns it may not have a precise match. This is particularly true of armlets elaborately deco-

rated in symmetrical panels, like cat. nos 1–2 (Fig 5). These belong to Clarke's Type E at Lankhills (1979, 307–9), are described at Colchester as employing 'multiple motifs' (Crummy 1983, 45, fig 47), and at Poundbury as of 'multiple units' (Cool & Mills 1993, 89). Clarke cites numerous other examples. While exactly matched patterns on this type of bangle are rare, some elements of the decoration do occur reasonably frequently, notably long panels of feathering flanking a central groove. It is often used, as here, on the last long panel at each end, with the panel often defined by one or more transverse grooves, eg at Lankhills (Clarke 1979, fig 37, 525, 502), Colchester (Crummy 1983, fig 47, 1725, 1732), Richborough (Bushe-Fox 1928, pl XXI, 51), and Canterbury (Garrard 1995, fig 434, 368, 371). Large and small ring-and-dot motifs, as on cat. no. 2 (Fig 5), are also frequently seen, the latter often grouped together in single or double rows, as seen again at Lankhills (Clarke 1979, 525, 393, 147, 650), Colchester (Crummy 1983, fig 47, 1725, 1730–2), Richborough (Bushe-Fox 1928, pl XXI, 51), Canterbury (Garrard 1995, fig 434, 371), and also Lydney (Wheeler & Wheeler 1932, fig 17, D, E, G, H, K). Other elements, such as the bead-imitative lozenges, are less common on this type of armlet, but can be found as the sole motif (Clarke 1979, fig 37, 166; Crummy 1983, 44–5).

Two of the *Durobrivae* armlets (cat. nos 3–5; Fig. 5) have not been directly paralleled, but the decorative techniques occur elsewhere (Crummy 1983, fig 46, 1714). Both hatching and alternating diagonal grooving techniques were clearly intended to catch and reflect light. The stout hook and eye clasp on two armlets (cat. nos 7 (Fig. 5) and 8 (not illustrated)), is matched at London (Pierpoint 1986, fig 39, 1), Poundbury (Cool & Mills 1993, fig 66, 12, 17), Colchester (Crummy 1983, 1651), Lydney (Wheeler & Wheeler 1932, fig 17, 56) and Richborough (Bushe-Fox 1928, 49, pl XXII, 59). The angled scoring on the upper and lower edges of cat. no. 7 can be seen as a debased version of the cable-imitative grooving found on the illustrated Richborough armlet (*ibid*).

Ivory armlets do not survive well in the ground, although others are known from 4th century graves at Lankhills (Clarke 1979, 312–13). The surfaces of the examples from the *Durobrivae* cemetery are roughened with decay and discoloured by contact with the copper alloy armlets. Ivory armlets can be in one piece, cut in the round, or in sections butted together and held by one or two sleeves of sheet metal (*ibid*). Clarke suggests that a single sleeve shows that the armlet was made from a strip bent into a circle, while two sleeves show that the armlet was formed from two half-circles cut in the round. Two ivory armlets (cat. nos 10 and 11; Fig. 6) may fit together, but, if so, the sleeves are not set opposite each other.

The incomplete thin wire copper alloy ring (cat. no. 13, not illustrated) is probably an earring, although the terminals are missing. Copper alloy earrings of thin wire are often too delicate to survive deposition.

The armlets and earring from grave 115 are standard late Roman forms and styles. Contemporary

necklaces and bead armlets are usually made up from small beads of brightly coloured glass, coral, shale, or jet (eg Guido 1978, fig 37; 1979, 292–300; Johns 1996, 100–3), whereas the group of ten beads from grave 115 is strikingly different (Fig. 7, Plate 1). Six are amber (cat. nos 14–19), three are of black glass enlivened with coloured zigzags (cat. nos 20–22), and one is a gadrooned bead of plain black glass (cat. no. 23). All are fairly large. The amber beads are roughly disc-shaped, and those of decorated glass barrel-shaped to annular. Some are wedge-shaped along one axis, enabling them to fit together closely when strung. They are sufficiently few in number to suggest that they may have been strung as an armlet, although it is possible that they grouped together at the front of a necklace, leaving thread or thong bare at the sides and back.

The beads are not unique in late Roman Britain, but they are rare. A single annular amber bead came from Lankhills in a grave dated to AD 350–70 (Guido 1979, 295), and another singleton from Icklingham, Suffolk (Liversidge 1973, fig 52a). In both cases these were threaded onto necklaces composed of beads of standard late Roman form. There is a rather different picture at Colchester where twelve amber beads came from five graves in the 4th century cemetery at Butt Road, two from grave 1, three from grave 15, one from grave 69, five from grave 406, and one from grave 609 (Crummy & Crossan 1993, tables 2.52, 2.54–5). Both grave 1 and 15 also contained exotically-shaped beads of black glass (*ibid*, tables 2.52, 2.55; Crummy 1983, fig 37, 1501, 1504, 1505). The amber beads in graves 1, 69 and 609 were strung on necklaces of conventional style, but those in graves 15 and 406 were part of armlets or necklaces that can be attributed with a specifically amuletic character, both of which included pierced coins that date the burials to the last quarter of the 4th century, or possibly the early years of the 5th century. Grave 1 can be similarly dated by a coin residual in its backfill, while graves 69 and 609 have been dated to later than AD 360 (Crummy & Crossan 1993, table 2.67).

Amber comes primarily from submarine deposits around the coast of the Baltic. Like jet, it was prized in antiquity for both its appearance and its electrostatic, seemingly magical, qualities. By the 2nd century BC the trade-route from the Baltic passed southwards through Aquileia, which became a centre for turning the raw product into finished carvings of high quality (Cunliffe 1997, 220; Strong 1966, 33–4). This point of control may account for the paucity of amber in both late Iron Age and Roman Britain. Amber can occasionally be found washed up on the East Anglian coast suggesting that some amber objects might be home-produced. An East Anglian origin could certainly account for both the *Durobrivae* and Colchester amber beads, but the increasing flow into eastern Britain of migrants from northern Europe bringing matching increased trade contacts is most likely to be the source. Amber beads of the type found in grave 115 are common in pagan Anglo-Saxon Britain.

The black glass beads also originated in main-

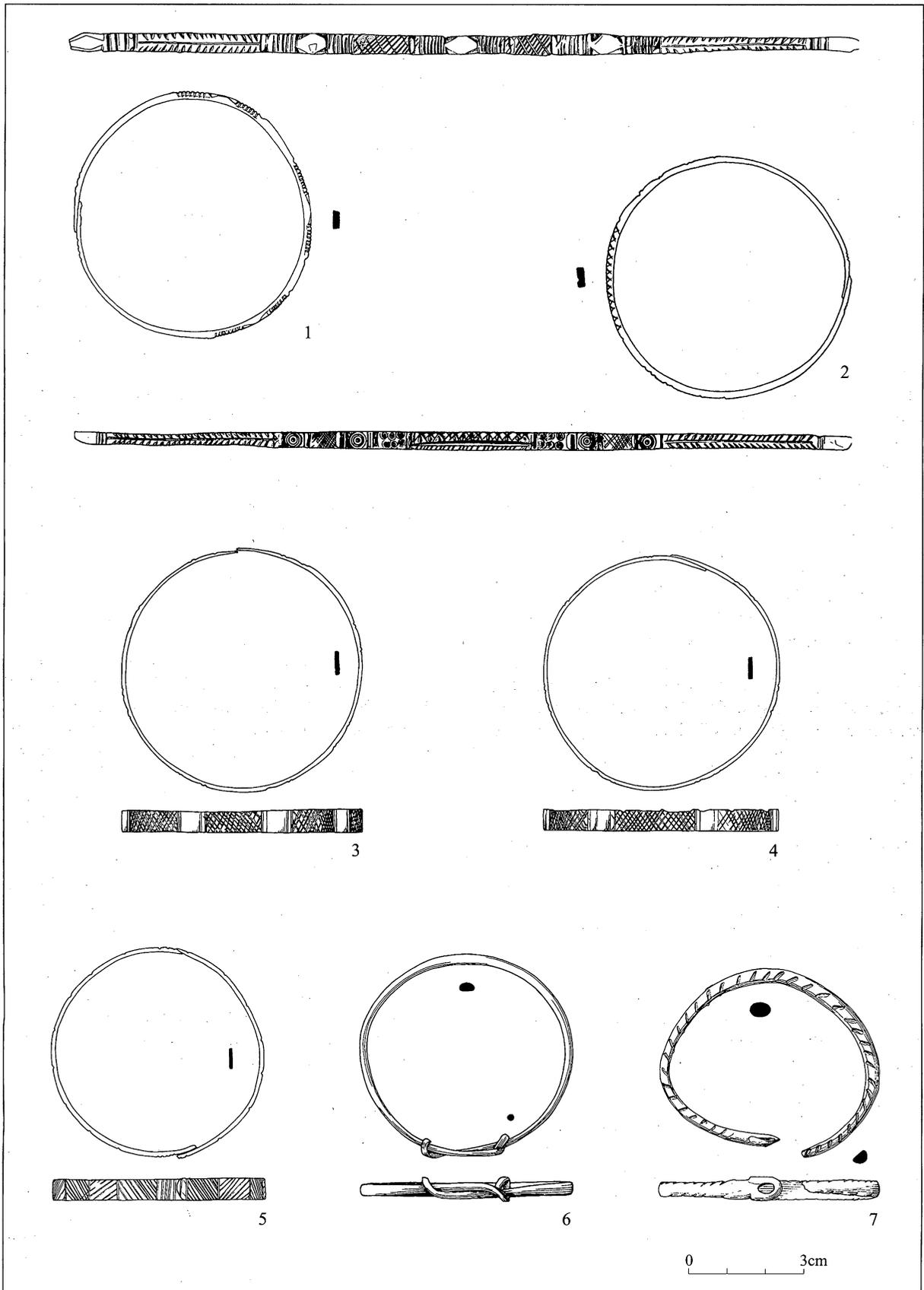


Figure 5. Copper alloy armlets from grave 115.

