Samples (incomplete) SMF Parish File

ASSESSMENT REPORT

SMYE'S CORNER, SHRUBLANDS QUARRY, CODDENHAM, SUFFOLK

Site CDD 050

ASSESSMENT & UPDATED PROJECT DESIGN

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SCCAS Report No. 2002/81

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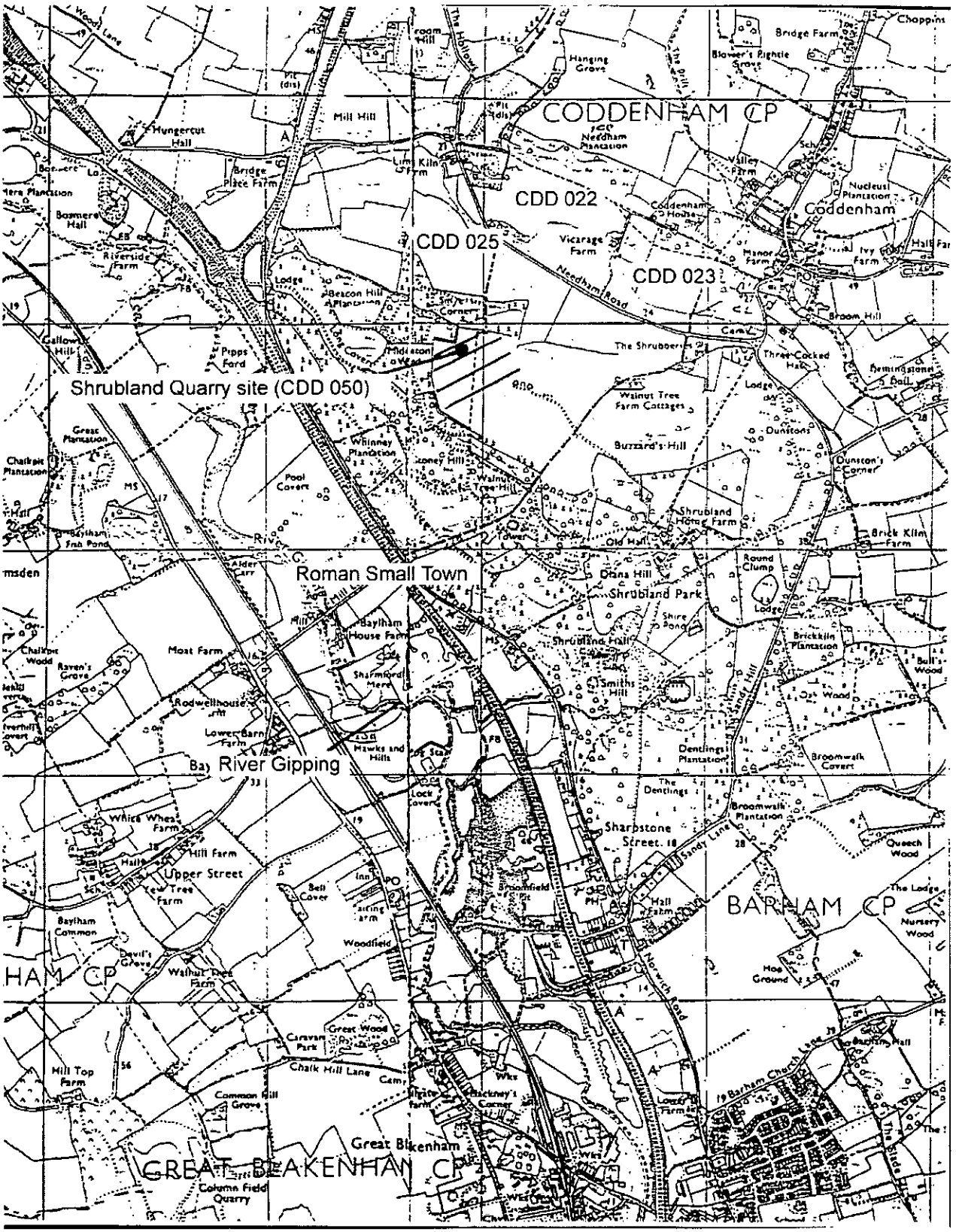

Figure 1. Site Location Plan (1:25000).

1. Background

1.1. Location and archaeological background

The site (SMR site no. CDD 050) lies just under two kilometres south-west of the village of Coddenham, centred about TM 120 538 (Fig. 1), on the northern side of a wide crest forming the watershed between valleys occupied by the River Gipping (to the south-west) and a small tributary stream (to the north-east). The maximum height in the excavation area is *c.*55 metres OD, the highest point of the crest; immediately to the north the land falls sharply away into the valley, whilst on the other sides the ground remains relatively flat for some distance before gradually sloping down towards the river.

Previously recorded archaeology in the vicinity of the CDD 050 site is extensive and includes the important Roman small town of *Combretovium*, positioned only *c.*700 metres to the south-west of the site and a Roman road may run *c.*500 metres to the south-east. Other recorded finds indicate Anglo-Saxon settlement and burial in the valley to the north and north-east, along with numerous stray finds of Iron Age, Roman and Anglo-Saxon date.

1.2. The excavation

In December 1992 an initial archaeological evaluation of the proposed Shrubland Hall Quarry development area (involving field-walking, metal-detecting and shovel test-holes) was carried out by the Archaeological Service of Suffolk County Council (hereafter SCCAS). This produced a low density scatter of Prehistoric and Roman finds, and one Saxon sceatta (series G porcupine type, early 8th century) was found some 100m south of the most southerly burial identified in later excavations (Boulter 1993).

In 1995 a planning application (MS/591/95) was made by Wilding and Smith Ltd. (since renamed Wilding Aggregates Ltd.) for the extraction of gravel over a *c.*22 hectare plot of the Shrubland Park Estate. The area consisted of an irregular polygon of cultivated arable land bounded to the north, west and south by woodland.

After the application, a brief and specification was issued in December 1995 for further evaluation of this area. This second phase of archaeological works consisted of fifteen linear trial-trenches (equivalent to about two percent of the site); seven additional trenches concentrated on the northern sector of the proposed area (phases 3 and 4 of the quarry development scheme), where the densest concentration of archaeological features was located. This site was recorded as CDD050 on the County Sites and Monuments Record (SMR), after which phases 1 and 2 of the quarry underwent extraction and archaeological monitoring.

Trenching in the second phase revealed features interpreted as a Late Iron Age occupation site, possibly surviving into the early Roman period (although this hypothesis depended on a single sherd of wheel-made pottery). Features identified included pits, ditches and post-holes, from which significant quantities of artefactual evidence were recovered; several elements of a field system were also identified.

Phase 3 of the quarry was designated for extraction in 1999-2000, and in October-December 1999 a roughly rectangular area of about 31,000 square metres (also incorporating a section of phase 4, located directly to the south) was fully excavated by the Field Projects Team of SCC Archaeological Service. This work was funded by contributions from Wilding Aggregates Ltd. and English Heritage.

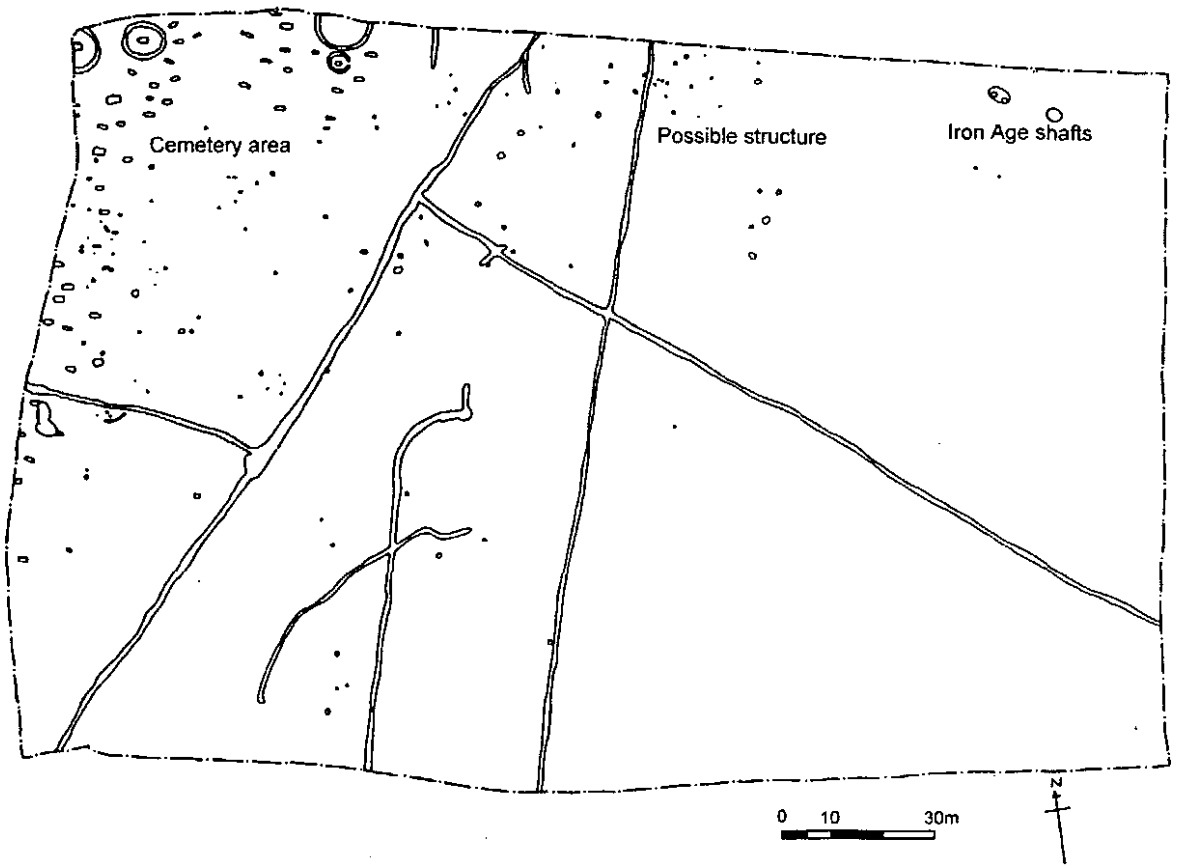

Figure 2. The excavated area.

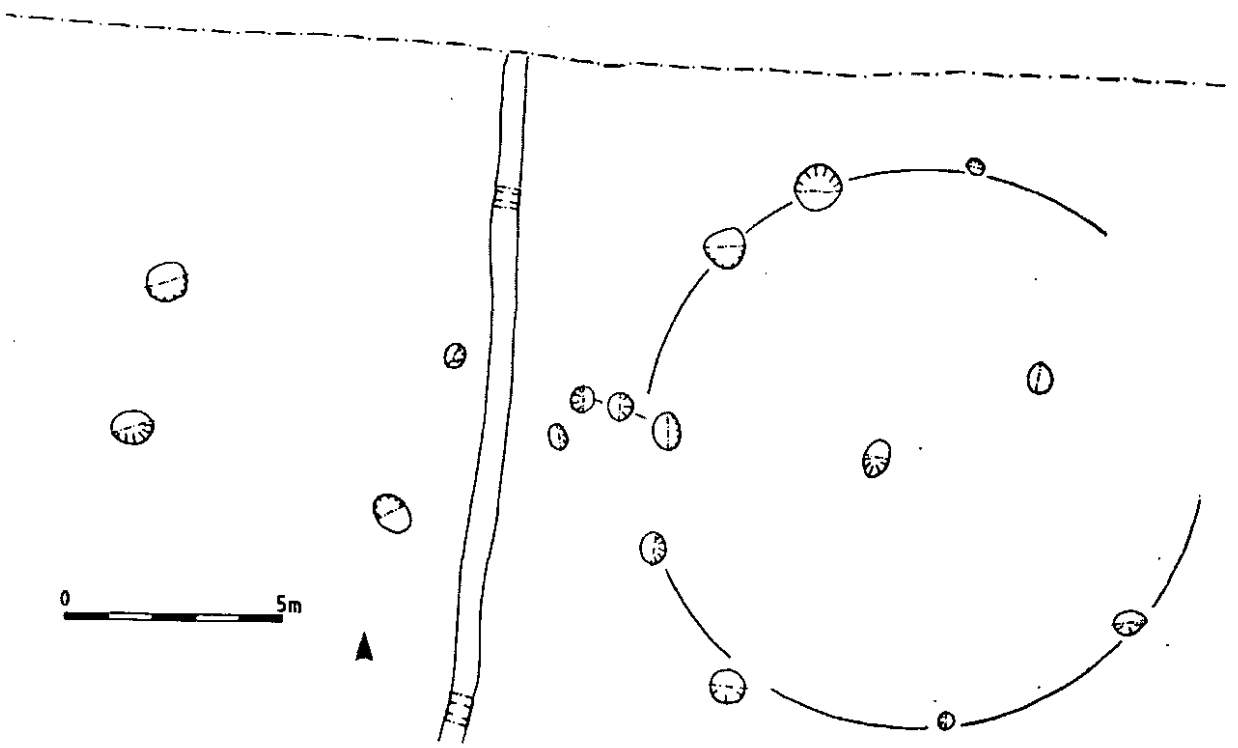

Figure 3. Possible Iron Age structure and associated features.

This phase of excavation confirmed the existence of the Iron Age site, while the field system is now identified as mid-Roman in date. The excavation also revealed the existence of a Final Phase Early Anglo-Saxon cemetery, hitherto quite unexpected (Fig. 2).

While the evaluation trenching in 1995 did locate and characterise the area of Iron Age activity and the late prehistoric/Roman field system ditches in the northern part of the proposed quarry area, it did not reveal any evidence for the 7th century cemetery subsequently found through open area excavation. The failure to locate any graves was in the main part due to the difficulty in locating graves in what is a very mixed natural drift geology of sand, gravel and boulder clay and in part due to the evaluation trenches, by chance, running between rather than over graves. The funding agreed for the archaeological programme of works consequent on the planning consent with Wildings Aggregates Ltd did not, therefore, have adequate resources to cover the full excavation of the cemetery area revealed in Phase 3 and English Heritage was approached for supplementary funding to complete the cemetery investigation. Additional funding was agreed in December, 1999, with the £10,766 contribution from English Heritage representing 32% of the archaeological site costs.

1.2.1. Summary of excavation findings

The Smye's Corner site has produced significant evidence for three principal periods of occupation, each with a varying degree of regional and national importance. The significance of these phases is outlined below.

Iron Age period

Several dispersed areas of pit and hearth features were found in the northern and western sectors of the excavation. A possible structure, perhaps a roundhouse (Fig. 3), has been identified to the north edge (central) of the site, and in the north-east corner of the site three large circular shafts were sampled to a depth of over six metres. Artefactual evidence (principally in the form of a large pottery assemblage from the pits) indicates occupation through the Iron Age.

Although the concentration of features is relatively low, this may be indicative of widely dispersed occupation or of a smaller settlement shifting over a longer period. The apparent lack of recorded structures may be due to the ephemeral nature of some building-types at this time. However the shallow nature of most features does strongly suggests that the site has suffered from erosion or other processes of soil removal, and it is quite possible that less durable vestiges of occupation had already disappeared or were lost during the clearance of topsoil.

Roman period

While some Early Roman material was found during the excavation, the majority of Roman pottery dated from around the 3rd century (including Nene Valley colour-coated and Much Hadham wares). Most of this came from three of the linear ditches crossing the site, although material was also recovered as residual finds in the fill of Anglo-Saxon graves and ring-ditches. In the absence of clear stratigraphy in the junctions between the linear ditches (identified as field boundaries), it can reasonably be suggested that many or all were open at one time.

Early Anglo-Saxon cemetery (Fig. 4)

In the north-west corner of the stripped area were found fifty inhumation burials, of which three were associated with ring-ditches (marking ploughed-out barrows); a fourth ring-ditch failed to produce evidence for a burial. These burials form part of a cemetery which clearly continued to the north and west of the excavation boundaries. Grave-goods present in about half the burials would indicate a pagan cemetery restricted in date to the 7th century. Of particular interest are two chamber burials with significant 'warrior burial' assemblages, while a third contained a

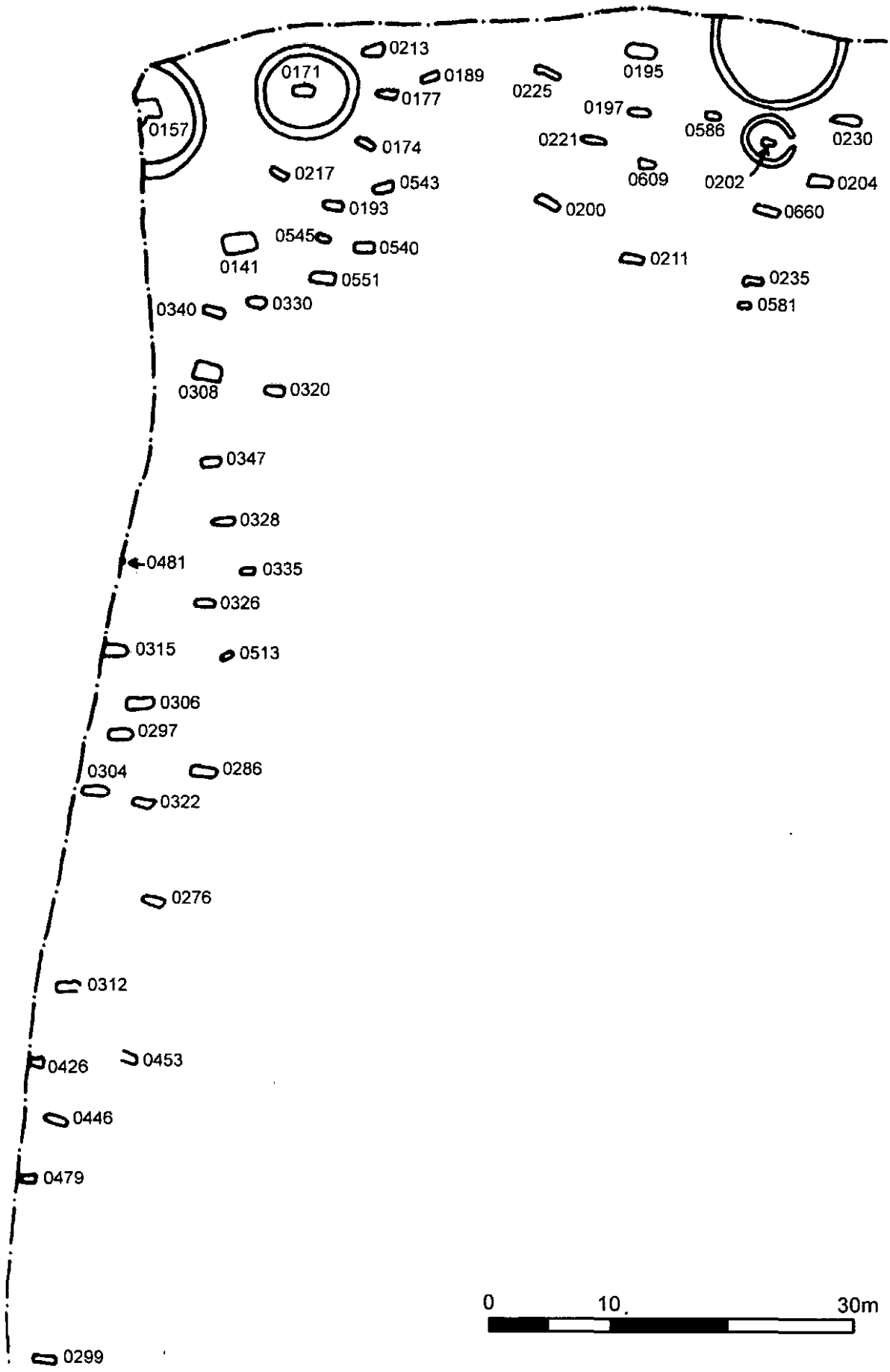

Figure 4. The cemetery area.

woman buried on an iron-framed wooden bed. A large bronze bowl was recovered from each of these burials.

The cemetery appears to represent the first activity on the site after the Roman period. There is no obvious relationship between the burials and the network of field ditches, unless the position of six burials (graves 0299, 0312, 0426, 0446, 0453 and 0479, effectively separated from the main cemetery by a ditch) was deliberate.

1.3. Post-excavation work

A project design for assessment was submitted to English Heritage (Topham-Smith and Anderson 2000), and included details of the post-excavation work which had been carried out up to that point.

During the assessment phase of the project, the contextual database was checked and grave plans and inventories were prepared for specialists. Preliminary phasing of the site was carried out, but no attempt was made to define sub-phases within the Early Saxon cemetery or the Iron Age site.

