# **OCCASIONAL PAPERS**



6

A ROMAN MALT HOUSE: Excavations at Stebbing green, ESSEX 1988

**East Anglian Archaeology** Archaeology Section Essex County Council

## EAST ANGLIAN ARCHAEOLOGY

# A Roman malt house: excavations at Stebbing Green, Essex 1988

## by Owen and Miranda Bedwin

with contributions by Brenda Dickinson, Kathy Horsley, Hilary Major, Peter Murphy, Steve Wallis and Martin Winter and an appendix on the Boxted Wood villa by Chris Going

illustrations by Roger Massey-Ryan, with Nick Nethercoat and Miranda Bedwin

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## **Cover illustration**

Excavation in progress: in the foreground, the pit containing traces of a timber lattice, interpreted as supports for the base of a wooden tank for soaking barley.

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## Summary

This report describes the rescue excavation of a Romano-British timber building and probable tank structure, interpreted as a malt house. The building was part of the estate centred on the Boxted Wood villa, midway between Braintree and Great Dunmow. The malt house was probably operating during the 2nd and early 3rd centuries; it was thoroughly robbed out sometime after the mid-3rd century. The villa itself, c.250m to the north-west of the 1988 investigations, had been discovered in 1947. Details of the excavation that located it are published here for the first time as an appendix.

## Chapter 1. The Excavation

## Introduction

Early in 1988, proposals for a 12-acre borrow pit on farmland at Stebbing (Fig.1C) came to the attention of the county council's archaeology section. The purpose of the pit was to provide gravel for the construction of the Braintree by-pass, a few kilometres to the east. No sites were known within the boundaries of the pit, and because the crops were well advanced in the fields to be affected, fieldwalking or geophysical survey were impracticable. The nearest site on the Essex Sites and Monuments Record was a small villa at Boxted Wood, discovered in 1947, but not published; this was c. 250m north-west of the west end of the proposed pit (Fig.1). The line of a Roman Road (Stane Street) also lay to the south, though whether it corresponds precisely to the line of the modern A120 is not certain. However, given the possibility of archaeological remains relating to the villa estate, a watching brief condition was requested on any planning consent which might be given.

In due course, consent for the borrow pit was granted and topsoil stripping began in May 1988. This was regularly monitored by Owen Bedwin; most of the area was entirely devoid of features or finds, but at the extreme western end, adjacent to a pond, a spread of Roman finds, mostly pottery, but with some substantial fragments of Millstone Grit, was noted, measuring c. 100 by 80m. Although the topsoil had not always been removed cleanly, many features were visible, and negotiations were entered into so that formal excavation might begin. The landowners, Clive and John Harvey, and John Laing Construction (who were removing the gravel for the by-pass) quickly gave consent, and a seven-week excavation took place from late May to mid-July 1988, under the direction of Owen Bedwin. Funding was provided by Uttlesford District Council, English Heritage, Hugh and Judy Johnson, and Clive and John Harvey; John Laing Construction (through John Lucas) provided earth-moving machinery, and Braintree District Council provided one of its Manpower Services Commission Community Programme teams under the guidance of Martin Smoothy for four weeks. Post-excavation costs were met by Essex County Council; the writing of this report was mainly the work of Miranda Bedwin.

## Excavation

The archaeological deposits were mostly at the foot of a gentle, south-facing slope, and partly on the flat flood-plain of the River Ter, at that point simply a small brook (Fig.1). The subsoil was a variable gravel with a substantial admixture of orange-brown clay in the top 50cm. Below that it was a clean, well-drained sandy gravel.

Following the discovery of Roman pottery in the topsoil, the western end of the borrow pit (corresponding to an area about four times the size of Trench A in Fig.2) was less rigorously stripped of topsoil by box-scraper. This left a considerable number of patches of topsoil in situ, but meant rather less damage to the tops of archaeological features. The remains of the topsoil were

then stripped by a variety of back-hoe machines with toothless ditching buckets, operating under archaeological control. Areas corresponding to Trenches A, B and C (Fig.1) were then trowelled clean, and all further excavation was by hand. The general aim was to establish as complete as possible a ground plan of surviving features and then to investigate selectively the more significant ones as resources allowed. Work concentrated on Trench A, which was the focus of archaeological remains. Outside the limits of this trench, a number of ditches clearly continued (Fig.2), but no other substantial archaeological features could be seen. Trenches B and C contained no features.

The topsoil over the area of Trench A was 25 to 30cm deep, directly overlying subsoil. The only exception to this was at the southern end of the trench, from the southern edge of pit 61 southwards (Fig.2). There were two shallow layers between topsoil and subsoil. The upper one, context 13, was a uniform, mid-brown, stone-free silty layer, up to 10cm thick; it contained abraded Roman pottery, but also modern glazed wares. Below this was a very dark grey silty clay, up to 15cm thick, with varying amounts of gravel (context 14); this contained Roman pottery, some unabraded, and some iron objects, mostly nails, all of which could have been Roman. Both contexts 13 and 14 were removed by machine because of pressure of time, though both were scanned by metal detector before this took place.

Figures 2 and 3 therefore represent all surviving archaeological features below both the topsoil and contexts 13 and 14. Almost all features were cut into the subsoil. The only exceptions were the spreads of clay-with-chalk (contexts 35, 36, 37, 42, 43 and 63), and the flint cobbling (contexts 45, 46 and 214), all of which rested on gravel subsoil. A representative selection of sections is shown in Figs 4 and 5. Apart from obviously modern mole drains and field boundaries (Figs 2 and 3), all datable features belonged to the 2nd-4th centuries AD.

Individual features, or groups of features, will now be described in turn, as follows:-

- 1. Spreads of clay-with-chalk
- Areas of flint cobbling 2.
- 3. Ditches/gullies
- 4. Pits/scoops
- 5. Flue bases
- 6. Post holes
- 7. Miscellaneous

For reasons that will become apparent later, features are grouped by general type, not by phase. Although there was undeniably a sequence of events, the phasing of this sequence is severely hampered by poor dating evidence, making attribution of many features problematical. This is more fully considered in the Discussion.



Figure 1 Stebbing Green 1988. Site location and disposition of trenches. The borrow pit is now a reservoir



Figure 2 Stebbing Green 1988. General plan of trench A. The position of the dog burial (context 188) is shown, though not visible at this stage of the excavation



Figure 3 Stebbing Green 1988. Detailed plan of all features cut into the subsoil in the southern half of trench A, showing the location of sections. Areas of clay-with-chalk and flint cobbling are omitted for clarity

1. Areas of clay-with-chalk (contexts 35, 36, 37, 42, 43 and 63)

These were spreads of chalky clay, *i.e.* small chalk fragments in a matrix of grey clay. They were of variable thickness, up to a maximum of c. 25cm. In some areas, the chalky clay was set directly on the gravel subsoil; in others, it overlay a disturbed looking gravelly layer (*e.g.* Fig.5, S26, where the chalky clay, 63, rests on natural at the east end of the section, but overlies disturbed gravel, 192, elsewhere). Note that the dog burial, 188, occurred in a localised thickening of this disturbed gravel fill; this is described more fully below.

As initially uncovered, these chalky areas were well compacted, as if they had been rammed down, but they weathered rapidly, becoming cracked and crumbly. Their general visible appearance corresponded closely to the description of the 'chalky clay' used as floor make-up in the Boxted Wood villa (appendix). It is therefore highly likely that this material served a similar purpose in the area examined in 1988, thus defining some kind of building. Sections excavated through these areas (*e.g.* S26 in Fig.5) recovered Roman pottery of possible 3rd-century date.

On this interpretation, the irregular edges of the surviving patches of this material, especially of contexts 42, 43 and 63, are unlikely to have been caused by wear while the site was in use. It is far more probable that the building and its environs were robbed of all re-usable materials at, or after, the end of their working life, and that this, plus perhaps some recent ploughing, has resulted in damage to an originally much larger area or areas. (Note that within context 63, one of the pairs of flue bases, 115/117, was found; this is considered more fully below).

The only boundaries of this material which may reflect its original extent are the western edge of context 35, where it abuts the cobbling, 46, and, perhaps, a line corresponding to the southern edge of 35, 36 and 37. In this latter case, however, it could have been truncated by ditch 29; the relationship between this and 35/36/37 was unfortunately totally removed by a mole drain (Fig.2). The maximum area of clay-with-chalk would have been 11m east to west by 12m north to south.

(Chalky clay material occurred in one other location, as a layer within pit 125 (Fig.7). It is not thought to have been floor make-up here and is discussed more fully below in the description of pit 125).

## 2. Areas of flint cobbling (contexts 45, 46 and 214)

These were three areas of well compacted flint cobbling, up to 15cm thick. In cleaning over the top of these, a few pieces of Roman tile were found. Limited excavation of the cobbling produced only the L-shaped iron lift key (Fig.8, No.12) from context 45.

In section, (the western end of S28 in Fig.5), the cobbling of context 46 was seen to butt up against chalky clay, 35, and was therefore likely to have been laid down at the same time.

The disposition of these cobbled areas is of note. Contexts 45 and 46 represented hard-standing on either side of the large depression, context 27, which was about a metre deep. This depression contained a damp, muddy fill, which ran into a small irregular pond (Fig.1). According to the landowners, the pond was spring-fed, and had been in existence since at least the beginning of the century. It is also shown on the first edition OS map of the area (1875). If there had been a pond roughly in this location during the Roman period, then the cobbling would probably have been necessary to prevent the edges becoming a quagmire.

The third area of cobbling, context 214 (Fig.7), was around the edge of pit 125, and is considered further in the description of that feature, below.

## 3. Ditches/gullies

Because the variety makes classification difficult, these are dealt with on the basis of location within trench A (moving from north to south) and orientation.

Linear ditch, context 2 (Fig.2) This was a shallow feature, up to 25 cm deep, oriented roughly east-west across the northern end of trench A; the stretch exposed had a pronounced kink. Because of its distance (over 60m) from the focus of Roman activity to the south, it may have had little or no connection with that activity. The single fill of this ditch, context 3, contained a sherd of stamped samian, dated to c. AD 150–180 (pottery report, below).

Linear ditches, contexts 9 and 11; 128, 130 and 208; 31; 71/149 These were all shallow features, aligned north-south, on the western side of trench A. Ditches 9 and 11 were very similar, up to 30cm deep, with virtually identical fills of dark grey clayey silt with occasional gravel inclusions and a few fragments of Roman pottery. A section positioned to try and establish their relative sequence (S1 in Fig.4) revealed only that they had silted up at more or less the same time.

