
Proceedings of the Cambridge Antiquarian Society

(incorporating the Cambs and Hunts Archaeological Society)

Volume XCIII
for 2004



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(incorporating the Cambs and Hunts Archaeological Society)

**Volume XCIII
for 2004**

Editor Alison Taylor

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Editorial

The first thing you will notice about these Proceedings is our leap (as a belated welcome to the 21st century) into colour, for our cover and a number of plates. This is not really an innovation: CAS had beautiful colour plates in 1883 and a few other 19th century volumes. At last this is affordable again, and the water colour drawings and photographs we wanted to show seemed to fully merit some extra expense. In future, we will look carefully at illustrations that would benefit from such reproduction and would be particularly keen to include fine examples of artefacts.

This volume contains some very substantial reports on archaeological work, for we are one of the few outlets available for full publication of excavations. It is refreshing to see that these all relate to recent work, not the backlogs that once were a feature of British archaeology. A quick look at the 'Fieldwork in Cambridgeshire 2003' section however reminds us what a small proportion of current work can be made available in this way. Of course, reports on all sites are produced and can be purchased from the relevant units or consulted in the county archaeological office. In future, these will also be added to a national data base known as OASIS, run by the Archaeology Data Service, so accessing this huge amount of data will eventually be much simpler. We aim to keep you abreast with such advances through our own website, www.camantsoc.org.

It was a great pleasure to be asked by the Cambridgeshire Local History Society to publish a short note on their superb photographic project, a worthy successor to CAS' similar project in the early part of the 20th century, now a much valued part of the Cambridgeshire Collection. This voluntary effort will likewise be used by those involved with the historic environment in years to come. The same Society asked us to include the list of recent additions to the Cambridgeshire Collection, compiled by Chris Jakes. This list used to be included in *Conduit* and has been much missed. It reminds us that our local historians are not far behind local archaeologists in their labours, a tribute to the floods of new data from an ever-active antiquarian community.

'Fieldwork', 'Reviews', 'Spring Conference report' and 'Conduit' are regular items we have managed to maintain – and which add to another substantial volume. This year, 'Conduit' was compiled at short notice by our redoubtable President, Tony Kirby, to whom we owe many thanks. In the nature of things this has to be done at the last moment, and even so many societies do not have a complete programme for the following year at the time we need it. We would therefore like to have a Supplement later in the year, as with original *Conduit*, but currently this is beyond our means. Perhaps we will have better news next year.

It remains to offer further thanks to our retiring President. Tony has taken the Society safely through two quite difficult years, and this October hands over to Nicholas James. Our Secretaries carry an even larger burden of work for the Society, of which organising nine lectures, often by speakers of national repute, is only one part. We are therefore extremely grateful to our retiring Secretary, Liz Allan, and to Janet Morris, who has now taken on the challenge. We must say a sorry farewell too to Don Fage, who has had the tough job of Registrar. It may also be noticed that we still have vacancies for Excursions Officer and for Editor of *Conduit*, so do contact us if you are interested in volunteering.

Alison Taylor
Editor

Anglo-Saxons on the Cambridge Backs: the Criminology site settlement and King's Garden Hostel cemetery

Natasha Dodwell, Sam Lucy and Jess Tipper

Excavations in 2000 and 2002 on two separate sites just over the Backs in Cambridge revealed evidence for a probably 7th-century Anglo-Saxon cemetery and, possibly related to it, a settlement site of the 6th to 7th centuries. Within the cemetery, 21 burials in 20 graves were found, including one double grave, and the survival of bone was generally good. Five of the burials were accompanied by grave goods. These included a copper alloy bowl with beaded rim (Perlrandsbecker) containing the remains of three eels, a bag ring, a curated Roman bracelet, a reused Roman coin, a bag or pouch assemblage, an unusual pendant, a spear-head and several knives. There were no characteristically 5th-century grave goods, and this group appears to date mainly to the 7th century. Study of the skeletal remains indicates a population of mixed age and sex. The settlement site revealed evidence for one earth-fast post-hole building and two other structures associated with sunken-featured buildings or Grubenhäuser, both with probable suspended floors, together with a small number of pits, two other possible structures and a later ditch.

Introduction

This paper reports the results of two separate excavations by the Cambridge Archaeological Unit (CAU; University of Cambridge) in west Cambridge: that in 2000 of part of a small probably 7th-century inhumation cemetery in advance of the building of King's College Garden Hostel (at TL 442 582), and 300m to the south, that of part of a settlement site of similar date, commissioned by Cambridge University Estates Management Services in advance of the construction of the new Institute of Criminology building on the University's Sidgwick campus (TL 4428 5812) (Fig. 1a).

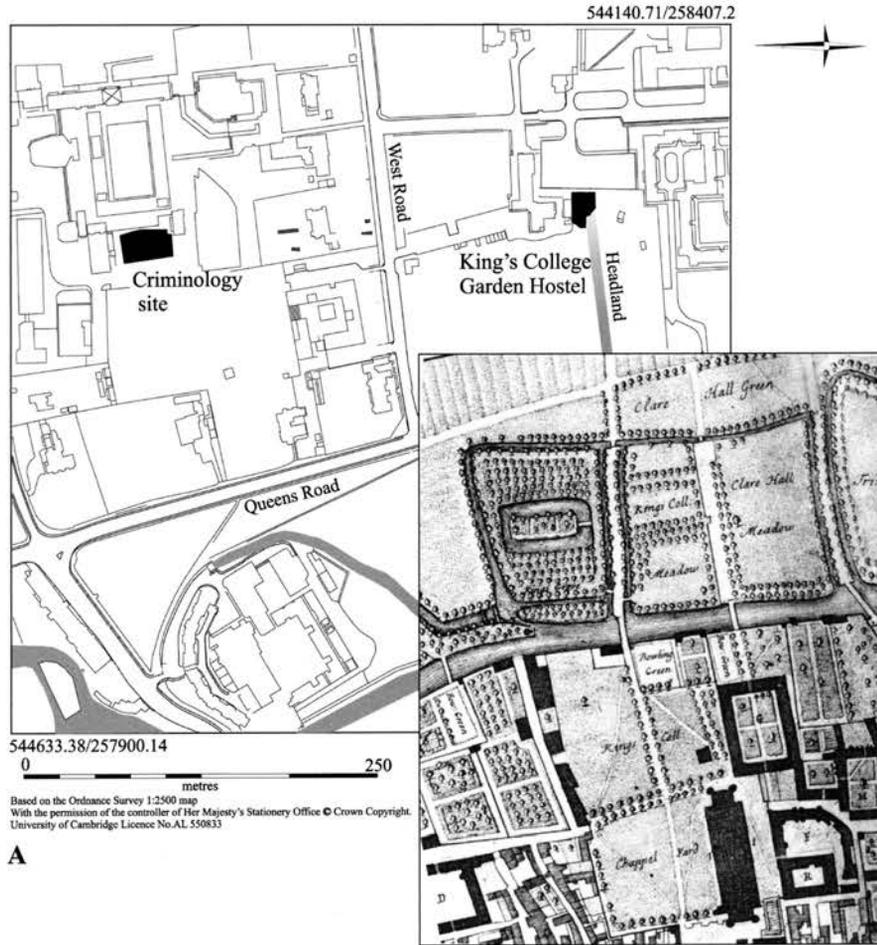
These sites both lie on second terrace river gravels, c. 1.5–2m above the Cam floodplain which lies 150m to the east, the settlement between 8.60 and 8.90m OD and the cemetery at 9.40m OD. They are situated to the west of Queens Road, with the cemetery lying to the north of West Road and the settlement to the south. The sites both lie to the north of an area of reported Iron Age and Anglo-Saxon burials at Newnham and

to the south of the Anglo-Saxon cemetery at St John's Playing Fields which is dated between the mid 5th and 7th centuries AD (Fox 1923: 242). There was evidence at St John's Playing Fields of Bronze Age features and the corner of a Romano-British field system just east of Akeman Street (the Roman Road is thought to run in a NE to SW alignment to the west of the Garden Hostel; Evans 1991a and b), and the 1992 excavations at Burrell's Walk revealed the northern margin of a probable Roman settlement complex, with prehistoric features also present (Gdaniec 1992). However, more recent work in the area at St Chad's (Whittaker 1998) and at St John's School (Mortimer 1995) found no archaeological remains. A ditch of probable Iron Age/Romano-British date was found during fieldwork in 1996 in the grounds of the University Library immediately to the northwest (Gibson 1996), while traces of a boundary ditch system of possible Anglo-Saxon date were found in an evaluation at No. 5 West Road (Mackay 2002).

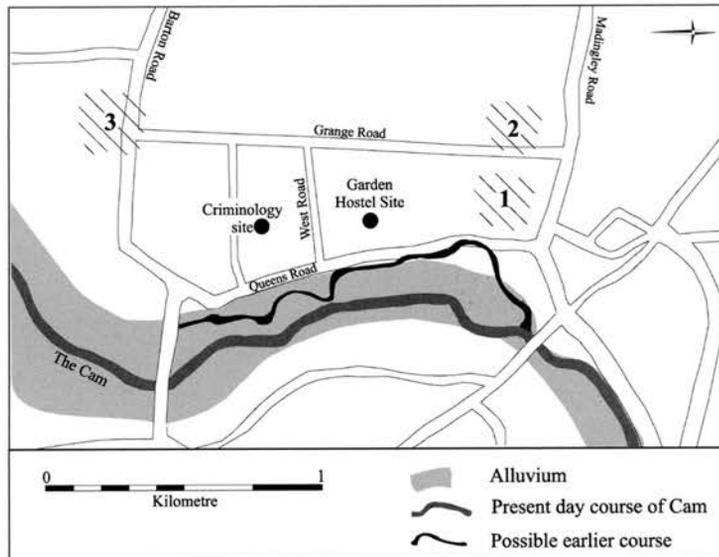
In the medieval period the area was part of an extensive system of open-field agriculture, the West Fields of Cambridge (Hall and Ravensdale 1976). This was documented in the cemetery excavation, where the immediate area of the site underlay a broad west/east aligned headland (Fig. 2, section), whose line still survives in the lawn of King's College Fellows Garden and must have continued east to join the causeway leading to the late medieval bridge crossing (Fig. 1a). Parts of the surrounding area were also subject to post-medieval quarrying (Patten 2002; A Dickens pers comm).

The cemetery

The cemetery was first discovered during an archaeological evaluation in advance of building work at King's Garden Hostel (Whittaker 1999). Three graves were recorded during this 1999 evaluation, and these and a further 17 graves (containing 18 individuals) were excavated in 2000 (Fig. 2). The excavated area consisted of the footprint of the new building, with an additional extension to the west, so that the graves



A



B

Figure 1. A) Location map, with Loggan map of 1688 inserted, showing position of the King's College bridge crossing along the projected line of the headland. B) Main Cambridge western Cam-side Anglo-Saxon cemeteries: (1) St John's playing fields (2) 71 Grange Road (3) Newnham Croft.

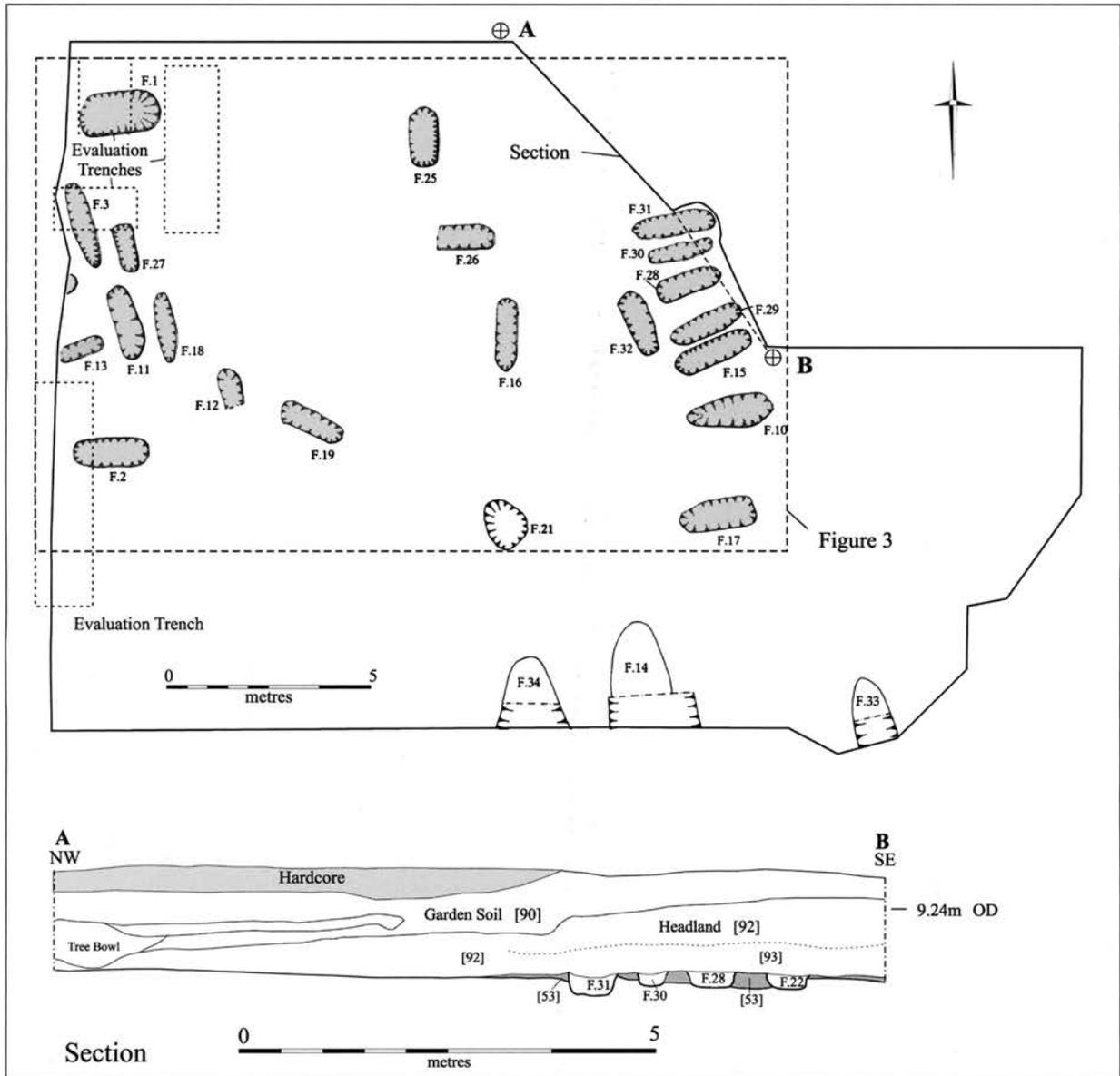


Figure 2. Cemetery excavation with graves, showing location of evaluation trenches, section through the headland below.

noted during the previous year's evaluation could be fully recorded and lifted (Fig. 3). There was evidence of prehistoric activity in the vicinity, in the form of a Late Bronze Age/Early Iron Age pit close to the centre of the site, and some residual worked flint and pottery recovered from the buried soil through which the later graves were cut.

Grave Catalogue

The following information is given for each inhumation: a) the grave number, followed by the original context number assigned to the skeleton; b) details of the grave orientation, dimensions and shape, and details of the skeleton, with comments on sex, age, preservation, pathology and position; c) information about associated finds, in each case followed by the small find number assigned during excavation.

Grave 1 ([012]; Fig. 4) Female, aged about 25 years

The skeleton is extremely poorly preserved and the surviving bones are very abraded. The absence of most of the pelvis and epiphyseal ends meant that this individual was aged on the degree of dental wear. The head was in the west of the grave and the body was extended, supine with slightly flexed arms; the right hand rested palm down on the hip, and the left on the pelvis. Wide, sub-rectangular cut, 1.90 x 1.10 x 0.27m. Linear enamel defects were recorded on the incisors, canines and the maxillary premolars and are indicative of episodes of feverish illness or starvation in childhood. These stress periods affected the development of these teeth from around one year up to the completion of the 2nd premolar at about six years. Medium deposits of calculus, or mineralised plaque, were recorded on much of the surviving dentition indicating poor dental hygiene.

