ESSEX



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THE TRANSACTIONS OF THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

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THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

The Society was founded in 1852 as the Essex Archaeological Society

Its objects are:

- (1) To promote and encourage the study of the archaeology and history of the historic county of Essex.
- (2) In furtherance of the above to publish the results of such studies in *Transactions* and to disseminate information on matters relating to archaeology and history in Essex through appropriate media.
- (3) To organise conferences, lectures, and visits for the benefit of members and interested members of the public; to educate the wider community in the historical and archaeological heritage of Essex; to co-operate with other bodies on matters of common interest and concern.
- (4) To provide library facilities for Society members and approved members of the public.

Publications

The articles in its Transactions range over the whole field of local history. Back numbers and offprints are available; list and prices on application to the Librarian.

Members receive a quarterly Newsletter covering all aspects of the Society's activities, news of current excavations and fieldwork, and items of topical interest.

The Library

The library is housed at the Hollytrees, High Street, Colchester, and is extensive. It aims to include all books on Essex history, and has many runs of publications by kindred Societies. Members may use the library on any weekday during museum opening hours (10-1, 2-5, Saturdays, October to March, closes 4 p.m.) on presentation of a signed membership card.

Membership

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Articles for Publication are welcome and should be set out to conform with the Notes for Contributors, of which offprints are available. They should be sent to the Hon. Editor.

A list of officers, with addresses, will be found in this volume.

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Cover illustration: An early second century bronze jug and patera from a rich burial at the Duckend car park site at Stansted. Originally bought as a matching set, the jug and patera are 15 cm high and 18 cm in diameter, respectively. Both items were on display when the Queen opened the new passenger terminal at Stansted Airport in March 1991. (Photo by Pete Rogers).

Some finds of the Bronze and Iron Ages in Essex

by Paul R. Sealey

Renewed exploration at Plane Hall Farm in Fingringhoe has produced more finds from a dispersed late Bronze Age founder's hoard of the Ewart Park phase. Details of two more such hoards are given, from Hacton and Little Oakley. Three unassociated items of metalwork of the period are reported: a middle Bronze Age palstave from Easthorpe, a late Bronze Age socketed axe from Little Horkesley and a fragment of another from South Green in Fingringhoe. The rim of an early Bronze Age collared urn from Great Tey is described. Two items of late Iron Age horse gear are included: a horse brooch from Bocking and a bridle-bit from Fingringhoe.

Introduction

This paper reports some recent archaeological finds notified to Colchester Museums; the opportunity is taken to publish in full some material in the collections. Inasmuch as a miscellany of this kind can have a theme, it is Bronze and Iron Age metalwork.

Bocking Iron Age Horse Brooch

Discovery: the horse brooch was found by N.T.H. Bone in January 1988 with a metal-detector on level ground on the east bank of the river Blackwater in Bocking (Braintree) at TL 7627 2438, just north of Bradford Bridge. It was purchased by the Museum (accession number 1988.87).

Description: what survives of the horse brooch is a flat bronze openwork fragment, now bent slightly out of true (Fig. 1 no. 1). Weight 13.05 g. It is 4.95 cm long, 2.8 cm wide and 0.2 cm thick. The (scratched) rear face of the mount is plain. Along the main surviving edge of the front face is a pelta (a crescent form with three curved sides) filled with radial hatching. Moving inside, there are two crescent rings (a small circle set inside a larger one, lying close to its edge); the actual crescents are also filled with radial hatching. The smaller circles are cells with a diameter of 0.7 cm, in which is set red champlevé enamel. Parts of the red surface are discoloured; a missing flake shows the inlay is barely 0.5 mm deep. This enamel is the opaque sealing-wax red glass not uncommon on late Iron Age metalwork. Analysis has shown that such glass was produced in the Mediterranean world and imported here in ingot form (Hughes 1972). Subsequent research has led to the recognition of a distinct opaque red glass found in Somerset from the last centuries B.C. until the Roman invasion. It would seem that the bead industry based on the Somerset lake villages had mastered the secrets of this glass and that not all the red inlay on Iron Age metalwork need therefore have been imported (Henderson 1987, 178-82). In their original condition bronzes

decorated with red glass would have had a flamboyant red and golden finish, quite unlike their modern appearance, except when recreated on aggressively conserved pieces such as the Santon (Norfolk) harness mounts (Megaw 1970, pl. 8a for colour photograph). Running inside and along the main edges of the mount are incised lines which, like those of the radial hatching, may have been cut with a graver, rather than cast (Lowery et al. 1971, fig. 1b, 172, pl. 10b). C.J. Going pointed out to me that with an openwork mount such as this, the pattern formed by the voids is hardly less significant than the design of the plate itself. No attempt has been made here to reconstruct the complete layout of the original mount. Too little survives to invite such an exercise, one that might be made all the more difficult (and the finished product so satisfying) by the asymmetry in which the Celtic artist so often revelled.

Discussion: the only parallel for the mount is a near complete harness trapping in the Polden Hill (Somerset) hoard (Harford 1803, 92, pl. 22 no. 3; Fox & Pollard 1973, 34; Brailsford 1975, pl. 22b, fig. 4d, 228 no. 3). Fox (1952, 52-4; 1958, 123-4) demonstrated that these fittings were horse brooches; he envisaged them employed on a team of two ponies fitted with a yoke, drawing a chariot. On the rear face of the Polden Hill brooch is a rectangular strap-loop, a catchplate and the remains of an iron pin. The strap-loop secured the piece to the crupper (the strap that ran from the neck to the tail of the pony). A caparison (horse blanket) draped over the animal was fastened by the pin. A minimum of two such horse brooches made up a set, one for the yoke (neck) end and the second for the tail end. Other brooches could be added to the crupper to enhance the effect.

Material in the Polden Hill hoard assigns its deposition securely to the mid 1st century A.D. There is nothing specifically Roman in the assemblage and it may well have been buried in the face of the rapid Roman drive west to the Bristol channel in the years immediately after A.D. 43 (Fox & Pollard 1973, 35; Brailsford 1975, 234). Iron Age horse brooches are not otherwise attested in the British Isles. It is apparent that they developed on the eve of the Roman invasion and we may therefore suggest a date of c. A.D. 25-50 for the Bocking piece.

Such is the striking similarity between the Bocking fragment and the horse brooch from Polden Hill, they must be products of the same school. Both have crescent ring motifs with radial hatching and circular panels for enamel inlay. The Polden Hill brooch is typical of the western mirror school of art, so-called because its most accomplished works are the mirrors current in the half century or so before A.D. 43 and because — to judge by the distribution of its products — the bronze smiths of the school were at work in



Fig. 1 1 Late Iron Age horse brooch from Bocking; 2 palstave from Easthorpe; 3-4 socketed axes from the Plane Hall Farm (Fingringhoe) hoard.

the West of England, from Gloucestershire, south to Devon and Dorset (Fox & Pollard 1973, 32-7). These western connections raise the possibility that the glass inlay on the brooch was not imported from the Mediterranean world but was a product of the Somerset bead industry; such glass has been identified in the Polden Hill hoard itself (Henderson 1987, 181). Bocking shows that the output of these western smiths was appreciated by the aristocracy of the Essex Trinovantes and their Catuvellaunian overlords in the 1st century A.D.

One of the puzzling features of Essex archaeology is the dearth of decorated Iron Age metalwork to match all the other indications of wealth and power in the county, particularly towards the end of the period. Wright (1911, 27) remarked on this, and his comment is as valid now as then. Bocking helps to redress the imbalance and can be regarded as a significant minor addition to the corpus of Iron Age art from the British Isles. Mindful of the overtones of wealth and power vested in the finest Iron Age metalwork, it may turn out to be appropriate that the presumed oppidum at Braintree should lie close to the findspot (Rodwell 1976, 326-8; Drury 1977, 104, 107-8; Eddy 1984; Bedwin 1986).

Easthorpe Middle Bronze Age Palstave

Discovery: the palstave was discovered by H.H. Macaulay in November 1988 when he was harvesting potatoes 80 m north-west of Little Birch Holt Farm at TL 9138 2212 in November 1988. The findspot is 40 m above O.D. on chalky boulder clay. He tells me the field has been ploughed throughout living memory; this is presumably how the axe was dislodged from its original context. The writer and A-M. Bojko were invited by the finder to field walk the site in January 1989. Conditions were sunny but nothing else was discovered. H.H. Macaulay has retained the find.

Description: weight 335 g. Length 1.4 cm; blade width 5.9 cm; width at stop-ridge 2.3 cm; stop-ridge height 0.9 cm; flange height 2.5 cm. The palstave (Fig. 1 no. 2) is lowflanged and unlooped. A concave septum ends in a ledgestop, as defined by Schmidt and Burgess (1981, 20). There is a broad blade with protruding tips and a pronounced facet inside the cutting edge; the sides are concave. On the face is rib-moulding which takes the form of a two-pronged trident. Although both casting seams are still just perceptible, it is apparent that an effort had been made to remove them. A hole 0.9 cm long on the unillustrated blade face presumably represents a casting flaw. Much of the butt end is pitted and there is damage to the edges of the flanges. A chip on the cutting edge may be an ancient removal caused by wear to a brittle tool; otherwise damage to the palstave is apparently modern.

Discussion: palstaves are ubiquitous in the middle Bronze Age and they are the diagnostic artefact of the period par excellence. Although the broad outlines of the history of the palstave are clear enough, the many permutations of typological detail have made it difficult to reach consensus over the niceties of classification. Our first palstaves fall into two categories (shield pattern and midribbed), current in the Acton Park phase of the 15th century B.C. Tools like Easthorpe (with two-pronged tridents and broad blades) are not attested until the succeeding Taunton phase of the 14th and 13th centuries. The few Acton Park phase palstaves with two-pronged tridents are assigned to that phase on the basis of their narrower blades and should be the immediate precursors of the Taunton phase tools (Schmidt & Burgess 1981, pl. 57 no. 781). In terms of contemporary nomenclature, the Easthorpe tool may be described as a Wantage type low flanged (op. cit., 133-5, pl. 59 no. 805) or Rowlands (1976, 28-30) Class I group 3 palstave.

Many other Bronze Age palstaves and axes are single finds without known archaeological context and it is difficult to know how to account for this. Some might be part of hoards dispersed by the plough, a few must be inadvertent losses in antiquity. But this can hardly account for all such finds and it is felt that many were buried in the Bronze Age without intention of recovery, for ritual reasons (Schmidt & Burgess 1981, 17).

Fingringhoe Late Bronze Age Hoard

Discovery: the finds were found dispersed in plough-soil at Plane Hall Farm in September 1987 at TM 0244 1962 when C.R. Behn resumed his metal-detector investigation of the findspot of the dispersed hoard discovered in 1985-1986, reported in an earlier volume (Sealey 1988). In 1986 the tenant farmer sub-soiled the field for the first time and this may have dislodged the finds described here. Four items (Fig. 2 nos 5, 12 and 14, and Fig. 3 no. 20) were found 'within a foot' (30.48 cm) of each other but they lay in plough-soil, not an original context, and attempts to locate the hoard nucleus (if indeed it still survives) have so far been in vain. C.R. Behn has retained the finds.

Catalogue: a discussion of the categories of artefact discovered in 1987 will be found in the first report on the hoard (Sealey 1988, 7, 10-11) and there is no need to repeat that exercise. Commentary here is confined to artefacts not reported before and to significant typological variants represented by the new finds.

- Socketed axe (Fig. 1 no. 3). Weight 186 g. Maximum length 10.8 cm; blade width 4.2 cm. The body is square in section and flares gently towards the blade; a short length of rib-moulding is extant below the (missing) collar. On both of the broad faces there is unobtrusive wing decoration. Little or no attempt had been made to remove the casting seams. Concave fractures along the cutting edge and at the blade tips may have been induced by use in antiquity. The mouth of the axe is not present and all that survives of the loop is the stub of the lower end.
- 2. Socketed axe fragment (Fig. 1 no. 4). Weight 64.38 g. Maximum length 4.8 cm; width 3.3 cm. There is a rounded collar-moulding on the rim; the loop springs from a smaller and unobtrusive parallel rib-moulding below. The only surviving casting seam is prominent; there is a protuberance of metal on the seam at the lower end of the loop. In antiquity the broad faces of the axe



Fig. 2 Plane Hall Farm (Fingringhoe) hoard. 5-8 socketed axes; 9 socketed gouge; 10 plain ring; 11 sickle; 12-13 sword fragments; 14 mount.

had been hammered to give the present crushed condition.

- 3. Socketed axe fragment (Fig. 2 no. 5). Weight 29.59 g. Maximum length 4.6 cm; width 3 cm. The collar and rib-moulding from which the loop springs are unobtrusive. In antiquity the prominent casting seam had been removed from the loop. Pitted surface.
- 4. Socketed axe fragment (Fig. 2 no. 6). Weight 18.04 g. Maximum length 3.6 cm; width 3 cm. There is a pronounced collar-moulding with parallel rib-moulding below.
- 5. Socketed axe fragment (Fig. 2 no. 7). Weight 5.32 g. Maximum length 2.1 cm; width 2 cm. The fragment represents part of a socket mouth with a rounded collarmoulding.
- 6. Socketed axe fragment (Fig. 2 no. 8). Weight 34.88 g. Maximum length 3.3 cm; width 1.75 cm. The fragment comes from the rear of the blade of an axe with rectangular section. A casting seam is just perceptible along the narrower face.

The largest of these scrap items can be identified as a south-eastern axe, an artefact already attested for the hoard by the 1985 finds. Precise identification of the smaller scrap fragments from the hoard is not possible but the likelihood must be that they too are south-eastern axes.

- 7. Gouge (Fig. 2 no. 9). Weight 48.95 g. Maximum length 7 cm; width of blade 1.75 cm. The gouge is hollow with a circular section; there is a pronounced splay to the blade cutting edge. An attempt had been made in antiquity to file down the casting seams. The mouth of the piece is missing.
- 8. Plain ring (Fig. 2 no. 10). Weight 10.77 g. External diameter 4 cm; maximum thickness 0.45 cm. In section the ring is oval. The plane of the piece has been bent slightly out of true. Both the smooth surface and variations in the thickness suggest wear to the ring in antiquity.
- 9. Sickle blade (Fig. 2 no. 11). Weight 60.96 g. Length 9.8 cm; width 3.3 cm; maximum thickness 0.6 cm. The under surface is slightly convex. In section the blade is asymmetrical and triangular, with the crest of the ridge on the upper surface set off-centre towards the rear and running obliquely across the tool. The surface is pitted and the edges of the tool have been eaten away by corrosion. Nothing survives of the hafting arrangements.

In Britain the metal sickle is an innovation of the middle Bronze Age (Rowlands 1976, 46-7). Their size and form set them apart from modern sickles but experimental evidence confirms their use for reaping (Nicolardot & Gaucher 1975, 89). Bearing in mind the significance of the tool for farming communities, it is difficult to avoid the feeling that sickles are underrepresented in hoard assemblages. Fingringhoe is noteworthy for its asymmetrical blade section. Although such blades are not unusual among the non-socketed sickles of the British Isles, only one of those illustrated by Fox is at all comparable. It was a component of a Ewart Park phase founder's hoard from Llantwit

Major (Glamorganshire) (Fox 1941, 139, fig. 1 no. 34, 145, 162 no. 34 being his type Ib; Wheeler 1925, fig. 57 for associated finds). Another sickle mentioned by Fox gives a closer match for the Fingringhoe blade. It comes from the 1906 Ewart Park phase hoard of Grays Thurrock (Essex) (Butcher 1922, 108 fig. 3 centre; Fox 1941, 144, 157 no. 5; O'Connor 1980, 380-1 no. 148, fig. 56 no. 14). Fox believed it must have been nonsocketed, although only a section of the blade survives. It differs from Fingringhoe in having a narrower blade with the rib set well back towards the rear, running parallel to the back edge. Blade sections such as Fingringhoe are not present among the socketed sickles illustrated by Fox (1939) but Dr J.P. Northover drew my attention to a looped cylinder-socket sickle with asymmetrical triangular section from the Plainseau (Somme) hoard (Nicolardot & Gaucher 1975, 99; Blanchet 1984, fig. 154 no. 88). It differs from Fingringhoe in that the blade is narrower and the crest of its ridge is placed towards the cutting edge. Ewart Park and Carp's Tongue swords in the hoard show that the Plainseau sickle is contemporary with those from Llantwit Major, Grays Thurrock and Fingringhoe. The difficulty of assigning the Fingringhoe tool to a specific category of sickle reflects in part the typological diversity that makes their classification so difficult (Needham 1986, 46).

- 10. Sword blade fragment (Fig. 2 no. 12). Weight 30.70 g. Length 2.9 cm; width 3.7 cm; maximum thickness 0.8 cm. The midrib is oval in section and demarcated from the blade wing by a groove. There is another and shallower groove behind the blade edge.
- 11. Sword blade fragment (Fig. 2 no. 13). Weight 61,05 g. Length 5 cm; width 3.45 cm; maximum thickness 0.9 cm. The midrib is oval in section and demarcated from the blade wing by a groove. There is another shallower groove behind the blade edge.

Both sword blade fragments had been bent when the weapon was broken up into short lengths of scrap metal; such fragments of dismembered swords are regular components of hoards of the period. The groove that defines the midrib from the wing shows that both fragments came from a Carp's Tongue sword. Both have similar sections but the shorter has a marginally narrower and thinner midrib. It would seem that the smaller fragment came from the final quarter or third of the weapon where the blade is narrower. Of the blade types recognised by Needham among the Carp's Tongue swords from the Petters Sport Field hoard, ours is his variant 2 (Needham 1986, 48).

In Britain the sword represents an innovation from the continent; it superseded dirks and rapiers at the end of the middle Bronze Age. The most common sword of the late Bronze Age was the Ewart Park type, which gives its name to the metalworking traditions of the 9th and 8th centuries B.C. in Britain. But Carp's Tongue swords (which in turn give their name to the local Ewart Park industries of southeast England) are rarer weapons. On the European mainland the distribution of finds is concentrated in western and southern Brittany, with an extension through western France

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Fig. 3 15-20 Plane Hall Farm (Fingringhoe) hoard. 15 unidentified; 16-20 copper ingot fragments; 21 late Iron Age bridle-bit from Plane Hall Farm; 22 South Green (Fingringhoe) socketed axe; 23 socketed axe from the Hacton hoard.

to the Gironde. In Britain these weapons are imports, the products of French armourers. Few complete examples are known here and their presence as fragments in hoards shows we are dealing with imports of scrap metal rather than a trade in finished items. Hoards with such scrap are most common in north Kent and coastal Essex, a distribution which the Fingringhoe find reinforces (Colquhoun & Burgess 1988, 111, pl. 133; Northover 1988, 139).

12. Mount (Fig. 2 no. 14). Weight 16.99 g. Length 3.95 cm; width 2.8 cm; maximum thickness 0.8 cm. Originally this crushed, distorted and incomplete fitting must presumably have had a more or less rectangular section. Running just inside the curved edge on both faces is a faint line.

The concave end with its incised line just inside the edge recalls the plaque in the Cassiobridge Farm (Hertfordshire) hoard (Coombs 1979, fig. 11.6 no. 51, 209 no. 51, 216). But the Fingringhoe piece is not such a plaque and finds its closest parallel in a concave-sided mount from the Dreuil (Somme) hoard (O'Connor 1980, 402 no. 28, fig. 65a no. 28). Searches for a parallel among the belt-fittings published by Audouze (1974) and Kilian-Dirlmeier (1975) have been in vain. Our mount from Fingringhoe is apparently related to a group of rare objects occasionally found in Carp's Tongue hoards from south-eastern England. Examples are known from the hoards at Grays Thurrock (Essex) (O'Connor 1980, 381 no. 27, fig. 56 no. 27), Addington (Surrey) (Britton 1960, GB. 54-2/1 no. 15), Reach Fen (Cambridgeshire) (Smith 1956, GB. 17-3/3 no. 49) and Feltwell Fen (Norfolk) (Smith 1958, GB. 35 no. 14). These inscrutable objects are linked by their size and rectangular section. It has been suggested they are mounts from scabbard mouths. Another possibility is that they represent beltfittings; O'Connor presumably had this in mind when he described the Dreuil example as a slide.

13. Unidentified object (Fig. 3 no. 15). Weight 62.93 g. Length 3.8 cm; maximum width 2.75 cm; maximum thickness 1.6 cm. In section the object is D-shaped and solid. At the thicker end the outer surface protrudes to give the impression of a hollow casting that has been filled with molten alloy. Parts of the surface are pitted and the rough edges at the thicker end show the object is incomplete.

This inscrutable object is included in the hoard catalogue on the strength of an unidentified late Bronze Age artefact from Ireland (Eogan 1983, 141 no. 177, fig. 79 no. 177). The specimen from Ireland is hollow and Fingringhoe might represent a miscasting of a similar piece.

- 14. Copper lump (Fig. 3 no. 16). Weight 25.61 g. Maximum length 3.1 cm; height 1.1 cm; width 2.4 cm.
- 15. Copper lump (Fig. 3 no. 17). Weight 29.9 g. Maximum length 1.3 cm; height 1.2 cm; width 2 cm.
- Copper lump (Fig. 3 no. 18). Weight 67.12 g. Maximum length 1.3 cm; height 2.4 cm; width 3 cm.
- 17. Copper lump (Fig. 3 no. 19). Weight 77. 5 g. Maximum length 3.5 cm; height 1.95 cm; width 3.5 cm.
- Copper lump (Fig. 3 no. 20). Weight 79.9 g. Maximum length 1.4 cm; height 2.2 cm; width 2.8 cm.

These five lumps are fragments of bun-shaped ingots. None has an original outer edge, so it has not been possible to gauge the diameter of the parent ingot. No analyses of the ingot fragments from Fingringhoe or Hacton (see below) have been attempted; they are described as copper on the basis of published analyses of other specimens.

Discussion: on the basis of the 1985-86 finds, it was apparent that the Plane Hall Farm assemblage was a dispersed hoard; the finds made in 1987 reinforce that conclusion (Sealey 1988, 11-12). Sword fragments, a sickle and a mount widen the range of scrap metal represented in the hoard. Merger of the 1985-86 and 1987 finds gives its overall composition (Table 1). The hoard weighs 1615.83 g; the mean item weight is 57.7 g.

Table 1. Composition of the Plane Hall Farm Hoard

	fragments/items	is minimum number of objects	
socketed axes	8	5	
gouges	3	3	
tanged chisels	1	1	
rings	4	4	
sickles	1	1	
swords	2	1	
mount	1	1	
unidentified	1	1	
ingot fragments	7	1	
totals	28	18	

Fingringhoe Iron Age Bridle-Bit

Discovery: the bridle-bit came to light in 1985 when C.R. Behn was exploring the plough-soil at Plane Hall Farm that produced the dispersed Bronze Age hoard described above. It was identified by the finder and A.K. Gregory, to both of whom the writer is indebted. C.R. Behn has retained the find.

Description: the bridle-bit is represented by part of the shaft of a link and its terminal (Fig. 3 no. 21). Weight 37.51 g, It is 4.3 cm long; the terminal is 2.9 cm deep and the shaft has a maximum diameter of 1.2 cm. Examination with a magnet suggests there is no iron core to what is otherwise a copper-alloy piece. The shaft is segmented with a subcircular cross-section. The upper and lower edges of the ears to the terminal are straight and parallel. Just inside each edge of the ears is a slight groove. There is a central collar that runs from the shaft, narrowing towards the outer face of the terminal and with channelled linear decoration. The surface of the piece is pitted with accretions. The blow or pressure that was responsible for the slight flattening of the terminal presumably also caused part of the outer wall to fracture and separate.

Discussion: our incomplete link finds a close parallel in an unassociated bridle-bit from Carneddau Hengwym (Gwynedd) (Ward Perkins 1939, 175; Palk 1984, 16, fig. C26). That the Carneddau Hengwym find is late in the Iron Age is evident from its stylistic affinities with bits in the Polden Hill hoard, buried in the aftermath of the Roman invasion of A.D. 43 (see p. 2). Confirmation is provided by a bowl escutcheon from the Roman fort at Hod Hill (Dorset), occupied within the period A.D. 43-51 (Palk 1984, 81 citing Richmond 1958, 114 no. 28, 119, fig. 57 no. 28). Now the Roman invasion provides the most secure chronological contexts for later Iron Age metalwork and so there is an inevitable tendency for chronologies of this material to be drawn towards the conquest period. Although we know that bits like Fingringhoe were still in use in the mid 1st century A.D., it is difficult to assess how long such metalwork had been current. The date of c. A.D. 1-50 proposed here for the piece must be taken with that caveat in mind.

Fingringhoe Late Bronze Age Socketed Axe Fragment *Discovery*: the fragment was found in September 1989 by C.R. Behn in a field at South Green at TM 0322 1948, above the 20 m contour and some 800 m east of the Plane Hall Farm hoard. He was exploring top soil with a metal-detector after the field had been ploughed. C.R. Behn has retained the find.

Description: the fragment comprises the blade end of an axe (Fig. 3 no. 22). Weight 50.10 g. Maximum length 2.8 cm; blade width 4.4. cm. The sides of the axe curve gently towards the blade. Inside can be seen the end of the socket; both casting seams are still perceptible. The surface is pitted and the blade is blunt.

Discussion: not enough survives to allow one to assign the piece to a specific axe type, but this is presumably another Ewart Park phase south-eastern axe. A thorough search of the findspot by C.R. Behn produced nothing more of Bronze Age date and so there is no reason to think the fragment is part of a dispersed hoard.

Great Tey Collared Urn

Discovery: K.L. North found the sherd in March 1988 at TL 8774 2430 when at work in a field south of Trumpingtons Farm. The findspot lies just above the 50 m contour on chalky boulder clay. A.R. Dann (who owns and farms the land) graciously allowed the writer to field walk the site with him that April. Conditions were dry and sunny but no more prehistoric pottery was recovered. A possible explanation for the failure to locate more material may lie in a drainage ditch cut some 10 m to the north of the findspot after 1982, when the field itself was ploughed for the first time. Should the sherd represent upcast from this ditch, more of the urn may await discovery there rather than in the field. A.R. Dann has retained the sherd.

Description: the fabric is hard and fine, the only surface blemish being a rounded grey inclusion 3 mm across. The outer surface is brown (Munsell 7.5 YR 5/4); the rim and interior wall, dark grey (2.5 YR N4/0). Weight 95.44 g.

Because of the lack of symmetry found in so many large hand-made vessels, it is not possible to gauge the exact angle of the collar or the precise rim diameter, although it is clear that it falls within the 30-40 cm range (Fig. 4 no. 27). The rim has an internal concave bevel with projection and is a variant of Longworth rim form 26 (Longworth 1984, 5 fig. 3 no. 26). As it descends, the wall of the collar becomes thicker; the lower edge is not present. Decoration is confined to the outer face. It takes the form of more or less straight lines incised with a sharp instrument before firing. There is a trapezium filled with diagonal lines; to the right are opposed diagonal lines, part of a triangle resting on its apex, or another trapezium. Below the lower horizontal line are three fingertip-with-nail impressions, above and in the trapezium are two pairs of finger nail impressions.

Discussion: collared urns are the most common cinerary vessels of the early Bronze Age. They developed from late Neolithic wares of Peterborough type and had a long history running from c. 1800 until 1200 b.c. (Burgess 1986, 342 adjusting Longworth 1984, 79-80), when Deverel-Rimbury became the standard funerary ceramic. The likelihood must be that the Great Tey urn came from a burial, although some urns were interred without human remains and a few instances of use other than funerary are attested (Longworth 1984, 47, 76-8 pace Burgess 1986, 341).

The chance find of a collared urn from Great Tey is all the more remarkable when we bear in mind how rare these vessels are in Essex. It should be seen as an outlier of the concentrations centred on north-west and south-eastern Suffolk (Longworth 1984, 81, fig. 42).

Such is the background against which the Great Tey urn must be evaluated. Its incised trapezium decoration filled with more or less straight lines and flanked by a triangle, or another trapezium, is a rare motif on Collared Urns. Longworth does not include the pattern in his motif repertoire and, where it does occur, insists on describing it as a triangle (Longworth 1984, 301 no. 1852, pl. 71 no. 1852). In some cases this is understandable because the trapezium is only a triangle with a truncated apex (e.g. op. cit., pl. 172 no. 1054, pl. 212 no. 2229). But this obscures the significance of a motif present on a whole range of late Neolithic wares such as the Unstan (Orkney) bowls (Callander 1929, 40-1 figs 4-5, 7), a grooved ware vessel from Durrington Walls (Wiltshire) (Longworth 1971, fig. 26a top centre, fig. 48 p. 220) and a Fengate ware bowl from West Kennet (Wiltshire) (Piggott 1962, 38-9 no. P12, pl. 21b no. P12), on which the pattern was grooved with a blunt instrument, as opposed to the other examples, where the use of a sharp tool created incised decoration. The West Kennet pot is collared and bipartite and exemplifies the precursors of the Collared Urn series. Of the urns illustrated by Longworth, the incised trapezium motif is present on two vessels from his primary (earliest) series, and on a third from the secondary (later) series (Longworth 1984, pl. 71 no. 1852, pl. 72 no. 2052, pl. 105 no. 268). Where the motif is present on other secondary series urns, it is executed in impressed cord (op. cit., pl. 117 no. 1935, pl. 211 no. 1760). These considerations suggest the Great Tey find should be placed towards the



Fig. 4 24 copper ingot fragment from the Hacton hoard; 25 socketed axe from Little Horkesley; 26 socketed axe from Little Oakley; 27 Collared Urn from Great Tey.

start of the Collared Urn tradition, a line of argument reinforced by the straight collar, a trait regarded by Longworth as primary (*ibid.*, 21 no. 3). The internal projection to the rim bevel is typically secondary but at least one parallel can be cited from the primary series (*ibid.*, pl. 52 no. 377). The finger nail and fingertip-with-nail decoration also has a bearing on the position of the urn in the sequence. Such decoration is almost non-existent in the Collared Urn tradition. Indeed Longworth regards fingertip rustication of the body as a trait the tradition left behind as it emerged from Fengate ware. The fingertip decoration on Great Tey is not rustication, but it is emphatic, and coupled with the finger nail impressions above, harks back to Neolithic traditions. The Great Tey urn can be seen therefore to stand at the start of the Collared Urn series, with features that recall the Neolithic ancestry of the phenomenon.

Hacton Late Bronze Age Hoard

Discovery: M.T. Gentry found the hoard in September 1957 at Hacton in Upminster when he was working in a field hoeing and thinning out beetroots. He told me that he cricked his back and retired to the edge of the field to make tea for his fellow workers. On the way his foot connected with the hoard, at TQ 5486 8568. The findspot lies just above the 10 m contour, on gravel overlooking the Ingrebourne river. When the writer visited the site with M.T. Gentry on the 2nd December 1988, we found the land was no longer under cultivation and had reverted to rough grassland and scrub. This allowed a thorough examination of the surface topography and it proved possible to re-locate the exact findspot.

So the attribution of the hoard to Barking in the accessions register at the Museum and in the Annual Reports (Hull 1962, 8) is mistaken. This misconception presumably arose because when M.T. Gentry sold the hoard to the Museum in 1958 he was living (as now) at Barking. But in a letter dated the 25th October of that year, he said that he had found the hoard on a farm at Upminster. His kind offer — in the same letter — to show museum staff the findspot was accepted thirty years later! The present location of the hoard is the Museum (accession number 1958.165).

Description: socketed axe (Fig. 3 no. 23). Weight 199.72 g. Maximum lenth 9.3 cm; diagonal mouth width 3.9 cm. The mouth of the axe is rounded. Four mm inside, on one of the broad faces, is a short rib, 1.1 cm long. The rounded collar moulding on the mouth splays outwards, with an uneven outer edge. Below the collar is a parallel moulding from which a single loop springs. From this rib-moulding runs the pair of curved wing ornaments present on both the broad faces. With one set of wing decoration, the lower edge continues on the narrow face as a slight ledge feature. The broader sides of the axe curve gently outwards towards the blade. An attempt had been made in antiquity to remove the casting seams; they are barely perceptible towards the blade end. Much of the surface is pitted, with various abrasion marks.

The rib inside the mouth deserves some comment. Ours is Ehrenberg type 4, but is exceptional in that only one (not a pair) is present (Ehrenberg 1981, fig. 1 no. 4; Schmidt & Burgess 1981, 20). At least one other Essex axe only has a single rib (Davies 1979, fig. 8.4 no. 26, 156 no. 26 from the Hatfield Broad Oak hoard). Experimental evidence shows these pairs of ribs are the positive impressions of grooves in the core, in which were lodged lumps of wax to hold the core in position in the mould when the molten alloy was introduced (Rynne 1983).

Copper ingot fragment (Fig. 4 no. 24). Weight 37.13 g. Maximum length 3.7 cm; width 1.8 cm; height 1.4 cm. Parts of the original upper and lower surfaces of the ingot are present. Because the fragment came from towards the middle of its parent ingot, there is no curved edge to allow one to gauge the diameter of the original ingot.

Discussion: the axe is another south-eastern one. It is not uncommon to find late Bronze Age axes with ingot fragments wedged inside. Because two items are involved, this writer holds that such finds constitute a hoard, although some seem reluctant to share this view (Field & Needham 1986, 144-5 nos 49 and 63).

Little Horkesley Late Bronze Age Socketed Axe *Discovery:* the axe was found c. 1985 by D. Brown when he was walking across a field in Little Horkesley, 200 m southeast of Upper Dairy Farm at TL 9511 3125. D.R. Powell told me that when the axe was discovered, the land had been under cultivation for seed corn. Every five years the field is deep-ploughed to 'eighteen inches' (45.72 cm) and this may have dislodged the axe from its original context. D. Brown has retained the find.

Description: weight 290 g (Fig. 4 no. 25). Length 10.8 cm; mouth diameter 4.3 cm. The mouth is circular. There is a rounded collar moulding, below which is a more or less parallel rib from which the single loop springs. The broader sides of the axe flare gently towards the blade. Both casting seams are conspicuous. There is some modern damage to the blade.