1.4. Summary of pre-assessment statement of potential

Iron Age period

The following characteristics were identified as key features of the site:

- the three circular shafts in the north-east corner of the site;
- evidence for settlement on the edge of the Suffolk clays towards the end of the Iron Age;
- the absence of any form of enclosure around the area of occupation.

Roman period

The Roman ditches were identified as part of a field system, analysis of which would provide further understanding of the agrarian basis of the Roman countryside, and also the hinterland of the Roman small town of *Combretovium*.

Early Saxon cemetery

Three aspects of the cemetery were identified as particularly important:

- 'final phase' cemeteries are of particular research interest since this is a period of major cultural change and population movement;
- the nature of the cemetery, with the number of high status burials and the assemblage of rich and varied grave goods;
- the relationship between the cemetery and a large cluster of probable Early Saxon funerary and settlement sites in the valley directly to the north and north-east, and within the Gipping valley as a whole.

2. Assessment

2.1. Introduction

Although the assessment includes all aspects of the site, it has already been agreed that English Heritage will only be asked to fund the analysis of the cemetery. Other aspects are incorporated as part of the Project Design, but costings are separated in Section 6.

The statements of potential below are linked to the revised research aims set out in Section 3 (noted as e.g. *RA 1.1*).

2.2. Stratigraphic and structural

2.2.1. Structural assessment

From assessment report by Sue Anderson and Ken Penn (Appendix 1.1).

Methodology

- the site context database was checked and preliminary spotdates added.
- preliminary phasing was carried out.
- a site matrix was not produced as there were so few intercutting features.
- grave plans and inventories were produced for specialists.

What date the well?

Factual data

Prehistoric/Iron Age

- evidence for prehistoric/Iron Age occupation consists of scattered pits, post-holes, hearths and ditches, one possible structure, a cremation burial, and three shafts.
- finds which can be dated to this period consist of 2229 sherds of pottery, 134 flints, 173 burnt flints, two stone objects, the majority of the fired clay and slag assemblages, and most of the animal bone.
- 16 samples were taken from Iron Age features, but plant macrofossils were generally rare.

Roman

- this phase is represented by ditches, 81 sherds of pottery and six fragments of tile.

Early Saxon

- the stratigraphic evidence for this phase consists of funerary features only: 50 graves and four ring ditches. Only 35 graves contained skeletal material.
- approximately 468 small finds and three pottery vessels are of Early Saxon date.

Post-Saxon

- features of this period consist of one pit and five ditches.
- 20 small finds are of post-medieval date, and there is a small quantity of post-medieval tile.

Statement of potential

Prehistoric/Iron Age

- the site is typical of Iron Age activity in this part of East Anglia, displaying dispersed pits, hearths and ditches containing pottery and other finds (*RA 1.4*).
- the main features which require further investigation are:
  - spatial distribution of the features and finds (*RA 1.1*),
  - identification of a possible field system (*RA 1.1*),
  - a possible structure (*RA 1.2*),
  - three shafts (*RA 1.3*),
  - and the pottery assemblage (*RA 1.1*).

- in general, the site is of interest because of its location on clayland and lack of any obvious enclosure.

Roman
- analysis of the Roman field system has the potential to add to our understanding of the agrarian basis of the Roman countryside, particularly with regard to the hinterland of the small Roman town of *Combretovium* (*RA 2*).

Early Saxon
- a 'conversion period' cemetery with a date centred on the late 7th century is of importance in the study of cultural change and population shift in East Anglia (*RA 3.1, 5.2*).
- although the cemetery is not complete, it is large enough for spatial analysis of artefactual and biological evidence (*RA 3.2, 3.3*).
- the osteological evidence will be of value in adding to interpretations of demography and status based on small finds (*RA 4.1, 4.3*).
- the proportion of high-status burials in the excavated part of the cemetery is remarkable (*RA 3.2, 5.1*).
- there is potential to study the relationship of the cemetery with a large cluster of known Anglo-Saxon sites in the Gipping Valley (*RA 6.1*).
- there is potential to contribute to the English Heritage radiocarbon dating programme for this period (*RA 6.2*).

2.2.2. Archive
A specification for the structure of the site archive is included in Appendix 1.4.

2.3. Small finds
2.3.1. Small finds
From assessment report by Sue Anderson (Appendix 2.1).

Methodology
- preliminary recording of objects, including database entry, was completed prior to assessment.
- the assessment included checking radiographs to confirm identifications, updating the database, and listing the types of metalwork present in the bed burial.

Factual data
- Twenty-six graves and seven non-grave features in the excavation produced small finds.
- The total number of small finds (including counts of fragments from the bed burial, and evaluation finds) was 472.
- The majority of finds were from burial 0308, which contained the bed.
- Other finds from graves included 31 beads, 11 wire rings, a cosmetic set, 21 buckles, 18 knives, three copper alloy bowls, a bucket, two seaxes, three spearheads, fittings from two shields, and a fauchard.

Statement of potential
- The potential of this finds assemblage is to add to the existing corpus of knowledge regarding 'conversion period' cemeteries and use of grave goods (*RA 3.2, 5.1, 5.2*).

2.3.2. Saxon coins

From assessment report by Michael Metcalf (Appendix 2.2).

Methodology

- preliminary identification of the coins was assessed and spotdates were provided.

Factual data

- the coins consist of two certain and one probable Series B sceattas.
- the sceattas can be dated to the late 7th or early 8th centuries.
- in addition, there is a pendant made from a gold *solidus* of Dagobert I, dated 629-39.
- condition is good, but the coins require cleaning.

Statement of potential

- the potential of the Saxon coins is to provide dating evidence for the relevant graves, and to provide evidence of coin use in Suffolk at this period (*RA 5.1, 6.1, 6.2*).

2.3.3. Worked antler

From assessment report by Ian Riddler (Appendix 2.3).

Methodology

- assessment was by visual examination.

Factual data

- only two antler objects were found, a single-sided composite comb with two end segments and ten tooth segments secured to two connecting plates by nine iron rivets, from the bed burial, and a fragmentary decorated comb found inside the copper alloy bowl of grave 0141.
- similar combs have been found in 7th century graves, and a close parallel comes from the bed burial at Swallowcliffe Down.

Statement of potential

- the form and dimensions of the combs can be reconstructed and the details of their design established.
- they are a useful addition to the series of Anglo-Saxon 7th century single-sided composite combs and can be dated on typological grounds.
- the significance of their deposition, in terms of position in the grave and gender association, can be explored (*RA 5.1, 5.2*).
- no scientific analysis is recommended due to the poor condition of the objects.

2.3.4. Preserved textile

From assessment report by Penelope Rogers (Appendix 2.4).

Methodology

- small finds were examined by eye for traces of preserved textile.
- preliminary catalogue entries for the bed burial and buckle 1197 were prepared to avoid loss of information during transport, storage, and conservation.

Factual data

- c.220 objects were examined for assessment; objects still in blocks were excluded, but most are not expected to produce extensive textile.

- the material is largely from 26 graves.
- textile preservation is generally poor; over half the objects have no visible evidence for it.
- soil accretions may be hiding some textile and allowance should be made for some appearing during conservation (a further c.20 objects).
- weave structure will be difficult to identify due to poor preservation.

Statement of potential

- the poor preservation of the textiles means that it will probably not be possible to reconstruct clothing in any of the burials.
- the identification of fibres and ratio of wool to linen will provide a useful source of data.
- the main textile in bed burial 0308 is an unusual fabric type and it may have significance for the construction of the bed itself (*RA 5.1, 5.2*).
- bed burials are rare and they, and their associated textiles, are of national importance (*RA 6.2*).

2.3.5. Conservation

From assessment report by Karla Graham and Dylan Cox (Appendix 2.5).

Methodology

- radiography of the metalwork and soil blocks was undertaken.
- assessment of the mineral preserved organic material (not textile) was carried out.
- repacking of some fragile finds for transport.

Factual data

- a total of 251 objects (some of them in soil blocks) were included in the assessment.
- material types consisted of copper alloy (37), iron (142), gold (1), silver (17), composite (5), bone (2), ivory (2), crystal (6), glass (29), organic (1), stone (1), and unknown (8).
- the soil blocks contained respectively: a copper alloy bowl; a bone comb; copper alloy, silver and gold objects, and beads. These have now been excavated.
- mineral preserved organics were noted on 123 objects, and included horn, insect remains, leather, textile, wood and unidentified.
- the majority of objects were in fair condition, only four being classified as 'unstable' and six as 'poor'.
- packaging requires improvement.
- further reports were made during excavation of the soil blocks, but were not incorporated into the original conservation assessment report.

Statement of potential

- conservation will allow further identification of the mineral preserved organics, clarification of form and non-ferrous coatings of some objects, and is required for some specialist analyses.

2.4. Bulk finds

Table 1 shows the quantities of finds collected during the excavation and evaluation.

	Evaluation		Excavation	
Material	**No.**	**Wt/kg**	**No.**	**Wt/kg**
Pottery	224	1.943	2410	14.313
CBM	-	-	11	0.843
Fired clay*	107	0.645	396	2.859
Flint	24	-	138	8.406
Burnt flint and stone	23	1.032	150	5.343
Stone	-	-	3	1.096
Slag	12	0.055	27	0.285
Glass	4	0.005	-	-
Charcoal	-	-	25	-
Burnt material	-	-	1	0.001
Animal bone	-	0.004	328	0.457
Shell	2	0.006	1	0.001

Table 1. Bulk finds quantities (* includes SF).

2.4.1. Prehistoric pottery

From assessment report by Alexis M. Willett (Appendix 2.6).

Methodology

the material was quantified by sherd count and weight, fabrics were identified and described, and spotdates assigned.

Factual data

- a total of 2229 sherds weighing 13017g was identified as prehistoric, although there remains the possibility that some sherds may be of Early Saxon date.
- five fabric types were identified on the basis of inclusions.
- overall, the assemblage is of Iron Age date and may cover the entire period.
- forms were generally simple, with flat bases and plain rims, and the only decoration occurred on rim edges.
- the majority of pottery was recovered from pits, ditches and graves.

Statement of potential

- the potential of this material is to add to the knowledge of pottery of the Iron Age period in the local and regional area (*RA 1.1, 1.4*).
- comparison with material from other sites may help to address site and regional research objectives (*RA 1.4*).

2.4.2. Roman pottery

From assessment report by Cathy Tester (Appendix 2.7).

Methodology

- a catalogue of all fabrics and forms was made by context and the pottery was quantified by sherd count and weight; observations about decoration, abrasion, wear, burning, re-use, etc. were noted, and the sherds were assigned provisional spot dates.

Factual data

- 81 sherds (0.861 kg) were identified as Late Iron Age or Roman.
- the pottery belonged to the earliest and latest phases of the Roman period.

- whilst over half of the Roman assemblage was from a ditch of this date, a significant proportion was redeposited, or perhaps deliberately placed, in Saxon funerary features.

Statement of potential
- this assemblage is too small to add significantly to the interpretation of the site, and no further work is recommended.

2.4.3. Early Saxon pottery

From assessment report by Sue Anderson (Appendix 2.7).

Methodology
- the material was quantified by sherd count, weight and estimated vessel equivalent (eve), fabrics were identified and described, and spotdates assigned.

Factual data
- the only pottery which could be positively identified as Early Saxon consisted of three vessels from three graves.
- the assemblage consisted of two coarseware baggy jars and an imported wheelmade vessel.
- the suggested date is 6th-7th century for all three.

Statement of potential
- there is limited potential for comparison of the coarsewares with other recently excavated Saxon cemeteries and settlement sites in the region (*RA 6.2*).
- the imported vessel can be paralleled in Kentish graves, but the type is rare in East Anglia (*RA 5.1*). Further study is required to determine the exact form of the vessel for illustration purposes.
- chemical and petrological analysis may be of value in determining its source, and a comparison should be made with another vessel from Hadleigh (*RA 6.2*).

2.4.4. Ceramic Building Material (CBM)

From assessment report by Sue Anderson (Appendix 2.9).

Methodology
- the CBM was recorded by fabric, count and weight for each context.

Factual data
- only eleven fragments were collected, and these were divided into four fabric groups.
- the majority of fragments were of Roman date, although some post-medieval material was present.
- Roman material was largely associated with funerary features, and post-medieval material with ditches.

Statement of potential
- the group is small and has limited potential, although the presence of Roman tile in graves and not elsewhere on the site is of interest and should be investigated further, with regard to the known re-use of Roman ceramics in the Early Saxon period (*RA 6.2*).

2.4.5. Worked flint

From assessment report by Alexis M. Willett (Appendix 2.10).

Methodology

- the flint was recorded by form and count for each context.

Factual data

- 153 worked flints were collected.
- a large number was recovered from graves, but this may be recovery bias due to the more careful excavation of these features in comparison with other features, most of which were not fully excavated.
- there were no large assemblages from any features.
- there may be Mesolithic, Neolithic and Bronze Age components in the assemblage.

Statement of potential

- the worked flint has the potential to aid interpretation of the prehistoric period at this site, and further work may help to narrow down the dating of the assemblage (*RA 1.1*).

2.4.6. Metalworking debris and slag

From assessment report by Jane Cowgill (Appendix 2.11).

Methodology

- the slag was washed when necessary and identified on morphological grounds by visual examination, sometimes with the aid of a x10 binocular microscope
- it was recorded on recording sheets and entered into the catalogue which is included in the appendix.

Factual data

- eight pieces of slag (338g) were assessed.
- the assemblage included one natural stone, a fragment of vitrified clay, a piece of post-medieval slag, three plano-convex hearth bottoms, and a fragment of ?copper alloy working dross.

Statement of potential

- the only piece which may be of interest is the piece of possible copper alloy working dross from grave fill 0194, which should be submitted for XRF analysis to confirm its identification.

2.4.7. Other finds

From assessment report by Sue Anderson (Appendix 2.12).

Methodology

- 'other finds' covers all fired clay, stone, glass and burnt flint/stone, whether catalogued as small or bulk finds.
- fired clay was divided into fabric groups, quantified by count and weight, any smoothed surfaces or impressions were noted, and types/forms were recorded where possible.
- stone and glass were identified, spotdated, and quantified by count and weight.
- burnt flint/stone was counted and weighed.

Factual data

- fired clay

- 502 fragments weighing 3504g were collected, of which 70 were part of a single object (SF 1221).
- four fabric groups were identified.
- the majority of pieces were small, abraded and undiagnostic.
- the presence of at least one triangular loomweight was noted, and some fragments appear similar in form to briquetage vessels.
- most of this material was recovered from pits and is likely to belong to the prehistoric period, the loomweight and ?briquetage probably of Iron Age date.

- stone
  - three pieces of stone were collected, of which two were objects: a fragment of saddle quen and a whetstone.
  - both objects were found in features which probably date to the Iron Age.
- glass
  - four fragments of post-medieval bottle glass were collected from a ditch fill during the evaluation.
- burnt flint and stone
  - 173 fragments of burnt flint/stone weighing 6375g was collected.
  - most were from pits and a hearth, and were probably prehistoric in date.

Statement of potential

- spatial analysis of the fired clay may help to determine areas of occupation and loom use in the Iron Age (*RA 1.1, 1.2*).
- no further work is required on the other classes of finds.

2.5. Biological evidence

2.5.1. Plant macrofossils

From assessment report by Val Fryer (Appendix 3.1).

Methodology

- samples were processed by manual water flotation/washover, and flots collected in a 500 micron mesh sieve.
- dried flots were scanned under a binocular microscope at low power.

Factual data

- twenty samples were assessed, varying in size from 0.5 litre to 16 litres.
- there were no waterlogged deposits, and most plant material was preserved by charring.
- low densities of modern contaminants were present in most samples.
- samples were collected from a cremation, Iron Age hearths, pits, a well and a shaft, and Saxon grave and vessel fills.
- plant macrofossils were not common, but included oat, barley and wheat, and a few weed species.

Statement of potential

- most of the material recovered may be derived from a low density scatter of refuse which possibly included small quantities of cereal processing waste and other detritus.
- one sample from an Iron Age pit contained abundant wheat grains and may be the residue of a small dump of agricultural waste, but otherwise the material generally appears to be redeposited.
- due to the low density and poor preservation of material, it is considered very unlikely that further work would contribute significantly to the interpretation of the site.

2.5.2. Human skeletal remains

From assessment report by Sue Anderson (Appendix 3.2).

Methodology

- assessment was carried out by rapid scanning of the entire assemblage
- condition, completeness, and preliminary sex and age categories were recorded, and any obvious pathologies were noted

Factual data

- a total of 35 individuals were represented, although 50 graves were excavated.
- only one edge of the cemetery was excavated, and this part appears to be of 'final phase' Early Saxon date, based on small find evidence.
- the cemetery contained the skeletons of men, women and children, but no infant bones were present.
- the majority of skeletons are in poor condition due to acid soil conditions.
- completeness of skeletons was largely related to condition, as there was no intercutting or major later disturbance, although some graves had been truncated by quarrying activity.

Statement of potential

- the potential of the human skeletal remains is to study the physical nature of the human population of the site (*RA 4*).
- comparisons with more recently excavated local groups would be valuable in placing the group in context (*RA 6.2*).
- the group has high potential to add to the knowledge of 7th-8th century populations in East Anglia.

2.5.3. Animal bone

From assessment report by Alexis M. Willett (Appendix 3.3).

Methodology

- all bones were examined and assessed in terms of skeletal elements, numbers of identified species (NISP), weight, level of maturity, cut/chop and gnaw marks, and any other observations.

Factual data

- 587 fragments of animal bone weighing 491 g were collected.
- the bones were generally in very poor condition.
- the majority represented cattle and sheep, with small quantities of pig and horse, and no smaller animals or birds were present due to preservation bias.
- the majority of material was recovered from pits and is probably of Iron Age date.
- the assemblage is probably unrepresentative of the range of animals present at the site.

Statement of potential

- the potential for information from this assemblage is low, and no further work is recommended.

2.5.4. Shell

From assessment report by Sue Anderson (Appendix 3.4).

Methodology

- all shell was identified to species.

Factual data

- only three shells were collected by hand, two snails and an oyster.
- a large group of snails was found whilst cleaning a skull.

Statement of potential

- no further work is required on this material.

3. Revised research aims

The original research aims for the site were defined in the project design for the excavation phase (Newman 1999a), before the Early Saxon cemetery was identified. They therefore covered only the Iron Age phase of site use. A statement of potential was provided at the pre-assessment stage, but no aims and objectives were defined.

Iron Age

The major academic interest in this site, prior to excavation, was defined as its potential to reveal evidence for an Iron Age settlement, with particular regard to the structures, pit groups and associated field systems. Following excavation, the site is considered to be of local significance, or possibly 'sub-regional interest when taken together with other sites in the Gipping Valley, such as Barham and Darmsden' (Newman 1999b). The aims and objectives of this study are therefore:

1. To characterise the Iron Age occupation of the site and place it within its regional setting.
1.1. To consider the nature and longevity of the occupation
1.2. To consider the evidence for possible structures
1.3. To examine possible interpretations for the shaft features
1.4. To compare the site with other contemporary settlements in the region

Roman

The Roman phase of site use consists of evidence for agrarian activity, and as such it is probably of value only in adding to our knowledge of the hinterland of *Combretovium.*

2. To consider the use of the site in the Roman period and relate it to the nearby small town

Early Saxon

The 7th century cemetery is considered to be of regional, perhaps even national, importance. Cemeteries of this date are rare, even amongst the relative abundance of Early Saxon cemetery sites in East Anglia. The possibility of a nearby high status contemporary settlement (CDD022) also enhances the importance of the site.

3. To study the structure and use of the cemetery
3.1. To consider the origins and reasons for abandonment of the site
3.2. To examine the evidence for the use of space and growth of the cemetery
3.3. To study the spatial relationships of the graves together with any osteological evidence for family groupings.

4. To study the physical nature of the human population of the site
4.1. to examine the osteological evidence for the demographic structure of the population
4.2. to examine the osteological evidence for physical type and genetic affinities
4.3. to examine the evidence for skeletal pathology and stress indicators in the population

5. To consider the character and status of the cemetery
5.1. to examine evidence for status within individual graves (in particular the bed burial)
5.2. to study evidence for funerary beliefs and rituals in the 7th century

6. To place the cemetery in its local, regional and national context
6.1. to look at the relationship of the cemetery to earlier, contemporary and later archaeological evidence in the Gipping Valley, with particular emphasis on the 'transition of power holding and status from a small Roman town, to an area of intense 6th century activity, followed by a 7th century settlement/cemetery complex of the highest status, to a probable minster parish' (Newman 1999b).
6.2. to compare the cemetery with other contemporary cemetery sites in the region and further afield.