Associated Finds

1. Copper alloy bowl, lying by the left foot of the skeleton,

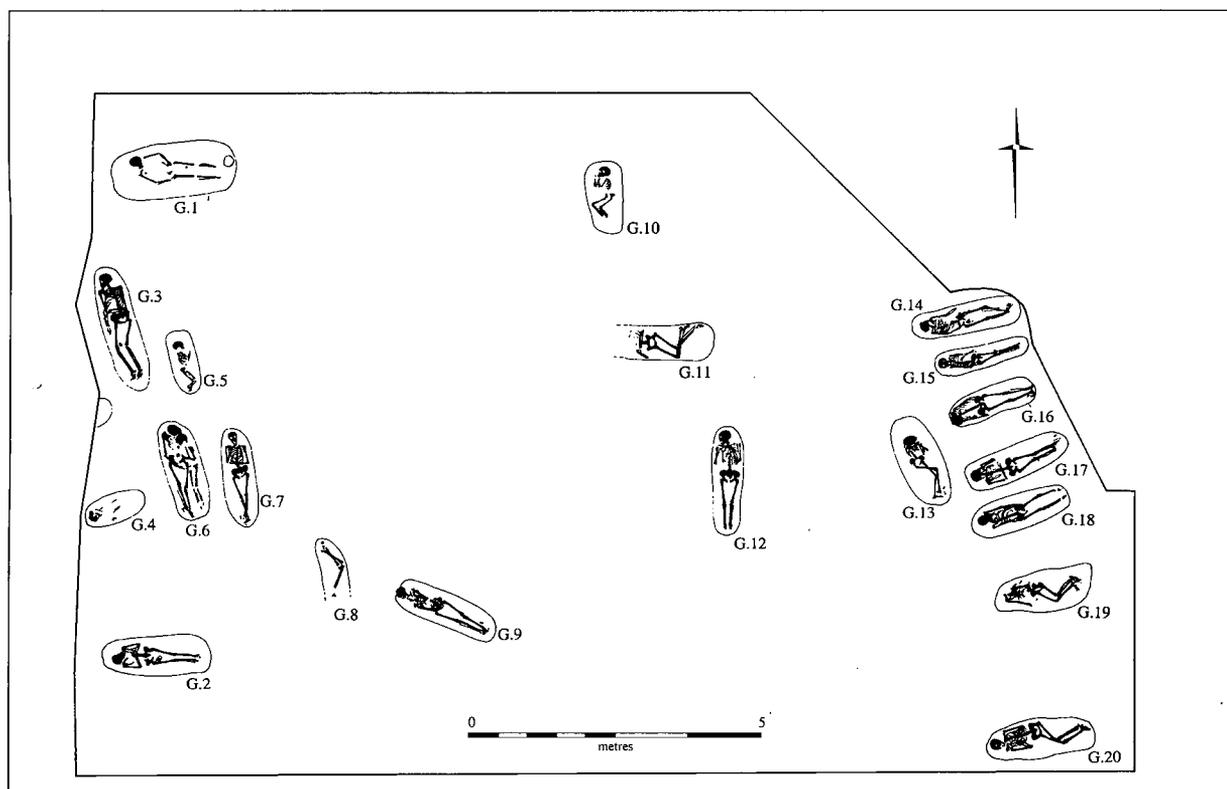


Figure 3. King's Garden Hostel cemetery, showing skeletal positions and orientation.

in a fragmentary condition. 170mm diameter, 62mm deep. The bowl was of a rounded form with flattened base, and had a narrow (7mm wide) out-turned beaded rim, with small raised bosses 2mm wide. This bowl type is regarded as imported from the Frankish continent, and is generally found in 6th-century contexts (Werner 1962: 312–5, Abb. 4–5; Evison 1987: 104). Examination of the bowl fill revealed 322 whole eel vertebrae, and fragments of 16 others, along with seven mandibular or maxillary halves, and humeri. These have been interpreted as representing the deposition of three whole European Eels (*Anguilles anguilles*) within the bowl at the time of burial (R Ballantyne pers comm; SF8).

2. Iron knife lying slightly above the left hip, point downwards. Broken off at tip, with 69mm in length remaining, of which 6mm was tang; thickness of blade back 4mm. The degree of corrosion makes the shape difficult to ascertain but there are indications that it had a straight base and curved back (SF3).

3. Worked stone spindle whorl, 30–32mm in diameter, with flattish base, domed top and large central hole (11mm diameter), lying between the thighs of the skeleton. This position may suggest suspension from a belt or girdle (SF9).

4. White circular bead or pendant, of chalk-like substance, surrounded by a decorated silver band, lying on the upper right chest of the skeleton. Diameter 22mm. Resembling a finger-ring, the band is indented top and bottom with small triangular stamps, and is scored roughly around its circumference with a shallow incised line. A groove in the chalk at one place may indicate that it had been suspended, and its position would support this (SF2).

Grave 2 ([008]; Fig. 5 & 24c) ?Female, aged 25–35 years
The skeleton is poorly preserved and the surfaces of the

surviving bones are extremely abraded. The head was in the west of the grave and the body was supine with legs extended and arms flexed at the elbows so that the left wrist rested on the right in the area of the sternum. Sub-rectangular grave, 1.80 x 0.70 x 0.35m. Again, this individual was aged solely on the pattern of dental wear. A large carious lesion was recorded on the left mandibular 3rd molar and, below this tooth, a deep abscess draining into the mouth has widened and deepened the socket so that the carious tooth is extremely loose. There are flecks of calculus on all of the surviving teeth and slightly defective enamel on the canines and 1st premolars.

Associated Finds

5. Copper alloy bracelet, max 60mm in diameter, found at the upper right thigh, possibly part of a bag assemblage. The bracelet is of D-section, max thickness 3.5mm, which widens, then tapers to points at the terminals, which overlap. From the point at which the ends of the bracelet widen, they are decorated with two central parallel grooves which run to the terminal points. These grooves were then themselves stamped with slightly irregularly-spaced dots. At the two widest points, the bracelet was further ornamented with outward-facing arcs at top and bottom, which may also have a stamped dot at the apex. This decoration serves to resemble a snakes-head. Johns (1996: 44) states that serpentiform jewellery reached Britain in the 1st century AD, with most datable examples tending to belong to the early and middle Empire. The bracelet found here, with its two snakes head terminals, would appear to fall into her class Bii (Johns 1997: 35), of which there are numerous bronze examples from Britain (*ibid* 37). Only one parallel find was noted by White (1988: 110) in his survey of Roman artefacts in Anglo-Saxon graves, however. Its location in association with the purse-ring, and

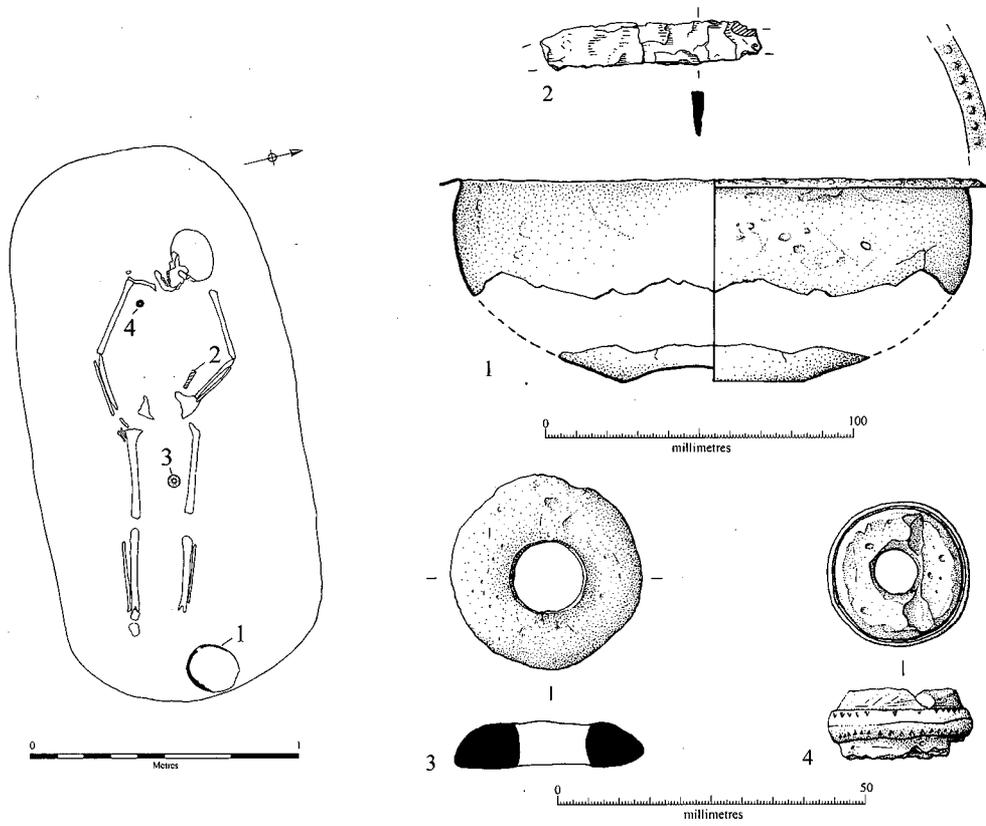


Figure 4. Grave 1 with associated grave goods.

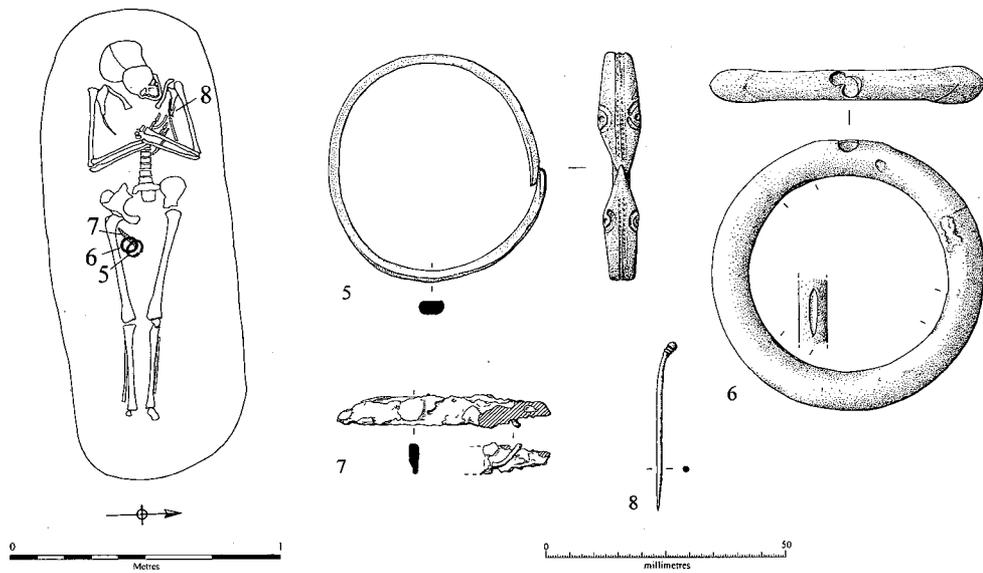


Figure 5. Grave 2 with associated grave goods.

not on a wrist, implies that it was contained within a bag suspended from the waist. This bracelet thus seems to represent a curated Roman item (SF4).

6. Copper alloy ring, 70–72mm in diameter, found at the upper right thigh, underlying the bracelet. The ring was undecorated, and of near-circular section, 8–10mm wide. Internal slots suggest its use as a purse-ring, an interpretation which is supported by its location just below the right hip, in conjunction with the bracelet, which it probably contained. Its diameter falls within the normal range for bag-rings (Geake 1997: 80–81; SF5).

7. Iron knife, 112mm in length, of which length of blade is 81mm, tang 31mm long and thickness of blade back 5mm, found at the upper right thigh, point upwards. The knife has a straight base and curved back, and the remains of an organic scabbard/sheath are visible, as are those of a small iron suspension ring at the handle end. The knife is complete, including the tip and tang, and the conservator recognised mineralised horn on the handle. Its location within the grave suggested suspension from the waist, as it lay underneath the purse-ring (SF6).

8. Copper alloy pin, 45mm in length, 1.5mm diameter, with a ridged terminal ending in a small dome, on the upper left ribs. The pin is slightly bent and thinned towards the terminal. Its position suggests its use as a dress fastening, perhaps for some form of head covering (Geake 1997: 67; SF1).

Grave 3 ([028]; Fig. 6) Male, aged over 45 years, ht: 1.83m Despite some slight machine damage this skeleton is well preserved. The head was in the NNW of the grave and the body was supine, legs extended but slightly flexed, right arm extended, left arm flexed at elbow, across abdomen with hand resting on right elbow. Long, narrow grave, 2.15 x 0.51 x 0.18m. Four teeth had been lost prior to death and a large caries was noted on a maxillary molar. Deposits of calculus were recorded on four of the surviving molars and enamel defects were observed on several of the surviving teeth, which were all heavily worn. Schmorl's nodes, increased porosity and marginal osteophytes, all changes characteristic of degenerative joint disease of the spine, were seen on the bodies of the lumbar vertebrae. The right clavicle of this tall, elderly man had fractured and was severely foreshortened in comparison to the left. The fracture would appear to be in an advanced stage of healing although the presence of a cloaca for draining pus may well be evidence of a secondary infection. The metopic suture on the front of the skull is still visible; this is a non-metric trait rather than pathological. No associated grave goods.

Grave 4 ([062]; Fig. 7) Infant, aged about 4 years

This immature skeleton is extremely poorly preserved and represented only by fragmentary skull and dentition, femur shafts, left humerus and scraps of ribs. The body was supine with its head in the WSW of the grave. Ovoid cut with gently sloping sides, 1.04 x 0.44 x 0.06m. No associated grave goods.

Grave 5 ([110]; Fig. 8) Infant, aged about 3 years

Poorly preserved infant, most of whose extremities are missing and whose epiphyses are either missing or damaged. The body, with its head in the NNW of the grave lay on its left side, flexed with the knees slightly bent and the arms flexed so that the hands (not present) would have rested close to the chin. Sub-rectangular grave, 1.15 x 0.52 x 0.17m. Lesions consistent with *cribra orbitalia* were present in the roof of the

surviving right orbit suggesting a period of iron-deficiency. No associated grave goods.

Grave 6 ([055/056]; Fig. 9) Juvenile, aged about 8 years and male, aged 25–35 years, ht: 1.76m

The juvenile [055] is poorly preserved with many elements missing or fragmentary. In contrast, the adult [056] is well preserved although many of the ribs and vertebrae are missing and the surfaces of the surviving elements are abraded. Both bodies had their heads in the NNW of the grave. The adult was supine, head facing the child who is on his left. The adult's left arm was extended (the child lies on the left humerus) with the hand resting on the hip and the right arm tight against the body, with the hand lying between the legs. The child was almost supine although the upper body is twisted so that he/she is lying slightly on their right side. The left arm is flexed at the elbow so that the lower arm touches the adult pelvis. Wide, sub-rectangular grave 1.70 x 0.65 x 0.33m. Prehistoric and Roman pottery were recovered from the fill. A large fragment of Roman tile rested over the head/shoulder of the child and a large white stone was found over the feet. The child's jawbones did not survive but the loose teeth were both deciduous and permanent and indicated an age at death of 8 years ± 24 months. Once again linear defects in the enamel were recorded on the crowns of the surviving permanent maxillary incisors and on the canines. Episodes of stress, similar to those experienced by the skeleton in Grave 1, affected the development of these teeth from about one year up to the completion of the canine crowns at six years. Enamel defects were also recorded on the adult dentition and these would have occurred in childhood between the ages of about one and seven years. Medium deposits of calculus, resulting from poor dental hygiene were recorded on several of the adult teeth. Neither of the right 3rd molars is present and it may be that they are congenitally absent or had yet to erupt. No associated grave goods.

Grave 7 ([078]; Fig 10) Female, aged over 45 years, ht: 1.59m

Preservation of the skeleton is excellent with only a few bones from the hands and feet missing. The head was in the north end of the grave and the body was supine with the legs extended and crossed below the knees. The arms were tight against the body with the left flexed so that the lower arm crossed the waist and the right flexed so that the hand rested on the right clavicle. Elongated, oval grave, 1.70 x 0.57 x 0.20m. An iron nail was recovered c. 50mm above the right knee. Changes characteristic of osteoarthritis — eburnation, osteophytes and porosity — were seen in the bones of the left wrist, in the cervical and lumbar vertebrae and in the sacrum. The 3rd and 4th cervical vertebrae have fused. Slight marginal osteophytes were recorded around the joint margins of both distal femora and around the head of the right humerus. Three large carious lesions were recorded on the mandibular dentition; one on each of the left molars at the crown/root junction and the alveolar bone below these teeth had resorbed. Medium to heavy deposits of calculus were recorded on all of the surviving teeth. A small septal aperture, a non-metric trait more commonly found in females than males, was noted on the right distal humerus. No associated grave goods.

Grave 8 ([059]; Fig. 11) ?Male, adult, ht: 1.74m

Only the legs and feet survive in situ; the rest of the body has been truncated by earlier ploughing. The head would have been in the SSE of the grave and from the position of the legs,

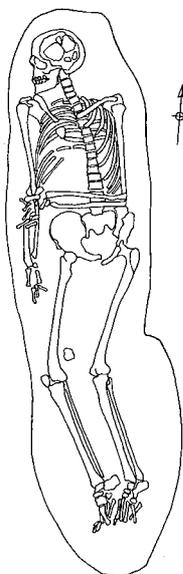


Figure 6. Grave 3

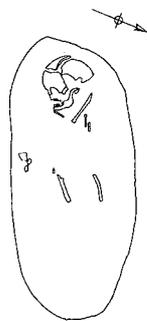


Figure 7. Grave 4

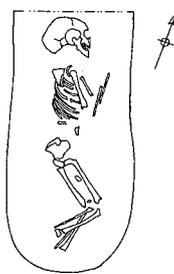


Figure 8. Grave 5

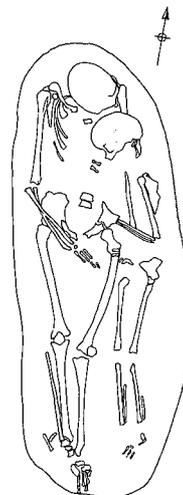


Figure 9. Grave 6



Scale for Figs. 6-13

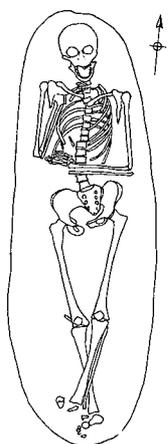


Figure 10. Grave 7

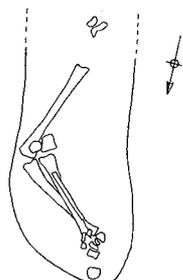


Figure 11. Grave 8

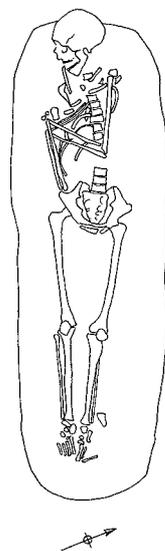


Figure 12. Grave 9

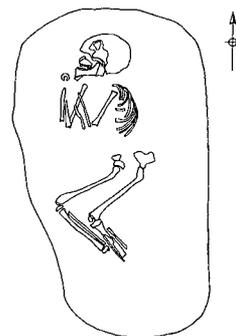


Figure 13. Grave 10

the body would have been lying on its right side or supine with the legs twisted. The legs are flexed at the knees with the left lying over the right and the lower legs and feet are higher than the rest of the surviving body. Sub-rectangular grave heavily truncated in the south, 1.30 x 0.50 x 0.13m. The sex of this individual was based solely on the bicondylar width of the femur. Extra and enlarged facets seen on the left talus and navicular suggest that the left foot may have been everted (twisted outwards). Enthesophytes (new bone formations at tendinous/ligament insertions) on the talus and porosity on the deformed joint surface of the navicular

may be associated with this deformity. Raised plaques of striated new bone characteristic of a non-specific infection were recorded on the distal third of the lower legs. No associated grave goods.