Discussion: the Little Horkesley axe is of interest because it exemplifies one of the four sub-groups which have been recognized among the multiplicity of south-eastern axes (Schmidt & Burgess 1981, 21-7). Ours is what Schmidt and Burgess call their Bilton (or Worthing) variant (op. cit., 214). It should be pointed out that not all south-eastern axes fall into one or other of these groups. Some conception of the fine dividing line between these sub-groups can be gauged by the fact that the axe from Hacton (see above) does not qualify as the Bilton variant because it is too short.

Little Oakley Late Bronze Age Hoard

Discovery: the hoard came to light in or before 1850 at TM 2135 2935 in a bank between two fields just north-west of the rectory. As ever with old reports of hoard finds, the documentary source material for the findspot is far from satisfactory; it is given here so that readers can evaluate it for themselves. The entry in William Wire's diary (now transferred to the Colchester branch of the Essex Record Office) for the 2nd April 1850 reads 'The Rev. Professor Marsden Gt. Oakley informs me several metal celts have been found in a ridge of earth at Little Oakley and most probably the ridge was a continuation of that in the former parish where two ancient British vessels were found near the Hall as previously noted'. At the time the rector of the parish was G. Burmester, incumbent from 1832 to 1890 (Powell 1959, 70). In 1889 he donated the socketed axe described below to the Museum. The accessions register says it was 'found on the glebe lands at little Oakley'. Butcher (1923, 265) adds that it had been 'discovered with several others' but he does not give the source from which his quotation was taken. In his MS notes on the parish housed at the Museum, M.R. Hull wrote that it had been found 'in a bank between two fields on the glebe lands'. It is clear that earlier writers were confident the Burmester axe came from a hoard, and that the hoard was the one mentioned by Wire.

Study of the 1838 tithe map and the apportionment for Little Oakley (ERO D/CT259B) shows where the glebe lands were situated. South of Rectory Road there was one large field; to the north, around the rectory itself, was a group of small fields and a copse. It is possible that not all the banks on the glebe lands in the 19th century have survived, particularly as some of the small plots north of the rectory have now been amalgamated. But the most westerly field boundary of the glebe lands north of the rectory still has a conspicuous bank over 100 m long. This may well be the 'ridge of earth' described by Wire, in which case we can establish the provenance of the hoard with some precision.

The present location of the only surviving axe from the hoard is the Museum (accession number 1889.40).

Description: socketed axe fragment (Fig. 4 no. 26). Weight 95.39 g. Maximum length 7.1 cm; blade width 4.1 cm. The sides of the axe splay out towards a crescent-shaped blade. Corrosion has eaten away the cutting edge; outer surfaces of the fragment are pitted, with scratches along and across the faces. The casting seams are inconspicuous but their near complete removal may simply reflect the battered condition of the piece.

Discussion: not enough of the axe survives for it to be assigned to a specific socketed axe type, although the expanded blade precludes a middle Bronze Age date. The likelihood must be that the axe is a south-eastern one and that we are dealing with another Ewart Park phase founder's hoard.

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Asheldham Camp — an early Iron Age hill fort: the 1985 excavations

by Owen Bedwin

with specialist contributions by Nigel Brown, Hazel Martingell, Peter Murphy, Richard MacPhail, Rob Scaife, Susan Tyler and Helen Walker

Summary

A series of trial trenches through the defences of Asheldham Camp dated the construction of the hill fort to the early Iron Age. The ditch at that time was 3.6 m deep; there was evidence of a later re-cut, dating to the late 11th or 12th century. Beneath the bank was a well-preserved old land surface; field examination of this soil indicated that there had been cultivation on the site prior to the building of the hill fort. Pollen analysis pointed to a pre-hill-fort environment that was pastoral, dominated by grassland, and with little evidence for woodland in the vicinity. Trenches in the interior of the hill fort showed that up to 90% had already been destroyed by nineteenth and early twentieth century gravel quarrying. In one trench, some archaeological features did survive, in the form of pits and post holes dating to the middle Iron Age. Some of these features contained substantial deposits of charred grain (mostly spelt and emmer) plus fragments of a large pottery storage vessel, and large pieces of charcoal derived from planks, stake-tips and staves possibly from a small oak barrel. These remains are best interpreted as the debris of a burnt-down granary.



Fig. 1 Asheldham Camp 1985. Site location.

Introduction

Asheldham Camp (TL 972 012; TL 90/1) is a univallate enclosure about 3.5 ha (8.75 acres) in extent. It lies roughly in the centre of the Dengie peninsula (Fig. 1) at c. 20 m OD. It is generally classified as a hill fort, although it is located in a plateau setting, rather than on a hill top. The defences are traceable around much of the east, south and west sides of the Camp, but the line of the northern defences is more problematical. There is no obvious entrance into the Camp, and its interior is clearly marked with a series of shallow, saucer-like depressions resulting from small-scale gravel extraction in the nineteenth and early twentieth centuries. On the east side, there is a mound (Fig. 2), just inside the line of the defences. Outside the Camp, the land slopes away gently to the south, down to the Asheldham Brook, which is the main waterway running from the centre of the Dengie peninsula through the coastal marshes to the open sea. Because of its setting, the Camp does not command extensive views over the surrounding countryside, though it is possible to see a considerable distance to the south and southeast, out over the estuary of the Crouch.

Asheldham Camp is a scheduled ancient monument (County No. 134), which in 1984 was the subject of a scheduled monument consent application, the intention being to plough up the interior of the Camp (which at that time was rough grazing) and to bring it into arable cultivation. Because so little was known about the Camp (in spite of a number of casual finds, see below), it was decided to carry out a limited archaeological investigation. This took the form of a detailed contour survey, followed by a number of trial trenches to assess the survival of archaeological deposits. With this information available, it was felt it would be easier to draw up a scheme for suitable future management of the site. The work was carried out in March and April 1985 by Essex County Council Archaeology Section under the direction of the author. It was grant-aided by English Heritage; scheduled monument consent for the excavation was given by the Department of the Environment.

The site and its environs

The subsoil at Asheldham is a well-drained sandy gravel, overlying London Clay. Around the Camp, the main land uses are either farming or mineral extraction. The nature of the local subsoil is particularly favourable for the formation of cropmarks, which, traced from aerial photographs, show Asheldham Camp at the centre of a complex network (Fig. 1D). It has been suggested that the present lay-out of roads and boundaries in the Dengie peninsula has a Roman origin (Drury and Rodwell 1978). Since the pattern of cropmarks does not fit at all well into this, presumed Roman landscape, it is likely to be pre-Roman, and it is therefore not unreasonable to see Asheldham Camp as an important focus during the prehistoric period.

Finds from inside the Camp

The field which corresponds to the interior of the Camp (marked 'Rough grazing' in Fig. 2) was described as 'Gravel Pit Field' in the Tithe Map of 1838, implying that quarrying had begun by that date. A second phase of casual gravel quarrying took place in the 1920s and 1930s, and was intermittently monitored by Laver (1930). His observations concerned two gravel extraction areas in the centre of the Camp. He noted a few post holes, plus a ?pit; some of these features contained pottery (Saxon and prehistoric) and charcoal. There was also a third (smaller) area of gravel extraction in the north-west corner of the Camp (?just at the edge of the post-war pine plantation: Fig. 2). Here, Laver recorded a substantial ditch at least 6 m wide at the top. The ditch was not bottomed, but was at least 2.2 m deep. The profile indicated a major re-cut, but there were no finds to date either this or the original ditch. Unfortunately, from Laver's (1930) sketch plan, it is difficult to be sure of the exact line of the defences. In addition to Laver's observations, there is a note in the Colchester Museum registers about finds made by a Mr. W.L. Hickson from 'the field marked CAMP on the 6-inch O.S. map'. These consisted of a number of small vessels, some intact, from pits 'full of black ash', discovered by workmen digging gravel. The date of their discovery is not known. The vessels are described as 'ovoid or globular, and about 8 inches high by 6 inches wide'. From this description, it is difficult to categorise them, but they may perhaps derive from Belgic or Roman cremation burials. Mr. Hickson also reported that the ditch and rampart of the Camp were cut several times during the gravel quarrying.

The Colchester Museum records also contain a note of finds made by a Mr. J.W. Sherlock during 1943, 1945 and 1946. These included some 'Hallstatt' (?early Iron Age) sherds, but the bulk was Belgic material, possibly a collection of vessels with cremations, since they were originally accompanied by bones. (Given the acidity of the soil, this probably implies burnt bone). One of the vessels is illustrated in Thompson's (1982) catalogue. How this material came to be discovered is not entirely clear; however, during the 1985 excavations, many signs of second World War disturbance were found, and it may be that the digging of these (?) latrine pits and (?) rubbish pits brought some of the vessels to light. There is also a rough sketch plan in the Colchester Museum Registers indicating that some of the 1945 finds came from the centre of the Camp.

Finds from the Camp defences

During the construction of Southminster Waterworks in 1893 (near the Pump House in Fig. 2), 'a rough basketwork of large sticks, on which had been laid a covering of clay with good coating of gravel' was observed (Laver 1898). This sounds like some sort of causeway, perhaps across a boggy area adjacent to the spring (Fig. 1D). Laver says that this material was laid in the bottom of a ditch, and surmised that it was an original entrance into the Camp. An iron knife and axe of 'Viking type' were also found. In addition, in 1900, Colchester Museum bought some pottery said to have been found during construction of the waterworks (VCH 1963). This included a Roman clay candlestick and six Belgic vessels, the latter perhaps indicating a cemetery or votive deposit.

On the eastern side of the Camp, the defences are in a poor state. There, an abandoned gravel quarry, dug to a



Fig. 2 Asheldham Camp 1985. Current land use.

depth of 7 m, (Fig. 2), has removed most of the ditch and may have clipped the outer edge of the bank. Some scarping of the steep western edge of this quarry was carried out in 1978 to make it safer. A visit by a member of the Essex County Council's Archaeology Section at that time produced a single sherd of medieval pottery (note in ECC SMR).

Recent excavations in the vicinity of the Camp

In 1976 excavation at Asheldham Church, c. 500 m due east of the Camp (Fig. 1D), produced evidence of Saxon settlement provisionally dated to the seventh century and later (Rodwell and Drury 1978). An aceramic phase post-dating the seventh century is suggested. The origins of the church were tentatively assigned to the late Saxon period.

In 1984, salvage excavation by the author (Bedwin 1984/5) immediately outside the Camp (Fig. 1D) revealed extensive early Iron Age settlement. Resources permitted only two days' work in an area of over an acre stripped of topsoil prior to mineral extraction. The full extent and nature of this site will never be known; its relation to the Camp is considered in the Discussion.

Survey and excavation

Because of the history of previous damage to the site by gravel quarrying, it was decided to:

- i) carry out a detailed contour survey of the site at 1:250 (from which Fig. 3 is derived). This did not extend into the pine plantation or the abandoned quarry (Fig. 2) because of the density of trees and scrub respectively.
- ii) to excavate a number of trial trenches with the aim of assessing the degree of survival of the Camp's defences and also of archaeological levels in the interior. In particular, trenches were dug to investigate the defences on all four sides of the Camp, and to sample the main ridges and depressions identified within the interior by the survey. A single area excavation was undertaken to examine a flat 'saddle' of land between two major depressions (Fig. 3, trench F). It was not possible to examine the 'Mound' (Figs. 2 and 3) because of the trees growing on it. All trenches were opened by machine, followed by cleaning of the sections and floor by hand. Any exceptions to this procedure are noted below.



Trench A (41 m by 2 m; Figs 3 and 4)

This was the main trench positioned to investigate the defences on the eastern side of the Camp; the western end of the trench also sampled an area of the interior immediately behind the rampart.

The ditch here was a broad, ill-defined, shallow depression, and the bank a low but broad rise in the ground. The precise alignment of bank and ditch were therefore difficult to ascertain, and trench A did not quite section the ditch at right angles. The ditch was shown to be 3.6 m deep, 10.0 m wide at the top and 3.2 m wide at the bottom. (Note that Fig. 4 shows these widths as 11.0 m and 3.5 m respectively due to the slightly skewed section). There was a sharp discontinuity between the lower ditch silts (contexts 65, 85, 86 and 89 in Fig. 4), and the upper ones (contexts 6, 14, 18 and 30). This, together with the obvious change in profile, indicates a major re-cut. The lower silts were hard, with much brittle, mottled reddish-brown iron pan (which sometimes extended into the natural subsoil). These silts contained only a single sherd of pottery, from 4 cm above the ditch floor in context 65, a primary silt (Fig. 4). This was an undecorated body sherd in a flint-gritted fabric, and measured 2 cm across. It is unlikely to be later than the early Iron Age, but it was, of course, small enough to be residual.

By contrast, the upper silts were fairly soft, grey-brown deposits with no iron-panning. Medieval pottery was present in most of them, especially contexts 6 and 14. The marked difference between upper and lower silts strongly suggests a substantial lapse of time between their deposition, i.e. between the digging of the original ditch and its re-cutting along a line corresponding to the lower edge of context 18 (Fig. 4). The profile indicates that the re-cut ditch would have been shallower but considerably wider than the original. Pottery from context 18 which would establish the date of the re-cut, was limited to 20 sherds, all from the upper edge of the fill. Three of these were in flint-gritted fabrics, and are therefore probably residual prehistoric material. Six belong to the middle Saxon period, but the remaining eleven cannot be dated to earlier than the eleventh century (see pottery reports, below).

The section through the bank was much disturbed (Fig. 4). The size of the ditch (both original profile and re-cut) implies an impressive bank, though little had survived in trench A. The sandy gravel of the original bank (contexts 7 and 10 in Fig. 4) was much attenuated and cut by later features (contexts 83, 95 and 104). However, the remains of the bank did seal a well-defined old land surface (context 8) and a substantial post hole (context 9). The latter, which contained a single flint-gritted body sherd, indicated wooden revetting of the bank, probably at the front, although it is impossible to be absolutely sure because of the more recent disturbances, and also because the broader re-cut has obscured the position of the upper edge of the original ditch. Equally, the full width of the bank could not be established as it was cut by a large pit (containing contexts 67 and 83 in Fig. 4). This feature was not bottomed, but was at least 2.2 m deep. In the top of it was a galvanised iron water pipe still in situ, running across the trench. This had been laid to supply water to a cattle compound which formerly

existed to the south of the 'Mound'.

In spite of the obvious re-cutting of the ditch, there was no indication in Trench A for a second phase of bank construction. Because of the disturbances already noted, however, any evidence could well have been lost.

The trench was extended locally to investigate a stretch of the buried soil, context 8 (Fig. 3; the easternmost extension on the north side). Because of the importance of dating the construction of the hill fort, it was hoped to obtain as large as possible an assemblage of pottery from this soil. In the event, virtually the whole of this extension had been destroyed by a later pit (context 95 in Fig. 4), and only 24 sherds (including 1 rim) were recovered. The rim had an upright, squared-off profile typical of the early Iron Age, a date with which the fabrics of the other sherds would be compatible. A secondary aim of this extension was to measure the distance between revetment post holes, but the destruction by the later pit ruled this out.

Behind the bank, a number of small features were visible in section, cutting into the subsoil; contexts 12, 68, 70, 72, 74 and 90 in Fig. 4. The trench was widened locally to investigate these further. All turned out to be post holes, except context 12, which was a small scoop or shallow pit. Contexts 68, 70 and 90 each contained one or two undiagnostic sherds of flint-gritted pottery. Context 12 yielded 74 sherds, among which the diagnostic material belonged to the early Iron Age (pottery report, below).

Trench B (13 m by 2 m; Figs 3 and 5)

This was located so as to section the rear half of the bank in an area where it appeared to have been less disturbed than in trench A. The bank survived as a gravelly feature up to 1 m high (context 22) sealing a well-preserved buried soil (context 23; Plate I). This soil produced three undiagnostic body sherds; it was also sampled for pollen and soil analysis (reports below). There was no sign of a second phase of bank construction equivalent to the ditch re-cut in Trench A. Behind the bank, i.e. in the interior of the hill fort, was a modern pit (context 25), probably of second World War date, containing scrap iron and fragments of drain pipe.

Trench C (107 m by 1.5 m; Figs 3 and 6)

The aim of this long trench was to sample the northern half of the Camp's interior, and particularly to locate the northern defences, which are no longer traceable on the ground. Surprisingly, no trace of a bank or ditch was found. There was a step in the subsoil, about 0.6 m high, c. 46 m from the northern end of the trench, which is reflected in the surface contours (Fig. 3). The fill above this slight step was a soft, clean sand which looked as though it had weathered down from the upper edge of the step. This fill was by no means as loose as some encountered during the excavation, and may thus imply quarrying at a date earlier than that of the 1920s and 1930s recorded by Laver. Possibly, it may relate to the quarrying which had given this area the name 'Gravel Pit Field' by the time of the 1838 Tithe Map.

There was a second step in the subsoil, about 1 m high, 14 m from the south end of the trench (Figs 3 and 6). Again this seems to indicate a recent quarry scoop (?Laver's pit

ASHELDHAM CAMP 1985

Sections

8



ESSEX ARCHAEOLOGY AND HISTORY

Fig. 4 Asheldham Camp 1985. Trench A, north and south section. Trench E, east section.



Plate I Asheldham Camp 1985. Trench B, north section through rear of hillfort rampart, showing buried soil (between arrows). Scale 2 m

1 in his 1930 report), and the sandy fill which had weathered down from this step was so unconsolidated that it collapsed within 20 minutes of being exposed.

Between the two steps in the natural was a ridge where some stiff grey clay was encountered (Fig. 3). Presumably, this is why the ridge had survived as such, as those involved in quarrying sand or gravel would have avoided it. There were a number of other small, twentieth-century disturbances in trench C, and no finds earlier than the nineteenth century.

The absence of evidence for the bank and ditch in the northern half of the trench presents problems of interpretation. The northern part of the Camp is lower than much of the rest of the site (compare the highest and lowest contours crossing trench C in Fig. 3, a difference of c. 1.5 m). However, this area has not been lowered sufficiently to have obliterated all traces of a ditch 3.6 m deep, as recorded in trench A. It can be argued that the hill fort ditch was not as deep all the way round its perimeter: trench A could have been near an entrance, and the ditch may have been deeper there. However, Laver's (1930) observations note a ditch in the north-west corner of the Camp which was at least 2.2 m deep, with a profile that closely resembles the upper part of that noted in trench A. Moreover, the ditch that Laver saw was also much nearer to trench C than trench A was. The unavoidable conclusion is that the line of the northern defences did not run through trench C, and this is further considered in the Discussion below, in relation to the results from other trenches.

Trench D (70 m by 1.5 m; Figs 3 and 5)

The trench was located so as to section the bank along the southern edge of the Camp, and also to sample the southern

part of its interior. As with trench C, there was some variation in subsoil, and this was reflected in the survival of archaeological features. Most of the subsoil was the usual sandy gravel, above which the soil was clearly disturbed, much of the section revealing partly-rotted twigs and turf immediately overlying the subsoil. The southernmost 12 m was a yellowish-grey sandy silt. The soil above this was far less disturbed; again gravel quarrying would probably have stopped on reaching this subsoil.

The bank survived as a low rise in the ground, barely 0.5 m above the surrounding areas. It consisted of a mottled, silty deposit, overlying a well-defined buried soil which was sampled for pollen and soil analysis. There were no finds from the buried soil. About 7 m from the southern end of the trench was a substantial circular post hole cut 0.5 m into the subsoil (context 26 in Fig. 5). The trench was extended slightly to the west to expose this feature fully, and two small sherds of flint-gritted pottery were found within it. A second extension to trench D was excavated slightly to the north of the first one (Fig. 3); the feature it was intended to examine turned out to be a slight colour variation in the subsoil.

Trench E (29 m by 1.5 m, with westward extension; Figs 3 and 4)

Like trench C, this was positioned to investigate the northern defences. There was a substantial-looking feature towards the northern end (context 49), but on excavation, this proved shallow and irregular. It is best interpreted as the disturbance caused by the roots of a large tree. There were no other features in the trench, and the depth of topsoil in some parts of it was minimal.

Trench F (13.5 m by 8 m; Figs 3, 7 and 8)

Unlike the other trenches, this was a small area excavation on a flat piece of ground between two conspicuous depressions. It was anticipated that the area might have escaped destruction by quarrying. This proved to be the case and a number of prehistoric features were found, cut into the subsoil, but there were no surviving occupation levels. The main features were the two pits, contexts 35 and 62 (Fig. 7). These were quite similar in general appearance, being of equal depth (0.5 m), with wide, flat bottoms, steep sides and with at least one shallower 'lobe' at the edge, i.e. contexts 39 and 87 (Fig. 8). The fills, however, were totally different. Context 35 had a clean sandy fill with only a few flint flakes and no pottery. It was cut through by a substantial post hole, context 37. Context 62 contained two sharply contrasting fills. The black lower fill (63) consisted very largely of charred material (an estimated 40 kg), made up of charred grain and charcoal, some of the latter in large lumps, clearly derived from worked wood (report below). Within this fill were about 40 large unabraded sherds from a single, thick-walled storage jar in a heavily flint-gritted fabric, of middle Iron Age date. The upper fill was a fine, sandy deposit, free of charred material, but containing an almost complete middle Iron Age bowl in a sandy fabric. The purpose of these pits is unknown; the sandy subsoil was so loose and friable that it begun to weather away as soon as it was exposed. It seems unlikely that these could have been storage pits, unless lined.

The other features in trench F were all post holes. Two

were substantial and well-defined (context 32 and 37; the latter has already been mentioned as cutting through pit 35). Both contained large amounts of charcoal and charred grain. Context 37 also yielded several large unabraded sherds of a middle Iron Age globular bowl, with curvilinear decoration (see pottery report, below). The other post holes (contexts 46, 50, 58 and 60 in Fig. 7) were all shallow and ill-defined; none contained any datable objects.

Trench G (10 m by 2 m; Figs 3 and 5)

This was located to sample the south-western corner of the bank. The subsoil was a slightly silty sand, similar to the southern end of trench D. In section, the bank could be seen to have survived only as a thin lens (context 101), a maximum of 25 cm thick. There was no sign of recent quarry disturbance. A buried soil was present, but there were no finds from it. A well-defined circular post hole (context 80) was very similar in appearance to context 26 in trench D, and occupied an analogous position to the rear of the bank.

Trench H (10 m by 1.5 m; Fig. 3)

This was positioned to examine the survival of the defences along a stretch of the southern edge of the Camp where the bank was barely traceable on the ground. The section revealed no sign of the bank, and although the subsoil was gravel, it seems more likely that a broad area of the bank had been levelled here, not by quarrying, but by bulldozing to facilitate access into the field to the south.



Fig. 5 Asheldham Camp 1985. Trench B, north section, Trench D, west section. Trench G, east section.

ASHELDHAM CAMP 1985 Trench C r 4 m Profile s Ν ► CLAY -----'n 15 m SUBSOIL Section S Ν · . ***** (1). (Section continued below left) 5m ∼107 (Modern) (Section continued below left) (1)• -109 (Modern) s CLAY SUBSOIL - 6 1.1 ัก (Section continued below left) 111-(Modern) (Not bottomed) N s ĊĹAÝ SUBSOIL $\widehat{}$

Fig. 6 Asheldham Camp 1985. Trench C, profile and east section. Note different vertical and horizontal scales in the profile, and also note the use of different horizontal scales between profile and sections.



Fig. 7 Asheldham Camp 1985. Trench F, detailed plan.



Fig. 8 Asheldham Camp 1985. Trench F, sections. For location of these sections refer to Fig. 7.

Trenches J and K (both 17 m by 1.5 m; Fig. 3) Both trenches were positioned to test for the presence of Laver's (1930) 'outer' ditch on the nothern side of the Camp.

Neither trench contained any archaeological features.

Trench L (62 m by 2 m; Fig. 3)

This trench was designed to provide a section through the western defences. However, no trace of ditch or bank was found. It would therefore seem that the natural defences (i.e. the slope of over 3 m from top to bottom, plus extensive marshy ground at the foot of the slope) were considered a sufficient obstacle on this side. It is possible too that the summit of the natural bank could have been additionally defended with a palisade.

Trench M (10 m by 2 m; Fig. 3)

This part-section was cut to check the alignment of the main hill fort ditch found in trench A, as near as possible to the boundary fence. Only the outer edge of the ditch was located, but the alignment indicated that the ditch ran beneath the modern road.

Discussion

This section is divided into 5 parts as follows:

- 1. The sequence of events at Asheldham Camp.
- 2. The pre-hill-fort environment.
- 3. The Iron Age economy.
- 4. The relation of Asheldham Camp to other Essex hill-forts.
- 5. Conclusion.

1. The chronological sequence

Six phases are identified, five from the 1985 excavations, and one from previous casual finds.

Phase 1; Early Neolithic

Among the small flint assemblage (125 pieces), there were 37 blades and blade cores, suggesting some form of early Neolithic activity (Martingell, below). There were no features of this date, and all the material was residual. The remainder of the assemblage may be of Late Bronze Age date, or later (i.e. possibly phase 2 or 3), and is not considered strong enough evidence for a separate phase.

Phase 2; Early Iron Age

Flint-gritted pottery typical of the early Iron Age (EIA) was widely spread over the site, though there was relatively little from trench F in the interior of the Camp (Fig. 3). On the basis of the discovery of EIA material in the old land surface beneath the hill-fort bank (trench A) and of the single flint-gritted sherd in the primary silt (also trench A), the construction of the hill fort is assigned to this phase. What is not clear is the extent of occupation at this time. Within the hill fort, only one small pit, context 12 in trench A (Fig. 4) can definitely be dated to the early Iron Age, by virtue of 74 flint-gritted sherds. However, contexts 11, 68, 70, 90 and 98 (trench A) plus context 31 (trench D), all post holes, each yielded one or two sherds of flint-tempered pottery and could well belong to this phase. In general terms, the number of post holes in the zone immediately behind the bank suggests parallels with Danbury (Morris and Buckley 1978), though this is not an especially helpful comparison, since the concentration of post holes at Danbury could not be resolved into a building. At Asheldham, only an area excavation immediately behind the bank where no gravel quarrying has occurred could distinguish whether or not there were structures in that zone and whether it was densely occupied or relatively empty.

A further complicating factor in trying to decide the intensity of occupation within the Camp is the existence of an apparently contemporary settlement just *outside* the northeastern defences (Fig. 1D and Bedwin 1984-5, 87-8). This settlement was recorded on a salvage basis over 2 days in 1984 and its full extent was not properly established. The whole area to the north-east of the Camp has now been quarried away ('Active quarry' in Fig. 2), and this, combined with the level of destruction inside the Camp, makes any assessment of the relationship between activities inside and outside the Camp during this phase very difficult.

Phase 3; Middle Iron Age

Virtually all the pottery characterised as Middle Iron Age (MIA) came from trench F. Pit 62 and post hole 37 (Fig. 7) produced large unabraded sherds of MIA pottery. Post hole 32 was very similar to 37 but yielded only a single undiagnostic sherd. It did however have a substantial deposit of grain and charcoal similar to pit 62 and is therefore probably MIA too. Pit 35 contained only a few flint flakes but was similar in appearance to pit 62, and is probably of similar date.

The relatively small size of trench F means that the plan of features (Fig. 7) does not really permit much in the way of interpretation of MIA activity. This derives rather from a consideration of the finds. These consisted of a number of large sherds of pottery (including one partly vitrified from a large storage jar), fragments of oak charcoal from planks, stake tips and the staves perhaps from a small barrel, and a mass of charred grain and charcoal. On the basis of this evidence, Peter Murphy (below) suggests a grain storage area in the vicinity of trench F, with grain being kept in both pottery and wooden vessels. The remains noted above would thus be interpreted as debris from a burnt-down granary.

This kind of evidence clearly implies permanent settlement in at least part of the Camp's interior during this phase. This idea is supported by the MIA pottery assemblage, which includes a variety of coarse and fine wares, indicating a wide range of domestic functions.

One question left unanswered by the 1985 excavations is whether the MIA settlement was within a heavily defended enclosure, or whether the hill-fort ditch had silted up and the bank weathered down to an extent that they were no longer considered defensible. The main ditch section in trench A (Fig. 4) is unenlightening in this respect. Rapid primary silting is indicated (context 65), but any evidence for an MIA re-cut could have been obliterated by the phase 5 re-cut (see below).

The three radiocarbon dates are discussed here, as they all come from charred grain samples in trench F.

HAR-6700 cal. BC 200-cal. AD 210 (within the 95% confidence limits). This was derived from context 63, and is associated with the very coarse storage jar (Fig. 11.15), which seems unlikely to have been in circulation as late as the radiocarbon date implies. Equally, context 63 was stratigraphically below context 64, which produced the unequivocally MIA jar (Fig. 11.11) and which also would somewhat be out of place as late as the HAR-6700 date range. This date should therefore be treated with circumspection.

- HAR-6701 cal. BC 400-90 (95% confidence limits). This was from context 38, and is associated with the MIA pot with curvilinear decoration (Fig. 11.16).
- HAR-6702 cal. BC 520-170 (95% confidence limits). This was from context 34, where there was no pottery, only a single flint flake. The dimensions of post hole 32 (which contained 34) were very similar to post hole 37 (which contained 38, with MIA date and pottery). Furthermore, the charred grain samples were very similar (Murphy, below), and so contexts 34 and 38 may well represent charred debris from the same incident.

Phase 4; late Iron Age/Roman

The 1985 excavation yielded only 3 small sherds of Roman pottery, and so this phase is included on the basis of casual finds made in the Camp (summarised above in the section on 'The site and its environs'). The contrast between the chance finds of globular vessels, some intact, which may be Belgic or Roman, and the virtual absence of such material from the widely spaced excavation trenches is striking. The most likely explanation is that the casual finds came from a small, compact cemetery, which was not located by any of the 1985 trenches. Given the circumstances of discovery 'by workmen digging gravel', it is possible that none of this putative cemetery survives.

Phase 5; Saxon

This phase is characterised by the presence of a small assemblage (338 g) of Saxon pottery (Tyler, below), almost all from trench A. All the material appears to be residual, even the fairly large sherds from context 18, the lowest layer in the re-cut hill-fort ditch (Fig. 4). It is difficult to interpret this material, other than to say that it implies settlement in the vicinity, sometime during the period AD 450-850, and probably towards the latter end of that time (Tyler, below). This evidence of probable mid-Saxon settlement can be added to the 7th century material from the Asheldham church site, 500 m to the east (Drury and Rodwell 1978).

Phase 6; Medieval

Apart from a few topsoil finds, medieval pottery was restricted to a small group of sherds (1.7 kg) from various contexts in trench A, and restricted in date to the late 11th and 12th centuries (Walker, below). It included sherds from context 18, the lowest layer in the re-cut. Since this was the latest pottery in that context, it effectively dates the re-cutting of the ditch to that period. The re-cutting seems not to have been a localised affair. It was observed by Laver (1930) in the north-west corner of the Camp, as well as in 1985 in the north-east (trench A), and may have been carried out around the whole perimeter, excluding the west side, where no trace of a ditch of any period was found (trench L).

The historical context of an 11th/12th century refortification could perhaps be the civil unrest during the reign of Stephen. It is worth noting that the pottery in context 6 (Fig. 4) immediately above context 18, is of similar date, perhaps a little later (Walker, below). Context 6 was rather more prolific in pottery than 18, and had the appearance of a substantial dump against the inner edge of the ditch. This may indicate the slighting of the defences not long after they were built.

2. The pre-hill-fort environment

The evidence bearing on this comes from the buried soil beneath the hill-fort bank. Field examination of the soil (Mac-Phail, below) indicates cultivation prior to the construction of the hill fort, though by how long the two episodes are separated remains unknown.

The results of the pollen analysis of samples from the buried soil are not as clear-cut as had been hoped due to poor preservation (Scaife, below). Nevertheless, the pollen which did survive contained species indicative of both arable and pastoral vegetation. Cereal pollen was present, but pollen types suggesting a pastoral environment were dominant. Three interpretations are provided for the presence of cereal pollen in the buried soil (Scaife, below). The most straightforward one is that it represents cereal cultivation pre-dating the hill fort's construction. A second interpretation is that the pollen may have derived from crop-processing activities on the site (cf. Murphy's identification of charred grain, below). However, it is probable that most, if not all, of the crop-processing activity detected during the 1985 excavations post-dated the building of the hill fort, making this interpretation less likely. The third possibility is that the pollen came from plant material such as animal fodder or bedding brough to the site, or from dung. Again, this seems less likely, unless we are to suppose an open settlement on the site before the hill fort was built (for which there is little evidence from the excavations). The first interpretation is therefore to be preferred, i.e. that the cereal pollen does indicate pre-hill fort cultivation, and this is compatible with MacPhail's findings noted above.

As a final point, Scaife (below) suggests that the greater abundance of hazel (*Corylus*) pollen towards the top of the buried soil profile may indicate a brief return to pastoralism (after a period of cultivation) just before the hill fort was built.

3. The Iron Age economy

The evidence for this comes from the charred grain and other plant macro-fossils identified by Murphy (below). No animal bone or teeth survived in the extremely acid conditions and so evidence for animal husbandry is completely lacking.

In general terms, the evidence for the economy relates to the Early and Middle Iron Age (EIA and MIA), a period of perhaps three or four centuries after the hill fort was built. The three main cereal species were spelt, emmer and 6-row hulled barley. Murphy (below) notes that the occurrence of emmer in MIA contexts represents the first evidence of its cultivation as late as this period in eastern Essex. Most of the weed seeds indicate cultivation on the well-drained land surrounding the Camp, but a few suggest it may have extended onto poorly-drained soils. Reference to Fig. 1D indicates cropmarks to the north and east of the site, some of which may represent Iron Age fields. The evidence of seeds from wetland species may indicate cultivation either near the spring just outside the south-west corner of the Camp, or down towards Asheldham Brook to the south.