Ditches 128, 130 and 208 were all small, shallow features, with similar black or dark grey silty clay fills containing a little gravel. The fills were very like those of ditches 9 and 11; indeed, in plan (Fig.2) it appeared as if ditch 9 could have bifurcated into 128 and 130. Unfortunately, a modern ditch and mole drain had obliterated any relationship.

Ditch 128 was relatively short, measuring c. 4.1m, north to south. Its southern end was cut by ditch 75 (Fig.2). Ditch 130 was also cut by ditch 75, but continued southwards where it ran parallel to another short length of ditch, 208 (5.5m long, north to south). The fills of 130 and 208 were very similar, and appeared to be contiguous, if not partially overlapping, in plan. Sections intended to clarify the relationship (e.g. S26 in Fig.5) did not do so, and the few finds of Roman pottery provided little help in this respect. All that can be said is that on grounds of appearance, the two ditches appeared to have silted up in much the same way at much the same time.

South of the end of ditch 208, ditch 130 was given the separate context number 31. Fill and profile remained similar. Ditch 31 cut the north end of a possible beam slot, 33. Both contexts 31 and 33 cut the clay-with-chalk spreads (S30, Fig.5).

At its southern end, ditch 31 was cut by a modern mole drain at precisely the point where its relationship with east-west ditch 29 would have been determined (Fig.2). The line of ditch 31 was, however, continued southwards by ditch 71. The fills and profiles of contexts 31 and 71were very similar (compare S13 in Fig.4 with S26 in Fig.5). It was possible to establish a relationship between ditch 71 and the east-west ditch, 29. The single fill of 71(context 72) was continuous with an upper fill of 29 (context 40 in S8, Fig.4), implying that the later silting of ditch 29 was contemporary with the silting of ditch 71.



Figure 4 Stebbing Green 1988. Selected sections (S1–S25). Positions of these shown on Figure 3. Key as for Figure 5



Figure 5 Stebbing Green 1988. Sections S26–S30 through the clay-with-chalk spreads. Positions of sections shown on Figure 3

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At its southern end, ditch 71 swung round to the west, where it was given a new context number, 149 (Figs 2 and 3). Fill and profile remained much the same. Ditch 149 cut the shallow, ill-defined depression 138.

Ditches 51, 38, 83 and ?73 Between them, these ditches made up the curvilinear northern end and rectilinear east and west sides of what looks in plan like an inverted U with very long sides. All fills and profiles were very similar, although for most of its length ditch 83 (on the east) was rather smaller than ditches 38 and 51. No relationship could be established between ditches 51 and 11; they appeared to have silted up in a similar way at the same time. However, ditch 51 was undeniably cut by the east-west ditch 75/98/79 (see below).

Ditch 73, towards the southern end of the excavated area, may perhaps have been a continuation to the south of ditch 38. The northern end of 73 did not have a distinct butt end, merely shallowing out, and could have originally extended north to link up with 38. Ditch 73 was cut by the rectangular pit, context 151 (Fig.2).

Ditch 57 In plan, this L-shaped ditch was incomplete, its western end being cut by the modern east-west field drain running across the centre of Trench A. Its eastern end ran into the east arm of ditch 51. Its profile and fills were extremely similar to those of the latter. The pair of flue bases 53 and 55 were cut by ditch 57.

*East-west ditches 75/98/79 and 25/77* The former was a rectilinear ditch aligned roughly east-west across the centre of the excavated area. Its fill and profile (*e.g.* S14 and S16 in Fig.4) were remarkably similar to all the other ditches so far described, though its central stretch, context *98*, was rather deeper. Ditch *98* cut a small post hole, context *102* (S20 in Fig.4). It also cut the U-shaped ditch *51* (S22 in Fig.4), and the small north-south ditches, *128* and *130*. The western end of *75* ran into the large irregular depression, context *27*.

Ditch 25/77 was c. 2m south of ditch 79 at the eastern edge of trench A. Fill and profile were very similar to those of ditch 79. Context 25 was effectively the broad, shallow butt end of 77. No relationship was established between 25/77 and the north-south ditch, 83.

North-south ditch 91/104 This was a short length of ditch, c. 4.2m overall, which turned sharply westwards at its northern end, though the feature at this point had been largely removed by the substantial modern boundary ditch running across the centre of the excavated area (Fig.2). Fill and profile (e.g. S19 in Fig.4) were similar to 75/98/79, though it was rather shallower. No relationship was established between 91/104 and east-west ditch 98.

Ditch 29 This was a slightly curving ditch, 18.0m long, immediately south of the clay-with-chalk areas. Its floor sloped gradually from west to east, culminating in a definite, flat-bottomed depression at its eastern end (compare S6 and S7 with S8 in Fig.4). It was the deepest feature in trench A, with a maximum depth of 1.0m at the eastern end. Most of its lower fills were gravelly, though the major upper fill over the eastern half, context 40, was a very dark grey silty clay, identical in appearance to the fills of almost all the shallower ditches, e.g. 9, 11, 31, 38, 83. Context 40 was also one of the few to be dated with reasonable confidence; it contained pottery of the late 3rd/early 4th centuries, which matches the date of the fills of 31 and 38. At the eastern end only, immediately above the flat-bottomed depression, there was a substantial deposit of charcoal and charred grain in context 68 (S8 in Fig.4); the section shown in S8 was sampled for carbonised plant remains (report below).

One other observation is of note; namely, at its western end, the fills of ditch 29 merged indistinguishably with those of the depression 27. This may be seen in S6 (Fig.4), where uppermost fill, context 133, and to a lesser extent context 40, are part of both 29 and 27.

Ditch 212 This ran east-west in the south-east corner of trench A. It had a shallow butt end at its western extremity, contiguous with the eastern butt end of ditch 29 (Figs 2 and 3). Ditch 212 was up to 1.5m wide and up to 25cm deep (e.g. S25 in Fig.4), with a rather stony fill, but very few finds. It was cut by pit 125 and ditch 15.

Ditch 81 This was another wide, shallow feature aligned north-west/south-east in the south-east corner of trench A. Its fill and profile were similar to ditch 212. Its lower fill, context 85, was fairly stony, though its dark grey upper fill, 82, much less so (S17 in Fig.4). There were few finds.

Curvilinear ditch 139 This was located in the south-west corner of trench A. It was extremely shallow, with an irregular profile, and seemed to be linked to the irregular scoop, 138 (see below). The fills of 138 and 139 were very similar.

### 4. Pits/scoops

These were relatively few. Pit 125 was the largest and by far the most complex, and is described in detail below. Of the remainder, only pit 151 had clearly cut sides, the others being more in the nature of scoops, often shallow and irregular.

*Pit 125 and its environs (Fig.7)* In addition to the pit itself, this includes the shallow L-shaped ditch, *15*, cobbling, *214*, and the post hole, *173*. These are considered together on grounds of propinquity, rather than any demonstrable functional link, though the cobbling butts up to the pit, the shape of which is respected by the ditch.

Pit 125 was roughly rectangular, measuring 4.1 by 2.7m. It was cut up to 24cm into the subsoil, with fairly steep sides and a flat floor. There was also a small, lobe-like extension, 196, on its south side.

As first exposed, the pit had two upper fills. The bulk consisted of dark brown, silty clay, context 126; around most of the edge of this was a chalky clay, context 155, very similar in appearance to the areas of rammed clay-with-chalk already described. Spread out within the top of fill 126 were a large number of more or less intact animal bones (Fig.7A). These were mostly horse, almost certainly deriving from a single individual, plus a few bones of cattle. The horse bones included, among others, left and right femora, tibiae, radii and ulnae, plus most of the phalanges. There was, however, little sign of articulation and there were no teeth or fragments of skull. This absence may be more apparent than real since there had been machine clearance right down to the top of 126. The pottery from this context could not be closely dated.

Context 126 was then removed, to reveal 155 running beneath it across the whole pit (Fig.7C). Layer 155 was then removed, exposing a thick, horizontal layer of charcoal, context 156. Roughly within the centre of this was the articulated skeleton of a small chicken, complete apart from the head.



Plate I Stebbing Green 1988. Pit 125, showing the pattern of staining on its base. Linear scales 2 metres

Below context 126 was a framework of dark, linear stains, referred to as context 205 in Fig.7, within a disturbed gravelly fill, context 206 (Plate I). Context 205, which although very dark grey-brown, was not charcoally, measured 3.5 by 2.5m, effectively filling the floor of the pit. It is interpreted as the decayed in situ remains of a substantial timber framework.

The cobbling, context 214, formed an area of hard-standing around the edges of the pit. The cobbling overlay the backfilled shallow ditch, 212 (Fig.7A) and the circular post hole, 173. It was bounded to the south and west by another shallow ditch, 15, which was up to 30cm deep (S4 in Fig.4).

*Pit 151* This was a few metres from the southern edge of trench A, and cut through ditch 73. It measured 2.5 by 1.8m, and was 0.6m deep with a flat bottom. Its main fill, 152, was fairly compact (S23 in Fig.4), with flecks of chalk and charcoal, a little pottery and fifty-six fragments piece of millstone grit. There was a thin layer of charcoal-rich silt, 204, on the floor of the pit.

*Pit/scoop 61* This was an irregular, scoop-like feature near the eastern edge of trench A. It measured c. 2.8 by 2.4m, and was very shallow (max. depth 30cm) with gradually sloping sides (S11 in Fig.4). Its main fill, context 62, was a virtually stone- free, almost black silt, with some charcoal, pottery and animal bone. The lower fill, *132*, was harder and stonier, with some redeposited orange clay.

*Pit/scoop 23, with 202* This was another irregular scoop, adjacent to, and partly beneath, the eastern baulk. Context 23 looked very similar in profile to context 61 (above), with a similar fill, 24, containing charcoal, flecks of burnt daub, a little pottery and some iron nails. Within the floor of the south-west corner of 23 was a slightly deeper

depression (best seen in S24 in Fig.4), given the separate context number 202. This had a much more compact and stonier fill, 203, containing only a few scraps of pottery.

*Pit/scoop 21* This irregular oval feature was 3m west of 23, but was rather smaller, measuring only 1.3 by 1.0m. It too was shallow, up to only 30cm deep (S5 in Fig.4), with a dark grey, charcoally upper fill, 22, above a harder, stonier fill, *114*. The upper fill was remarkable for containing six enigmatic iron objects, four of which are illustrated in Fig.8. Four of these were bars with T-shaped heads, of uncertain function, and the exact purpose of the other two is also unclear. The pit also contained a few iron nails, a little pottery and some burnt daub.

*Pit/scoop 189* This was a tiny, shallow scoop, barely 50cm across, immediately east of context 21. It was less than 10cm deep, and yielded only a few scraps of pottery from its slightly charcoally fill.