4. Methods statements and tasks for analysis

4.1. Introduction

The following presents the methodologies and task lists for analysis as suggested by the relevant specialists. This does not include general management and meetings, which are set out in the task list (section 6.2).

4.2. Stratigraphic

4.2.1. Structural analysis

From assessment report by Sue Anderson and Kenn Penn (Appendix 1.1).

General (Task 2)

A small amount of background preparation work remains to be done:

- *combine evaluation plans with excavation plans* — *2 days*

Prehistoric/Iron Age (Tasks 2, 8)

The Iron Age site will be analysed by Edward Martin. The work will involve analysis of contextual information to compare features and find groups and suggest phasing, a comparison with other contemporary sites in the region, consideration of the shafts, possible structure and field system, and preparation of a report.

• *analysis of artefactual/contextual information and phasing*	*5 days*
• *spatial analysis of feature types and finds*	*1 day*
• *comparison with other sites*	*1 day*
• *report: description of features and discussion*	*5 days*
• *liason with illustrator*	*1 day*
Total	***13 days***

Roman (Tasks 2, 8)

The Roman evidence will be considered by Jude Plouviez. The contextual and artefactual evidence will be considered and a short report prepared.

• *analysis of contextual and artefactual evidence*	*1 day*
• *preparation of report*	*0.5 day*
Total	***1.5 days***

Early Saxon (Tasks 1, 2, 8)

Analysis of the cemetery will be carried out by Ken Penn. This will involve background study of the SMR, study of the small finds (see below), analysis of the cemetery evidence and preparation of a report.

• *prepare preliminary report synopsis for EAA*	*1 day*
• *site visit*	*1 day*
• *background research: SMR, local context, etc.*	*5 days*
• *analysis of the cemetery*	*3 days*
• *liason with specialists, illustrators etc.*	*7 days*
• *preparation of report:*	
◦ *introduction etc.*	*1 day*
◦ *the excavation*	*2 days*

• *catalogue of graves*	*5 days*
• *burial practice etc.*	*5 days*
• *editing of specialist reports*	*3 days*
• *discussion and conclusions*	*10 days*
• *preparation of final report synopsis for EAA*	*1 day*
• *selection of figures*	*1 day*
• *final editing*	*1 day*
Total	***46 days***

4.2.2. Archive

Once the project is completed and the publication text has been submitted, the site archive will be processed and an index compiled. The work will be carried out by a Research Assistant and managed by the Finds/Post-Excavation Manager (Task 9).

• *Management*	*1 day*
• *Sorting of plans, sections, paperwork etc.*	*1 day*
• *Digital data management*	*0.5 day*
• *Photographic archive sorting*	*0.5 day*
• *Index preparation*	*0.5 days*
Total	***3.5 days***

4.3. Small finds

4.3.1. Small finds (Tasks 4.1, 4.2, 8.5, 8.6)

From assessment report by Sue Anderson (Appendix 2.1).

The majority of small finds will be recorded in detail by Ken Penn and a catalogue will be produced. Particular attention will be paid to the fittings from the bed burial, and it will be necessary for all the relevant specialists in this area to meet for discussion about and attempted reconstruction of the bed. Discussion text will be prepared for a finds report which will be ordered by function. All grave goods will require illustration.

• *recording of objects and production of a catalogue*	*7 days*
• *bed burial recording and analysis*	*2 days*
• *meeting re bed burial*	*1 day*
• *production of a report*	*17 days*
• *checking illustrations*	*1 day*
Total	***25 days***

Birte Brugmann will prepare a catalogue and report on the beads, pendants, toilet sets and necklace rings:

• *catalogue descriptions*	*1 day*
• *small finds analysis (typology, dating, provenance, distribution, use):*	
• *46 glass, amethyst, ivory and metal beads*	*4 days*
• *5-7 necklace rings*	*1 day*
• *1 pendant*	*1 day*
• *2 toilet sets*	*1 day*
Total	***8 days***

4.3.2. Saxon coins (Task 4.3)

From assessment report by Michael Metcalf (Appendix 2.2).

The coins will be identified and a catalogue produced. This analysis will be carried out at no cost to the project.

• *identification of coins and production of a catalogue*	*1 day*
• *production of a report*	*1 day*
Total	***2 days***

4.3.3. Worked antler (Task 4.4)

From assessment report by Ian Riddler (Appendix 2.3).

A publication text, which includes a descriptive catalogue of the two combs, together with a discussion of their relative dating, design, technology and deposition in the graves, will be prepared.

• *preparation of publication report*	*2 days*

4.3.4. Preserved textile (Tasks 4.1, 4.5)

From assessment report by Penelope Rogers (Appendix 2.4).

Fibre identification will be by transmitted light microscopy, using a polarising analyser. Some samples may be submitted for SEM at the Centre for Archaeology. Especial attention will be given to Grave 0308, the bed burial. The alignment of textile in relation to ironwork and woodgrain underneath will be recorded and plotted.

• *Catalogue and fibre identification of c.40 finds*	*4 days*
• *Work on Grave 0308*	*1 day*
• *Meeting re bed burial*	*1 day*
• *Final report*	*1 day*
Total	***7 days***

4.3.5. Conservation (Task 3)

From assessment report by Karla Graham and Dylan Cox (Appendix 2.5).

Mineral preserved organics will be further investigated, the form and coatings of selected items will be clarified, and there will be selective interventive conservation.

- *Clarification and identification of mineral preserved organics other than textile.*
- *Clarifying form and non-ferrous coatings of selected items.*
- *Selective interventive conservation.*

4.4. Bulk finds

4.4.1. Prehistoric pottery (Task 5.1)

From assessment report by Alexis M. Willett (Appendix 2.6).

Temporal and spatial analysis of the pottery will aid in interpretation of the Iron Age occupation of the site. Rim measurements will be taken to complete descriptions of vessels to minimum standards. If possible, closer dating of the material will be undertaken, by comparing vessel types and fabrics with other local assemblages.

• *temporal and spatial analysis*	*2 days*
• *recording of rim measurements*	*1 day*
• *comparisons with material from other sites*	*2 days*
• *selection of sherds for illustration*	*0.5 days*
• *preparation of report*	*3.5 days*
Total	***9 days***

4.4.2. Roman pottery

From assessment report by Cathy Tester (Appendix 2.7).

No further work is required.

4.4.3. Early Saxon pottery (Task 5.2)

From assessment report by Sue Anderson (Appendix 2.8).

Further work is required on the imported vessel. Some time will be spent attempting further reconstruction of the form to aid the illustrator, and sherds will be selected for chemical and petrological analyses.

• *reconstruction of imported vessel*	*1 day*
• *comparison with other imports and discussion of origin*	*1 day*
• *preparation of report*	*1 day*
Total	***3 days***
• *chemical and petrological analysis (A. Vince)*	*£50*

4.4.4. Ceramic Building Material (CBM) (Task 5.3)

From assessment report by Sue Anderson (Appendix 2.9).

The presence of Roman tile in funerary contexts will be investigated, and a comparison made with other local sites.

• *discussion of CBM from funerary contexts*	*1 day*

4.4.5. Worked flint (Task 5.4)

From assessment report by Alexis M. Willett (Appendix 2.10).

The flints will be compared with other local assemblages with the aim of providing closer dates for the assemblage.

- *comparison with other sites* *1 day*
- *preparation of report* *1 day*

Total ***2 days***

4.4.6. Metalworking debris and slag (Task 5.5)

From assessment report by Jane Cowgill (Appendix 2.11).

XRF analysis of the copper alloy working dross is required.

- *XRF analysis (Sarah Paynter, AML)* *0.5 day*

4.4.7. Other finds (Task 5.6)

From assessment report by Sue Anderson (Appendix 2.12).

Fired clay

Spatial analysis will be carried out to determine whether the fired clay relates to any specific activities on the site, or can be used to indicate areas of habitation (in conjunction with other finds groups).

- *Spatial analysis and preparation of report* *1 day*

Stone, Glass, Burnt flint and stone

No further work is required.

4.5. Biological evidence

4.5.1. Plant macrofossils

From assessment report by Val Fryer (Appendix 3.1).

No further work is required.

4.5.2. Human skeletal remains (Task 6.1)

From assessment report by Sue Anderson (Appendix 3.2).

Methods used to analyse the human bone will follow Brothwell (1981), Bass (1971), Krogman (1978), and the WEA (1980). Bones present will be recorded on an outline skeleton form, intact skulls and long bones will be measured, non-metric traits will be recorded on a present/absent basis, dental remains will be recorded on standard tooth charts, and any pathological changes will be noted.

- *recording and cataloguing (including database inputting)* *8 days*
- *metric and non-metric analysis* *1 day*
- *dental analysis* *2 days*
- *pathological analysis* *1 day*
- *preparation of report and archive catalogue* *5 days*

Total	*17 days*

4.5.3. Animal bone

From assessment report by Alexis M. Willett (Appendix 3.3).

No further work has been recommended on this assemblage.

4.6. Illustrations

4.6.1. Drawings (Task 7.1)

The following finds drawings are anticipated to be required by specialists to illustrate their reports:

- all grave goods except coins
- Iron Age pottery (5? vessels - not included in the costing)
- Early Saxon pottery (3 vessels)
- Technical reconstruction of the bed

The following site illustrations are required for publication:

- Location plan
- Overall site plan
- Cemetery plan
- Grave details (c.50)
- Distribution plans (c.4)

Additional plans and sections may be required for the Iron Age site (not included in costing)

Timings:

• *small finds*	*25 days*
• *pottery*	*0.5 day*
• *bed reconstruction*	*2 days*
• *site plans*	*30 days*

4.6.2. Photography (Task 7.2)

Publication photographs will be required for the following:

• *Saxon coins*	*0.5 days*
• *up to 10 small finds for publication*	*0.5 days*

5. Archive and Publication

5.1. Archive

The archive will be deposited at SCCAS stores in Bury St. Edmunds and will follow the specification outlined in Appendix 1.2.

5.2. Publication

The Coddenham excavation will be published in the East Anglian Archaeology Monograph Series.

The following summarises the basic layout which is proposed:

1.	Introduction	4 pages
	The excavation	
2.	The Iron Age and Roman phases	3 pages
	Settlement evidence	
	The shafts	
	Roman land use	
	Finds and environmental evidence	
3.	The Early Saxon cemetery	75 pages
	Catalogue of graves	35 pages
	The finds/discussion of grave goods	20 pages
	Burial practice/barrows/grave structure	7 pages
	Human skeletal remains	3 pages
	Other specialist reports (bed, textile, mpo, etc)	10 pages
4.	Discussion and conclusions	10 pages

6. Resources and Programming

6.1. Staff for analysis stage

Project co-ordinators

John Newman	JN	Archaeological Field Officer	SCCAS Field Projects Team
Sue Anderson	SA	Finds/Post-excavation Manager	SCCAS Field Projects Team

Stratigraphic analysis

Kenn Penn	KP	Early Saxon cemetery report	Norfolk Archaeological Unit
Jude Plouviez	JP	Roman site report	SCCAS Conservation Team
Edward Martin	EM	Iron Age site report	SCCAS Conservation Team
Project assistant	Asst	Assist with analysis and archiving	SCCAS Field Projects Team

Specialists

Sarah Percival	SP	Prehistoric pottery	Norfolk Archaeological Unit
Sarah Bates	SB	Flint	Norfolk Archaeological Unit
Alan Vince	AV	Chemical analysis of pottery	Freelance
Ian Riddler	IR	Worked antler and ivory	Freelance
Birte Brugmann	BB	Beads and necklace fittings	Freelance
Karla Graham	KG	Conservators	English Heritage (CfA)
Sarah Paynter	SPa	Metallurgical analysis	English Heritage (CfA)
Michael Metcalf	MM	Saxon coins	Ashmolean Museum, Oxford
Penelope Rogers	PR	Textile working	Textile Research Centre, York
Richard Darrah	RD	Woodworking specialist	Freelance
Sue Anderson	SA	Human bone, CBM, Misc bulk finds	SCCAS Field Projects Team
Finds assistant	Asst	Assist with finds work	SCCAS Field Projects Team

Illustrators and photographers

Donna Wreathall	DW	Illustrator (small finds)	SCCAS
Sue Holden	SH	Illustrator (site, finds)	Freelance
R.D. Carr	RDC	Photography	SCCAS Conservation Team

6.2. Task list

Task No.	Section		By	days	day rate	EH cost	SCC cost
1		**General management**					
		Project meetings	KP	4	160.00	640.00	
			JN	4	160.00	640.00	
			SA	4	144.00	576.00	
		Liaison with illustrators	KP	2	160.00	320.00	
		Liaison with specialists	KP	4	160.00	640.00	
		Finds/post-excavation co-ordination	SA	2	144.00	288.00	
		Preparation of preliminary synopsis for EAA	KP	1	160.00	160.00	
2	4.2.1.	**Structural analysis**					
		Site visit	KP	1	160.00	160.00	
		Preparation work	Asst	2	98.00	196.00	
		Background research (SMR, local context etc.)	KP	5	160.00	800.00	
		Analysis of the cemetery	KP	3	160.00	480.00	
		Analysis of the Iron Age settlement	EM	7	160.00		1120.00
		Analysis of the Roman evidence	JP	1	160.00		160.00
3	4.3.5.	**Conservation**					
		Further work	KG	40	-	-	
4	4.3.	**Small Finds**					
		Packing finds for transportation	Asst	2	98.00	196.00	

Task No.	Section		By	days	day rate	EH cost	SCC cost
4.1	4.3.1.	*Metalwork*					
		Catalogue recording	KP	7	160.00	1120.00	
		Bed burial recording and analysis	KP	2	160.00	320.00	
		Meeting to discuss bed burial	KP	1	160.00	160.00	
			RD	1	130.00	130.00	
			PR	1	148.00	148.00	
			KG	1	-	-	
		Discussion of woodworking aspects	RD	6	130.00	780.00	
		Checking drawings	KP	1	160.00	160.00	
4.2	4.3.1	*Beads/pendants*					
		Identification and catalogue preparation	BB	1	146.00	146.00	
		Report	BB	7	146.00	1022.00	
4.3	4.3.2.	*Saxon coins*					
		Identification and catalogue preparation	MM	1	-	-	
		Report	MM	1	-	-	
4.4	4.3.3.	*Worked antler*					
		Preparation of publication text	IR	2	120.00	240.00	
4.5	4.3.4.	*Preserved textile*					
		Catalogue and fibre identification of c.40 finds	PR	4	148.00	592.00	
		Work on Grave 0308	PR	1	148.00	148.00	
		Final report	PR	1	148.00	148.00	
5	4.4.	**Bulk finds**					
5.1	4.4.1.	*Prehistoric pottery*					
		Temporal and spatial analysis	SP	2	152.00		304.00
		Rim measurements	SP	1	152.00		152.00
		Comparisons with other sites	SP	2	152.00		304.00
		Selection of sherds for illustration	SP	0.5	152.00		76.00
		Preparation of report	SP	3.5	152.00		532.00
5.2	4.4.3.	*Early Saxon pottery*					
		Reconstruction of imported vessel	SA	1	144.00	144.00	
		Comparison with other imports	SA	1	144.00	144.00	
		Chemical and petrological analysis	AV	-	-	50.00	
		Preparation of report	SA	1	144.00	144.00	
5.3	4.4.4.	*Ceramic Building Material*					
		Discussion of CBM from funerary contexts	SA	1	144.00	144.00	
5.4	4.4.5.	*Worked flint*					
		Comparison with other sites	SB	1	152.00		152.00
		Preparation of report	SB	1	152.00		152.00
5.5	4.4.6.	*Metalworking debris and slag*					
		XRF analysis of copper alloy working dross	SPa	0.5	-	-	
5.6	4.4.7.	*Other finds*					
		Fired clay	SA	1	144.00		144.00
		MONITORING	JN	1	160.00	160.00	
			KP	1	160.00	160.00	
6	4.5.	**Biological evidence**					
6.1	4.5.2.	*Human skeletal remains*					
		Recording and cataloguing	SA	8	144.00	1152.00	
		Metric and non-metric analysis	SA	1	144.00	144.00	
		Dental analysis	SA	2	144.00	288.00	
		Pathological analysis	SA	1	144.00	144.00	
		Preparation of report and archive catalogue	SA	5	144.00	720.00	
7	4.6.	**Illustrations**					
7.1	4.6.1.	*Drawings*					
		Discussion of illustrations with KP	SH	1	148.00	148.00	
			DW	1	116.00	116.00	
		Illustrations for site	SH	30	148.00	4440.00	
		Small find illustrations	DW	25	116.00	2900.00	
		Bed reconstruction	SH	2	148.00	296.00	

Task No.	Section		By	days	day rate	EH cost	SCC cost
		Pottery illustrations	SH	1	148.00	74.00	74.00
		Flint illustrations	DW	1	116.00		116.00
7.2	4.6.2	*Photography*					
		Saxon coins	RDC	0.5	180.00	90.00	
		Other small finds	RDC	0.5	180.00	90.00	
8	5.2.	**Report**					
8.1		Final synopsis for EAA	KP	1	160.00	160.00	
8.2		Introduction, etc.	KP	3	160.00	480.00	
8.3		The Iron Age site	EM	6	160.00		960.00
8.4		Roman evidence	JP	0.5	160.00		80.00
8.5		Catalogue of graves	KP	5	160.00	800.00	
8.6		Discussion of grave goods	KP	17	160.00	2720.00	
8.7		Burial practice	KP	5	160.00	800.00	
8.8		Editing of specialist reports	KP	3	160.00	480.00	
8.9		Discussion and conclusions	KP	10	160.00	1600.00	
8.10		Selection of figures/plates	KP	1	160.00	160.00	
		MONITORING	SA	1	144.00	144.00	
			KP	1	160.00	160.00	
8.11		Final editing/revision	KP	1	160.00	160.00	
9	4.2.2.	**Archive**					
9.1		Management	SA	1	144.00	144.00	
9.2		Sorting of plans, sections, paperwork etc.	Asst	1	98.00	98.00	
9.3		Digital data management	Asst	0.5	98.00	49.00	
9.4		Photographic archive sorting	Asst	0.5	98.00	49.00	
9.5		Index preparation	Asst	0.5	98.00	49.00	
Total staff costs						**29811.00**	**4326.00**

6.3. Administration

The project will be administered by Suffolk C.C. Archaeological Service (Field Projects Team) and based in their Ipswich and Bury St. Edmunds offices, but most of the work will be carried out by Ken Penn at Norfolk Archaeological Unit (Gressenhall).

6.4. Programming and costings

The programme for each of the tasks outlined above is shown in the Gantt Chart.

Unit Staff		Per day	No. of days	Cost (EH)	Cost (SCC)	Total
John Newman	JN	160.00	5	800.00		
Sue Anderson	SA	144.00	30	4176.00	144.00	
R.D. Carr	RDC	180.00	1	180.00		
Jude Plouviez	JP	160.00	1.5		240.00	
Edward Martin	EM	160.00	13		2080.00	
Donna Wreathall	DW	116.00	27	3016.00	116.00	
Assistant	Asst	98.00	6.5	637.00		
Total				**8809.00**	**2580.00**	
						11389.00

External Staff		Per day	No. of days	Cost		Total
AML-funded staff						
Sarah Paynter	SPa	-	0.5	-		
Karla Graham	KG	-	41	-		
Other specialists						
Ken Penn	KP	160.00	79	12640.00		
Alan Vince	AV	-	-	50.00		
Michael Metcalf	MM	-	2	-		
Birte Brugmann	BB	146.00	8	1168.00		
Ian Riddler	IR	120.00	2	240.00		
Penelope Rogers	PR	148.00	7	1036.00		
Richard Darrah	RD	130.00	7	910.00		
Sarah Percival	SP	152.00	9		1368.00	
Sarah Bates	SB	152.00	2		304.00	
Sue Holden	SH	148.00	34	4958.00	74.00	
Total				**21002.00**	**1746.00**	
						22748.00

Non-staff costs	Cost		Total
Transportation of finds	100.00		
Specialist travel expenses	400.00		
Bed reconstruction materials	60.00		
Postage and photocopying	50.00		
Publication costs	10000.00		
	10610.00		10610.00

Grand total	40133.00	4326.00	**44747.00**

6.5. Monitoring

Monitoring points have been suggested in the Gantt chart on two dates (4th November 2002 and 11th Feb 2003).

6.6. Health and Safety

The Department of Environment and Transport within Suffolk County Council produces its own health and safety guidelines which will be followed. A copy has been submitted to English Heritage previously.

Bibliography

Anderson, S., unpub., 'Roman and post-Roman pottery', in Everett, L., *Aldham Mill Hill, Hadleigh (HAD 059): excavations.* SCCAS Report.