Grave 9 ([083]; Fig. 12) ?Male, aged 25-35 years, ht: 1.73m
This skeleton is well preserved although the surfaces of many of the surviving bones were abraded. The head lay in the NW of the grave, the body was supine, legs fully extended and the arms flexed at the elbows so that both hands rested on the right shoulder. Sub-rectangular cut, 1.95

x 0.60 x 0.34m. Sherds of prehistoric and Saxon pottery, a Roman tile fragment and worked flint were recovered from the fill. The distal 100–200mm of the left fibula is completely deformed by an oblique lesion, which separates almost two-thirds of the anterior of the shaft at the epiphyseal line. There is evidence of a small abscess, from which pus would have drained on the medial aspect of the shaft and bone remodelling has thickened the shaft here. There is smooth, new bone formation on the distal tibia and a small spicule of new bone would have fused the lower leg bones. The lesions may be the result of a fracture to the distal fibula, with secondary infection or osteomyelitis. The infection, which was active at death, may have prevented the complete union of the fracture. Plaques of grey/brown woven new bone on four ribs may be evidence of a chest infection that was still active at death. Flecks of calculus were recorded on all of the surviving teeth. No associated grave goods.

Grave 10 ([103]; Fig. 13) Juvenile, aged about 8 years
Preservation is extremely poor; none of the long bones were complete, neither of the hands or feet survives and the only part of the spine that survives is the atlas. The surviving skeletal elements are fragmentary. The body was flexed and lay on its right side with its head in the north. Both arms were flexed at the elbows so that the hands (not present) would have lain below the mandible. Wide, sub-rectangular cut, 1.28 x 0.70 x 0.21m. Fortunately both jaws were well preserved and the presence of both adult and deciduous teeth enabled accurate ageing of the child. Once again linear defects in the enamel of several of the permanent tooth crowns, indicative of periods of stress, were noted. No associated grave goods.

Grave 11 ([107]; Fig. 14) Subadult, aged 12–16 years
The upper body (skull, shoulder girdle, humerii, and the cervical and thoracic vertebrae) is not present having been truncated by earlier ploughing. The head would have been in the west of the grave and the body was supine with legs flexed at knees (left over right), the right arm extended and the left crossing the stomach. Sub-rectangular cut, truncated in the west, 1.60 x 0.6 x 0.06m. The degree of epiphyseal fusion was used to estimate age. No associated grave goods.

Grave 12 ([072]; Fig. 15) Female, aged 35–45 years, ht: 1.61m
Preservation is excellent, although the feet and the right lower arm were damaged by machining. Supine with head at the north of the grave, legs extended, both arms flexed at the elbows and both hands resting on the right clavicle. Sub-rectangular cut, 1.70 x 0.50 x 0.12m. A cow's molar was recovered from the fill. Enthesophytes were present. These bony spurs are close to the insertions of the iliolumbar ligaments, which are often involved in postural lower back pain. Several of the muscle attachments on the humerii are enlarged, suggesting that this woman was involved in heavy work. Six teeth were lost prior to death and the remainder exhibit severe wear; the central maxillary incisors and left lateral incisor are only pegs/roots. Moderate deposits of calculus and two carious lesions were also noted. No associated grave goods.

Grave 13 ([125]; Fig. 16 & 24a & b) Juvenile, aged about 12 years
The skeleton is well preserved with only a few small hand and foot bones missing. The head was in the NNW of the grave and the body was prone with the head facing east and the chin resting on the grave base. The left arm lay extended

below the body, the right arm flexed so that the hand was beside the right shoulder, the legs were slightly flexed towards the east and the right femur crossed the left. Wide, ovoid cut, 1.60 x 0.70 x 0.20m. Flecks of calculus were recorded on a 1st molar and linear defects in the enamel were recorded on the mandibular canines indicating that episodes of dietary stress or illness occurred between the ages of about one and six years.

Associated Finds

9 & 10. Two knife blade fragments by the left foot. The fragments, which do not adjoin, comprise the tip of a blade (length 28mm) and a shaft fragment (length 54mm). The knife appears to have a straight base and curved back but it is difficult to be sure, given the degree of corrosion. No tang or handle remains. This is thus difficult to date, other than generally to the period of furnished burial. It is, however, in an unusual position, by the feet of this prone burial, and thus may not have formed part of the dress of the individual buried, but rather been deposited as a separate offering within the grave (SF15).

Grave 14 ([122]; Fig. 17 & 24a) Male, aged 35–45 years, ht: 1.76m

The skeleton was moderately preserved although the pubic symphysis is missing and the ends of the long bones are damaged, as are the vertebrae, ribs and digits. Head was at the WSW end of the grave and the body was supine and extended. The right hand rested on the inner thigh and the left leg was slightly flexed at the knee. Sub-rectangular cut, 1.90 x 0.50 x 0.30m. The pelvis and the sacrum had started to fuse on the right side prior to death; extra bone or enthesopathies were noted at the auricular surface and margin of the pelvis and sacrum. Changes indicative of degenerative joint disease in the spine (osteophytes, Schmorl's nodes and an increase in porosity) were recorded on the lower thoracic and upper lumbar vertebrae. A small erosive lesion was recorded in the right foot on the head of the talus, where it articulates with the navicular. The teeth are relatively unworn and slight deposits of calculus were noted on the surviving dentition.

Associated Finds

11. Large iron hafted spearhead, point downwards above the left knee. Length 370mm, width 40mm, max blade thickness 10mm. The spearhead is leaf-shaped, with a split circular haft, and would appear to be an example of Swanton's type C2. There are fragmentary remains still within the shaft, and these are presumably the remains of the wooden spear. The spearhead is intact, including the point. Swanton (1974: 10) gives the range of lengths of spearheads of type C2 as between 20cm and 35cm, so this would make this a large example, but it does not appear to fall into the larger type C3, as it does not have the smaller proportion of socket length to blade length of this type (SF13).

12. Iron seax, or large knife, at the left hip, with the point downwards. Length 192mm (of which 36mm is tang), width 28mm, maximum blade thickness 6mm, with a straight cutting edge and curving back. Heavily corroded, with possible traces of an organic handle, and the tip broken off (SF14a)

13. Iron knife, at the left hip, underneath the seax, with the point downwards. Length 120mm, width 13mm, maximum blade thickness 4mm, with relatively straight sides. Very badly corroded, broken at the tip, but with the tang (18mm long) remaining (SF14b)

Grave 15 ([119]; Fig. 18 & 24a) Juvenile, aged about 12 years
The skeleton is moderately preserved although many of the

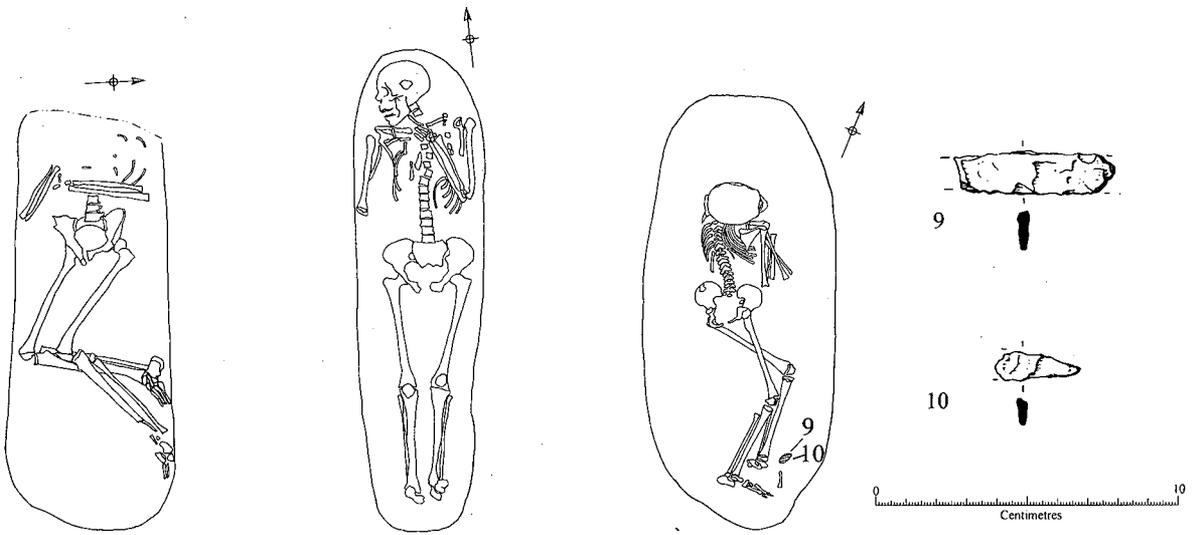


Figure 14. Grave 11

Figure 15. Grave 12

Figure 16. Grave 13 with associated grave goods.



Scale for skeletons
shown in Figs. 14–18

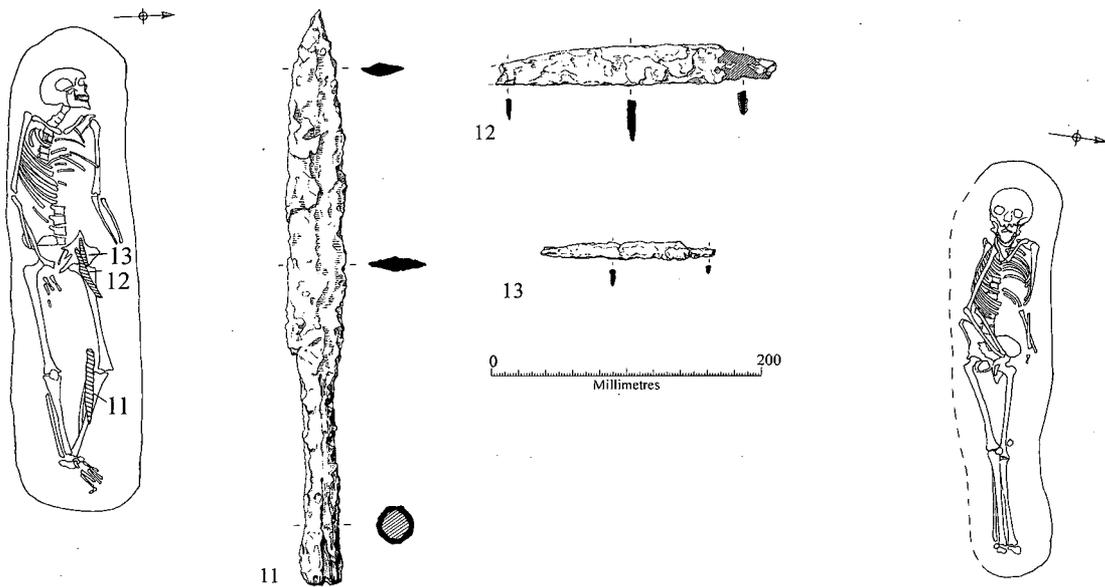


Figure 17. Grave 14 with associated grave goods.

Figure 18. Grave 15

hand and foot bones are missing. The skull is at the WSW of the grave and is supine and extended with the right hand on the left hip. Narrow, sub-rectangular cut with irregular edges, 1.65 x 0.40 x 0.13m. Once again linear defects in the enamel were recorded on several of the teeth, as were flecks of calculus. Despite his/her youth the teeth are heavily worn; the dentine is exposed on the surviving incisors. No associated grave goods.

Grave 16 ([113]; Fig. 19 & 24a & b) Female, aged over 45 years, ht: 1.66m

The skeleton is moderately preserved although most of the long bones are incomplete. The head was in the WSW of the grave and the body was supine and extended. The head and several of the cervical vertebrae had been displaced by earlier ploughing. Sub-rectangular cut, 1.50 x 0.50 x 0.22m. Degenerative changes, including an increase in porosity, osteophytes and eburnation were recorded throughout the vertebral column. Similar changes were observed on the superior processes of the sacrum and the costal facets of the ribs. During life 14 mandibular teeth had been lost and whilst the maxilla is missing only one loose molar with slight calculus on all sides, including the occlusal surface, was recovered.

Associated Finds

14. Small copper alloy buckle, single-tongued, length 31mm, width 19mm, found in the left chest area. The buckle has a D-shaped loop and a triangular plate with three rivets at the base and a lobed terminal. Some mineral-preserved fabric is visible around the tongue. The triangular plate is decorated with incised dots. Its position in the chest area suggested that it did not act as a belt-fastening, so it may have fastened a strap, or possibly a bag (or been contained within a bag; SF11).

15. Small copper alloy hook, length 21mm, found in the left chest area, with the remains of an iron rivet decayed in its hole, associated with a copper alloy rivet. The shaft of the hook is decorated with three incised bands at either end. Also in the same area were a piece of copper alloy plate and a fragment of unknown material. Exact parallels to the hook and rivet are known from the 7th-century cemetery at Burwell, in Cambridgeshire, in grave nos. 3, 6, 83 and 97 (Lethbridge 1931). While Lethbridge saw these as hook-fastenings for a wooden box or case (*ibid* 48), Geake argues that their association with perforated leather at Bekebourne and Painsthorpe Wold is evidence for their use with flexible bags or pouches (1997: 81). The position of the hook and rivet in the area of the left breast implies a bag was placed either on the chest of the deceased, or behind the back (SF16).

16. Large, flat-based bone spindlewhorl, 44mm in diameter, found underneath the head at the right shoulder. The spindlewhorl had a domed top and a circular hole (11mm in diameter) through the centre, but no noticeable decoration. Its position underneath the head is unusual, although it should be noted that the head of the skeleton had been disturbed prior to excavation. The whorl may, therefore, have once formed part of the bag-assembly (SF17).

17. Reused coin, dated to the 4th century AD (Valens, minted AD365–378), with a thin rectangular copper alloy plate attached to one side, forming a wide loop, presumably for suspension, found in the left chest area. On the other side there are the fragmentary remains of a further copper alloy rectangular plate, of uncertain function. This may have been a coin reused as a pendant, with a crude loop on the rear for suspension, although it is more common for such coins

to be pierced or have a loop around the rim instead (Geake 1997: 32). Corroded together with the coin was a fragmentary piece of iron, which was presumably once attached to the other corroded piece of iron found next to it, which had a central rod visible. The purpose/function of the iron artefact(s) is uncertain, but it does not appear to form part of the coin pendant, and the whole is not a brooch (SF12).

18. Long, slim, double-sided composite bone or antler comb, length 358mm, with almost all its teeth broken, found underneath the left shoulder. A row of nine iron rivets running along the centre of the comb served to fasten the three plates together. Faint cross-hatch decoration was apparent on both the front and rear attachment plates on one end only, suggesting that similar decoration may once have been present on the other end of the comb. Other decoration may also have once been present. Its position underneath the left shoulder may suggest either deliberate placement (rather than forming a part of the dress; Geake 1997: 63), or that it formed part of the bag-assembly, which may have been disturbed (SF10).

Grave 17 ([116]; Fig. 20 & 24a) Female, aged 35–45 years, ht: 1.61m

The skeleton is moderately preserved although the surfaces of the surviving bones are abraded. The head was in the WSW of the grave, the body was supine, the legs fully extended, the right arm bent so that the lower arm crosses the stomach region, the left arm flexed upwards so that the hand rested on the left shoulder. Sub-rectangular cut with concave sides 1.82 x 0.52 x 0.29m. Changes indicative of osteoarthritis were recorded in both hands at the 1st carpometacarpal joints. Degenerative changes were also noted on the cervical and lumbar vertebrae. Three wisdom teeth had not erupted and it may be that they were impacted or congenitally absent. In the mandible, a large external draining abscess was observed below the 2nd left mandibular premolar, which survives only as a rotten stub. Behind this, the 1st molar was lost ante mortem and its socket had begun to heal over but is still visible. A large caries was recorded on the 2nd right maxillary molar and slight to medium deposits of calculus were recorded on most of the surviving dentition. No associated grave goods.