land Europe (cat. nos 20–23, Fig. 8). The well-made gadrooned bead (cat. no. 23) may be a product of the Trier workshop that started up in the late 4th century, although a more easterly source is possible as 4th century gadrooned beads also occur in large numbers in southern Bavaria (Guido 1978, 99; 1999, 21, Group 2iii). The three beads with coloured zigzags, red, yellow and white, belong to Guido's Group 2vi (1999, 22–3; Guido 1978, Group 5, 135), which may be of Frankish origin and may also have been first produced at the end of the 4th century but are generally found in graves of 5th century date, including some from the Krefeld-Gellep cemetery, Germany. There is a strong possibility that the bead with a white wave (cat. no. 20) is slightly later than those with a yellow or red wave (cat. nos 21–22, Fig 8; Guido 1978, 135). Some similar beads listed by Guido may derive from late Roman contexts, but the white-wave beads that were in association with datable objects come from burials of the Anglo-Saxon period, to which may be added two further examples from Anglo-Saxon graves in Norfolk and Kent (Guido 1999, 178–80; Green & Rogerson 1978, fig 69.7, Jviii; Evison 1987, fig 55, 2e). A slightly later date for the white-wave bead may also be borne out by its somewhat different manufacturing technique; the red and yellow zigzags being marvered neatly into the black matrix while the white zigzag stands above the surface, indicating a different working practice and probably a different workshop. However, black glass beads with unmarvered yellow zigzags have also been found at Colchester and Canterbury, the former probably from an Anglo-Saxon burial, the latter from a late Roman multiple burial (Guido 1981, no. 12; 1999, 180).

The white-wave bead from grave 115 appears, then, to be the latest item in the assemblage. While the armlets from the grave are positively Roman in character and suggest a date in the later 4th century, the amber beads and two of the glass ones can be used to refine this to the final quarter of the century. The white-wave bead provides the best evidence that the burial may not have taken place until the early years of the 5th century. A conservative date range of *c.* 390–420 may therefore be offered for the inhumation. In its combination of late Romano-British and early Saxon artefacts it can be compared to Grave 3 from Dorchester-on-Thames, dated conservatively by Kirk and Leeds to the late 4th century, but revised by White to the first quarter of the 5th century (Kirk & Leeds 1953; White 1988, 109).

Catalogue

- 1 (Fig. 5). Complete copper alloy armlet with lapped terminals. Maximum internal diameter 60mm, rectangular section 4.5mm by 1.5mm. The decoration combines, in a symmetrical pattern, panels of transverse grooves, feathering, hatching, and raised lozenges imitative of strung faceted beads. One terminal is decorated with a raised lozenge reminiscent of a debased snake's head.
- 2 (Fig 5). Complete copper alloy armlet with lapped terminals. Maximum internal diameter 60mm, rectangular section 4.5mm by 1.5mm. As with 1, above, the decoration is a symmetrical arrangement, here using panels of transverse grooves, feathering, large and small ring-and-dot motifs, and an unusual central panel with feathering on one side, a central groove, and complex notching on the other creating a row of alternating raised and sunken triangles.
- 3 (Fig. 5). Copper alloy armlet with lapped terminals. One terminal is original. The other end appears to be broken, but the metal on the back is scarred, showing that it was soldered onto the original end. They have now sprung apart. Maximum internal diameter 61mm, rectangular section 6mm by 1mm. The decoration consists of hatched panels separated by plain, slightly faceted panels flanked by narrow transverse mouldings. That the lapped joint is a repair, rather than an example of scamped work, is supported by the fact that the original terminal abuts a plain panel, while the other provides a hatched panel much shorter than the others. However, the terminals on 4, below, are exactly similar, making a break unlikely.
- 4 (Fig. 5). Complete copper alloy armlet with lapped terminals and decoration similar to 3. Maximum internal diameter 61mm, rectangular section 5mm by 1mm. As with 3, one terminal is original, the other apparently broken, although see above. Both are slightly wider than the main part of the armlet, suggesting that they were lightly hammered together.
- 5 (Fig. 5). Copper alloy armlet with butt terminals. Maximum internal diameter 55mm, rectangular section 6mm by 1.5mm. The decoration consists of panels defined by single upright grooves and filled with fine diagonal grooving, alternately angled to give the impression of chevrons.
- 6 (Fig. 5). Copper alloy armlet of plain wire with simple twisted joint. Maximum internal diameter 52mm, D-shaped section tapering to the clasp, maximum 4mm by 2.5mm. No decoration is obvious, but the metal is quite rough with corrosion and slight decoration, as on Crummy 1983, fig 43, 1656, may be obscured.
- 7 (Fig. 5). Copper alloy armlet with hook and eye clasp, the hook end missing, the eye end almost flat and slightly expanded. Maximum internal diameter, slightly distorted, 50mm, section elliptical tapering to D-shaped near the terminals, maximum dimensions 5.5mm by 4mm. The upper and lower edges of the hoop are scored by slanting grooves. This very minimal decoration can be seen as an extremely debased form of the slanting grooves passing over the outer face of armlets in imitation of cabling (eg Bushe-Fox 1928, pl XXII, 59).
- 8 (not illustrated). Missing, catalogue from photographs. Complete copper alloy armlet with hook and eye clasp. The hook is a stout bar rising up and slightly backwards from the terminal. The eye is a large expanded loop. Just in from the eye is a protuberance similar, although smaller, to the hook. This prominent clasp arrangement is very similar to that on the imitation cabling example from Richborough referred to above.
- 9 (Fig. 6). Ivory armlet held together with a sleeve of copper alloy. Internal diameter 53mm, rectangular section 6.5mm by 2.5mm. The sleeve, and the ivory beneath it, is ribbed at either end. Between the ribs is an incised cross. The shallowness of the cross suggests that it is not impressed into a cross cut in the ivory beneath.
- 10 (Fig. 6). Fragment of an ivory armlet with a ribbed sleeve of copper alloy. Maximum internal diameter 53mm, rectangular section 8mm by 1.5mm. May belong with 11 to