Ashwin, T., 1996, 'Excavation of an Iron Age site at Silfield, Wymondham, Norfolk 1992-3', *Norfolk Archaeol.* 42(iii), 241-82.

Bass, W., 1971, *Human Osteology.* Missouri Archaeol. Soc.

Boulter, S., 1993, *Archaeological Evaluation: Shrubland Park, Coddenham.* SCCAS Report 93/5.

Brothwell, D., 1981, *Digging Up Bones.* 3rd edition. BM(NH)/OUP. London.

Bryant, S., 1997, 'Iron Age', in Glazebrook, J. (ed.), *Research and Archaeology: a Framework for the Eastern Counties, 1: resource assessment.* East Anglian Archaeology Occasional Paper 3, pp. 23-34.

Bryant, S., 2000, 'The Iron Age', in Brown, N. and Glazebrook, J. (eds), *Research and Archaeology: a Framework for the Eastern Counties, 2. research agenda and strategy.* East Anglian Archaeology Occasional Paper No. 8, pp.14-18.

Cleal, M.J., 2001, 'Briquetage containers', in Chowne, P., Cleal, R., Fitzpatrick, A. and Andrews, P., *Excavations at Billingborough, Lincolnshire, 1975-8: a Bronze-Iron Age Settlement and Salt-working Site.* East Anglian Archaeology 94.

EH, 1997, *English Heritage Archaeology Division Research Agenda,* draft version.

Ellis, A.E., 1969, *British Snails. A Guide to the Non-Marine Gastropoda of Great Britain and Ireland.* Oxford University Press, 2nd edition.

Evison, V., 1979, *A Corpus of Wheel-thrown Pottery in Anglo-Saxon Graves.* Royal Archaeol. Inst. Monograph, London.

Evison, V., 1987, *Dover: Buckland Anglo-Saxon Cemetery.* English Heritage Archaeological Report No. 3. London.

Filmer-Sankey, W. and Pestell, T., 2001, *Snape Anglo-Saxon Cemetery: Excavations and Surveys 1824-1992.* East Anglian Archaeology 95.

Geake, H., 1997, *The Use of Grave-Goods in Conversion-Period England, c.600-c.850.* BAR British Series 261.

Going, C.J., 1987, *The Mansio and other sites in the south-eastern sector of Caesaromagus: the Roman pottery.* Chelmsford Archaeological Trust Report 3.2/CBA Res. Rep. 62. CBA, London.

Going, C.J., 1997, 'Roman', in Glazebrook, J. (ed.), *Research and Archaeology: a Framework for the Eastern Counties, 1: resource assessment.* East Anglian Archaeology Occasional Paper 3, pp. 35-45.

Graham, K. and Cox, D., 2001, 'Smye's Corner (Shrublands Quarry), Coddenham, Suffolk. Report on the Excavation of the Bone Comb Soil Block', English Heritage.

Hamerow, H., 1993, *Excavations at Mucking Volume 2: The Anglo-Saxon settlement.* English Heritage/British Museum Press, London.

Hawkes, S. C., 1973, 'The Dating and Social Significance of the Burials in the Polhill Cemetery', in B. Philp, *Excavations in West Kent 1960-1970,* Dover 1973, 186-201.

Hillson, S., 1992, *Mammal Bones and Teeth: An Introductory Guide to Methods of Identification.* London.

Jacobi, R., 1984, 'The Mesolithic of Northern East Anglia and Contemporary Territories' in Barringer, C. (ed.), *Aspects of East Anglian Pre-History.* Geo Books, Norwich, 43-76.

Jepson, M., 1971 *Biological Drawings with Notes, Part 1.* London.

Krogman, W., 1978, *The Human Skeleton in Forensic Medicine.* C.C. Thomas, Illinois.

Malim, T. and Hines, J., 1998, *The Anglo-Saxon Cemetery at Edix Hill (Barrington A), Cambridgeshire*, CBA Research Report 112, London.

Martin, E., 1993, *Settlements on Hill-tops: seven prehistoric sites in Suffolk*, East Anglian Archaeology 65.

Martin, E., 1999, 'Suffolk in the Iron Age', in *Land of the Iceni: The Iron Age in Northern East Anglia.* CEA, UEA, Norwich.

Myres, J., 1977, *A Corpus of Anglo-Saxon Pottery of the Pagan Period.* Cambridge University Press.

Newman, J., 1999a, 'Project Design for archaeological monitoring, excavation and archive/assessment report for site at Shrubland Quarry, Coddenham (CDD 050)'. Unpublished PD document, October 1999.

Newman, J., 1999b, 'Shrubland Quarry, Coddenham, Suffolk. Archaeological Excavation 1999 (CDD 050)'. Unpublished site summary, November 1999.

Penn, K.J., 2000, *Norwich Southern Bypass, Part II: Anglo-Saxon Cemetery at Harford Farm, Caistor St. Edmund*, East Anglian Archaeology 92.

Plouviez, J., 1985, 'The Late Romano-British Pottery', in West, S.E., *West Stow. The Anglo-Saxon Village,* EAA 24i 82-85.

Riddler, I. D., 1996, *The Early Anglo-Saxon Combs from the Barrington Cemetery,* Archive Report for the Cambridge County Council Archaeological Field Unit, Cambridge.

Riddler, I. D., 1996, *The Early Anglo-Saxon Combs from the Barrington Cemetery,* Archive Report for the Cambridge County Council Archaeological Field Unit, Cambridge.

Riddler, I.D., Trzaska-Nartowski, N.I.A. and Hatton, S., forthcoming, *An Early Medieval Craft. Objects and Waste of Antler and Bone from Ipswich Excavations, 1974-1994,* East Anglian Archaeology, Gressenhall.

Ross, A., 1968, 'Shafts, pits, wells - sanctuaries of the Belgic Britons?', in Cole, J. and Simpson, D. (eds.), *Studies in Ancient Europe*, Leicester University Press, 255-85.

Scarfe, N., 1999, 'Domesday Churches', in Dymond, D. and Martin, E. (eds.), *An Historical Atlas of Suffolk*, Suffolk County Council Archaeological Service and Suffolk Institute of Archaeology and History, 52-53.

Schmid, E., 1972, *Atlas of Animal Bones - for Prehistorians, Archaeologists and Quaternary Geologists.* Elsevir, Amsterdam.

Scull, C. and Bayliss, A., 1999, Radiocarbon Dating and Ango-Saxon Graves, in U. von Freeden, U. Koch and A. Wieczorek, editors, *Völker an Nord- und Ostsee und die Franken,* Bonn, 39-50.

Speake, G., 1989, *A Saxon Bed Burial on Swallowcliffe Down,* English Heritage Archaeological Report 10, London.

Tester, C., 2001, 'Roman pottery assessment', in Tester, A. and Anderson, S., *Staunch Meadow, Brandon (Site BRD 018). Assessment Report and Updated Project Design.* SCCAS Report no. 2001/07.

Wade, K., 1997, 'Anglo-Saxon and Medieval (Rural)', in Glazebrook, J. (ed.), *Research and Archaeology: a Framework for the Eastern Counties, 1. resource assessment,* East Anglian Archaeology Occasional Paper 3, 47-58.

West, S., 1998, *A Corpus of Anglo-Saxon Material from Suffolk,* East Anglian Archaeology 84, Gressenhall.

WEA, 1980, 'Recommendations for age and sex diagnoses of skeletons', *J. Human Evolution* 9, 517-49.

Appendix Contents

Appendix 1. Structural Assessment Reports

A1.1. Structural and stratigraphic assessment

Sue Anderson, Suffolk C.C. Archaeological Service, and Ken Penn, Norfolk Archaeological Unit.

1. Factual data

Method of assessment

The site context database was checked and preliminary spotdates were added based on the finds assessment. Preliminary phasing was carried out based on these, and on feature fills where no dating evidence was available. There were few intercutting features, and it was not considered worthwhile to produce a site matrix.

Grave plans were combined and inked versions were prepared for specialists. Grave inventories (summaries of the shape, size, fill, contents) were also prepared.

Quantity of records

The site archive (not including artefacts) consists of the following:

- 647 context record sheets (0001-0124 evaluation; 0131-0677 excavation)
- 28 pencil plan sheets (1:50) and a concordance plan on permatrace
- 22 pencil section/grave plan sheets (sections at 1:20, grave plans at 1:10, small find plans at 1:1) on permatrace
- 2 sheets of plans and sections from the evaluation phase, and two sheets of inked copies
- 2 inked plans (overall site plan and numbered plan of cemetery at 1:400) on permatrace
- 11 B&W films (negatives and contact prints) with film codes DMJ 1-36; EGW 22-36; EGX 1-38; EGY 1-38; EJV 1-36; ELD 1-13; EPI 14-35; EPJ 1-34; EPK 1-38; EPL 1-37; EUX 1-39.
- 353 colour slides with film codes DMI 1-36; EGU 1-39; EJT 6-96; EJU 1-96; EPH 1-92
- all context and finds records are input onto Access database tables

Provisional dating

The preliminary phasing is as follows:

1	Iron Age/prehistoric features
2	Roman features
3	Early Saxon cemetery
4	Post-Saxon features
Un	Unphased

Table A.1 shows the quantities of contexts (divided into cut and fill) by identifier.

Phase	**1**		**1?**		**2**		**3**		**4**		**Un**
identifier	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	
ditch	18	38	18	26	1	5			5	9	
ditch?	1	1									
hearth	10	11	1	1							
hearth/pit	1	1									
pit	71	71	38	38					1	1	
pit/post-hole			1	1							
pit?			1	1							
post-hole	16	15	14	14							
shaft	3	6									
well	1	4									
cremation			1	1							
grave							50	52			
ring-ditch							4	16			
skeleton								35			
organics							2				
vessel fill								5			
finds	1							4			32

Table A.1. Numbers of contexts by type and phase.

Residuality and contamination
Very little evidence of residuality or contamination was observed during the excavation, due to the general lack of intercutting features. Occasional small sherds of Iron Age pottery occurred in the Saxon graves and later ditches, but otherwise the integrity of the site had not been compromised.

Statement of potential

This statement of potential follows a programme of assessment carried out in accordance with a Project Design for Assessment (Topham-Smith and Anderson 2000). The following is a revised version of the statement of potential included in that document, to incorporate assessment results and recent work on Final Phase cemeteries.

The potential of the cemetery at Smye's Corner to answer questions and augment existing knowledge rests firmly on the important work already undertaken on sites of this type or settlement patterns in the region, much of which has been supported by English Heritage.

The Smye's Corner site has produced significant evidence for three principal periods of occupation, each with a varying degree of regional and national importance. The significance of these phases, based on a preliminary scan of finds and contextual information, is outlined below.

Iron Age period
Several dispersed areas of pit and hearth features were found in the northern and western sectors of the excavation. It was only possible to identify one potential structure from post-hole patterns. In the north-east corner of the site three large circular shafts were sampled to a depth of over six metres. Artefactual evidence (principally in the form of a large pottery assemblage from the pits) indicates occupation through the Iron Age.

Although the concentration of features is relatively low, this may be indicative of widely dispersed occupation or of a smaller settlement shifting over a longer period. The near-absence of recorded structures may be due to the ephemeral nature of some building-types at this time, although one possible structure has now been identified during assessment. However the shallow nature of most features does strongly suggests that the site has suffered from erosion or other processes of soil removal, and it is quite possible that less durable vestiges of occupation had already disappeared or were lost during the clearance of topsoil.

Three characteristics make the Iron Age phase at Smye's Corner worthy of further study:

1) **Shafts**. Of especial interest are the three circular shafts in the north-east corner of the site, of which only one appeared to bottom out within six metres of the present surface; several other pits in the quarry area are believed to have extended down into the underlying chalk. There is no indication of their method of construction or their original function. While ritual pits are found across south-eastern England (Ross 1968, 279), they are not overly common in East Anglia; there was however no obvious sign of ritual deposition within the pits at Coddenham, and a natural explanation may be preferred (cf Eaton Heath, Norwich and Broome Heath, Ditchingham).
2) **Location**. While the majority of Iron Age settlement sites in Suffolk have easy access to water (Martin 1988, p.58), there is no identified water-source in the immediate neighbourhood of this site. Occupation here would provide further proof for the settlement on the edge of the Suffolk clays towards the end of the Iron Age (Bryant 1997, 28), and may provide a parallel for the clayland site at Park Farm, Wymondham, Norfolk (Ashwin 1996).
3) **Form of settlement**. Also of note is the absence of any obvious form of enclosure around the visible areas of occupation, at a period when a higher proportion of settlements in Suffolk appear to have been enclosed (Bryant 1997, 28).

The main areas with high potential for further analysis are:
- the shafts
- the possible structure to the northern edge of the site
- spatial analysis of the features and finds
- identification of a possible field system
- study of the pottery

Roman period
While some Early Roman material was found during the excavation, the majority of Roman pottery dated from around the 3rd century (including Nene Valley colour-coated and Much Hadham wares). Most of this came from three of the linear ditches crossing the site, although material was also recovered as residual finds in the fill of

Anglo-Saxon graves and ring-ditches. In the absence of clear stratigraphy in the junctions between the linear ditches (identified as field boundaries), it can reasonably be suggested that many or all were open at one time.

While there is no evidence for other forms of occupation in the Roman period this pattern of ditches is not without interest, since analysis of field systems will lead to better understanding of the agrarian basis of the Roman countryside (Going 1997, 37-38), and also the hinterland of the Roman small town of *Combretovium*.

Early Anglo-Saxon cemetery

In the north-west corner of the stripped area were found fifty inhumation burials, of which three were associated with ring-ditches (marking ploughed-out barrows); a fourth ring-ditch failed to produce evidence for a burial. These burials form part of a cemetery which clearly continued to the north and west of the excavation boundaries. Grave-goods present in about half the burials would indicate a pagan cemetery restricted in date to the late 7th century, with grave goods/accompaniments typical of the period, and two graves able to be dated by coin evidence to this period. Of particular interest are two chamber burials with significant 'warrior burial' assemblages, while a third chamber burial contained a woman buried on an iron-framed wooden bed. A large bronze bowl was recovered from each of these burials. Four other burials (one male, three female) were also 'elaborated' in their grave good assemblages.

The cemetery appears to represent the first activity on the site after the Roman period. There is no obvious relationship between the burials and the network of field ditches, unless the position of six burials (graves 0299, 0312, 0426, 0446, 0453 and 0479, effectively separated from the main cemetery by a ditch) was deliberate.

Four characteristics make the Early Anglo-Saxon cemetery at Smye's Corner worthy of further study:

1) **Date**. Cemeteries of the 7th century are of particular research interest, since this is a period of major cultural change and population movement (EH 1997, 49). The abandonment of the Coddenham cemetery may also be linked to the resurgence of Christianity (EH 1997, 44 and 49), or more particularly to a stricter imposition of dogma and the growth of a new 'mortuary landscape' centred on churches, and social desires for burial close to the altar/saint.
2) **Assemblage**. The very nature of the cemetery, with the number of high-status burials and the assemblage of rich and varied grave goods, is remarkable. The East Anglian region stands at the forefront of Anglo-Saxon studies, in which the excavation and interpretation of cemetery sites constitutes a primary objective (EH 1997, 44).
3) **Context**. It is important to understand any relationship between the cemetery and a large cluster of probable Anglo-Saxon sites in the valley directly to the north and north-east (recorded as CDD 022, 023, 025, 027, 036, 042 and 048). These sites would indicate both burial and settlement, apparently high-status and of late 5th to early 8th century date.

   The site is one element of a physical and social landscape, and belongs to a moment when religious and mortuary landscapes were undergoing a profound change. The cemetery also lies within a territorial landscape of 'lordship' which may be reconstructed to some extent, with evidence for early cemeteries, for a 'central place' and the possible subsequent foundation of a minster church amongst important factors.

   The site at Smye's Corner is evidence for continuity of the mortuary landscape in siting and other aspects of burial but also of a change in material culture.

   From a more overall viewpoint, it is necessary to consider the context of the cemetery in the Gipping valley, where other important finds from this period have been found (in particular bronze bowls from a possible burial at Badley, large cemeteries at Hadleigh Road and Boss Hall in Ipswich, and a settlement or 'productive' site at Barham; see West 1998, 266-75).

4) **Material and environmental data**. Although bone survival was generally not good, enough survived to reveal physical evidence of the local population and to contribute to the EH C14 programme. Besides C14 analysis of the human bone and standard x-radiography of the iron material, scientific techniques will include analysis of the important textile remains, especially those associated with the bed burial, and XRF analysis of copper alloy dross. The material includes dress fittings, beads, weapons, vessels and combs, besides the bed-burial complex.

The immediate context for this work includes the cemeteries at Harford Farm, Norfolk (Penn 2000), and Buttermarket and Boss Hall, Ipswich. The wider context draws upon the information in the County SMR, summarised in West's Corpus (West 1998) and on the fieldwork undertaken by SCCAS, in particular the SE Suffolk Survey, carried out as part of the East Anglian Kingdom Survey.

Recent work on similar material from other sites, for example, Sutton Hoo and Snape (Filmer-Sankey and Pestell 2001), Suffolk, and Barrington, Cambridgeshire (Malim and Hines 1998), will extend the available parallels, whilst work on specific object types will include examination of beads, where Birte Brugmann's unpublished work will be useful.

In conclusion, the Smye's Corner site has the potential to form the stimulus for a more extensive study on the settlement pattern and characteristics of settlement hierarchy in Coddenham parish in particular, and the lower Gipping Valley in general. More specifically the parish of Coddenham and adjacent parish of Barham have produced evidence for a small Roman town, areas of intense and high status Early to Middle Anglo-Saxon activity and a suggested Middle Saxon trading centre. In addition, Coddenham is a suggested minster parish (Scarfe 1999, 52). Work on the Smye's Corner site should therefore reflect this local archaeological background and consider how the excavation findings may aid in a more complete interpretation of the wealth of data relating to both settlement patterns and their relative status.

Finally, Penn's work at Harford Farm (Penn 2000) suggests the wider world of cultural change or 'transition' from accompanied burial in unenclosed cemeteries to unaccompanied burial around a church is part of the wider context, which is in turn illuminated by the burials at Smye's Corner.

Tasks for analysis

General

- combine evaluation data with excavation plan

Iron Age

- analysis of artefactual/contextual information and phasing 5 days
- spatial analysis of feature types and finds 1 day
- comparison with other sites 1 day
- report: description of features and discussion 5 days
- liason with illustrator 1 day

Roman

- analysis of contextual and artefactual evidence 1 day
- preparation of report 0.5 day

Early Saxon

- prepare preliminary report synopsis for EAA 1 day
- background research: SMR, local context, etc. 5 days
- analysis of the cemetery 3 days
- liason with specialists, illustrators etc. 7 days
- preparation of report:
  - introduction etc. 1 day
  - the excavation 2 days
  - catalogue of graves 5 days
  - burial practice etc. 5 days
  - editing of specialist reports 3 days
  - discussion and conclusions 10 days
  - preparation of final report synopsis for EAA 1 day
  - selection of figures 1 day
- final editing 1 day

A1.2. Structure of the Site Archive

(from SCCAS Manual)

The site archive is defined as all paper, photographic, computer and other records and all finds and environmental evidence generated by fieldwork and post-excavation assessment or analysis.

The site archive will therefore consist of:

- copies of correspondance relating to fieldwork
- original context sheets
- original photographic records
- site drawings
- bagged and boxed artefacts and ecofacts
- original finds records
- computer discs and printouts

At the completion of a project, all material related to it should be archived. At this point, it may be necessary to sort through paperwork to reduce the amount to be stored — for example, duplicate copies of letters, invoices, site plan photocopies etc., could be discarded.

Paperwork should be properly filed and labelled, and an archive index prepared using the appropriate form (Appendix 2.11). They are currently stored in the sensitive store at Bury St. Edmunds.

Plans and sections are stored in hanging files and are also to be indexed. At present, there is no provision for storing copies separately.

No copies are made of the original context and finds forms, but all information is input onto MS Access databases. The computerised data is stored on a mainframe in Ipswich and is backed up nightly.

All finds should be stored according to their material requirements, as specified by the Museums and Galleries Commission, in the stores of the Archaeological Service at Bury St. Edmunds or Ipswich.

Any discard policy which has been carried out during the analysis should be noted in the archive.

A copy of the project archive index will be stored in the SMR, and this will provide access to the main archive. Both the SMR and long-term storage facilities are currently in the same building.

Appendix 2: Finds Assessment Reports

A2.1. Small finds

Sue Anderson, Suffolk C.C. Archaeological Service.