The material which survived in carbonised form appears to have derived from the later stages of crop-processing and consumption. Some distinction can be made between the (probable) EIA features in trenches A and G, which produced grain assemblages best interpreted as by-products of graindrying or roasting, and the MIA features in trench F which indicate grain-storage nearby. There are, however, major limitations to any interpretation based on a few, widelyscattered samples. The basis of the difference between EIA and MIA may be genuinely chronological, but it could equally well be locational, with grain-drying/roasting being typical of the zone just behind the bank, but with storage structures well into the interior of the Camp.

It may also be the case that to consider the hill fort alone is to invite a false or inadequate perspective. It remains highly likely that on the light, well-drained soils of the Dengie peninsula, arable farming played an important part in the EIA and MIA economy (and perhaps earlier too from the evidence of tillage noted below the hill-fort bank). The fact that Asheldham Camp is located at the centre of a group of cropmarks of probable prehistoric date (fig. 1D) suggests that it may be more profitable to see the hill fort and the activities carried out there as simply part of the broader social and economic framework. The findings reported by Murphy (below) of material relating only to the later stages of crop-processing may hint at a specialised role within that framework. However, this conclusion is a tentative one for reasons made clear in the preceding paragraph. The only way to resolve the issue would be to carry out further excavations within the Camp and also at a contemporary settlement nearby. With an intensive programme of environmental sampling as part of the excavation strategy, it should be possible to differentiate between crop-processing activities at the Camp and elsewhere.

4. Asheldham Camp and other Essex hill forts

It is now 10 years since the last review of Essex hill forts (Morris and Buckley 1978). Since that time, little fieldwork has been done or published and it remains the case that the construction of very few hill forts has been securely dated. The chart published by Morris and Buckley (1978, 22-3) therefore needs little amendment though the Mucking 'minihill fort' would not now be included in such a classification. Uphall Camp seems now to be of Middle Iron Age origin (P. Greenwood, pers. comm.), and the 1985 excavations date the building of Asheldham Camp to the early Iron Age. Evidence now exists for the Late Bronze Age origin of the earthwork at Chipping Hill, Witham (Flook and Bedwin, forthcoming). As a first step to a better understanding, the dating of the origin of all the undated earthworks is an important priority. Without this information, it is impossible to say whether the Essex hill forts are an organised, regional response to outside threats, or a local *ad hoc* response.

The Essex hill forts are a rather disparate group of earthworks, and few survive in anything like an undamaged state. As a group, the single unifying factor seems to be their siting in positions of strategic importance relating to rivers, estuaries, and the coastline (Morris and Buckley 1978). What goes on inside these hill forts is still largely unknown. The findings from Asheldham do help a little in this respect, as they indicate Early and Middle Iron Age settlement, though of what density was not established. By the late Iron Age the Camp seems to have been abandoned, with a small part of it perhaps being used as a cemetery (Phase 4, above). Whether this is a typical sequence for an Essex hill fort is not clear in the present state of knowledge.

Morris and Buckley (1978, 14) also discussed the possibility of Saxon re-use of a number of hill forts, namely Witham, Danbury and Asheldham. At the last named, there was some indication of Saxon activity, though since all but one sherd came from the ditch in trench A (Fig. 3), this could as easily have been outside the Camp as inside. Saxon refortification seems unlikely, though of course all traces could have been removed by the late 11th/12th century re-cut (Phase 6, above).

5. Conclusion

The primary aim of the 1985 excavation was to assess the survival of archaeological deposits within the Camp and its defences. This aim was achieved, although the discovery that so much had been destroyed was an unwelcome one. The information gained about the development of the site, plus the prehistoric environment and economy, should therefore be seen as a by-product of the excavation. In addition, a report was prepared for English Heritage in May 1985 summarising the archaeological findings and setting out possible options for future management of the monument.

One or two aspects of the 1985 findings deserve further comment. In spite of the number of excavations on Iron Age sites in Essex, no buried soil had previously been sampled for the information it could provide about the ancient environment. This is due largely to the fact that there are so few surviving prehistoric earthworks beneath which a buried soil might be protected.

Equally the study of charred grain represents a considerable addition to the limited published data about Iron Age crops and crop-processing. Only three other sites seem to be represented in the literature. These are Rectory road, Orsett (Murphy 1988), with the identification of grain from a single Early Iron Age pit; the Orsett causewayed enclosure, with grain from another Early Iron Age pit (Hubbard 1978, 294), and Wendens Ambo, where grain was identified from a number of Middle Iron Age (and ?Early Iron Age) features (Jones *et. al.* 1982). This current lack of comparative data from extensive sampling programmes on Essex sites will, however, soon be remedied by publications in the pipeline (e.g. North Shoebury and Ivy Chimneys, Witham), and also by work on the excavations at Stansted in advance of the airport construction.

Finally, observations relating to the perimeter of the Camp need to be considered. First, the absence of earthwork defences along at least part of the western side was surprising, although the steep, natural slope there has a drop of over 3 metres. Had this been augmented by, say, a wooden palisade at the top, an effective defensive arrangement would



Fig. 9 Asheldham Camp 1985.

(A) Perimeter of Camp after Laver (1930). (B) Perimeter of Camp as suggested by the 1985 excavations.

have existed. Secondly, there is the lack of evidence for defences on the northern side of the Camp, where Laver (1930) noted a main bank and ditch, plus an outer ditch (Fig. 9A). In 1985, trenches C, E, J, K (Fig. 3) located no sign of the defences. Furthermore, the alignment of the hill-fort ditch in trenches A and M, indicated that it ran beneath the modern road. It is possible that this road, for a short stretch, follows the line of the ditch, or, more probably, the bank (suggested line in Fig. 9B). There is a marked depression along the northern edge of the road, which might represent the silted-up ditch. If this is so, Laver's observations are hard to explain. One possibility is that the 'northern defences' visible in the 1920s represent the southern edge of earlier gravel workings (cf. 'Gravel pit field' in the 1838 Tithe Map). One advantage of the perimeter indicated in Fig. 9B is that it does away with the awkward bend at the north-east corner, which Laver's observations demand.

The 1985 excavations do not shed much light on what is pehaps the most conspicuous topographical feature of the Camp and its environs. This is the way the Camp appears to act on the line of the east-west road (Figs 2 and 9). With Laver's perimeter (Fig. 9A), the road gives the Camp a wide berth that is hard to explain. The results of the 1985 investigations suggest that the Camp's north-eastern perimeter defines the line of part of the road. However, this still leaves unresolved the question of why there is such a gap to the west. The author can only suggest that the area of marshy land, shown immediately to the west of the Camp, was formerly more extensive (especially to the north), causing the road to skirt around it.

Specialist Reports

Flintwork

by Hazel Martingell

A total of 125 worked flints from the excavations were studied. The following flints were identified:

- 2 scrapers
- 1 denticulate on thermal
- 1 notched piece on a core
- 1 microdenticulate on a crested piece
- 6 core rejuvenation flakes
- 31 blades
- 71 flakes
- 8 cores
- 1 thermal split block with core preparation
- 3 bashed lumps

Material

The material varies from good quality glossy black flint to grey flint with inclusions. The blades are almost all made of the better quality flint.

Discussion

The worked flints were residual in later features or were unstratified in the topsoil.

The thirty seven blades and blade cores provide the earliest evidence for occupation of the site, during the early Neolithic; they came from the topsoil and contexts 33 and 36 in trench F (Fig. 8). These blades and blade cores account for one third of the collection, an unusually high percentage for a mixed assemblage from a later prehistoric site.

The use of flint split by thermal change, and the few retouched pieces suggest a LBA and even later date for the remainder of the artefacts. The two scrapers (Fig. 10, Nos 1 and 2) and the denticulate, are all made on flakes split by thermal action, and are the only clearly retouched pieces present.

Prehistoric pottery

by Nigel Brown

The excavations yielded a small quantity of prehistoric pottery mainly from trenches A and F. A total of 420 sherds weighing 7.009 kg was recovered. Much of the material was residual in later features or recovered from the topsoil. However, two features, 62 and 37, in trench F produced reasonable quantities of pottery, whilst smaller amounts were derived from the old land surface below the bank, and features to the rear of the bank.

A rolled rim (Fig. 11, 1) with carefully finished surfaces, probably originally burnished, from the topsoil in trench D, and a very abraded rim (Fig. 11, 2) from the later recut of the hillfort ditch, may be Neolithic although an Iron Age date cannot be excluded. The rest of the pottery appears to belong to the Iron Age. Two phases seem to be represented corresponding to the Early and Middle Iron Age.

In Essex, Early Iron Age (EIA) assemblages are generally dominated by flint-tempered fabrics. However, there tends to be an increase in the use of sand-tempered wares and a general diversification of fabric types in the EIA, compared to preceding Late Bronze Age groups. In Middle Iron Age assemblages flint-tempered fabrics form a much smaller proportion (Drury 1980, 52). At Asheldham, pottery in flint-tempered fabrics is the most common element in the material from trench A, whilst a range of sand and vegetable-tempered fabrics predominate in trench F, where many of the sherds display features which, on typological grounds, appear likely to belong to the MIA.

The old land surface beneath the bank in trench A (context 8) produced 23 body sherds and 1 small upright flat-topped rim (Fig. 11, 3); all are in flint-tempered fabrics and probably of ELA date. The old land surface in trench B (context 23) yielded three small undiagnostic body sherds. The primary silts of the hillfort ditch (context 65) produced one abraded flinttempered body sherd. Feature 12 produced 74 sherds including a rounded rim (Fig. 11, 4) and part of a lug handle (Fig. 11, 5); a similar example was recently recovered from a nearby quarry (Bedwin 1984/5). An EIA date may be appropriate, although the lug has numerous parallels in Late Bronze Age (LBA) contexts. Features 11, 68, 70, 90, 98 in trench A and 31 in trench D all produced one or two small flint-tempered sherds which may belong



Fig. 10 Asheldham Camp 1985. Flintwork.



Fig. 11 Asheldham Camp 1985. Prehistoric pottery.

to the EIA. Amongst material from the trench A topsoil, two upright flat topped rims (Fig. 11, 6 and 7) one with slashed decoration on the top, and a very small rim (Fig. 11, 8) possibly from a hooked rim jar would be appropriate in an LBA or EIA assemblage. Two rounded rims (Fig. 11, 9 and 10), one markedly everted, are probably MIA, likely to derive from vessels of Little Waltham Form 13 (Drury 1978, 55).

Pit 62 contained a range of Iron Age pottery. The upper fill (context 64) produced a near complete roughly finished small bowl (Fig. 11, 11) of Little Waltham Form 11 (Drury 1978, 55), together with an everted rim (Fig. 11, 12) and footring base (Fig. 11, 13), both with burnished exteriors probably from a single vessel of Little Waltham Form 13. A second rim sherd (Fig. 11, 14) may be from a similar, larger vessel. The lower silts (context 63) contained a large part of a storage jar (Fig. 11, 15). This coarse vessel had a brittle overfired feel and one sherd was partly vitrified. In view of the large quantity of charcoal and carbonised grain from this context, fire damage to this vessel seems likely.

A large part of a globular bowl with strongly everted rounded rim (Fig. 11, 16) from pit 37, is of particular interest. The surface of this vessel is well smoothed, and probably originally burnished. The exterior is covered with free-flowing curvilinear decoration interspersed with small dimples. The dimples seem to be randomly placed, although there is an irregular line, partly obscured by damage to the surface, just below the widest point of the vessel. This pot may be related to the Mucking-Crayford style (Cunliffe 1978, A:24). However, such free-flowing decoration does not normally

occur in Essex, and is not included in Drury and Rodwell's (1973, 93-94) review of Essex curvilinear pottery. Decoration of this kind does not occur at Little Waltham but is relatively common amongst the MIA pottery from Mucking (S. Trow, pers. comm.) and occurs on a large body sherd of a globular bowl from Prittlewell (Priddy 1985, 129). It also occurs on pottery from North Kent (Thompson 1986, fig.7.18). The topsoil of trench F produced two footrings (Fig. 11, 17 and 18) and an abraded rim of a jar (Fig. 11, 19) of Little Waltham Form 10B (Drury 1978, 55). These jars are found widely in EIA and MIA assemblages (Cunliffe 1978, fig. A:11, 13). They appear to be a common component of an EIA Darmsden-Linton style assemblage from Lofts Farm, Heybridge, Essex (Brown 1988) and occur in EIA/MIA contexts at Orsett (Brown in prep.).

Macroscopic inspection of the fabrics reveals nothing which need necessarily be of non-local origin. The EIA material cannot be closely dated and much of this fragmentary pottery would not be out of place in a Late Bronze Age assemblage.

In view of the similarities of the MIA assemblage with the Little Waltham pottery a date range 300-100 BC would seem appropriate. The three radiocarbon dates do, however, suggest a rather wider date range, unless it is assumed that their accuracy is questionable (see Discussion, phase 3, above). Although small, the MIA assemblage contained large storage vessels (Fig. 11, 15) smaller coarse, storage or cooking jars and bowls (Fig. 11, 11) and fine ware bowls (Fig. 11, 16) suitable for 'tableware', indicating a range of domestic functions.

Roman pottery

by Catriona Turner

A total of 3 small sherds of Roman pottery were identified, 2 from the topsoil, and one from context 6 in trench A. All were residual, and are listed in the Archive.

Saxon pottery

by Susan Tyler

Saxon pottery (a total of 338 g) occurred in the topsoil above ditch 15 and in the ditch itself (context 18 - lower fill). Some pot recovered from the topsoil (Fig. 12.3) has the same fabric as one from the lower ditch fill, and is almost certainly from the same pot, a fairly large globular vessel.

All fabrics incorporate some vegetable temper: although quartz-sand and grog tempers are also present. Surface treatment of fabrics includes examples of burnish and deliberate roughening by the application of a slip containing quartz-sand; rusticated sherds are absent. All sherds are plain with no examples of stamped or incised decoration.

Catalogue

Definition of terms used Density of temper: Sparse: less than 5 per sq. cm Medium: 6-10 per sq. cm Dense: more than 10 per sq. cm Size of temper: Small: less than 1 mm Medium: 1-2 mm

Large: greater than 2 mm

AC85/E/1 — topsoil

Base sherd, Fig. 12, 1. Slight footring. Medium hard fabric tempered with sparse vegetable matter and medium quartz sand. Outer: reddish to dark brown. Inner and core: dark brown. Wt. 16 g.

Base and lower body sherds, Fig. 12, 3. Fairly large globular vessel. Flat base. Medium hard fabric with abundant vegetable temper. Inner and outer surfaces smoothed. Outer: reddish-brown. Inner and core: dark brown to black. An identical fabric from AC 85/A18 is undoubtedly part of the same vessel. Wt. 213 g.

Body sherd. Medium hard fabric with medium quartz-sand and sparse vegetable temper. Outer surface part-burnished. Dark brown throughout. Wt. 8 g.

Body sherd. Soft fabric with abundant vegetable and sparse medium grog temper. Dark brown throughout. Wt. 13 g.





AC 85/A/18 - Ditch fill

Body sherds — Medium hard fabric tempered with abundant vegetable matter. Inner and outer surfaces smoothed. Outer: reddish-brown. Inner and core: dark brown to black. An identical fabric from AC 85/E/1 is undoubtedly part of the same vessel. Wt. 81 g.

Rim Fig. 12, 2. Upright, rounded. Medium hard fabric tempered with abundant vegetable matter, sparse grog and sparse quartz-sand. Outer and inner surfaces appear to have been roughened by the application of a slip containing quartz-sand particles. Outer and inner: orange-brown to reddishbrown. Core: dark brown. Wt. 7 g.

Discussion

This small group of Saxon pottery is not closely dateable because of the absence of decorated or diagnostic forms. The predominance of vegetable-tempering may suggest a date towards the second half of the period AD 450-850 (Wilkinson 1988; Jones pers. comm.).

The medieval pottery

by Helen Walker

Most of the medieval pottery came from a recut ditch in trench A and consists entirely of locally made early medieval wares of the 11th and 12th centuries. Small amounts of medieval and post-medieval wares occur elsewhere on site, mainly in context 1.

The Fabrics

A fabric type series already in use for all post-Roman pottery in Essex has been used to classify this material (Cunningham and Drury 1985, 1-2). Cunningham's fabric numbers are quoted in this report.

Fabric 12A — Early medieval shell-tempered ware; soft with a soapy texture, brown or purplish in colour. N.B. all the Fabric 12 wares are vesicular, the shell having been leached out.

Fabric 12A(1) — similar to 12A but with very sparse tempering. Sherds found were either reduced to a very dark grey or had orange surfaces and a grey core. Fabric 12B — Early medieval sand and shell-tempered ware; similar to 12A but with the addition of sand temper giving a harsher feel. Many of the sherds are orange with grey cores but brown and grey examples are also common.

Fabric 12C — Early medieval sand with shell tempering. The sand tempering is dominant with little shell, usually on the surface. Apart from the shell it is similar to Fabric 13.

Fabric 13 — 'Early Medieval' ware; this has a coarse sand tempering and colour is typically reddish-brown with a light grey core, although reduced examples are found.

Fabric 20 — Medieval coarse wares: these are hard, usually grey and sand-tempered. They date from the 12th to 14th centuries.

Fabric 21 — Sandy orange wares: a general category, dating from the 13th to 16th centuries, usually locally made. It is described by Cunningham (1982a, 359 and 363).

Fabric 35 — Mill Green ware; the examples found at Asheldham Camp show the characteristic brick-red colour and grey core of Mill Green fine ware. The sherds are virtually without sand tempering although sparse inclusions of clay pellets occur. The matrix contains abundant very fine quartz and sparse to moderate mica (for a full fabric description see Pearce *et al.* 1982). Mill Green ware has been found in London in contexts dating from the later 13th century to the mid 14th century.

Fabric 40 — Post-medieval red earthenwares; these date from the 16th century onwards and are described by Cunningham (1982a, 359-373).

Fabric 45M — Modern stoneware.

Fabric 48D - Staffordshire ironstone types.

(Fabrics 12A, 12B, 12C, 13 and 20 are fully described by Drury (for-thcoming)).

Contexts containing medieval pottery

Trench A - 1 (topsoil), 18, 21, 14, 6, 95.

Trench D – 1 (topsoil).

Trench F - 1 (topsoil).

Surface finds (from edges of rabbit scrapes, from beneath roots of trees which had fallen over, etc.).



Fig. 13 Asheldham Camp 1985. Histogram relating medieval pottery fabrics to features.



Fig. 14 Asheldham Camp 1985. Medieval pottery

Pottery from recut ditch in Trench A

A total of 1.7 kg of pottery was recovered from the ditch consisting of Fabrics 12A, 12A(1), 12B, 12C and 13. See Fig. 13 for histogram to show amounts of fabric in each layer.

Vessel types present

Fabric 12A	Cooking p	ot with	thumbed	rim.
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- Fabric 12A(1) Cooking pots with thumbed rims.
- Fabric 12B Cooking pots, thickened and beaded rims with and without thumbing. A rim sherd of a possible bowl is also present No. 14.
 Fabric 12C Cooking pots, thickened and beaded rims, thumbing absent
- Fabric 12C
 Cooking pots, thickened and headed rims, thumbing absent.

 Fabric 13
 Cooking pots, beaded rims, thumbing absent; there is also an example of a more developed rim type No. 23.

Illustrated material from recut ditch (Fig. 14)

Context in brackets at the end of each description.

- 1 Rim fragment probably from a cooking pot, orange surfaces and grey core. Fabric 12B (18)
- 2 Rim fragment, probably from a cooking pot, grey, Fabric 12C, (18)
- 3 Cooking pot, thumbed rim, red-brown, Fabric 12B (14)
- 4 Cooking pot rim, thumbed on inside edge, grey-brown, Fabric 12B, (14)
- 5 Cooking pot rim, orange with grey core, Fabric 12B, (14)
- 6 Cooking pot rim, orange surfaces and grey core, abraded, Fabric 12B, (14)
- 7 Rim and shoulders of cooking pot, grey with sooting on rim, Fabric 12B, (14)
- 8 Cooking pot rim, brown surfaces, grey core, Fabric 13, (14)
- 9 Cooking pot rim, grey, Fabric 13, (14)
- 10 Sagging base, reddish-brown, Fabric 13, (14)
- 11 Cooking pot, thumbed rim, purplish surfaces, Fabric 12A, (6)
- 12 Cooking pot, thumbed rim, reduced to a dark grey, Fabric 12A (1), (6)
- Cooking por, thumbed rim, orange surfaces, grey core, Fabric 12A (1),
 (6)
- 14 Rim of ?bowl, yellowish-brown, Fabric 12B, (6)
- 15 Cooking pot, thumbed rim, reduced to a dark grey, Fabric 12B, (6)
- 16 Cooking pot, faint thumbing on inside of rim, orange surfaces, grey core, Fabric 12B, (6)
- 17 Cooking pot rim, abraded sherd but slight thumbing on rim can be seen, Fabric 12B, (6)
- 18 Cooking pot, thumbed rim, orange surfaces and grey core, abraded, Fabric 12B, (6) and (14)
- Cooking pot, thumbed rim, orange surfaces and grey core, Fabric 12B,
 (6)
- 20 Cooking pot rim, brick-red surfaces and grey core, Fabric 12C, (6)
- 21 Cooking pot rim, grey, Fabric 12C, (6)
- 22 Cooking pot rim, orange-brown surfaces, grey core, Fabric 13, (6)
- 23 Cooking pot rim, brown surfaces and grey core, external sooting, Fabric 13, (6)

Discussion

Due to their marked similarity in form it has been suggested that Fabrics 12 and 13 appeared around the same time or were perhaps slightly preceded by Fabric 12A, a development which may have taken place early in the 11th century (Drury forthcoming). Early Medieval ware, Fabric 13, is thought to have continued production until it merged with the medieval coarse wares c. 1200 and it is likely that Fabric 12A had disappeared by the mid-12th century (Drury forthcoming).

As most of the pottery possesses the more developed beaded and/or thumbed rims a 12th-century date is more likely. Similar pottery is found at Colchester Castle (Cunningham 1982a, fig. 26, 6-21). No. 8 is comparable to fig. 26.13; unfortunately this example is residual in a later context but similar cooking pots are attributed to period VIIB and can be given a date within the first half of the 12th century, whilst a cooking pot with a simple thickened rim, fig. 26.11 is attributed to period VIIA, the late 11th century.

No. 9, however is comparable to a cooking pot rim from Saffron Walden, Barnards Yard Site, fig. 44.80 (Cunningham 1982b) which has been given a later date of the mid 12th-13th century. While No. 23 has a much more developed rim and is probably datable to c. 1200, a comparable rim is found at Pleshey Castle (Williams 1977; fig. 31.10) from period IC-D the '?later 12th century +'.

The presence then, of No. 23 in (6) gives the layer a *terminus post quem* of the end of the 12th century or later. All the pottery in the recut ditch is similar and may belong to the same vessels; there are two external fits between layers 6 and 14 further suggesting that these two layers are contemporary.

In layer 18 however, at the bottom of the ditch, the sherds look similar to those in the layers above but the only rims present are thickened without thumbing and therefore could be earlier, perhaps late 11th century. There is an external fit between contexts 6 and 18, but the break is recent and therefore very suspect.

Pottery from Trench A/95 Three sherds of Fabric 13 are present, one may belong to the same vessel as sherds found in contexts 6 and 14.

Pottery from context 1 (topsoil) Small amounts of Fabrics 12 and 13 are residual in context 1 (trenches A, D and F), including three cooking pot rims, two of which are from trench A and are similar in form and fabric to Nos 12 and 22 from context 6. A third ?cooking pot rim in Fabric 13 came from trench D and is illustrated (Fig. 14.24). One sherd of medieval coarse ware, Fabric 20, was found in trench A. There are also a couple of pieces of postmedieval ware, including a sherd of Staffordshire ironstone type ware of 19th/20th century date, from trench A and two sherds of modern stoneware, probably part of a large bowl and probably 20th century.

Surface finds A few sherds of interest were found as surface finds; a pipkin handle and part of a bunghole in Fabric 21, probably late 15-early 16th century in date, was found together with three unglazed sherds of Mill Green fine ware, Fabric 35. There was also part of of the rim of a tyg with an all over dark green glaze in Fabric 40, probably 16th century or later. Body sherds of Fabrics 13 and 20 were also found.

Cereals and crop weeds

by Peter Murphy

The exploratory trenches at this site covered only a small area in total but enough prehistoric features were exposed to make sampling for carbonised plant remains worthwhile. Soil samples were collected from post-holes, pits, a shallow depression and the buried soil beneath the bank in trench A, from pits, post-holes and associated minor features in trench F and from a single post-hole in trench G. Plant remains were extracted from these samples by manual water flotation, collecting the flots in a 500 micron mesh sieve. The dried flots were sorted under a binocular microscope at low power. The plant remains extracted and identified are listed in Table 1 and selected cereal remains are illustrated in Plate II.

Food plants

Cereals were identified in all but one of the samples (context 99). Triticum spelta (spelt wheat), Triticum dicoccum (emmer wheat) and Hordeum vulgare (six-row hulled barley) are the three main species. Free-threshing wheat (Triticum aestivocompactum), oats (Avena sativa) and possibly rye (Secale cereale) occur sporadically. A fragment of hazel nutshell (Corylus aveilana) came from the buried soil beneath the bank in Trench A.

Emmer occurs at sufficiently high frequencies in the Middle Iron Age contexts 34 and 38 to establish that it was intentionally cultivated. It is also fairly common in 63, though this feature is not well dated. In samples from Late Iron Age contexts at some Essex sites, including North Shoebury and Ivy Chimneys, Witham, emmer is present but only at low frequencies, probably indicating no more than its persistence as a contaminant of spelt crops (Murphy, forthcoming). The samples from 34 and 38 thus at present provide the latest evidence for Iron Age emmer cultivation in the east of the county. However, results from Wendens Ambo, on the chalk of NW Essex, suggest that in that area, emmer remained an important crop throughout the Iron Age (Jones, Halstead and Morse 1982). There is no reason to suppose that the free-threshing wheat, oats and rye were cultivated as crops in their own right, however: they appear to represent impurities in other cereals.

Crop weeds

The range of weed taxa identified from seeds is restricted. The most abundant weeds are Bromus mollis/secalinus and Avena spp, which are common



Plate II Asheldham Camp 1985. Cereal chaff. Top row Triticum spelta Spikelet forks and glume base (63) Middle row Triticum dicoccum Spikelet forks and glume base (38)

in most samples, Chenopodiaceae (including C. album and Atriplex sp), seeds of which occur at high frequencies in 34 and 38, and Tripleurospermum maritimum, which is common only in 63. The remaining weed taxa include Raphanus raphanistrum, Stellaria graminea/palustris, Montia fontana subsp. chondrosperma, an indeterminate umbellifer, c.f. Trifolium sp, Vicia/Lathyrus, Polygonum persicaria/lapathifolium, P. convolvulus, Rumex acetosella, Rumex spp, Plantago lanceolata and Carex sp. These weed seed assemblages represent a weed flora ecologically consistent with cultivation on well-drained sand and gravel soils. Raphanus raphanistrum and Rumex acetosella are particularly prevalent weeds on light acid soils (Clapham et al, 1962). The few seeds of wetland taxa (M. fontana and Carex sp) could indicate that tillage extended onto some poorly-drained land.

Cereal processing and storage

There were marked variations in the densities of carbonised plant remains in the soil and in the composition of the assemblages. These variations can be interpreted in terms of cereal processing, storage and consumption at the site.

Carbonised straw fragments are either absent or extremely rare in these samples and no assemblages consisting principally of chaff and weed seed waste fractions were recovered. The assemblages thus all represent grain products at different stages of cleaning, rather than crop-cleaning waste. The larger samples fall into three groups:

i) In the samples from pit 63 in trench F the wheat grain : glume base ratio is very close to the 'ideal' 1:1 ratio expected in mainly two-grained spikelets: in 63a the ratio is 1.16:1 and in 63b 0.99:1. (The calculation of these is based on the assumption that the poorly-preserved unidentified cereal grains are of wheat and barley in the same proportions as the identified grains). Both spelt and emmer are present, spelt spikelet fragments being roughly twice as common as those of emmer in 63a. Barley grains occur but are rare and there are a few grains and rachis fragments of free-threshing wheat. Caryopses of large weed grasses (*Bromus* and *Avena*) are abundant but small weed seeds are not common. 63 can be interpreted as the charred remnants of a bulk spikelet store of spelt and emmer including other cereals and weed grasses as contaminants. The assemblage from the adjacent feature 88 is similar to 63 in most respects, though the wheat grain : glume base ratio is higher.

- ii) Samples from the post-holes 34 and 38 in trench F produced fairly similar assemblages in which emmer is the predominant wheat, with some spelt, traces of free-threshing wheat, and much higher proportions of barley than in 63 and 88. Wheat grain : glume ratios in 34 and 38 are 2.42:1 and 3.57:1 respectively. Large weed grass caryopses are common, as are small weed seeds, particularly Chenopodiaceae. The samples from these two postholes again represent prime products but the excess of wheat grains over glume bases may indicate that the wheat grain had been partly separated from the chaff before carbonisation occurred. Alternatively, a higher proportion of the glumes may have been completely burnt away during charring than in 63. The proportion of barley in these samples is too high to represent an impurity in a wheat crop and must indicate either mixed cropping or, more probably, a mixing of separate batches of cereals at some stage after harvesting.
- iii) Contexts 13, 40 and 81 from trenches A, F and G respectively, produced assemblages with a high proportion of cereal grain, mainly wheat, with some *Bromus* and *Avena* caryopses but few chaff fragments or small weed seeds. These samples represent almost fully-processed prime grain.
ASHELDHAM CAMP -- AN EARLY IRON AGE HILL FORT

Table 1: Carbonised	l remains of	f cereals and	l weeds from	n Asheldham	Camp,	Essex
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	1 re	ench	A	A	A	A	A	A	A	F	F	F	F	F	F	G
	Context nur	nber	8	13	71	91	92	98	99	34	38	40	63a	63b	88	81
	Feature-	type	Soil	Pit	Post	Post	Pit	Depr	ression	Post	Post	Lobe'	Pít	Pit	'Lobe'	Post
			 		hole	hole				hole	hole			(m)		hole
Cereal indet.	(caryopses)	(a)	1	31	(+)	4	5	3	—	317	572	67	35	29	31	37
	('sprouts')		—	-	-	-	-	—	-	-	-	-	- 1	-	+	-
	(culm nodes)		_	1	1	-	- 1	-	! _	1	(+)	_	_	2frags	_	_
Triticum spp.	(carvopses)	ക	-	25	2	2	5	†	<u> </u>	738	972	173	763	719	310	136
	(enitelet forks/hores)				-	-	<i>,</i>			47	40	11.5	00	145	16	1.30
	(a)	10		<u> </u>			<u>⊢</u>			07	40		09	102	10	3
	(grume bases)		-	<u>'</u>	-		1	-		42	02		108	425	15	
<u> </u>	(rachis internodes)	<u>(d)</u>		-	-	-	-		-	9	3		40	58		
	(tough-rachis nodes)		<u> </u>	-			-	-	—	3	-		1cf	2	-	<u> </u>
	(awn fragments)		-		-	-	-	-	-	+	+		+	+	-	—
Triticum dicoccum Schübl	(spikelet forks)			_		-	- 1	-	- 1	75	51	_	27	-	4	_
	(glume bases)		_	1	_	2	_	_	_	81	103	1	56	_	11	2
Triticum spelta L.	(spikelet forks)				<u> </u>	_		[_]	-	<u> </u>	3		31		3	_
· · · · · · · · · · · · · · · · · · ·	(glume bases)	<u> </u>	<u> </u>					<u> </u>	_	5	14		169		15	1
	(graine cases)			<u> </u>			-		<u> </u>	, ,	2(1)		100	<u> </u>	15	
Secola annu I. T		<u> </u>					<u> </u>		-	-	2(1)					
Secale cereale L.	(caryopsis)		-	-	-		-	-	-	ct3	-					
Hordeum vulgare L. emend	Lam (caryopses)			<u> </u>	-	_	-			140	301	50	_			14
Hordeum sp.	(caryopses)		<u> </u>	6	-	-	_	-	_	-	-	_	9	15	5	-
	(rachis internodes)		-	—	-	-	–	-	–	2(k)	_	-	4	2	1	_
	(awn fragments)		_	-	_	-	-	-	- 1	_	2	_	-	_	_	
Avena sativa L.	(florers)		_	_	-	_	_	<u> </u>	_	2	_ `	_	1	-	_	
	(floret bases)		_	<u> </u>		_	<u></u>	F_		1		_	8	16	_	_
Anona farra Andaminiana	(floret bases)									1			1	10	_	
Авела запиалиавыстала	(norec bases)		_	-		-		—		- 4			1	4	_	
Avena sp.	(caryopses)	-			-	-		-	-	60	21	_	65	69	13	
	(floret bases)			-		-	<u> </u>	-	-	-	2	-	-	2		
	(awn fragments)		—	—	_	_	_		_	+	+		+	. +		—
Avena/Bromus	(caryopses)	(e)	-	-	-	_	L – .		—	36	131	—	31	_		_
Bromus mollis/seculinus	(caryopses)			- 8	-	-	1	-	-	63	164	78	279	288	61	20
Gramineae indet.	(carvopses)			-	_	_	_	-	_	2	7	_	1	4	3	_
Raphanus raphanistrum I.	(siliqua ioints)	<u> </u>	_		_	_		_	_	_	4		-			_
Stellaria graminaa/palustris	founder found)					_								- 1	· · ·	
Company grantineur paraseris				-									-			
Caryophynaceae indet.		—	-	-	_	_	-	_		_	_		1	-		
Montia fontana L. subsp. ch	ondrosperma		-			_	-	-	_	-	_	_	1			
Chenopodium album L.			-		-	ł	-	-	-	-	_	_	6	5		_
Chenopodium sp.		_	-	-	-	-	-	-		-			1	-	_	-
Chenopodiaceae indet.		(f)	—	-	-		-	-	-	941	812		9	6	1	
Umbelliferae indet.			_	_	—	—		-	-	_			_	1	—	-
cf. Trifolium sp.			_	_	_	_	_	_	_	-	1	-	_	_	_	_
Vicia/Lathvrus sp.			_	_	_	_	-	_	_	_	_	_	_	2		_
Leguminosae indet		(9)				_	_	_	_	1	_	_	_	_		_
Paluganum Americania Astarti	falium	(6/ /h)								22	2			2		
Polygonum persicaria/apainty	000000000000000000000000000000000000000	(11)	_	-		_		_	_	, ,	2	-	_	4		_
Polygonum lapathijolium L.					-				. –		_		-	_		-
Polygonum convolvulus L.				1	—	-	_	-	_	1*	2*	1	1*	3	2	<u> </u>
Polygonum sp.			—	_	-	1		-	_	1	-				-	
Rumex acetosella agg.				-		_	-	_	_	_	_		_		1	—
Rumex sp.					_	_	-	_	_	5	1	_	1	_	_]	_
Corylus avellana L.		(i)	+	_	_	_	_	_	_	_	_	_	_	_	_	_
Plantago lanceolata L.			_	_	_	_	_	_	_	1+2cf	lcf	_	_	_		_
Tripleurospermum maritimum	r (I) Koch			_	-		_	_		lfrag	7	_	52	26		
Compositon of Oursender	a zay rooti.	10		<u> </u>			<u> </u>		<u> </u>	111.08				20	_	_
Compositae el. Unopordum a	wantnium L.	0)	-	-	_								_			_
Carex spp.						_							2			_
Indeterminate			<u> </u>		_	2	-	-		34*	9	-	2	<u> </u>		
Sample volume/weight (1/kg) approximate		12/15	48/60	24/30	24/30	24/30	12/15	24/30	8/10	8/10	24/30	8/10	8/10	24/30	12/15
% flot sorted			100	100	100	100	100	100	100	12.5	12.5	100	6.25	6.25	100	100

Notes: (a) Poorly-preserved grains and fragments with embryo. (b) Elongate forms predominate, grains from 63 are the best-preserved: most are of spelt and emmer-type from lateral spikelets with a few underdeveloped grains; some grains with convexly-curved ventral surfaces from one-grained spikelets; and a small proportion of short grains, probably of a free-threshing wheat. (c) Poorly-preserved forks and terminal forks. (d) Includes both smooth emmer-type internodes and spelt internodes with venation on outer surfaces. (e) Poorly-preserved grains grass caryopses. (f) Seeds from 34 are not well-preserved, with blistered testas partly encrusted with sediment. *C. album, Atriplex* and smaller spikelet. (m) This second sub-sample from 63 was taken solely to check how homogeneous the deposit was: spelt and emmer spikelet fragments have not been separated. *+ frags.