Grave 18 ([069]; Fig. 21) Male, aged 25–35 years, ht: 1.71m

With the exception of the vertebrae and ribs the body is well preserved. The head lay in the WSW of the grave, the body was supine, hands resting on the thighs, legs extended, although the left is splayed slightly laterally. Oval cut with base sloping to west, 1.75 x 0.62 x 0.22m. A sherd of Roman pottery was recovered. Lesions characteristic of bone infection (osteomyelitis) were recorded on the left pelvis and left side of the sacrum. There are three cloacae with smooth remodelled edges on the pelvis in the area of the attachment for the muscle gluteus maximus, and within the bone these diverge into smaller abscesses. There is an area of new bone and another possible abscess on the sacrum. The left pelvis and sacrum would have been fused in life by small spicules of new bone at the sacro-iliac joint (unfortunately these broke as the skeleton was lifted). The lesions represent bone destruction, pus formation, and simultaneous bone repair. They may have been caused by the introduction of bacteria locally i.e. from an adjacent wound or infected soft tissue or via the bloodstream from an infection site elsewhere in the body. These lesions and the plaques of new bone around the margin of the acetabulum may help to account for the awk-

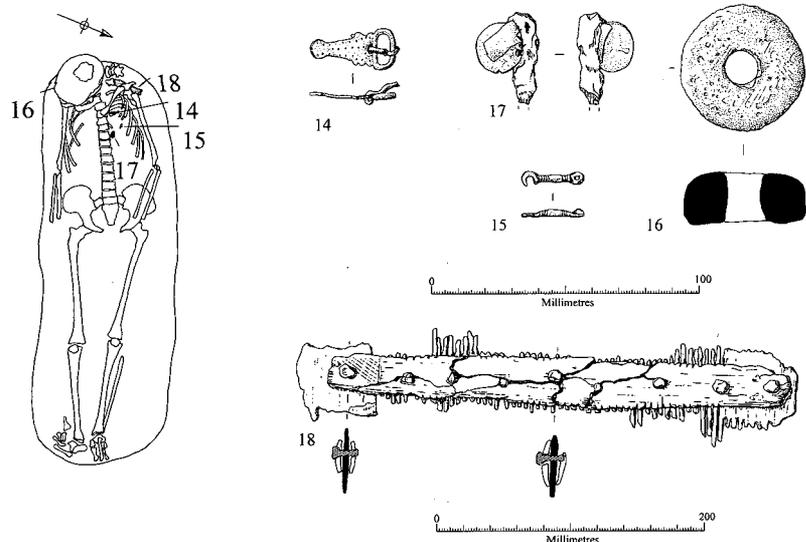


Figure 19. Grave 16 with associated grave goods.

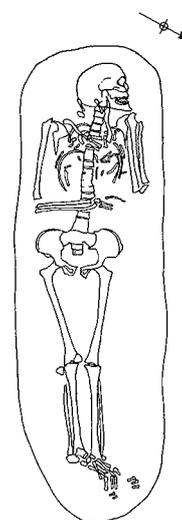


Figure 20. Grave 17

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Metres
Scale for skeletons shown in Figs. 19–23

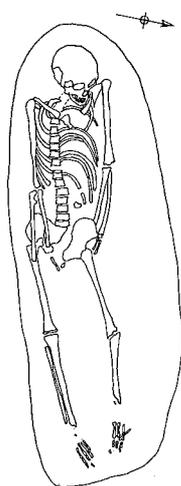


Figure 21. Grave 18

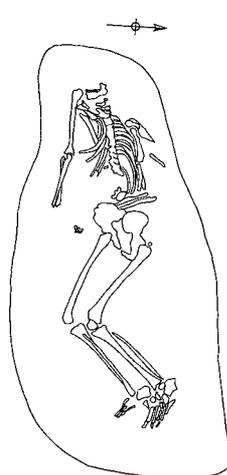


Figure 22. Grave 19

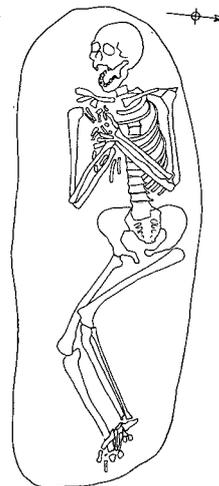


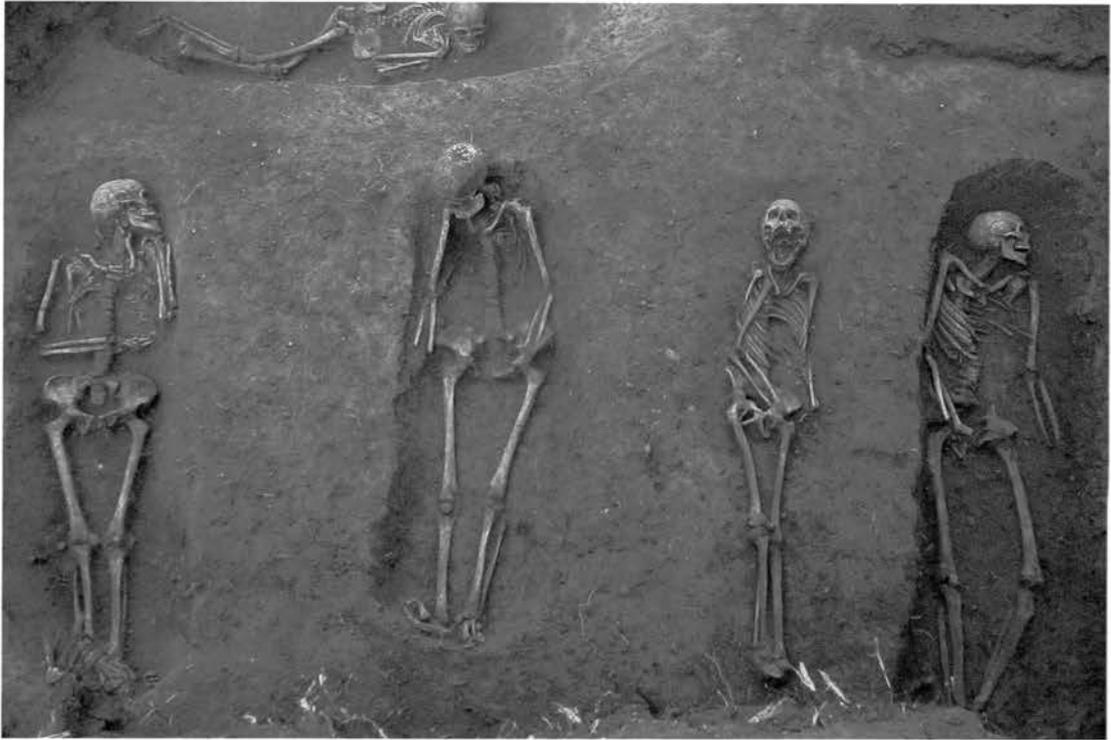
Figure 23. Grave 20

ward position of the left leg. There are degenerative changes in the ribs, particularly the right, on the body of the 5th lumbar vertebra and at the sternoclavicular joint. Although not pathological, many of the muscle attachments on the arms particularly on the right are enlarged. The dentine is exposed on all the incisors and canines but the molars are relatively unworn and flecks of calculus were recorded on all of the teeth. No associated grave goods.

Grave 19 ([051]; Fig. 22) Subadult aged 14–19 years
The skeleton is moderately preserved although there is some machine damage and many of the surviving bones are abraded. The head lay at the west of the grave, the body was

prone, the right arm tight against the body and flexed at the elbow so that the hand rests below the pelvis, while the left arm is again tight against the body but extended. The legs are slightly flexed at the knees towards the south/left. Wide but ill-defined cut, 0.90 x 0.90 x 0.18m. A sherd of Roman pottery was recovered from the fill. Enamel defects were recorded on the mandibular premolars and deposits of calculus ranging from slight to heavy were recorded on the surviving teeth. No associated grave goods.

Grave 20 ([075]; Fig. 23) Male aged over 45 years, ht: 1.74m
The skeleton is complete except for a few small hand and foot bones. The head was at the west of the grave and the



A



B



C

Figure 24. A) Looking west, Graves 14-17 (right to left) and 13 in background; B) foreground, Grave 16 showing displacement of skull through ploughing; C) Looking west, Grave 2.

body lay supine with the arms tight against the body, flexed at the elbows, right over left so that the hands cross the chest. Both legs were slightly bent over to the right and the left leg lay over the right. Sub-rectangular cut, 1.70 x 0.57 x 0.20m. Degenerative changes were recorded throughout the body. Marked changes were observed in the spinal column, particularly the right side, with osteophyte development, Schmorl's nodes and eburnation. Increased porosity on the joints and osteophytes around their margins affected both clavicles and bones in the left wrist/hand. The 4th and 5th lumbar vertebrae are fused, and the 5th lumbar vertebra shows a condition known as spondylolysis, where the vertebral arch is separated from the body. The cause can be genetic or the result of an injury to the lower spine in youth. The ossification and fusion of the xiphoid process, at the bottom of the breastbone, and the ossification of the thyroid and costal cartilage are all associated with increased age. A total of nine teeth, all from the maxilla, were lost prior to death. A lack of dental hygiene may have contributed to the tooth loss as heavy deposits of calculus survived on the remaining molars and premolars. A septal aperture, a non-metric trait more common in women than men, was recorded in the left humerus. No associated grave goods.

Discussion

The cemetery date

Five of the graves are furnished with goods, four of which can be discussed with respect to assigning a date to the cemetery (the knife fragments in Grave 13 cannot be dated more closely than 5th- to 7th-century). The pendant in Grave 1 is of extremely unusual form, and is possibly unique. If this is the case, then dating by parallels is obviously difficult, but the use of single pendants has been suggested to be characteristic of 7th-century Anglo-Saxon burial (Geake 1997: 41). There is also some suggestion that plano-convex spindle whorls such as that found in Grave 1 are 7th-century in date (*ibid* 59), but little comparative work has been done. The copper alloy bowl with beaded rim in Grave 1 belongs to a series manufactured on the continent, known as *Perlrandbecken* (Werner 1962, 312–5), apparently in the 6th century (Evison 1987: 104); the main distribution is seen in the Rhine and Meuse valleys, with a few found in Thuringia, France and England, where the type has a mainly eastern distribution, and is found mainly with richly-furnished females (*ibid*). This bowl could, of course, have been deposited many years after manufacture (its fragmentary state makes it difficult to discern its condition at burial), and other burials, generally of 7th-century date, have produced copper alloy bowls containing somewhat peculiar deposits (see below). On balance, although this burial may well date to the 7th century, an earlier date cannot be ruled out.

Dating of the bag-ring in Grave 2 is difficult, as bags are found in graves throughout the period of furnished burial, although their use as containers for small objects may be a 7th- or 8th-century feature (Geake 1997: 80–1). In relation to Grave 14, spearheads of type C2 are found in earlier Anglo-Saxon contexts, but most appear to date to the 7th century or later (*ibid*; Geake 1997: 70). A very close parallel is seen in Grave

XII in the 7th-century cemetery at Melbourn (Wilson 1956: 35, fig. 3). While knives on their own are hard to date accurately, the discovery of two knives, or a knife and seax, together with a spearhead strongly suggests a 7th-century date, as pairs of knives are more common in the 7th century than earlier.

Grave 16 offers more secure dating. The buckle in Grave 16, although a small and relatively plain example, is a characteristic 7th-century type (Geake 1997: 76–7), as is the hook and rivet (Lethbridge 1931: 48; Geake 1997: 81). The plano-convex form of the spindle-whorl in this grave may also suggest a 7th-century date (Geake 1997: 59), although this is far from clear. Reused Roman coins are sometimes found in 7th-century bag assemblages (*ibid*), although they are also found in earlier graves worn as pendants. While 7th-century inhumations are sometimes associated with single-sided, humped-back composite combs, the popularity of double-sided composite combs does not seem to decline between the 5th and the 7th centuries (*ibid* 63). This particular artefact is therefore difficult to date accurately. In sum, Grave 16, although disturbed in the head region, has produced clear evidence for a 7th-century bag or pouch deposit. Probably fastened by the hook and rivet, it presumably contained the reused coin, the unidentified iron which had corroded onto it, the piece of copper alloy plate associated with the hook, and possibly also the triangular buckle.

While only two of the five furnished graves can be assigned a date in the 7th century (G14 and G16), there seems to be little evidence from the cemetery as a whole which would point to an earlier date, especially if the bowl in G1 is regarded as an heirloom, or similar. There are no brooches, beads or weapons other than the seax and spearhead (G14), no use of cremation, and no goods aside from the bowl can be definitely assigned to the 5th or 6th centuries. Moreover, the scarcity of furnished graves is typical of these later cemeteries. We are thus probably dealing here with a relatively sparsely furnished cemetery of the 7th century, and perhaps later. Eighth-century and later graves are notoriously hard to date, given their characteristic scarcity of grave goods, and it is entirely possible that this cemetery, and others like it, carry on in use after the traditional cut-off point of AD700.

However, given that the datable graves are not concentrated into one area of the site, with Grave 1 on the western edge of the excavated area and Grave 14 and 16 on the eastern edge, it is possible that use of this cemetery was just restricted to the 7th century. This might be supported by the rather variable orientation of the graves, and the variations in body position which were observed. Flexed burials, and burials on their side tend to become rare after the 7th century (Lucy 1998), and orientation tends to become more uniform.

Skeletal remains

The degree of disturbance or truncation, the condition of the bone and, as importantly, which skeletal elements survive, not only affects the potential for

determining the age and sex of individuals but also for recognising pathological conditions. For many of the adults the pubic symphyses and the auricular surface of the pelvis were missing or damaged, meaning that the degree of dental attrition was used to estimate age. Although the assemblage was in relatively good condition, the surfaces of many of the bones were abraded and root damaged. This is likely to have led to an under-diagnosis of conditions such as periostitis. Similarly the damage/absence of many of the epiphyseal ends of long bones and the many missing extremities is likely to have affected the number of cases of joint disease recognised.

Of the 21 individuals examined, 13 adults (61.9%) and eight immature individuals were identified (Table 1). In a cemetery where the whole population was buried, a far higher proportion of infant deaths would be expected and, to a lesser extent, a higher proportion of mature individuals. While this is by no means unusual in an Anglo-Saxon cemetery population (Crawford 1991), it does imply that either the majority of the young and old burials took place outside the excavated area, or that a different burial rite was used for these age groups. Among the adult skeletons, five were anatomically sexed as female, and one as possibly female, while five were sexed as male and a further two as possibly male.

Stature, using a combined femur and tibia length could be calculated for nine of the adults. The adult average is 1.704m, ranging from 1.59–1.83m. The females (n=3) averaged 1.603m (5ft 3½ins) with a range of 1.59–1.61m. The males (n=6) averaged 1.755m (5ft 9ins) with a range of 1.71–1.83m. The intrinsic error in these stature estimates means that the males could be 35.5mm taller or shorter than their given height (29.9mm in the case of the females). The stature of a further two adults could be calculated using just the tibia and both fell within these ranges even when their maximum error was taken into account.

Arthritic changes involving the spine were recorded on five of the adult individuals. These were all middle or mature aged individuals and the degenerative changes would be a result of increased age and general wear and tear on the skeleton. Osteoarthritic changes were recorded on the hand(s) of the skeletons in Graves 7 and 17. Dental diseases were the most commonly recorded pathologies amongst this small group. The dentition of 19 individuals could be examined. Of these 17 (89.5%) displayed one or more dental pathologies. Calculus, caries, abscesses, ante-mortem tooth loss, periodontal disease and enamel hypoplasia were all recorded.

Eleven adult dentitions could be examined (the skeletons in G8 were truncated) and in these a total of 300 teeth were observed. A total of ten caries were

recorded (this includes teeth where the tooth was so rotten that only the root survived) and this gives a prevalence rate of 3.3%, which is in accordance with the norm for the period. At Barrington the prevalence rate of caries was almost identical at 3.2% (Duhig in Malim and Hines 1998: 172). Burials from the Anglo-Saxon period are an exception to the trend of increase in caries from Neolithic times to the present. The number of tooth positions observed amongst adults was 326 and the number of teeth lost ante mortem was 34, which gives a prevalence rate of 10.4%. This is slightly higher than that at Barrington where it was 7.1% (*ibid*) but within the norm for the period (Roberts and Manchester 1995: 57).

Dental hygiene was not a high priority amongst this group with even young individuals having heavy deposits of mineralised plaque on their teeth (eg the subadult in G19 has calculus almost entirely covering the crowns of its anterior teeth). Defects in the enamel, known as enamel hypoplasias, appear quite common; they were recorded on the teeth of eight individuals and are indicative of nutritional stresses or severe feverish illnesses during childhood. The degree of dental wear is quite severe and even several of the immature individuals have dentine exposed on the permanent dentition. This is not unusual in the Saxon period when diet and methods of food preparation are believed to have accelerated dental attrition. One slight concern is that this may have led to the over-aging of some individuals.

Cemetery rite and layout

Before starting any discussion of the cemetery rite and layout, it should be noted that the graves reported here are assumed to represent only a sample of the original buried population. While it is possible that the southern limit of the cemetery is revealed here, the northern, eastern and western limits have not been defined.

As can be seen from the plan (Fig. 3), the cemetery exhibits variable orientation of graves. While 7th-century cemeteries often have more regular orientation, generally with heads to the west, King's Garden Hostel does not stand out in a Cambridgeshire context: the contemporary cemeteries at Shudy Camps (Lethbridge 1936) and Burwell (Lethbridge 1931) show a similar range of orientation. Nor does the orientation seen here seem to relate to any obvious features of the burials; the direction of the head does not seem to relate to the age or sex of the person interred, although it should be noted that those with grave good assemblages (excepting the knife fragments in G13) all have the heads to west or WSW. While orientation is variable, the lack of intercutting of graves implies that some care was taken in the plac-

Table 1. The cemetery population

Immature			Adults						
Infant	Juvenile	Sub-adult	Juvenile/ Sub-adult	Young	Young/ Middle	Middle	Middle/ Mature	Mature	Adult
2	2	2	2	1	2	4	2	3	1

ing of burials, perhaps even indicating some degree of marking of graves (although no evidence for post-holes or small barrows was recovered). This care is especially evident in the placing of Graves 14–20 in an oriented row, all with heads to WSW, on the eastern side of the site (Fig. 24a), and in the cluster of graves 3 and 5–7, with heads all to NNW, on the western side.