*Pit/scoop 123* This was another shallow, irregular feature, c. 1.0m across at most, a few metres due north of 21, and due west of 61. It was c. 30cm deep and cut through the clay-with-chalk layer, 43 (S29 in Fig.5). Its fill contained a little charcoal and a few chalky flecks.

*Pit/scoop 121* This was a circular scoop, c. 1.1m across, to the north-east of 123, and adjacent to ditch terminal 104. Its fill was a sterile, dark brown silt.

*Pit/scoop 138* This was the most irregular and ill-defined feature in this class. It lay in the south-west corner of trench A, and measured c. 8.0m north-south and up to 3.0m east-west. Its fill, a soft, almost black silt, with a little pottery, was visually indistinguishable from that of 139 to the north and 149 to the south.

*Pit/scoop 175* This was a small, oval pit, c. 1.2m by 0.9m, on the eastern side of trench A, between the ditches 25 and 104. It was 60cm deep (S27 in Fig.5), with a compact, gritty fill.

## 5. Paired flue bases

There were three of these pairs. Two were cut slightly into the subsoil; these were 53/55, lying between the modern east-west field ditch running through the centre of the excavated area and ditch 57, and 64/66, due south of 53/55, in the angle formed by ditches 98 and 104. The third pair, 115/117, were scoops in the clay-with-chalk floor, 63, best seen in S26, Fig.5. All are shown in plan at the same scale in Fig.6.

Contexts 53/55 Both were truncated to the north and south. They consisted of similar, shallow scoops, up to 20cm deep, with a soft dark fill containing much charcoal and burnt daub. Both were c. 0.7m across, though their full extent north to south could not be determined. There were signs of scorching on the loose gravel subsoil that formed the base of these two features.

Contexts 64/66 These were both complete and extremely similar to 53/55. Dimensions were 1.2m by 0.8m, with a maximum depth of 20cm. Fills were identical, and very similar to those of 53/55, *i.e.* soft, loose and charcoal-rich, with much burnt daub. There was evidence too of scorching of the subsoil around the edges of these features.

Contexts 115/117 These were two slightly softer areas of heavily burnt (*i.e.* reddened) clay-with-chalk in the spread 63 (S26 in Fig.5). Although the fills, 116 and 118, were dissimilar to those of the other two flue bases, they are grouped here on the basis of size, shape, evidence of burning and the paired arrangement. It is possible that these slightly looser areas of burnt clay-with-chalk were not fills of cut features, but had simply formed immediately beneath a pair of flues resting on the floor above.

Soil samples from the fills of 53/55 and 64/66 yielded charred seeds, including sprouted wheat grains (see report by P. Murphy below).

## 6. Post holes

There were few of these, rather scattered and showing no pattern. They are considered from north to south.

*Post hole 198* This was cut through the clay-with-chalk spread, 63. It was circular, 0.85m in diameter and 0.4m deep. There was a clear central post pipe, 200 (S26 in Fig.5).

*Post hole 191* This was 7m east of post hole *198*. It too was circular, though rather smaller, being 0.65m across and 0.4m deep. There was no post pipe and no finds were recovered.

*Post hole 158* This was 2m south of the large east-west ditch 29. It measured 0.65m in diameter, and was 0.15m deep. Its stony fill contained no finds.



Figure 6 Stebbing Green 1988. Detailed plans of three paired flue bases: contexts 53 and 55; 64 and 66; 115 and 117

Post hole 173 This was adjacent to pit 125 and has already been discussed with that feature, above.



Figure 7 Stebbing Green 1988. Plan and section of pit 125



Plate II Stebbing Green 1988. Dog burial. Linear scale 20 centimetres

## 7. Miscellaneous

There were three features in this category; a dog burial, a large depression and a possible beam slot.

Dog burial, context 188 This was the complete skeleton of a dog, c. 0.5m long, lying on its right side, in a localised thickening of the gravelly levelling layer, 177 (Plate II; Fig.2 for location). There was no detectable grave cut and there were no associated finds, although 177 elsewhere yielded a few small sherds of Roman pottery. It is interpreted as a foundation deposit beneath the building implied by the presence of the spreads of clay-with-chalk floor make-up.

Depression 27 This was only partly excavated because it was so wet and muddy. Its lowest fills seemed continuous with fills at the west end of ditch 29, and the possibility therefore exists that this represents the partly silted up remains of a Roman pond, with water derived from the same spring as that which serves the present-day pond (Fig.1C, inset). As such, it would have provided a valuable source of water for those working in the building just to the east, and also perhaps for whatever processes were taking place there (considered more fully in the discussion).

Beam slot 33 This very shallow, L-shaped feature was cut into the top of the clay-with-chalk spreads between the north-south ditches 31 and 38 (Fig.2). It is tentatively identified as a beam slot because of its flat-bottomed profile (S30 in Fig.5) and precise right-angled corner at its north end. It measured 4.2m north-south, was 6cm deep at the most and is soft, silty, dark grey fill contained a little Roman pottery.

## Chapter 2. Specialist Reports

## Coins

### by M. Winter and S. Wallis

A total of twenty-one coins came from the site; nineteen were Roman, one was medieval and one probably post-medieval. All were recovered by metal-detector; six during the initial survey, fifteen during the excavation itself. All came from the topsoil, which is perhaps reflected in the high proportion which are worn and illegible.

#### Catalogue

- 1. Ae, illegible, early 3rd century.
- 2. Ae, illegible, but portrait is probably Hadrian, AD 117-38.
- 3. Ae, illegible, probably 2nd century.
- Medieval silver penny, worn so otherwise unidentifiable. It has been pierced for use as a pendant.
- 5. Ae, illegible, probably a barbarous radiate, late 3rd century.
- 6. Ae, barbarous radiate, late 3rd century.
- 7. Ae, coin of Constantine II RIC 25 (Aquileia), AD 337-40.
- Ae, coin of Constants or Constantinius II, uncertain mint. Rev. FEL TEMP REPARATIO, radiate phoenix standing r. on rocky ground, AD 348–350.
- 9. Ae, barbarous radiate, late 3rd century.
- 10. Ae, illegible, 4th century.
- 11. Ae, illegible, late 4th century.
- Ae, coin of the House of Constantine. Rev. VICTORIAE LAETAE PRINC PERP. AD 318–9.
- Ae, radiate of uncertain Emperor and mint. Rev. ?FIDES MILITUM, female figure. AD 270–90.
- 14. Ae, illegible, 4th century.
- 15. Ae, barbarous radiate, probably copying Tetricus I, AD 270+.
- 16. Ae, illegible, early 4th century.
- Ae, radiate. Rev. AEQUITAS, female figure with cornucopia. Portrait may be Carausius. AD 270–90.
- 18. Ae, illegible, 4th century.
- 19. Probably a post-medieval trade token.
- 20. Ae, illegible, late 4th century.
- 21. Ae, illegible, late 4th century.

### Discussion

Since the coins were unstratified, and the majority were worn, their reliability for dating is less than that of the pottery (below). The only divergence from the ceramic evidence is the presence of at least three late 4th-century coins, indicating some form of activity continuing at this time.

## **Copper alloy**

#### by H. Major

None of the copper alloy came from a stratified Roman context, although the assemblage included a few items of Roman trinket jewellery. The post-medieval objects included a shoe-buckle fragment, part of a rumbler bell and a white metal button.

### Catalogue

(Fig.8)

- 1. Coiled finger-ring, broken at one end. The flattened terminal is decorated with a punched pattern and two transverse lines. This has probably been cut down from a bracelet similar to Crummy 1983, 45, no. 1710, which has a 4th-century date. *Context 1 (topsoil)*.
- Finger-ring fragment with a bezel containing a green glass stone. It is probably Roman, from a trinket ring of Robinson's type 8 (Robinson 1978). Context 1 (topsoil).

- 3. Bracelet fragment with D-shaped section of variable width. The terminal is decorated with transverse lines. *Unstratified*.
- Tongue-shaped terminal, probably from a bracelet, with lenticular section and variable width. There are traces of white metal coating on the outer face. Possibly Roman. Unstratified.
- (Not illus.) Two pin fragments, probably part of a Roman brooch pin. Context 1 (topsoil).

## Lead

## by H. Major

All the lead came from the topsoil. Most of it consisted of small solidified puddles, casting waste and offcut scraps. These are likely to be 19th or 20th century, and represent the waste from casting lead for farm or domestic use. The only objects found were three weights, probably of a similar date, and a 9mm bullet.

## Iron

## by H. Major

There were seventy-three iron objects, of which only twenty came from stratified contexts. Most of the unstratified material was recovered by metal detecting after topsoil stripping. Many types of utilitarian iron objects retained their basic form from the Roman period through to the beginning of this century, and much of the unstratified material is therefore undatable, but likely to be fairly recent.

This undatable material included fragments of two tanged and two socketed blades; a wedge; a carpenters dog; a U-shaped bar, probably part of a buckle; three ring fragments; and a possible wire fish hook.

Six horseshoe fragments came from the topsoil, and are likely to be post-medieval, with one exception which had a wavy edge, a shape suggesting an earlier medieval date.

## Catalogue

(Fig.8)

Objects from context 22 (upper fill of pit 21)

- 6. Bar, with thickened central section and a bolt through each end, probably with domed heads (this is unclear on the X-ray). The holes for the bolts are square and the bolt heads are on the flat side of the bar. The centre of the bar is possibly cracked.
- 7. Rectangular block, with no detail showing on the X-ray. There are fragments of mineralised wood concreted onto the surface. There is a slight depression (probably circular) in the centre of one face, obscured by very hard corrosion. 68 × 45 × 22mm. (Vincent Pargeter, ECC millwright, comments as follows: almost certainly the bottom bearing of a vertical iron spindle, or a wooden vertical shaft with an iron pin. The vertical spindle could be that of a millstone or horse gear. The iron bearing would have been embedded in a wooden beam).
- 8. Bar with T-shaped head, with curved, damaged terminals. The other end of the bar is broken, but is starting to curve. A small, curved terminal fragment from this context may be from this bar, as shown in the drawing, but the join is not conclusive.
- 9. Bar, similar to No. 8, but with the head complete. (Vincent Pargeter, ECC millwright, comments as follows: Nos 8 and 9 look like special nails for attaching round or half-round poles to a larger beam at right angles. The T-form prevents the round timber from splitting under stress).
- 10. (Not illus.) Bar, similar to No. 9, but with less of the shaft surviving.
- 11. (Not illus.) Part of the head and shaft of a bar similar to No. 9.