In terms of the model for glume-wheat processing proposed by Hillman (1984, fig. 3) the larger assemblages from Asheldham Camp seem to represent stages from step 7 onwards, that is from bulk spikelet storage to consumption. The samples from 34 and 63 contained large pieces of charred structural wood, including some probable staves which could have been part of a container for cereals (see below) and 63 produced fragments of a coarse storage jar. It thus seems reasonable to interpret these deposits as the charred debris from a granary fire. The other cereal deposits from trench F could perhaps have come from the same source, but the remaining large samples consisting mainly of grain are more likely to represent material charred during processes of grain-drying or grain-roasting. The sparse assemblages from trench A, contexts 8, 71, 91, 92 and 98, of which cereal grains form the main component, represent charred material dispersed from domestic activities of this type.

In summary, two main types of activities related to cereals can be distinguished. In the area of trenches A and G early Iron Age features produced assemblages apparently produced as a by-product of domestic grain-drying or grain-roasting, whilst in the vicinity of trench F there was a cereal storage area. Since only a small number of contexts was available for sampling, speculation about the wider economic status of the hillfort in the agrarian economy of the area would be unprofitable. There is no basis here to support a model of the type produced by Jones (1984) for Danebury, Hampshire. All that can be said at present is that the available samples relate to the later stages of cropprocessing, storage and consumption, providing no indication of whether the hillfort occupants were farmers or were obtaining grain and spikelets by trade or other means.

Charcoal

Carbonised plant remains recovered by flotation from samples of contexts 34 and 63 included some unusually large and well-preserved pieces of charcoal, and further large fragments were collected by hand during excavation. Identifications and descriptions of these charcoal fragments are given in Table 2.

Apart from a few twigs of Corylus sp. (hazel), Fraxinus sp. (ash) and Quercus sp. (oak), the charcoal is of mature oak, apparently all structural wood, and includes posts or small beams, planks/boards, stake tips and other worked pieces. The fragments of boards, up to about 24 mm in thickness, include both radially and tangentially-split examples: in most cases their widths cannot be determined. Of particular interest are three fragments, illustrated in Fig. 15, a-c, one of which is from a very narrow board. These have gently curved facetted faces and their edges are not cut or split at right angles to the faces, but at oblique angles. In cross-section the rays appear undeformed and these features are therefore not a result of warping during charring. These pieces appear to represent the remains of staves from a barrel or a similar container. The stake-tips are mostly fragmentary but came from squared stakes: three examples are shown in Fig. 15, d-f. There are also worked pieces with cross-sectional dimensions 33 × 25 mm and 33 × 27 mm cut obliquely to the grain: they could not have been produced by splitting and must have been sawn or adzed (Fig. 15, g, h).

These oak charcoal fragments clearly represent quite sophisticated carpentry, but since they were not found *in situ*, reconstruction of the structures from which they came is impossible. However the association of this charcoal with charred cereals representing stored products implies that structures and perhaps containers associated with grain storage are represented.



Fig. 15 Asheldham Camp 1985. Oak charcoal fragments from context 63.

a-c Fragments of radial and tangential boards, possibly staves.

d-f Stake-tips.

g-h Pieces cut obliquely to the grain.

Table 2: Asheldham Camp, Charcoal

	io - Monchandari Ganap, Charcoar
Context 34	
Quercus sp. (oak)	Fragments of radial boards. 15, 19 and 24mm thick.
Context 38	
Quercus sp. (oak)	Twig. 18mm diameter.
Context 63	
Fraxinus sp. (ash)	Straight twigs with bark. 7mm and 9mm diameter.
<i>Corylus</i> sp. (hazel)	Curved twig fragment with bark. 18mm diameter.
Corylus/Alnus sp. (hazel/alder)	Twig fragment with bark. 9mm diameter.
Quercus sp. (oak)	 (a) Squared posts or small beams; 50×70mm, 55×50mm, 35×45mm, 55×45mm; cross- sectional dimensions.
	(b) Radial boards, mostly fragmentary; maximum surviving thicknesses 10-23mm. Includes two very narrow boards, only 30 and 45mm wide, one radial, one near-radial apparently not split after charring. (Fig. 15a, b)
	(c) Tangential and intermediate boards; max- imum surviving thicknesses 15-23mm. Trim-

- ming marks on face of one board. (Fig. 15c) (d) Stake-tips. Cut from roughly-squared wood. (Fig. 15d-g)
- (e) Pieces cut obliquely to direction of grain; cross-sectional dimensions 33×25 and 33×27mm. (Fig 15h, i)

Dimensions are approximate since the fragments show considerable variation in thickness along their lengths.

Soil report

by Richard MacPhail

The site, which occurs just north of the River Crouch, is situated mainly (northern sector) on typical argillic gley soils (Hurst Association) developed on river terrace gravels, with a downslope area on stagnogleyic argillic brown earths on fine aeolian drift (Ratsborough Association; Jarvis *et al* 1983). The buried soils described from trenches B and D relate to these two soil types respectively (see Soil Profile Description). On the upper part of the site at trench B, field examination suggested that pre-rampart cultivation had homogenised the less stony topsoil here, possibly also inducing some erosion, as the soil seems quite shallow. This interpretation was supported by the rather thick Ap horizon described in trench D which is in fact a colluvial lynchet deposit.

In short, there is good field evidence of cultivation and downslope soil movement beneath the ramparts at Asheldham Camp.

Soil Profile Description

Trench B

Soil Type: Typical argillic gley soil (Hurst Association; Jarvis et al 1983) Slope: 2-3°W Altitude: c. 21 m OD

Site: Neutral (minor shedding)

Parent material: River terrace gravels

Horizon, depth cms

Rampart - some 120 cms of brown soil and gravel

- Ap(?) Dark brown (7.5 YR 4/4) weak sandy loam; common small and
 0-16 medium rounded stones; weak coarse blocky; few fine roots; moderately; humose; sharp, even boundary.
- (B)C Strong brown (7.5 YR 5/6) loose sand; abundant very small stones;
 16+ structureless; rare roots; gradual, even boundary into river terrace gravels.

Trench D

Soil type: Stagnogleyic argillic brown earth (Ratsborough Association) Slope: 4°S Altitude: 17 m OD Site: Receiving Parent material fine acolian drift over London Clay. Horizon, depth cms

Rampart - some 30 cm of gravel and soil

- Ap Strong brown (7.5 YR 4/6) weak sandy loam; few small stones;
- 0-28 coarse subangular blocky to prismatic; few medium to common roots; clear even boundary.
- Btg
 Brown (7.5 YR 5/4) weak fine sandy loam with abundant fine to

 28-48 +
 very coarse mottles; stone free; poor coarse prismatic; gradual boundary to fine Ctg.

(Ancient Monuments Laboratory Report 27/86)

Pollen analysis of the Iron Age land surface by Rob Scaife

Pollen analytical procedure

A series of 2 cm thick, contiguous samples was obtained for pollen analysis from trench E. This sequence was selected because of the well-preserved character of the old land surface/buried soil profile and the fact that it was broadly horizontal and thus away from the effects of colluviation (Macphail, above). The sequence was examined in conjunction with Dr. Macphail's pedological analysis to ascertain if any truncation of the profile had taken place. This was apparently not the case. Standard pollen extraction procedures were used for concentrating the sub-fossil pollen and spores (Moore and Webb 1978). Absolute pollen frequencies were calculated using the addition of known quantities of exotic pollen (Garrya elliptica) to accurately weighed (1.5-2 g) samples. Pollen preservation was poor and absolute pollen frequencies ranged between 6,000 and 30,000 grains per gram at the top of the old land surface. The results of this analysis are presented in Fig. 16 with pollen calculated as a percentage of the sum of total pollen and spores as a percentage of total pollen plus spores.

Results

Pollen was found to be countable (although present it was badly degraded; below) to a depth of 16 cm. The 8 pollen spectra represented in this sequence show broadly similar characteristics throughout, and it is clear that soil faunal mixing processes have been responsible for homogenisation of the soil profile. Such biological mixing is likely to be largely responsible for the relatively low absolute pollen frequencies and poor pollen preservation when compared with acidic podzol type profiles.

It is immediately apparent (Fig. 16) that the pollen spectra are dominated by herbaceous taxa with few tree pollen types. Where they are present, the pollen types are of anemophilous (wind pollinated) taxa which produce large quantities of pollen (*Quercus, Alnus, Pinus*) and such cannot be regarded as evidence of woodland growing in the close vicinity of Asheldham Camp. It is, however, noted that *Corylus* type pollen is more abundant at the top and bottom of the profile (3% and 6% respectively) and it might be suggested that the basal presence represents the last vestiges of woodland/scrub in the area and that its occurrence at the old land surface might have resulted from a return to pastoralism immediately prior to earthwork construction.

Pollen contained in soils is largely representative of the on-site vegetation (Dimbleby 1985). Those herbaceous taxa present appear to provide evidence of both pastoral and arable components. Consistent records of cereal type pollen were present (>45u with large pore and annulus, microsculpturing and thicker exine than in wild Gramineae). In most cases, cereal type pollen grains were in excess of 50u overall size. This, however, is the only real indication of cropping activity because the remaining pollen types exhibit a strongly pastoral character. Undoubtedly, the old land surface represents an agricultural soil (Macphail) and three interpretative possibilities can be noted:

- The pollen of cereals may have remained in the soil for longer periods before destruction (differential preservation) and thus may be representative of an earlier phase of arable cultivation.
- ii) It is now well known that cereal pollen becomes entrapped in the cereal flowering heads and may persist through to the production of flour and bread (Robinson and Hubbard 1977, Scaife 1986). It is suggested therefore that cereal pollen may be liberated during crop processing activities (e.g. winnowing). Murphy has identified the charred grain from Asheldham and this provides further evidence of arable activity at least within the economic, if not pollen, catchment of the site.

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 iii) Cereal pollen may also be liberated in quantity on archaeological sites from animal fodder, bedding and from dung. The latter may also have been used as fertiliser or simply dumped on areas around any occupation.
 It is however, impossible to state clearly which of the above possibilities may be true.

The evidence of the pastoral nature of the Camp's environment is more sound both pedologically (Macphail) and palynologically. The relatively high percentages and absolute pollen frequencies of *Plantago lanceolata* (to 22%), Gramineae (to 64%) and a range of other herbaceous taxa including for example; Compositae types, *Trifolium* type, *Lotus* type. Because of the faunal disturbance of these soils, it is most likely that the pollen present represents only a short period, that is, immediately prior to the construction of the earthwork — perhaps by only a few years.

Conclusion

Pollen preserved in the sub-bank, *in situ* soil profile has yielded palynological evidence for a pastoral, grassland-dominated environment at the time immediately prior to the earthwork's construction. There is little evidence for any remaining woodland in the region of Asheldham although tentative evidence for the presence of hazel scrub is indicated at the top of and bottom of the pollen profile. Arable cultivation has been noted from the charred cereal identified by Murphy. Pollen evidence for such cultivation is present but enigmatic in view of often complicated taphonomy of cereal pollen on archaeological sites.

Radiocarbon dates

A number of samples of carbonised grain were submitted to A.E.R.E., Harwell for radiocarbon dating. The calibrated dates were as follows (Stuiver and Pearson 1986):

Harwell	Context	Result	Calibrated date range	
Number		(BP)	1 sigma	2 sigma
HAR-6700	63	1980 ± 80	cal. BC 95-cal. AD 75	cal. BC 200- cal. AD 21
HAR-6701	38	2190 ± 70	cal. BC 380-170	cal. BC 400-90
HAR-6702	34	2280 ± 80	cal. BC 400-235	cal. BC 520-170
The ± 1 sig	ma and ± 3	2 sigma ranges a	re 68% and 95% confidence	ranges respectively.

David Haddon-Reece (Archaeometry Section, Ancient Monuments Laboratory) has provided the following combined date for HAR-6701 and HAR-6702 as follows:

HAR-6701	2230 ± 55	cal. BC 390-205	cal. BC 400-130
+			
HAR-6702			

These radiocarbon dates were funded by the Ancient Monuments Laboratory.

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The finds are in Colchester Museum, accompanied by a copy of the archive. The accession number is COLEM 1990.92. A second copy of the archive is held in Essex County Council's Sites and Monuments Record in Chelmsford.

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ASHELDHAM CAMP - AN EARLY IRON AGE HILL FORT

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Recent Archaeological Work in Great Chesterford

by Howard Brooks and Steven Wallis

Introduction

This article consists of reports on small-scale excavations on South Street and Carmen Street, but also includes notes on recent watching briefs on Rose Lane, London Road and Newmarket Road. Excavation and recording was by both the Great Chesterford Archaeology Group (G.C.A.G.) and Essex County Council (E.C.C) Archaeology Section, principally organised by P. Dey for G.C.A.G., and by S. Wallis, R. Havis and H. Brooks for E.C.C. In most cases, the reports given here are summaries of fuller archive reports deposited in Saffron Walden Museum and Essex Sites and Monuments Record (E.S.M.R.), which should be consulted for further details.

A thorough summary of the archaeology of the Roman small town of Great Chesterford has recently been published (Burnham and Wacher 1990, 138-142). Such a summary will not be attempted here, although the location plan (Fig. 1) gives a general indication of present knowledge of the Roman fort, town and suburbs, and of the location of Saxon burials. In plotting Fig. 1 from the published plan of the 1948-9 excavations (Brinson 1963, fig. 22), from the digitisation of aerial photographs held in the E.S.M.R., and from recent sightings of the Roman town wall in contractors trenches, the boundaries of the fort and town are found to differ slightly from other published plans (e.g. Rodwell 1972, fig. 1: Burnham and Wacher 1990, fig. 38). This is perhaps to be expected, and it is not until much more survey, excavation and observation has been done that the course of the southern circuit of the town walls, or large parts of the fort defences can be confidently plotted. Fig. 1 is offered as a 'best fit' of present knowledge, but it is hoped that it can be modified and adapted in the light of future discoveries. No attempt has been made to reconcile the apparent discrepancies, especially in road lines or junctions between excavated roads and roads plotted from cropmarks. In fact, the internal details of the town are sufficiently complex to warrant a separate, detailed assessment to tackle these problems.

Since the salvage recording at Ickleton Rd (Crossan, Smoothy and Wallace, 1990; Code IGC 89) all Great Chesterford sites notified to E.C.C. have been given the prefix GC, followed by a number (e.g. GC 1 is the South Street site reported on here). The new numbering system is used in this report.

South Street (Code GC 1: S. Wallis). 1989. TL 5080 4273 (centre)

Introduction

A housing development between South Street and the river Cam involved disturbance below topsoil in some areas only (Fig. 2). Trench A was stripped by developers to a near uniform depth of 0.5 m. At this depth, most of the trench was still covered by recently deposited material (disturbed riverine silts). Segments dug through these deposits revealed only natural subsoil beneath. However, at the eastern end the stripping had reached the surface of the subsoil. Three archaeological features were present.

Trenches B and C were narrow trenches dug by the developers. The sections were examined and recorded. By force of circumstance, very few finds were recovered from the two trenches.

Description of excavated features

Roman features in trench A

A gully (F4) up to 0.16 m deep and filled with a typical rubbish deposit, including pottery, bone, oyster shell, and medium and large flints. Presumably a flint wall had been robbed from this trench, which had subsequently been used as a rubbish dump. The pottery dates this secondary use of the trench to the later 2nd century A.D., or soon after. *Roman features in trenches B, C*

A clayey layer (L13), 0.3 m deep, probably belonged to the Roman period. A similar, but undated, layer was also found in trench C.

Medieval or later features in trench A

A rubbish pit, F1, 0.27 m deep contained Saxo-Norman pottery (see report below).

A ditch, F14, was probably late medieval.

Undated features

Several recent and undated features were recorded. In trench C, part of a circular well-shaft (F25, 26) was constructed of flints in a light buff mortar: in trench A — a dog burial (F9) contained a small amount of Roman pottery (insufficient for more precise dating).

Finds

Flint by Hazel Martingell

This report comments on the flints from the South Street site, and also from the London Road site (GC 3, below) and the 1989 Ickleton Road site (IGC 89: Crossan, Smoothy, and Wallace, 1990, site 11). A table in the archive report includes other flints from Great Chesterford, as listed in the Essex Sites and Monuments Record.

The lithic artefacts recovered from the three sites (London Rd, Ickleton Rd and South Street) are an addition to earlier collections previously recorded from many findspots in and around Great Chesterford,

London Road (GC 3) produced a section of retouched broad blade and a good flake.

Ickleton Road (IGC 89: from the fill of vessel 2), 26 trimming flakes, 4 blade fragments, 1 bifacial fragment, 1 burnt piece and I waste piece. This indicates a working floor, later mixed up with the soil forming the fill of the pot.

South Street contributed a patinated blade butt section, a fragment of a retouched piece, and a bladelet — a possible trimming piece.



Fig. 1 Great Chesterford. Location of recent sites. Roman and Saxon remains are shown outside the walls, but only roads have been plotted within the walled area.



Fig. 2 South Street (GC 1). Site plan, with detail (inset) of eastern side of Trench A.



Fig. 3 Roman pottery: 1, South St. (GC 1), context 8; 2, Park Cottages (GC 5) context 1.

These artefacts are not of major significance, but when seen within the context of earlier finds, they represent more evidence for the working of the river Cam gravels in prehistoric times.

The Roman Pottery

by Colin Wallace

The dating evidence to be obtained from this site's pottery having been mentioned above, there only remains the presentation here of some general remarks on the later second century group from wall-trench F4. While it was not large enough to quantify (only some 3 EVEs), the dearth of published Roman pottery from Great Chesterford makes some comment worthwhile, the recent account of the 1950s excavations being concerned largely with material from ploughsoil rather than stratified groups (Toller, in Draper 1986).

The latest sherds consisted of a Central Gaulish samian form 31 rim, the base of a Lower Rhineland colour-coat beaker (Going 1987, fabric 6), a rim sherd from a shallow, bead-rimmed dish (Going form B2) in sandy grey ware, part of a Braughing jar (Going form G21) in Hadham greyware, and a burnt BB2 bodysherd. The bulk of the pottery, however, was of early second-mid century date: late Flavian-Trajanic samian, Verulamium Region ware (fabric 26, including a burnt C16 bowl rim), Hadham white-slipped ware (fabric 14, flagon) and a variety of greywares (including, in fine grey ware (fabric 39), sherds from a deep hemispherical bowl (form C12) decorated with demi-rosettes within incised triangles). Oxidised Hadham wares were conspicuous by their absence.

Material in finds group 8, recovered from the area of the wall-trench by the Great Chesterford Archaeological Group, agreed with the dating arrived at for the fill of F4. There were sherds of Antonine Central Gaulish samian, a thin-walled South Spanish amphors bodysherd (i.e. late Dr 20 or Dr 23, (pers. inf. Paul Sealey), mid-later second century mortaria (Verulamium region, cf. Wilson 1984, fig. 111, 2656/57; Colchester, cf. Going D11/Col 498), some probable BB2 and an Antonine-period shelltempered jar-rim (below, Fig. 3.1). Also present was more of the stamped fine greyware bowl from context 5.

Of note amongst the other pottery were sherds, from layer 13, of a buttbeaker copy in a fabric matching the post-conquest local Silty Wares identified at the King Harry Lane cemetery, Verulamium (Stead and Rigby, 1989, 192-95; kindly identified by Valery Rigby). As the other pottery from this context included a BB1 dish base, the date of the beaker sherds has no bearing on that of the layer.

While elsewhere in Essex shell-tempered wares were confined to early Roman (from south Essex, Going fabric 50) and late (fabric 51) groupings, in the Midlands these wares were a *long-lived* tradition. Given Great Chesterford's position in the far north-west of the county, it is not surprising that vessels in this 'Midlands shell-gritted wares' tradition have been found here. Toller's fabric 2 encompasses both this material and the distinctive late Roman shell-tempered wares (Toller, in Draper 1986, 25 and fig. 12.2-18).

Two vessels are illustrated here, the first from finds group 8 (above), and the second from the 1990 watching brief at the rear of Park Cottages, Rose Lane (below, site GC 5).

Fig. 3.1. GC 1, context 8. A jar with internally grooved rim. Fabric

very pale brown (10YR 8/4) with pale brown to grey core, abundant shell, soapy surfaces and a hackly fracture. The form is known at Verulamium, with a date-range of A.D. 130-180 (Wilson 1972, fig. 118.666). See Toller (in Draper 1986, fig. 12.3 and 4) for examples from the 1953 excavations.

Fig. 3.2. GC 5, context 1. An angular rim from a large storage jar in similar fabric to the above (10YR 8/4 with dark grey, cf. 7.5YR 4/0, core). Compare examples from Maxey (Gurney 1985, fig. 95.294 and 302). The watching-brief pottery (of late Roman date) came from a thick loam layer (1).

The Saxo-Norman and later Pottery

by Helen Walker

This is an extract from a longer report in the site archive.

St. Neots ware

A partially complete St. Neots ware cooking pot was excavated from both fills of pit 1, and is described below (Fig. 4).

Small cooking pot: estimated 60% complete; grey core and pinkish surfaces except for rim and just below the rim which is dark grey; shelly fabric lacking sand; most of the internal surface is encrusted with soot, the extent of which can be seen on Fig. 4; external surface is slightly abraded, indicating that the vessel may have had a long life; slightly uneven surfaces, lack of throwing lines and horizontal breaks indicates that the vessel was coil-built on a turntable rather than wheel-thrown.

Also found on the upper fill of pit 1 were single sherds of Thetfordtype ware and Early Medieval ware.



Fig. 4 Saxo-Norman pottery: South St. (GC 1), pit F1.

Discussion of Saxo-Norman and later pottery

St. Neots ware is described by Hurst (1976, 320-323). It is soft, containing finely divided shell naturally present in the clay, and dates from c. A.D. 900 into the 12th century, although by c. 1100 an increasing amount of sand temper was used. Evidence of a clamp kiln has been found at St. Neots in Huntingdonshire (Addyman 1973, 62-63), some 36 km north-west of Great Chesterford, but it is thought that there may have been several centres of production of St. Neots ware because of its wide distribution (McCarthy and Brooks 1988, 63). This distribution extends from the region of the Wash

south-westwards towards Oxford, so that its occurrence at Great Chesterford is just within its normal easterly limit of distribution.

Small, jar-shaped cooking pots such as this are a typical St. Neots form: they are thought to be early, perhaps pre-Conquest (Addyman 1973, 82), certainly a 12th-century date can be ruled out as the fabric does not contain sand.

The pattern of sooting is interesting: internal sooting implies that something was burnt inside the vessel, possibly oil. Analysis would be needed to confirm this.

Later pottery

The following sherds were excavated from other contexts.

Context 15

One thickened, everted, flat-topped rim, in late medieval sandy orange ware, perhaps from a large jug or one-handled jar; splashes of glaze. One slippainted body sherd also in sandy orange ware, with partial covering of plain lead glaze. Both sherds probably date to 15th century.

Context 20

One post-medieval red earthenware (PMRE) thickened rim. One PMRE base with internal plain lead glaze. Part of a flower-pot. Fragment of English stoneware. All pottery is modern.

Unstratified

One sherd of PMRE with an external black glaze, probably 17th to 18th century.

Discussion

Prior to its consolidation within the walled town in the fourth century A.D., the Roman settlement at Great Chesterford extended across much of the area of the present village. The Roman features of the present site are a small part of that settlement.

The rubbish pit (F1) is apparently the earliest published medieval feature from Great Chesterford. It may have been behind a building fronting onto what is now South Street.

Flint Cottage, Carmen Street (GC 6: H. Brooks) 1990 TL 5051 4309

Two test holes dug by Gt. Chesterford Archaeological Group (with guidance by E.C.C. staff) against rear (west) wall of new property formed out of northern half of garden of Flint Cottage, which is close to the supposed line of Roman town defences (Fig. 1).

Interpretation of Excavated Contexts (Fig. 5, 6) Trench 1

Context I was a garden soil, in a flower bed against the back wall of the property. It overlay an old gravelled garden path (2) which ran along the back of the property to a brick potting shed. Context 3 was also a recently cultivated garden soil. Context 5, contaminated by post-medieval finds, might be an old garden soil sealed by later dumping of 3.

Contexts 4 and 6, and mortary layer 8 which was mixed in with them, was associated with the construction of a pebbly mortared layer (10), probably a foundation, and certainly Roman. A certain amount of domestic debris in 4 (cow, sheep and chicken bone, oyster shell) is probably not in its original context, but has been dug up from some context disturbed by the construction of 10. A post-medieval sherd in 4 is clearly intrusive and has been ignored. Foundation 10 is sealed by two courses of flint walling (11) which is undated but probably contemporary with the rest of the flint wall (12) which contains brick and is post-medieval. A pit 7 cut natural 9.

Trench 2

Context 1 was a garden soil, in a flower bed against the back wall of the property. It overlay an old gravelled garden path (2) which ran along the back of the property to a brick potting shed. Context 3 was also a recently cultivated garden soil.

Contexts 4 and 5 were associated with the construction of a pebbly mortared layer (10), probably a foundation, and certainly Roman, which sealed 5. Chalky horizon 8 was absent from this trench. Contexts 4 and 5 sealed natural 9. Foundation 10 was sealed by flint walling 11.

Finds

Coin

by Richard Bartlett

Trench 1, context 4. Fourth century, House of Constantine. Further identification is difficult as coin is badly struck, and inscription is missing.

Roman pottery as dating evidence

by Colin Wallace

Because only two contexts (trench 1:4 and trench 2:4) had more than a very small number of sherds, and also because some post-medieval sherds have been mixed up with the Roman material, this material does not warrant fuller publication.

Contexts listed here contained pottery of the following periods. Where material is clearly residual, it is marked (R), and where intrusive (I). The codes for vessel forms (alphanumeric) and specific fabrics (numeric, in bold) refer to Going's form and fabric series (1987, 3-54). Trench 1

1-3 Roman (R)

- (see coin, above) Third century dish B4.2 (35); beaker H35 (36), 4 plus earlier Roman. Also Post-medieval (I)
- 5 Roman (R)
- 7 Single sherd, Roman?

Trench 2

- 3 Roman (R)
- 4 ?Second century - necked jar (36); fabrics 39, 44, 45 and 47

5 Roman

Bone

by Owen Bedwin

These small groups are not worth detailed study. Details in archive.

Other finds

by Howard Brooks

All Roman finds groups were kept intact, but everything except pottery, tile/brick, flint, and clay pipe was discarded from post-medieval contexts.

Finds groups consisted of post-medieval and modern groups of pottery, brick/tile, clay pipe, mortar, slate, glass, iron nails; coal, coke; oyster, bone. Residual flint flakes. Full details in archive.

Discussion

A pebbly mortared layer underlies the present flint wall at the back of Flint Cottage. The layer is certainly Roman, and might be the eastern edge of the Roman town wall, or an associated construction layer or surface.



Fig. 5 Flint Cottage (GC 6). Location and plan.

FLINT COTTAGE, GREAT CHESTERFORD.



Fig. 6 Flint Cottage (GC 6). Section, north face of Trench 1.

Round-up of Smaller Sites and Watching Briefs

(A) Rose Lane: No. 1, Park Cottages (GC 5: R. Havis) NGR TL 5109 4275

Observation of trenches for an extension to the south-west side of No. 1, Park Cottages (Fig. 1) by members of Great Chesterford Archaeology Group and E.C.C. staff revealed the following stratigraphy: Top layer (1) was 1.3-1.6 m depth of greyish-brown loam, containing fourth century Roman pottery and scraps of iron and bone. This sealed a c. 20 cm thick gravelled horizon (2) running obliquely in relation to the rear of the property, 3.5 m from its SW corner, and 4.6 m away from its NW corner. No finds were obtained from the gravel (2), which rested on natural subsoil. (3) at 1.5 to 1.8 m below site level.

The pottery from (1) is described below. Full details of finds and site in archive.

The Roman pottery

by Colin Wallace

A small amount (14 sherds) of fourth century wares and forms: Nene Valley colour-coat and mortaria, Hadham red ware (a necked jar) and grey ware, and a storage jar in Midlands (?Nene Valley) shell-tempered ware (above, fig. 3.2).

(B) London Road, Swayne, Adency and Briggs site (GC 3: S. Wallis). TL 5056 4243 (centre)

This site was examined after removal of topsoil (Fig. 1). No features were seen, but two worked flints were recovered. See flint report on South Street, above.

(C) Watching briefs on Newmarket Road (GC 4, 7, 9-11).

Watching brief on a pipeline (GC 4: 1989. S. Wallis) in Newmarket Road revealed a chalky rubble horizon 0.55 m below modern road surface, between points TL 5049 4310 and 5052 4307 (west of 'Walcot' and 'Flint Cottage', Carmen Street). This chalky horizon was probably the lower part of the Roman town wall, which lies directly below Newmarket Road at this point. At the north end, outside 'Walcot', the wall appeared to be of thicker and sturdier construction. Whether this implies any architectural detail, such as a gate, is not clear.

North of the junction of Carmen Street and Newmarket Road, observation of a contractor's trench in December 1990 revealed the eastern edge of the Roman town wall at TL 5042 4318 (GC 9: P. Dey). The fabric of the wall was large flints, stones, chalk, with fragments of Roman brick, in a mortar matrix. This observation ties up well with the alignment of the wall foundation observed outside 'Walcot' (GC 4, above) and the line of the wall observed in the 1948-9 excavations (Brinson 1963, fig. 22, p. 77).

Slightly farther north from GC 9 a contractors' trench was observed (GC 7: 1989. P. Dey, K. Cassidy), and sample of stratigraphy sketched at two points between 'Fairacre' and the sewage pumping station (TL 5038 4333, and 5040 4329). Here a chalky pebbly horizon was revealed at depths of between 2.5 and 4 feet below the modern road surface at the northern point, and 1 and 2 ft. at the southern point. It is not certain whether this is a man-made or a natural deposit, and further sightings, associated with finds are required.

In a lay-by off the western side of Newmarket Road part of an early roadway was seen in the section of a contractors trench at between 1 and 4 metres west of the kerb at TL 5030 4358 (GC 11: 1989. P. Dey). Under a modern concrete road, a lower roadway of 0.3 m thick mortar and stone was observed at 0.8 m below modern ground level. As this is quite close to the course of the Roman road issuing from Great Chesterford's north gate, it is tempting to infer that the lower surface represents a slight deviation of the road now visible as a cropmark (Fig. 1) and continuing as the present Great Chesterford — Cambridge road.

Also on Newmarket Road, a contractors trench cut across a 3.75 m wide layer of chalk set in a dark brown (possibly iron-stained) mixture at 0.5 m below modern ground level at TL 5046 4278 (GC 10: 1989. P. Dey). Though this might not be taken as wall foundation at first glance, the width of the chalk deposit and its position close to another presumed sighting of the town wall foundation under Flint Cottage (ESMR) indicates that it is probably the foundation of the town wall, the brown material merely indicating some disturbance of the top of the foundation.

(D) Fieldwalking by members of GCAG in 1990 (GC 8). Three 20-metre corridors were walked between points TL 5034 4354, 5036 4355, 5038 4356 and 5042 4332, 5044 4333, 5046 4334. Finds consisted largely of post-medieval pottery, with a few Roman sherds. Most of the pottery came from the southern ends of these corridors, which lie within the suspected area of the Roman fort. An unidentifiable but probably late Roman coin was recovered (examined by Richard Bartlett).

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The following Archaeology Section assistants worked on site: K. Horsley, S. Rippon, A. Russell.