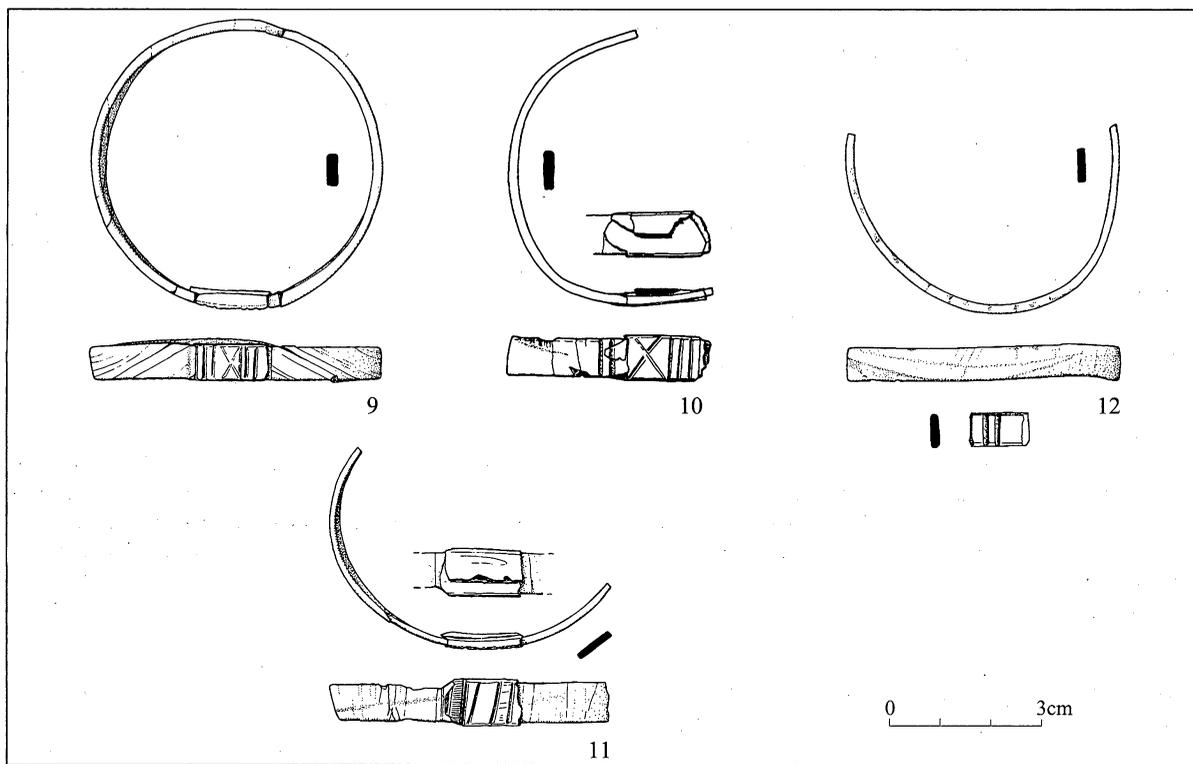


Figure 6. Ivory armlets from grave 115.

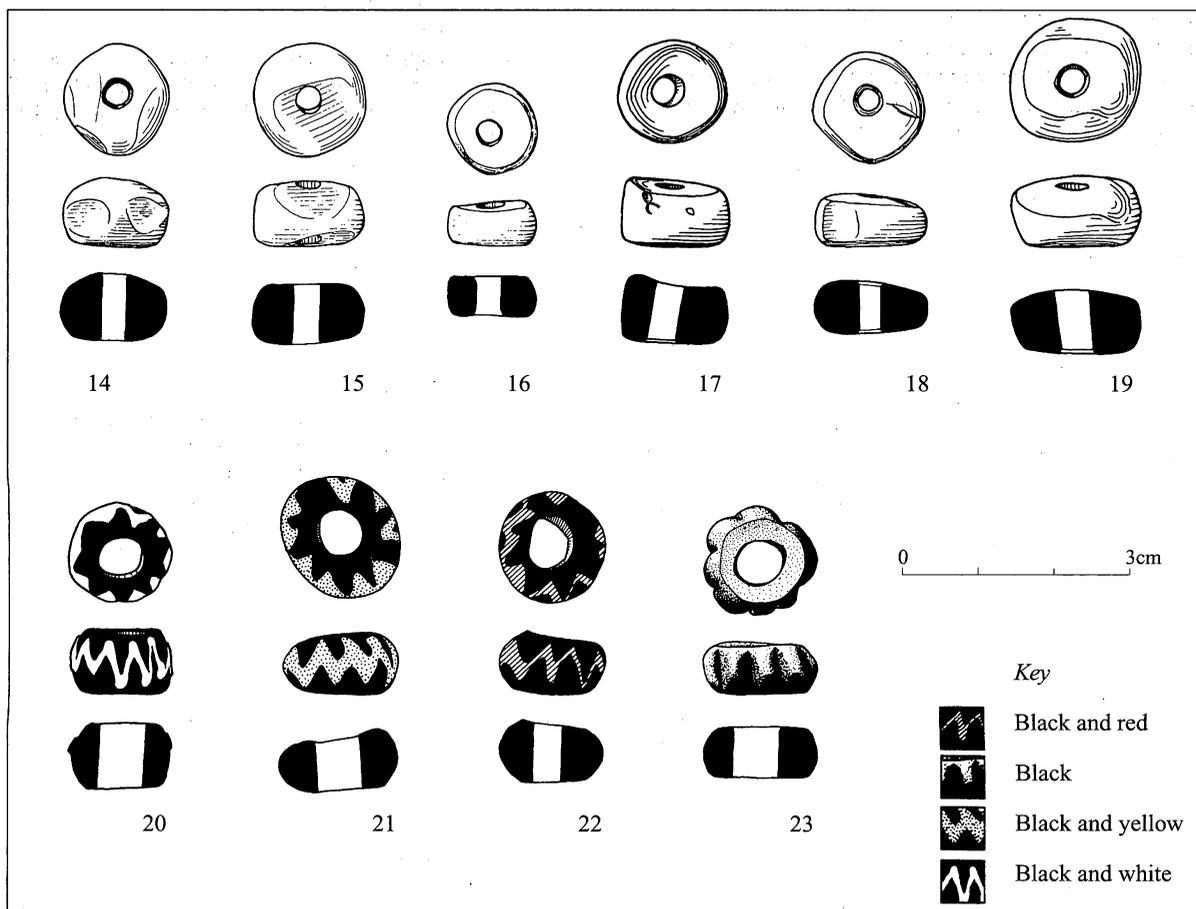


Figure 7. Glass and amber beads from grave 115.

- form one armlet with two sleeves (Clarke 1979, 313).
- 11 (Fig. 6). Fragment of an ivory armlet with a ribbed sleeve of copper alloy. Internal diameter 50mm, rectangular section 8mm by 1.5mm. May belong with 10 to form one armlet with two sleeves (Clarke 1979, 313).
- 12 (Fig. 6). Fragment of an ivory armlet. Internal diameter 51 mm, rectangular section 7mm by 1.5mm.
- 13 (not illustrated). Two fragments of a ring of thin copper alloy wire. Internal diameter 14mm, thickness 1mm. Probably an earring, as Allason-Jones's Type 1, a basic form that cannot be closely dated (1989, 2-3).
- 14 (Fig. 7, Plate 1). Disc-shaped amber bead. Maximum diameter 15.5mm, length 9.5mm.
- 15 (Fig. 7, Plate 1). Disc-shaped amber bead. Maximum diameter 16mm, length mm.
- 16 (Fig. 7, Plate 1). Disc-shaped amber bead. Maximum diameter 12.5mm, length 6mm.
- 17 (Fig. 7, Plate 1). Disc-shaped amber bead. Maximum diameter 12.5mm, length 8mm.
- 18 (Fig. 7, Plate 1). Disc-shaped amber bead. Maximum diameter 13mm, length 6mm.
- 19 (Fig. 7, Plate 1). Disc-shaped bead amber bead. Maximum diameter 15.5mm, length 8mm.
- 20 (Fig. 7, Plate 1). Annular bead of black glass with off-white zigzag trail. Maximum diameter 13.5mm, maximum length 8mm.
- 21 (Fig. 7, Plate 1). Annular bead of black glass with marvered yellow zigzag trail. Maximum diameter 16.5mm, maximum length 8mm.
- 22 (Fig. 7, Plate 1). Annular bead of black glass with marvered red zigzag trail. Maximum diameter 13.5mm, maximum length 7.5mm.
- 23 (Fig. 7, Plate 1). Gadrooned bead of black glass. Maximum diameter 14mm, length 6.5mm.
- MD 6, unstratified
- 27 Theodora
Obv. FL MAX TH[EO-DORAE AV]G
Rev. PIETAS-[ROMANA]
AE VI 0.94 g; 14 mm
Pietas carrying an infant type, illegible mintmark, 337-340.
MD 7, unstratified
- 28 Copy of Magnentius
Obv. D N MAGNEN-TIVS [P F AV]G
Rev. VICTORIAE DD NN A[VG ET] CA - VOT/V/
MVL/X, //AMB
AE VI 2.04 g; 16 mm
Copy of RIC VIII, p. 122, no. 9, Amiens, post 351352.
MD 3, unstratified
- 29 Valens
Obv. D N VALEN-[S P F AV]G
Rev. SECVRITAS-RE[IPVBLIC]Æ, OF-II//CON
AE VI 2.70 g; 18 mm
RIC IX, p. 66. no. 17(b).XIII(b), Arelate, 367-375.
MD 2, unstratified

Pottery

Mark Wood

A small assemblage of 102 sherds (3.256kg) of Roman pottery was recovered, of which 32 sherds (0.816kg) came from grave fills and 13 sherds (0.736kg) were unstratified.

Given the location of the site, it is hardly surprising that the products of the Lower Nene Valley kilns, especially those nearby at Chesterton, Water Newton and Stibbington should all be well represented. Locally produced shelly wares are also fairly well represented. In essence the overall group is later Roman (3rd to 4th century) in character although there are a few exceptions which are 2nd century (context 28 for example).