Age does seem to have had an impact on burial position. Non-adults were more likely to be placed prone or lying on the side (although this could not be demonstrated statistically due to the small numbers involved). The single burial on its right side (G5) was an infant, two of the three on their left side (G6a and G10) were juveniles and the two prone burials (G13 and G19) were a juvenile and a subadult respectively. The majority of the non-adult burials also thus had a flexed posture, and the vast majority of the adults were in an extended position. The only exceptions to this were the unaged adult G8 and two of the three mature adults (G3 and G20, both male). It would thus seem that age, and perhaps sex, had an influence on burial position, but not location within the cemetery, for there appears to be no obvious patterning in terms of where burials of the different age and sex groups are located.

As might be expected, younger individuals tend to be buried in shorter and shallower graves, perhaps suggesting that graves were dug after the person had died, specifically for them. Graves were, on the whole, of adequate (sometimes generous) size. This is slightly unclear as regards the double burial Grave 6, which is only of medium width, despite containing two people. Double burials have recently come under discussion by Stoodley (2002), where he argues that these should not be always assumed to be blood relations; perhaps if a child died within a short time of an adult from the same community, it was thought appropriate that they be buried together. It is interesting that in this instance the juvenile is buried with an adult male. This perhaps reflects on the idea of the male as protector: the seemingly deliberate placement of a tile and a stone over the head and foot of the younger individual in this grave may also signal that they were in need of greater protection in death.

Grave goods

Four graves have assemblages worthy of further discussion (little more can be said about the knife fragments in G13). Grave 1, with its unique pendant and the highly unusual deposit of eels within an imported copper alloy bowl at the feet, is also one of the largest graves from the site. The inclusion of this food(?) offering within a bowl puts this grave into a group of similar finds. The hanging bowl accompanying the barrow burial at Ford, Laverstock in Wiltshire contained onions and crab apples, as well as string (Musty 1969), while the similar deposit from Banstead Down in Surrey contained textiles and what were thought to be crab apples (Barfoot and Price Williams 1976). Other bronze bowls containing nuts have been reported from Faversham (Roach Smith 1868: 144) and St Peter's Broadstairs (*Medieval Archaeology* 19

1975: 223), where they were also accompanied by fruit. The discovery of eels within such a vessel in a grave appears at the moment, however, to be unique. The only possible parallel, in symbolic terms, may be the unopened oysters which were found in a grave at Sarre, Kent (Smith 1908: 357–61).

There is very little evidence which can be used to reconstruct clothing. Only the pin in Grave 2 seemed to be acting as a dress, or perhaps head-dress, fastener. Otherwise, the only evidence is for items which would have been attached to a belt or girdle. Graves 2 and 16 have both produced evidence for bag assemblages; that in Grave 2 was secured by a purse-ring at the waist and appeared to contain a curated Roman bracelet, while that in Grave 16 may have been a purse of openwork leather or other organic material, secured by a hook and rivet (placed in the upper chest region, however). This latter purse may have contained a wider range of material, although the disturbance of the head region of this skeleton means that the comb, spindle whorl and buckle cannot be securely said to have been contained within it. The spindlewhorl perhaps deserves some further comment. Lethbridge (1931: 76) argued for their use as toggles, to fasten a girdle, rather than as spinning equipment, and in this case it may have acted as some form of dress fastening, although they are also found in boxes at Melbourn (Grave XIX; Wilson 1956: 36) and at Burwell (Graves 42, 76 and 121; Lethbridge 1931).

The Roman snakes-head bracelet in Grave 2 and the Roman coin, reused as a pendant in Grave 16 both seem to represent curation of Roman artefacts for amuletic purposes. Both were contained within bag or purse assemblages, rather than being worn, and were found with a 25–35 year old probable female and a female over 45 years respectively. These finds are in line with White's observation (1988: 165) that in the later 6th and 7th centuries such amuletic use of Roman artefacts was limited on the whole to women (and children) in inhumation cemeteries. The amuletic use may be argued to have developed in the Cambridge region, and perhaps more generally, from a practice of the curation of Roman material. Several of the 5th- and 6th-century cemeteries in the vicinity have produced Anglo-Saxon burials using Roman material. Fox (1923: 242) reports a Roman harp-shaped brooch on a female skeleton from St John's, and another Roman bow brooch on the shoulder of a skeleton from Girton (*ibid* 247). While the brooches in these earlier cemeteries were worn (where this was noted), the Roman finds from 7th-century cemeteries in the area tend to have been used differently. The Roman coin from Grave 7 at Burwell appeared to form part of a purse or bag assemblage at the left hip, although the two 4th-century coins in Grave 24 at the same site appeared to have been sewn onto a neckband as decoration (Lethbridge 1931: 50, although Lethbridge 1936: 5 states that these too were probably contained within a pouch). Grave 11 at Shudy Camps also contained a Roman coin in a pouch, found between the knees (Lethbridge 1936: 2–5). The graves from King's

Garden Hostel which contain Roman artefacts are thus in line with the general practice of keeping them in bags or pouches, of both the local vicinity, and also further afield (Geake 1997: 59).

The single weapon burial, Grave 14, from the site contains the characteristic 7th-century combination of type C2 spearhead, seax and knife. While the seax and knife appear to have been suspended from the waist in the normal position, points downwards (perhaps originally contained within the same scabbard?), the spearhead is placed more unusually, with the point by the left knee, also pointing toward the feet. Spearheads are more usually found by the head, point up, and this inversion may have some symbolic meaning. Alternatively, this spearhead orientation is commonly seen in graves in Frankish regions of the continent (Evison 1987: 28); together with the imported bowl from Grave 1, this may hint at wider influences than just the local. The overall context of the cemetery is discussed alongside the settlement below.

The settlement

Work in 2002 in advance of the new Institute of Criminology building consisted of an evaluation, shortly followed by a small open area excavation, 20m by 28m, which focused on the footprint of the new building (Figs. 25 & 26). The trial trenching had demonstrated that no horizontal strata survived subsequent plough-truncation and, accordingly, the site was stripped to the surface of the terrace gravels, *c.* 0.8m below the present ground surface, into which the archaeological features had been cut. Descriptions of the structures and other archaeological features are presented and discussed below.

Structure 1 (Fig. 27)

Structure 1 consisted of 41 post-holes arranged in a rectangular pattern, aligned approximately east to west. These make up the plan of an earth-fast post-hole timber building which measured 10m in length by 5m in width with an internal floor area of *c.* 50m²; the western end of the building appears to have been removed by the insertion of a later structure (Structure 3); its associated sunken feature occupies the internal area, and the same alignment, as the earlier post-hole building but was presumably constructed after the earlier building had been dismantled. The fact that the western end of the sunken feature projects beyond the end of the post-hole building indicates that they cannot be contemporary (ie the sunken feature as some manner of in-hall cellar), although absolute certainty is not possible due to the difficulty of trying to distinguish postholes cut into backfilled features.

The ground plan of Structure 1 consisted of single small post-holes, the majority of which measured *c.* 0.3–0.4m in diameter and 0.2–0.4m in depth, closely spaced *c.* 0.5–0.6m apart. There was no evidence of post-pipes, or post-packing, in any of the post-holes and there was no definite evidence of post replacement in the form of additional post-holes. A slightly wider gap of *c.* 0.8m between the post-holes midway along the southern side (post-holes [186] and [189]), marks the probable location of a doorway. Post-hole [189],

which marked the location of the eastern doorpost, was also the deepest post-hole of the building at 0.5m in depth. Unfortunately it was not possible to observe the arrangement on the northern side due to truncation by the trial trench; it is probable that there was a corresponding doorway given the uniformity of this type of building on settlements across early Anglo-Saxon England.

The building is typical in both size and construction of the early Anglo-Saxon period. In size, Structure 1 compares to Building 2 at West Stow, which measured 9.75 x 4.27m, although in construction it compares to the smaller Building 1 at West Stow, which was defined by single rather than double post-holes (West 1985). There was no evidence of external raking timbers or of internal supporting posts which, together, suggests that this was a wall-post building, with the thrust of the roof borne by the walls. It has been persuasively argued that the structural integrity of this type of wall-post building was maintained by the use of tie beams, which direct the thrust of the roof down the load-bearing walls (Dixon 2002; Day forthcoming). The tie beams could have been supported directly on the post tops, and some of the post-holes of Structure 1 might have been paired across the length of the building or, alternatively, placed above a wall plate, which is perhaps more likely in this case given the slight irregularities in the spacing and positioning of post-holes, and thus posts. There was little direct evidence for the type of wall cladding used in Structure 1. The general absence of daub points to the use of wood, presumably either horizontal or vertical planks.

There was no evidence for a beaten earth or trampled floor within Structure 1, and there was no evidence for internal features, such as a hearth, although this could be due to later truncation of deposits. No material culture was found within the internal area of the building, or within any of the post-holes. The disturbed remains of a dark buried soil were apparently preserved across the central area of the site but the date of this deposit was not established. This might suggest that the building had a raised floor, consisting of planks pegged and supported on joists and a sill beam above the ground. There was some slight evidence of a possible internal partition wall at the eastern end of the building, but there was no line of post-holes across the building. Instead, the partition is hinted at by the presence of an internal post-hole ([34]), 0.8m in length north-south, abutting post-hole [33] in the southern wall-line of the building. This would provide a subdivision *c.* 1.2m in width at the eastern end of the building. There were no associated finds.

Structure 2

Structure 2 consisted of a shallow irregular sub-rectangular shaped sunken feature, measuring *c.* 4.60m in length by 3.50m in width and 0.36m in depth and aligned ESE to WNW; it was initially defined in, and truncated up to 0.15m by, Evaluation Trench 3. The northern half of the pit had been cut away by a later ditch (F1), aligned east-west across the site. Therefore, the original shape of the pit was possibly more regular in shape. This sunken feature is interpreted as the remains of a structure. The pit is of average size in comparison to those excavated elsewhere, which show a strong central tendency for *c.* 4 x 3m (Tipper 2000: 74–6). The pit cut ([124]) possessed gradually sloping sides down to a roughly flat base; the base of the pit measured *c.* 3.90 x 2.75m in area. There was no evidence to show that the base had formed the occupation surface.

Five post-holes, measuring 0.20–0.50m in diameter and

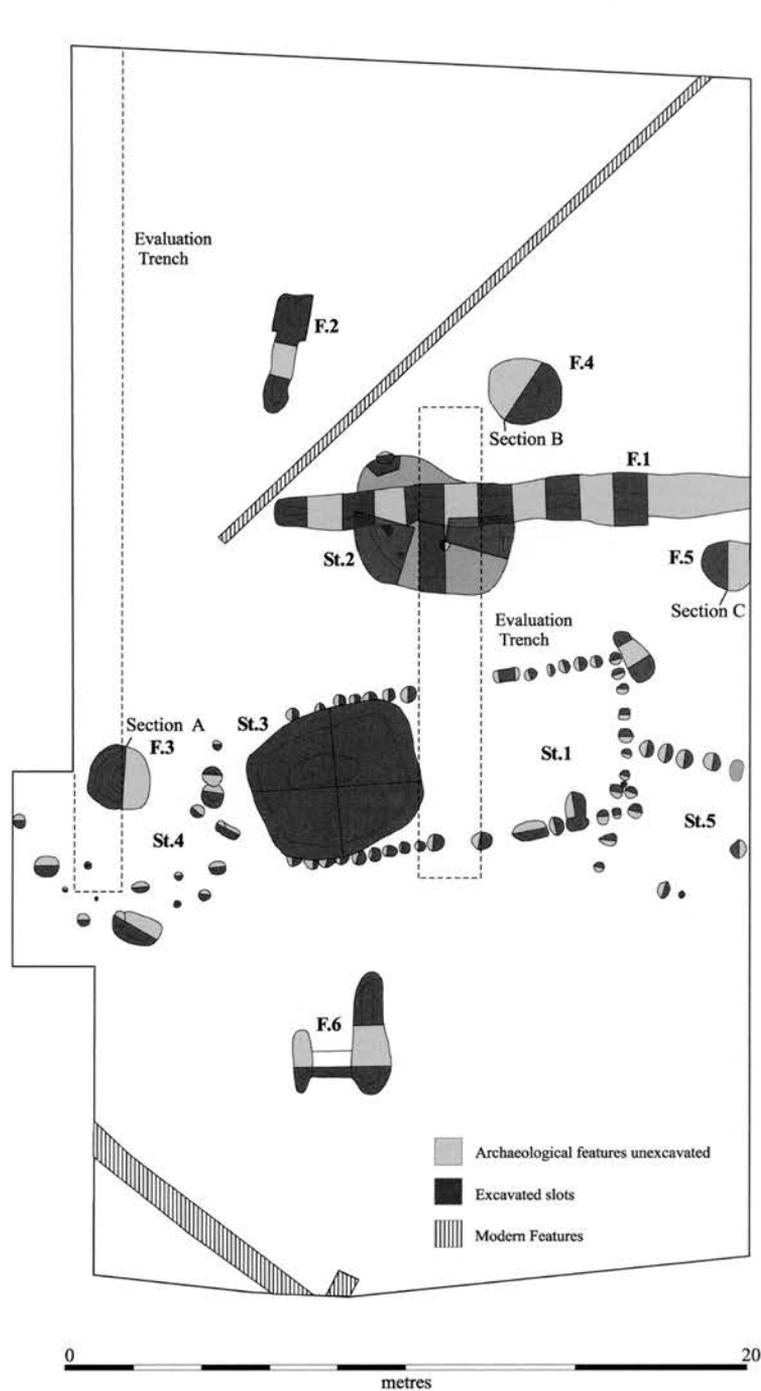
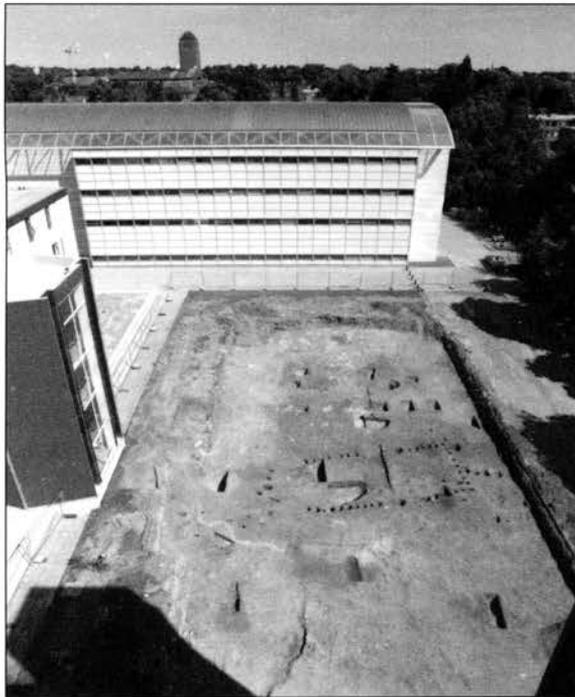


Figure 25. Settlement excavation

0.20–0.36m deep, were found in the base and sides of the pit. Post-hole [214], which straddled the upper edge of the pit in the northwest corner, was shown to be cut by the sunken feature, and none of the post-hole fills were defined through its fill. It is possible that none of the other post-holes related to this building, and they could relate to an earlier post-hole structure. However, none of the post-holes were particularly shallow in comparison to others on the site and would have been exceptionally deep had they been dug from the original ground surface; there were also no other post-holes defined in this part of the site. Therefore, it seems likely that they

related to Structure 2. Two post-holes were located along the short east and west sides and it seems possible that they could have held gable posts. The eastern post-hole ([212]) straddled the side of the pit while that on the western side ([206]) was set within the base of the pit, c. 0.8m from the upper edge of the pit; such an irregular arrangement, while unusual, is not unknown and a similar arrangement has been defined in similar structures on several other sites. The former measured 0.29m in depth and the latter 0.36 m. One small post-hole ([210]) was located roughly in the centre of the base, measuring 0.24m in depth. A further two post-holes



A



B

Figure 26. A) General view of the settlement site from south.

B) The excavated structures from the south.

were located in the north-west ([208]) and south-west ([204]) parts of the base and could feasibly mark the location of, albeit irregular, corner posts. No post-holes were defined in the opposite eastern corners of the pit.

A single fill ([123]) was defined in the pit, described as a mixed mid brown, yellow-grey red-orange silty sand. This fill contained a very small material culture assemblage in comparison to Structure 3 (see below), although the northern half of the pit was removed by a later ditch and the central part of the pit was truncated by machine. The finds comprised 57 fragments of animal bone (total 320g, from which seven were identified as cattle, five as sheep/goat, and one

each of pig and dog), three sherds of Anglo-Saxon pottery (131g) and one sherd of medieval pottery (6g), this presumably intrusive.

Structure 3 (Fig. 27)

Structure 3 also consisted of a sub-rectangular shaped sunken feature (cut [134]), with slightly bowed long sides, and was located c. 3.5m to the south-west of Structure 2 and on the same ENE/WSW alignment. Given the absence of horizontal stratigraphy and closely datable material, the relationship between Structures 2 and 3 could not be ascertained. However, Structure 3 cut through the western half of Structure 1, and was presumably constructed after the post-hole building had been dismantled, although how soon after could not be determined by excavation.

Structure 3 was slightly larger in area and depth compared to Structure 2, measuring c. 4.80m in length, 4.30m in width and 0.54m in depth. No post-holes were defined in association with this pit; this absence of post-holes is relatively uncommon on sites in East Anglia, where the majority of similar structures have two or six post-holes. However, a growing number without post-holes have been found on sites across the country. The absence of post-holes does not preclude the absence of posts, which could have stood directly on the base of the pit, but it does seem that gable posts were not essential in their construction (Tipper 2000: 90–3).