K. Horsley also assisted with finds processing. Hilary Major kindly identified some of the finds. Colin Wallace wishes to thank Dr. W.J. Rodwell for spot-dating the samian pottery, and V. Rigby and Paul Sealey for general assistance. The coin was conserved by Richard Bartlett.

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Early Planned Landscapes in South-East Essex

by Stephen Rippon

This paper examines the origins and nature of the 'planned landscapes' which cover much of southern Essex. Firstly, the need for a rigorous methodology is stressed, and the processes by which such landscapes can evolve are discussed. Secondly, a multidisciplinary use of a wide range of data allows a greater understanding of the origins and context of several areas of planned landscape; a strong case is made that they are predominantly later Saxon, contrary to the widespread belief that they date to the late Iron Age or Roman period. Finally, some of the implications of such large scale reorganisation of the landscape are considered.

Introduction

Landscape study has a long tradition in Britain, but its main areas of interest are noticeably biased towards upstanding remains such as reaves, lynchets, and ridge and furrow. Hence, prehistoric and Roman 'celtic-fields', and medieval 'open-fields', have received considerable attention (e.g. Baker and Butlin 1973; Bowen and Fowler 1978; Rowley 1981), but land allotment in the intervening periods, and in particular the origins of non-open field landscapes, have not.

That large areas of lowland England never had the 'Midlands' style open-field, or 'Champion' landscape, is now accepted (Williamson and Bellamy 1987). Rackham (1986a:5) describes the pattern of small enclosed fields and dispersed settlement in counties including Essex, as 'Ancient' landscape, in contrast to the more recent 'Planned' countryside of the Midlands, which resulted from the enclosure of openfields. However, recent work on certain areas of non-open field countryside, has shown that large tracts of land were planned out during the late Iron Age and Roman periods, long before the origins of open-fields elsewhere.

This reorganisation is represented by extensive areas of 'regularly' laid out roads and fields. On a relatively flat plain constrained by straight linear features, either natural or manmade, fields can develop through piecemeal assarting, but result in a regular pattern. This is very different to a planned system, which can be defined as a deliberate and conscious attempt to parcel-up land in an exact fashion, in contrast to the 'organic growth' of field systems, which occurs in a more gradual way. The results are 'cohesive' and 'agglomerative' field-systems respectively (Bradley and Richards 1978). 'Cohesive' has largely been superseded by the term 'coaxial' (Fleming 1987: 188), and applies to systems with a predominant orientation, consisting of parallel and perpendicular field-boundaries, which run great distances across country, largely oblivious to subtleties of the terrain. There are now over 30 examples spread over most of England, covering both uplands and lowlands, preserved as upstanding earthworks, cropmarks or extant field-boundaries, and ranging in date from the Neolithic to early medieval periods. Throughout this paper I take early medieval to mean post-Norman conquest, thus late eleventh to late thirteenth centuries.

Before examining one of these planned landscapes in greater detail, consideration must be given to methodology. Austin (1985) has identified three problems with morphologically based studies; an over-simplification of form, a lack of consideration given to the processes of change, and the poor quality of dating evidence. I would add a fourth problem, this being the failure to consider the implications of such large-scale landscape reorganisation. I hope to address most of these questions in this study.

Methodology

The early published examples of planned landscapes preserved in modern field-boundary patterns were very 'selective'; certain roads, field-boundaries, footpaths and cropmarks were plotted, with no indication given of what evidence was overlooked. Examples include the work of Rodwell (1978) and Rackham (1986b) in southern Essex, both of which cover the area to the south of Wickford, but visually appear very different, simply because Rackham included more boundaries (Fig. 1).

A more rigorous approach has been adopted by others, including Williamson (1987) who has published a detailed description of his methodology. This involves using a map showing all field-boundaries shown on the earliest available cartographic sources, then removing those which are demonstrably recent and post-date the laying-out of the regular landscape. These include boundaries resulting from the post-medieval enclosure of wastes and deer parks, and reclamation of marshes (e.g. Fig. 5). By illustrating this stage of the methodology, the reader can see what the author has selected in plotting the final 'planned landscape', and what he has chosen to leave out (e.g. Fig. 6). I regard the 'major elements' of such landscapes as features that form the boundary of at least three fields; in many cases they run for over a kilometre. Though this rigorous methodology was used, it should be stressed that the regularity in these relict planned landscapes is really self-evident. The existence of such regularity cannot be denied; it is the interpretation placed upon it that remains problematical.

Landscape Evolution

In landscape archaeology, it is important to understand the mechanisms of change. Certain aspects of this are discussed below, to provide a conceptual framework for the rest of this study.



Fig. 1 Relic landscapes in south-east Essex.

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Fig. 2 South-east Essex; relief, geology and landscape morphology.

What do these landscapes represent?

As the early work of Rodwell and Rackham shows, there has been a tendency towards oversimplification with regards to the actual nature of these landscapes; 'it is very easy to make simpler patterns from the complex, but difficult to reconstruct the complex' (Austin 1985:20). One problem is a failure to emphasise what the published plans are intended to represent. Williamson (1987:426) has dealt adequately with this in his work on Suffolk landscapes, which do not claim to show every individual Iron Age field. Certain elements may indeed be survivals from the original episode of planning, but this cannot be said for all of them. Landscapes are a palimpsest; a simple comparison of a seventeenth-century estate map, nineteenth-century tithe map, and later Ordnance Survey Six Inch Maps, all of the same area, will show the extent to which individual fieldboundaries are mobile, though the same exercise will also illustrate the stability of many major elements (Rippon 1989, Figs 6 and 18). Therefore, landscape topography should merely enhance regularity present in a modern landscape, which may reflect an earlier planned field-system only surviving in a fragmentary state.

Morphology and Processes

It should be emphasised that planned landscapes are deliberately laid out in a regular fashion; the use of exact straight lines and right angles testifies to this, as does the fact that changes in relief and drainage may be ignored. However, there are several scales at which this planning could have occurred. Firstly, the whole area covered by the 'regular' landscape may have resulted from a single episode of 'planning'. However, in south-east Essex, a close examination of the morphology shows this not to be the case (note the distinction between 'regular' and 'planned'). The same appears to be true of other published examples, including Goltho in Lincolnshire (Bassett 1985; Fleming 1987:190).

Therefore, that part of south-east Essex with a regular landscape can be divided into smaller blocks, isolated on the basis of topographical homogeneity, with a constant orientation and individual major elements traversing most if not all of its width (Figs 2 and 6). These 'morphological zones' are an analytical tool to aid the characterisation of the landscape, but may also correspond to past territorial units. For example, some zones correspond closely to groups of several medieval manors or parishes, such as the Shoebury system (Fig. 6), and those parts of the Warley and Horndon parishes on the Clay (Fig. 2).

Alternatively, adjacent zones with slightly different orientations may reflect stages by which a cultivated area expanded. Thus, chronological variation in the episodes of planning can also occur. The following hypothetical example serves to illustrate this. The core of an estate was plannedout, forming a distinct 'morphological zone', with a regular grid of roads forming the major elements, but possibly based upon pre-existing trackways which were straightened in the process (this appears to be the case in Thurrock, see Fig. 2, and elsewhere in the country, for example Nottinghamshire, Branigan 1989: 162). As population increased, there was a need to expand onto the surrounding waste; this area of intake forms the second 'morphological zone', and may be of a slightly different orientation to the first. There followed a period of contraction, and fields in this second zone were abandoned, with only the roads and earthworks of some boundaries surviving. In subsequent periods of expansion, this area was recolonised, with new fields laid out, occasionally following the earthworks of earlier features. These later fields need not have been planned in a deliberate fashion; rather they could have developed through piecemeal assarting. This would still have resulted in a regular pattern because of the constraints of the surrounding grid of roads. Over time, the roads shifted, as lanes skirted around fields to link up new farms, giving a distinctive 'stepped' appearance (e.g. Fig. 4, road besides Orsett Cock and Loft Hall enclosures). Therefore, the network of roads can be of altogether different date to the planned layout of individual fields. This illustrates just how complex an apparently simple regular landscape can be.

Continuity

Relatively few field-boundaries will remain stable after their initial laying out, through to the present day; only some major elements are likely to do so. However, what are the implications of the survival of early planned landscapes, on the question of continuity in land-use?

At North Shoebury, the alignment of the late Iron Age field system was maintained through the Roman period, suggesting continual use of the land (Wymer and Brown forthcoming; Brown pers. comm.). However, in other cases there may be a hiatus in use; for example, at Gun Hill, late Iron Age, Roman and medieval ditches all run parallel and within five metres of each other, but there is no evidence of recutting to fill the chronological gap representing the Saxon period (Drury and Rodwell 1973). Does this imply discontinuity of landuse?

It has been assumed that the survival of early planned landscapes implies their continued exploitation (e.g. Drury 1976:121). It has even been stated that a reversion from arable to pasture will result in the loss of that landscape (Drury and Rodwell 1978:148). The 'hypothetical example' given above shows this assumption to be wrong. In the case of Gun Hill, there is no need to suggest continued use of the area, rather, a period of abandonment or at least decreased intensity of activity, during which the Roman ditch and bank survived as an earthwork to influence the location of the medieval field-boundary.

Origins and Dating

Various methods of dating the origin of a planned landscape can be used, though many of these have theoretical and methodological weaknesses. A major assumption of Rodwell's is that as medieval churches occupy nodal locations, they 'fit into', and so post-date, the planned landscape. However, if we work through the possible mechanisms by which the landscape could have evolved, then the fieldsystems could equally have been planned around the preexisting churches. Another variable to consider is the chronology of church development. Most churches appear

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Fig. 3 South-east Essex; Domesday woodland.



Fig. 4 Orsett; landscape elements, cropmarks and major excavated features.

to have been founded from the 10th or 11th century, such as at Rivenhall (Rodwell and Rodwell 1986:79-93).

Better evidence comes from 'horizontal stratigraphy', for example when a Roman road cuts across a planned landscape (e.g. Williamson 1987:420). In exceptional cases, churches appear to overlie an element in a planned landscape, though excavation is required to determine the chronology, as was possible at Asheldham (Drury and Rodwell 1978).

The excavation of individual field-boundaries is unlikely to provide good dating evidence, due to their mobility and disturbance through continual recutting. Also, pottery can only ever provide a *terminus post quem* for infilling, as it is washed into ditches from the ploughsoil, being derived from manuring. However, if that practice stops, or there follows an aceramic period, then only pottery from earlier times will continue to find its way into ditches. Even when sectioning the more stable 'major elements', care must be taken that these are not survivals from an earlier phase of occupation of the area, around which any planning was based.

Case-study: Rodwell's Roman Planned Landscape in Southern Essex

'A Landscape Revisited'

Essex has numerous examples of planned landscapes preserved in modern field-boundary patterns. Most are 'coaxial', and several can be dated to the pre-Roman period through their stratigraphical relationship to Roman roads (Fig. 1). In 1978 Rodwell published the plan of a morphologically different example, claimed to represent an early Roman Imperial Estate, covering the Thurrock and Dengie areas of south-east Essex (Rodwell 1978). This 'relict' field-system apparently extended into the Southend area, but was never published (Rodwell pers. comm.). However, in 1986 this omission was rectified by Rackham (1986b), who published a plan for the remaining area, but postulating a late prehistoric date.

Though this regularity in the landscape was first recognised by Laver (1895), Christie (1921, 1922, 1923), and Coles (1934, 1939), it was Rodwell's work that brought widespread recognition to the phenomenon. For many years his hypothesis was accepted uncritically both by local authors such as Wright (1981:5), and renowned scholars such as Applebaum (1981), Williamson (1986a:245) and Branigan (1989:161). However, doubts were expressed by several local archaeologists (Toller 1980:41, Eddy 1984-5:20), and by the mid-1980s excavations had contradicted the Roman date (Toller 1980; Milton 1987). Wilkinson (1988:126-8) went as far as to suggest an early medieval origin, meaning post-Norman conquest.

The increase in excavated evidence since the work of Rodwell, and further work on planned landscapes elsewhere in the country, provided the context for the following reassessment of the south-east Essex example, although time prevented a similar examination of the Dengie Peninsula. For the Southend area, field-boundary data was provided by the c. 1840 Tithe Maps, and roughly 100 earlier estate maps in the Essex Records Office and elsewhere (listed in Rippon 1989:91-3). Time prevented such detailed analysis for the Thurrock area, where the basic data was provided by Wilkinson 1988: Fig. 96, and the O.S. First Edition Six Inch maps.

Physical Background (Fig. 2)

Regular landscapes cover most of the lowlying London Clay basin in southern Essex, though only the area to the south of the River Crouch is considered here. The area is bounded by lighter soils, with the Bagshot gravels to the north, the Mucking Terrace chalkland and terrace gravels to the south, and extensive drift deposits of fertile brickearth to the west of Mar Dyke and east of the Rayleigh Hills. Two outcrops of lighter soils occur within the clayland, namely the Rayleigh and Laindon Hills.

The London Clay is heavy but fertile, whereas the gravel soils are lighter but of poorer quality. The 1894 Pringle Report into agriculture, described the London Clay as 'three horse land', whereas the Boulder Clay of north Essex was only 'two horse land', and the gravel soils required just one horse (Coles 1936-7:23; Collins 1965:13). Indeed, London Clay was the first land to be abandoned during the agricultural depression of the late nineteenth-century (Collins 1978). Only the brickearths can be regarded as good arable; it is significant that the planned landscapes are found here too, as it shows that they are not just confined to more marginal areas.

Settlement History (based on Wilkinson 1988:115-21, and data in the Essex and Southend Museum S.M.R.s).

A settlement history of the various soils provides the context into which the episodes of landscape planning can be fitted. Most evidence comes from unstratified finds, presented on distribution maps (Buckley 1980; Dunnett 1975; Wilkinson 1988: Figs 93-4). There are important problems with this data, especially collection biases due to the activities of nineteenth-century antiquarians, mineral extraction, variable intensity of agriculture, and the identification of sites through crop-marks leading to the bulk of recent rescue excavations being on the lighter soils.

In comparison, the London Clay has received relatively little archaeological attention. Unfortunately, Basildon New Town (Fig. 2) was built without any proper archaeological supervision, and so the lack of material produced during its development cannot be used as negative evidence that there was little pre-medieval activity on the clay. However, it is interesting that though chance finds of Bronze Age metalwork were made (Nigel Brown pers. comm.), there were no coins or burials of the Roman period, which are relatively conspicuous, and abundant elsewhere.

The lighter soils show a long history of exploitation, broadly continuous from the Neolithic onwards, with an increased number of sites evident from the Iron Age. The Mucking Terrace, the most intensively investigated area, saw occupation into the Iron Age, but then a period of less intensive use, suggesting a shift to heavier soils in the late Iron Age. The early Saxon Period saw its reoccupation. In contrast, the brickearths do not appear to have seen widespread abandonment at any stage, even in the early Saxon period.

The London Clay only appears to have been occupied from the late Iron Age or Roman period. Archaeological evidence is very limited, probably due at least in part to collection biases outlined above, but allowing for this, the sparsity of elsewhere relatively ubiquitous Roman coins and burials may suggest the area was genuinely less intensively exploited. Both the Orsett Cock (Geoff. Carter pers. comm.) and Rawreth (Drury 1977) enclosures, on or near the clay, are interpreted as being predominantly for stock management during the Roman period, though a significant area of arable land around Wickford is suggested by a corn drier and large storage pit (Rodwell 1970).

Environmental evidence from the lower course of the Mar Dyke shows the steady clearance of woodland from the later Bronze Age, c. 1000 BC, peaking in the late Iron Age and Roman periods. The late Roman and early Saxon periods possibly show a slight increase in woodland, with the growth of birch, beech and ash (Wilkinson 1988:109-14 and Fig. 98).

Analogies elsewhere support the view that heavy claylands were abandoned at the end of the Roman period, for example around Goltho in Lincolnshire (Beresford 1987:20), in Northamptonshire (Hall 1988:100) and Norfolk (Warner 1987:10). The closest analogy to the study area is the north-west Essex Boulder Clay plateau (Williamson 1986b, 1988), where the more extensive, heavy interfluves saw little occupation even in the late Iron Age and Roman periods, when only limited arable is postulated (Williamson 1986b:125). There was a general post-Roman abandonment, with reoccupation only in the later Saxon period (Williamson 1986b:127).

If Wilkinson is correct, and the planned landscapes of southern Essex have an early medieval origin, then they would have been superimposed upon an intensively exploited landscape. However, if the replanning occurred somewhat earlier, say from the eighth century when settlements on the lighter soils were abandoned, then on the London clay, new landscapes were probably set out on an unenclosed area used largely for pasture. Only on the continually occupied brickearths would a dislocation of settlement have occurred.

Similar issues have been discussed with regard to the origins of open-fields. While Thirsk has argued that major change in the landscape is likely only when population reaches a very high level, Campbell suggests such transformations are more likely with a population, which though rising, thus providing the incentive for change, is still relatively low, making logistics of resource redistribution easier (Campbell 1981:115-29).

Domesday Woodland

A key aspect of Wilkinson's argument, that the planned landscapes of south-east Essex date from the early medieval period, is his interpretation of the woodland as recorded in Domesday. He noted the high values in parishes located entirely on the clay, and so concluded they were heavily wooded (Wilkinson 1988:118-121). He argued that post-Roman afforestation would lessen the likelihood of a Roman landscape surviving, and that the existence of large tracts of woodland during the Roman period would render the existence of a rectilinear landscape unlikely at that date.

However, there are major flaws in his arguments. There seems no reason why substantial tracts of woodland should not be included in a planned landscape, especially if the woodland was managed. Even if a planned landscape became afforested, it would only need a grid of roads to survive, and once the area is recolonised a regular, though not necessarily planned, landscape would reappear. However, it is the interpretation of the actual woodland density at Domesday which is most problematical.

The references to woodland are difficult to interpret, especially as the convention used over most of the study area, 'woodland for x swine' refers only to pannage, not to managed woodland (Rackham 1980a:119; Warner 1987:20). However, the values given are very precise, not rounded-up estimates, suggesting a fair degree of reliability.

Previous attempts at studying Domesday woodland, have simply compared absolute values (e.g. Wilkinson 1988: Table XIII, pp 118, 126-8). However, this ignores the size of area over which the woodland was spread. When the area of woodland for each manor is divided by the total area of that estate, then the proportion of woodland on the claylands and brickearths is in fact relatively low. The same analysis shows the proportion of ploughs to be very high, in exactly the same areas as the planned landscapes. This is best demonstrated by calculating the amount of woodland for each plough (Fig. 3). However, anomalies remain, not least the lack of woodland recorded on the Rayleigh Hills. The most likely explanation is that Domesday does not state whether, for example, the pasture for 500 swine belonging to Bulphan, a parish entirely on the clayland, was physically within the bounds of that parish as they survived to be mapped in the post-medieval period. Rather, the woodland may well have been located in a detached part of that parish on the gravel hills, for this 'enclaving' is well documented in the medieval period, and there is no reason why it should not have existed in the eleventh century.

Other woodland indicators support the conclusion that the claylands were relativley free from woodland at least by the late Saxon period. 'Leah' place-names, generally accepted as indicating woodland, cluster on the Rayleigh, Billericay and Laindon Hills (Reaney 1935, Wright 1981). It has also been suggested that medieval deer parks were located in wellwooded areas. Where emparking licences record former landuse, woodland usually constitutes over half (Rackham 1980a:191). The distribution of deer parks in southern Essex is the same as the 'leah' place names, and neither are found on the Clay. Therefore, even if there was a slight late/post-Roman afforestation, as the Mar Dyke sequence suggests, it was clearly gone by the late Saxon period.

Eleventh-Century Landholding

The pattern of landholding in the late Saxon period can be reconstructed from the Domesday Book. This records predominantly small manors, often the only possession of their lord; 81% of landholders had just a single holding (Round 1903; Boyden 1986).

Sometimes, a manor was part of a larger estate, the components of which were either nucleated or dispersed over large areas. The estates belonging to Swein were concentrated in south-east Essex, but individual holdings were widely scattered. Interestingly, the only large continuous territory is around Shoebury, roughly coterminous with the planned landscape there. The five Domesday manors of Shoebury and Wakering constituted nearly 18 hides, of which Swein held 161/2. In 1066 all five holdings were in different hands; thus the fragmentation of estates called 'Shoebury' and 'Wakering' must have occurred before this time. Swein obtained the manors between 1066 and 1086, and they were fragemented after 1154 (Helliwell and Macleod 1980:2-6). Apart from this one case, each morphological zone of the regular landscape was held by a multiplicity of lords by the late eleventh century.

Even land held by individual manors could be dispersed. A charter of c. 1080 describes the disposition of holdings belonging to Stifford; thirty acres were to the north of the Brook, twelve acres to the south and thirty acres 'at the Stone' (Hart 1971:15-17). Clearly, in this areas as a whole, numerous landowners, and probably hundreds of tenants in several communities, would have been forced to co-operate if the planned landscape had originated in the eleventh century or later.

It has been seen that the London Clay, occupied by many of these planned landscapes, was of a relatively marginal nature in terms of arable agriculture, and was the first to be abandoned at a time of difficulty. This suggests that its extensive exploitation and division into regular plots took place during a period of land shortage and economic growth, climatic improvement, or the introduction of new technology. There is no evidence of widespread occupation of the clay until at least the late Iron Age and there is good reason to assume it was deserted in the immediate post-Roman period. Woodland appears to have been extensively cleared by the Roman period, and by Domesday, landholding had become so fragmented that it would have been impractical for such large-scale planning to have occured. Therefore, either a late Iron Age/Roman or middle to late Saxon date is the most likely context for the planning of these landscapes, both generally regarded as periods of settlement expansion.

The Thurrock Area

Rodwell's work represents an oversimplification of the planned landscape in this area. Firstly, he shows it as one entity spreading over the Mucking Terrace and Laindon Hills (Fig. 1), but an examination of all field-boundaries and roads shows that the regular landscape does not extend far off the London Clay and brickearths (Figs 2 and 4).

Secondly, though there is clearly an unusual degree of regularity over the whole area, it lacks overall uniformity. The orientation is not constant, a notable break occurring at a line roughly between Bulphan and Langdon Hills of about 8° (Fig. 2). There is no grid of roads or major alignments extending over the whole regular landscape. The only roads that do traverse the entire area, run north-south through Horndon-on-the-Hill and Ockendon, and clearly

illustrate the change in orientation mentioned above. They usually continue beyond the area of the planned landscape as sinuous trackways. Thirdly, the nature of field morphology varies throughout the regular landscape, with very straight, narrow fields in the north, more sinuous strip-fields in the south, and simple rectangular fields around the Ockendons (Fig. 2) and Bulphans.

I have suggested above that a regular landscape could be a complex palimpsest, representing several episodes of planning, reoccupation or reorganisation, with elements preserved from earlier periods. Therefore, in trying to understand the origin of this landscape, particular attention has been paid to the suitable 'contexts' for the colonization of such extensive areas, as well as the dating of specific elements.

Settlement History: Either the late Iron Age/Roman period or middle to late Saxon period seem the most likely contexts for expansion onto the clay. Both relate to periods when the lighter terrace soils were used less intensively. The fragmented nature of landholding by the eleventh century suggests a *terminus ante quem* for the extensive re-planning of the landscape.

Place names: The predominance of topographic names, notably '-don', on the clayland has been noted by Gelling (1975; 1978:119-123). That one name element is so dominant suggests they relate to a single phase of colonization. Gelling suggests that topographic names are either very early or very late Saxon. As this area was probably abandoned in the post-Roman period, it seems the settlements on or near the clay acquired their names relatively late.

Morphology: The dating of field-systems by morphology is fraught with difficulty (Branigan 1989:161-2; Ford, Bowden, Mees and Gaffney 1988). However, the shape of the fields may provide some clues as to their origin. The reversed-S profile of fields in the southern part of the regular landscape (Fig. 2), and far smaller strip-fields at Orsett (Fig. 4) and Horndon-on-the-Hill are suggestive of medieval forms. However, the strip-fields with straight axes in that part of the Warleys and Horndons on the London Clay (Fig. 2) are more difficult to attribute to a particular period, as both the Roman and medieval periods are possible.

Though the best known form of Roman planned landscape is a grid system or 'centuriation' (Dilke 1971), stripfields were also used, for example, in the Fens (Hallam 1971), on the Berkshire Downs (Ford, Bowden, Mees and Gaffney 1988) and in Nottinghamshire (Branigan 1989; Riley 1980:11-26). However, long straight strip-fields without a reversed-S profile can be post-Roman; for example, those of the Cambridgeshire silt Fens date to the thirteenth century (Hall 1981), and Harvey (1980) argues the Holderness field-systems are post-ninth century.

Relationship to Roman Roads: None have been identified as crossing the area of the regular landscape, though several occur in areas to the north and south, stopping when they reach the clayland (Fig. 1; Rodwell 1975: Drury and Rodwell 1980:fig 22). This suggests that the planned landscapes may post-date and so have obliterated the Roman roads.

Cropmarks: The majority of ditches correspond to the regular landscape (Fig. 4). One intriguing site to the north of the

Orsett Cock remains undated; a rectangular enclosure containing a large ring-ditch/circular structure is associated with a trackway, all features suggestive of a late prehistoric date and on the same orientation as the planned landscape (Fig. 4: Loft Hall Enclosure). In contrast, the late Iron Age enclosure at the Orsett Cock has a totally different orientation.

Another interesting cropmark is the trackway just to the east of the Orsett Causewayed Enclosure, which is outside the planned landscape. However, it continues northwards on the same orientation as the planned system; is this an example of an earlier trackway incorporated into the new planned landscape, and straightened as a result? *Excavations*: Unfortunately, no large scale excavations have occurred in the interior of the planned landscape, only on its southern periphery. The evidence is summarised below; see Figs 2 and 4 for locations.

Evidence for an early Roman terminus post quem:

At *Barrington's Farm*, Orsett, a ditch at variance to the regular landscape contained first and second century pottery, with one 'possibly intrusive' late Roman sherd. Other ditches, aligned with the planned landscape contained only post-medieval pottery (Mi'ton 1987).

At South Ockendon, a ditch containing first century AD pottery was on a different orientation to the surrounding landscape (Chaplin and Brookes 1966).

At *Palmer School*, several Roman ditches were on the same alignment as the planned landscape to the north, though others were not (Rodwell, K. 1983).

Possible evidence for a Roman date:

At Cherry Orchard, Orsett, a gravel road was on a slightly different orientation to the surrounding field-boundaries, though Bannister observes that it is continued by the line of a path west of Orsett church. It contained late Roman material in its make-up, and overlies a ditch containing similar material (Bannister 1965).

At Belhus Park, possibly three Roman ditches were on the same alignment as the planned landscape (Wilkinson 1988:62-3). These may be part of an isolated enclosure.

At Primrose Island, Stifford Clays, a Roman enclosure is on the same alignment as the planned landscape (Wilkinson 1988:17-19).

At *Stifford Clays* two Roman ditches appeared to be of a similar orientation to the planned landscape, though interestingly, a medieval ditch was not (Wilkinson 1988:19-24). However, the dating is very poor, and this site is on the very edge of the planned landscape, where present field-boundaries are not particularly regular.

At Ardale School, early Saxon burials were aligned upon the dirches of a Roman enclosure on a similar alignment to the planned landscape, which here includes the 'medieval' style reversed-S profile strip fields. Excavation of one of these boundaries yielded Victorian material, showing it was open until the nineteenth century; there were no signs of earlier recuts (Wilkinson 1988:24-59). Once again this is on the very edge of the regular landscape.

Evidence for a post-Roman date:

(See also Cherry Orchard, Palmer School and Barrington's Farm, above). At *Baker Street*, Orsett, a ditch at variance to the planned landscape contained abraded Roman material; cropmarks show this continuing for around a kilometre towards Orsett village. Ditches forming part of the stripfield system contained little datable material except one, which yielded late Iron Age to Roman material including one very abraded late Roman sherd (Wilkinson 1988:13-17).

The Orsett Cock Enclosure was occupied into the early Saxon period, with both the Iron Age enclosure and Saxon sunken featured buildings on different alignments to elements of the overlying planned landscape (Milton 1987; Toller 1980; Geoff. Carter pers. comm.). However, this does not necessarily imply a post-early Saxon date for the whole regular landscape around Orsett. A field system may have been laid out to the north in the Roman period (hence the Cherry Orchard site), which was later extended south, to include the now deserted enclosure. Thus, only that part of the regular landscape south of the village is *certainly* later Saxon.

Evidence for a pre-twelfth century date:

At North Ockendon, a ditch forming the continuation of a field-boundary which was shown on the tithe map and formed part of the regular landscape; it contained twelfth- and thirteenth-century pottery (Wilkinson 1988:65-8).

Therefore, little evidence exists for the nature of the Roman landscape in this area, but some Roman features are orientated with present field-boundaries at least in peripheral parts of the regular landscape. Thus, it does appear as if some Roman enclosures in particular, could have survived as earthworks to influence the orientation of the later landscape. Further work is required to investigate the extent of this Roman legacy, especially where the evidence is strongest, around Orsett.

In other areas the Roman landscape was on a different orientation to modern field boundaries and the relationship to Roman roads suggests that extensive areas of the planned landscape post-date the Roman period. The fieldmorphology certainly appears to be at least partly Saxon or medieval in character. Place-names support analogies elsewhere for a middle or later Saxon date for the reoccupation of this area, and a *terminus ante quem* for the planning is provided by the fragmented nature of landholding at Domesday.

It would appear, therefore, that the following conclusions can be reached. Firstly, the regular landscape is not all one entity; there are numerous morphologically distinct landscapes in this area, with a generally similar orientation perhaps due to a framework of earlier trackways. Secondly, individual morphological zones were deliberately planned out. Thirdly, the landscape as it exists is a palimpsest, including both Roman and Saxon/medieval elements, though most of the regularity evident in the modern landscape probably dates to the middle or later Saxon period.

The Southend Area

It has already been indicated that the work of Rackham was inadequate in characterising the nature of the planned landscape of this area. The result of a more detailed analysis is to identify a series of clearly defined morphological zones (Figs 5 and 6). The clearest are radial systems in Southchurch, Shoebury, and Stambridge. In contrast, to the south of Wickford are the fragmentary remains of a very rectilinear system. Other areas within the regular landscape do not show such clear signs of 'planning', and were not investigated as thoroughly.

The area can be divided into four environments; marshland, brickearth soils overlying lighter soils of a river terrace, older gravels of the Rayleigh Hills, and the heavy London Clay (Fig. 2). The regular landscapes are restricted to the brickearths/recent terrace deposits and London Clay. Their settlement histories, outlined already, show continuous occupation on the fertile brickearths, and only limited occupation of the London Clay even in the Roman period. By the time of Domesday, both areas were extensively cleared. In the case of the Stambridge system, Domesday also shows a highly fragmented pattern of landholding, with virtually all the manors in different hands. This is in sharp contrast to the Shoebury system, the majority of which was held by Swein, having been acquired after 1066; the estates were dispersed in the mid-twelfth century.

The best dating evidence for the origins of the 'radial' planned landscapes comes from Shoebury. Excavations at North Shoebury revealed an extensive late Iron Age/Roman field-system, on a different orientation to the overlying planned landscape (Wymer and Brown forthcoming; Nigel Brown pers. comm.). The upper fills of late Roman ditches contained early Saxon sherds, so providing a *terminus post quem* of the fifth or sixth century for the planned landscape. At excavations in Great Wakering, the late Iron Age and Roman period is not well represented, but several ditches, including one containing a few sherds of early Saxon pottery, are again on a different orientation to the planned landscape (Crowe forthcoming).

The Great Wakering/North Shoebury parish boundary is also of great relevance. This field-boundary has a continuous straight course for over 4 km, with the curving roads of the planned landscape bearing no relationship to it. In fact, its exact line can be continued west another 9 km, as far as Scrub Lane in Hadleigh (Figs 5 and 6). A feature so straight and long may well be a Roman road, an example of how redundant earthworks can be fossilized in later landscapes.

The excavations at North Shoebury also revealed a large rectangular enclosure aligned with the churchyard and a road to the west which formed part of the radial planned landscape. Thirteenth-century pottery came from the secondary silts of the enclosure ditch, with twelfth/thirteenth-century, and a few eleventh-century sherds from lower levels (Wymer and Brown forthcoming; Nigel Brown pers. comm.), providing a *terminus ante quem* for the planning. This could be pushed back to the tenth century on the basis of the possible Danish camp at Shoebury (Spurrell 1890), which fits into the radial pattern of roads, suggesting it post-dates the original planning. One road, Rampard Street, appears to have been overlain by the fort, and was forced to skirt around the defences (Figs 5 and 6; Spurrell 1890:50).

Therefore, two possible dates for the episode of planning can be suggested; firstly, the middle to late Saxon period, before the fragmentation of landholding and secondly, the late-eleventh to mid-twelfth centuries during the area's control by Swein and his family.

Support for the earlier date comes from the morphological similarity with the Stambridge system, for which the fragmented nature of eleventh-century landholding suggests a pre-eleventh-century date. The intensive exploitation of this whole area is reflected in the number of ploughs per hide at Domesday; following Campbell's (1981, 115-29) hypothesis, this would also support the earlier date, as the lower population would have meant less upheaval for the tenant population. There is no evidence of disruption comparable to the 'Harrying of the North', to provide a suitable post-conquest context. Thus, a pre-eleventh century date is

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Fig. 5 Southend area; landscape elements.

suggested for at least the Shoebury system, and possibly the morphologically similar Southchurch and Stambridge areas.

The highly rectilinear pattern to the south of Wickford is enigmatic (Figs 5 and 6). Roman centuriation has never been convincingly identified in Britain (Dilke 1971). However, an analysis of Six Inch maps shows that many of the parallel and perpendicular boundaries south of Wickford correspond exactly to divisions of two 'centuriae' (Fig. 6; Rippon 1989: Fig. 29). In 1965, a feature continuing the line of one of these boundaries was excavated, and proved to be a Roman road (Rodwell 1966). Maybe this is very fragmentary centuriation, or more likely, an example of 'a land assignation made in multiples of *actus* by someone with at least a vague notion of Roman surveying' (Dilke 1971:193, discussing Ripe in Sussex).