There is little of note amongst the products themselves, although they include unusual forms from the Nene Valley, as well as products from further afield. These are principally samian and amphorae. Dressel 20 form the bulk of the amphorae with a solitary sherd of a Gauloise 4 flat-based wine amphora. This latter is far from an unusual find in Britain though it may be rarer in this region. The only other noteworthy products are two sherds of Black Burnished Ware 1 from Dorset and a single sherd of Oxfordshire red colour coated ware. The presence of some burnt sherds is not surprising, since the site is a cemetery.

Human remains

Corinne Duhig

Human bones were recovered from 52 contexts, with a single unstratified fragment. The limited nature of the recording work meant that in no case was it possible to recover a complete inhumation. Under these circumstances, the actual number of individuals represented remains equivocal although a minimum

Coins

Adrian Popescu

Six coins of late denominations were found, only one of which was stratified (cat. no. 24, grave 174 (175)). The remainder were metal-detected from recent deposits within the modern drain. The group includes one 3rd century copy while the rest are 4th century, all types commonly found on Romano-British sites. The majority of the numismatic material is concentrated in the 4th century.

- 24 Copy of Victorinus
Obv. [...]GRIN[...] Head of emperor r.
Rev. [...]IA Salus 1
AE V 1.47 g; 14mm
Cf. Cunetio 2959
MD 1, Context grave 174 (175)
- 25 Constantinopolis
Obv. CONSTAN-TINOPOLIS
Rev. No legend, //TRS
AE XII 2.25 g; 16 mm
RIC VII, p. 217, no. 548, Treveri, 332-333.
MD 8, unstratified
- 26 Constans
Obv. [FL IVL CON]STANS AVG
Rev. VIRTVS-[AVGG N]N, //TRS
AE XII 1.50 g; 15 mm
RIC VIII, p. 144, no. 77, Treveri, 337-340

of 57 individuals is represented. Males, females and children down to infancy are represented, although the fragmentary nature of the skeletons prevents sexing of most adults and precise ageing of all but one child and a few adults.

Although the bones have been broken by modern ditching activities they are generally sound with only some surface erosion. Methods used are those of Cho et al (1996) and Ubelaker (1989). In the inventory below, the bones present are listed only by element and side (Table 1). Very few were complete, and the actual portions present, such as 'proximal', 'distal', 'head' (of long bones), the various parts of the skull vault, face and base etc are recorded in the site archive. The note 'one individual' means that it is clear that all the bones from this context are compatible by virtue of age, unusual size and/or condition; this does not mean that other contexts necessarily contain more than one individual — indeed, they probably do not — and in the few cases where more than one person can be identified in a single context this is shown by 'a' and 'b' suffixes to the skeleton number.

Pathological changes are dominated by dental disease and the arthropathies, a situation usual for skeletal remains from the ancient world. However, there are also signs of dietary deficiency or physiological stress in the conditions of *cribra orbitalia* and enamel developmental defects (EDDs). *Cribra orbitalia* is a sieve-like appearance to the upper orbit produced by several anaemias and related conditions, the most common being iron-deficiency anaemia, usually produced by parasitism and infection rather than by inadequate dietary intake of iron (eg Stuart-Macadam 1989, 218–9). EDDs, also known as enamel hypoplasia, are caused by episodes of starvation or severe febrile illness (eg Goodman & Rose 1990). Pathologies are noted in Table 1; in addition:

Burial 2 Grave 3: (juvenile, unknown sex): the left calcaneus, talus and navicular are all fused together by disorganised new bone proliferation, mainly nodular, which surrounds, but does not intrude upon, the joint surface. There is also proliferation around the articulations with the malleoli; all except the most medial of the distal navicular facets are extremely cystic/eroded. Absence of the rest of the skeleton prevents further description or diagnosis of this arthropathic disorder (following Rogers et al 1987).

Burial 649 Grave 650: (adult female) shows evidence of EDDs. It also displays a cut on the left temporal bone (on the anterior tubercle of the glenoid fossa). This is in the position to be expected from a decapitation, but is too eroded for its cause to be determined with certainty.

The amount of information obtained from this small and disturbed sample, and the reasonable condition of the bones, suggests that any future opportunity for full excavation of this site would provide a highly informative skeletal assemblage. Further comments on the two possible cases of decapitation (skeletons 536 and 649) are presented in the discussion below.

Discussion

The Roman field system

The recorded ditches appeared to follow two main alignments, their layout perhaps conditioned by the outer bank of the town defences, and by the road which branches off Ermine Street outside the south gate. The ditches observed in 1998, probably dating to the mid to late 3rd century, may have formed part of a system of rectangular enclosures and linear features on a predominant northeast to southwest alignment visible on aerial photographs (Upex 1995). Both road and enclosures cut through a series of circular features of varying diameter, possibly representing prehistoric round barrows and henge monuments (Fig. 2). The function of the enclosures and ditches visible on aerial photographs is uncertain. They may represent yards or plots of land associated with roadside buildings, pens for livestock or the remnants of field systems.

The Roman cemetery

Chronology

Burial commenced in the later part of the 3rd century and continued throughout the 4th century, a single burial being attributed to the late 4th century or early years of the 5th century (115). With the exclusion of residual sherds of samian and early Lower Nene Valley wares, only five out of 170 graves produced 4th century pottery (3, 169, 173, 179 and 351). The assemblage included bowls, flagons, dishes and jars and reflected the distribution of forms frequently found in the former cremation-using areas north of the Thames (Philpott 1991, 108–109). Graves furnished with 4th century pottery have been recorded within Cambridgeshire at Guilden Morden (Fox & Lethbridge 1924, 54–58), Litlington (Liversidge 1977, 30) and Godmanchester, The Parks (Jones 2003, 35–36). The almost complete absence of pottery in the grave fills is consistent with the decline of pots and vessels in general as grave goods during the 4th century (Philpott 1991, *passim*).

Grave Groups and alignment

Without conclusive evidence for genetic traits in the osteological remains, it was not possible to establish whether the multiple graves belonged to genetically related individuals. Family groups are often identified in late inhumation cemeteries where the evidence for familial correlation becomes more visible in terms of genetic and/or ritual affinities. For instance, there is evidence for families being buried together at Butt Road, Colchester (Crummy & Crossan 1993), Poundbury, Dorchester (Farwell & Molleson 1993) and Lankhills, Winchester (Clarke 1979).

Although the burials at *Durobrivae* are on various alignments, two major features seem to have guided their layout, namely the western bank of the urban defences and the extramural road (Fig. 2). Many graves were cut at approximately right angles to these two

Table 1. Inventory of burials.

Grave Cut	Grave Fill/Skeleton No.	Orientation (Group)	Depth (m)	Bones present	Age (years)	Sex	Pathology	Other
3	2	E-W (5)	0.51	Cranium, ribs, R clav, scaps, L ul, rads, L calc/tal/nav	16-18	N/A	L calc/tal/nav: fused	-
5	4a	N-S (1)	0.65	tibs, fib	adult	-	-	1 indiv
5	4b	N-S (1)	0.65	hum, ribs	0.5-1.5	N/A	-	1 indiv
21	20	NNE-SSW (3)	0.8	R tib	adult	-	lipping at distal tibio-fibular joint	-
23	22	NNE-SSW (3)	0.5	L tib	c.7.5-8.5	N/A	-	-
25	24	NNE-SSW (3)	0.9	L innom, R innom, L fem	34-86 mean 61.2	male	L fem, L isch tub: lipping, spicules and nodules, ??DISH	-
27	26	NNE-SSW (3)	0.53	L fib, L tal, R mt1	adult	-	-	-
33	32	WNW-ESE (2)	0.6	cranium, innom, verts, L ul, R fem	adult	?male	verts: o/a; R fem: new bone on less troch	1 indiv
39	38	NNE-SSW (3)	0.7	L fem, R tib	adult	-	-	-
41	40	N-S (1)	0.64	cancellous bone lump	-	-	-	-
43	42	ENE-WSW (4)	0.7	calvaria, ribs	25-49, mean 36.2	male	metopism, lambdoid ossicles, <i>cribra</i> stage 2	-
49	48	NNE-SSW (3)	0.5	R tib, R fib	adult	-	-	1 indiv, robust
51	50	Uncertain (6)	0.75	L calc	adult	-	-	1 indiv
59	58	N-S (1)	0.9	fem	adult	-	-	-
61	60	ENE-WSW (4)	0.9	L fem	adult	-	lipped <i>linea aspera</i>	-
69	68	Uncertain (6)	0.58	skull, vert	adult	-	EDDs	-
71	70a	WNW-ESE (2)	0.75	R fib, R calc, R tal fem	adult	-	-	1 indiv
71	70b	WNW-ESE (2)	0.75		1.5-2.5	N/A	-	1 indiv
77	76a	Uncertain (6)	0.4	ribs, R innom, L fem, R hum, R ul, R rad, R calc	23-57, mean 35.2	male	fem: lipping of head (++) and <i>linea aspera</i>	1 indiv
77	76b	Uncertain (6)	0.4		<16-20	-	-	1 indiv
89	88	E-W (5)	0.46	R fem	c.0.5-1.5	N/A	-	-
115	114	ENE-WSW (4)	0.4	cranium, fib	5 ± 16 months	N/A	-	Cu alloy stains on L occipital and lower left molar
119	118	N-S (1)	0.6	tibs	adult	-	-	-
125	124	NNE-SSW (3)	0.8	L tib, R tal	adult	-	-	-
131	130	NNE-SSW (3)	0.68	R fem, fem, R pat	adult	-	-	-
139	138	ENE-WSW (4)	0.4	L tib, L fib, R fib	adult	-	R fib: distal fracture	-
141	140	N-S (1)	N/A	R fem	c.2.5-3.5	N/A	-	-
143	142	N-S (1)	0.62	L innom, R ul, R rad, R mt3	adult	-	-	-
145	144	N-S (1)	0.6	vert, L hum, l/b sh frags	adult	-	-	-
159	158	E-W (5)	0.35	tib	adult	-	-	-
169	168	E-W (5)	0.6	rib	adult	-	-	-
177	176	E-W (5)	0.6	L tib, fib	adult	-	-	-