The objects from pit 21 are of unknown use, but are likely to be connected with the operation of the malt house, and perhaps with the milling process. The bar with bolts through each end (No. 6, above) was considered as a possible mill rynd, the bar across the hopper of the upper stone into which the spindle of the lower stone fits. Such a use, however, would require a hole (not necessarily perforating) in the centre of the bar to take the end of the spindle, and the X-ray shows that this is absent. The bar was presumably a joining piece for two timbers, or pieces of stone or iron.

The four bars with curved T-shaped heads probably belong to the category of T-clamps. If the reconstruction of No. 9 is correct, the tails of the objects were curved. T-clamps generally have straight heads, but there is considerable variation. A T-clamp from Baldock (Manning and Scott 1986, 159, no. 572) also exhibits a curved head and stem, although the head is not curved to the same extent as these examples. T-clamps could obviously be used for a number of purposes. They were used for fixing some types of wall tile (Brodribb 1987, 68), but this is unlikely here. At Gadebridge Park Villa, there was evidence that they were driven through wood, with the arms of the head turned over (Manning 1974, 177). This is a possibility here, as there is mineralised wood on the objects; however, in the opinion of the writer, the wood may not have been originally associated with these objects, but merely part of the same rubbish deposit. The regular curve of the heads and the similarity of the four objects suggests that they were made in this form, not that the heads were bent over afterwards.

Other objects

- L-shaped lift key. The rectangular-sectioned handle is perforated at the end, and there are no teeth visible on the bit. L72 mm. Context 45.
- 13. Linch-pin with sub-oval head; type 2b (Manning 1976, 32). This is the commonest Roman form. Context 14. An almost identical linch-pin came from *context* 20.
- 14. Wedge, with tapering rectangular section. Roman or later. *Context* 14.
- 15. Part of a latch lifter, broken at both ends. The terminal plate may be perforated, but the X-ray was not taken from a view which would confirm this. Probably Roman. *Unstratified*.
- 16. (Not illus.) Part of a ring, with a link attached by a sleeve; probably part of a horse bit of Roman or later date. Ring; internal diam. 49mm, diam. of section 5mm; link square-sectioned, c. 6 by 6mm, L of sleeve 30mm. Unstratified.
- (Not illus.) Bent bar fragment, possibly part of a staple. c. 65 × 9 × 5mm. Context 43.
- (Not illus.) Bar with head bent into an eyelet; possibly a distorted nail. 43 × 6 × 6mm. Context 58.

## **Iron nails**

### by H. Major

314 nails and nail fragments were examined, of which 134 came from unstratified contexts.

Examples of seven different types of nails were found. The commonest type had a round, flat head with a square shaft, comprising 81% of all identifiable nails. The length range was 31-109mm, with an average length of 62mm. The type was common up to the beginning of this century, and only fourteen of the thirty-two complete examples came from reliable Roman contexts. This type of nail is almost invariably the commonest on any Roman site.

Three nails were of definitely post-medieval types. A few hobnails were present, and also six examples of nails

with a flat, inverted, triangular head, a typically Roman type. None of the nails present would have been substantial enough for nailing large timbers.

## The Roman pottery

by K. Horsley, with Brenda Dickinson

The excavation produced 2159 sherds of Roman pottery, which were classified using the method introduced by the Chelmsford Archaeological Trust (Going 1987), and which is now standard for all excavations carried out by ECC Archaeology Section.

Most of the pottery appeared to be of 2nd and 3rd-century date. It was all very abraded and this, coupled with the fact that there seemed to be very little similarity between the dates of the pottery and the obvious stratigraphic relationship of the features, suggested that most of the material was residual. This would support the excavators interpretation that the site was comprehensively robbed out, leading to considerable disturbance and re-deposition of material.

Only three sections (across ditches 29, 31 and 38) could be confidently dated; these were of the late 3rd to 4th century and appear to represent the final phase of activity on the site. It seems most likely from the ceramic evidence that whilst the main occupation of the site was over by the mid-3rd century, there was still activity in the form of robbing out into the 4th century.

Due to the large amount of residual pottery and the lack of good quantified groups, the material was not quantified. This means that only general comparisons can be drawn with other local sites, such as Great Dunmow (Wickenden 1988) and Stansted (Brooks and Havis, forthcoming)

It is, nevertheless, interesting to note that the pottery from Great Dunmow, Stebbing Green and the Stansted area all have, in contrast with the south and east of the county, unusually large amounts of fabrics originating from the Hadham area. This includes the Hadham oxidised red wares, Hadham white-slipped wares, Hadham blacksurfaced wares and Hadham grey wares. Unfortunately, it is not yet possible to discuss the wares from the Hadham kilns in any detail, as much of the relevant material is unpublished.

An interesting discovery was the presence of three carinated beakers with out-turned rims in Hadham grey ware (Fig.9). This beaker type (H10.4) appears to be fairly unusual in the south and east; in the north-west of the county several examples have been found. One was recovered from a late Antonine cremation in a cemetery at Great Dunmow (Wickenden 1988, 16.8), while others come from, as yet, undated sites excavated as part of the Stansted project (Brooks and Havis, forthcoming), including one from cremation 1 at Duckend Farm.

All these sites are in the north-west of the county and Stebbing Green is the easternmost site in Essex on which this form has been found. It has also been recorded in east Hertfordshire, in cremation B.XX at Skeleton Green (Partridge 1981, fig. 96.46), and more specifically in north-east Hertfordshire at Baldock, where it is referred to as one of the commonest jar types on site. Most of the beakers came from early 2nd to mid 3rd centuries and many have been found in Hadham grey wares.



Figure 9 Stebbing Green 1988. Roman pottery

#### The samian stamps

by Brenda Dickinson

## (Fig.9)

Form 18/31R, stamped [PATRC] phallus LINI: Paterclinus of Lezoux (b), Die 5a (Durand-Lefebvre 1963, no. 558). There is no site dating for this, but other stamps of Paterclinus occur in the Wroxeter gutter and at northern forts re-occupied c. AD 160. His forms include 31R, 79 and 80 but he also occasionally stamped form 27. c. AD 150–80. Context 3.

Form 27, stamped O CE I: Celsus I of La Graufenesque, Die 1e (b). The letters are very blurred, due to double stamping. Much of Celsus Is output belongs to the later 1st century, though his occasional use of forms 24, Ritt. 8 and Ritt. 9 suggests some pre-Flavian activity. This occurs at Cannstatt (Knorr 1921, Taf. III, 23a) and Rottenburg and will be from one of his later dies. c. AD 80–95. Context 1 (topsoil).

## **Burnt clay**

## by H. Major

A total of 977 pieces of burnt clay was recovered, weighing 8634g. Most of the pieces were very small, and thirty-four of the fifty-five contexts containing burnt clay had less than 100g. The only context with a significant amount was 183 (2,934g), with an homogenous group of material derived from a wattled structure.

Five different fabrics were identified. Wattle impressions were exclusively associated with one fabric, which had sparse inclusions of sand, vegetable matter and chalk flecks, and it is likely that fragments in this fabric all derived from wall daub. It had a wide distribution across the site.

A second fabric contained far more abundant chalk. Flat surfaces were present, but there were no wattle marks. Some of the surviving floor was made of chalky clay, and it is likely that the chalky fragments represent burnt floor material. The largest amounts of this fabric do, in fact, come from in and around the surviving areas of flooring, particularly from ditches 31 and 38, which cut the clay-with-chalk floor.

In context 99 (the fill of ditch 98), fragments of sandy baked clay occurred in association with probable metalworking slag, and some fragments of it had surface deposits suggestive of contact with slag.

The different fabrics may thus represent clay specially selected or prepared for different purposes — a fine clay with few inclusions for walling, chalky clay for floor make-up and sandy clay for industrial use.

## Brick and tile

## by H. Major

Roman brick and tile was not abundant, with only 133 pieces recovered. The material was mainly from tegulae, imbrices and brick, with a single piece of combed box flue



Figure 10 Stebbing Green 1988. Millstone Grit fragment

tile. Most of the assemblage was fragmentary, and 42% of the total was spall, tile fragments without a full thickness. None of the tile had mortar adhering.

The proportions of the different roof tile types suggest that it is unlikely that any of the buildings on the site had a tiled roof. The brick included an almost complete bessalis, usually used for hypocaust pilae, and a fragment probably from a lydium, both from context 40, one of the fills of ditch 29. The bessalis measures 212 by 208 by 42mm, and has a signature of three arcs against one edge, drawn with a stick rather than a finger. The complete tile may have been brought to the site for a specific purpose, such as use as a post pad. The other, fragmentary, tile and brick may have been used incidentally in floors, but the distribution is scattered, with no concentrations in or around the floored areas.

## Slag

## by H. Major

A small amount of slag was recovered, some of it very dense, and likely to be metalworking slag. It was not examined by a slag specialist. The largest group of material (eighteen fragments; 294g) came from context 99 (fill of ditch 98), and was associated with baked clay. The assemblage hints at metalworking taking place on the site, but probably not on any scale.



Figure 11 Stebbing Green 1988. Distribution of Millstone Grit fragments within the excavated area (*i.e.* southern half of trench A)

## Querns and millstones

## by H. Major

The excavation produced a large number of quern and millstone fragments, predominantly of Millstone Grit, with only a few, eroded scraps of lava. There were 124 fragments of Millstone Grit, mostly small pieces. In most cases it was not possible to tell which were from quernstones (turned by hand) and which from millstones (mechanically operated). It might be expected that the millstones would be thicker than the quernstones, but the distribution of thicknesses showed no clear peaks to suggest a distinction between querns and millstones. In fact, one of the thinnest pieces, with a minimum thickness of 32 to 46mm, came from a stone with a diameter of over 700mm, too large to be a quern (context 39). The only other stone with a measurable diameter was a lower fragment from the topsoil, 53-62mm thick, with a diameter of c. 540mm.

Where present, the grinding surfaces were usually grooved, and often noticeably worn. One fragment from the topsoil may have been redressed. Three pieces had pecked grinding surfaces. Other surfaces and the edges of the stones were usually fairly smooth, with visible pecking or tooling in only a few cases. The grinding surface was often slightly angled, and one upper stone fragment had a very low kerb around the upper edge.

Three fragments, one of them a definite millstone lower stone, and the other two probably millstones, had notches in the edge which may have formed a seating for a clamp.

Context 152 (fill of pit 151) contained fifty-six small chips of Millstone Grit, mostly slabby or wedge-shaped, some with part of a broadly grooved grinding surface. It is unlikely that these chips could have been created by accidental breakage, and they probably represent the waste from cutting down the edge of a millstone over 70mm thick. There were other Millstone Grit fragments in the vicinity of pit 151 (Fig.11), and this part of the site may have been the area in which the millstones or quernstones were prepared or re-dressed.