1. Factual data

Methodology of assessment

A preliminary database of the small finds was made at the pre-assessment stage. Assessment involved checking the original identifications of objects against the radiographs, and making basic corrections. Typologies of the main object types were noted where possible, and spotdates assigned. No detailed descriptions or measurements were made at this stage. The Saxon coins (see A2.2), the bone combs (see A2.3) and the fired clay loomweight (see A2.12) are not included in this assessment, although they do appear in the basic quantification figures.

Quantification

Twenty-six graves and seven non-grave features in the excavation phase produced small finds, listed by material in Table A.2 (some small finds are composite, but are recorded under the material which forms the largest proportion of their make-up). The table includes evaluation finds — four glass, six iron, six copper alloy and four lead objects — most of which are certainly post-Saxon.

Material	No.
Iron	371
Copper alloy	44
Lead	4
Silver	19
Gold	1
Bone	2
Ivory?	3
Glass	33
Crystal	6
Stone?	1
Fired clay	1
Organic	2
Wood	1
Total	**488**

Table A.2. Small find material quantities.

Provenance and dating

Most small finds were from graves, and the majority were probably of late 6th to early 8th century date. A concordance of small finds by grave is shown in Table A.3. The majority of finds were from grave 0308, which contained the bed burial.

Range and variety

Finds were divided into probable categories, as shown in Table A.4.

Category	Code	Total no. of objects	No. in non-grave features
Coins, Tokens and Jettons	CTJ	5	
Dress Accessories	DA	83	1
Household Objects	HO	6	2
Industrial Waste	IW	5	5
Military and Weaponry	MW	16	1
Miscellaneous Tools	MT	3	2
Miscellaneous Fittings	MF	310	4
Personal equipment	PE	34	1
Textile Working	TW	1	1
Toilet Objects	TO	4	
Unidentified	UN	21	6

Table A.4. Objects by Find Category.

Coins

See A2.2. In addition to the three sceattas, a gold *solidus* of Dagobert I had been converted into a pendant and formed part of a necklace in Grave 0543. This object was not available for assessment by Michael Metcalf. A Roman coin in poor condition was found in Grave 0308 (SF 1140d), and was possibly of Valentinian (J. Plouviez pers. comm.).

Category	Find type	0141	0157	0171	0174	0177	0193	0195	0200	0204	0213	0217	0221	0276	0297	0299	0308	0312	0346	0426	0446	0453	0513	0540	0543	0545	0585
Coins, Tokens and Jettons	Coin																1								3		
	Coin/pendant																1										
Dress Accessories	Bead				3							1		4			32						2		3		1
	Brooch							2																			
	Buckle	1	2	2		1	1			1	1		1		2		2	1		1	2			1	2	1	
	Pendant																2										
	Necklace Ring													1			5						1		2		1
Household objects	Bowl	1	1														1										
	Bucket		1																								
	Vessel repair		1																								
Military and weaponry	?Arrowhead																		1								
	Fauchard																							1			
	Seax		1																		1						
	Seax sheath mount		1																								
	Shield boss	1	1																								
	Shield grip		1																								
	Shield mount		4																								
	Spearhead	1	1	1																							
Miscellaneous fittings	Fitting		1				1										1								1		
	Bracket		2														3										
	Catch																				1						
	Chain link																1										
	Cleat plate																11										
	Eyelet																15										
	Nail															1	71										
	Nail/rove																22										
	Ring													1			1										
	Rivet																3										
	Rove																1										
	Strap																144										
	Strap, curved																27										
	Wood																1										
Personal equipment	Knife			1		1	1			1	1		1	2	1	1	1	1	1		2			1	1	1	
	Latch lifter								1					1			2						1		2		
	Purse fitting																4										
	Sharpening steel					1					1																
Toilet and surgical objects	Comb	1															1										
	Cosmetic set																2										
Unknown	?		4			1	1							1		1	2			1	1	1			1		

Table A.3. Grave concordance.

Dress Accessories

Jewellery

Only two brooch fragments were found in this assemblage, possibly parts of a single object, found in Grave 0195. This may be a 'safety-pin' brooch, but further work is needed to ascertain the exact type. It was made of copper alloy and was gilded.

A total of 46 beads was collected from seven graves, of which two were ?silver, one was copper alloy, six were crystal, three were ?ivory and 34 were glass. Glass beads were in a variety of styles, including twisted cylinders, biconical, ring-shaped, spherical, and melon. Most were in plain colours (red, green, yellow, white), but one green sphere was decorated with large white dots with central red dots. One large glass bead had a loop of silver wire attached to it for suspension as a pendant.

Eleven rings, all made of copper alloy or silver wire, were found in five graves. However, only one was found in a position which suggested it may have been worn on a finger, the others being associated with beads and probably strung on necklaces. Six of these were found in a group near the right shoulder of the skeleton in Grave 0308.

There were three pendants, all from 0308. These consisted of a gold coin pendant (see A2.2) and two small silver lozenges attached to a wire ring.

Belt and strap fittings

Twenty-one buckles were found in fifteen graves. Most were simple small oval framed types with square, rectangular or tongue-shaped plates, all typical of the 7th century. In general they were made of copper alloy, but a few iron examples were also present. One large 'Aquitanian' type buckle was found (SF 1215/1217, Grave 0446). The tongue-shaped plate had three large rivets and was decorated with inlaid ?silver.

A small copper alloy sheet tongue-shaped strap end was identified in Grave 0308. This was associated with purse fittings.

Fasteners

A worn, triangular, copper alloy hooked tag with punched decoration was found during the evaluation (unstratified metal detector find). It may be of early Saxon date, but similar types are known in later periods.

Household Objects

Three bowls (graves 0141, 0157 and 0308) and a bucket (grave 0157) were found.

The bowls were all made of sheet copper alloy and had moulded attachments forming the bases and handles, and are of Merovingian type. All three are in a fragmentary state, but two are probably substantially complete. One has a ring tripod base, the other a ring tetrapod base, and both have rectilinear drop handles.

The bucket is represented by iron bands and a handle, but the number of bands is currently unknown. This will be established at the analysis stage. Iron-bound buckets are found in graves from the mid-6th century onwards.

A small copper alloy key and a fragment of a lock plate, both evaluation finds, were probably of post-medieval date.

Industrial Waste

Three lead objects and two fragments of copper alloy from the evaluation were the only small finds belonging to this category. The lead included two pieces of dross and a possible ingot, and the copper alloy of a small melt fragment and a piece of sheet with irregular surfaces and edges. All were unstratified metal detector finds.

Military and Weaponry

Very few weapons were recovered from this cemetery. They were found in seven graves, and included a possible arrowhead or small spear, two seaxes, three spears, two shields, and a fauchard, all iron.

The spears were all standard types for this region, and consisted of Swanton types E3, F2 and possibly J. One spear ferrule was also found, in a grave which did not contain a spearhead.

The two seaxes were both 'broad' types (Böhner 1958, quoted by Geake 1997, 14). One of these was associated with a small disc-shaped seax-sheath mount decorated with a triskele. This type of seax has been dated to the turn of the 7th-8th centuries.

The shield fittings consisted of a very tall conical boss with decorated mounting studs and larger matching shield studs, and a broken tall conical boss with no studs. Grips were present with both bosses.

The fauchard is a very unusual find in England. Only one has previously been recovered from a funerary context, at Buckland II, Dover (I. Riddler, pers. comm.).

Miscellaneous Tools

Two objects found during the evaluation were probably of post-medieval date and may be related to agricultural activity. One was an unidentified iron socketed tool which appeared similar to a chisel, and the other was a fragment of a large, simple iron barrel padlock. There was also a fragment of a medieval or later whittle-tanged knife.

Miscellaneous Fittings

Most of the 'miscellaneous fittings' were from bed burial 0308. These consisted of 144 straight iron strap fragments, 28 curved iron strap fragments, 15 iron 'eyelets', 11 iron 'cleat plates', 91 separate iron nails or clench nails with roves, three iron brackets, an iron Y-shaped fitting of uncertain use, and smaller unidentified pieces. The curved strap fragments were all from the 'head end' of the bed and may represent decorative pieces on a headboard, or possibly something which is unrelated to the bed. Further work is required to resolve this issue.

Other miscellaneous fittings included a copper alloy suspension ring (Gr. 0276), two large iron brackets (Gr. 0157), an iron catch (Gr. 0446), and an iron strap distributor (unstratified, probably post-medieval). A small copper alloy tube with a rivet, similar to a lace tag, was of uncertain use (Gr. 0193).

Personal equipment

Eighteen iron knives were found in seventeen graves. Based on Evison's typology (Evison 1987, p.113), there were seven Type 1, three Type 3, one Type 4 and two Type 5 examples. The remainder were too fragmentary for identification.

Three 'spatulate tools' or sharpening steels were also found, all located next to knives in three graves.

Seven iron objects from five graves were identified as latch lifters, although several were fragmentary and may represent more than one of these artefacts.

Purse fittings consisted of three small copper alloy hook catches from Grave 0308.

Fragments of two chains, iron and copper alloy, both from grave 0308, may be parts of chatelaines.

Toilet Objects

Two silver cosmetic sets were found in Grave 0308, each consisting of two picks and a scoop. One scoop was shaped in the form of a hand. These seem to have formed part of a necklace.

Two bone combs were also found in this grave and another, and are discussed below (A2.3).

Textile Working

One fired clay loomweight was recovered from an Iron Age context (see A2.12).

Unidentified

Eighteen objects (one lead, four copper alloy, one silver, one stone, one organic, and ten iron) from nine graves and six non-grave contexts are currently unidentified.

Condition

See conservation assessment.

2. Statement of potential

The majority of dateable small finds from this site fall into the 7th and early 8th centuries, corresponding to the 'conversion period' of Early Saxon England.

The potential of this material is to add to our knowledge of late-phase Early Saxon cemeteries in East Anglia. A significant group of 7th century material has also been excavated at RAF Lakenheath (Eriswell parish) recently, and is currently being assessed. The material culture at the two sites is noticeably different however, and Coddenham will be of value for comparison with the much larger group from Eriswell. Other comparison sites will include

Barrington, Shudy Camps and Burwell in Cambridgeshire; Harford Farm, Norfolk; ?Ixworth; Boss Hall and Buttermarket, Ipswich; in addition to other conversion period cemeteries in Essex and Norfolk as well as a more general comparison with those in Kent. Metal detector finds from Coddenham and Barham can also be compared (West 1998).

Specific examples of finds which are of regional and national importance include the Merovingian-type bowls, the unusual shield boss, and the bed burial.

Further work

General

All small finds require full descriptions, including measurements, in order to produce a catalogue for publication. A search for parallels will also be required for the discussion. The catalogue will incorporate information on preserved organics and textile, as provided by other specialists.

The bed burial

The bed burial is clearly an important find and requires detailed analysis. Few other burials of this type are known (Speake 1989; Malim and Hines 1998), and whilst some elements of the construction are similar to other beds, there are several aspects in which this example is markedly different. Specialist input from a woodworking expert (Richard Darrah) will be required to interpret this.

Timing for metalwork analysis

General

Finds examination and descriptions (K Penn)	7 days
Catalogue and discussion of the beads and other necklace fittings (B Brugmann)	8 days
Discussion (K Penn)	17 days

The bed burial

Finds examination and catalogue (K Penn)	2 days
Meeting of K Penn, R Darrah, P Rogers, K Graham in York	1 day
travel and ?overnight costs	£200
Woodworking analysis (R. Darrah):	
study of metalwork (in Bury)	1 day
reconstruction of bed	3 days
discussion of structure with other specialists (in Bury)	1 day
modification of reconstruction	1 day
preparation of report	1 day
material costs	£ 60
travel costs (to Bury)	£ 90

A2.2. Saxon coins

Prof. D.M. Metcalf, Ashmolean Museum.

The coins were briefly assessed and identified by Michael Metcalf, who made the following comments:

> The pair from grave 0543 are both Series B sceattas from c.690-710. This series has been very intensively studied, at the level of individual dies, and it will be possible to be much more specific when the coins have been cleaned. The gold coin pendant from this grave is a *solidus* of Dagobert I, dated 629-39, from the mint of Arles.
>
> The coin from grave 0308(?) is rather worn, but it appears also to be of Series B, and of course it too merits careful cleaning and conservation. Allowing for wear, this might extend the date of burial to possibly as late as 715-20. The practice of including coins in a burial was by then dying out in Kent and Essex, but there is one later grave-find with eight sceattas from Garton-on-the-Wold, East Yorkshire.

Further work will be carried out at no charge following cleaning and photography of the three coins.

Further work

- Identification of coins and production of a catalogue — no cost

- Production of a report — no cost
- Photography of all coins (R.D. Carr) — 0.5 day

A2.3. Worked bone

Ian Riddler, Freelance Bone Artefact Specialist.

The Factual Record

Antler combs (Sfs 1104 and 1250) came from graves 0308 and 0141 respectively within the Anglo-Saxon cemetery. For the purposes of the assessment they are described here as Comb One (Sf 1104, Grave 0308) and Comb Two (Sf 1250, Grave 0141). Both combs were block-lifted by Suffolk County Council Archaeological Services and transported to the English Heritage Centre for Archaeology, Fort Cumberland. They were carefully removed from their respective soil blocks by Karla Graham and Dylan Cox. A full photographic and radiographic record of the excavation process has been made for each comb, and the records for Comb One have been consulted for this assessment (Graham and Cox 2001).

Comb One had separated into three sections within the soil block. Each surviving piece from the three sections has been labelled by number and letter, in accordance with its original position on the comb. In effect, the comb is now a mass of small fragments, but its original shape, dimensions and decoration can be seen, and the comb itself can be reconstructed, if required.

The same situation prevails also with Comb Two, which survives in eleven separate sections. This comb owes its survival to the proximity of the copper alloy bowl within which it had been placed and it is more difficult to reconstruct in its entirety, although it can be identified to type. The comb fragments survive in reasonable condition although most are pitted, abraded and eroded. Some of the finer details of the decorative schemes of both combs can only be discerned with difficulty.

Comb Descriptions

It has been noted in the Conservation Excavation Report for Comb One that the bone has lost most, if not all, of its collagen. That comb is virtually complete. It is a single-sided composite with two end segments and ten tooth segments secured to two connecting plates by nine iron rivets. Both the end segments and the connecting plates are decorated, mainly by single ring-and-dot motifs running in a line across the centre of each connecting plate. The connecting plates have doubled framing lines and a fine diagonal patterning along the top edge, which is continued across the tops of the tooth segments. They are decorated between rivets with a line of single ring-and-dot motifs; the same motifs also cover a wider area at the centre of each connecting plate. The end segments also include decoration, with single ring-and-dot motifs spread across the available space. The decoration of the comb is the same on both sides. Both connecting plates and tooth segments are made of antler and there is no evidence for the use of bone. Both of the connecting plates and eight of the twelve tooth and end segments could be securely identified to material type.

The remaining connecting plate for Comb Two is decorated by a series of paired crossing diagonal lines, which coincide with the position of each iron rivet. Between these motifs lie groups of four double ring-and-dot motifs. The one surviving end segment is fragmentary but it also includes doubled ring-and-dot motifs, which occupy all of the space available. The other side of the comb does not survive. The comb includes sections of six tooth segments and one end segment, fastened by seven iron rivets.

Both combs are of early to Middle Saxon date. Comb One is relatively long (around 175mm) and the graduation of the teeth extends across the end segment and the accompanying tooth segment at each end, emphasising its elongated nature. The precise shape of its end segments is not clear but they rise above the top line of the connecting plates, and the comb can therefore be described as winged. Some doubt remains about the precise shape of the end segments, but comparable combs almost certainly provide the answer to that question, and both the size and shape of the comb can be estimated with some accuracy.

The original dimensions of Comb Two are less certain but it is of a similar shape, although shorter in length. Its surviving end segment is winged and, as with Comb One, the top of the connecting plate and the adjacent tooth segments are scored with a pattern of short incised diagonal lines.

Statement of Potential

Early and Middle Saxon combs have been found in some numbers from both cemeteries and settlements. They are not unduly common in Suffolk, however. West lists thirty in his survey of early Anglo-Saxon objects from Suffolk but none of those combs are comparable with the Coddenham examples (West 1998). In some respects, it is the

combs not illustrated by West from other sites in Suffolk, including Brandon, Ipswich, Sutton Hoo and West Stow that form the closest parallels to the Coddenham combs, and allow their relative dating to be established.

Both combs are now in fragments. That is fortunate because it allows their design and technology to be established. In each case the riveting follows a standard Anglo-Saxon pattern, with the majority of the tooth segments secured on one edge. The spacing of the rivets in relation to the tooth segments and to the decorative design of the connecting plates can also be determined. The lower edges of the connecting plates survive on both sides on Comb One and one side of Comb Two, allowing the direction of cutting of the comb teeth, and the width of the saw blade used to cut them, to be established to some extent, at least. Almost all of the teeth remain for Comb One and although they are eroded it is still possible to see traces of wear on them and to record the extent to which the comb had been used. Very few teeth at all survive from Comb Two and they are in poor condition, so that it is not possible to comment on the extent of wear present.

Similar combs have come from seventh century graves, as well as contemporary settlement contexts. Those from Barrington, Burwell, Cherry Hinton, Ducklington, Kingston, Polhill, Sutton Hoo, Swallowcliffe Down and West Stow are particularly relevant, in this respect. In contrast, the Middle Saxon single-sided composite combs from Brandon and Ipswich are almost entirely decorated with linear lattice patterns and their overall designs differ from the Coddenham combs. A number of the Brandon and Ipswich combs have display sides. In contrast, the Coddenham combs are decorated with ring-and-dot patterns and they do not possess display sides, although this cannot be established for Comb Two. This is almost certainly because these combs are of an earlier date within the seventh century, and they should be equated with the seventh century series outlined above. Indeed, the parallels cited above suggest that the combs date to the middle or the second half of the seventh century. Comb Two may be a little earlier in date than Comb One but it is difficult to date either comb with any great precision..

The relative and absolute dating of the series of comparable early and Middle Saxon combs is not unduly precise but it is at least based largely on objects from post-War and modern excavations. The contexts of these combs have been examined in some detail in terms of their dating evidence and the broad typological sequence for combs of this type has been established (Hawkes 1973, 198; Speake 1989, 54; Malim and Hines 1998; Riddler 1996; Riddler, Trzaska-Nartowski and Hatton forthcoming). This comb can therefore be placed within a reasonable dating framework.

Alongside Coddenham Grave 0308, combs have been retrieved from bed burials at Barrington and Swallowcliffe Down, both of which were the internments of women. Both combs are single-sided composites. The Barrington comb is peculiar and difficult to classify; it may not be Anglo-Saxon. The comb from Swallowcliffe Down is comparable to Comb One from Coddenham both for its size and for its decoration.

Comb Two was recovered from within the fill of a copper alloy bowl. A buckle, shield and spear also came from the grave. A number of combs have been found within bowls in East Anglian graves, including those from Brightwell Heath and Sutton Hoo. Comb Two is paralleled precisely by a fragmentary comb from the cemetery at West Stow, which appears to have been made by the same comb-maker.

Within early Anglo-Saxon England double-sided composite combs are found in the graves of both men and women (Hills forthcoming). The series of single-sided composites with which both Coddenham combs belong appear to come largely from the graves of women, on current evidence. The exceptions are graves at Lowbury Hill and Sutton Hoo (as well as Coddenham Grave 0141), both of which belong in all probability to the first half of the seventh century. By the middle of that century single-sided composite combs were only deposited in female graves. This situation can be tested here against the palaeopathological evidence and the dating evidence from other objects within each grave. To judge from the grave contents, Comb One (Grave 0308) appears to be that of a female and Comb Two (Grave 1041) that of a male.

In summary, the form and dimensions of each comb can be reconstructed and the details of their design can be established. Both are very useful additions to the series of Anglo-Saxon seventh century single-sided composite combs. The significance of its deposition, in terms of its position in the grave and its gender association, can also be explored. The placing of combs within copper alloy vessels appears, for example, to be predominantly an East Anglian practice. Coptic bowls and other forms of container from contemporary graves in Kent do not have combs in them.

Storage and Curation

The combs have been removed from their soil blocks, cleaned and repackaged. They are now in a stable condition and their packaging is suitable for long-term storage. The combs could be reconstructed for display purposes but neither is an obvious candidate for display. Both combs are fragmentary and reconstruction drawings are necessary to indicate their original forms and methods of construction.

Time and Resources for Further Work

The fragmentary and abraded nature of both combs is useful in that it does allow the material of their component parts to be identified without undue difficulty. This can be done under low magnification and no further analyses are envisaged. In theory, a part of each comb could be taken for Accelerator dating, as a confirmation of the typological date (cf Scull and Bayliss 1999). It has been noted, however, in the Conservation Excavation Report for Comb One that almost all of the collagen of the bone has leached out, rendering this form of dating very difficult. No scientific analyses are therefore recommended.