Grave Cut	Grave Fill/ Skeleton No.	Orientation (Group)	Depth (m)	Bones present	Age (years)	Sex	Pathology	Other
181	180	Uncertain (6)	0.62	all R: innom, ul, rad, fem, pat, mc1, mc2	adult	male	innom: acet shallow, ?congenital deformity	1 or 2 indivs: fem head not altered by shallow acet
527	526	ENE-WSW (4)	0.7	fib, R tal, mts	adult	–	–	1 indiv, v. gracile, perhaps same as below
529	528	WNW-ESE (2)	0.5	vert, tib	adult	–	–	1 indiv, v. gracile, perhaps same as above
537	536	Uncertain (6)	0.35	cranium, vert, ribs, R innom, R ul, L fem, fem	c.35	female	<i>cribra</i> stage 2; one rib: lipping and cysts of tubercle; L fem: rugosity and lipping of insertion of <i>Glut max</i>	decapitation?
541	540	Uncertain (6)	0.73	sac, L pubis	26–70 mean 38.2	female	–	–
576	575	ENE-WSW (4)	0.57	cranium	adult	–	–	–
602	601	ENE-WSW (4)	0.74	rib, scap, L hum, l/b shaft	18–25 y	–	–	–
616	615	N-S (1)	0.68	R tib	imm	N/A	–	–
618	617	N-S (1)	0.72	fem Fs	adult	–	–	–
620	619	E-W (5)	0.58	fem	adult	–	–	–
624	623	N-S (1)	0.68	innoms, R fem	c.30–34	female	–	–
628	627	NNE-SSW (3)	0.7	cranium	adult	–	–	–
638	637	NNE-SSW (3)	0.5	hum	adult	–	–	–
640	639	NNE-SSW (3)	N/A	R hum	adult	–	–	–
644	643	N-S (1)	0.8	sac, R ul, R rad	adult	–	–	–
650	649	N-S (1)	0.58	skull, hums	adult	female	cut on L petrous, spotted enamel (EDDs), severe caries	decapitation?
652	651	ENE-WSW (4)	0.6	skull, verts, ribs, claws, scaps, hums	32–65, mean 45.5	male	severe a/m tooth loss, caries, abscesses and mal-occlusion; verts: o/a; scaps: lipping of fossae; R hum: rugosity of insertion of <i>Pec mag</i>	–
656	655	N-S (1)	0.5	ribs, hums, L mc2	adult	–	–	–
662	661	NNE-SSW (3)	0.8	verts, ribs, sac, innoms, L ul, rads, fib	18–25	–	–	1 indiv
664	663a	N-S (1)	0.6	L tib, fib	adult	–	–	1 indiv
664	663b	N-S (1)	0.6	R tib	adult	–	–	1 indiv (larger)
666	665a	NNE-SSW (3)	0.8	L fem	<14	N/A	–	1 indiv
666	665b	NNE-SSW (3)	0.8	R ul, R rad	?adult	–	–	1 indiv
682	681	Uncertain	0.44	innom, L rad, L fem	<12	N/A	–	1 indiv

landmarks, the same alignment as the pre-existing field-ditches/enclosures of Phase 1. Given the high degree of disturbance, together with the absence of clear stratigraphic relationships, it was not possible to establish patterns of alignment in relation to chronological changes. It appeared, however, that the north to south aligned burials of Group 1 were amongst the earliest features, being cut by the graves in Groups 2–5, and that the east-northeast to west-southwest graves in Group 4 were amongst the latest. Whether this evidence may indicate a progressive change in orientation towards an east to west alignment is uncertain. There were only few east to west aligned burials, including the two stone coffins (1 and 546), many of which occurred in isolation.

As most skeletons had been truncated during the original digging of the roadside ditch, there was insufficient evidence to allow the analysis of body postures. The least disturbed burials (1, 546, 649 and 651) appeared to be laid supine and extended.

Distribution: burial density and 'empty' zones

The high density of burials together with variations in the alignments must have been responsible for the frequent intercutting of graves. Disturbance may suggest that the graves were not marked. Despite overcrowding, there were areas with lower density of burials and 'empty' zones towards the slope further away from the walled circuit of the Roman town (Figs 3 and 4). Both lower burial density and 'empty' zones could have been caused by natural or artificial constraints, such as trees, ditch banks, topographical

features, shallow graves, etc which may have disappeared.

The former ditches had only partially silted-up and were therefore still visible by the time burial started, possibly guiding the orientation of some of the graves whilst also serving (albeit temporarily) as external boundaries of the cemetery. In the absence of dating evidence, any such suggestion is tentative. It is also possible that the ditches acted as internal boundaries for the definition of sectors or burial plots, possibly relating to land-ownership. Evidence for continuation of established plots in Romano-British cemeteries comes from sites at Butt Road, Colchester (Crummy & Crossan 1993, *passim*), Ilchester (Leach 1994), Kelvedon (Rodwell 1988) and at Godmanchester, The Parks (Jones 2003).

Burial Rites and grave treatment

Burials consisted exclusively of inhumations some of which produced evidence for wooden coffins in the form of loose iron nails in the grave fills (graves 43, 77, 105, 527, 529 and 576). Unstratified clusters of iron nails were located by metal detector throughout the site. More substantial body containers were represented by the two lidded limestone coffins, which supplement the substantial group already known from the immediate area.

Both stone coffins were rectangular with flat lids, and belong to a fairly common type previously recorded in the Water Newton area (Taylor 1984). Stone coffins are commonly found in urban cemeteries and occasionally in rural locations in the context of



Figure 8. Roman stone coffin from Durobrivae, now at the Norris Museum, St Ives. Photo A. Taylor.

villa-holdings or 'imperial estates'. As a whole, the distribution of stone coffins in Roman Britain appears to be influenced by the local geology, with particular reference to the Oolitic-Liassic Jurassic Ridge, indicating that availability of raw material *in loco* played a significant part. This is well exemplified by the distribution in the Cambridgeshire region (Taylor 1984;1993) where the majority of coffins occur in the Peterborough area, near the Barnack quarries, although problems of transport could be overcome by use of rivers. Elements of ritual choice, as well as fashionable trends and status (below), are also likely to have influenced the preference accorded to this type of container, accounting for the variety of associated burial rites.

There was also one possible stone-lined grave (25) (Fig. 4). Although the burial had been disturbed, it was clear that stones had been placed along the edges of the grave. Partial covering of bodies with stones (or tiles) has been related to the use of un-nailed wooden coffins. The practice is frequently found at cemetery sites both in urban and rural contexts along the Jurassic Ridge (Philpott 1991, 63). For instance, partial linings were noted at Ashton (Northants.) where both the position and quantity of stones varied considerably (Philpott 1991). There are also examples from Lankhills (Winchester) which would indicate that the practice became common after c.370 (Clarke 1979), Butt Road (Colchester) (Crummy & Crossan 1993) and Poundbury Site C (Dorchester) (Farwell & Molleson 1993). Local availability of limestone may provide a partial explanation.

Brick, roof tile (*tegulae* and *imbrices*) and limestone slab fragments were found in the fills of numerous graves, and in the fills of two ditches (161 and 674). In the case of the graves, however, it was not possible to establish whether they may have originally represented deliberate stone and tile packing. It is possible that the materials originated from the demolition of buildings located in the proximity of the cemetery site.