Discussion and General Conclusions

Two groups of problems can be identified in previous work on planned landscapes; methodology, and the failure to consider the implications of such large scale reorganisation. The former is dealt with above, but I now wish to turn to the latter. It must be remembered that we are studying the use of a block of land, which did not exist in isolation, but within a settlement pattern, a tenurial framework, and a wider landscape, not all of which was planned.

A Late Saxon Landscape

Both case-studies show the regular landscapes of southern Essex to be complex in both their physical form and chronology. At both Thurrock and Southend, features survive from the Roman period, though there is no evidence of an extensive planned landscape of this date. It is interesting that recent excavations to the south of Maldon have produced evidence for Roman ditches on the same alignment as the Dengie planned landscape (Gilman 1989:154). However, both marginal clay and fertile brickearths appear to have seen a major reorganisation of the landscape, certainly between the fifth and twelfth centuries. A middle Saxon date, say between the eighth and the tenth centuries, is the most likely context, after the early Saxon contraction, and before the late Saxon fragmentation of landholding.

The evidence for widespread reorganisation of the landscape, based upon large estates in the middle to late Saxon period, is now widespread (Unwin 1988:29). Planned landscapes of this date, but coaxial in nature, are being identified in East Anglia (Williamson 1987:428-9). In the Midlands, the open-field system and nucleated villages may have been emerging at this time (Fox 1981:70; Hall 1988:36; Unwin 1988). However, an important point to emphasise is that while reorganisation was widespread, its nature was not uniform; southern Essex never saw the development of nucleated villages and open-fields.

The expansion onto the marginal London Clay, and reorganisation of resources there and on the brickearths, occurred within large estates illustrating the strip-parish principle, with a territory crossing a series of zones of different landuse potential. Settlements which utilized the planned landscapes had access to a wide range of resources with the estate centres, represented by Church-Hall complexes, located on the edges of ecological zones (e.g. Orsett, Fig. 4). The problem of where the actual settlements were located remains to be resolved.

These estate centres often lie beside long sinuous trackways, running to the wooded hills and in some cases as far as the Thameside marshes (Fig. 2). In the medieval period, large areas of coastal marsh were 'enclaved' to inland



Fig. 6 Shoebury; landscape elements.

manors, especially along the north bank of the Thames (Cracknell 1959; Round 1903:369-70). A good example is the marsh around Corringham, enclaved to Fobbing, Mucking, Dunton and even Little Warley, which is 15 km to the north-west. One of the derivations of the place-name 'Wick', which are abundant on the marshes, is as an appendage to larger estates situated elsewhere (Britnell 1988:161-2).

Documentary evidence also illustrates the enclaving of woodland, on the Rayleigh Hills (Rackham 1986b:14-16, fig. 14). It may not be a coincidence that it is the gravel hills, Mucking Terrace, and inland marshes of the Mar Dyke Fens and Rawreth Shot that saw the only common land to survive into the post-medieval period (Chapman and Andre's Map of Essex 1777). It seems likely that this pattern of enclaving, and the surviving fragments of common land, are the remnants of large inter-manorial commons, such as Tiptree Heath in central Essex, which was shared between seventeen parishes in the medieval period (Rackham 1980b:105). All this evidence suggests that the middle Saxon countryside of southern Essex was divided between numerous large estates occupying the areas of several parishes, covering a range of resources and with access to both upland and lowland distant pastures. During the late Saxon period they began to fragment, into the multiplicity of manors recorded in Domesday.

Landuse and Exploitation

A major question is how the planned landscapes were exploited. Southern Essex constitutes an area typical of Rackham's 'Ancient Countryside', with dispersed settlement and enclosed fields held in severalty (Rackham 1986:4-5). Documentary evidence and estate maps show the existence of this predominantly enclosed landscape from at least the sixteenth century (Britnell 1983, 1988; Farrell 1969; Poos 1983). However, there is both historical and physical evidence to suggest the existence of small patches of common-field in the medieval period, though it is difficult to determine how widespread this form of agriculture was (Roden 1973, 340).

The occurrence of long narrow fields has been noted in south-west Essex (Erith 1948) and at Mucking (Astor 1979). It should be noted that these are considerably smaller than the strip-fields in the southen part of the Thurrock regular landscape. These are approximately one furlong wide, and up to twelve furlongs in length, comparable in scale to the early phases of the midland open-fields identified by Hall (1988), and the Holderness planned landscapes (Harvey 1980). To the south of Baker Street, there survive divisions perpendicular to these long sinuous boundaries, suggesting that originally these large fields consisted of numerous narrow strips approximately one furlong in length (Fig. 4).

These strip-fields suggest cultivation of an arable core, surrounded by grazing land in those parts of the planned landscape with simple rectangular fields, as well as on the marshes, such as Mar Dyke, and lighter but less fertile soils, such as the Mucking Terrace. These were areas into which arable cultivation expanded at times of land hunger. Such an expansion may take the form of an extension of the regular landscape, as was the case when the Mar Dyke was drained, or through piecemeal assarting which created irregular fields, as excavated at the Orsett Causewayed Enclosure (Hedges and Buckley 1985). The latter provides an example of expansion into marginal areas in the thirteenth century.

Social Organisation

In recent years, there has been some discussion of the social organisation behind planned landscapes, particularly in the prehistoric (Fleming 1984, 1985) and medieval (Harvey 1989) periods. There is insufficient space here to give this subject the attention it deserves, but I feel it is important to make several observations.

Discussion centres on whether a community or powerful individual was responsible for such extensive acts of planning. Though evidence for the initiative of a community in regulating open-fields is impressive, I would observe that the *regulation* of *existing* arrangements requires very different authority to that needed to *re-plan completely* a whole landscape. Besides, southern Essex never had full open-field agriculture in the medieval period, nor a strong tradition of nucleated settlement, with its associated high level of communal co-operation. Thus, I would argue that there was unlikely to have been sufficient social cohesion for the numerous communities involved to have co-operated and carried out these acts of planning themselves; a powerful elite must have been responsible.

Conclusion

Rodwell's pioneering work in the 1970s must be given full acknowledgement for focussing attention on these planned landscapes. However, I would suggest that early methodologies have given a misleading impression of their nature. To overcome this, firstly, the selection of major elements in a planned landscape should be rigorous, and the data used made explicit and illustrated where possible. Topographic analysis should merely enhance regular patterns, not create them. Secondly, the emphasis needs to be shifted from simply presenting the earliest recognisable phase of a planned landscape, to studying how landscapes evolve. A lack of consideration into this has led to an over-simplification of the multiplicity of processes by which landscapes change. Thirdly, it should be made clear that there is more to landscape topography than simply identifying planned landscapes; this case-study shows that such areas must be placed in their context of landuse and social organisation. As wide a range of evidence as possible should be used, including documentary sources, archaeology, place names, and environmental analysis. If this can be achieved, then we will be able to gain a far greater insight into the origins of our countryside.

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Sir John de Coggeshale: an Essex Knight of the Fourteenth Century¹

by Jennifer C. Ward

Essex knights in the Middle Ages are less well known than those of the Tudor and Stuart periods. Yet the late thirteenth and fourteenth centuries were crucial in setting the pattern of knightly responsibilities for the future. Sir John de Coggeshale (d. 1361) was one of the most active Essex knights of his time, and typifies the changes which were then taking place in knightly involvement in county government and justice. The knights had long been an élite group in society, drawing their wealth mainly from their estates. Their early training in fighting enabled them to play an important part in warfare. Their whole outlook and lifestyle had much in common with the baronage, and they were connected with the nobility through ties of service and sometimes marriage, and as retainers and neighbours. From the thirteenth century they were in increasing demand by the Crown for service in the counties and for attendance in parliament, and during John's lifetime the Crown came to rely more heavily on the knights and gentry.

The estates of the Coggeshale family were largely built up by John's grandfather Ralph who died in 1305. At the end of Henry III's reign (1216-72) small purchases were being made by Ralph as at Halstead and Inworth², but his greatest acquisitions were made in the twenty-five years before his death, and these constituted the principal lands of the family in the fourteenth century. The most important gain was the estate of Great Codham Hall in Wethersfield which became the main family residence. In 1294 Ralph concluded a fine with Peter son of Robert de Burgate and his wife agreeing to rent for £10 a year land in Wethersfield, and also in Bocking, Gosfield, Halstead, Panfield, Shalford, Saling, Sampford, Braintree and Rayne. He also secured the reversion of land belonging to Peter's inheritance which in 1294 was held in dower. The whole estate comprised two messuages, 467 acres of arable land, 36 acres of wood, 25 acres of meadow, 85 acres of pasture, £4. 6s. 0d. rent, and one mill. His purchase was finalised the following year.3

Ten years earlier, Ralph had secured possessions in Shalford. He obtained part of Sheering Hall in 1284 from Nicholas son of Simon de Ashwell, an acquisition which he completed in 1298 in a fine with Peter son of Simon de Ashwell. He gained 250 acres of arable land, together with wood, pasture, and meadow, a small amount of rent, a watermill, and the advowson of the chapel there.⁴ His third major acquisition was the manor of Duddenhoe in Wendon Lofts in 1287.⁵ This gain also involved the reversion to Ralph of land held in dower. Altogether Ralph was to acquire 314 acres of arable land, a mill, 19½ acres of meadow, 38 acres of pasture, £1. 7s. 0d. rent, and about ten acres of wood.

The acquisition of reversions of land shows that Ralph was not only concerned to gain land which he could exploit himself. He was planning for the future of his family. This is also seen in the fine concerning Alresford, when Ralph's right to land in Thorrington, Alresford, Frating and Great Bentley was acknowledged in 1295 by Roger de Coggeshale, and in return Ralph granted it to Roger and his wife for their lives, with the reversion to him and his heirs. It was not until 1343 that the property came into the hands of his grandson John.⁶

An important way in which a family's lands could be increased was by marriage, and here again Ralph showed that he was planning for the future through the marriage of his son John (d. 1319) to Sarah, daughter of Laurence de Plumbergh. This marriage gave the Coggeshale family a stake in South Essex, at North Benfleet and Paglesham. According to Ralph's inquisition *post mortem* in 1305, the possessions in North Benfleet comprised four hundred acres of arable land, £4 rent, twelve acres each of meadow and pasture, and twenty acres of wood. The manor of Paglesham, together with Rugwood in Foulness, had 310 acres of arable land, together with a windmill, and £2. 2s. 0d. yearly rent from certain free tenants.⁷

The family estates were therefore the result of piecemeal accumulation in the late thirteenth century made through purchase and marriage. The process of gradual acquisition is reflected in Ralph's inquisition *post mortem* in the number of lords from whom he held his lands. For instance, Ralph's main holding in Coggeshall Hall in Little Coggeshall was held of John Fillol, but he also held land of the abbots of Coggeshall and Westminster, and a fulling mill of the heirs of William atte Napelton. A similar pattern is seen on Laurence de Plumbergh's lands at North Benfleet.

From Ralph's time, the principal family estates in Essex remained Great Codham Hall in Wethersfield, Sheering Hall in Shalford, Coggeshall Hall in Little Coggeshall, Duddenhoe in Wendon Lofts, Paglesham and Rugwood, and North Benfleet. These manors included some possessions in places nearby; in 1319 Ralph's son John had holdings in Messing and Inworth near Coggeshall, and Arkesden and Chrishall near Duddenhoe. Reversions of property in Halstead and Alresford came into the hands of Ralph's grandson John (d. 1361) who is also said to have held the manor of Hawkwell.8 John also secured the advowson of Ashingdon church as a result of a case he brought in the court of King's Bench.9 The family was primarily based in Essex, but by 1319 held the manor of Bradcar in Shropham in Norfolk, and by 1361 also held Stutton in Suffolk.¹⁰ The acquisitions made in the first half of the fourteenth century were minor compared with Ralph's gains in the time of Edward I. No calculation of the family's income is possible, but their possessions were greater than those of many knightly families. There is no doubt that they ranked among the

wealthiest knights of Essex, and verged on lesser baronial status.

Two descriptions of the estates survive, namely Ralph's inquisition post mortem in 1305 and his son John's inquisition post mortem in 1319.11 The inquisition post mortem of his grandson John de Coggeshale in 1361 provides little description of the demesne holdings, and the valuations were a formality with all but two of the manors being valued at twenty marks each, and Codham and Paglesham at £20 each.¹² Taking the first two inquisitions, the acreages in 1319 were on the whole much lower than those of 1305. It is unlikely that this was due to the loss or sale of lands, as there is no sign of this among the Feet of Fines. It is possible that some of the lands were held by Ralph's widow in dower, but again there is no evidence on this point. The most likely explanation of the lower figures lies in the situation faced by the family in 1319. As John de Coggeshale held some of his estates in chief of the Crown and died leaving an heir who was under the age of twenty-one, the whole of the family's lands would come into royal custody. There would therefore be every incentive to show reduced valuations in the inquisition post mortem. Moreover the political situation in 1319 was highly disturbed, with conflict looming between Edward II and the barons; two of John's manors, Bradcar and Paglesham, were in fact seized by Aymer de Valence, earl of Pembroke, and it was not until 1320 that the manors were taken into the king's hands and inquisitions held. Even then, no description of Paglesham was provided.

On the basis of comparison with the Feet of Fines and with the Ministers' Accounts of North Benfleet of the 1330's it appears that Ralph's inquisition post mortem of 1305 was reasonably accurate in its description of the estates. It indicates that the main emphasis was on arable farming, and amounts of meadow, pasture and woodland were relatively small. The only manor for which Ministers' Accounts survive is North Benfleet where the accounts cover the years 1335-9, a time of agricultural depression.¹³ The manor was run by a serjeant under the general supervision of John de Coggeshale's steward, Thomas Aylmer, with the occasional visit from John himself. Although some revenue came from rents (£8. 15s. 1/2d. in 1338-9) the main profits were derived from mixed farming. About 350 acres were sown, mostly with wheat and oats, although there were also very small quantities of peas and vetch. What was not needed for the food allowances of the labourers and the stock was sold, and the sale of grain brought in £12, 14s. 9d, in 1338-9; the sales comprised nine quarters one bushel of wheat, four bushels of peas, and 175 quarters two bushels of oats. There is no indication of grain being taken to Codham to feed John's household, and it is likely that he relied on his North Essex manors for food supplies. With North Benfleet being a marshland manor, stock was of considerable importance, as seen at Michaelmas 1337 when there were 47 cows, 180 ewes and 156 lambs on the demesne. In 1338-9, the sale of stock brought in £4. 3s. 91/2d., wool £5. 19s. 0d., but the dairy yielded £21. 11s. $7\frac{1}{2}d$, with both sheep and cows being milked. Occasionally, stock was sent to John's other estates; lambs were sent to Coggeshall and Bocking in 1335-6, although

it is not known whether this was to develop flocks there or for consumption. The lambs sent to Codham in 1336-7 for the bishop of Lincoln were presumably destined for the table. Food could also be sent to John when he was working in Chelmsford, and at the time of the trailbaston commission in 1336-7, six lambs, two calves, six geese and twelve hens were dispatched from North Benfleet.

John de Coggeshale's landed wealth provided the foundation for his activities in politics, war, justice and Essex affairs. He must have been born about 1301, as he was said to be aged eighteen or more at the time of his father's death in 1319. Because he was a minor, he came into royal custody, and his marriage was granted by Edward II to his favourite, Bartholomew de Badelesmere, in return for a payment of 100 marks.¹⁴

As steward of the royal household between 1318 and 1321 Bartholomew was a powerful and influential figure at court. It is likely that John's experience and contacts were broadened at this time; in June, 1319, he was at York where, along with John de Goldyngton and Sir Bartholomew Burghersh, he witnessed a grant to Bartholomew de Badelesmere, and in 1320 he was one of those accompanying him on the king's service to the papal court at Avignon.¹⁵

John's father had been involved in county affairs as well as the disturbances of Edward II's reign. He served as a keeper of the peace for Essex in 1314 and as commissioner of array two years later.¹⁶ In 1318 he was pardoned for adherence to the leading rebel to Edward II, Thomas earl of Lancaster.¹⁷ Bartholomew de Badelesmere himself changed sides and joined Earl Thomas, but the king defeated the rebels at the battle of Boroughbridge in March, 1322; those who were not killed in battle were executed as traitors, and all rebel lands were confiscated by the Crown. It is likely that John de Coggeshale succeeded in remaining uninvolved in these events. The fact that on coming of age John did homage to the king and received his lands in July, 1322, indicates that he had kept out of the fighting.18 Whatever his attitude to politics, John was certainly serving Edward II militarily in the 1320's. In July, 1322, he was summoned to perform military service against the Scots. Four years later, he was allowed to postpone taking up knighthood; the actual date when he became a knight is not known.¹⁹ The performance of war service by knights continued to be important in the fourteenth century, along with their growing responsibilities in county government. In many cases, as with John, the knight fought when young, and became increasingly involved in administrative and judicial work as he grew older.

John embarked on his career in Essex affairs while he was still in his early thirties. His most important offices were those of sheriff and escheator, but he also served as a knight of the shire in parliament, as a justice, and on a variety of local commissions between the 1330s and his death in 1361. Compared with his fellow Essex knights, he was far more heavily involved in county work, a strong indication of the extent to which the Crown relied on him, and of his connections at court. Both the sheriff and escheator were Crown appointments, a single sheriff being appointed for Essex and Hertfordshire. John first became sheriff in November, 1334, and held the office for five years until the shortlived experiment of local appointments in 1339-40. He again served as sheriff between May, 1340, and January, 1341, between November, 1343, and May, 1348, and between November, 1352, and November, 1354.²⁰ Such long tenures of the office were exceptional in fourteenth century Essex, and were contrary to the statute of 1340 which laid down that the sheriff was only to hold office for a year. The arrangements concerning the office of escheator underwent several changes during the fourteenth century; John served as escheator of Essex, Hertfordshire and Middlesex between 1343 and 1348, and of Essex and Hertfordshire between 1351 and 1354.²¹ At both these times, the office of escheator was held by the sheriff.

Although less important than earlier in the Middle Ages, the office of sheriff remained one of power and prestige. The sheriff had to answer at the Exchequer for the county farm and the revenues due from the shire, he presided over the county court, and received and carried out the orders of the Crown on a wide variety of matters. After a visitation by royal justices he was responsible for carrying out their sentences and making a return of fines and chattels of felons and fugitives to the Crown.²² The sheriff was responsible for holding the tourn in the hundreds to check on the frankpledge tithings, inquire into local crime and punish minor breaches of the peace and trespasses.²³ The escheator was responsible for the lands of tenants-in-chief of the Crown which came into the king's hands by reason of minorities, failure of heirs, or forfeiture. He took the estates into the king's hands, and accounted for the revenues until ordered to hand them over to the heir or to someone else. He also partitioned estates among coheiresses.²⁴ Thus in 1347 John conducted the inquisitions post mortem of John and William de Wauton, two Essex knights who had died at the siege of Calais, and then had to restore the lands to the families as they held nothing of the king in chief.25

In addition to the offices of sheriff and escheator, John was appointed to a wide range of judicial and administrative commissions. Some were only of local importance; in 1338 he was a member of the commission de walliis for the hundred of Rochford, and seventeen years later he was supervising the repair of walls, dykes, causeways and bridges on the coast at Dengie.²⁶ In 1351, before his reappointment as sheriff, he was organising labour for work at Hertford castle. ²⁷ Many of the commissions however were connected with Edward III's Scottish and French wars, and there is no doubt that the organisation of the war effort meant an increased administrative burden for John and the other knights of the county. Some of the orders came to John because of his office as sheriff, but many came to him as a leading man of Essex with ample administrative experience. The work was essentially varied. In 1335 he was concerned with the levy of 100 hobelars and 200 archers in Essex for the Scottish war.28 He was involved with the array of soldiers and the defence of the coast at the time of Edward III's Crécy and Calais campaign in 1346-7.29 In 1344, he was on a commission with John de Sutton and Robert de Teve to list the principal landholders of the county for the Crown. Much of the work was concerned with revenues due to the Crown. In 1349 John was inquiring into money which had been raised to pay archers and had never been sent to the king at Calais, in 1353, 1354 and 1357 he was investigating cases of nonpayment of the customs duties on wool, and in 1358 a case of fraud over the cloth subsidy.³⁰ These last commissions bring out how dependent Edward III was on the customs duties, particularly those on wool. The provision of food supplies was also vital for the war effort, and in 1355 John was one of those appointed to purvey 200 bacon pigs, 60 weys of cheese, 40 carcases of beef, 100 quarters of beans and peas and 100 quarters of wheat which were to be sent to Calais; his account however shows that although he delivered 213 pigs, all the other amounts were below the king's specifications, and no cheese was delivered at all.³¹

The maintenance of the peace was always a major concern of medieval government, although the gang warfare in Essex in the 1340s shows that its enforcement was often difficult. Various commissions concerning law and order were issued to John, such as those for the arrest of suspects in 1339, 1340, and 1345, and the commission to inquire into the names, lands and goods of those outlawed for felonies in 1352.32 At all these dates, John was holding the office of sheriff. Much more important for the future involvement of the gentry in judicial matters was the use of the commission of the peace which underwent considerable development in John's lifetime. John served on two commissions of the peace in 1351 and 1356. Of the two, the commission of 1351 was wider-ranging; it provided for the preservation of the peace according to the statutes of Winchester and Northampton of 1285 and 1328 respectively, and allowed the justices to determine as well as hear cases of felony and trespass. It also gave them the right to enforce the Ordinance and Statute of Labourers, designed to enforce a wages and prices freeze in the wake of the Black Death of 1348-9.33 The Crown had been reluctant earlier in the fourteenth century to allow the commissions the right to determine felonies and trespasses, but this power became vested in the justices of the peace after 1368.

How did John come to achieve such a position of importance in county government? It is not enough to say that he proved an efficient agent of the Crown, as this would not explain why he achieved office in the first place. He must have had influential friends and contacts at court who pressed for his appointment, and it is likely that these dated from the time of his minority. As has been seen, he was with Bartholomew de Badelesmere in 1319-20, but Bartholomew died a rebel in 1322. In 1319 John witnessed a grant with Sir Bartholomew Burghersh, Badelesmere's nephew, and it appears most probable that it was the Burghersh family who promoted John's interests, in particular Bartholomew's brother Henry who was bishop of Lincoln between 1320 and his death in 1340. John and Henry were certainly on terms of friendship, as seen in John's entertainment of the bishop at Great Codham Hall in 1336-7.34 Henry Burghersh supported Bartholomew de Badelesmere, and the temporalities of his see were seized by Edward II after Bartholomew's fall. He supported the king's deposition in 1327, and was much involved in diplomacy in Scotland and France in the early

years of Edward III's reign. More important from John's point of view, he was the king's treasurer in 1327-8 and chancellor between 1328 and 1330; he may have helped to secure the grant in 1328 to John and his heirs of free warren on all the family's demesne lands.³⁵ Henry was again treasurer between 1334 and 1337, and it is likely that he supported John's appointment as sheriff in 1334. Henry's brother Bartholomew, who was close to Edward III, also continued to support John, and acted as one of his mainpernors during the investigation into county government in 1341.³⁶

John's contacts at court were not limited to the Burghersh family. His other mainpernors in 1341 were John Fitzwalter and John de Nevill, both of them prominent in Essex and at court. Great Codham Hall was in fact held of the Nevill family. In addition, Robert Bourchier was probably also influential in furthering John's career. Robert was an Essex lord and active on county commissions, but he was also a royal justice and the first layman to become chancellor in 1340-1. As with the Nevills there was a tenurial link between the families, as John's father had held possessions in Halstead of the Bourchiers. The tie between the families was strengthened with the marriage of Robert's son John to John de Coggeshale's daughter Elizabeth.³⁷

In view of his landed status, experience of office and powerful friends at court, John was an obvious choice to serve in parliament as one of the two knights of the shire for Essex. He was a member of the parliaments of February 1334 and May 1335, both held at York, of September 1336 at Nottingham, and of February 1339, April 1343 and February 1358 at Westminster.³⁸ Knights were elected in the county court, with the sheriff presiding and making the return, and in 1335, 1336 and 1339 John as sheriff was returning himself. He was not exceptional in the number of times he was returned, as this frequency of service is found with several other Essex knights in the fourteenth century. The Scottish and French wars made the Crown increasingly dependent on the Commons in parliament for grants of taxation, while knights and burgesses found parliament a useful forum for airing local grievances and gaining concessions. Parliament was a place where they could build up both contacts and experience.

Local office brought considerable opportunities for profit. Some of the work which John performed was paid. As knight of the shire he received four shillings a day. He was also paid for his work on the commission of the peace, receiving £0. 6s. 8d. a day for himself and his clerk in 1351; he is said to have sat at sessions of the commission of the peace for fifty days in 1352, but there is no means of knowing whether this figure is typical.³⁹ Through his offices and his influential friends at court, John was in a position to secure wardships, as when he obtained the custody of all the lands of John Baynard together with the marriage of the heir in 1350 which he shared with the heir's mother, Isabel Baynard; the heir, Thomas, is said to have been born and baptised at Codham, but it is not clear whether there was any family relationship.⁴⁰ He paid forty marks for the marriage, and a rent of twenty marks a year for the lands.

Throughout the Middle Ages, complaints about the corruption of officials were rife, and John was no exception.

The whole problem was the subject of investigation by Edward III in 1340-1. Commissions of over and terminer were issued on 10 December, 1340, to deal with oppressions by justices and ministers of the king since he assumed the governance of the realm in 1330.41 These commissions were part of Edward III's shake-up of central and local government in the wake of his failures at the beginning of the Hundred Years' War. The extent of the purge is reflected in the loss of office by six escheators and twelve sheriffs, including John, early in 1341. By November 1341, Essex officials had agreed with the justices to pay a fine of 3,000 marks which was divided up amongst them.42 John's powerful friends largely kept him out of trouble. In March 1341, the justices were ordered not to arrest John de Coggeshale as Bartholomew Burghersh, John Fitzwalter and John de Nevill had mainperned to have him before the justices to answer for his trespasses; if he had already been arrested, he was to be released.43 He failed to appear before the justices and was fined 100 marks for non-appearance; this fine was however pardoned by the king in November.44 It is possible that John had seen trouble coming, as, having been reappointed sheriff in May, 1340, he was apparently unwilling to remain in office six months later; he was however ordered to continue as sheriff.45 This was not a case of desiring to quit local politics permanently. There is no later sign of reluctance to hold office, and John was busy with public affairs until within a year of his death. However he safeguarded himself in 1353 by obtaining a royal pardon for all his trespasses in the time of Edward II and Edward III.46

Through his public duties John had a working relationship with many leading Essex gentry. Evidence is lacking however as to whether any of these men was a particular friend. As knight of the shire, he served with Adam le Bloy in 1334, with William de Teye in 1335 and 1343, and with Robert Bourchier in 1339; in 1336 his fellow-knight was Thomas Gobion, very much his senior in county experience, and in 1358 John de Haveryng who was highly experienced in parliamentary affairs. Appointment to judicial commissions meant working with a small group of gentry and royal justices who combined local knowledge with wide experience outside Essex. In 1351 when John was appointed to the commission of the peace and labourers, the other knights and gentry included John de Sutton, John de Goldyngham, Robert de Teye and John de la Grove. When he was again appointed five years later, the commission again included John de Sutton and Robert de Teye, and also Thomas Tyrel, described as king's yeoman, who had seen long service with the king and queen and their daughter Isabella.⁴⁷

Knights and gentry also came into contact through their legal business and property transactions. They witnessed each other's deeds, as when John acted as a witness to two acquisitions of land by Robert Bourchier in 1346 and 1347,⁴⁸ and assisted with tenurial arrangements. John assisted John de Liston in 1338 with a new enfeoffment of the manor of Liston, designed to avoid feudal incidents; eleven years later, when new arrangements for the succession had to be made following the death of John de Coggeshale's eldest son John, two of the Essex gentry, William de Teye and John Oliver, acted to secure the fine by which John de Coggeshale and his wife would hold the manor and advowson of North Benfleet for life, with remainder to their second son Henry and his heirs.⁴⁹ Ties between gentry families were strengthened by marriage, as between the Coggeshales and the Bourchiers.

Relatively little evidence survives as to social contacts among the gentry. John's family residence at Great Codham Hall had a ten acre park; the early fourteenth-century hall of the house with its smoke-blackened crownpost roof survives; one octagonal crownpost with moulded cap and plain domed base can be seen, but the other is missing.⁵⁰ It is only occasionally that references survive to social gatherings, as when John entertained Henry Burghersh, bishop of Lincoln. The witnessing of the deed in 1347 for Robert Bourchier took place at Halstead, probably at his home at Stansted Hall. Marriages and baptisms would be times when local gentry came together, as in 1358 when William de Wauton attended the baptism of John's grandson William at Codham, possibly acting as godfather.⁵¹

These ties among the gentry were important in creating community of interests, but the primary concern of all these men was for their families, and the securing of advantageous marriages and new estates has to be seen in the family context. John de Coggeshale held his estates jointly with his wife Margaret, a device commonly used by barons and knights to avoid wardship and feudal incidents.⁵² John's eldest son was also called John; he fought in Edward III's retinue at the battle of Crécy in 1346 and was killed at the subsequent siege of Calais.53 This left the second son Henry as heir, and for him John secured an heiress, Joan, daughter of William de Welle who died in 1349 when Joan was said to be aged twelve or thirteen. This meant that she was of marriageable age, and John paid her guardian, Guy de Brian, £400 for the marriage. Her inheritance included lands in Suffolk and Cambridgeshire, as well as Great Sampford and East Tilbury in Essex. By the time she was fifteen in 1351, she had married Henry de Coggeshale who obtained her lands from the Crown in that year, and they had at least one child; the eventual heir, William, was born in 1358.54 John de Coggeshale also had a third son Thomas who served Thomas of Woodstock, the youngest son of Edward III, and achieved prominence in the county in the reign of Richard II. John's daughter Elizabeth married John Bourchier, as has already been mentioned.

Little is known of John de Coggeshale's attitude to the Church. Like many of the gentry he owned his own missal.⁵⁵ The church at Codham was probably very much of a family chapel; according to Morant, it continued to be used until the latter part of Elizabeth's reign, and it now survives as a cottage.⁵⁶ As part of his property, John held a number of advowsons of parish churches, at Shropham in Norfolk, North Benfleet, Alresford, Hawkwell, Ashingdon, and the chapel of Sheering Hall in Shalford.⁵⁷ No will has survived, so it is not known whether he ordered a brass or funeral monument like John de Wauton at Wimbish or his daughter at Halstead, or whether he made any arrangements for the foundation of a chantry.

John de Coggeshale died in June, 1361, possibly in the

second great outbreak of the Black Death. Less than a year before he died, he acted as one of the supervisors of a repayment of taxation to Essex vills.58 His career throws light on the whole spectrum of activities of a fourteenth-century knight, as landowner, warrior, Crown official and knight of the shire. He exemplifies the growing importance of the knights and gentry in local administration and justice, and also the significance of connections with the court and central government; the Crown and the county were interdependent, and the leading men of Essex had their ties with both. John's contacts ranged from the most important figures in central government, captains in the Hundred Years' War and leading courtiers, to his Essex neighbours. John de Coggeshale increased the standing of his family, enabling his sons and grandson to continue to play a prominent part in Essex affairs under Richard II and Henry IV.59

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Lionel de Bradenham and his siege of Colchester in 1350¹

by W.R. Powell

In the summer and autumn of 1350 the town of Colchester was attacked and later besieged for thirteen weeks by Lionel de Bradenham, lord of the neighbouring manor of Langenhoe. This remarkable episode was related by Philip Morant, who was heavily biased in favour of Colchester, and described Bradenham as 'covetous and ambitious' and as 'a very incroaching and troublesome man'.² Morant's account was corrected and expanded by J.H.Round, in a paper read at our Society's Annual meeting at Colchester in 1913.3 That was almost the last time that Round was able to attend one of our meetings.4 As always, he had something new and significant to say, and on that occasion he had also taken particular trouble to interest a general audience, by shaping his paper partly as a commentary on the popular version of events given in the Colchester pageant of 1910. Round did, however, make one uncharacteristic misjudgement.

Lionel de Bradenham was again mentioned by Dr. Elizabeth Chapin Furber, in her edition of Essex Sessions of the Peace 1351, 1377-1379, published by our Society in 1953.5 She printed as an Appendix the account by Bradenham and a colleague, in 1352, of their collection throughout Essex of the fifteenths and tenths - the national tax on moveable goods - in which were included fines for infringement of the Statute of Labourers, and she pointed out that Bradenham was later accused of embezzling some of the fines. Dr. Furber commented that Bradenham was 'obviously involved' in the violent crimes for which John, Lord FitzWalter was indicted in 1351, and that he was 'a most unsavoury character'. Dr. Furber's disapproval of Bradenham may have been heightened by her mistaken belief that he had murdered his own pregnant wife.6 The evidence of Bradenham's involvement with FitzWalter was also weaker than she thought.