The principal task here is to prepare a publication report:

Publication Report

A publication text, which includes a descriptive catalogue of each object, together with a discussion of its relative dating, design, technology and deposition in the grave, can be prepared for both combs. This would include a reconstruction sketch for each comb, indicating their original appearance. The time allowance also includes a direct comparison of Comb Two with a comb from West Stow, which may have been made by the same person.
2 days @ £120 per day, = £240

A2.4. Preserved textile

Penelope Rogers, Textile Research Centre.

1. Introduction

1.1. This assessment is concerned with the mineral-preserved textiles in association with metalwork and other artefacts from the Anglo-Saxon cemetery at Smye's Corner (Shrublands Quarry), Coddenham, Suffolk (CDD 050). It includes 15 finds from the 1995 evaluation.

1.2. The site was excavated by Suffolk CC Archaeological Service, Finds Manager Sue Anderson (Bury St Edmunds office). The conservator is Karla Graham, English Heritage Centre for Archaeology, Portsmouth.

1.3. The Finds Manager has provided an extract from the Project Design concerning the small finds and the conservator has provided a table of finds, conservation documentation and X-rays, as an aid to the assessment.

2. Quantity of Material

2.1. Roughly 220 objects have been examined for the purposes of the assessment. This represents all the artefacts recovered from the site (excavation and evaluation) with the exception of:

Grave 0141, sf 1002, copper-alloy bowl still in soil block
Grave 0308, sf 1104, fragile bone comb
Grave 0308, sfs 1117-1122, 1124-1128, silver objects still in soil block
Grave 0308, sf 1140, copper-alloy object with organics, still in soil block
Grave 0543, sf 1201-1202, silver coins

2.2. From examination of similar types of object from the site, it seems unlikely that any of the above will produce extensive textile, except perhaps sf 1140.

3. Date, provenance, contamination

3.1. No dating has been provided yet, but the finds are typical of the Early Anglo-Saxon period and appear to include a substantial 7th-century component.

3.2. The material mostly comes from the 26 graves found during excavation.

3.3. Plant roots were frequently noted during examination of the finds, which suggests that the objects have lain close to the surface at some stage.

3.4. There is no obviously intrusive material.

4. Range of material and preservation

4.1. Textile preservation is on the whole very poor. Over half of the objects have no visible evidence for textile at all. None of the evaluation finds has any textile in association.

4.2. Many of the objects still have remains of the soil, which seems to be clay with flint and chalk inclusions, adhering. For these, although no textile is visible at present, allowance should be made for some evidence emerging during conservation. The attached estimate is based on the assumption that there will be a further c.20 items which appear after conservation.

4.3. Where textile is visible (see Table A.5), the remains are mostly poor and it will be difficult to identify weave structure.

Context	SF No.	Object	Textile
Grave 0157	1010	shield boss	good
	1011	spearhead	poor
Grave 0171	1013	knife	poor
Grave 0193	1025	knife	poor
	1025b	?sharpening steel	poor
Grave 0221	1048	knife	poor
Grave 0276	1054	knife	poor
	1056	knife	poor
	1057	object	poor
Grave 0297	1063	cu/a buckle	poor
Grave 0299	1059	knife	poor
Grave 0308		*see separate list*	
Grave 0312	1072	knife	poor
Grave 0346	1141	arrowhead	poor
Grave 0446	1181	seax	probable
	1215	iron buckle	poor
	1219	knife	poor
Grave 0540	1197	cu/a buckle	good
Grave 0543	1203	fe fitting	poor
	1211	fe object	good
Grave 0565	1224	fe object	poor

Table A.5. Objects with textile remains visible at assessment stage

4.4. The textile on the buckle, sf 1197 Grave 0540, has been recorded fully at the assessment stage, as the remains are fragile and only loosely adhering to the buckle plate.

5. Grave 0308, bed burial

5.1. Because grave 0308, the bed burial, is of especial significance, it has been dealt with separately.
5.2. Many of the objects from this grave still have soil adhering (as described in 4.2.), but textile is already visible on many of the fragments of iron straps.
5.3. Preliminary catalogue entries have been constructed at the assessment stage, to avoid any loss of information during transport/storage/conservation. It is likely that more information will emerge during conservation.
5.4. The preliminary catalogue entries are attached, along with notes for the conservator on features to look out for.
5.5. The main textile (A) clearly forms part of the bed, rather than the clothing of the occupant. The other textiles (B) and (C) are of uncertain function.
5.6. The fibrous material inside the glass beads, sfs 1114 and 1115, from Grave 0308, was tentatively identified during conservation as the remains of cords. This has been examined by microscopy and in both instances it has proved to be plant roots (see separate note).

6. Means of collecting data

6.1. Now that preliminary catalogue entries have been constructed for Grave 0308, the rest of the textile analysis should be carried out *after* conservation.
6.2. When this stage is reached, it will be necessary to have grave plans and a plan of the bed fittings from Grave 0308.
6.3. The preliminary collection of data will be low-power optical microscopy.
6.4. Fibre identification will be by transmitted-light microscopy, using a polarising analyser.
6.5. Where this form of microscopy does not allow identification, samples will be submitted for SEM work. Glynis Edwards at the Centre for Archaeology has agreed that a member of staff there will undertake this work.
6.6. Dye identification is not worth attempting, because of the poor textile preservation.
6.7. Especial attention will be paid to Grave 0308, the bed burial. The alignment of textile (A) in relation to the ironwork and the wood grain underneath will be recorded carefully and plotted on a plan.

7. Statement of potential

7.1. The poor preservation of the textiles means that it will probably not be possible to reconstruct the clothing in any of the graves in this burial.
7.2. Nevertheless, the identification of fibres and especially the ratio of wool to linen will provide a useful source of data, to be compared with data from sites with different soil types. The author is building up a database which should eventually allow a more accurate prediction of which sites are likely to provide useful textile evidence.
7.3. The main textile in association with the bed burial, 0308, is an unusual fabric-type and different from the textiles found in association with other bed burials, such as Swallowcliffe Down, Wiltshire, and Edix Hill

(Barrington A), Cambridgeshire. It may have significance for understanding the construction of the bed itself. Bed burials are rare and they, and their associated textiles, are of national importance.

8. Conservation

8.1. Many of the objects require investigative conservation, so that the textiles are revealed (see 4.2 and 5.2-5.6).
8.2. Now that some preliminary analysis has been carried out (see 4.4 and 5.3-5.4), the main investigative work can be left until after conservation of the objects is complete.
8.3. It will then be necessary for a member of the conservation staff to prepare SEM micrographs of samples provided by the author (see 6.5).

9. Timing

The following tasks are required:

- Catalogue and fibre identification of c.40 finds — 4 days
- Work on Grave 0308 in addition to that carried out at assessment — 1 day
- Final report — 1 day

10. Publication

10.1. A brief report will be compiled for publication, concentrating on (i) the bed burial and (ii) the ratio of wool to linen and the possible explanation of poor preservation of textile in this cemetery.
10.2. We will need an illustrator to work up a 3-D drawing of the textile remains on the bed from the author's sketches.
10.3. Other illustrations will be small-find drawings of objects (presumably already budgeted elsewhere) incorporating textile.

11. Preliminary catalogue entries for textiles recorded at assessment stage

and notes for the conservator

Grave 0308 (bed burial)

TEXTILE A on sfs 1092, 1093, 1152, 1172: iron straps from bed

Note: Each sf no represents several fragments of iron strap, consistently 20-22mm wide. Where organics are preserved they consist of wood on one face and textile on the other. The best-preserved area of textile is on a fragment of sf 1093, bagged separately by PWR.

Textile woven in 2/2 twill from plied yarn, 9/Z2S /1.0 x 7/Z2S/1.5 per cm. The weave is very irregular: in places the twill diagonal reverses direction, although it is not clear whether this represents an error or a deliberate attempt at chevron twill. The close-set system of threads mostly runs along the length of the straps, but in some cases it runs crossways. The fibre is probably wool [to be checked by SEM].

Note: In each of the pieces with textile so far examined, the wood grain runs lengthways. This means that the wood does not always reflect the alignment of the textile. Further work by PWR at the analysis stage will include plotting the textile and its alignment on to a plan of the ironwork. It would be helpful if the conservator could carry out as much conservation as is necessary to reveal the textile fully.

TEXTILE B on sf 1090, loose fragment

A loose fragment of fully mineral-replaced (mineralised) textile/cordage, 9 x 8 mm. On one face seven or eight fine parallel cords are visible; on the other, remains of a fine textile. No further details possible.

TEXTILE C on sf 1136, cu/a ring with attachment fitting

On outer surface of one of plates, lapping over edge, 9 x 5 mm, off-white textile woven in tabby weave, 20/Z x 18/Z per cm. Fibre well-preserved, fully processed, fine plant fibre, almost certainly flax.

Note for conservator re bed burial.
The large iron eyelets of Anglo-Saxon beds sometimes have cords or thongs running through the eye. It is not possible to see any in the Coddenham eyelets at present, but the possibility should be investigated during conservation.

Fibres in glass beads 1114 and 1115

Note. The fibres emerging from the bead holes were mounted for microscopy and proved to be roots, identified by the branching structure and the frequent tracheary elements.

Grave 0540

sf 1197 medium-sized cu/a buckle

On back of inner belt plate (i.e., probably against body), 10 x 7 mm of textile woven in tabby weave, 14/Z x 12/Z per cm; open weave. Fibre well-preserved, fully processed, plant fibre, either hemp or low-grade flax; includes naturally brown as well as off-white fibres.

A2.5. Conservation and Mineral Preserved Organics

Karla Graham & Dylan Cox, English Heritage Centre for Archaeology, Fort Cumberland

Introduction

This report addresses the updated conservation assessment of the material from Smye's Corner (Shrublands Quarry), Coddenham, Suffolk (Site CDD 050). The conservation assessment was undertaken initially by Karla Graham (English Heritage) and Dylan Cox (University of Southampton) at the English Heritage Centre for Archaeology (C*f*A), Fort Cumberland. Assessment of the mineral preserved organic material was made with advice from Glynis Edwards (English Heritage).

This report has been updated following the excavation at the C*f*A of 4 soil blocks from the site.

The following tables summarise the types of material and quantity associated with this site.

Material	Number
Copper Alloy (CuA)	37
Iron (Fe)	142
Gold (Au)	1
Silver (Ag)	17
CuA and Fe	2
CuA, Fe and Ag	1
Fe and Ag	1
Ag and glass	1
Amethyst	2
Bone	2
Crystal	4
Glass	29
Ivory / bone	2
Organic	1
Stone	1
Unknown	8
Total	**251**

Methodology

The conservation assessment comprised three main stages:

1. X-Radiography of the metalwork and soil blocks

Limited X-Radiography (6 x-radiographs) had already been undertaken by Julia Parks (Conservation Services, Ipswich) of the Evaluation Finds and the following Laboratory numbers: 200008960; 200008969; 200008982; 200008984 – 8986; 200008993.

These x-radiographs were examined and a further 45 x-radiographs were undertaken at the C*f*A. AA400 (formerly AX film) and MX 125 radiographic film were used.

2. Assessment of the mineral preserved organic material other than textile

The artefacts were examined under low power binocular magnification. A catalogue was collated in an Excel 97 spreadsheet. The spreadsheet contains the following information:

- Corresponding English Heritage Laboratory numbers for finds.
- Number of fragments in each bag (as requested).
- Mineral preserved organic category.
- Mineral preserved organic material.
- Investigative conservation requirements.
- Condition of artefacts.

- Conservation requirements (including preventive conservation).

These fields are fully described in the Appendix to this report.

3. Preventive Conservation

Repacking of a select number of items for transit to Penelope Walton-Rogers (in particular placing fragile copper alloy buckles etc in crystal boxes).

4. Excavation of Soil blocks

Included in the assemblage were four soil blocks. These soil blocks were excavated at the C*f*A by Dylan Cox and Karla Graham and individual reports were produced outlining methodology and results. The soil blocks comprise the following Laboratory Numbers.

Soil Block	Material / Description	Laboratory Numbers
1	Copper Alloy Bowl	200008960, 200191405
2	Bone Comb	200009062
3	Crystal & Glass Beads, Silver	200009066; 200009075
		200009076 – 9085 (inclusive), 200191382 – 401 (inclusive)
4	Copper Alloy	200009096, 200191402-404 (inclusive)

The Excel spreadsheet (refer to separate Excel file in archive) and the following Results and Further Work sections have been updated following the excavation of the soil blocks and the assessment of the finds contained within them.

Results and Comments

The following tables summarise the information contained in the Excel 97 spreadsheet.

1. Mineral Preserved Organic (MPO) Category

MPO Category	MPO Description	Number
1	Organic components of metal artefacts	16
2	Organic artefacts directly associated with metal objects	17
3	Organic component of composite object	62
4	Other organic materials preserved on artefacts	3
5	Possible MPO	30
1 or 2		2
None		125

2. Mineral Preserved Organic Material

MPO Material	Number
Horn	7
Insect	1
Leather	9
Textile	11
Wood	66
Unidentified	44

3. Investigative Conservation Requirements

Investigation	Number
Clarify	101
Investigate	51
No investigation	99

4. Condition

Condition	Number
Good	3
Fair	169
Stable	44
Unstable	5
Poor	7

5. Conservation Requirements

Conservation	Number
Consolidate	1
Joining	22
Repack	33
Reduce volume of corrosion products	1
Re-integrate	1
XRF	5
No conservation requirements	202

6. Comments

Condition of the material

- Overall, the metalwork was in fair to good condition. The corrosion products associated with the ironwork were fairly soft.
- A number of items had incurred mechanical damage on transport to the C*f*A (in particularly, the bone comb soil block, a spearhead and others).
- It has been noted that during the course of the assessment, the soil blocks have gradually begun to dry out and are in a relatively unstable condition. Due to their complexity, the soil blocks were not excavated in the Assessment Phase.

Packaging

Overall, the packaging requires improvement including:

- The introduction of supports for objects in the pierced polyethylene bags.
- The reduction of the number of objects in each box.
- Separating heavy and fragile objects (currently in the same box).

Further Work

The total amount of time for the following future investigative conservation is **c.40 days**.

- Clarification and identification of mineral preserved organics other than textile.
- Clarifying form and non-ferrous coatings of selected items.
- Selective interventive conservation.

The actual time and priorities will be determined following the finds specialist's assessment report.

APPENDIX

1. Order for recording mineral preserved organic material (after Glynis Edwards).

Category	Description	Examples
1	Organic components of metal artefacts	• Knife handles • Sword hilts • Spear hafts
2	Organic artefacts directly associated with metal objects	• Knife sheaths • Sword scabbards • Belt remains on buckles • Purse remains on fittings or contents
3	Organic component of composite object	• Wood from shields • Strap fittings
4	Other organic materials preserved on artefacts	• Textile from clothing which may be preserved on artefacts other than dress fittings. • Textile from grave coverings. • Wood from shields which can extend over other artefacts. • Wood from coffins. • Plant material which may have lined a grave or covered the body. • Pupa cases and other insect remains.
5	Possible MPO	• MPO has been seen but needs to be revealed to make an identification. • By association, it seems likely that the artefact has MPOs but would need to be investigated.

*2. Investigation (*Invest*)*
- Clarify
- Investigate (*Inv*)
- Excavate (*Ex*)

3. Condition
- Chemical (Poor, Fair, Good)
- Physical

The two types of damage are listed in the column as chemical followed by physical damage, separated by a hyphen. Where there is no physical damage, no comment is made.

4. Conservation
- Description of requirements
- *RP*: All finds require some level of packing (merely placed in bags). Where RP is noted, these objects require support / repacking to prevent possible imminent physical damage.

A2.6. Prehistoric Pottery

Alexis M. Willett, Suffolk C.C. Archaeological Service.

Introduction

A total of 2229 prehistoric pottery sherds, weighing 13.017kg, were recovered from this site. A summary of the quantification by fabric is shown in Table A.11. A more detailed list by context is available in the appendix.

Fabric	Period	No	%No	Wt/g	%Wt
F1	*Iron Age*	562	25.2	3157	24.3
F2	*Iron Age*	163	7.3	1212	9.3
QS1a	*Iron Age*	1249	56.0	6350	48.8
QS1b	*Iron Age*	6	0.3	44	0.3
QS2	*Iron Age*	138	6.2	1082	8.3
QS3	*Iron Age*	111	5.0	1172	9.0
Totals		**2229**		**13017**	

Table A.11. Summary of prehistoric pottery quantification.

This pottery assemblage is dominated by wares dated to the Iron Age.

Methods

Quantification was carried out using both sherd count and weight. A full quantification by fabric, context and feature is provided in the archive. For this small group, no attempt was made to record weights for separate body, base and rim sherds, or to quantify by form. A x4 hand magnifying glass was used to identify fabrics. Recording uses a system of letters and numbers for fabric codes. The letter prefix in the fabric codes represents the main inclusion present (F representing flint and QS quartz sand). SCCAS pottery spotdating forms were used and the results were input onto an MS Access 97 database.

Fabrics

Five fabric types, with subdivisions, were identified on the basis of inclusions. Basic fabric descriptions are provided below. All are soft and handmade. See key to inclusion sizes.

Code	Date	Description
F1	Iron Age	Major inclusion common, moderately sorted, medium, angular calcined flint. Also abundant, very well sorted, very small, rounded quartz sand and sparse, moderately sorted, medium, sub-rounded organics. Exterior surface and margin dark brown/black to red/brown, core black/dark grey, interior margin black to red and interior surface dark brown/black to red. Rough feel. Undecorated. Mainly reduced during firing.
F2	Iron Age	Major inclusion abundant, poorly sorted, medium/large, angular calcined flint. Also abundant, well sorted, small, rounded quartz sand and common, poorly sorted, medium/large, sub-rounded organics. Exterior surface brown, exterior margin dark brown/black, core black and interior margin and surface dark brown/black. Harsh feel. Undecorated. Mainly reduced during firing.
QS1a	Iron Age	Major inclusion abundant, very well sorted, very small, rounded quartz sand. Also sparse, well sorted, medium, sub-rounded organics and sparse, well sorted, small, angular calcined flint. Exterior and interior surfaces and margins dark brown/black to orange to buff/grey and core

		grey/black. Rough feel. A few sherds decorated with fingernail marks.
QS1b	Iron Age	Major inclusion abundant, very well sorted, very small, rounded quartz sand. Also sparse, well sorted, medium, sub-rounded organics and sparse, well sorted, small, sub-angular grog pieces. Exterior surface dark grey/black, exterior margin and core black and interior margin and surface grey. Powdery feel. Undecorated.
QS2	Iron Age	Major inclusion abundant, moderately sorted, small, rounded quartz sand. Also sparse, moderately sorted, medium, sub-rounded organics. Grey/brown to grey/black throughout. Rough feel. Undecorated.
QS3	Iron Age	Major inclusion abundant, very well sorted, very small, rounded quartz sand. Also sparse, well sorted, small, angular calcined flint and very sparse, poorly sorted, medium, sub-angular organics. Dark grey/black throughout. Smooth feel. Undecorated although many sherds have burnished surfaces. Fineware.

Definition of inclusion sizes: very small - 0.1-1mm, small 1.1-2.5mm, medium 2.6-5mm, large 5+mm.

Pottery by Period

Iron Age Wares

The majority of the prehistoric wares appear to be of Iron Age date. Although close dating of the fabrics has not been possible at this stage, it appears that the flint tempered fabrics may date earlier within the Iron Age than the quartz sand tempered wares. There is also a possibility that some of the harder sandy sherds are of Anglo-Saxon date but these are difficult to identify and require further analysis.

Fabric F1 is a calcined flint tempered ware with abundant quartz sand and sparse organics inclusions. Almost one quarter of the prehistoric pottery assemblage was identified as this fabric. Three base sherds, representing two bases were found. Sixteen rim sherds, representing thirteen rims were also recovered. The majority of the rims are relatively plain and upright, although six are described as slightly flaring or leaning in their form. One of the rim sherds has an impressed finger mark in its top. A parallel for this decoration may be seen from an early – middle Iron Age sherd from West Stow, Suffolk (Martin 1999, fig. 13, 26). One of the sherds displays a rounded shoulder in its form.

Fabric F2 is a calcined flint tempered ware with abundant quartz sand and common organics inclusions. Two base sherds and two rim sherds were recovered. The small base sherds are flat and one with part of the vessel wall showed it to be relatively upright in form. Both the rims are plain and fairly upright with a flat top. Only a few of the sherds are abraded.