The lack of distinctive features on the fragments examined makes it difficult to comment on the technical details of the use of the stones. The larger stones from the site must have been mechanically driven, and this could

Context	U/L	gs	u/s	edge	T	diam.	Comment
la	L	pecked	rough	?	53-62	c.540	
Ь	-	smooth	irreg	smooth	53	×	
с	L?	w/grooves?	-	-	45	-	
d	-	smooth	?	-	44	-	Reused?
е	-	w/grooves	rough		43-47	-	Cuts on gs
f	-	w/grooves	pecked	smooth	67	-	Reused?
g	-	-	radial tooling	smooth	74	-	
h	-	smooth	smooth	-	60	-	
i	-	-	smooth	smooth	64	-	
j	-	worn	fairly smooth	smooth			seating
k	U?	w/grooves	smooth	smooth	60	-	
1	-	w/grooves	tooled lines	-	62	-	
m/n	-	-	-	-	-	-	5 frags
16a	L	worn	fairly smooth	fairly smooth	35–43	-	
b	U	w/con grooves?	-	rough	38-52	-	Low kerb
с	-		-	-	-	-	4 frags
22	L?	fairly rough	irreg	irreg	70	-	
24	-	-	-		45	-	Reused
39a	L	radial grooves	rough	smooth	32-46	>700	Clamp seating?
b	-	-	-	-		-	Chip
10-		ham drassed	amooth		75		
40a	-	harp dressed	smooth	-	75	-	Millstone Chip
Б	-	-	-	-	-	-	Chip
70	U?	radial grooves	smooth	smooth	52	-	Millstone
82	U?	irreg	rough		75	-	Millstone
96a	U?	w/grooves	rough	rough	43	-	
Ь	-	-	-		-	-	Chip
131	L	smooth	irreg	-	66		Reused
1470	-	grooved?	fairly smooth	fairly smooth	37		Slight lin round edge
b/c		-	-	-	-		A frage
0.0						_	4 llags
152		grooves	-		-	-	56 frags
157a		smooth	rough		58		
b	-	w/grooves	fairly smooth	fairly smooth	45	_	
c	-	smooth	rough	rough	66	-	13 frags. prob. same
d		-	-		-	-	8 frags
168			_				3 chine
100				-	-		5 cmps
169a	-	pecked?	fairly rough	-	38	-	
Ь		pecked?	tooled	-	56	-	
Unstratified	U?	w/grooves	pecked	-	49	-	Reused?

Abbreviations: U/L = Upper or lower stone; gs = Dressing of grinding surface; u/s = Dressing of under or upper surface; edge = Dressing of edge; T = Thickness in millimetres; diam = Diameter in millimetres; w = Worn; con. = Concentric

Table 1 Millstone Grit querns and millstones

have been done by human, horse or water power. The lack of a suitable water channel suggests that water power was not being used (*e.g.* contrast this site with the Romano-British watermill at Ickham in Kent (Spain 1984)).

I would like to thank Dr R.W. Spain for his comments on the Millstone Grit from the excavation.

## One fragment is illustrated (Fig.10), as follows:

Millstone Grit; fragment from the edge of a lower quernstone or small millstone. The surface was originally grooved, but has worn very smooth. There is a slight nick on the edge (paralleled on some other fragments) which may be an original feature. Bob Spain notes that the pattern of wear indicates that the topstone would have revolved clockwise. Diam. 570mm, max. thickness 46mm. Context 39, fill of ditch 38.

#### Other stone objects

## by H. Major

The only definite object from the excavation was a whetstone. Three natural boulder fragments of quartzitic sandstone have traces of deliberate shaping, perhaps for use as building stone. One of these, from context 10, may be part of a saddle quern.

(Not illus.) Whetstone fragment was of grey limestone. Slightly rounded rectangular section, surfaces eroded. 16 by 14mm, surviving L 34mm. *Context* 63.

## Flintwork

by O. Bedwin

There were three struck flakes, without retouch, from the topsoil.

#### **Faunal remains**

### by O. Bedwin

A total of 160 fragments of disarticulated animal bone and teeth were identified from fifty contexts (all Roman), scattered widely across the excavated area. The condition of the material was variable; about half was in the form of small, worn fragments, the other half consisting of larger, generally unworn fragments, particularly from layers within pit 125 (Fig.7).

There were also two skeletons. The first of these was a complete dog burial (Plate II); the second was the rather disturbed skeleton of a chicken, without its head, in context 156, one of the fills of pit 125.

The disarticulated and articulated material will be considered separately.

## Disarticulated fragments

The 160 fragments derived from five species as follows:-

Bos 100; Equus 25; Ovis 20; Sus 14; Canis 1

The assemblage is too small to permit conclusions about diet or economy to be drawn. Most contexts yielded only a few fragments of bone or teeth. The only exception was context l26, the top layer in pit l25 (Fig.7), where there were 23 large pieces of bone (18 Equus; 5 Bos), lying flat across the top of the layer. Presumably, this group was deposited at the time this area was abandoned. The Equus material consisted of major limb bones, vertebrae and ribs, almost certainly from the same animal.

## Articulated bone

The complete dog skeleton (of about spaniel size) lay on its right side, oriented east-west, with its head towards the west. It was found in a very shallow, oval depression filled with context *177*, the general mixed gravelly, levelling layer. No grave cut could be seen, and it was sealed by the floor make-up layer 63. The most likely interpretation of this burial is that it is a foundation sacrifice.

The chicken skeleton was found in the charcoal-rich layer, context 156, towards the bottom of pit 125. It was articulated though flattened and was without its head. Although found within the charcoal layer, the bones themselves were not burnt, nor were the sides of the pit. This layer, and the headless chicken skeleton, were therefore dumped into the pit. The skeleton is perhaps most plausibly interpreted as a ritual deposit, perhaps connected with the abandonment of the area.

## Charred plant remains and molluscs from Roman contexts

by Peter Murphy

## Introduction

The features, on low-lying ground, comprised a complex of ditches, gullies, pits, the bases of flues from hearths or ovens and associated surfaces of cobbles and rammed chalk/clay. Millstone fragments were found, indicating that some cereal processing had taken place on site. Samples were collected from four paired features (53 and 55; 64 and 66), thought to be flue bases, from a charcoal-rich layer 156 (in pit 125, which had evidently contained some type of wooden structure) and from ditch 29, primarily in order to recover charred remains of cereals.

## The deposits

Depth

The fills of the supposed flue bases included a high proportion of red-fired clay fragments with some charred plant material in a dark grey clay matrix. Context 156 contained a much higher proportion of charcoal in a similar matrix. A column sample was taken from the lowest 48cm of fill in ditch 29. The fills were as follows:-

(in cm)	Context	Description
50–60	40	Very dark grey firm clay; stony with abundant rounded to subrounded flint pebbles to cobbles; abundant small chalk fragments; abundant small charcoal fragments; some fired clay fragments.
60–62	60	Dark grey firm clay; stony; abundant mollusc shells; some charcoal fragments.
62–70	60	Dark grey to dark greyish-brown firm clay; some greyish-brown silty patches; stony with rounded to subrounded flint pebbles and chalk fragments; charcoal fragments and small fired clay fragments.
70–77	60	Dark grey to dark greyish-brown sandy clay; very stony with rounded to subrounded flint pebbles; chalk flecks; small charcoal fragments.
77–85	68	Very dark grey clay; stony with rounded to sub- rounded flint pebbles to cobbles and chalk fragments; abundant charcoal fragments.
85–90	68	Very dark grey to black clay; slightly stony with small flints and chalk fragments; charred plant material including cereal chaff very abundant
90–98	68	Very dark grey clay; stony with small subrounded to rounded flint pebbles and chalk fragments; charred plant material common.

Samples were disaggregated by soaking in hot water and charred plant material was then separated by manual flotation, collecting the flots in a 0.5mm mesh. The non-floating residues were wet-sieved in a 0.5mm mesh. The flots and residues from all samples were examined but only material from the lowest fills of ditch 29 and from the 'flue bases' has been studied in detail. Most other samples included very similar assemblages of charred cereal remains to these contexts, but at lower densities and in a

Context no.		68	68	54	56	65	67	
Depth (cm)		85–90 <sup>1</sup>	90–98 <sup>1</sup>					
Cereal indet.	spr <sup>2</sup>	13	7	-	-	3	-	
Cereal indet.	cafr	+	+	+	+	++	+	
Cereal indet.	ca	2	1	8	1	7	1	
Cereal indet.	m	-	-	-	-	1	Ξ.	
Cereal indet.	cn	-	-	-	1fr	-	-	
Triticum sp (p)	ca <sup>3</sup>	17	6	13	10	27	5	
Triticum sp (p)	afr	++	++	-		+		
Triticum sp $(p)$	$gb^4$	106	48	6	21	50	65	
Triticum sp (p)	spb <sup>5</sup>	69	12	5	4	29	14	
Triticum sp (p)	ri	141	56	-	4	20	10	
Triticum sp (p)	bri	5	2	-	-	1	-	
Triticum sp (p)	m <sup>6</sup>	4	-	-	-	-	-	
Triticum spelta L	gb <sup>7</sup>	591	185	70	65	287	136	
Triticum spelta L	spf <sup>8</sup>	27	11	-	-	6	2	
Avena sp (p)	ca	-	-		-	1cf	-	
Avena sp (p)	afr	++	-	-	-	+	+	
Atriplex patula/hastata		8+fr	1+fr	1	1	-	-	
Medicago lupulina L		1	1	-	-	-	-	
Rumex sp (p)		11	3fr	-	-	1	-	
Polygonaceae indet		1	-	-	-	-	-	
Plantago lanceolata L		1	-	-	-	-	-	
Anthemis cotula L		2	-	1	-	1	-	
Picris sp		1	-	-	-	-	-	
Poaceae indet	8	4	0-	-	6	1		
Bud		-	-	-	-		1	
Indet seeds etc		2	1	1		1	1	
Sample wt (kg)		1	1	3.9	3.65	4.7	5	
% flot sorted		3.125	3.125	25	25	25	25	

Taxa are represented by fruits or seeds except where indicated.

Abbreviations: a = awn; bri = basal rachis internode; ca = caryopsis; cn = culm node; fr = fragments; gb = glume base; ri = rachis internode; rn = rachis node; spb = spikelet base; spf = spikelet fork; spr = 'sprouts'

Notes: 1 - These fills included cladoceran ephippia and a few non-charred macrofossils of Urtica and Carex. 2 - Plumule and primary root frags. 3 - Including germinated grains. 4 - Abraded/fragmentary. 5 - Forks in poor state with only stubs of the glume bases surviving.