Decapitation

Burial 649 (650) presented a horizontal cut on the left petrous consistent with possible decapitation (Duhig, above). It belonged to an adult female whose body had been laid out supine on a north to south alignment with the head to the north. The head had apparently been severed but left in the correct anatomical position. Decapitation is increasingly being found as a minority burial rite in late Roman Britain (Macdonald 1979; Taylor 2001, 123), especially in rural areas. In occasional examples it can be argued that the victim was executed, but the majority (as here) were otherwise normal burials, probably surgically decapitated post-mortem for religious/superstitious reasons linked to releasing troublesome spirits. At *Durobrivae*, a second burial 536 (537) of uncertain alignment, also belonging to an adult female, appeared to have had the skull removed from its anatomical position and placed with care on the pelvis. Despite inconclusive osteological evidence due to the poor condition of

preservation of the skeletal remains, a second case of decapitation is possible.

An 'intrusive' grave?

Burial 114 (grave 115; Fig. 4) was the only furnished burial recorded. During excavation of the child's skull, a group of copper alloy and ivory armlets, together with amber and decorated black glass beads, was found and lifted (Figs 5–8). The bracelets were clearly not worn but stacked together, with the beads placed inside the group of bracelets. The evidence suggests they may have been buried inside a box or bag, since decayed. Ornaments were frequently deposited in a pile near the hip or head in the graves of female juveniles. Preference was given to certain types and combinations including the deposition of bracelets and beads, the latter being commonly associated with the former which could also occur on their own (Philpott 1991, 147–148). Most known examples date to the 4th century. The armlets from grave 115 at *Durobrivae* were of standard late Roman form and style suggesting a date in the final quarter of the 4th century. The beads are Germanic or Frankish imports from the Continent, providing the best evidence that the burial did not take place until the late 4th century or early years of the 5th century (Crummy, above).

Inhumation 114 parallels a similar burial in a stone-lined cist at Wittering (Cams), excavated in 1993 (McKenna, nd). Here a single decapitated female inhumation near the A1 was accompanied by three bone and five copper alloy bracelets, beads and other items, the bracelets showing a marked similarity with those from the *Durobrivae* grave. The Wittering burial was dated on the basis of the artefacts to the (3rd or) 4th century AD (Ian Meadows, pers comm).

At *Durobrivae*, the presence of one furnished grave out of nearly sixty unfurnished burials, together with the typology of the grave goods, raises the question as to whether it may have been foreign. According to the literary sources, Sarmatians and Burgundians are vaguely attested in Britain under, respectively, Marcus Aurelius and Probus (Salway 1985, 549, ff.). The evidence from funerary contexts would suggest that the earliest phase of Germanic settlement, though on a small scale, dates from the early part of the 5th century. These data might throw light on the problem of 'foreign graves' in the context of the late Romano-British cemeteries. For instance, at Lankhills, Winchester (Clarke 1979) the presence of two groups of 'intrusive graves' was defined on the basis of classification, typologies and positioning of objects in the graves with respect to the body. The first group was related to people who had arrived around the middle of the 4th century from the Danube area (Bavaria and Hungary) and had been recruited into the Roman army. The burials of adult males were characterised by knives, crossbow brooches and belt metal fittings as part of military uniforms. The grave goods associated with the female burials consisted of distinctive dress fasteners and other items of adornment. The association of the second group of 'intrusive buri-

als' with later incomers showing Saxon affinities is less convincing, due to the absence of Anglo-Saxon artefacts in the graves. The presence of common late Roman artefacts in the same grave could simply indicate that the Bavarian items reached Roman Britain as the result of increased trade contacts with the Rhine frontier. Furthermore, the absence of male burials accompanied by official uniform metalwork would argue against the presence of recruits (whether local or foreign) in the cemetery.

Status

Fashion, religious beliefs and personal choice are likely to have played a major role by dictating the mode of burial and aspects of conformity in relation to the funerary standards. The burials from *Durobrivae* did not appear to display any marked traits associated with wealth or to show evidence for the presence of treatments reserved for the poorest section of the community, the dominant pattern consisting of unfurnished burials. An exception is represented by the presence of two inhumations in stone coffins. The association of stone coffins with major walled towns and 'high-ranking' rural settlements would indicate a correlation between status and substantial body containers, although local availability of raw material may have been a factor.

At *Durobrivae* skeletal analysis as a whole did not reveal atypical changes, although there were rare instances of physiological stress and dietary deficiency caused by poor hygienic conditions and malnutrition.

Religion

At *Durobrivae*, the apparent progression of the graves towards east to west alignments and, more convincingly, the presence of infants in a formal cemetery alongside adults may be indicative of Christianity (Watts 1991, 38–51). It is interesting to note that infants were found buried in pits at Greenfield's Site 3. Infant burials are commonly found in discrete cemeteries, generally associated with buildings, or in pits and ditches on rural sites. Generally taken to indicate that infants were not held in the same regard as adults (Philpott 1991, 98), the disposal and segregation of infant burials may have had ritual connotations (Scott 1991). With particular reference to the group of infants from Greenfield's Site 3, the quantity of coins together with the burial of joints of animal meat and the fragments of a possible altar may indicate religious use of the building (Perrin 1999, 64). The burials recorded by Greenfield were earlier than those excavated in 1998. The occurrence of infants in a formal cemetery could show a change in attitude during the 4th century, possibly under the influence of Christianity.

The presence of Christian burials would further indicate the existence of a Christian community at *Durobrivae*, where the major evidence is the Water Newton Treasure. This comprises a series of votive leaves from the pagan tradition of *ex-voto* in temples, and items of a Eucharist set with dedicatory inscrip-

tions and *chi-rho* symbols, which may have belonged to a house-church or purpose-built structure for the congregation of wealthy Christians in the late 3rd to 4th century (Painter 1977; Thomas 1981, 113–121). The composition of the Water Newton Treasure is a reflection of the fusion of pre-existing pagan elements and Christian rites. The same syncretism is apparent in the context of the cemetery excavated in 1998, and exemplified by the persistence of pagan rituals, as in the practice of decapitation, alongside Christian trends, such as the formal burial of infants with adults.

The cemetery in its suburban context

The cemetery was evidently established in an area which had been used for rural activities during the mid to late 3rd century, by which time suburban occupation along the road had already begun (in the Hadrianic period) at some distance from the town perimeter (Greenfield *nd*). The apparent presence of an 'empty zone' for rural activities between the town defences (constructed in or after the 2nd century) and the suburban area may reflect land ownership on the fringes of the Roman town. Subsequent use of the former rural 'empty zone' was largely for a cemetery established in the later part of the 3rd century. In the second half of the 4th century, occupation became sporadic whereas burial activity continued. The fact that the cemetery did not encroach upon the buildings nearby may indicate that the suburb was not entirely derelict, the evidence being supported by late Roman pottery and coins from the area (Perrin 1999, 74–77).

In major Romano-British towns, the location of a cemetery between the town circuit and the suburban built-up area would be unusual. However, it would not be unusual in minor towns where burial was more informal. For instance, at Ilchester (Leach 1982, 82–88) and Ashton (Hadman & Upex 1975, 1977, 1979; Hadman 1984), inhumations had been laid out in plots at the rear of street-frontage buildings. The evidence from *Durobrivae* would be consistent with many minor towns where urban planning in general was more flexible (Finch Smith 1987, *passim*; Burnham & Wachter 1990, 31, 316), and had to take into account the fact that unofficial centres developed almost spontaneously due to changed economic and political circumstances which often prompted the promotion of many of these 'minor' towns to a higher status.

Two possible explanations for the location of the cemetery can be suggested. Given the evidence for agricultural activity, together with industrial production and, possibly, trade from the suburban area, it is tempting to associate some burials with the population of the extra-mural area nearby. The cemetery may have been used by both townspeople and suburban residents, accounting for continuity of burial during the 4th century, at a time when the suburban zone had started to contract, although there was still a considerable population residing in the town.

From a different perspective, the location outside the western defence may relate to some form of planning of the suburban area, following construction of

the walled circuit. It is possible that ribbon development was expected, but since expansion did not occur, the cemetery came to occupy the 'empty zone'.

Cemeteries around Durobrivae

Current knowledge rests almost exclusively on antiquarian observations and recording (Haverfield 1902, 170; RCHM 1926, 52; Taylor 1926, 233–234) (Fig. 2). The evidence is summarised below.

- Northwest gate, south of Ermine Street: stone coffins for inhumations and urned cremations recorded during the 18th century by Artis (1828) and Stukeley respectively.
- Southeast corner of the town defences: inhumations excavated by Artis (1828).
- West corner of the defences: urned cremations and stone and lead coffins exposed during construction of the Great North Road in 1739.
- Road to Irchester: cropmarks suggest a system of large enclosures flanking the road. One of the enclosures near the junction with the road branching off Ermine Street contained grave cuts for inhumations. Possible square and circular *mausolea* were also observed, one of which may have been contained within one of the enclosures (Wilson 1975, 10).
- Normangate Field, north of the River Nene: a stone mausoleum contained four burials one of which was accompanied by a gold ring, a silver brooch and bronze bracelets (Dannel & Wild 1969, 7). Scattered inhumations were also found (Burnham & Wachter 1990, 91). The site at Normangate Field may have belonged to one of the villa-estates known to have existed in the area.
- Greenfield's Site 2 by the Billing Brook (Greenfield nd): evidence for 2nd to 3rd century occupation emerged in the form of a well together with ovens, postholes, ditches and gravel pits. There were also several disturbed inhumations and stone coffins (Anon. 1958) which may have belonged to the burial site located at the junction between Irchester road and the road branching off Ermine Street.