Fabric QS1a is a quartz sand tempered ware with sparse organics and sparse calcined flint inclusions. Nearly two thirds of the prehistoric pottery assemblage was identified as fabric QS1a. Many of the sherds have been noted to be finer than others implying a varying quality within the wares. Thirteen flat base sherds were found. 64 rim sherds were also recovered. Most of the rims are plain and upright or slightly flaring in form. Three rim sherds have impressed finger marks along the tops, in the same style as those mentioned in the fabric F1 section, and a grooved rim top. Two body sherds are also decorated. They display horizontal rows of impressed finger nail impressions.

Fabric QS1b is a quartz sand tempered ware with sparse organics and grog inclusions. Only two small, undecorated sherds of this fabric were identified. No diagnostic features were noted.

Fabric QS2 is a coarse, quartz sand tempered ware with sparse organics inclusions. 138 pottery sherds, weighing 1.082kg, of this fabric were identified. The large majority are undecorated body sherds. Three flat bases are present and are of similar forms. Many of the sherds of this fabric are substantial in their thickness and, along with their coarse fabric matrix, may be interpreted as having been storage vessels rather than finewares. Two body sherds are decorated with finger nail impressions.

Fabric QS3 is a fine, quartz sand tempered ware with sparse calcined flint and very sparse organic inclusions. 5.0% of the total number, and 9.0% of the total weight of the prehistoric pottery sherds are composed of this fabric. Sixteen rim sherds, representing ten rims, are present in this assemblage. The majority of these are relatively upright and plain with flat tops, although a few are slightly flaring. One flat base sherd was also recovered from the excavation.

Pottery by Feature

Sherds of prehistoric pottery was collected from 132 features on the Coddenham site and a summary of the quantification by feature type is shown in Table A.12.

Feature type	No	Wt/g
Ditch	234	1300
Grave	257	694
Hearth	252	1509
Posthole	71	310
Pit	1056	7303
Pottery scatter	109	228
Ring ditch	15	14
Shaft	168	1272
Well	11	110
U/S finds	56	277

Table A.12. Summary of prehistoric pottery quantification by feature.

The greatest quantity of prehistoric pottery was recovered from pits. Significant amounts were also recovered from graves, ditches and shafts. As many sherds were recovered from graves it is possible that they are from the Iron Age and are residual in these later features or they are being confused with the Anglo-Saxon material. Few of the coarser fabric sherds were collected from graves, only 14 QS2 sherds and three of fabric F2. It is the finer sherds that were generally found within grave fills. It is mainly sherds of fabrics F1 and QS1a that were yielded by grave fills, although these are the two most abundant types in this prehistoric pottery assemblage.

The shaft fills mainly contained flinty wares, the postholes and hearth fills primarily produced sherds of sandy fabrics and the other feature types yielded a range of fabric types. Relatively small numbers of sherds were retrieved from individual features.

Small numbers of abraded sherds were excavated from all feature types.

Summary and discussion

Pottery dating to the Iron Age clearly dominates this prehistoric pottery assemblage. The varying quality of the sherds and the coarseness of the fabrics suggests that this site was used over a significant length of time during the Iron Age period. The prehistoric pottery assemblage from Coddenham may provide useful data to add to the knowledge of pottery types from the local area and region. Comparison with material from other sites may help to address site and regional research objectives. In considering the publication of Iron Age pottery assemblages, Bryant (2000, 14) states that "the absence of (published) quantified assemblages severely limits the degree to which comparisons between sites can be made", thus the material from Coddenham should be further analysed and subsequently published.

Recommendations for further work

- temporal and spatial analysis should be undertaken;
- rim measurements should be analysed;
- closer dating of the material, if possible, should be sought;
- comparisons with material from similar local and regional sites; parallels for the rim and base forms may be found which may aid closer dating of the vessels.

A2.7. Roman Pottery

Cathy Tester, Suffolk C.C. Archaeological Service.

Introduction

Excavation produced a small quantity of late Iron Age and Roman which ranged in date from the 1st to the 4th centuries. A summary of the fabric quantities is presented in Table A.13 below which also provides a key to the fabrics or fabric groups present in this assemblage.

Methodology

A catalogue of all fabrics and forms was made by context for this assessment and the pottery was quantified by sherd count, weight and estimated vessel equivalent (eve). Observations about decoration, abrasion, wear or other notable features were recorded, and the sherds were assigned provisional spot dates. The pottery was classified using the form and fabric type series devised for recording Roman pottery at Pakenham (unpublished). This has become standard for recording LIA and Roman pottery in Suffolk but it is supplemented when necessary by Going's (1987) type series for Chelmsford. A x10 microscope was used to identify the fabrics. SCCAS pottery recording forms were used and the data was entered onto an MS Access 97 database file. Where percentages are given they refer to sherd number/sherd weight in that order.

Fabric	code	No.	% No.	Wt/g	%Wt.	eve	% eve
Black-surfaced wares	BSW	10	12.3	52	6.0	0.21	23.3
Grey micaceous ware	GM	1	1.2	6	0.7		
Grog-tempered wares	GROG	6	7.4	50	5.8	0.08	8.9
Sandy grey wares	GX	46	56.8	608	70.6	0.19	21.1
Hadham oxidised wares	HAX	6	7.4	41	4.8	0.31	34.4
Late shell-tempered wares	LSH	1	1.2	2	0.2		
Nene Valley colour-coated	NVC	9	11.1	89	10.3	0.11	12.2
Oxidised coarsewares	RX	2	2.5	13	1.5		
Total		**81**		**861**		**0.90**	

Table A.13. Roman fabric quantities.

Roman pottery

The nine fabrics or fabric groups which were identified included local and regional coarsewares and provincially traded late Roman specialist wares. There were no imports.

Specialist wares

Provincially traded specialist wares came from Much Hadham in Hertfordshire, the Lower Nene Valley and possibly the South Midlands.

Much Hadham oxidised wares (**HAX, 7.4% / 4.8%**) are represented by fragments of a dish (Going Type B10) from ring ditch 0239 (fill 0251), a small flagon, a small bowl-jar (Going Type E3), a mortarium and an undiagnostic body sherd from the fill of grave 0195 (fill 0196).

Nene Valley colour-coated wares (**NVC, 11.1 / 10.3%**) include a large bowl-jar and a beaker or jar.

Late shell-tempered wares (**LSH, 1.2% / 0.2%**) consist of a single body sherd from a jar.

Local and regional coarsewares

The local and regional coarsewares which make up the rest of the assemblage consist mainly of sandy grey wares (**GX, 56.8% / 70.6%**) and a single late jar from Ditch 0187 (fills 0188 and 0528) accounts for most of this. The rest consist of single sherds from grave fills and include two flanged dishes (Type 6.17) but the others are small, abraded and non-diagnostic.

Grog-tempered wares (**GROG, 7.4% / 5.8%**) were found in five contexts. Three were residual in grave fills. Two of the sherds are in the distinctive 'smooth red-surfaced' variant used for copies of Gallo-Belgic forms; one is possibly a girth beaker rim from ditch 00252 (fill 0254) and the other is a small abraded bodysherd.

Black-surfaced wares (**BSW, 12.3% / 6%**) are represented by a lid, a flanged bowl (Type 6.17) and an unclassified cup or small bowl. The rest of the sherds are non-diagnostic, small and abraded body sherds. All BSW was recovered from grave fills.

Oxidised coarsewares (**RX, 2.5% /1.5%**) are represented by two non-diagnostic body sherds recovered from grave fills.

Dates

The dates of the Roman pottery fall into the earliest and the latest Roman periods. The earliest pieces are the grog-tempered sherds, wheelmade, so probably early to mid 1st century. This is followed by a long gap and the rest of the fabrics and forms identified are exclusive to the late and latest Roman periods (AD 250-400+).

The pattern of pottery deposition

The pottery was collected from twenty-four contexts in nineteen stratified features which included four ditches, thirteen graves, a ring-ditch and a pit. One context was unstratified. Table A.14 summarises the quantities of the pottery by broad feature type.

Feature type	No.	% No.	Wt./g	%Wt./g	eve	% eve	Av. Wt./g
ditch	44	54.3	638	74.1	0.26	28.9	14.5
ring ditch	10	12.3	40	4.6	0.06	6.7	4.0
grave fill	25	30.9	164	19.0	0.52	57.8	6.6
pit	1	1.2	6	0.7			6.0
u/s	1	1.2	13	1.5	0.06	6.7	13.0
Total	**81**		**861**		**90**		**10.6**

Table A.14. Roman pottery quantification by feature type

The majority of the pottery (54% / 74%) came from ditches. The rest of it came from the Anglo-Saxon graves (30.9% / 19%) and ring ditch (12.3% / 4.6%). A single sherd came from a pit and one was unstratified. The condition of the pottery varies. The average weight of the residual material recovered from A-S features (grave fills and ring ditch) is only 5 grams compared with that from the Roman boundary ditch (0187) which was 15.5 grams.

Discussion

The small size and residual nature of a significant portion (43.2% / 23.6%) of the Roman assemblage can only indicate that there was no intense activity on this particular site during the Roman period. The only Roman feature is boundary ditch 0187 and the Roman pottery does establish a late 4th century date for its abandonment and infilling. Single late Iron Age or early Roman sherds which were the only finds from pit 0382 (0383) and ditch 0252 (0254) are not sufficient to date those features.

Most of the pottery seems to be the product of the usual cycle of deposition and redeposition which would occur on a site. However, the presence of late Roman pottery on sites with subsequent early Saxon occupation is always of interest. It is notable that four of the very bright orange-red Hadham sherds come from the fill of one grave 0195 (fill 0196). Their presence may fit into a pattern of deliberate collection / selection of Roman sherds, often the 'red' pieces by Saxons which has been described by Plouviez (1985). Although not as clear-cut as at Brandon (Tester 2001) where there were no Roman features in the immediate vicinity, the possibility that some of these sherds may have been 'curated' cannot be ruled out entirely.

Small as it is, the Roman pottery assemblage adds to the current knowledge of pottery supply and use in the vicinity of the Roman small town at Coddenham. Use of the same methodology whatever the assemblage size will ensure commonality with past and current work, and mean that small groups such as this will have potential for providing quantified information to a wider study of the region's economy, industry and trading connections and for establishing the character of the activities carried out there.

There are no pieces which merit illustration and no more information would be gained from further work on this group of pottery.

A2.8. Early Saxon Pottery

Sue Anderson, Suffolk C.C. Archaeological Service.

Introduction

The only pottery which could be positively identified as Early Saxon was collected from three graves. The 490 sherds (2300g) represent three vessels, one from each burial. None of the pottery identified as Iron Age had similar fabrics, but some were similar to material from other Saxon sites. However, all of these vessels were associated with identifiably Iron Age sherds.

Methodology

Quantification was carried out using sherd count, weight and estimated vessel equivalent (eve). A full quantification by fabric, context and feature is available in the archive. All fabric codes were assigned from the Suffolk post-Roman fabric series, which includes Norfolk, Essex, Cambridgeshire and Midlands fabrics, as well as imported wares. A x20 microscope was used for fabric identification and characterisation. Form terminology for Early Saxon pottery follows Myres (1977) and Hamerow (1993). Recording uses a system of letters for fabric codes together with number codes for ease of sorting in database format. SCCAS pottery quantification forms were used and the results were input onto an Access 97 database.

The pottery

The three vessels were identified as follows:

1. Baggy jar (60 sherds, 627g) with upright plain tapered rim above a slight shoulder (100mm diameter, 50% complete) and flat-rounded base. Sand and organic tempered (Fabric ESO2). Oxidised pale buff to brown externally, reduced black internally. Rough surface. Internal burnt residue. Context 0338 (Grave 0335).
2. Baggy jar (30 sherds, 533g) with upright plain tapered rim (130mm diameter, 25% complete) and flat-rounded base. Organic tempered (Fabric ESO1) with occasional sand. Oxidised red externally, reduced black internally. Rough surface. Context 0515 (Grave 0513).
3. Bottle or narrow-necked jar (c.400 sherds, 1140g) with rolled rim, short neck, sub-biconical body and flat base. Wheelmade, decorated with rouletted cabling. Medium sandy greyware (Fabric ESIM), soft and abraded, rough feel, containing clear and white quartz sand up to 0.3mm, and occasional fine to coarse red grog. Grey-black

surfaces with reddish brown core, occasionally with an inner reduced core in thicker sherds. Context 0168 (Grave 0141).

The two plain baggy jars are typical of pottery grave goods found at other recently excavated Early Saxon cemetery sites in Suffolk (e.g. Eriswell, Flixton, Sutton Hoo). Their organic fabrics suggest a later, probably 6th-7th century, date.

The third vessel was an Early Saxon import. The form was difficult to reconstruct due to the fragmentary and abraded nature of the sherds, but part of the rim and neck were present, there were decorated sherds with very shallow rouletting from the upper half, and partial reconstruction of the lower body indicated a globular or sub-biconical profile on a flat base. The closest parallels would appear to be bottles from Sarre and St. Peter's, Kent (Evison 1979, e.g. Fig 3c, 5c and 8d), although none of these have mouths quite as wide as the Coddenham example. Imported vessels are relatively rare in Suffolk, but are known from Lakenheath, Sutton Hoo and Ipswich (Evison 1979) and recently an example was excavated at Hadleigh (Anderson unpub.). None of these are the same type as the Coddenham vessel, although the Hadleigh pot, a biconical jar with girth-grooving of the upper half, is in a similar fabric.

Recommendations for further work

- all three pots should be illustrated for publication
- the imported vessel should be chemically analysed, along with the vessel from Hadleigh for comparison, with the aim of suggesting a possible source
- some further discussion of the imported vessel's provenance and parallels is required

A2.9. Ceramic Building Material

Sue Anderson, Suffolk C.C. Archaeological Service.

Eleven fragments of CBM were collected. Four fabrics were identified as follows:

1. Very fine pink fabric, few inclusions, hard. Post-medieval?
2. Medium sandy, containing oxidised clay pellets and ferrous fragments, and occasional coarse flint. Buff or red with reduced core. Roman.
3. Medium sandy, occasional fine calcareous inclusions, orange. Peg tiles. Post-medieval.
4. Fine sandy, micaceous, ferrous fragments. Post-medieval?

The majority of fragments belonged to Fabric 2 and were of Roman date, but most were abraded. Table A.15 shows the quantities by fabric.

Fabric	No	Wt/g
1	1	2
2	6	730
3	3	108
4	1	3

Table A.15. CBM quantities by fabric.

Only one form could be identified, from the flange fragment of a flanged tegula in 0188.

The material was collected from ten contexts: five fragments were from grave fills, one was from a ring ditch, one was from a pottery scatter, and four were from ditch fills. One possible post-medieval fragment was found in grave fill 0309 and is probably intrusive, but all other late material was from ditches.

Recommendations for further work

- The presence of Roman tile in funerary contexts is interesting in view of the general lack of this material from the rest of the site, so it may be worth discussing this further. Otherwise no further work is required.

A2.10. Worked flint

Alexis M. Willett, Suffolk C.C. Archaeological Service.

A total of 153 worked flints, along with nine that appear to be natural, were recovered from the site. The flint appears to be derived from gravel deposits. Table A.16 shows a summary of the flint categories.

Each flint was examined by eye for evidence of working, either as debitage or the formation of tools. Each flint was categorised and any patination and utilisation was noted. The results were input into an MS Access database.

Flint type	Unpatinated	Patinated	Totals
Tools:			
Scraper	6	-	*6*
Hammerstone	2	-	*2*
Other tool	-	1	*1*
Debitage:			
Core	4	1	*5*
Blade	3	3	*6*
Flake	119	14	*133*
Natural	-	-	*9*
Totals	**134**	**19**	**162**

Table A.16. Summary of flint categories.

Table A.17 summarises the number of flints recovered from each feature type. The majority of the flints were recovered from graves and pits across the site. As the graves were Anglo-Saxon in date it is assumed that the flints found within their fills were residual. This high number from graves appears to be a reflection of excavation recovery bias as the graves were probably excavated with more attention to detail than other features. No refits were attempted. Most of the features only produced a few flints each; there appear to have been no large assemblages.

Feature type	No
-	13
Ditch	16
Ring ditch	9
Hearth	1
Posthole	2
Pit	42
Grave	51
Shaft	11
Well	4

Table A.17. Numbers of flints per feature type.

The evidence from the worked flints points to a range of periods of prehistoric activity at Coddenham. The types of scraper in the assemblage are as follows: two horseshoe scrapers; one side-end scraper; two end scrapers and one flake scraper. The shape of the scrapers appears to suggest a range of dates: horseshoe scrapers are thought to date to the Bronze Age but end scrapers are typically Mesolithic or Neolithic in date (SCCAS 1976). The majority of the worked flints were recovered from features that also yielded Iron Age pottery although many of the flints were from contexts that have been spotdated as Saxon, suggesting that they were not found in their original prehistoric contexts.

A noteworthy worked flint was recovered from the grave fill of 0195 and is probably a microlithic point, although, as it is incomplete, it may be part of a lightly worked Neolithic leaf-shaped arrowhead. Mesolithic microliths have been recovered from many other sites in East Anglia, and the size and shape along with the patinated nature of the flint found at Coddenham favours this interpretation. Examples of Mesolithic microliths similar to the one found at Coddenham can be seen in the collection from Two Mile Bottom, Thetford, Norfolk (Jacobi, 1984, p54) and slightly less similar are those from Lackford Heath, Suffolk (Jacobi, p52).

The blades that were present on this site also suggest a Neolithic element in the assemblage and the small number of patinated flints supports an indication of a Mesolithic component at Coddenham.

Recommendations for further work

Closer analysis of the flints and comparisons with other flint assemblages in the region may help to narrow down the dating of the Coddenham flint assemblage.

A2.11. Metalworking debris and slag

Jane Cowgill, Freelance metalworking specialist.

Methodology

A total of 338g of slag and associated materials was submitted for recording (total of 8 pieces). The slag was washed when necessary with a toothbrush, dried and identified solely on morphological grounds by visual examination,

sometimes with the aid of a x10 binocular microscope. It was recorded on *pro forma* recording sheets and this information was entered directly into the catalogue below. A note of probable fuel type has been recorded when fragments were incorporated within the slag.

Catalogue

Context 0064, Vitrified clay, 53g.
Original form unclear; very vitrified; could be hearth lining or brick?

Context 0142, Natural ironstone, 15g.

Context 194 (grave 0193), ?Copper-alloy working dross, 14g.
Heavy blob; black and copper coloured; exotic stone??
Context 194 (grave 0193), Natural ironstone, 2g.

Context 0254 (upper fill ditch 0252), Slag, 10g.
Very light and glassy not necessarily from iron smithing (agricultural traction engine?), coal fuel, Post-Medieval or Modern.

Context 0281/0278 (fill ditch 0268), Plano-convex hearth bottom, 19g.
Iron-smithing debris; abraded dense fragment.

Context 0409 (fill ditch 0408), Plano-convex hearth bottom, 122g.
Iron-smithing debris; thin solid flat piece; charcoal fuel.

Context 0512 (fill ditch 0490), Plano-convex hearth bottom, 103g.
Iron-smithing debris; smashed therefore form unclear; hearth lining attached.

Discussion

This is a very disparate group of slags. Only three pieces in the assemblage were generated by iron smithing (contexts 0281/0278, 0409 and 0512) and these show no consistency in form and are therefore unlikely to have been produced by the same smith. No hammerscale was noted amongst the soil in the bags containing the iron smithing slags. The fuel used when all three pieces were formed was probably charcoal.

The only piece that may be of interest is the piece of possible copper-alloy working dross from the grave fill 0194. Slags are sometimes found in Anglo-Saxon grave fills (pers. comm. K. Leahy).

Recommendations

The piece of ?copper-alloy metal-working dross should be submitted for XRF analysis to confirm its identification. Otherwise the assemblage requires no further work.

A2.12. Other finds

Sue Anderson, Suffolk C.C. Archaeological Service.

Introduction

This assessment covers all fired clay, stone, glass and burnt flint/stone, whether catalogued as small or bulk finds.

Fired clay

A total of 502 fragments of fired clay were collected from the site, including 70 fragments collected as a small find (SF 1221). These were divided into four fabric groups based on macroscopic and microscopic appearance, and range of inclusions. The fabrics were as follows:

1. Medium sandy, occasional flint and chalk with some voids, soft, usually buff-red, sometimes partly reduced.
2. Coarse sandy, hard, very dense, usually dark red.
3. Organic tempered, soft, with soapy feel, red.
4. Very fine, smooth, contains clay pellets, few other inclusions, orange or grey.

Table A.18 shows the quantities by fabric.

Fabric	No	Wt/g
1	475	3236
2	20	255
3	5	11
4	2	2
Total	**502**	**3504**

Table A.18. Fired clay by fabric.