6 - Non-fragmented nodes of glume wheat. 7 - With lemma and palea fragments adhering internally in some cases. Terminal glumes present. 8 - Rarely complete.

The samples also included small fragments of cereal chaff, so the counts are minimum numbers of specimens. Additional weed taxa are Avena fatua, Fallopia convolvulus and an indeterminate umbellifer from the upper ditch fills.

Table 2 Charred plant remains

poorer state of preservation. The sample from 156 was composed of charcoal fragments with no cereal remains.

## Charred cereals and crop weeds

Identifications from the samples examined in detail are given in Table 2. The commonest elements are glume bases of spelt, *Triticum spelta*, characterised by their width, strong primary keel, strong subsidiary venation obscuring the secondary keel, wide angle at the primary keel and even curvature of the rest of the glume. Some bases, though poorly preserved, are too wide to be anything other than spelt. The unidentified bases are fragmentary and/or abraded. There are a few semicomplete spelt spikelet forks. The well preserved internodes all have strong veins on their outer surfaces. The wheat awn fragments show clear clusters of small barbs. The grains are not well preserved and some had germinated prior to charring.

Avena awn fragments are also present, but a few A. fatua-type floret bases show that a weed oat is represented. Other weed taxa identified are Atriplex sp, Medicago lupulina, Rumex sp(p), Polygonum sp, Plantago lanceolata, Anthemis cotula, Picris sp and Poaceae.

## Molluscs

Mollusc shells were present in the fills of ditch 29, but have not been examined in detail. Shells were rare in the lowest fills, perhaps implying rapid infilling providing little opportunity for colonisation by molluscs. The upper fills, and in particular the shelly band in context 60, at 60–62cm, contained abundant shells of *Succinea* sp, and *Anisus leucostoma* with a few specimens of *Armiger crista, Vertigo pygmaea, Vallonia* sp (p), *Carychium* sp (p) and Arionid granules. It would appear that by this level, the ditch had reached a stable profile and was a linear marshy depression. There is no evidence for flowing water at any level.

## Discussion

The cereal samples from this site are all essentially similar in composition. They consist largely of spelt chaff with some grains but very few weed seeds or culm fragments, implying a harvesting method involving separate reaping of ears and straw. Germinated wheat grains are consistently present though there are also unsprouted grains. The samples vary principally in terms of the density of charred macrofossils in the soil and their state of preservation. The lower ditch fills contained abundant fragments of awns, lemmas and paleas, but these elements were rare or absent in the 'flue base' fills. These latter features also contained few near-intact spikelet forks and relatively few rachis internodes. The higher grain:glume base ratio in some 'flue base' samples also probably relates to preservational factors. Allowing for this variability due to varying preservation it appears that the samples are all related to the same type of activity.

Hillman (1982) has interpreted comparable assemblages from corn-dryers at the Romano-British site at Catsgore, Somerset, as the remains of sprouted spelt accidentally charred during parching, as part of the malting process, mixed together with spelt chaff and wood charcoal which had been used to fuel the ovens. A similar interpretation is possible for the Stebbing Green material: the samples from the 'flue bases' would represent mixed charred residues in a primary context, whilst the material from the ditch would represent residues raked out from these, or similar, ovens. In Essex, evidence for the use of wheat in malting and brewing comes from Culver Street, Colchester, where a deposit of carbonised, sprouted wheat grains with some barley, interpreted as malt, was found in the corner of a room burnt during the Boudiccan sack of the city (Murphy 1992).

If the cereal residues from Stebbing Green are interpreted as charred malting residues, interpretation of other aspects of the site follows. Firstly, its low-lying location is explained. Any other type of cereal processing would best be done in a dry situation, but for malting and brewing ample water supplies are needed, and a drainage system is necessary for the discharge of waste water. Secondly, the excavated contexts can be interpreted. The wooden framework in pit 125 could be the base of a tank in which grain was initially soaked; the adjacent ditches could have acted as drains to take off surplus water which had not been absorbed by the grain. The rammed chalk/clay surfaces (e.g. context 63) might represent a malting floor (which would have had to be within a building). The ovens with flue bases 53, 55 and 64, 66 could have been used to parch the malt. The millstone fragments could have been used for coarsely grinding the dried malt prior to the production of the wort for brewing.

## Chaper 3. Discussion

This is not organised around distinct phases, because, as the pot report (above) makes clear, there is so much residuality that phasing on the basis of the ceramic evidence is virtually impossible. The sequence that can be established through stratigraphy is minimal and relates only to a very few features. Accordingly, the discussion is centred on the main structures and their function(s).

## The structures

Two structures are identified in the southern part of trench A. The clay-with-chalk spreads, 35, 36, 37, 42, 43 and 63, are interpreted as make-up for flooring of some kind within a single building. The reasons for this are (a) it is virtually identical to the material described in the Appendix, below, as clay and chalk bedding for a tessellated pavement, and (b) it is too easily worn to have made a satisfactory floor itself. Precisely what kind of flooring material was laid on it though remains unclear, as no tesserae were found during the 1988 excavation.

Equally uncertain are the precise dimensions and shape of the building represented by these areas of floor make-up. The clay-with-chalk patches varied in thickness, with context 43 especially thin and patchy. This observation, coupled with the fact that almost all the pottery was mixed and abraded, supports the notion that the excavated area was thoroughly disturbed at some point in the past. It is the authors suggestion that this was due to robbing out of this structure at (or after) the end of its useful life. Thus whatever formed the superstructure of the building, plus its flooring material, would have been removed, leaving the clay-with-chalk vulnerable to wind, weather and wear from whatever post-abandonment activity may have occurred there. It is not thought likely that modern ploughing has actually done much damage because no plough marks were visible, and it may be that most of the wear occurred in antiquity, perhaps during the robbing out itself. From Fig.2, the likely maximum dimensions of the building would have been 12 m by 11m, with the western edge corresponding to the junction between the clay-with-chalk 35 and cobbling 46. As such, the building would have been a straightforward rectangle, but it is possible to envisage other shapes, e.g. a rather narrower rectangle, with the eastern edge defined by the eastern edge of context 63, with the remains of context 43 representing a small extra room to the east.

It is difficult to infer much about the above-ground structure. The most likely form is one based on timber cill-beams standing on the clay-with-chalk (and thus leaving no archaeological trace), with timber uprights, infilled walls of wattle and daub, and probably a thatched or shingled roof. The only part of such a structure which might be said to have provided some archaeological evidence is the wattle and daub, some burnt fragments of which were recovered during the 1988 excavation. Equally, however, these might have come from the superstructure of an oven or hearth. The roofing type is largely a matter of negative evidence, since virtually no trace of roof tile was found; wooden shingles or thatch are therefore more likely possibilities.

Within the building there is little trace of sub-division. There were two post holes (contexts 198 and possibly 191 in Fig.2), but these could easily post-date the structure, as could the shallow pit, context 123, (Fig.2 and S29 in Fig.5). With its soft, loose, slightly charcoally fill, the latter seems unlikely to have been open while the building was in use. However, two features which do seem to have been integral are the two oval, burnt patches, contexts 115 and 117 (Figs 2 and 6), which are interpreted, along with 53/55 and 64/66, as a pair of flue bases, beneath a hearth or oven. Equally, if it is argued that the building corresponding to the clay-with-chalk areas was indeed a full rectangle, then the pair of flue bases, 64/66, would have been inside it, but as explained above, it is impossible to be certain about its overall size and shape.

As for the date of this building, it must have been operating during the 3rd century, judging by pottery from within one of the clay-with-chalk spreads, but was out of use by the late 3rd/4th century, according to pottery from the ditches 31 and 38, both of which cut it. It may, therefore, have had a relatively short life. The dog burial (context 188 in Fig.2) is thought to have been a foundation sacrifice.

The second structure is represented by the remains of the timber lattice uncovered in the base of pit 125 (Fig.7 and Plate I). These thick, dark stains are interpreted as the remains of substantial timber joists, supporting either a timber floor, or, more likely, a timber (or ?lead) tank, set in the pit. The flint cobbling (context 212 in Fig.7) presumably provided a hard-standing for those working with the tank and its contents. Whether it was roofed cannot be established with any certainty; there was small, well-defined post hole (context 173) at one corner only, which might have held a roof support, but which might equally have held an upright which played some useful role in whatever process was being carried out in the tank.

It is assumed that the tank itself was robbed out (as with the larger building described above), and the pit subsequently backfilled. If this is correct, then the layers filling the pit, which include one of almost pure charcoal with the skeleton of a headless chicken, a dump of clay-with-chalk similar to the floor make-up in the large building (and ?derived from it during robbing out), and a silty top fill with a mass of horse and cattle long bones, are probably not especially informative about its function. The small amount of pottery does not provide a precise date. It is also possible that layer *155* (Fig.7C) was rammed in to form a base for a second phase of timber tank, the entire superstructure of which was robbed out.

## The function of the building and the tank

Establishing just what these were used for is problematical. Central to this issue is the question of whether they should be considered together as involved in the same process, or as having separate functions. There is no stratigraphic relationship between the two and the ceramic evidence is inadequate in this regard.

Apart from the structural evidence already discussed, any interpretation needs to take into account two other pieces of evidence, namely the role of the pieces of Millstone Grit, distributed, as shown in Fig.11, all around the building, and also the purpose of the three pairs of flue bases, implying some process involving heating or drying. It is perfectly possible to find separate interpretations for the building and the tank. For example, the building could have been for milling grain, using the Millstone Grit, with either human or animal power (there being no channel to suggest water power). Although the full extent of the building could not be established, it would appear to have been large enough to accommodate an animal-powered arrangement, perhaps in its southern half. This would contrast within the suggestion of man-powered milling in the Romano-British millhouse at Orton Hall Farm, though here the excavator had the advantage of being able to identify three pad-bases above which the millstones were thought to have operated, all within a single building (Mackreth 1996, 72-4). The tank could have been used for something quite different, perhaps tanning, along the lines of a similar, though rather larger, example at Brithdir, near Dolgellau (White 1978). Alternatively, John Boyes (pers. comm.) has suggested a walk-pit, used for treading cloth to felt it.