In 1966 Dr. R.H. Britnell published an account of agricultural production at Langenhoe in the 14th century.⁷ This deals mainly with the period when Lionel de Bradenham was lord of the manor, and it also summarizes his career, providing more information than was given by previous writers.⁸

The present paper aims to examine Lionel de Bradenham's long and eventful career in greater detail, particularly in relation to his siege of Colchester and its aftermath. His family, which probably came from Norfolk,⁹ had arrived in Essex by 1288, when the manor of Langenhoe was settled on Simon de Bradenham and his wife Margaret and her heirs.¹⁰ Simon and Margaret also had lands in Suffolk and Cambridgeshire.¹¹ He was sheriff of Essex and constable of Colchester castle from 1297 to 1300,¹² and in 1298-9 served several times as a judge of oyer and terminer.¹³ Simon died before 23 September 1303.¹⁴ He may well have been related to John de Bradenham, Chancellor of Cambridge University 1295-6.15 Lionel de Bradenham,16 who was probably Simon's son or grandson, was in 1328 holding Langenhoe of Robert FitzWalter, Lord Fitzwalter, for 1/2 and 1/4 knight's fee.17 The quarter fee probably represented the moiety of Reeves Hall in East Mersea, which in 1368 was held by the Gros family as tenants of Bradenham, for the same service.¹⁸ In 1303 Robert Fitz-Walter, as tenant-in-chief, had held 1/2 knight's fee in Langenhoe, and that was held in 1346 by Lionel de Bradenham.¹⁹ Bradenham's manor of Langenhoe extended into the neighbouring parish of Peldon.²⁰ He acquired two other small properties adjoining the manor: in 1336 eight acres of meadow in Abberton, and in 1364 one-third of a messuage, 30 acres of land, and pasture for 60 sheep in Langenhoe itself.²¹ In 1354 John Martel granted him a 7-year lease of lands in Rivenhall and Faulkbourne - probably Martel's manor.22

Lionel de Bradenham held Langenhoe for over forty years. The manor comprised the whole parish (2,091 acres by modern measurement) including a demesne of some 250 acres of arable with extensive marshland sheep pasture. The manorial accounts which survive for five years between 1325 and 1348 give a net income ranging from £50 to £70, with an average of £58.²³ As Dr. Britnell shows, sheep-farming was especially profitable, while the cultivation of grain was expanded to produce a large surplus, much of which was sold to Colchester merchants. At the same time the income from rents was being increased by substituting leaseholds for customary tenancies. The accounts indicate that Bradenham was an enterprising farmer who was making a good living from his manor. This impression of competence is confirmed by what we know of his activities elsewhere.

Besides farming at Langenhoe, Bradenham carved out a career as a man of business, serving both the Crown and important private clients. The Abbess of Barking, going abroad in 1350, appointed him as one of her attorneys.²⁴ She was Maud de Montagu, sister of the earl of Salisbury.25 Sir John de Braham, of Braham Hall in Little Bromley, employed Bradenham in similar circumstances in 1358.26 Ralph de Tendring, who had an estate in Purleigh, did the same in 1362, when he was sent to Ireland in the king's service.27 In the same year Sir Michael de Poynings, Lord Poynings, empowered Bradenham, as one of his attorneys, to convey the manor of Bures Tany (Bures St. Mary, Suffolk), to Sir William Baud.²⁸ In 1364 Bradenham was serving as steward of the manor of Lexden, within the borough of Colchester.²⁹ Even in 1369, the last year of his life, when he was discredited and in financial straits, Bradenham was called on to stand surety when his neighbour the prior of Mersea regained possession of his convent after its seizure by the Crown.³⁰ These records show that by the 1350s

Bradenham was in demand as a lawyer and land agent, and that also appears from legal transactions, unrelated to his own property, in which he acted as feoffee. In 1350, for example, Bradenham and Gilbert le Blount of Pleshey conveyed land in Hatfield Peverel and Faulkbourne to Mary Fabel and her son John as part of a family settlement after the death of Mary's husband Thomas.³¹ In the same year Bradenham, with Robert de Teye and Miles le Frenshe, enfeoffed Richard de Sutton and Anne his wife with the manor of Picotts in Ardleigh. Robert de Teye was the owner of Picotts; among his other Essex manors was Marks Tey, about 7 miles north-west of Langenhoe.32 He was associated with Bradenham on later occasions. In two other cases Bradenham was licensed by the Crown to alienate land in mortmain: in 1352 to St. Botolph's priory, Colchester, and in 1358 to Barking abbey.33 Since he is not known to have had property in the places concerned, and certainly had other business dealings with these monasteries, it is probable that he was acting as their agent and not as a principal.

On many other occasions Bradenham acted as a witness to conveyances, usually in north Essex, but occasionally as far away as Dagenham (1348, to Barking abbey), Merrow in Surrey (1360, to the Knights Hospitallers), Wrentham in Suffolk (1362, to Lord Poynings), and Stebbing, Woodham Ferrers and Fairstead (1364, to Sir William de Ferrers, Lord Ferrers of Groby).34 Bradenham's business also included financial transactions. In 1343 Sir Henry Garnet owed him £40.35 Garnet, who held the manor of Wennington, on the river Thames, and Garnets Hall in Margaret Roding, had suffered imprisonment and forfeiture as a rebel in 1321. He had later recovered his lands, no doubt at a price. He retained Wennington but appears to have sold half of Garnets in 1344, shortly before his death.³⁶ In 1347 Bradenham, with Sir Robert de Marney and Thomas de Belhous, acknowledged that they owed £100 to John le Fermer and William de Teye.37 Marney was lord of Layer Marney, near Langenhoe, which his family held for three centuries.³⁸ Fermer had an estate at Foxearth and Brundon, on the Essex-Suffolk border.³⁹ William de Teye was the father of Robert de Teye of Ardleigh.40 Marney, William de Teye and Fermer all served as knights of the shire for Essex in Parliaments under Edward III.41

Bradenham took part in other financial transactions in 1347. In August he and Sir Robert de Marney granted 100 marks rent from land in Essex to Eleanor de Ewelle, apparently in exchange for a grant to Marney of an equivalent rent from her lands in Buckinghamshire and Oxfordshire.42 In the following August Bradenham, with two other men, acknowledged a debt of £80 to the bishop of London, Ralph de Stratford.43 On another occasion Bradenham seems to have been acting on his own account, not as an agent: in 1356 he acknowledged that he owed £100 to John Gernon, John son of John de Sutton, and Richard de Sutton.44 These three men, all of whom became knights, were among Bradenham's closest associates. Gernon's family had been settled in Essex since the 12th century, at Theydon Garnon, Garnons in Wormingford, and Gernons (later Garlands) in Great Birch.⁴⁵ Sir John Gernon was lord of Lexden hundred,40 and also served (1364-5) as sheriff of Essex and Hertfordshire.⁴⁷ He was patron of Little Leighs priory, which one of his forbears had founded.⁴⁸ His capital manor, at Birch, was near Langenhoe to the west. Sir John de Sutton the younger was heir to a prominent Essex family whose principal seat, at Wivenhoe, lay on the east bank of the river Colne opposite Langenhoe.⁴⁹ Sir Richard de Sutton was his brother. Their father, Sir John de Sutton, was a friend and executor of John de Vere (d. 1360) earl of Oxford.

Bradenham was being employed on Crown business by 1352, when he and John Depeden were appointed collectors of fifteenths and tenths throughout Essex. Their appointment was renewed in 1353, 1354, and again in 1357-8.50 In 1355 Bradenham, Robert de Teye, John atte Grove and Thomas Tirel were commissioned to enforce the Statute of Labourers in Essex.⁵¹ In 1358 Bradenham, John atte Lee, and Richard de Ravensere were commissioned to enquire in Essex and Hertfordshire into chattels unlawfully concealed from Isabella the queen mother.⁵² In February 1360, after Isabella's death, Bradenham, with the same colleagues and two others, Walter de Aldebury and Roger de Herlaston, was put on a commission of over and terminer to investigate trespasses within her liberties and those of queen Philippa.53 A month later Bradenham was called up for military service as one of the officers in a detachment of 100 men from Essex commanded by Sir Hugh de Blount of Buttsbury.⁵⁴ They were ordered to report to Sandwich, no doubt en route for France, where the English forces were then advancing on Paris. If Bradenham ever reached France his stay was probably brief, for peace negotiations began in April 1360, and in July he was witnessing the charter, already mentioned, relating to Merrow in Surrey. Shortly before July 1362 he was appointed a justice of the peace for Essex.55 But at that point he ran into serious trouble as the result of a long-standing feud with the burgesses of Colchester.

In the 14th century Colchester was one of the most important towns in eastern England.⁵⁶ Under a series of royal charters, from 1189 onwards,⁵⁷ the burgesses had secured a degree of self-government, including the right to hold a hundred court for the town and its liberty (or suburbs), certain hunting rights in the liberty, and a monopoly of fishing in the river Colne. But the earlier charters had been loosely drafted,⁵⁸ and disputes often arose concerning the burgesses' jurisdiction over the manors within the liberty, and over the river. Another contentious issue was the burgesses' right of pasture on the extensive commons of the liberty.

Conflicts were most likely to arise at Lexden, which adjoined the town to the west. The burgesses' claim to jurisdiction there appears to have dated from Saxon times, but to have been called into question after the Conquest by the eastward extension of the royal manor of Stanway.⁵⁹ In the 14th century the manor of Lexden, now separated from Stanway, belonged to the FitzWalter family, Lords Fitz-Walter.⁶⁰ The FitzWalters were descended from a cadet of the Clare family, to whom Henry I had granted the barony of Little Dunmow.⁶¹ They were warlike as well as rich. Robert Fitzwalter (d. 1235) had been leader of the baronial rebels against King John. Robert FitzWalter (d. 1326), Lord FitzWalter, who acquired Lexden by marriage in 1280,
fought in wars against Wales, Scotland and France. His grandson, John FitzWalter, Lord FitzWalter (d. 1361), served with the Black Prince at the siege of Calais.⁶² While such men could be dangerous neighbours at the gates of Colchester, the townsmen themselves were quite prepared to resort to violence in defence of their interests, as indeed were all classes of medieval society.

John, Lord FitzWalter, who had succeeded his father as a child, had livery of the family estates in 1335. Between 1342 and 1351 he and his henchmen terrorized north Essex, until finally brought to justice. Colchester figures in the long list of charges against him.63 He was said to have besieged the town from Easter to Whitsuntide 1343, holding up market traders, until bought off by townsmen. This attack seems to have been part of a dispute over the burgesses' rights and jurisdiction at Lexden. FitzWalter had complained in 1343 that 100 men had invaded his park at Lexden, hunted deer, fished and cut down trees there.⁶⁴ One of his servants, John Osekyn, had been wounded in the attack and later died. Several men were indicted before the borough coroner for the murder, but FitzWalter brought in an Essex county coroner to sit within the liberty of Colchester to hear the case, and tried to secure the indictment of John Fordham, one of the bailiffs of Colchester, and other townsmen to whom he was ill-disposed. Among the jury empanelled by the Essex coroner was Henry Fenerde of Copford, who refused to indict Fordham and the others, believing they were innocent. FitzWalter thereupon sent his servants to Fenerde's house and beat him almost to death. On the same day he himself went to Copford, intending to do the same to Thomas Vernon, another juror. Vernon escaped, but as a result of this case Essex jurors were said to be terrified of FitzWalter, and dared not give verdicts against his will.

FitzWalter was accused of other offences at Colchester. He had contrived the escape of Wymarc Hierde, whose arrest had been ordered by the justices of the peace. When John atte Hyde of Colchester bought a watermill adjoining Lexden, FitzWalter kept Hyde out of the mill and eventually seized it himself, saying that he did not want any Colchester man near his manor. Some of FitzWalter's villeins had unlawfully pastured sheep and other animals for two years on the common pasture of the burgesses of Colchester near Lexden. FitzWalter's steward, William Baltrip, had taken goods from Colchester market not in the normal way of trade but at his own will.65 FitzWalter had refused to pay the subsidy at Lexden and threatened to break the legs and arms of any villein who dared to distrain upon him. In 1351 Fitz-Walter was indicted for all these crimes, and his estates were confiscated by the Crown. After spending a few months in the Marshalsea gaol, and later in the Tower, he obtained a royal pardon, but only by agreeing to buy back his estates for £847, which he paid by instalments during the remaining years of his life.66

How far can we accept Dr. Furber's suggestion that Lionel de Bradenham was 'obviously involved' in Lord Fitz-Walter's depredations? There is no direct evidence of it. Bradenham is not listed among those indicted with Fitz-Walter in 1351-2, as Dr. Furber admits,⁶⁷ nor is FitzWalter named in the long list of charges brought against Bradenham

himself in later years, although these relate to offences going back to 1350.68 It is true that Bradenham was closely associated with the FitzWalter family as steward of their manor of Lexden and as their feudal tenant at Langenhoe. If he had, as Dr. Furber supposed, been steward of Lexden between 1342 and 1351 - the period covered by the indictments against FitzWalter - he could hardly have avoided being FitzWalter's accomplice in crime, along with the other officials there. But Bradenham is not known to have been steward then, or at any period during FitzWalter's lifetime. He was certainly steward in 1364,69 but by then FitzWalter had been dead for three years. The feudal bond between Bradenham and FitzWalter cannot, however, be denied, and its power should not be under-estimated. As late as the 15th century tenants by knight service were still swearing solemn oaths of loyalty to their lords.70 Bradenham could not lightly have ignored a summons to assist FitzWalter in a private feud. Perhaps, therefore, we can sum up the argument by saying that Bradenham may well have been involved in Fitz-Walter's crimes, but that proof is lacking.

There is no doubt, however, that Bradenham would have known a great deal about FitzWalter's activities in the 1340s, particularly those near Langenhoe, and in 1350 he himself attacked Colchester in much the same way as FitzWalter had done in 1343. According to the charges later brought against Bradenham he had come to Colchester on 8 August 1350, with 200 men-at-arms and archers, and attacked the eastern suburbs of the town.71 The invaders smashed down the doors and windows of many houses and used them as shields in further attacks. They looted food supplies, including corn from the barn of St. John's abbey at Greenstead. Those dwelling in the suburbs fled into the town, abandoning their houses and possessions. Bradenham pressed his attack throughout the day, intending to burn Colchester, but after meeting stiff resistance he retreated and settled down to besiege the town. His followers had orders to hunt down and kill all Colchester men that they could find at fairs and markets, sparing only those who had passes issue by Bradenham. Bradenham also wrote to several of his 'friendship and affinity' urging them to join in his operations against Colchester. Among them were Sir John de Braham, Sir John Gernon, Sir William de Tendring and Thomas Breton. Bradenham's previous links with Braham and Gernon have already been mentioned. Sir William de Tendring, who may have been one of the family of the name which held Little Birch,72 was associated with Bradenham in later years. Thomas Breton was lord of Layer-de-la-Haye, another manor near Langenhoe.73

Bradenham's siege continued until 27 October, when Colchester at last sued for peace, sending the prior of St. Botolph's and William Hadleigh, who had been one of the town bailiffs in 1344-9,⁷⁴ to meet Bradenham at Layer Wood, between Layer Marney and Messing. On 7 November Bradenham came to St. Botolph's priory with a large force and there concluded a treaty with the town, which gave him £20 'by name of a ransom for granting them their life and permitting them to be in peace, as an enemy does to his enemy in a land at war, afterwards sending to the knights and others to whom he had previously sent letters of molesting, not to molest the men of the town'.

Why did Bradenham attack Colchester in 1350? An operation mounted in such force, and sustained with efficiency and determination for so long, was probably part of a wider conflict rather than an isolated episode. Morant thought that it was a reprisal against the town after Bradenham had lost a lawsuit concerning the Colne fisheries.⁷⁵ J.H. Round showed that the suit took place in 1362, and could not, therefore, have provoked the attack in 1350.⁷⁶ There is no doubt, however, that the fishery dispute went back to 1350 or earlier, and it is probable that Bradenham's attack was connected with it. It may not have been the only reason for the attack, for the close economic relations between Langenhoe and Colchester at this period, described by Dr. Britnell, are quite likely to have given rise to occasional disputes.

No legal action seems to have been taken against Bradenham in 1350. If that seems strange it should be recalled that his attack took place only a few months after the Black Death, which is estimated to have killed about a quarter of Colchester's population.77 But, whatever may have been the cause of the delay, it was not until 1362 that Colchester at last struck back at Bradenham, possibly emboldened by the recent death of Lord FitzWalter, whose son and heir was only a youth. On 3 July 1362 the king appointed a special commission under William de Fyncheden to enquire into a petition by the men of Colchester, Alresford, Brightlingsea, St. Osyth, East and West Mersea, Fingringhoe, Peldon, Peet, Wigborough, Salcott, Tollesbury and Goldhanger claiming common fishery in the creeks of the river Colne called the Swin, Geeton and Paddock, 'in which waters it is lawful for any of the realm to fish ... without hindrance', and complaining that Lionel de Bradenham had infringed their rights.78 The petitioners alleged that Bradenham 'now asserting for the first time that the said waters are in his lordship' (Langenhoe) had leased them to various other men who had fixed piles there and obstructed the entrances. They also accused him of holding an illegal sheriff's tourn at 'Bulfynescrouche' (possibly Crouch House, Langenhoe),79 and of misappropriating fines which he had levied as a justice of labourers, and money which he had received as a collector of tenths and fifteenths.

Three days after the appointment of William de Fyncheden's commission, on 6 July 1362, the king notified the justices of the peace for Essex that Lionel de Bradenham had been removed from their number.⁸⁰ In the following October Fyncheden and his colleagues arrived at Colchester to hear the case against Bradenham, but although they found it proved, they took no action against him. So said the burgesses, in a second petition to the Crown a few months later.81 They now spoke for themselves alone, without Alresford and the other Colne-side parishes, alleging that the Swin, Geeton and Paddock creeks lay within the limits of the fisheries granted to them under their royal charters, that they had been accustomed to fish them 'as their own', and that their merchant ships were wont to lie there when homeward bound. But now, they said, Bradenham had appropriated those creeks and excluded the burgesses from them. The burgesses prayed that the Fyncheden

commission should re-open the case, and should examine Bradenham, who was now in Colchester. It will be seen that in this second petition the burgesses were changing their ground, by claiming an exclusive right over the creeks and also by alleging that Bradenham was obstructing navigation in the river.

On receiving the second petition the government duly ordered the Fyncheden commission to determine the case. Meanwhile, however, Bradenham was being investigated by the Admiralty court on similar charges.⁸² On 4 July 1362 - the day after the appointment of the Fyncheden commission - the king's admiral, Robert de Herle, had arrived at Colchester to receive from the sheriff of Essex the presentments of juries previously convened in the maritime townships of the county 'regarding the matters which pertain to the office of Admiral, and of hearing and doing what shall be required of them on the part of the king'. Lionel de Bradenham's name headed the list of presentments to the Admiral. He was charged with making unlawful enclosures in 1361-2 in the Swin creek, and in 1360-1 in the South Geden, Fleet (?Pyfleet) and Paddock creeks, thus obstructing fishing and navigation. It was also alleged that in 1349-50 he had made six great weirs in the deep channel of the Colne 'where before ... there never was any weir ... but these places were common to all ...'. Ten other men, in addition to Bradenham, were presented to the Admiral for obstructing the Colne, at dates ranging from 1346-7 to 1361. Sir John de Sutton (the elder), who had made five weirs in the river, was lord of Wivenhoe, as mentioned above. Sir John Coggeshall, who had made four weirs, was lord of Alresford, on the east bank of the river.⁸³ John Wyncester, of Alresford, had also made four weirs. The prior of Mersea, whose convent was on Mersea Island, on the west side of the Colne estuary, had made five weirs. John Cokman of (East) Donyland, John Moveron of Brightlingsea,84 Richard Smyth of Fingringhoe, and Geoffrey Abbot had each made one weir. The abbot of St. Osyth, on the east side of the estuary, had 'caused to be enclosed with great stakes one great place', and John Salcote had done the same, presumably in the Salcott Channel, west of Mersea Island. It will be seen that the list of presentments includes every Colne-side parish from Colchester down to Mersea Island and St. Osyth except Elmstead, which has only a short river frontage, and that Bradenham, though apparently the most serious offender, was by no means the only one. Morant, who used the document containing this information, does not mention the other offenders, giving the impression that the Admiralty enquiry was concerned only with Bradenham.85

Admiral de Herle's main concern was the effect of the enclosures on navigation. The presenting jurors alleged that the Colne was silting up, threatening to bring the port to a standstill. The Admiral agreed that the enclosures were prejudicial to the king and the whole community, but in order to act 'the more discretely and carefully', he kept adjourning the case until, on 12 March 1363, he received a peremptory letter from the king, pointing out that the men of Colchester had complained of his delay, and ordering him to proceed to judgement as soon as possible. Herle thereupon



Plate I Colchester and the River Colne. (From the O.S. 1 inch map, 1st edn., reprinted 1862).

ruled that all the obstructions in the Colne and its creeks should be removed, and that no one, in future, should 'make any enclosures or structures in the said port or its arms (of the sea) aforesaid, nor elsewhere further than that he may keep his animals on his own soil'. This ruling was confined to the question of obstruction. It did not, as Morant supposed, confirm Colchester's right to a monopoly of fishing in the creeks of the river. Provided that Bradenham and the other Colne-side landowners did not obstruct the river they were still free to fish in the creeks. Whether they could claim exclusive rights in the creeks adjoining their own manors, which had no doubt been their intention in building weirs - was another matter, which was still being argued in the 18th century.⁸⁶ But as far as it went, Admiral de Herle's ruling was a triumph for the burgesses of Colchester, who in 1396 obtained from the Crown a formal exemplification of it, engrossed like a charter, which still survives among the borough records.87

The Admiral's ruling was a setback for Bradenham, but he did not accept it tamely. In the same month he brought charges of threatening behaviour against Robert atte Forde, George de Fordham and other prominent burgesses of Colchester, who had to give sureties for good behaviour.88 The burgesses countered with similar charges against Bradenham.⁸⁹ Meanwhile they were preparing a graver indictment against him, which came before King's Bench in 1364.90 Bradenham was charged eventually with attacking Colchester in 1350, as described above; with releasing from Colchester castle in 1358 when he was acting as constable, two convicted criminals whom he then took into his own service, and who later committed further crimes; with causing the deaths of John Spog of Colchester and three other men about 3 May 1362 by narrowing the Geeton and Paddock creeks; and, as steward of Lexden, with misappropriating a cart and horses involved in a fatal accident on 3 May 1364, instead of surrendering them to the Crown as a deodand. According to the indictment Bradenham had been arrested at Colchester on 13 October 1364 and committed for trial, but on the 17th had escaped and sought sanctuary in the church of the Friars Minor (Grey Friars) in the town. When approached in the church by the king's coroner in the presence of the county coroners he had acknowledged that he was a felon.

Two points in the indictment call for comment. The statement that Bradenham was constable of Colchester castle in 1358 seems to be incorrect. In 1350 the office had been granted for life to (Sir) Robert de Benhale, who was holding it when he died in 1364.91 Presumably Bradenham was deputy constable, in charge of the day-to-day management of the castle. The indictment also states that he was steward of Lexden in 1364. How long he held that office is not known. William Baltrip had been steward in 1349-51, when he had been Lord FitzWalter's agent in crime.92 That Bradenham had been entrusted with the castle and with Lexden is further evidence of his capability. But to the burgesses of Colchester it must have seemed outrageous that the man who had terrorized the town in 1350, and had obstructed their river, should be given such independent and powerful positions within the borough.

On 6 December 1364 Bradenham received a royal pardon for all the offences of which he had been indicted.⁹³ J.H. Round took this to mean that 'the robber baron, after all, seems to have gone scot free,⁹⁴ but he was, for once, strangely wide of the mark. Bradenham (who incidentally was never a baron) did, in fact, pay dearly for his pardon, just as Lord FitzWalter had done in 1351. This can be seen from the pipe rolls of the Exchequer for 1364-6. The following entries appear on the roll for 38 Edward III, made up at Michaelmas 1364, in the account of the sheriff of Essex and Hertfordshire, Thomas Fitling, as follows.⁹⁵

The prior of the house of the Order of Preachers of Sudbury and his fellow friars of that house render account of £100 for the confiscated goods and chattels of Lionel de Bradenham, felon. In the roll of fines made, also of chattels and revenues, made in the king's presence in Michaelmas term 38th year. Paid.

The sheriff owes $\pounds 162$ 4s. for the goods and chattels of Lionel de Bradenham, felon, confiscated to the king for his flight. In the roll of fines made, also of chattels and revenues, made in the king's presence in Michaelmas term 38th year.

The sheriff owes $\pounds 162$ 4s. as above for the goods and chattels of Lionel de Bradenham, felon, confiscated to the king for his flight. The said Lionel (?acknowledges) that he owes the king in exoneration of the said sheriff $\pounds 162$ 4s., and he will answer to the king through the Council of the Barons recorded in the (?memorandum) for the 39th year.

Lionel de Bradenham renders account of $\pounds 162 4s.$, for his goods and chattels confiscated to the king, in exoneration of the sheriff, under guarantees (*per manut*') from Robert Marney, knight, of Essex, John de Sutton the son, knight, of Essex, Edmund de Northtoft of Essex, Roger de Wolfarton (? of Suffolk and William Warde of Suffolk) as contained in the said memorandum. Paid $\pounds 81 2s.$, also $\pounds 41$ fine. He owes $\pounds 40 2s.$

Bradenham did not pay off any of his debt to the king during the following year, as is noted in the roll for 39 Edward III (Michaelmas 1365) in the account of the sheriff, John Garnon.⁹⁶

Lionel de Bradenham (renders account of) £40 25. remaining of £162 45. for his goods and chattels confiscated to the king, charged to Lionel himself in exoneration of Thomas Fitling, sheriff, under guarantee of Robert Marney, knight, of the county of Essex, John de Sutton the son, knight, of the same county, Edmund de Northtoft of the same county, Roger de Wolfarton of the county of Suffolk and William Warde of the same county, as contained in the previous roll.

By Michaelmas 1366, however, Bradenham had fully discharged the debt.⁹⁷

Lionel de Bradenham renders account of ± 40 2s. remaining from ± 162 4s. for his goods and chattels seized by the king, in exoneration of Thomas Fitling, sheriff (entry continues as in the roll for 1365, and ends:) Paid ± 40 16s. 1d. And he has a credit balance of 14s, 1d.

The pipe rolls thus show that the king received a total of £262 4s. for Lionel de Bradenham's confiscated goods and chattels, of which £100 was paid by the Dominican friars of Sudbury and the remainder by Bradenham himself. 'Goods and chattels' in this context probably cover everything that belonged to Bradenham, including real property. Since there is no evidence that the Dominicans actually received from the Crown any of Bradenham's goods or lands, it seems likely that they were advancing the £100 on his behalf. Their rôle in these transactions is discussed below. Of the laymen listed in the pipe rolls as Bradenham's guarantors Sir Robert de Marney and Sir John de Sutton have already been mentioned as his associates. Roger de Wolfarton (or Wolfreston) had acted with Bradenham as an attorney for Sir John de Braham in 1358.⁹⁸ He appears as a feoffee in many conveyances of the later 14th century, including one of 1378 relating to the manor of Lexden.⁹⁹ Edmund de Northtoft was lord of the manor of Nortofts in Finchingfield.¹⁰⁰

The funds needed to pay off Bradenham's debt to the king were raised by borrowing against the security of the manor of Langenhoe and his other property. In April 1365 he granted a life interest in the manor and in all his goods and chattels in Essex, movable and immovable to (Sir) John de Sutton the younger, his brother (Sir) Richard Sutton, (Sir) Robert de Marney, Roger de Wolfarton, Edmund de Northtoft, William Warde and John Stanstede, rector of Stanway.¹⁰¹ It will be seen that these men included the five who had been Bradenham's guarantors at the Exchequer in 1364, with the addition of Sir Richard de Sutton and John Stanstede. On 31 January 1368 Bradenham made a further conveyance of Langenhoe manor, this time to Sir John de Sutton the younger, his brother Sir Richard, Sir William Bourchier, Sir John Gernon, Sir William de Tendring, Sir John de Heveningham and John de Peyton.¹⁰² Gernon and Tendring had been among Bradenham's confederates at the siege of Colchester in 1350, as mentioned above. Sir John de Heveningham was lord of Little Totham, about 10 miles south-west of Langenhoe.¹⁰³ In 1352 he had joined with Bradenham to witness the conveyance of an estate at Blunts Hall, Witham, to John de Boys, who was also a tenant of Bradenham at Langenhoe.¹⁰⁴ John de Peyton was a son-inlaw of Sir John Gernon, and later succeeded to part of his extensive Essex estates.¹⁰⁵

The stated purpose of Bradenham's conveyance of 31 January 1368 was to indemnify the feoffees named in it against any damages arising from a recognizance of £350 which they were then taking out to secure the payment of £175 in five annual instalments of £35, starting at Whitsuntide 1368, to Sir John de Lee, Sir William Baud, Robert de Teye and Simon Longe at the church of the Dominican friary in Chelmsford.¹⁰⁶ Sir John de Lee has already been mentioned as a colleague of Bradenham on judicial commissions in 1358 and 1360. He was probably one of the family of the name which then held Moulshams in Great Wigborough, a manor about 3 miles west of Langenhoe.107 Sir William Baud, who was lord of Wormingford and of Bures St. Mary (Suffolk) had been associated with Bradenham several times in previous years.¹⁰⁸ Robert de Teye was the son and heir of Robert de Teye (d. 1360),¹⁰⁹ whose links with Lionel de Bradenham have also been mentioned. Simon Longe held lands at Witham.¹¹⁶ Lee, Baud, Teye and Longe were presumably feoffees: but for whom were they acting? The stipulation that £175 was to be paid in instalments at the Chelmsford Dominican friary suggests that the £100 advanced by the Sudbury Dominicans in 1364 towards Lionel de Bradenham's debts to the king was now being repaid with interest and that the friars were acting as moneylenders. In the Dominican order individual friaries were closely associated through their provincial chapter, and it is possible that in this case the Chelmsford and Sudbury friaries were business partners. In the 14th century they were both large and important houses.¹¹¹

The possibility that the Dominicans were lending money

at interest is intriguing. During the Middle Ages usury, though illegal, was not uncommon. In the land market it was particularly easy to borrow at interest through a mortgage by way of conditional conveyance,¹¹² while the use of feoffees - widespread by the 14th century - helped to conceal the true nature of a transaction. If the sum of £175 which, in 1368, Bradenham's trustees undertook to pay at the Dominican friary in Chelmsford in five annual instalments (1368-72), was indeed repayment of the £100 advanced by the Sudbury Dominicans in 1364, the compound interest would have been just over 6.4 per cent over the whole nine-year period, or just under 12 per cent over five years - not extortionate rates. It is possible, however, that part of the £100 had already been paid by 1368, or that the £175 was not destined for the Dominicans themselves. All this is speculation. But there is no doubt that the ± 175 was a mortgage on Bradenham's manor of Langenhoe, and was required to repay the money which had already been paid to the Exchequer in his name. It is also certain that the £175was duly paid, since a statement to that effect was endorsed on the accompanying recognizance.¹¹³

By now Lionel de Bradenham was an old man. The financial arrangements made in and after 1364 allowed him to remain in occupation of Langenhoe, but he must have been in serious financial difficulties, for the net income from the manor had fallen catastrophically. In 1325-48, as mentioned above, it had averaged over £50, but by 1369-70, the next year for which accounts survive, it was only £8 11s. 31/2d.114 This was no temporary set-back, but reflects declining production, as Dr. Britnell shows. Bradenham's last years were also troubled by continuing attacks from his enemies. In November 1365 he obtained a royal order halting further legal action against him in connexion with his alleged obstructions in the creeks of the river Colne.¹¹⁵ In May 1366 a judicial commission was appointed to investigate his complaint that he had been falsely accused of embezzling money which had come into his hands as a collector of tenths and fifteenths.¹¹⁶ The commission was headed by Bradenham's old friend Sir John Gernon, and included another of his associates, Robert de Teye. The charges of which Bradenham complained had been investigated by an earlier commission in 1362, as mentioned above, and were not resolved in his lifetime.

Lionel de Bradenham died between 28 September 1369 and 29 September 1370, and Langenhoe then passed to Sir John de Sutton. That appears from a manorial account drawn up by Sir John's serjeant who added 'in which time the said manor first came into the hand of the said John de Sutton after the death of Lionel de Bradenham, formerly lord¹¹⁷ There can be little doubt that Sutton acquired the reversion of the manor in return for his help in paying off Bradenham's debts to the king, and that Morant was right in commenting that the siege of Colchester and the other offences for which Bradenham 'was fain to sue for a pardon' had 'proved his ruin'.¹¹⁸

Sir John de Sutton soon discovered that he had inherited Lionel de Bradenham's problems along with his property. In 1375 the king ordered a judicial enquiry concerning the sum of \pounds 109 allegedly embezzled by Bradenham as a collector of the tenths and fifteenths. The prior of St. Botolph's, Colchester, as Bradenham's executor, and Sir John de Sutton, as his heir, were to be summoned for questioning.¹¹⁹ Sir John was still holding Langenhoe in 1387,¹²⁰ but by 1412 the manor had passed to John de Boys, whose father of the same name had been one of Bradenham's tenants.¹²¹

Lionel de Bradenham's life has dramatic unity as well as historical interest. Born into a family newly settled in Essex he was something of an outsider, and his estate was small, but he made powerful friends, especially among his neighbours in the north-east of the county. Capable and energetic, he was successful as a farmer, lawyer and land agent. Entering the king's service in later life, he held high office as a local administrator and judge. If he was aggressive and unscrupulous, that was not unusual in an age when men often took the law into their own hands. But he sometimes went too far, especially in his harsh treatment of Colchester, and at last his enemies brought him down. When arrested he lost his nerve, and fled for sanctuary to a church close to the castle which he had once commanded. To regain his freedom and recover his property he had to pay a heavy fine, raised by mortgaging his manor and granting its reversion to his neighbour Sir John de Sutton. He died soon after.

For the historian taking a wider view of 14th-century Essex, the story sheds light on the way legal and financial business was done; on public order and law-enforcement; on the administration of the county, and on the administrators, a small closely-knit group of whom Bradenham, for a short time, was one. Not least, Bradenham's career emphasises the growing power of Colchester, Essex's principal borough and port.