The pit had gently sloping sides down to an irregular, but roughly flat, base; the base of the pit measured c. 3.9 x 3.3m in area and was, therefore, considerably smaller than the stripped surface area. The interface between the cut and the lowest fill was sharp and there was no evidence of side-collapse, which indicates that the sides were originally cut on a slope. There was no evidence to suggest that the base of the pit had formed an occupation surface, either in the form of a made-up surface, accumulation and trampling of occupation material or of wear and erosion on the base of the pit. There was, however, a slight hollow or depression in the base, c. 2m in length, 0.5m in width and 0.05m in depth, which was aligned roughly parallel with, and to the north of, the central axis of the pit. This hollow is similar to one defined in the base of GH136 at Mucking, Essex (Hamerow 1993: 17 and fig. 66; Tipper 2000: 257–9 and in press). However, the hollow did not appear to have been the result of wear and the function, if indeed it had one, is not clear. On the basis of this evidence, the building is reconstructed with a suspended floor above the pit, following Stanley West's interpretation at West Stow (West 1985; Tipper 2000 and in press). There was, however, no evidence of associated structural remains outside the pit.

The fill of the pit was characterised by three distinct deposits: a tripartite fill sequence which is typical of sunken feature deposits on sites across the country (Tipper 2000: cf chap. 5 and in press). Immediately above the base of the cut, in the north-east part of the pit, there was a discrete deposit of unfired clay which formed an irregular line c. 1.05m in length by 0.2m in width, roughly parallel to the central axis of the pit. This deposit could possibly be the remains of loom weight material but it was not deposited in the pit as a neat group or row of loom weights. The clay deposit was sealed by the lower fill ([129/133]), extending across the entire base of the pit to a depth of 0.1m (max). This fill was described as grey-orange-brown fine sandy silt, with very occasional peat in the matrix. It was sealed by a deposit of mid-brown sandy gravel ([128/132]), containing frequent angular gravel. This deposit sloped down into the centre of the pit, possibly as a result of later compaction and stabilisation, 0.45m in

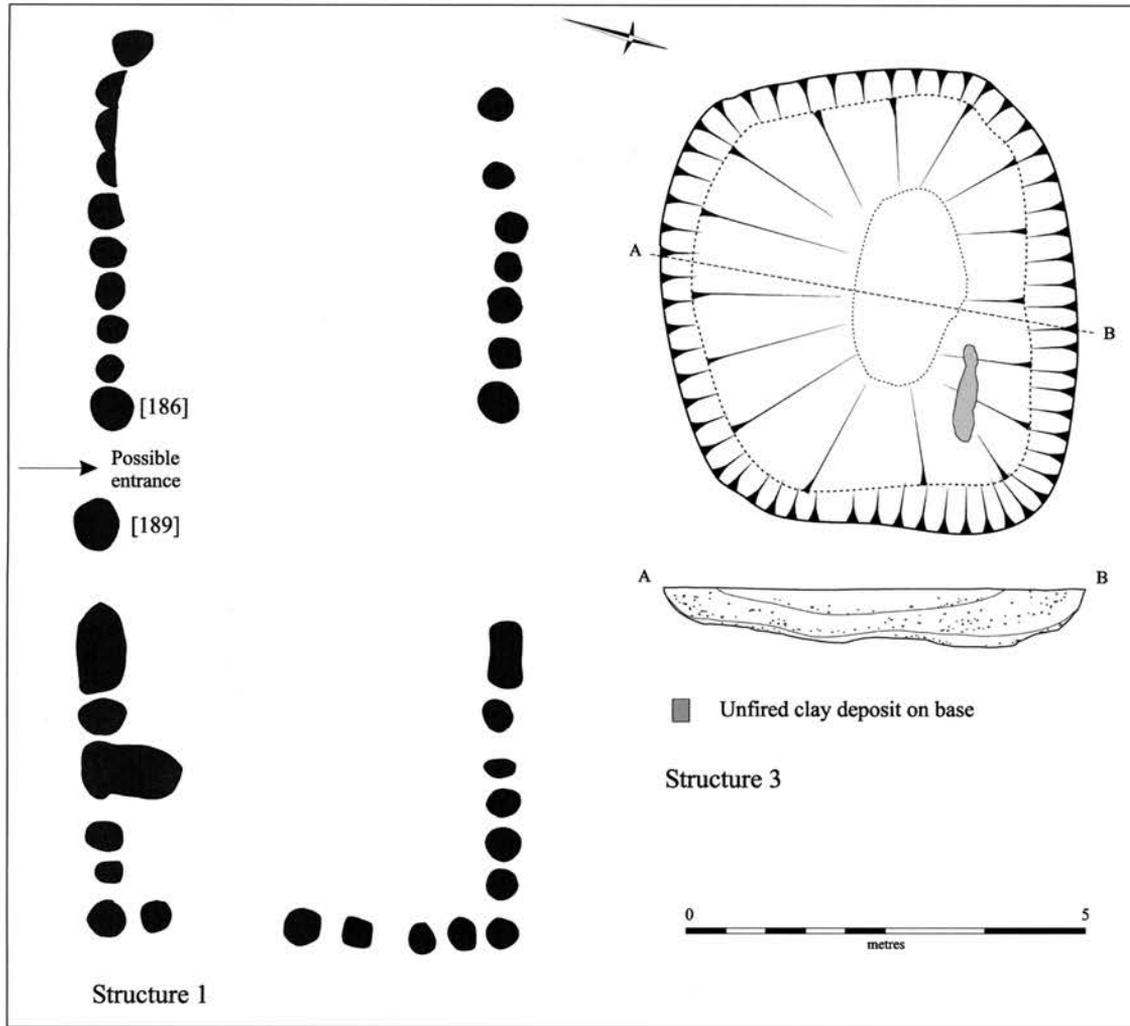


Figure 27. Post-built timber building Structure 1; plan and section of Structure 3.

depth (max). A discrete deposit of burnt stone, the result of a single dump, lay at the interface between this and the upper fill. The upper fill ([127/131]) was located within the hollow in the centre formed by the stabilisation of the previous fill, measuring c. 3.25m in length, 3.1m in width and 0.31m in depth (max). This final fill was described as light grey-brown

fine sandy silt, containing occasional angular gravel and pea grit.

It is suggested that these fills were deposited after the building was abandoned and the floor planks removed; they accumulated neither as occupation deposits on the base of a sunken floor nor below floorboards during the use of the

Table 2. Finds distribution within the fills of Structure 3's sunken feature (weight in g in brackets)

Material	Lower	Middle	Upper	Middle/Upper	Unknown
Animal bone	100 (2819)	163 (5259)	6 (53)	95 (2593)	
Burnt coal?			1 (20)		
Fired loomweight	23 (847)	8 (459)			
Glass			1 (8)		
Lava quernstone			1 (25)		
Fired clay/burnt daub	1 (11)	3 (79)			
Oyster shell		1 (92)			
Anglo-Saxon pottery	8 (206)	8 (72)	5 (51)		5 (41)
Roman pottery	1 (21)				
Post-medieval tile					1 (28)
Roman tile	2 (246)				
Unfired clay	1 (143)	? (86)			

building. However, given the absence of silting on the base and erosion of the sides, it would seem that the pit was not left open to fill in gradually. The pit contained a varied material culture assemblage distributed throughout the three fills, although the majority of material was concentrated in the lower and middle fills (Table 2). The assemblage included 26 sherds (370g) of Anglo-Saxon pottery, from 18 different vessels, and 364 fragments of animal bone (over 10kg, of which 94 were identified as cattle, 39 as sheep/goat, six as pig, seven as horse, six as bird and one as deer). That the pit was rapidly backfilled with occupation material and not left to silt up gradually might suggest that the disuse of this building does not mark the cessation of occupation on this site, but merely the abandonment of this area as built-space.

Two other less regular post-built structures were also identified but neither was clear-cut like Structure 1. Of more ambiguous character, the status of these post-hole arrangements as buildings is considered only as a possibility:

Structure 4 (Fig. 25)

Structure 4 consisted of an irregular cluster of 17 post-holes located along the western edge of, and possibly extending outside, the excavation and adjacent to Structure 1. No coherent pattern could be discerned from the post-holes, which all showed diverse fill characteristics and were of differing sizes, ranging from 0.11–0.65m in diameter and 0.1–0.4m in depth. They might relate to some manner of small shed-like structure or working area c. 5m (east-west) x c. 4m (north-south) in area. Its confused plan may be the result of rebuilding. There were no associated finds, with the exception of a single sheep axis from one of the post-holes.

Structure 5 (Fig. 25)

Structure 5 extended over c. 3.5m (east-west) x c. 4m (north-south) and consisted of a sub-rectangular arrangement of 15 or 16 post-holes. The west side of this building overlapped the southeastern corner of Structure 1 and continued east beyond the edge of excavation, on a slightly different alignment (ESE-WNW). The sequence of the two buildings could not be defined, although clearly they were not contemporary. The north and west walls of this structure were defined by rows of closely spaced post-holes, 0.16–0.61m in diameter and 0.08–0.5m in depth. The southern wall was less obvious and only two post settings were identified along its southern side. There were no associated finds.

There were three substantial pits on the site, all of which have been phased to the Anglo-Saxon period. The distribution of the three pits across the site might

indicate a direct relationship between them and the main buildings, although this may be more apparent than real given that these remains are clearly part of a settlement of unknown extent but which clearly had more than one phase of building. The function of these pits is not known, although given the low quantity of material within their fills it seems that they were not dug simply as rubbish pits:

Feature 3 (Fig. 28a)

Feature 3 was a large sub-circular shaped pit, measuring c. 2.0m in diameter and 0.9m in depth. The pit had steeply sloping sides down to a stepped concave base. The pit was located on the western edge of the site, and within the internal area of, although not necessarily contemporary with, Structure 4. The lower fill of this pit consisted of a mottled light orange-brown sandy silt ([14]) which extended up the sides of the pit, 0.15m in depth (max). This was sealed by a homogeneous mid grey-brown silt deposit c. 0.45m in depth ([13]). The upper fill of this pit was located within a small central hollow, c. 1m in diameter and 0.28m in depth, which had presumably formed as a result of the stabilisation of the lower fills. This upper fill consisted of mid grey-brown silt containing frequent flint inclusions.

The small quantity of finds from the fill of this pit, which was completely excavated, included a large fragment of lava quern stone 0.25m in length, 16 sherds (103g) of early Anglo-Saxon pottery and a single fragment of fired clay annular loom weight (Table 3). One of the fragments of lightly fired clay contained the remains of two wattle impressions. There were also 18 fragments of animal bone (271g, of which five were identified as cattle, two as sheep/goat and one as pig).

Feature 4 (Fig. 28b)

Feature 4 was a large sub-circular pit, measuring c. 2.2m diameter x 1.1m deep, which was located c. 2m to the north of Structure 2. The pit had sharp and steeply sloping sides down to a roughly flat base c. 0.5m in diameter.

The pit contained several fills and appeared to possess a later recut. The lowest fill ([74]) was mid red-brown sandy silt with frequent gravel inclusions, c. 0.28m in depth and sloping up the lower sides of the pit. This deposit was sealed by a mottled mid grey-brown sandy silt ([73]) which also contained frequent gravel inclusions, c. 0.8m in depth (max). The upper part of [73] appeared to be cut through by a small secondary pit ([72]). This recut measured c. 1.3m in diameter and 0.55m in diameter. It contained two fills, a lower deposit ([71]) consisting of mid-light grey silty sand with frequent gravel inclusions, c. 0.35m in depth, and an upper deposit of mid-light grey silty sand with a lower frequency of gravel inclusions, c. 0.2m in depth.

Table 3. Finds distribution within the fills of pit F3 (weight in g in brackets)

Material	Lower [14]	Middle [13]	Upper [12]	Cut [15]	Unknown
Animal bone		9 (60)	4 (86)	5 (125)	
Fired loomweight					1 (33)
Lava quernstone			1 (1664)		
Fired clay/burnt daub			9 (136)		
Anglo-Saxon pottery		6 (21)	10 (86)		
Roman tile		2 (436)			
Worked flint		1 (?)	1 (?)		

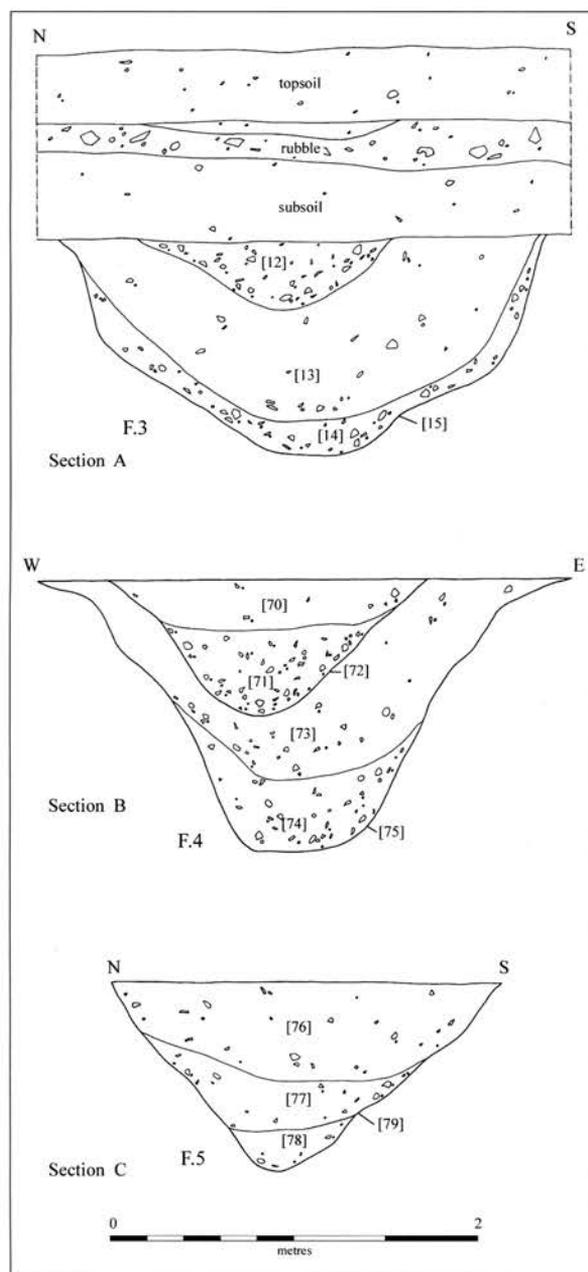


Figure 28. Sections of pits F3, F4 & F5

The small quantity of finds from the fill of this pit (Table 4), which was half-excavated, included seven sherds (44g) of early Anglo-Saxon pottery, three of which (29g) were from the probable secondary recut [72]. The fill of this later pit contained the fragment of stamped Anglo-Saxon pottery; it also contained a clay pipe stem (42mm long, weight 4g, pre-

sumably intrusive). The middle fill contained 18 fragments of animal bone (526g, of which five were identified as cattle and one each as sheep/goat and pig).

Feature 5 (Fig. 28c)

Feature 5 was a large sub-circular shaped pit, measuring 1.6m in length (north-south) and 0.77m in depth; the eastern edge extended outside the edge of the excavation. It had a steep V-shaped profile, and was located c. 3.5m to the north-east of Structure 1. The lowest fill of this pit ([78]) consisted of grey sandy silt c. 0.15m in depth. This was sealed by a band of mottled orange silty sand, with patches of grey sandy silt, c. 0.2m in depth. The remainder of the pit was filled with a homogeneous grey sandy silt c. 0.4m in depth.

A further two small pits were also defined on the site:

Feature 7 (Fig. 25)

Feature 7 was a small pit located along the southern side of Structure 4, but cut by post-hole [59] and therefore pre-dating the post-built structure. It was roughly ovoid in shape with sloping sides down to a flat base, measuring c. 1.1m in length by 0.9m in width and 0.20m in depth. The fill of this small pit ([60]) contained light grey silt, with a thin band of charcoal on the surface and displayed traces of burning, including burnt stones within its fill. It seems possible that this might be the remains of a fire pit but there was no evidence of burning to the sides or base of the pit. The small finds assemblage comprised eight fragments of animal bone (90g, four of which were identified as cattle), one oyster shell (7g) and two sherds of Anglo-Saxon pottery (5g).

Feature 8 (Fig. 25)

Feature 8 consisted of two small intercutting pits or post-holes (cuts [120] and [122]) located at the northeast corner of, but outside, Structure 1; the relationship between the two pits could not be determined. Pit cut [120] was sub-ovate in shape, measuring c. 1.0m in length by 0.8m in width and 0.3m in depth. This pit contained two fills, the lowest ([119]) consisting of light orange silty sand, 0.1m in depth. This was sealed by grey sandy silt ([118]), c. 0.25m in depth. Pit [120] intersected with a second pit ([122]) on its northern side. This second pit measured c. 0.7m in length by 0.5m in width and 0.2m in depth. The fill ([121]) consisted of grey sandy silt. There were no finds from the fill of either pit.

A single ditch was excavated, which is not thought to relate to the early Anglo-Saxon settlement features:

Feature 1 (Fig. 25)

Feature 1 was a V-shaped ditch aligned east to west across the site, c. 14.0m in length by 1.5m in width and 0.47m in depth (max). The western end of the ditch was marked by a butt-terminal, c. 6m from the western edge of the site; the

Table 4. Finds distribution within the fills of pit F4 (weight in g in brackets)

Material	Lower [74]	Middle [73]	Recut [70/71]	Unknown
Animal bone		18 (526)		
Clay pipe			1 (4)	
Anglo-Saxon pottery		3 (29)	3 (9)	1 (4)
Roman tile (fired clay)		1 (374)	1 (62)	
Roman tile (stone)		1 (90)		

eastern end continued beyond the limit of excavation. The fill of the ditch was dark grey-brown sandy clay. The ditch cut through the northern half of the (infilled) sunken feature of Structure 2.