However, perhaps the most plausible interpretation is that offered by Peter Murphy, which has the merit of uniting almost all the features of the site in a single explanation, namely that the main activity within the excavated area was malting. This relies crucially upon the identification of sprouted grain in samples from the flue bases and from the lower fill of ditch 29. Thus pit 125 could have accommodated a tank for soaking the grain; water for this could have come from the spring which supplies the modern pond. The building represented by the areas of clay-with-chalk could have contained a malting floor. The flue bases would represent the remains of hearths used for parching, and the Millstone Grit fragments would have derived from the millstones which produced the coarse meal needed for brewing. It is possible too that ditch 29 functioned as an elongated sump for disposal of surplus liquid from the process. It was the deepest ditch within the excavated area, and was the only one to drain rapidly, being deep enough to cut through the clayey, water-retentive upper 50cm of subsoil (see Excavation, above).

This interpretation still leaves one or two loose ends, e.g. the series of shallow ditches (9, 11, 31, 38, 51, 98), which are all extremely similar to one another in profile and fill, and which clearly cut the clay-with-chalk areas (Figs 2 and 3). The fills of some of these ditches, and the top fill of ditch 29, are among the few reasonably well dated contexts on the site, belonging to the late 3rd/4th centuries (Horsley, above), and indicate that the building was out of use by then. However, the purpose of the ditches remains enigmatic, although since the east-west ditch runs into the modern (spring-fed) pond, it may formerly have had some kind of drainage function, assuming there was a pond here during the Roman period. Also of note is the relatively small number of Millstone Grit fragments recovered, compared, say, with the Roman water mill at Ickham in Kent (Young 1975). Possible explanations for this may be that the Stebbing Green malt house was very short-lived and/or that in an area lacking building stone, the Millstone Grit may have been re-used elsewhere.

### The malt house within the villa estate

On the very limited evidence of the 1947 excavation, the villa probably came into being not before the early 2nd century, perhaps developing from a pre-existing farmstead on the basis of the native Belgic wares found (Appendix). It survived probably until the end of the 4th century. By contrast, the building interpreted as a malt house had a shorter life, operating during the 3rd century, but out of use by the late 3rd/early 4th century. It is not perhaps surprising that the villa building itself pre-dates the setting up of the malt house; presumably the villa estate would have had to establish its economic viability before being able to invest in the construction of this specialised building. One may also reasonably infer the existence of the remains of other ancillary buildings in the landscape around the villa itself.

# Appendix: the 1947 excavations at Boxted Wood

by C.J.Going

If the 1988 excavation is to be placed in a more detailed setting, it is clearly necessary to publish details of earlier explorations of the known Romano-British site to the north-west (the villa shown in Fig.1). These comprise the pre-war probings of the then landowner, William Harvey, and the immediately post-war excavations by Felsted School Archaeological Society. Further explorations appear to have been carried out on the site in the 1950s by the late M.J.Campen (pers. comm.), but his principal activities when he was a Stebbing resident appear to have been concentrated upon the site at Porters Hall, c. 1.5km to the north-west. Two short accounts of the results have been published: a brief description in the Felsted School Bury Magazine (Green 1948), and a survey by Hull in his Gazetteer of Roman Essex (1963a, 183). Some additional material is preserved in the MS of this latter (Hull 1963b), from which it is clear that the Stebbing entry was compiled without the benefit either of the (admittedly rather inaccessible) Bury Magazine, or the contemporary excavation notes. At the time, these notes were in the possession of Major J.G.S.Brinson of the Roman Essex Society, but they only came to light after the latters death in 1972.

(I am greatly indebted to Michael Green for allowing me full access to the notes of his excavation, now returned to his possession, and also to the late Mrs Harvey, wife of William Harvey, and to Mr Clive Harvey, the present landowner, with his brother, of the site).

The field had long been known to contain finds, of which the most enigmatic was an allegedly life size bronze head rumoured locally to have been bartered for ale at a local public house (The Elephant) in the 1920s (Mrs Harvey, pers. comm.). While this find is almost certainly apocryphal, more definite evidence dates to 1938 when the field was steam-ploughed for the first time. This activity brought considerable quantities of pottery, tile, tile tesserae and other debris to the surface. These finds aroused William Harveys curiosity and he dug into the debris scatter. At a depth of some ten inches, he came across the remains of a tessellated pavement. Realising its potential significance, he notified the Colchester and Essex Museum, and in consequence the site was visited by the late Rex Hull.

Hull (1963a, 183) reported that:-

'the area yielding remains is bounded by straight lines of dark earth running approximately NW to SE about 180 yards apart. The southern of these two lines is clearly that of a considerable ditch; the northern is no less clear, but has no indication of a ditch [sic; presumably there was no trace of sinkage]. The intervening area is covered with broken pottery and tile, and remains suggesting industrial activity. This is thickest at the N. end, where digging by Mr Harvey revealed a tessellated floor partly ripped up by steam ploughing. Only small areas, about 1 foot square, remained, with 1 inch and ½ inch square cubes, all plain red. In one place only, the plough had turned up a patch of ½ inch white tesserae, and there was one black one found loose among the red'. Any further exploration of the site by the landowner was deferred by the second world war, but in 1947 the field was again ploughed three-four inches deeper than usual. This brought further debris to light. Mr Harvey informed the Felsted School Archaeological Society. One of its members, H.J.M.Green, noted that:-

'as there was some possibility that the (Roman) remains which were known to be lying close to the surface, might be disturbed, if not destroyed, by the plough, it was felt that an immediate rescue excavation was desirable'. (HJMG MS notes).

## The 1947 excavations

These were directed by H.J.M.Green and comprised five trenches. Three were within the debris scatter found some ten years before by Harvey. Two further trenches tested a scatter of material now observed to the south-east of this principal concentration. the first scatter of material was also ringed with six test holes in an attempt to gauge its extent.

## Trenches I-III and Test Pits I-VI

*Trench I* This was sited directly over the surface scatter of tesserae brought to light by Harvey before the war. It proved to be sited above a building.

Layer 1 9 inches of topsoil. This contained many tesserae, mainly coarse red (*i.e.* tile), but included a few white tesserae made of chalk, beneath which were found the remains of a badly damaged tessellated pavement (layer 2).

Layer 2 Tessellated pavement, 1 inch thick. Few of the tesserae in this trench remained in situ, the rest having been ploughed up.

Layer 3 In the Green MS, this is described as a 1 foot 6 inches thick clay and chalk bedding for the pavement. In this layer was found a large copper-alloy fibula (Green 1948, plate facing page 16; and see below). Hull, however, identified only a thin level of chalky material as the floor bedding, so layer 3 is best seen as a mixture of make-up and natural into which the foundations of the villa were cut.

Projecting a little way into the south-west edge of this trench was a butt-ended flint rubble foundation. It was 3 feet wide and 1 foot thick, and mortared together with very earthy lime. The top of the foundation was level with layer 2 (above). The excavation of this layer was not completed. It seems probable that the butt end of the wall here is the jamb of a doorway. The site plan shows a tessellated floor on both sides of this wall. As test pit V, some 5 feet to the south of this trench, contained only undisturbed clay, this indicates that the tessellated floor south-east of the wall was extremely narrow, perhaps no more than 2m wide. It was probably a corridor fronting the building. Behind the ?entrance was a principal room, similarly floored. As Mr Harvey had also found a small quantity of white tesserae here, this floor was probably provided with a (?monochrome) panel inset. This description corresponds very closely with Hulls pre-war observations:-

'the pavement lay 10 inches from the surface and was very uneven, owing to its poor bed, which was of rammed earth carrying a very thin layer ['ridiculously thin' in the VCH MS] of very white mortar [the chalk layer?] in which the tesserae were set' (Hull 1963a, 183).

*Trench II* This trench exposed an irregular fragment of a tessellated pavement about 4 feet square. At the north end it had sunk a few inches. The tesserae were plain red cubes

of tile c. 1 inch square. The pavement is recorded as having been found by Mr Harvey in 1938 (Hull 1963a, 183).

*Trench III* At 9 inches below the modern surface, the fragmentary remains of a concrete floor were found. Nothing else of note was discovered.

*Test Pits* Six of these were dug in the area surrounding the surface debris in an attempt to define the approximate limits of the building. Test pits I, IV, V and VI revealed only undisturbed clay.

Test Pit II Beneath 10 inches of topsoil a well- preserved concrete pavement was discovered.

*Test Pit III* The remains of a beaten earth floor were found in this pit (depth not stated).

### Conclusions

Trenches I–III and test pits I–VI delimited the remains of what had clearly been a small structure with flint rubble foundations and tessellated and concrete floors. Small though these are, they nevertheless permit something of the plan of the building to be inferred. It is probable that two small transverse walls intervened between trenches II and III. Likewise, the room in trench III is unlikely to have been the same room as that revealed in trench I–II. Here, a small ?partition wall may be inferred. The plan of trench I shows that there are tesserae on the south-east side of the wall foundation. This foundation is probably a door jamb, and since test pit V in front revealed nothing, it is likely to have been a corridor. Trench III therefore revealed a room likely to have been a cross wing.

In sum, the evidence suggests a small corridor building with a range of three or four rooms, possibly fronted on the south side by a corridor, with the remains of one, and perhaps two, symmetrically disposed cross wings. Further speculation about the precise plan of the structure must await more detailed field work, but the evidence found is entirely consonant with a small villa.

Trenches IV and V About 50 yards to the south-east of the scatter of surface material investigated above, a large irregular area of black earth was noted. This contained much material including broken pottery, roofing tiles and oyster shells. Two trenches (IV and V) were excavated here. These showed the patch to comprise a series of shallow, scoop-like hollows. Almost all of the pottery found in 1947 came from these two trenches.

Trench IV In this trench, a section was cut across a rubbish pit 9 feet in diameter and 1 foot deep. It produced a considerable quantity of pottery, principally Romano-British grey wares. In the bottom of the pit, however, fragments of 1st-century native Belgic pottery were found.

Trench V This was of a similar size to trench IV, but unfortunately the nature and extent of the pit into which it cut was not observed at the time. In addition to Romano-British pottery, an iron key was found (Green 1948, plate facing p. 16; Fig. 12, no. 1).

### The finds

The discoveries made at the time of the excavation were divided up: while the iron, copper alloy, coins and some other finds remained in the possession of the Harvey family, the pottery was sent to the Colchester and Essex Museum (confusingly provenanced to the adjacent parish of Rayne). While the Museum material remains uncontaminated, the material at Blake House Farm may be compromised by the addition of other material, for the writer also came across some pottery stored at the farm which possessed subtly different nuances of shape. Questions revealed that they had been discovered by chance at Harlow (Mrs Harvey, pers. comm.). However, the majority of finds reported on here can be assigned with confidence to the 1947 excavation.

## Glass

Two fragments of window glass, of the matt-glossy type were found, probably in the rubbish pits (trenches IV and V).