Distribution of cemeteries around *Durobrivae* seems to have been guided by the defensive bank. The earliest burials, cremations, were located in cemeteries along the north and west edges of the Roman town, where inhumations are also recorded. To the east, south and southwest of the urban defences burial grounds seem to have contained inhumations only. By comparison with burial grounds for mixed rites, later cemeteries exclusively for inhumations seem to have been re-located further away from the town, as at Greenfield's Sites 2–4 where there was also evidence for suburban ribbon development.

The reasons behind the shift are difficult to explain. It is possible that the early burial grounds lay too close to the town, their development partially constrained by the Nene and the Billing Brook. In the western cemetery pressure on land is exemplified by graves cut through the counter-bank of the

town ditch, suggesting prolonged usage (Burnham & Wachter 1990, 91). It is therefore possible that natural geological features made it necessary to find new areas for later graves, although the rite of inhumation continued to be performed in the earlier burial grounds. Convenience may explain cemeteries along easy access roads for suburban areas. Proliferation of cemeteries in the late 3rd to 4th century may point to an increase in the population at *Durobrivae*.

Another interesting aspect relating to distribution of the cemeteries is the presence of substantial grave markers and body containers in what seem to be preferential locations. For instance, *mausolea* have been found to the west of the town, along the Irchester road. Similarly, the bulk of stone coffins came from the southwest cemetery. It is possible that wealth and status, together with religious beliefs and fashionable trends may have conditioned the choice of areas for 'special' burials.

Conclusions

Durobrivae has attracted the attention of antiquarians since the 18th century. More recent excavations and aerial photographic surveys have produced a growing body of evidence allowing a better understanding of the town development in Roman times. As a 'minor' walled centre, *Durobrivae* began life as a civilian *vicus* attached to a (pre-Flavian?) military fort near the Billing Brook. It later developed into a *mansio* and, possibly, a *civitas* (Rivet 1964, 135). Evidence is also emerging for the organisation of the rural hinterland where villas and farmsteads appear to form a consistent settlement pattern in terms of distribution in relation to the town. From a topographic point of view, not only is there potential evidence for the organisation of the town core, but also for the use of the suburban space for agricultural and industrial activity. Finally, many cemetery sites have been identified which could offer further potential for the analysis of phases of expansion-contraction and changes of land use through time.

Acknowledgements

The authors would like to thank the client, David Griffiths of the Highways Agency, for his help and encouragement. The project was funded by the Highways Agency, initially through their contractors for this part of the A1, BLN Routecare, and later directly. Without the enthusiasm and interest of David Griffiths, the final report on the monitoring work would not have been the exhaustive work that it is. Thanks are also due to the contributing specialists. Our thanks also go to Celia Honeycombe (conservator), Crane Begg, Carlos Silva (site illustrations) and Sue Holden (finds illustration), and Rob Atkins (Project Officer). Andrew Hatton supervised the fieldwork and provided useful assistance during the preparation of this paper; the project was managed

by William Wall and monitored by Tim Reynolds. This paper was edited for publication by Elizabeth Shepherd Popescu.

Cambridge Antiquarian Society is grateful to Cambridgeshire County Council Archaeological Field Unit for a grant towards the publication of this paper.

Bibliography

- Allason-Jones, L 1989 *Ear-rings in Roman Britain* BAR Brit Ser 201
- Anon 1958 Roman Britain in 1957 I: Sites Explored. *J Roman Stud* 48: 139–140
- Anon 1959 Roman Britain in 1958 I: Sites Explored. *J Roman Stud* 49: 117–118
- Arnold, CJ 1984 *Roman Britain to Saxon England* Croom Helm
- Artis, ET 1828 *The Durobrivae of Antoninus identified and illustrated in a Series of Plates exhibiting the excavated Remains of the Roman Station in the Vicinity of Castor, Northants*
- Burnham, BC & J Wachter 1990 *The Small Towns of Roman Britain* London
- Bushe-Fox, JP 1928 *Second report on the excavation of the Roman fort at Richborough, Kent*
- Casa Hatton, R & W Wall 1999 *A Late Roman Cemetery beside the A1 near Durobrivae (Water Newton): Archaeological Recording* CCC AFU Rep No 165
- Cho, H, AB Falsetti, J McIlwaine, C Roberts, PS Sledzik & AW Willcox 1996 *Handbook of the Forensic Anthropology Course of the Department of Archaeological Sciences* University of Bradford and the NMHM/AFIP, Washington DC
- Clarke, G 1979 *Winchester Studies 3: Pre-Roman and Roman Winchester Part II: The Roman Cemeteries at Lankhills* Oxford University Press
- Cool, HEM, & JM Mills 1993, 'The copper alloy and silver grave goods' In DE Farwell & TI Molleson, *Excavations at Poundbury 1966–80, vol 2, the Cemeteries* Dorset Natur Hist Archaeol Soc Monogr Ser, 11
- Crummy, N 1983 *The Roman small finds from excavations in Colchester 1971–9* Colchester Archaeol Rep 2
- Crummy, N & C Crossan 1993 'Excavations at Butt Road 1976–9, 1986, and 1988' In N Crummy, P Crummy, & C Crossan, *Excavations of Roman and later Cemeteries, Churches and Monastic Sites in Colchester, 1971–88* Colchester Archaeol Rep 9
- Cunliffe, B 1997 *The Ancient Celts*
- Dannell, G & P Wild 1969 *Castor Normangate Field. Bull Northants Fed Archaeol Soc* 3: 7–9
- Evison, VI 1987 *Dover: The Buckland Anglo-Saxon cemetery* HBMCE Archaeol Rep 3
- Farwell, DE & TI Molleson 1993 *Poundbury Volume II: The Cemeteries* Dorset Nat Hist Arch Soc Monogr Ser 11
- Finch Smith, R 1987 *Roadside Settlements in Lowland Britain* BAR Brit Ser 157
- Fincham, G 2004 *Durobrivae, a Roman Town between Fen and Upland* Tempus
- Fox C & TC Lethbridge 1924 *The La Tene and Romano-British cemetery, Guilden Morden, Cambs. PCAS* 27: 49–63
- Garrard, IP, 1995, 'Other objects of copper alloy and silver' In K Blockley, M Blockley, P Blockley, SS Frere & S Stow, *Excavations on the Marlowe Car Park and surrounding Areas*
- Goodman, AH & JE Rose 1990 *Assessment of Systemic Physiologic Perturbations from Dental Enamel Hypoplasias and Associated Histological Structures. Yearbook of Physical Anthropology* 33: 59–110
- Green, M 1993 *The pipeclay figurines in A Taylor, A Roman lead coffin with pipeclay figurines from Arrington, Cambridgeshire. Britannia* 24, 191–225
- Green, B, & A Rogerson 1978 *The Anglo-Saxon Cemetery at Bergh Apton, Norfolk* E Anglian Archaeol 7
- Greenfield, E (nd) *Interim Report of Water Newton Excavations (1956–58)*, Huntingdonshire Unpublished
- Guido, M 1978 *The Glass Beads of the Prehistoric and Roman Periods in Britain and Ireland*
- Guido, M 1979, 'Beads and Necklaces' In G Clarke 1979
- Guido, M 1981 'The beads from the Mersea Road cemetery' In P Crummy, *Aspects of Anglo-Saxon and Norman Colchester* Colchester Archaeol Rep 1
- Guido, M 1999 *The glass beads of Anglo-Saxon England, c. AD 400–700*
- Hadman, J 1984 *Ashton 1979–82 'Durobrivae* 9: 28–29
- Hadman, J & S Upex 1975 *The Roman settlement at Ashton, near Oundle Durobrivae* 3: 13–15
- Hadman, J & S Upex 1977 *Ashton 1976 Durobrivae* 5: 6–9
- Hadman, J & S Upex 1979 *Ashton 1977–78 Durobrivae* 7: 29–30
- Haverfield, F J 1902 *Romano-British Northamptonshire VCH Northants Vol I*
- Johns, C 1996 *The Jewellery of Roman Britain*
- Jones, A (ed) 2003 *Settlement, Burial and Industry in Roman Godmanchester* Birmingham University Field Archaeology Unit Monograph Series 6 BAR Brit Ser 346, Oxford
- Kirk, JR & Leeds, ET 1953, *Three early Saxon graves from Dorchester, Oxon. Oxoniensia* 17–18: 63–76
- Leach, P 1982 *Ilchester Vol I: Excavations 1974–75* West Archaeol Trust Excav Monogr 3, Bristol
- Leach, P (ed) 1994 *Ilchester Vol II: Archaeological Excavations and Field Work to 1984* Sheffield Excavation Report No 2
- Liversidge, J 1973 *Britain in the Roman Empire*
- Liversidge, J 1977, *Roman Burials in the Cambridge Area. PCAS* 67: 11–38
- McKenna, R (nd), *A Romano-British Decapitated Burial at Church Farm, Wittering* Unpublished
- Macdonald, J 1979 'Religion' In G Clarke, *Winchester Studies 3: Pre-Roman and Roman Winchester Part II: The Roman Cemeteries at Lankhills* Oxford University Press: 404–433
- Mackreth, DF 1995 'Durobrivae, Chesterton, Cambridgeshire' In AE Brown (ed), *Roman Small Towns in Eastern England and beyond*
- Painter, KS 1977 *The Water Newton Early Christian Silver* British Museum
- Perrin, JR 1999 *Roman Pottery from Excavations at and near to the Roman Small Town of Durobrivae, Water Newton, Cambridgeshire 1956–58. J Roman Pottery Stud, Vol 8*
- Philpott, R 1991 *Burial Practices in Roman Britain* BAR Brit Ser 219 (1991)
- Pierpoint, SJ 1986 'Small Finds' In R Whytehead, *The excavation of an area within a Roman cemetery at West Tenter Street, London. E1 Trans London Middlesex Archaeol Soc* 37, 23–124
- RCHM 1926 *Inventary of Huntingdonshire*
- Rivet, ALF 1964 *Town and Country in Roman Britain*
- Rodwell, K 1988, *The Prehistoric and Roman Settlement at Kelvedon, Essex* CBA Res Rep 63/Chelmsford Archaeol Trust Rep 6
- Rogers, J, T Waldron, P Dieppe & I Watts 1987