No pottery was recovered from the fill of ditch F1, of which approximately 50% was excavated in 1m segments; an abraded sherd of medieval pottery (the only medieval pottery on the site) from the fill of Structure 2 could possibly derive from the ditch. A fragment of a bent perforated copper alloy strip (4g), possibly part of a set of tweezers, was recovered from segment [24], which cut through the northeast part of Structure 2. Therefore, this object may well be residual within the fill of a later field boundary. There were also 91 fragments of animal bone within the fill of this ditch (864g, of which 41 were identified as cattle, 11 as sheep/goat, and one each as pig, dog and cat), with some variation between segments. Most, or at least some, of this material is probably redeposited bone from earlier Anglo-Saxon contexts (particularly Structure 2) given the general paucity of later medieval material, or earlier Roman material on the site; the small unstratified scatter of abraded sherds of Roman pottery is thought to be the result of manuring rather than domestic activity as are two unstratified sherds of (possible) St Neots ware.

Two further features were defined, of a similar but uncertain nature. These are tentatively described as troughs, intercutting pits or possible irregular slots:

Feature 2 (Fig. 25)

Feature 2 was defined for *c.* 3.6m, 0.6m in width and 0.4m in depth, aligned north-south, and was the northernmost archaeological feature defined on the site. It possessed a steep-sided cut [153/154/156/157] with a rounded base and contained a pale grey silty sand. The fill contained two sherds of abraded Anglo-Saxon pottery (20g), one of which is a base sherd. It also contained a large base sherd of Romano-British red Hadham ware pottery (35g), 13 fragments of animal bone (44g, of which three were identified as cattle, and one each as pig and sheep/goat) and one worked flint (4g). Therefore, it would appear that this feature relates to the Anglo-Saxon occupation, although its function is unclear; it is possible that this feature is actually the remains of several small intercutting pits.

Feature 6 (Fig. 25)

Feature 6 was similar in character to Feature 2, located several metres to the south of Structures 2 and 3. This con-

sisted of three distinct features, possibly short slots, two of which were aligned north-south, *c.* 1m apart, with a short segment aligned east-west between and linking them. The north-south slot on the eastern side ([162] and [166]) measured *c.* 3.6m in length, 1.2m in width and 0.3m deep and is of a similar size as, and alignment to, Feature 2, *c.* 17m to the north. The other north-south slot [160] was slightly smaller, measuring *c.* 1.9m length, 0.5m in width and 0.3m in depth. Both of their fills consisted of orange-brown sandy silt. These features both appeared to cut a short east-west slot [164], *c.* 1m in length, 0.4m in width and 0.3m in depth, which contained a light grey-brown silty fill. None of their fills contained any material.

The Anglo-Saxon finds assemblage

Anglo-Saxon Pottery

Sixty-five handmade early Anglo-Saxon sherds weighing 835g, and representing a maximum of 53 vessels, have been recorded. There were two decorated sherds in the assemblage (25g). This pottery is considered to date between the 6th and 7th centuries AD based on similarities with other assemblages dating to this period and according to the established chronological framework for pottery of this period.

All except one of the sherds were stratified within the fills of sealed features. The fill of the sunken feature of Structure 3 contained 26 sherds weighing 370g and the fill of Pit F4 contained 16 sherds weighing 107g (65% of the assemblage by sherd count; Table 5).

A number of fabric groups have been identified macroscopically based on a rapid visual assessment of the qualitative differences in fabric and matrix. In total, 23 sherds weighing 330g (40% of the total by sherd weight) have been identified as organic-tempered, containing frequent carbonised organic matter or most frequently organic voids. Of these, three sherds (38g) also contained igneous(?) rock inclusions and coarse fragments of biotite. Nine sherds (214g) of organic-tempered pottery were from a single vessel, located within the fill of Structure 3. A survey of the evidence for organic-tempered pottery during the early Anglo-Saxon period has suggested that this technique spread from the south and east to other parts of the country, increasing in use, during the later

Table 5. Quantification of Anglo-Saxon pottery within the fills of features.

Context	Context type	Count	Weight (g)
F2	?Trough/slot fill	2	20
F3	Pit fill	16	107
F4	Pit fill	7	44
F7	Pit fill	2	5
Structure 2	Sunken feature fill	3	131
Structure 3	Sunken feature fill	26	370
Structure 4	Post-hole fill	2	8
Structure 5	Post-hole fill	1	2
[9]	Post-hole in Trench 1	3	27
[5]	Post-hole in Trench 3	1	4
Unstratified		2	117

6th and 7th centuries, with its use largely ceasing in the south and east by the middle of the 8th century (Hamerow *et al* 1994: 14–5).

Fifteen sherds (184g) have been identified as containing igneous(?) inclusions and large fragments of biotite (22% by sherd weight, excluding three sherds which also contained organic temper). Sixteen sherds (141g) were identified as sandstone-sand-tempered (17% by sherd weight). Six sherds (76g) were identified as calcitic-tempered, of which four (61g) also contained biotite and igneous(?) rock inclusions. The calcitic inclusions and voids could be the remains of calcite and/or possibly fossiliferous limestone. Four sherds (104g), from three vessels, appear to have contained frequent fine ooliths and oolitic voids.

The fabric identifications should not be seen as mutually exclusive and it is possible that further analysis will show that the small groups are simply variations within broader types and should be merged together; it is unclear how many of the inclusions have been added to the clay as temper or how many occur as background material within the clay which has been used to manufacture these vessels.

Four of these sherds were subject to thin section analysis (Vince 2003), and all were found to have used very different raw materials. One sherd (<67> from the lower fill of Structure 3's sunken feature) has a possible origin in south Leicestershire (*cf* Williams and Vince 1997), whereas the other three (<073> from Pit F4, <004> from post-hole [009] in an evaluation trench, and the unstratified <092>) appear to have more local origins (the latter two of which also had chaff deliberately added).

Most sherds in the assemblage were too small and indistinct to indicate the form of the vessel, as vessels were often represented by single sherds. There were no complete profiles in the assemblage, but there were three rim sherds (44g) from different vessels. None was large enough to establish the rim diameter. One rim (unstratified, 35g) was from a globular vessel with a short vertical rim (illustrated). There was also a small rim sherd with a vertical and slightly bulbous lip, from the fill of Structure 3's sunken feature, and a simple everted rim from post-hole [005] (Trench 3). There were two possible base sherds, from different vessels, in the assemblage (weighing 22g in total). Two of these derived from the fills of ?Trough F2 and Post-hole [009] (Trench 1). Both were simple flat-rounded bases.

There were two decorated sherds, weighing 15g, and from different vessels. These form 3% of the assemblage by sherd count, which is comparable to the proportion of decorated pottery at West Stow (*c.* 2%; West 1985: 128). Both decorated sherds are illustrated. There was one small stamped fragment in the assemblage (2g), from the upper fill [70/71] of Pit F4. The stamp motif has been identified as a Category N 1ai, according to the classification in the Archive of Anglo-Saxon Pottery Stamps (Briscoe 1983). This type of simple motif appears to have been made with three teeth of a comb; impressed comb-point decoration is common and found across the country. The stamp ap-

pears to be arranged in a row of diagonal impressions, although too little of the sherd survived to define the complete decorative scheme.

There was also one sherd (13g) with incised decoration, deriving from the lower fill [129/133], in the northwest quadrant of Structure 3's sunken feature. This sherd possessed diagonal incised lines forming a two-line chevron pattern, or possibly a pendant-triangle or swag. It is possible that this decoration could have occurred on a vessel in combination with stamped decoration given that only a small part of the decorative scheme can be identified from the single small sherd.

JNL Myres established a typological framework for early Anglo-Saxon pottery based on a study of decorative elements and their arrangement on certain distinctive vessel forms. He also put forward a broad chronological framework, which has generally been accepted, for particular types of decorated pottery. Myres suggested that zigzag comb-point decoration was possibly an imitation of rouletted ornament found on Frankish vessels, and as such might indicate a late 6th- or 7th-century date (Myres 1977: 26). Pottery with this type of decoration, in a chevron pattern, has been found in a number of cemeteries dating to the Conversion period (7th century AD), for example, in Grave 18 at Chamberlains Barn II, Leighton Buzzard, and in Grave G2 at Marina Drive, Dunstable, both in Bedfordshire (Hyslop 1963: fig. 11a; Matthews 1962: fig. 5.4). Myres suggested that stamped chevron pottery is generally attributable to the 6th century, with those in which the chevrons are empty more likely to be earlier than the more elaborately decorated vessels with the chevrons filled with stamps (Myres 1977: 51). However, the pottery of this period is difficult to date accurately and this should be used with caution as dating evidence in the absence of other datable material from the site.

Just over half the sherds in the assemblage have been smoothed or wiped with a cloth or by hand to produce a smooth surface finish, varying from a rough wipe to a smooth lustre. Twenty-seven sherds (weighing 348g) have burnished internal and/or external surfaces, varying from a light burnish to a very high gloss. Six sherds (weighing 122g) had evidence of carbonised organic residue adhering to their internal and/or external surfaces.

The pottery is all handmade and the majority of vessels were probably coil built and have been carefully finished, although the coils were not generally visible in section. The thickness of the 59 sherds with two intact surfaces varied between 4.5 and 13.5mm; 44 sherds had a thickness of between 7 and 11mm. The pottery was fired in a bonfire- or clamp-type kiln, resulting in the characteristic (reduced) dark grey-brown-black colour. Several of the sherds are lighter brown, indicating variations in the conditions of firing.

The pottery appeared, in general, to be in relatively good condition, although most vessels are represented by only single sherds. The mean sherd weight of the assemblage is 12.8g. This compares to a mean sherd

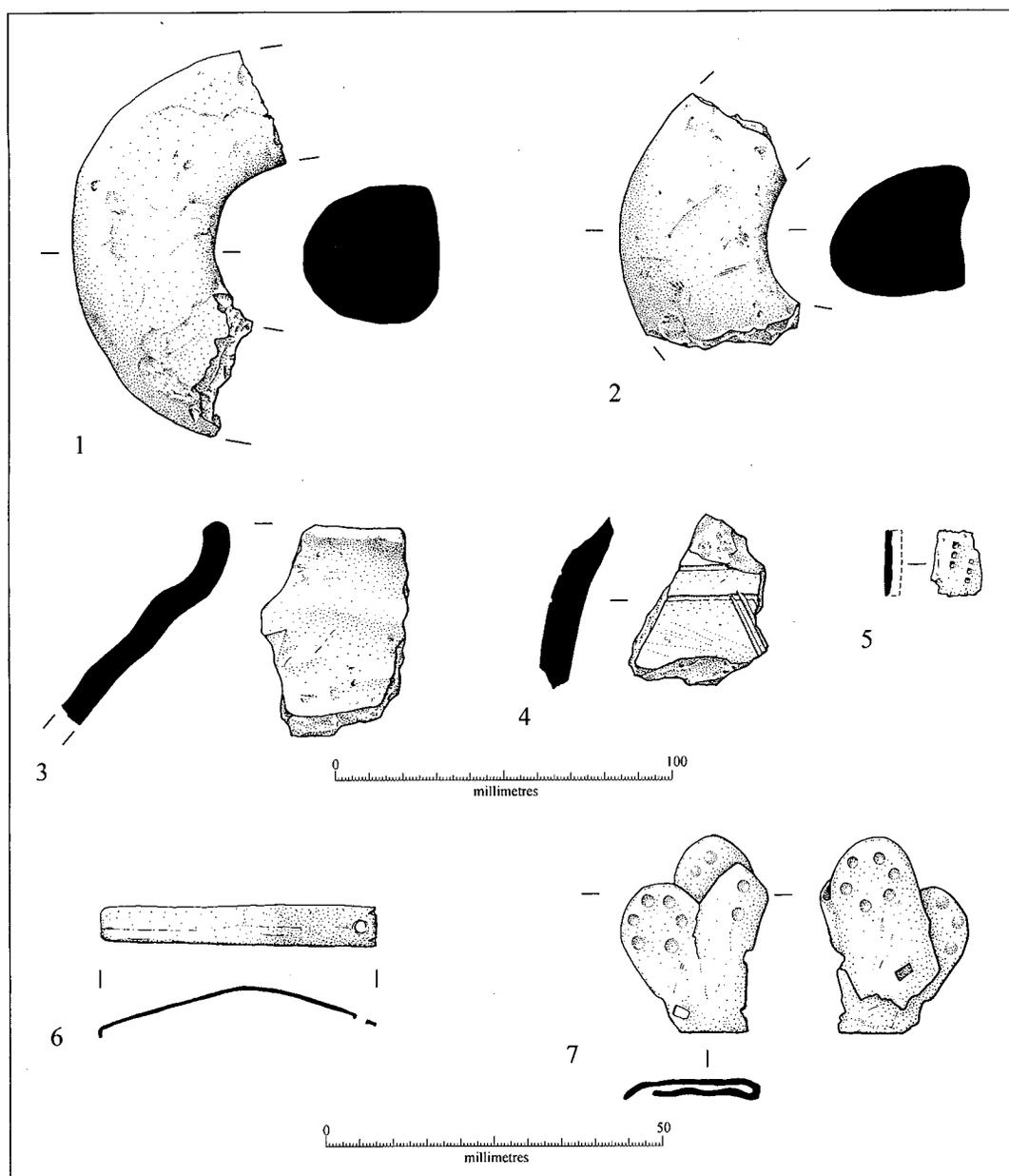


Figure 29. Finds from the settlement excavations.

weight of 9.8g in the fills of 20 sunken-featured buildings (c. 6000 sherds) examined in detail at West Stow (Tipper 2000 and in press). There is, however, considerable variation between features, varying from 2.5g in the fill of Pit F7 up to 43.7g in the fill of Structure 2's sunken feature (for features containing more than one sherd). Forty-one out of 65 sherds (63%) weighed less than 10g. In comparison, at West Stow 75% of the assemblage weighed less than 10g. Over three-quarters of the pottery from the Criminology Site (52 sherds) was under 50mm in size (max length). In comparison, 86% of the assemblage examined at West Stow was under 50mm in size.

Illustrated Anglo-Saxon pottery (Fig. 29.3–5)

<092> Unstratified

Rim sherd of a globular shaped vessel with a short vertical rim; Fabric Type: Millstone Grit Sandstone-sand; Rim diameter: not established; Rim percentage: not established; Vessel completeness: 5%; Weight: 35g; Wall thickness: 9mm; Smoothed surfaces; Colour: pale orange-pink, core and interior surface blotched grey; Context: Unstratified.

<067> [129]/[133] Structure 3

Decorated body sherd; Fabric type: Igneous?; Vessel completeness: <5%; Weight: 13g; Wall thickness: 10mm; decoration: two-line chevron or possibly two horizontal lines above a pendent-triangle or swag; Burnished exterior, completely abraded interior; Colour: dark grey, pale brown exterior surface; Context: 129/133. Lower fill of NW quadrant of Structure 3's sunken feature.

<035> [070]/[071] F4

Decorated body fragment; Fabric type: Oolitic limestone?; Vessel completeness: <5%; Weight: 2g; Wall thickness: >3.5mm; Incised decoration: row of impressed diagonal comb-point decoration, Briscoe stamp motif N 1ai; Burnished exterior, completely abraded interior; Colour: blotched grey and pale brown; Context: 70/71. Upper fill of Pit F4.

Metalwork

There were two fragments of copper alloy from the site. No ferrous metalwork was present.

<096> / [24] segment of Ditch F1, cutting through north-east corner of Structure 2 (Fig. 29.6)

Fragment of bent perforated copper alloy strip, 40mm in length by 6mm in width and weighing 4g. One end of the strip, closest to the break end, has been perforated with a hole 1.75mm in width. The broken end also has the remains of two ?decorative triangular nicks. The other end of the strip has been hooked over. Tweezers? Anglo-Saxon.

<097> Spoil — metal detector find (Fig. 29.7)

Fragment of decorated and perforated copper alloy sheeting with a central triangular lobe or panel bordered by curved lobes which are decorated with punched dot ornament, 34mm in length, 25mm in width, 0.75mm thick and weighing 4g. The sheet has been perforated in the two bottom corners; these edge holes were presumably for attachment, possibly for sewing. However, the sheet is very thin had it been fixed to textile for dress and it may have been stuck on to a more robust, flat surface. Folded over in half. Mount? Anglo-Saxon or possibly medieval (11th–12th century?).

Other finds

Aside from one large fragment of Mayen lava quernstone from the upper fill of Pit F3 (probably of original diameter c. 600mm, this fragment was 250mm in length and 40mm thick, weighing 1664g) and two further fragments (one from the same fill, 39g, and one from the upper fill of Structure 3's sunken feature, 25g), the rest of the artefactual finds from the settlement consisted of fired and unfired clay (see Armour *et al* 2003). The majority of this represented the remains of around 10 to 15 fired clay loomweights (weighing 1339g in total), of which all but one were recovered from the lower and middle fills of Structure 3's sunken feature (the remaining example came from the fill of Pit F3; see Fig 29.1–2). Where original size and form could be reconstructed, these were all annular, with D-shaped sections (indicative of the early Anglo-Saxon period; Hurst 1959: 23–4) and ranged from 110–125mm in diameter, 38–46mm thick, with central holes 45–47mm in diameter. On one fragment, a shallow groove made by the suspension cord was visible.