## Wall plaster

Two small fragments of painted wall plaster were found also probably in the rubbish pits. The pieces were too small for any decorative scheme to be identified, but the ground colour of one was blue, and the other, white. They probably derive from a panelled room.

## Iron

by N.P.Wickenden

(Fig.12)

- 1. A good example of an L-shaped lift key, with a rolled end to the handle, which is square in section and divided off from the narrower shank by a marked shoulder. Three of the original four teeth on the bit survive. Length 35mm. For the type see Drury (1976, fig. 16.16) and Wheeler (1930, 73, pl. XXX.3). *Trench V*.
- (n.ill.) Incomplete latch lifter, square in section. This is a very common type, cf. Frere (1972, 182, fig. 68.73).
- (n.ill.) Drop hinge, L-shaped staple, with the typical round section of the shorter arm. The tapering longer arm would have been driven into the door jamb. For the type, see Frere (1972, 180).
- (n.ill.) Strip, 107mm in length, 13mm wide, bent at one end.
- (n.ill.) Punch. Length 63mm.
- (n.ill.) Punch. Length 43mm.
- (n.ill.) Narrow bar of rectangular section. Length 103mm.
- (n.ill.) Nail, Manning type Ia, with square-sectioned shaft and pyramidal head. Length 68 mm. Cf Manning (1976, fig. 11).
- (n.ill.) Nail, Manning type Ib. Length 130mm. Three more examples of this type survive.
- (n.ill.) Nail, Manning type II. The triangular head with its marked shoulders is the same thickness as the shaft.

## Copper alloy

by N.P.Wickenden

- 2. Colchester brooch, lacking pin and spring. Worn. The catchplate (incomplete) has three circular perforations. The spring is broken, with only one turn and the third hook remaining. For a similar example from Colchester, see Hawkes and Hull (1947, 308–10 and pl. LXXXIX.6). Brooches of this type are most likely to date from the mid-1st century AD.
- Incomplete bracelet composed of two twisted wire strands. Internal diameter 41mm.

## Coins

Five coins were also with the material. They were all issues of the lower Empire.

## Bone

Seventeen fragments were found. Species represented were deer (including bone and antler), sheep/goat, pig and cattle.

### Tile

Among the tile fragments at Blake House Farm was a small piece of roller-stamped tile. This was submitted to Dr D.Johnstone for examination and erroneously attributed by him to Roake Farm, Broughton (Hampshire) in his published report (Lowther's group 1, die 5A (Lowther 1948)). This die is also paralleled at the Rayne by-pass Romano-British site (Black 1989). The date is probably the first half of the 2nd century (Betts *et al.* 1997).

Also found were quarter and ?half-rounded pila tiles. These are extremely rare and may, or may not, be from the 1947 excavations.

## The Roman pottery

### The samian

The remains of fifteen vessels were found. Three were of South Gaulish manufacture, while the remainder were Central Gaulish products of the Antonine period. Forms represented, with minimum vessel counts, were: Drag. 18 (1); Drag. 18/31 (1); Drag. 27 (1); Drag. 31 (7); Drag. 32 (1); Drag. 33 (2); Drag. 37 (4); Ritt. 24/5 (1). None of the decorated pieces were big enough to identify, and there was only one stamp (report below by Brenda Dickinson).

 Drag. f. 31, CG. Pottacus 3a or 3I. POTTACVS of Lezoux. This stamp occurs on Hadrians Wall and Halton Chesters. There is also one example from Birens. The forms include f. 31R and 80. Dates: c. AD 160-80.

#### The other pottery

The assemblage spanned the entire Roman period, although there was a distinct lack of early 2nd-century material, and folded beakers were also noticeable by their absence. While the bulk of the material apparently derived from two large scoop-like pits (trenches IV and V) to the south-east of the principal building, only a few sherds appear to have been marked (faintly now, and in pencil). The wide date-range of the material suggests that the hollows formed a repository for rubbish for much of the Roman era. In view of this, and the lack of a precise provenance within the site for much of it, the principal interest resides in the fact that it comes from a region from which little had been published until recently (*e.g.* Smoothy 1989). The material is best considered in toto.

The first impression is of comparative poverty. Imports were almost absent. Samian was rare, and colour coats represented no more than an insignificant fraction of the whole. In terms of origins, the Boxted Wood assemblage is identical to those recovered from the wayside settlements of Great Dunmow and Braintree (Going and Ford 1988; Drury 1976). The overwhelming majority of the pottery comprised coarse reduced wares of various sorts. Most of this pottery is probably extremely local, and likely to be from kiln sites within a 20km radius. (Some may be from Boxted Wood itself: Clive Harvey recollects the excavation of what may have been a kiln by a local enthusiast, M.J.Campen, close to the bank of the Ter, only c. 100m to the south-west of the 1988 excavation). No trace of this discovery was noted by Hull. Of these local production sites, the Hadham kilns are likely to account for a substantial share, although the lack of the Braughing jar (one sherd only noted), some at Porters Hall, some at Great Dunmow, and none apparently noted yet at Braintree, suggests that Boxted Wood lies at the edge of the main zone of its reduced ware distribution. Supplies from the Colchester potteries may have been obtained via small towns such as Braintree. Certainly the presence of Cam 268 in the classical Colchester form suggests that Margary 32 was a principal westward axis for the latter production centre in the Antonine era and probably later. Central and south Essex sources are, by contrast, less evident. There were some early shell-tempered sherds, but these were more common at Porters Hall, Great Dunmow, Coggeshall, Rayne and Felsted, possibly because of the small size of the Boxted Wood sample. However, in the later Roman era, there is little evidence. Barely present were flint-tempered Rettendon type wares, which are characteristic of central Essex (Going 1987).

The remainder, mostly specialist and fine wares, is derived from the major regional potteries, and includes products of the industries at Colchester, Much Hadham, the Nene Valley, Oxfordshire and probably Harrold in Bedfordshire. Of the fine wares, Hadham is the most common — unsurprising on a site so close to a principal trade artery by which material from this source reached East Anglia.

Forms The reduced wares include (among the dishes and bowls), Cam ffs 37, 40, 305A (x3) and 305B (x13). Fragments of eight mortaria were noted, four from the Colchester industry (one Hadrianic-Antonine, the remainder Antonine), three fragments from an East Anglian source possibly of the 3rd or 4th century AD, while a single Oxfordshire example was noted of mid-3rd century, or later. Jars were the most common class, however, the principal type being Cam f. 268B (12 examples). This is an interesting contrast to Chelmsford, where the form is unusually uncommon. Rilled jars of the Braughing type were represented, as noted above, by a single shoulder sherd (a further example came from the site at Porters Hall, 1.5km to the north west). Colour-coat sources include Colchester (ten sherds including Cam ffs 391, 391C and ?396, all probably Antonine or later), the Nene Valley (HPM types 7.79 (flange-rimmed bowls), plain-rimmed dish (HPM 7.87), a pentice-moulded beaker (HPM 5.56), and a fragment of another beaker, probably HPM 5.47). Hadham wares include a Cam f. 290 and a variety of the more common jar forms. Some of the few flagon forms are in this fabric.

## Pottery of intrinsic interest

## Terra Nigra

5. Rim sherd of a platter of Cam type 3.

#### **Romano-Saxon** pottery

- Reduced ware: referred to in Roberts (1981). Probably later 4th century.
- 7. Referred to in Roberts (1981). Probably later 4th century.

In addition to the sherds already noted, there were some which were extremely unusual. These include a sherd with a series of dimples on the body which is in a fabric about which the writer is uncertain. It is tempting to assign all this material to Boxted Wood, but in view of the *aliena* also present, it is possible that the site was contaminated.





## Conclusion

The limited scale and rushed nature of the 1947 excavation make detailed conclusions difficult. The remains seemed to be concentrated in two areas. The first, centred at TL 6886 2336, was shown to be the site of a building containing at least one tessellated floor and a number of concrete ones. It clearly represents a domestic rather than an agricultural structure. The building was probably a small dwelling of the winged corridor or cottage type (Green, pers. comm.), with a main range measuring in excess of c. 15 by 7m. If the floor in test pit II is part of the same structure, rather than a second to the south-west of this building, then its main range was in excess of 25m, which bears comparison with such structures as Sandon, Kent (Parfitt 1980).

Dating evidence for the building was sparse, but the brooch incorporated into the floor make-up beneath the tessellated floor (above) provides a rather vague mid-1st century terminus. Its battered and corroded state suggests that some time had elapsed before the construction of the building.

Evidence that this, or another domestic building on the site, was decorated with some sophistication is hinted at by debris from the two large pits in trenches IV and V (from which almost all the pottery came). Finds from these pits included two fragments of window glass, two minute pieces of painted wall plaster, and the fragment of roller-patterned flue tile.

The second area, c. 50 yards south-east of the building, appears to have been a mass of pits. That in trench IV was very shallow and seems to have filled up over a long period. It had what was described as native Belgic pottery in the bottom.

The two ditches reported by Hull were marked on a six-inch O.S. map then in the Colchester and Essex Museum (I am indebted to Dr W.J.Rodwell for showing me this original source). They are reproduced by Green,

from a sketch by Harvey, in the formers MS notes. While Green was unable to make any observations on these two features, which were described as Roman, the writer observed and photographed the south-west ditch from the air in 1975. It ran as a cropmark north-west from the field with the villa into an adjacent field to the north, making a turn within it northwards to meet a dog-leg in the present field boundary. At its south-east end it meets an existing ditch, which continues for a short distance on the same alignment. This ditch pre-dates the Tithe survey, but was clearly in existence until fairly recently. In recent years, no trace of the north-east ditch has been observed. Like the south-west ditch, however, it is unlikely to be Roman, but probably medieval or later.

Perhaps unsurprisingly in view of their small size, these earlier excavations add little to the 1988 evidence. The main building appears to have been an unpretentious dwelling, perhaps a small, winged corridor villa. It was built probably not before the early 2nd century, and more likely in the Antonine era — the floruit of villa construction in the region. On the evidence of the 1988 excavation, the pars rusticana comprised at least one substantial building, interpreted here as a malt house.

The earlier excavations and related observations were originally assessed by the writer for the evidence they could provide on the nature of the Roman settlement of Stebbing parish, published in Going (1988). The data suggested an agricultural establishment based on arable and livestock farming, but which saw other activities including ?metalworking and, possibly, pottery production. The 1988 excavation results, with the evidence of later Roman agricultural activity, considerably amplify this essentially conventional picture. The Boxted Wood villa emerges more clearly now as a self-sufficient estate of some size — one of many in the Trinovantian heartland of north Essex.

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