Most fragments were small, abraded and undiagnostic. A few contexts produced pieces with smoothed surfaces (0008, 0021, 0393, 0575, 0603, 0622, 0649). One fragmentary object, 1221, was identified as a triangular loomweight, but is not reconstructable for illustration. Other pieces in the same fabric (Fabric 1) may well be pieces of similar objects.

The large group from 0575 included several pieces which appeared slab-like, and one piece may have been a shallow dish. These fragments were not unlike briquetage in appearance, although they were not highly fired and had no vitrified salt traces on the surfaces. Their function is uncertain. However, some more convincing fragments of briquetage were also identified in 0272 and 0363, including fragments of a possible vessel with a flat inturned rim. Similar rim types, which were knife-cut, were noted at the salt production site at Billingborough, Lincolnshire (Cleal 2001, 59).

The fired clay was collected from 51 contexts, including a posthole, ditches and graves, but the majority was from pits. Table A.19 shows the distribution by feature type.

Identifier	No	Wt/g
ditch	12	18
grave	12	24
hearth	13	15
posthole	3	4
pit	339	2763
ring-ditch	2	2
unstratified	6	12

Table A.19. Fired clay by feature type.

Most features containing this material were of Iron Age date, but the small size and heavy abrasion apparent on the majority of fragments indicates that much of the material was likely to have been redeposited.

Recommendations for further work

- Limited work to determine whether the fired clay clusters in any areas of the site may be of value in indicating possible sites of structures which could have contained looms.

Stone

Three fragments of stone were collected. One was a piece of granite (pit fill 0292) which shows no evidence of working. The other two fragments were worked. A sandstone saddle quern end fragment was collected from 0278/0281, and a schist whetstone was found in pit 0643. Pottery found with all three pieces was of Iron Age date. No further work is required on this material.

Glass

Four fragments of post-medieval bottle glass were collected during the evaluation. No further work is required on this material.

Burnt flint and stone

A total of 173 fragments of burnt flint and stone weighing 6375g was collected. Most of the stone was sandstone. Table A.20 shows the quantities by feature type.

Feature type	No	Wt/g
pit	88	3093
hearth	32	2143
posthole	10	219
ditch	6	160
grave	23	171
ring-ditch	4	57
shaft	3	416
well	1	24
-	6	92
Total	**173**	**6375**

Table A.20. Burnt flint/stone by feature type.

Most of the features containing burnt flints or stones were prehistoric in date, although several were collected from graves and are likely to be residual.

Appendix 3: Biological Material Assessment Reports

A3.1. Plant macrofossils from environmental sampling

Val Fryer, Freelance Environmental Specialist.

Introduction

Excavations at Coddenham were undertaken by the Suffolk County Council Archaeological Service Field Team. Contexts of Iron Age and Early Saxon date were recorded including pits and post-holes, shafts, hearths and burials. A cremation (0670) may possibly pre-date the Iron Age deposits. All excavated features were cut into relatively free-draining clay silts which overlay a chalk subsoil. Waterlogged deposits were not encountered.

Factual data

Quantification of material

Twenty samples for the extraction of plant macrofossils were available for assessment, varying in size from 0.5 litre to 16 litres. Samples were taken from the following contexts:

Iron Age pits/post holes	Samples 0152, 0367, 0395, 0399 and 0469	Table A.21
Iron Age shafts	Samples 0539, 0549, 0550, 0651, 0652, and 0671	Table A.22
?Iron Age cremation	Sample 0670	Table A.23
Iron Age hearths	Samples 0136, 0138 and 0379	Table A.23
Iron Age well	Sample 0391	Table A.23
Saxon grave fill	Sample 0309	Table A.24
Saxon vessel fills	Samples 0184, 0208 and 1090	Table A.24

Data collection and method statement

The samples were processed by manual water flotation/washover, collecting the flots in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at low power (magnifications of up to x16) and the plant macrofossils and other remains noted are listed on Tables 3.1.1 – 3.1.4. With the exception of rare fragments of mineral replaced wood (Table 3.1.4), all plant material was preserved by charring.

An estimate of the density of material encountered is given as x = 1 – 10 specimens, xx = 10 – 100 specimens and xxx = 100+ specimens. The taxa noted are categorised as cereals, herbs, wetland plants and trees/shrubs. The presence of other plant macrofossils and other materials is also noted. Abbreviations used in the tables are explained below.

Modern contaminants including fibrous roots, seeds/fruits and arthropod remains were present at a low density in most samples.

The non-floating residues were collected in a 1mm mesh sieve and dried before sorting. Artefacts and ecofacts were removed for further specialist study.

Key to Tables

fg = fragment fsf = fruit stone fragment b = burnt pmc = possible modern contaminant coty = cotyledon

Sample No.	0184	0208	0309	1090
Plant macrofossils				
Charcoal <2mm	x	x	xx	x
Charcoal >2mm				
Mineral replaced wood	x	x	x	x
Other materials				
Black porous 'cokey' material	x		x	
Bone	x	xb	x	
Burnt stone		x		
Copper alloy residues				x
Mineralised soil concretions	xx		xx	
Pottery	x			
Sample volume (litres)	**4**	**10**	**5.5**	**6**
Volume of flot (litres)	**0.3**	**<0.1**	**<0.1**	**0.2**
% flot sorted	**25%**	**100%**	**100%**	**50%**

Table A.21. Iron Age pits/post holes.

Sample No.	0539	0549	0550	0651	0652	0671
Cereals						
Cereal indet. (grains)			x		x	x
Hordeum sp. (grains)			xcf			
Triticum sp. (grains)			xcf			
(glume bases)			x			
Herbs						
Small Poaceae indet.			x			
Vicia/Lathyrus sp.			x			
Wetland plants						
Eleocharis sp.			x			
Trees/shrubs						
Corylus avellana L.					x	
Other plant macrofossils						
Charcoal <2mm	xx	xx	xxx	xx	xx	x
Charcoal >2mm		x	xx			
Charred root/rhizome/stem	x				x	
Indet.seeds			x	x		
Other materials						
Black porous 'cokey' material	x	x			x	
Black tarry material					x	
Bone	xb		xx xxb			
Ferrous slag/waste			x			
Sample volume (litres)	**8**	**13**	**10**	**10**	**16**	**5**
Volume of flot (litres)	**<0.1**	**<0.1**	**0.1**	**<0.1**	**<0.1**	**<0.1**
% flot sorted	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table A.22. Iron Age shafts.

Sample No.	0136	0138	0391	0397	0670
Herbs					
Atriplex sp.			xpmc		
Vicia/Lathyrus sp.					xcoty
Other plant macrofossils					
Charcoal <2mm	xx	xx	x	xx	xxx
Charcoal >2mm	x	x		x	xx
Charred root/rhizome/stem			x		x
Other materials					
Black tarry material	x				
Bone	xb				xxb
Burnt/fired clay			x		
Burnt stone			x		
Pottery		x			
Sample volume (litres)	**5**	**3**	**0.5**	**0.5**	**14.5**
Volume of flot (litres)	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0.1**
% flot sorted	**100%**	**100%**	**100%**	**100%**	**100%**

Table A.23. Other Iron Age features.

Sample No.	0184	0208	0309	1090
Plant macrofossils				
Charcoal <2mm	x	x	xx	x
Charcoal >2mm				
Mineral replaced wood	x	x	x	x
Other materials				
Black porous 'cokey' material	x		x	
Bone	x	xb	x	
Burnt stone		x		
Copper alloy residues				x
Mineralised soil concretions	xx		xx	
Pottery	x			
Sample volume (litres)	**4**	**10**	**5.5**	**6**
Volume of flot (litres)	**0.3**	**<0.1**	**<0.1**	**0.2**
% flot sorted	**25%**	**100%**	**100%**	**50%**

Table A.24. Saxon grave and vessel fills.

Results

Plant macrofossils

Cereal remains and/or seeds of common weed species were noted (generally at a very low density) in nine samples. Preservation was poor to moderate; the majority of the cereal grains and most seeds had become very puffed and distorted during charring and most macrofossils were very fragmented.

Cereals

Avena sp. (oat), *Hordeum* sp. (barley) and *Triticum* sp. (wheat) grains were recorded. *Triticum* sp. grains were particularly abundant in sample 0469; most are of an elongated drop-form and are probably of *T. spelta* (spelt wheat). *T. spelta* glume bases and spikelet forks were noted in samples 0152, 0399 and 0469.

Wild flora

Weed seeds were rare. The taxa noted included *Bromus* sp. (brome), *Chenopodium album* (fat hen), indeterminate small grasses, *Rumex acetosella* (sheep's sorrel), *Scleranthus annuus* (knawel) and *Vicia/Lathyrus* sp. (vetch/vetchling). Wetland plant and tree/shrub macrofossils were extremely rare. Single *Eleocharis* sp. (spike-rush) nutlets were noted in samples 0469 and 0550, a *Corylus avellana* (hazel) nutshell fragment was present in sample 0652 and a fragment of *Prunus* sp. (bullace/damson/sloe) fruit stone was recorded from sample 0395.

Other plant macrofossils

Charcoal fragments were present at varying densities in all samples. Other plant macrofossils included fragments of charred root, rhizome or stem and indeterminate seeds. Small pieces of mineral replaced wood were recovered from the fills of the Saxon vessels.

Other materials

The fragments of black porous 'cokey' material and black tarry material are probably derived from the combustion of organic materials at very high temperatures. Small bone fragments were present in eight samples. Other materials included metallic fragments or residues, burnt clay and stone fragments and small pot sherds.

Statement of potential

Plant macrofossils and other remains were not common.. It appears that most of the material recovered may be derived from a low density scatter of refuse which possibly includes small quantities of cereal processing/storage waste and other detritus. With the possible exception of sample 0469, which may be the residue of a small dump of agricultural rubbish, it appears very unlikely that any of the material was deliberately placed within the features. Some reworking of earlier deposits may be indicated by the presence of small fragments of ?cremated bone within the Saxon burials.

Due to the low density and poor preservation of the material recovered, it is considered very unlikely that any further analysis would significantly contribute to the overall interpretation of the site or its component features. Therefore, no further work is recommended on this material.

A3.2. Human skeletal remains

Sue Anderson, Suffolk C.C. Archaeological Service.

Introduction

A total of 50 graves was excavated at Coddenham. From these, 35 discrete skeletons or parts of skeletons have been identified.

This assessment is based on rapid recording of all contexts of skeletal material. Information on the condition and completeness of each skeleton or bone group was recorded, together with preliminary sexing and a basic age category. Any immediately obvious pathology or congenital anomalies were also noted. This information has been input onto a database using Access.

The majority of inhumations were undisturbed, hence the lack of disarticulated material. A few graves were cut by later ?Saxon ditches, but bones and grave goods seem to have been redeposited close to the original graves so it may be possible to relate these to articulated remains.

Condition

The underlying geology of the site is predominantly clay and gravel. The acidic nature of this soil resulted in the destruction of large amounts of the skeletal remains of most individuals, although a few were relatively well preserved. Table A.25 shows the condition categories assigned to skeletons.

Category	No.	%
V. poor	17	48.6
Poor	10	28.6
Fair	6	17.1
Good	2	5.7
V. good	0	-

Table A.25. Condition of skeletons.

This shows that over three-quarters of the skeletons were in poor or very poor condition. However, the number of better preserved skeletons is still quite high for an East Anglian group of this date.

The completeness of the skeletons was also assessed, although in this cemetery the level of completeness is almost entirely related to condition rather than to disturbance and intercutting. Figure 3.2.1 shows the number of skeletons in groups of ten percent completeness. This is based on scores for basic skeletal elements (cranial vault, face, dentition, torso, arms, hands, legs and feet) ranging from zero (not present) to four (intact). The total score for each skeleton was then used to produce a percentage of the total possible score (32).

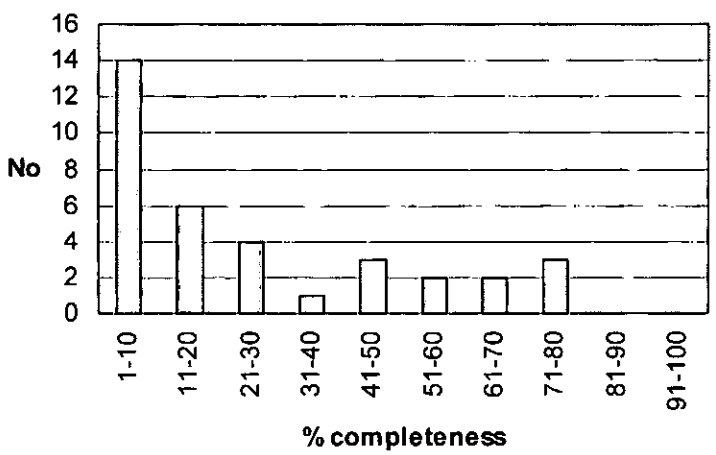

Figure 3.2.1. Completeness of articulated skeletons.

This shows similar results to the condition assessment, with most skeletons falling below 50% complete.

Although there is clearly some bias in preservation, this appears to be random since it is probably related to underlying subsoil pH. There may be some bias due to greater decay of bones of smaller children or older adults, but this is normal in most populations. At this site, it may be possible to distinguish adult and child graves which no longer contain bone, based on size and grave goods. This will be a useful supplement to the demographic data.

Preliminary age and sex structure

Information on age and sex was collected, but was based on rapid analysis and will be refined in the full analysis. The results presented below must be regarded as preliminary.

All skeletons were assigned an age category, but narrow age groups were not used at this stage. Table A.26 shows the preliminary results.

Age group	No.	%
Infant	0	-
Child or ?child	5	14.3
Sub-adult or ?sub-adult	1	2.8
Adult or ?adult	25	71.4
Unknown	4	11.4

Table A.26. Age distribution.

This suggests that non-adults represent 17.1% of the total group, which is a relatively low figure for cemeteries of Anglo-Saxon or Medieval date. It may be possible to identify further 'child' and 'adult' graves based on size.

Table A.27 shows the suggested sex for the 25 adult skeletons.

Sex	No.	%
Male	5	20.0
?Male	4	16.0
Female	3	12.0
?Female	1	4.0
Unsexed	12	48.0

Table A.27. Sex distribution.

It is likely that some of the currently unsexed individuals will be sexable when more detailed analysis is carried out.

Grave good sexing will provide a useful comparator for biologically-determined sex, and will also add to the demographic data. Fourteen individuals have grave goods which will be useful in suggesting sex.

Dental remains

The study of dental remains in this group will be a major part of the analysis due to the poor preservation of bone and comparatively better survival of teeth. Table 3.2.4 shows the degree of completeness of dentitions for individuals in various age groups.

	Score				
Age group	**0**	**1**	**2**	**3**	**4**
Infant	-	-	-	-	-
Child	-	-	5	-	-
Sub-adult	-	-	-	1	-
Adult	9	9	2	5	-
Unknown	3	1	-	-	-
Total	**12**	**10**	**7**	**6**	**0**

Table A.28. Completeness of dentitions (0 = not present, 4 = complete).

This shows that around 65% of skeletons have at least partial dental remains, although three-quarters of these are fragmentary.

Pathology

Pathology and congenital anomalies were recorded only where obvious. Clearly the poorer remains will yield little information concerning the health of the population (although again the teeth of less well preserved individuals may be of use). However, there were several cases of chronic degenerative disease, some examples of spinal pathology, and a possible infectious disease.

Potential for analysis

As this is primarily a cemetery site in the Early Saxon phase, the human remains clearly have a high potential to contribute to its interpretation.

Despite the poor preservation of many skeletons, there are still grounds for optimism. It is anticipated that analysis will involve a high level of dental recording, due to the common presence of teeth even where bone has been destroyed. This will include, in addition to more usual data collection, the measurement of some teeth to aid sexing, and recording of dental non-metric traits. Recently developed sexing criteria for poorly preserved material will be used and tested against grave good sexing, where available. A full demographic study should be possible using both biological and artefactual evidence.

A study of the health of this population will be interesting, particularly comparing 'high' and 'low status' groups. Preservation will be a problem in this, but there should be enough information from the better preserved skeletons to provide some data for analysis.

Comparative studies with contemporary populations will be useful in placing this group in context. It will be compared with other recently excavated Early Saxon groups from Suffolk, if data is available.

Although preservation of the skeletal material is poor by general standards, this is the only group of its date to have been excavated in central Suffolk so far. Any analysis which can be carried out will therefore be invaluable for the understanding of human skeletal biology in the Early Saxon period of East Anglia.

A3.3. Animal bone

Alexis M. Willett, Suffolk C.C. Archaeological Service.

Introduction

A total of 587 fragments, weighing 0.491kg, of faunal remains was recovered by hand from the Coddenham Quarry site. The bones were generally of very poor preservation and the majority of the elements remain as very small fragments. As a result of their poor condition 150 fragments, 26.2% of the total number but only 6.0% of the total weight, were considered to be unidentifiable. Table 3.3.1 provides a summary of the animal bone quantification. A more detailed list is available in the appendix.

Methodology

All the bones were examined by eye and, for each taxon, were assessed in terms of skeletal elements (also part and side of the body), numbers of identified specimens (NISP), weight, level of maturity, any cut/chop and gnaw marks and any other observations. The results were recorded on SCCAS faunal remains forms and entered into a Microsoft Access database. A full list of the data is available in the archive/appendix. References used for identification can be seen in the bibliography (Hillson 1992; Jepson 1938 and Schmid 1972).

Results

Table 3.3.1 shows the summary of quantification for each taxon. Six taxon categories were identified in this assemblage, although three of these are broad groupings in order to narrow down the classification of those elements that were readily identifiable. The broad groups can be defined as:

Large mammal - an animal approximately the size of cattle / equid / large deer;
Medium mammal - an animal approximately the size of sheep/goat / pig / small deer;
Small mammal - an animal approximately the size of a cat or smaller;
Sheep/goat - sheep and goat were not distinguished due to a lack of time and a reference collection.

Taxa	NISP	No	Wt/g
Cattle (*Bos taurus*)	15	240	143
Sheep/goat (*Ovis/Capra*)	24	43	84
Pig (*Sus scrofa*)	1	19	20
Equid (*Equus* sp.)	1	1	21
Large mammal	6	81	130
Medium mammal	3	45	59
Small mammal	2	8	7
Unidentifiable	-	150	27
Totals		**587**	**491**

Table 3.3.1. Summary of quantification by taxa.

It is the teeth of larger mammals, such as cattle, sheep/goat, equid and pig, that have mainly survived on this site, presumably due to their most robust nature in comparison with the rest of the skeleton. Very few fragments of other skeletal elements are present in this assemblage and most of these appear to be from one sheep/goat. These bones were recovered from context 0674 and are in a far better state of preservation than the other bones from the site. No small mammal, bird or fish bones were recovered from this site further emphasising the poor soil conditions for bone preservation. Chop marks were seen on a small number of the bones and one fragment was also charred. No obvious pathological conditions were noted and no gnaw marks were found. It is possible that the poor condition of the bone surfaces may have obscured minor bone changes from being observed.

Only a few fragments of bone were recovered from each context and in general they represent single elements. Table 3.3.2 shows the summary of quantification by feature type where it can be seen that the large majority of the animal bones were recovered from pits. Approximately 20% of the total number of animal bone fragments were excavated from features that also produced Iron Age pottery and a smaller but significant amount was found in contexts that have been spotdated as Early Saxon.

Feature	No	Wt/g
Ditch	12	8
Ring ditch	21	4
Pit	547	457
Grave	5	3
Shaft	1	3
Well	1	16

Table 3.3.2. Summary of quantification by feature type.

Discussion

Little information about the site may be gained from this animal bone assemblage. It is apparent that the major domesticates are represented and it is probable that this collection of bones is just a very small fraction of the original numbers of bones that were deposited there. However, the very poor preservation of the bone indicates that the possible numbers and range of animals on the site cannot be reasonably estimated. Also, the nature of the bones is difficult to ascertain as a result of their poor condition and whether they have been butchered or not, for example, cannot really be assessed.

Further work

Due to the small size of the assemblage and the poor quality of the animal bones no further work is recommended on the animal bones from the Coddenham Quarry site.

A3.4. Shell

Sue Anderson, Suffolk C.C. Archaeological Service.

One unstratified oyster shell (*Ostrea edulis*) was collected during the excavation. Two snail shells were found during the evaluation, but both were common types (*Helix aspersa* (0062) and *Cepaea nemoralis* (0019)), both of which can be found in such diverse habitats as forests, thickets, sand dunes and gardens.

A large quantity of small snail shells was collected during cleaning of the skull of skeleton 0232. A small sample was kept, and they were identified as *Caecilioides acicula*, a species which inhabits dry pastures, quarries and grassy places, is subterranean and feeds on roots (Ellis 1969).