Three contexts contained lightly fired clay identifiable as burnt daub (13 fragments, 226g in total): the upper fill of Pit F3 (one of which possessed the remains of wattle impressions), and the middle and lower fills of Structure 3's sunken feature. There were also unfired clay fragments from the latter two contexts (229g in total), which may be the remains of

unfired clay loomweights.

Economic evidence

A total of 706 fragments of animal bone was recovered (15,072g, using a combination of careful hand collection and sieving) of which 286 fragments (41% were identifiable to species (see Swaysland in Armour *et al* 2003). In all features cattle and sheep/goat (where identifiable, these are all sheep) were the most commonly represented species. Also present were pig, horse, dog, cat and goose. The only non-domestic species represented was deer (the one roe deer metatarsal shaft possibly being indicative of hunting). The presence of almost all skeletal elements indicates that cattle were being raised and consumed on site. Most cattle were culled in late adolescence/early adulthood, on reaching maximum size and weight. A few older animals were kept for breeding and traction (suggested by one cattle distal tibia which showed signs of osteoarthritis). The absence of a large number of young animals would indicate that milk production was not a significant aspect of the economy, although this may have been influenced by carnivore action. The dominance of cattle is not a pattern replicated at some other early Anglo-Saxon sites in East Anglia, such as West Stow (Crabtree 1989: 10) and Bourn Bridge (Yannouli 1996), where sheep/goat form the largest species representation. The low representation of pigs here is also unusual, perhaps indicating a lack of suitable pannage in the area.

Four soil samples were subjected to environmental analysis (see Roberts in Armour *et al* 2003). Two contained large amounts of cereal grain, no chaff and only a very low amount of wild plant remains, which fits the pattern described by Greig (1991) for cereal cultivation in the early medieval period. There were only small amounts of wild plants found in these samples. The majority of these were typical arable weeds, such as clover, brome/oat and vetch/wild pea. However, there was also a single occurrence of stinking chamomile, which might suggest the cultivation of heavy (and sometimes damp) soils. The only wild plant remains of which there are more than two or three examples are those which might also be edible, or harder to remove from a cereal product such as vetch/wild pea, cabbage/mustard or brome/oat. It is possible that the large amount of charred cereal grain combined with the small amount of wild plant seeds — and the lack of chaff — represents a cleaned crop which was charred during cooking.

Discussion

The King's Garden Hostel cemetery and the Criminology Site settlement together add considerably to our knowledge of the West Cambridge area in the early Anglo-Saxon period. To date, remains of this period have been reported from Newnham, St John's College cricket field, Girton and Trumpington. Further to the east, isolated burials and/or finds suggestive of burials have been reported from Milton

Table 6. Results of environmental bulk sample analysis.

sample number	<1>	<3>	<4>	<5>
context	[10]	[66]	[60]	[123]
feature		str 4	F7	str 2
feature type	pic	posthole	pic	sw quad
sample volume/litres	7	1	2	4
flot fraction examined	1/1	1/1	1/1	1/1
naked <i>Hordeum vulgare sensu lato</i> grain			2	
<i>Hordeum vulgare sensu lato</i> grain			21	5
<i>Triticum</i> sp. grain		7	39	30
<i>Triticum/Hordeum</i> sp. grain	5	1	13	20
<i>Secale cereale</i> grain		1	4	
cereal grain indet.	4		4	
cereal fragments			++	+
<i>Chenopodium polyspermum</i>			3	
small <i>Chenopodium</i> sp.			2	3
<i>Fallopia convolvulus</i>				1
small <i>Rumex</i> sp.	1			
small <i>Brassica/Sinapis</i> spp. (c. 2mm)			5	
small <i>Vicia/Lathyrus</i> spp. (<2 mm)	1		1	6
small <i>Trifolium</i> spp. (<1mm)				2
small <i>Galium</i> spp. (<2mm)			1	1
<i>Anthemis cotula</i>				1
<i>Schoenoplectus cf lacrustis</i>			1	
<i>Bromus/Avena</i> spp.			6	4
small Poaceae indet. (c. 2mm)			2	
small seed indet.			7	2
small charcoal (<2mm)	+++	+++	+++	+++
medium charcoal (2-4mm)	+++	+	+++	+++
large charcoal (>4mm)	++	-	++	++

Road, Jesus Lane, Mill Road, Rose Crescent and possibly Coldham's Lane (Fox 1923: 244-5).

A number of isolated finds are known from the Newnham Croft area (TL 439 574; fig. 1b.3). Lethbridge (1938: 311) reports chance finds made since 1893 at the south end of Grange Road and on both sides of Barton Road, including several inhumations found 'recently' with spearheads, pottery vessels and wrist-clasps. He also reports cinerary urns from Newnham in the British Museum. In addition, Fox (1923: 244) cites the discovery of two interments at Newnham Croft in 1910, one of which was accompanied by wrist-clasps and a cruciform brooch, and the other by three cruciform brooches. A 5th-century equal-armed brooch also came from this site.

The cemetery reported by Fox (1923: 242) as being located mainly on the site of the racquets courts in St John's College cricket field was excavated in 1888 (TL 441 588; Fig. 1b.1). Fox details the discovery of at least 100 cinerary urns and other vessels, along with 30 skeletons (presumably inhumed) and 'a representative range of associated objects' as being present in the Cambridge Museum. Alongside the Anglo-Saxon material in the unsorted and unpublished collection were a number of Roman artefacts, and at least one Roman brooch was known to have accompanied an Anglo-Saxon furnished burial (*ibid*). The mate-

rial from the site included cruciform, square-headed, small-long, annular and applied brooches, along with wrist-clasps, iron keys and belt-plates (*ibid* 243). Fox saw the cemetery as dating from the mid 5th century through to the early 7th century, seemingly on the basis of a glass- or garnet-inlaid rectangular buckle chape and a pair of late applied brooches. This cemetery would thus seem to be predominantly of 5th- and 6th-century date, with burial perhaps continuing into the early years of the 7th century. Its extent is still unclear: Fox says that 'many hundred skeletons and urns were destroyed before investigation' (*ibid* 242) and Walker (1912) reports the discovery of an inhumation with a bone comb, amber and glass bead necklace and possibly a disc brooch, along with two Anglo-Saxon cremations and some Roman burials during the building of Saxmeadham, 71 Grange Road, less than 200 yards from the St John's racquets courts, suggesting that this cemetery was extremely extensive (fig. 1b.2). However, the more recent excavations by the CAU detailed in the introduction to this paper have produced no evidence for Anglo-Saxon burials in the surrounding areas. It would thus seem that the King's Garden Hostel site, along with the Newnham burials, each form discrete clusters of burial in West Cambridge, with the King's Garden Hostel burials largely post-dating those which were already known.

A large cemetery is known further to the north at Girton (TL 423 609) where excavations in 1881–2, 1886 and 1926 found nearly 100 inhumations and over 130 cremations with a wide range of grave goods in an area of extensive Roman buildings with associated burials of Roman date (Lethbridge 1938: 313; Fox 1923: 246–9; Hollingworth and O'Reilly 1925). Further to the south, three cruciform brooches (one very early), a spearhead and wrist-clasps found before 1854 at Dam Hill, Trumpington (TL 451 568) may also indicate an inhumation cemetery (Fox 1923: 249).

It would thus appear that there are at least four discrete clusters of burials on the west side of Cambridge: of these, the cemetery at St John's may continue into the early years of the 7th century, while the King's Garden Hostel site would appear to be a *de novo* foundation, predominantly dating to the 7th century, and possibly later. The establishment of new burial areas in the later 6th or 7th century, even close to pre-existing 6th-century sites, is a very common occurrence in central and eastern Britain, and may signal important social shifts at this time (Lucy 1998).

Further afield, similar cemeteries of 7th-century date are known from Burwell (Lethbridge 1931), Cherry Hinton (Kennett 1973: 102), Foxton (Lethbridge 1938: 312–3; Fox 1924: 37–46), Melbourn (Wilson 1956) and Shudy Camps (Lethbridge 1936), along with finds indicating an isolated burial from Quy (Kennett 1973: 102). The large cemetery at Barrington Edix Hill also continued into the 7th century (Malim and Hines 1998). The King's Garden Hostel site is less elaborately furnished than the majority of these. Grave goods recovered from Melbourn, for example, included iron-bound boxes, bag assemblages, double-sided bone combs, knives, bronze pins, wooden buckets, spearheads, a shield boss and various pendants and festoons, despite there only being 28 graves (including two double burials) excavated. The 139 graves excavated at Burwell and almost 150 graves at Shudy Camps produced an even wider range. Broadly, though, these sites are comparable, especially in terms of the variation in orientation seen, the variety of positions in which the dead were buried, and the curation of Roman artefacts.

While the full extent of the King's Garden Hostel cemetery cannot be known, the part seen here appears representative of a typical 7th-century Cambridgeshire cemetery with, however, unique characteristics in the eel bowl and silver and chalk pendant. While the date of the bowl's manufacture may place it back into the 6th century, its deposition may well have been later. The excavation of settlement remains just 300m to the south may help to place it in its more local context. Until now, Anglo-Saxon settlement evidence from the Cambridge area in the Anglo-Saxon period appeared to focus around Market and Peas Hill, Castle Hill and possibly also Newnham and Barnwell. In these areas characteristic Anglo-Saxon pottery and some evidence of structures has been found (Fox 1923: 245–6; Alexander and Pullinger 2000). The excavation under discussion here helps confirm this suspicion of such settlement on the gravel terraces west of Cambridge.

The excavation has uncovered the complete ground plan of one substantial post-hole building or hall, as well as the remains of two other probable post-hole structures, two buildings associated with sunken features, both of which have been interpreted with suspended floors, and three large pits within a relatively small excavation area of c. 560 m². The fills of the sunken features and pits have produced a small, but sealed, assemblage of material from the settlement. These have been dated to the early Anglo-Saxon period, possibly the 6th and/or 7th centuries AD, based on the similarity of the structural evidence and the material cultural assemblage to other settlement remains of this period.

The distribution of the settlement at this point was essentially linear and the buildings did not extend to the northern and southern margins of the excavation area; the east-west alignment and linear arrangements of buildings is common within larger settlements of the period, for example at West Stow and Bloodmoor Hill, both in Suffolk (West 1985; Dickens *et al* in press). Given the localised density of the Anglo-Saxon buildings within the excavation area, with the evidence for intercutting buildings, it seems likely that the settlement extended over a considerable area. In comparison, the core of the settlement on the knoll at West Stow occupied over 1.8ha. (West 1985). The settlement remains at Mucking extended across an area of c. 18ha. (over 900m from the north to the south end of the site) and Helena Hamerow interpreted it as groups of farmsteads that gradually shifted across the landscape between the 5th and 7th centuries AD (Hamerow 1993; although see Tipper 2000: appendix 1 and in press). It is possible that the Criminology site is part of a larger settlement complex, which was also the result of a gradual movement along the terrace edge. However, the stratigraphic relationship between Structure 1 and Structure 2 demonstrates that the settlement had more than one phase of occupation at the same location. This is in itself relatively unusual and intercutting buildings are generally few and far between. At West Heslerton, North Yorkshire, for example, few post-hole buildings had stratigraphic relationships with *Grubenhäuser*; furthermore, in every case where the relationship could be established it was shown that the *Grubenhäuser* was replaced by the post-hole building (Tipper 2000: 101).

Unfortunately, there is no way of establishing the total extent of the Criminology settlement with any certainty at this time. It seems reasonable to associate the findings from No. 5 West Road, lying c. 50–60m to the north, with this settlement (Mackay 2002). Although this site may not be directly associated with the King's Garden Hostel cemetery, when seen in relationship to it, to the St John's Playing Fields cemetery to the north and to the Newnham burials to the south, we need to consider whether this density of Cam-side Anglo-Saxon occupation is special, and somehow directly ancestral to the foundation of the later Saxon/medieval lower town, or whether it may be typical of riverside Anglo-Saxon settlement densities (and thus simply a factor of more intense investi-

gation along this part of the Cam). It can be noted that extensive investigations at Eriswell, RAF Lakenheath, by the Suffolk County Council Archaeology Service, have defined two or three early Anglo-Saxon cemeteries within *c.* 200m of each other, and in association with settlement remains (Martin *et al* 2002: 219–21). The evidence from Eriswell seems special only insofar as a large area of landscape has been intensively investigated, in comparison to most other small-scale excavations. Similarly, the density in Cambridge may simply be a reflection of more intense development, and consequently discovery, within the town in comparison to the rest of the Cam Valley. Developer-funded landscape excavation has also defined a high density of settlement remains along the Cam Valley in the south of Cambridgeshire with, for example, early/middle Anglo-Saxon settlements being found at Hinxton, Hinxton Hall and Bourn Bridge. At present, we do not know the density of Cam-side Anglo-Saxon settlements and cemeteries, but the evidence is beginning to suggest that it was considerable.

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Endnotes

1. A substantial accumulation of medieval plough soil that sealed the cemetery was recorded in section. Its depth varied across the site from *c.* 0.40m in the south to *c.* 0.90m in the north and has been interpreted as a probable headland associated with the medieval ridge and furrow system. Its lower horizon is made up of the clods of the buried soil, which have been worked into the medieval layers above, and probably represents an early phase of ploughing possibly contemporary with the truncation of the cemetery. The interface between this and the dark greyish brown loam above it is irregular. The build up of soil contained sherds of prehistoric and Saxon pottery and had increasing amounts of gravel in its upper half. Although no medieval pottery was recovered from the sections, 13th-century sherds were identified in these layers during the evaluation. Both the medieval headland and the buried soil which the Saxon graves cut were sampled for pollen but none was recovered (R Scaife pers comm). This may be due to extensive modern root disturbance and also the slightly acidic soil. The soil micromorphology results can be found in the archive. Ravensdale and Hall's map of the West Fields is based on their work on the 'Corpus Terrier', a document listing all the titheable lands belonging to Corpus Christi in *c.* 1360. On this map the headland is shown as separating two furlongs in the Cam Field area. The development of the headland into a causeway/trackway through the West Fields can be seen on Loggan's plan of Cambridge of 1688 and Custance's plan of 1798. It is known that a bridge was built at the end of this causeway as early as 1472–3 soon after King's College was founded, whose grounds it leads into (Willis and Clark 1886: 567–8); its masonry was exposed during riverside shoring operations in 1991 (Evans 1991c).
2. This pit was oval and vertical-sided (F21, 1.27 x 0.97 x 0.40m); the lower fill contained 54 pottery sherds (several of which were decorated), which represents the remains of at least 10 separate vessels from a coherent assemblage of domestic wares, of both fine and coarse fabric, and can be assigned to the Post Deverel-Rimbury tradition, as defined by Barrett (1980; Knight in Dodwell 2001). Accompanying the sherds were burnt flint, animal bone (including antler) and charcoal.
3. In assessing the human osteology, general methods used are those of Bass (1992), Buikstra and Ubelaker (1994) and Steele and Bramblett (1988). An assessment of age was based on the stages of dental eruption and epiphyseal union, on the degree of dental attrition (Brothwell 1981) and, where possible, on changes to the pubic symphysis (Brooks and Suchey 1990) and the auricular surface. The following age categories are used:

Infant	0–4 years
Juvenile	5–12 years
Subadult	13–18 years
Young adult	19–25 years.
Middle adult	26–44 years
Mature adult	45 years +

There may be overlaps between categories or a broad category, such as adult, may be used where insufficient evidence was present. Sex of the adults was ascertained where possible from sexually dimorphic traits on the pelvis and skull and from metrical data. No attempt was made to sex immature individuals.

4. Nine environmental samples from grave fills were analysed. The graves were found to contain occasional small fragments of charcoal, fragments of charred concretion and occasional charred grains of breadwheat and hulled barley; all probably surface debris from nearby burning events (not necessarily contemporary with burial), accidentally included during the infilling of the graves. Mollusc shells were not present in sufficient quantities for environmental reconstruction. Small fragments of animal bone (where recognisable, loose ovicaprid and cow molars and phalanges) were also found in four graves (G1, G12, G14, G17), but this appears to represent accidental inclusion, rather than the known Anglo-Saxon practice of interring either whole animals or food offerings with the deceased. Unless otherwise stated the grave cuts had near vertical sides and the fills were a mid grey brown sandy silt with occasional small stones, some with charcoal flecks. Despite the depth of the graves below the present ground surface all had been disturbed by roots and there was some evidence of animal disturbance. More detailed descriptions can be found in the original skeletal recording sheets and in the unpublished in-house excavation report (Dodwell 2001).
5. The single sherd of translucent pale blue glass, 4.5mm thick and weighing 8g, from the upper fill [131] was probably Roman in date. The oyster shell was a large and fresh example (92g) derived from the middle fill [128], southeast quadrant, and is probably residual Roman (as are the two other abraded fragments of oyster shell from the fill [60] of pit F7 (7g) and unstratified (11g).
6. There were seven fragments of tile weighing 1,003g in total, of which all except one (28g) was Roman in date. Several of the fragments were quite substantial (one weighed 374g) and none was greatly worn or abraded. There was also a single fragment of post-medieval tile in the fill of Structure 3 (28g).
7. The Roman tile fragment from this feature consisted of two joining fragments of burnt Collyweston tile, weighing 90g in total, from fill [73] in pit F4. Probably residual Roman given the presence of other Roman tile and general paucity of other later medieval material on the site.
8. This small Roman pottery assemblage consisted of 34 abraded sherds, dating from AD150 to the 4th century AD, and largely of local wares (see Monteil in Armour *et al* 2003).
9. This was one of eight worked flints recovered during the settlement excavation, reported on fully in Armour *et al* (2003).

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