- Arthropathies in Palaeopathology: the Basis of Classification according to most Probable Cause. *J Archaeol Sci* 14: 179–193
- Salway, P 1985 *Roman Britain* The Oxford History of Britain
- Scott, E 1991 'Animal and infant burials in Romano-British villas: a revitalization movement' In P Garwood (ed), *Sacred and Profane* Oxford Committee of Archaeology, Oxford: 115–121
- Strong, DE 1966 *Catalogue of the Carved Amber*
- Stuart-Macadam, P 1989 'Nutritional deficiency diseases: a survey of scurvy, rickets, and iron-deficiency anaemia' In MY Iscan & KAR Kennedy (eds), *Reconstruction of life from the skeleton* 210–22 New York: AR Liss
- Taylor, A 1984, A Roman stone coffin from Stuntney and gazetteer of similar coffins in Cambridgeshire. *PCAS* 73: 15–21
- Taylor, A 2001, *Burial Practice in Anglo-Saxon England* (Stroud: Tempus)
- Taylor, MV 1926 *Romano-British Huntingdonshire*, Vol I
- Thomas, C 1981 *Christianity in Roman Britain to AD 500* London
- Ubelaker, DH 1989 *Human skeletal remains: Excavation, Analysis, Interpretation*. (Manuals on Archaeology 2) Washington: Taraxacum for Smithsonian Institution
- Upex, SG 1995 *The A1 Road Improvement, Norman Cross-Stamford Sector* Peterborough Regional College
- Watts, D 1991 *Christians and pagans in Roman Britain* London
- White R 1988 *Romano-Celtic objects from Anglo-Saxon graves. A catalogue and an interpretation of their use* BAR Brit Ser 91
- Wild, JP 1970 *Textile Manufacture in the Northern Roman Provinces*
- Wild, JP 1983 'Textile fragments from the later Butt Road cemetery' In N Crummy, *Small finds from excavations in Colchester 1971–79* Colchester Archaeol Rep 2
- Wilson, DR 1975 'The Small Towns of Roman Britain from the Air' In W Rodwell & T Rowley (eds), *The Small Towns of Roman Britain* BAR Brit Ser 15: 9–49
- Wheeler, REM, & Wheeler, TV, 1932, *Report on the excavations of the prehistoric, Roman, and post-Roman site in Lydney Park, Gloucestershire*

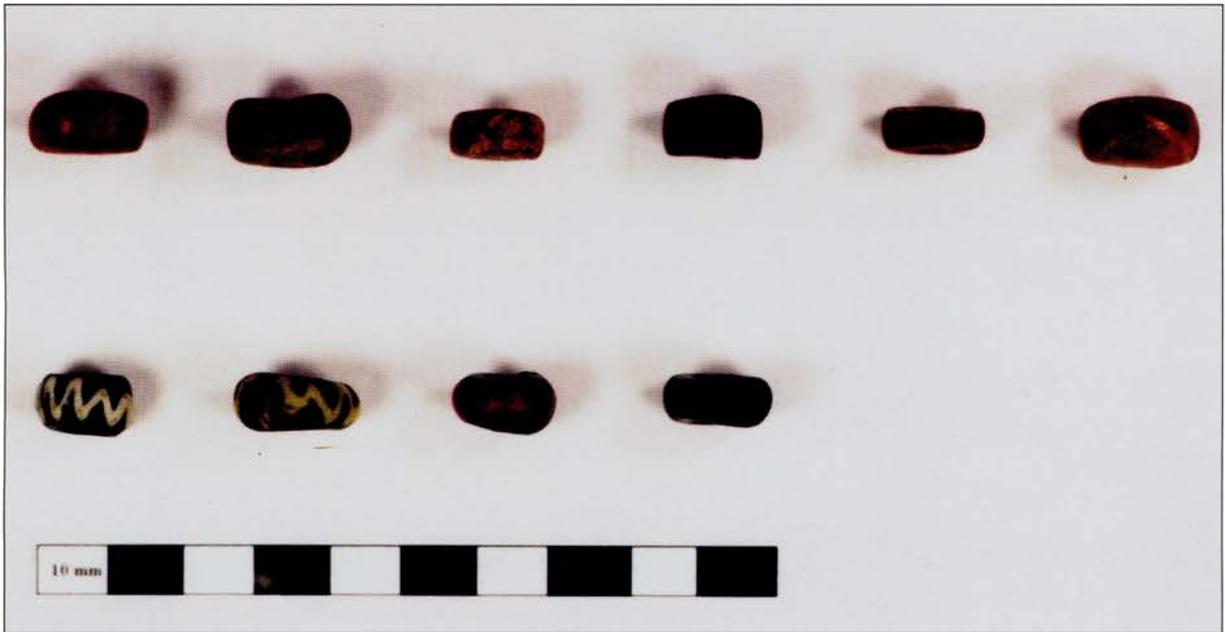


Plate 1. Glass and amber beads from Durobrivae grave 115.

Proceedings Volume XCV, 2006

Price £12.50 for members, £14.50 for non-members

Contents

A late Roman cemetery at <i>Durobrivae</i> , Chesterton Rebecca Casa Hatton and William Wall	5
Romano-British and medieval saltmaking and settlement in Parson Drove, Cambridgeshire Phil Andrews	25
Roman tumuli or medieval industry? Moulton Hills, Bourn, reconsidered David Baxter	49
A late Roman Cemetery at Watersmeet, Mill Common, Huntingdon Kate Nicholson	57
A Romano-British temple complex and Anglo-Saxon burials at Gallows Hill, Swaffham Prior Tim Malim	91
An Anglo-Saxon settlement at Cherry Orton Road, Orton Waterville, Peterborough James Wright	115
Landscape History, Observation and Explanation: the missing houses in Cambridgeshire villages Christopher Taylor	121
Conservation of early 17th Century allegorical wall paintings in St John's College, Cambridge Tobit Curteis	133
Huntingdonshire Bell Frames Robert Walker	139
Changes in the landscape of west Cambridge after Enclosure 1805–1870 Philomena Guillebaud	159
Archaeological Notes	
Romano-British buildings at Tunbridge Lane, Bottisham TL 5453 6095	171
Medieval land reclamation and subsequent occupation on High Street, Ramsey TL 2870 8506	175
Animal carcasses in a Roman ditch, West End, Haddenham, TL 4613 7552	179
Fieldwork in Cambridgeshire 2005 Sarah Poppy, Elizabeth Popescu and James Drummond-Murray	183
Obituaries	199
Reviews Anne Holton-Krayenbuhl, Tony Kirby, Alison Taylor	201
<i>Index</i>	205
<i>Abbreviations</i>	211
Recent Accessions to the Cambridgeshire Collection Chris Jakes	213