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Notes

- 1. An early draft of this paper was read at the annual meeting of the Victoria County History of Essex on 18 October 1984. I am grateful to the present editor, Dr. Janet Cooper, for allowing me to consult the files of the History for Colchester and Langenhoe and for reading this paper in typescript; to the County Archivist and his staff for help in using the records in their charge; and to my wife, Avril, for checking references and typing the whole paper.
- 2. Morant, Essex, i (Colchester), 90; ibid. 416 (s.v. Langenhoe).
- 3. J.H. Round, 'Lionel de Bradenham and Colchester', E.A.T. N.S. xiii. 86.
- His last appearance was probably on 27 May 1913: E.A.T. N.S. xiii. 149. He was President 1916-21, but was then an invalid.
- 5. Furber, op.cit. 52, 62n, 181 and n.
- 6. The murderer was actually John Kent: Cal. Pat. 1364-7, 54-6.
- 7. 'Production for the market on a small 14th-century estate', Econ. Hist.
- Rev. 2nd. ser. xix. 380.
 8. Dr. Britnell also mentions Bradenham in his Growth and Decline in Colchester 1300-1525 (1986) 46, 137.
- 9. P.H. Reaney, Dictionary of British Surnames, s.v. Bradnam. The villages of East and West Bradenham are near East Dereham.
- 10. Feet of F. Essex, ii. 61.
- Cal. Close 1279-88, 544; Cal. Ing. p. m. iii, p.133. Simon had been knighted by 1295: Cal. Close 1292-1301, 172.
- 12. Morant, Essex, i, p.vii; Cal. Fine. R. i.419.
- 13. Cal. Pat. 1292-1301, 409, 460, 467, 470.
- 14. Cal. Inq. p. m. iv, p.340.
- J. & J.A. Venn, Alumni Cantab. Pt. 1, vol. i; Cal. Pat. 1292-1301, 211, 494.

- Bradenham's forename is recorded variously as Leo, Leonellus, or Leonettus.
- 17. Cal. Ing. p. m. vii, p. 127: Robert FitzWalter's inquisition post mortem.
- 18. Cal. Ing. p. m. xii, p. 200; cf. Cat. Anct. D. ii, p. 308, B2506.
- 19. Feud. Aids. ii. 132, 157.
- 20. Cat. Anct. D. ii, p. 346, B2905.
- 21. Feet of F. Essex, iii, 39, 140.
- 22. Cal. Close 1354-60, 67; cf. Morant, Essex, ii. 147.
- 23. E.R.O., D/DC 2/11, 2/12; D/DE1 M220 to 223; Britnell op.cit. I have calculated to the nearest pound. Dr. Britnell points out that the accounts describe all movements of grain as sales, even those to the lord's household. He estimates the average annual income during this period at £51 (£14 from rents, lease of fisheries and court dues, and £37 from sales of grain and wool and leases of livestock).
- 24. Cal. Pat. 1348-54, 581.
- 25. V.C.H. Essex, ii, 121.
- 26. Cal. Pat. 1358-61, 7; cf. Morant, Essex, i. 440.
- 27. Cal. Pat. 1361-4, 216; cf. Feet of F. Essex, iii. 97.
- 28. Cal. Close 1360-4, 414. For Poynings see Complete Peerage x. 660.
- 29. See below.
- 30. Cal. Fine R. 1368-77, 16.
- 31. Cal. Close 1349-54, 274.
- 32. Cal. Pat., 1348-50, 498; Morant, Essex, i. 432; ii. 202.
- Cal. Pat. 1350-54, 344: land in Colchester and Marks Tey; ibid. 1358-61, 57: land in Barking.
- Cal. Close 1346-9, 594; ibid. 1360-4, 121; ibid. 410, 509. Cf. ibid. 1343-6, 81 (Bradfield); ibid. 1349-54, 468 (Witham); ibid. 1360-4, 275 (Wormingford).
- 35. Cal. Close 1343-6, 254.
- V.C.H. Essex, vii. 182; Morant, Essex, ii. 473; Feet of F. Essex, iii. 70, 73, 76.
- 37. Cal. Close 1346-9, 368.
- 38. Morant, Essex, i. 406; Complete Peerage, viii. 523.
- 39. Morant, Essex, ii. 326; Feet of F. Essex, iii. 62, 67.
- 40. Morant, Essex, i. 432, cf. ii. 202.
- 41. Ibid. i, p. xii.
- 42. Cal. Close 1346-9, 369.
- 43. Ibid. 397.
- 44. Cal. Close 1354-60, 324.
- V.C.H. Essex, iv. 262; Morant, Essex, ii. 232, 181; J.H. Round, 'Great Birch, Easthorpe and the Gernons', E.A.T. N.S. xii. 88; P.H. Reaney, 'Gernon, Garland and Garnish', ibid. xvii. 172; Feet of F. Essex, iii. 79, 97, 107.
- 46. Morant, Essex, ii. 159.
- 47. Ibid. i, p.vii.
- 48. V.C.H. Essex, ii. 155; Feet of F. Essex, iii. 113.
- For the Suttons see: Essex Sessions of the Peace, ed. E.C. Furber, 17-18; V.C.H. Essex, iv. 227; Morant, Essex, ii. 187.
- 50. Cal. Fine. R. 1347-56, 333, 374, 413; ibid. 1356-68, 44, 64.
- 51. Cal. Pat. 1354-8, 294, 296.
- 52. Cal. Pat. 1358-61, 73.
- 53. Ibid. 409.
- 54. Ibid. 413. For Blount see Feet of F. Essex, iii. 102, 141.
- 55. Cal. Close 1360-4, 420.
- New Historical Geography of England before 1600, ed. H.C. Darby (1976), 181, 191. For estimates of the town's population in the 14th century see R.H. Britnell, Growth & Decline in Colchester 1300-1525, 49, 94, 95, 158.
- 57. Morant, Essex, i (Colchester), 82f.
- 58. This is emphasised in Henry VI's charter: ibid. 83f.
- 59. V.C.H. Essex, i. 416-17.
- 60. Complete Peerage, v. 472-3; Morant, Essex, i (Colchester), 130-1.
- 61. I.J. Sanders, English Baronies, 129.
- 62. Complete Peerage, v. 472-7; Essex Sessions of the Peace, ed. E.C. Furber, 61.
- 63. Furber, op.cit. 61-5; 88-9.
- 64. Cal. Pat. 1343-5, 98-9, quoted by Furber, op.cit. 88n.
- 65. Cf. Cal. Pat. 1350-4, 412.
- Furber, op.cit. 64-5. FitzWalter died in October 1361: Complete Peerage, v. 477. His successor was his son Walter, Lord FitzWalter (d. 1386).

- 67. Essex Sessions of the Peace, 181n.
- 68. See below.
- 69. See below.
- Cf. English Historical Documents 1327-1485, ed. A.R. Myers, 1117-18 (Oath of homage in 1429).
- 71. E.A.T. N.S. xiii. 86-91; Cal. Pat. 1364-7, 54-6.
- 72. Morant, Essex, i. 184.
- 73. Ibid. 412.
- 74. For William Hadleigh see Colchester Oath Book, ed. W.G. Benham, 54-5.
- 75. Morant, Essex, i (Colchester), 90.
- 76. E.A.T. N.S. xiii. 89-90.
- 77. Britnell, Growth and Decline in Colchester, 22.
- 78. Cal. Pat. 1361-4, 283. For the Swin, Geeton and Paddock creeks see P.H. Reaney, Place Names of Essex, 14-16.
- 79. Cf. P.N. Essex, 316.
- 80. Cal. Close 1360-4, 420.
- E.R.O., Colchester Borough Recs., Acc. C4, B.C. Pulleyne & F.W. Ormes v. Colne Fishery Co. & Colne Fishery Bd. (1902), Petition of Burgesses of Colchester to King, 1362 (Translation from P.R.O., SC8/40/971).
- 82. This and the following paragraph are based on: Colchester Borough Recs., Acc. C1, Exemplification, 1396 of Inquisition by Robert de Herle, Admiral, 1362 and King's Order, 1363 (Translation in Acc. C4, B.C. Pulleyne & F.W. Ormes v. Colne Fishery Co. & Colne Fishery Bd.). For this case see also Select Pleas in the Court of Admiralty (Selden Soc. vi), p. xlv.
- Morant, Essex, i. 452. He also had manors in Little Coggeshall and Wethersfield: Essex Sessions of the Peace, 18-19.
- For Moveron see Feet of F. Essex, iii. 72. In 1284 an earlier John Moveron had vindicated his right to build weirs on the Colne: E.P. Dickin, Hist. Brightlingsea (1939), 182.
- 85. Morant, Essex, i (Colchester). 90; 416-17 (s.v. Langenhoe).
- 86. Morant, Essex, i. 416.
- E.R.O., Colchester Recs., Acc. C1. The borough did not acquire exclusive rights over the Geeton creek at Langenhoe until 1904: V.C.H. Essex, ii. 428n.
- Cal. Close 1360-4, 521-2. For Forde see Colchester Oath Bk. 64-5; for Fordham, ibid. 64.
- 89. Cal. Close 1360-4, 522.
- 90. E.A.T. N.S. xiii. 89; Cal. Pat. 1364-7, 54-6.
- 91. Cal. Fine R. 1347-56, 235; Cal. Inq. p. m. xi, p. 476.
- 92. Essex Sessions of the Peace, 62-5.

- 93. Cal. Pat. 1364-7, 54-6.
- 94. E.A.T. N.S. xiii, 90.
- P.R.O., E372/209, rot.6. Parts of the MS are missing or illegible. In this and the following pipe roll the sheriff's name is spelled as Fittling, ffithlings, and Fitzling. Cf. P.H. Reaney, *Dictionary of British Surnames*, s.v. Fidling.
- 96. P.R.O., E372/210 rot. 8.
- 97. Ibid. E372/211, rot. 5d.
- 98. Cal. Pat. 1358-61, 7.
- 99. Feet of F. Essex, iii. 137, 145, 156, 167, 176(2), 186(Lexden), 216, 219.
- 100. Morant, Essex, ii. 366.
- 101. Cal. Close 1364-8, 171. John de Stanstede, who resigned Stanway in 1366, was rector of Copford from 1372; R. Newcourt, Repertorium Eccl. Par. Lond. ii. 553, 192.
- 102. Cal. Close 1364-8, 463.
- 103. Morant. Essex, i. 386; Feet of F. Essex, iii. 127.
- 104. Cal. Close 1349-54, 468; cf. Cal. Ing. p. m. xi, p. 27.
- 105. Morant, Essex, ii. 159, 179, 232.
- 106. Cal. Close 1364-8, 461: recognizance (8 Feb. 1368) and accompanying defeasance (10 Feb. 1368).
- 107. Morant, Essex, i. 221.
- 108. Morant, Essex, ii. 231; Cal. Close 1360-4, 121, 275, 414; ibid. 1364-8, 171.
- 109. Morant, Essex, ii. 202n.
- 110. Feet of F. Essex, iii. 138.
- 111. V.C.H. Suffolk, ii. 123; H. Grieve, The Sleepers and the Shadows, i. 20-2, 32-3; E.A.T. 3rd ser. vi. 40.
- E. Lipson, Econ. Hist. England, i (8th edn.), 616-19; F. Pollock and F.W. Maitland, Hist. Eng. Law, i. 117-24.
- 113. Cal. Close 1364-8, 461.
- 114. E.R.O., D/DC 2/13.
- 115. Cal. Close 1364-8, 157-8.
- 116. Cal. Pat. 1364-7, 287.
- 117. E.R.O., D/DC, 2/13.
- 118. Morant, Essex, i (Colchester), 90.
- 119. Cal. Close 1374-7, 131.
- 120. Feet of F. Essex, iii. 297. He was still living in 1391: ibid. 216.
- 121. Feud. Aids, vi. 440; Morant, Essex, i. 417; Cal. Ing. p.m. xi, p. 27.

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The Golden Fleece, Brook Street, South Weald

by P.J. Gilman

This paper presents the results of a survey of the Golden Fleece Inn. These show that the building is more unusual and impressive than had previously been supposed. However, because of the lack of direct documentary evidence, it has not been possible to do more than speculate on its original builder and function.

Introduction

The Golden Fleece Inn, a Grade II* Listed Building, stands on the north side of Brook Street, South Weald (Fig. 1), about half a mile west of Brentwood (NGR TQ 577929). Earlier this century, the Royal Commission on Historical Monuments (1921, 217) described the building as a typical 15th-century hall house with flanking cross-wings. However, in 1987-8, refurbishment prior to conversion to a restaurant provided the opportunity to record much of the internal timber-frame of the building.¹ This survey revealed previously unknown features, as well as prompting a reassessment of the building's date and structural history.

Description

The Golden Fleece comprises a central hall with flanking cross-wings to east and west, fronting onto the north side of Brook Street (Plate I). The cross-wings are jettied out on the street frontage, although they have been partially underbuilt by bay windows. A number of extensions and additions have been made to the rear of the building.

West cross-wing (Figs 2, 3, 6)

This is a composite structure with, at the southern end, a two bayed cross-wing (measuring 21×11ft internally) which has been extended 15ft to the rear by the addition of a further two bays. The roof of the front two bays is of crownpost construction and the central crown post truss is fully exposed at first-floor level. The moulding on the crown-post capital and the quality of the carpentry displayed in this wing indicate that this formed part of a relatively high status structure. The small size of the crown-post capital enables it to be dated to the late 13th century. Mortises for chamfered mullions and a long shutter groove, now filled-in, in the east wall (A on Fig. 2) provide evidence of the former presence of a window. Weathering was observed on the outside of the equivalent timbers at ground-floor level, confirming that this side of the cross-wing was formerly an external wall. Furthermore, there are mortises in the west wall at first-floor level. Presumably these once joined the cross-wing to a hall to the west, which was later demolished.

Opportunities for recording in the rear (northern) two bays were limited. However, the style of carpentry is similar to that of the hall and east cross-wing, suggesting that this extension is a contemporary addition. At ground-floor level, a doorway (now blocked) with a rough, round-arched head provided access between the cross-wing and the hall.

Central Hall (Figs 2-6)

The hall is open to both the cross-wings, which are structurally independent. The north and south walls are close-



Fig. 1 Location map (based on OS 2nd edition of 1897).



Plate I The Golden Fleece seen from Brook Street (photo by John McCann).

studded. The hall is divided into four equal-sized bays and, in plan, measures 35×25 ft internally. The proportion of breadth to length is thus 1:1.4. This approximates to the square root of 2, prompting the question as to whether sophisticated geometrical methods were used by the carpenter in laying out the building in order to achieve a well-proportioned effect. In view of the limited data available, this question is unanswerable, and it is perhaps more plausible to assume that the effect was achieved instinctively.

The hall was originally open to the roof, which is, for Essex, rather unusual in type. The central, queen post truss (Fig. 6) has a cambered arch-braced tie-beam, with massive braces rising from moulded corbels, one of which survives (Fig. 8). However, the other four, open trusses are of archbraced collar construction, with spur-ties to the top plates and clasped to the braces. The tie-beam and all the collars are cambered. Each of the collars has an augur hole at the apex of the camber, an unusual, and, as yet, inexplicable, feature. The purlins are clasped between the collars and principal rafters and have serpentine wind braces.

The hall is remarkable for the quality and extent of the moulded decoration on all the main timbers: posts, wall plates, arch-braces, spur-ties, and tie-beam (Fig. 8). The wall plates were also surmounted, originally, by a moulded cornice (Fig. 8), of which a small fragment has survived beside one of the spur-ties.

None of the hall's original windows remain. However, peg holes high up in the south wall, at the eastern end (Fig. 4) may be from a lintel and studs above a large oriel to provide light for what would have been the 'high' end of the hall. Somewhat better evidence has survived of the arrangements for access to the hall. The former presence of opposing doorways at the west end of the hall is suggested by peg holes for door heads and, in the south wall, gaps in the studwork. At the east end of the north wall is a doorway with moulded jambs (Fig. 8) and a four-centred head with sunk spandrels. Originally, this probably provided access to a staircase situated to the north of the hall, leading to the first floor of the east cross-wing. Although no structural evidence for a stair turret was visible, that one existed may be surmised by the existence of doors at both levels at the north end of the east cross-wing (see below).

The original mode of heating of the hall is uncertain. The lack of smoke-blackening in the roof is negative evidence against the former presence of an open fire. A possible clue to the location of a fireplace is provided by the curious arrangement of timbers at one point in the south wall (A on Fig. 4). Here, the wall post terminates at the girt and there is a supplementary, two-storey wall post immediately adjacent, to the east. These timbers are apparently original, there being no evidence for any rebuilding in this area. The most logical explanation for this method of construction is that it was necessitated by the presence of a feature at



Fig. 2 Ground and first floor plans.





Hall, East and West crosswings: interior elevation

1 Ç İ İ



Chimney stack

1

ground-floor level. The fact that the moulding on the supplementary post was not continued down to its base provides further support for this hypothesis. A likely interpretation is that the ground-floor 'feature' was a fireplace with an external chimney stack.

East Cross-wing (Figs 2, 6, 7)

This four-bayed cross-wing measures 40×19ft in plan internally and was originally divided by a partition, as evidenced by mortises in the underside of the central tie-beam. The differing roof construction and carpentry of the bays on either side of this partition are indicative of differences of status and function. The roof of the front (southern) and larger two bays is identical to that of the hall, i.e. arch-braced collars with spur-ties. The main timbers in these two bays, including the bridging beam, are again decorated with high quality mouldings. However, the northern part of the crosswing has queen post trusses with arch-braced tie-beams. Although still of good quality, there is none of the refinement and fine mouldings which grace the hall and the rest of this wing. A further difference is that the roof over the southern bays has serpentine braces to the purlins, whereas the northern bays have simple, curved braces.

The external brick chimney stack attached to the east wall seems to be an original feature, there being no evidence for the former presence of studwork in this area. Although at ground-floor level the fireplace has been rebuilt, a fireplace has survived at first-floor level. This has a four-centred arch; the brickwork above the springing of the arch is Flemish bond, with stretcher bond below. There are three fourcentred arched doorways in the west wall of the cross-wing. One, at the southern end of the cross-wing, leads directly from the ground floor into the hall. At the opposite, i.e. northern, end are two other doorways, at both ground and first-floor level. A mortise in a first-floor stud at the south end of the west wall (A on Fig. 7) may indicate that this wing was added to a hall which pre-dated the present one. However, the similarity in construction and carpentry would suggest that construction of the present hall followed within a relatively short period of time.

The original first-floor joists have survived only in the front bay of the cross-wing. They are laid horizontally, and were jointed to the bridging joist by means of diminished haunched soffit tenons. The earliest known use of this type of joint is at King's College Chapel. Therefore, there is a *terminus post quem* of c.1510-2 for the construction of this part of the building (Hewett 1980, 215, 282). However, allowing for time for the spread of knowledge of the joint, the most likely date for its use at the Golden Fleece would be sometime in the second quarter of the 16th century.

Documentary Background²

The Golden Fleece is in South Weald parish and, in the medieval period, lay within the manor of South Weald itself, which had been owned by Waltham Abbey since 1062 (VCH VIII 1983, 75). Brook Street itself is, in origin, the Roman road from London to Colchester. This probably formed the boundary between the manor of South Weald and, to the south, the manor of Ropers or Brook Street. The name of Ropers is assumed to derive from that of a former owner, Henry Roper, gentleman pursuivant to Queen Katharine of Arragon. In 1514 he is recorded as holding a property called 'The Place' (now the Moat House) in Brook Street, to the south of the London Road (Morant I 1768, 121). To the east of the hamlet of Brook Street lay the manor of Costred. This belonged to St Osyth's Priory, and contained the town of Brentwood which had been planted by the Priory in the late 12th century. After the Dissolution, the manor of South Weald was granted to Sir Brian Tuke in 1541. It was sold, by his son, George, to Richard, Lord Rich in 1548. Rich in turn, later that same year, sold the manor to Sir Antony Browne, the founder of Brentwood School. Browne later acquired the manors of Costred and Ropers. He died in 1567, leaving the South Weald estate to his step-daughter, Dorothy, the wife of Sir Edmund Huddlestone. They held manor courts at South Weald until 1575.3 However, Sir Antony's great nephew, Wistan, had disputed the possession and obtained part of the estate before Dorothy's death in 1615. He is known to have held manor courts at South Weald from 1575.4

Unfortunately, it appears that no documentary evidence has survived which has a direct bearing on the construction of the Golden Fleece itself. It has been possible to establish that the Golden Fleece has been a public house since 1745. Rate lists in the South Weald Overseers Book name John Sparrow as the tenant of 'The Fleece' in that year.⁵ It was probably an inn before that date, but as it is a freehold property it is difficult to trace in the manorial records. The building is shown on a map of the manor of South Weald of $c.1789-90.^6$ The accompanying survey describes it as 'a victualling house called the Golden Fleece' with stables, sheds, yards, and gardens on the north side of Brook Street.

Discussion

The most intriguing question posed by the Golden Fleece is why should such a magnificent building have been constructed at this location, away from the centres of both South Weald and Brentwood. Unfortunately, the lack of direct documentary evidence makes this question difficult to answer. The large size, for Essex, of the central hall and the ostentatious display of fine carpentry, both there and in the east cross-wing, surely indicate a desire to impress on the part of their early 16th-century builder. It is also clear that the builder could afford, and had access to, craftsmanship of the highest order, as evidenced by the excellence of the carpentry. Furthermore, the continued use of the open hall form, which would have been unfashionable in a domestic context at this period, indicates that the building had a nondomestic, perhaps ceremonial function.

A comparable building, architecturally, to the Golden Fleece is Queen Elizabeth's Hunting Lodge at Chingford. This was formerly known as the 'Great Standinge' and has a similar roof construction, involving arch-braced collars, spur ties and also has a moulded cornice (Hewett 1980, 219). It is known that this building was constructed by 1543, as a hunt standing, for Henry VIII. Direct comparisons with the Golden Fleece may not be valid, as the two buildings are evidently different in size and function. However, it is noteworthy that they both display craftsmanship of a very high quality.

In the absence of firm documentary and/or structural evidence, it is not possible to do other than speculate. A possible context for the construction of the Golden Fleece as a court hall has been suggested.⁷ This theory assumes that the planting of a new town at Brentwood by St Osyth's Priory resulted in conflict with Waltham Abbey, the owner of the adjoining manor of South Weald. As a result of this assumed rivalry between the two religious houses, it is suggested that Waltham Abbey may have built an elaborate court hall on the boundary of South Weald and Brentwood to attract prestige, and perhaps revenue, away from the latter.

Timber-framed court halls are relatively rare survivals. Moreover, certain identification of a building as a court hall is difficult unless confirmed by documentary evidence, or unless suggested by structural features. For example, at Widdington, there is what appears to be a court hall, attached to Widdington Hall itself (Scott 1984), and which, on architectural grounds, is thought to date from sometime in the second half of the 16th century. Here, the court would have been held on the first floor. Separate doorways provided access for the lord and his retainers. A low bar across the hall consisted of posts and panels with a gap in the centre. On the ground floor, there was a heated retiring room for the use of the lord. At Mount Bures, it has been suggested that the 'Old House' was a court hall (McMaster and Shackle 1989). This building, suggested to date from sometime between c.1500-1550, has two ground floor rooms with separate entrances, one room perhaps for storage, the other possibly an ante-chamber for private interrogations and audiences. The public court room, if this indeed was a court hall, was on the first floor (as at Widdington) which has a fine crown-post roof. However, the area to the east of the crown-post seems to have been partitioned off as a small waiting room.

In medieval Chelmsford, the courts were held in two buildings, both owned by the Bishop of London as lord of the manor (Grieve 1988, 42-3). One of the buildings stood against the south side of the churchyard, the other was in front of it in the open street, at the upper end of the market. The building in the street was a roofed space, open on all sides, as is clearly shown on the Walker map of $1591,^8$ and was used weekly as a corn market. It was also used as an assize court and for the sessions of the justices of the peace. The other court house, known as the 'Tolhouse' was used for the manor courts (Grieve 1988, 57). This is also shown on the Walker map, where it appears to have a central hall and cross-wings.

At the Golden Fleece, there are no definite structural features, to suggest that the Golden Fleece was once a particularly splendid court hall. For example, no trace could be found of the former presence of a bar. A mortise on one of the wall posts in the hall (A on Fig. 4) is a possible remnant, but no corresponding mortise was found on the opposite post. An alternative line of speculation, based on



Hall: North interior elevation

Fig. 5 Hall: Internal Elevation, north side.

THE GOLDEN FLEECE, SOUTH WEALD



East cross wing East interior elevation



Fig. 6 Cross-sections.

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Fig 7 The East Cross-wing: Internal elevations.



Fig. 8 Mouldings.

the high quality of the Golden Fleece and the similarities with the 'Great Standing', would be to ponder on the possibility of a royal connection. The fact that a follower of Queen Katharine of Arragon, Henry Roper, held property close to the Golden Fleece, would lend some support to this hypothesis.

The problems of the Golden Fleece are an illustration of the difficulties that can be encountered in attempting to understand timber-framed buildings, even where they are of such high quality. There is clearly a need for the publication, not merely of surveys of individual buildings, but also for a series of thematic studies of particular building types such as court and guild halls. If such studies were to identify characteristic structural features, this would be of great assistance in the interpreting of buildings such as the Golden Fleece.

Acknowledgement

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Notes

- The timber-frame was recorded by B.H. Milton, then of Essex I. County Council's Archaeology Section. Points of detail were clarified in subsequent visits by the author, in company with James Ross. 2.
- This account is partly drawn from research by Patricia Ryan. E.R.O. D/DTw M4.
- 3.
- E.R.O. D/DTw M10. 4. E.R.O. D/P 128/12/5. 5.
- E.R.O. D/DTw P3. 6.
- John McCann: 'The Golden Fleece, South Weald, the historical 7.
- background', unpublished typescript, 1986.
- 8. E.R.O. D/DM P1,2.

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Wills and Religious Mentality in Tudor Colchester

by Laquita Higgs

In 1526 Robert Crakebone of Colchester asserted in his last will and testament that he was 'whole of mind . . howbeit feeble and sick of my body remembering that I must needs die and depart out of this transitory life.' In Tudor Colchester, the majority of wills were written on one's deathbed, and the testator had to face the fact that, as immigrant Reinier Van Delft stated in his will, there is 'nothing more sure and certain' than death. Faced with the imminence of death, the testator had to prepare for his life to come, perhaps by providing for some of the good deeds which might assist a quick passage into heaven, and he had to look backward to make sure that all things were in order. No doubt many were like Philip Robertes, who wrote '... having a care (God knoweth) to have a clear conscience.'¹

The making of a will and a concern for virtue were closely connected. The church, well before the 16th century, had encouraged this connection between the making of wills and virtuous bequests. One of the prayers of blessing which might have been heard in church on Sundays, taken from the York Manual, was: 'For all that give or lease in testament any goods to the right maintenance and upholding of the work of the church ...' (Quoted in Cutts 1914, 208). Many, like Colchester millwright John Forster in 1516, bestowed money 'to the pleasure of God and health of my soul.'²

This paper will concentrate on the religious values revealed by the wills of Tudor Colchester. Certainly the earliest Tudor Colchester wills reflected a concern to make pious bequests; almost all mentioned pious bequests first, sometimes in great detail, before getting to the disposition of material goods. Today extant wills are a valuable source for learning about the mentality of the people in that time, because few or no personal journals or letters of the more ordinary folk exist from that period. Also, because the Tudor testator was faced with the jarring truth of death, wills give a valid glimpse into the testator's psyche and values. Taking heed of the cautions of other historians not to rely too heavily on the sometimes formulaic preambles of these wills, I shall examine carefully other facets of each will, such as religious bequests, the ownership of religious artifacts and books, and other religious statements in the will.³

We must first acknowledge that the use of wills as a historical source has its problems. Not everyone made a will, of course, and so conclusions made from wills about a whole community can be only tentative. Moreover, many historians have assumed that wills were primarily made by only the wealthier inhabitants, whereas others have found a broader economic range among testators. Certainly the very poorest would be unlikely to make wills, but Margaret Spufford, studying the peasant inheritance customs in Cambridgeshire in the last quarter of the 16th century, found that all groups in the village of Willingham produced wills and, surprisingly, that it was the poorer groups, probably motivated by the need to provide for minor children, which produced the most wills (1976, 169-71). The testamentary population in Bury St. Edmunds was also broadly based, with from twothirds to three-fourths of the adult male population making wills (Gottfried 1980, 8). In Colchester, using evidence from the pre-Reformation bequests to the high altar of the parish church, we find that over half of the testators gave only 20d. or less in comparison to others who gave from 2s. to 10s. or more. Although bequests to the high altar are hardly an accurate measure of wealth, they nevertheless give a rough picture of the levels of wealth of the will-making population and thus indicate that in Colchester many who were not in the upper economic stratum were making wills (Higgs 1983, 199-202).

Some object against the historical use of wills because few testators wrote their own wills and, therefore, the wills may reflect only the thinking of the writer of the will. In the early Tudor years many Colchester wills were written by clerics, though not all,4 and, in the later Tudor period, notaries and schoolmasters, as well as clerics, wrote wills. The writers of early Tudor wills did not identify themselves as such, but usually the writer was listed among the witnesses. Not until 1540 did a witness, a layman, name himself as the writer, and he did so in a special note at the bottom of the will: 'This present testament written by me, William Mauncell, at the instance and special desire of the said John WIlliamson.' Two other laymen, John Andrewes and Robert Lamb, identified themselves as writers of wills in the 1540s and 1550s, but not until the later Tudor period are there enough wills by individual scribes so that it is possible to detect patterns of writing. One of the most prolific writers was Thomas Rigbe, described in 1593 as a 'schoolmaster of writing' and in 1597 and 1598 as a schoolmaster in St. Peter's parish. Rigbe seems to have written many Colchester wills from 1585 to his own death, which probably occurred in 1602 soon after his own will was written. Rigbe identified himself as the writer in only two wills, but he witnessed and usually signed his name with his paraph, a mark of the scribe, in 15 other wills.5 Rigbe's usual pattern in the preambles of those 17 wills was a perfunctory commendation of the soul to the Trinity. A different approach was used by another prolific scribe, Richard Mason, who identified himself as the writer of 9 wills and witnessed, and perhaps wrote, another 13 wills. Mason used varying forms of preambles, some ordinary and some long and involved, apparently gearing his writing to the wishes of the testator. Therefore, because of the scribal intermediary, wills may not always reflect the views of the dying testator, but, on the other hand, testators often had a choice of scribes, and they would likely be familiar with the views of the scribe. Jennifer Ward, in her article on the Reformation in Colchester, concluded, '...in a town like Colchester it would have been relatively easy to find a scribe who reflected the testator's beliefs, and the preamble can therefore be taken as an indication of religious opinion' (1983, 87).

Whether or not we can depend on wills to give a correct sense of each testator's religious commitment and beliefs, nevertheless wills do give a sense of the values of a community over time, and Colchester's religious thinking and practices will be considered in that light. Jennifer Ward has already capably handled the difficult transition years of the Reformation, so emphasis in this paper will be on the early and late 16th century Colchester, on a contrast of Catholic, pre-Reformation Colchester with the Protestant Colchester of Elizabeth's reign as shown by the wills. In that period, Colchester went from a comprehensive religion of most of the community, centered on the organized structure of the parish church and its priestly services, to a less comprehensive religion based on preaching and preachers. Because of the doctrine of purgatory, Catholic Colchester manifested a high concern, even anxiety, about the state of its souls after death, whereas the more ardent Colchester Protestants were highly confident about their spiritual condition at death. A spiritual elite seemed to develop in Protestant Colchester. Lay people had been highly involved in religious matters in early Tudor Colchester, and that trend continued in the Protestant period, but it became focused on the elite of the town, who seemed to gain in power and hence attempted to control behaviour more frequently. Before looking at the

contrasting Catholic and Protestant periods in detail, an overview of Colchester, its wills and its overall religious commitment is in order.

Early Tudor Colchester had an estimated population of about 5,300 (Britnell 1986, 262). It was not a wealthy town compared to London, yet Colchester was twelfth or thirteenth in riches among the towns, as revealed by the lay subsidy of 1523-1525 (Hoskins 1963, 70). Nine hundred and fortytwo wills are extant from Tudor Colchester (1485-1603) for the 20th century historian to peruse.6 Table 1 gives a preliminary look at the wills, which were charted generally by decade so that the trends over time might be detected. A glance will show that the extant wills of the first years are too few to draw any firm conclusions about that period, though they are certainly useful for comparison.7 Many more men than women made wills, which is hardly surprising since certain categories of people - married women, children, prisoners, traitors, heretics, and those of unsound mind - did not generally have the right to dispose freely of their goods (Camp, xii-xiii). Of the 760 male testators, only a small number, fourteen, were clerics. Colchester was one of the privileged boroughs within which the inhabitants had the right to devise houses and land, and 59% of the testators (63% of the men and 40% of the women) owned or leased land with the right to transfer that land in their wills. As noted above, the evidence from the bequests to the high altar indicated that the Colchester will-makers were from a broad economic range, yet the wills, as a whole, were more representative of 'the better sort' of people, which was often true of English wills of the period.

YEARS	No. of WILLS	MA (inclu cler	LES uding tics)	MA OWN (or le LA	LES JING asing) ND	No. of CLERICS	FEMALES		FEMALES OWNING (or leasing) LAND		
1485-99	17	16	94%	15	94%	1	1	6%	0	0	
1500-09	82	65	79%	43	66%	1	17	21%	13	76%	
1510-19	64	50	78%	37	74%	_	14	22%	8	57%	
1520-29	43	37	86%	26	70%	1	6	14%	3	50%	
1530-39	60	48	80%	33	69%	2	12	20%	6	50%	
1540-49	71	63	89%	38	60%	3	8	11%	l	13%	
1550-59	93	77	83%	52	68%	1	16	17%	9	56%	
1560-69	77	60	78%	43	72%	2	17	22%	6	35%	
1570-79	108	88	81%	55	63%	1	20	19%	4	20%	
1580-89	126	92	73%	55	60%		34	27%	13	38%	
1590-99	136	110	81%	65	59%	2	26	19%	7	27%	
1600-03	65	54	83%	18	33%		11	17%	2	18%	
TOTAL: 1485-1603	942	760	81%	480	63%	14	182	19%	72	40%	

Table 1: Tudor Colchester Testators

The level of religious commitment among the people of Tudor Colchester is impossible to determine exactly, and the attempt is made more tentative by the realization that wills did not represent everyone in a community. Other factors skew conclusions about religious commitment, e.g. the wealthier had more resources so they might appear to be more pious than the less wealthy; or the presence of children, particularly minors, might make a big difference in the money available for pious deeds. Nevertheless, a simple counting and charting of indicators of piety in wills will give some idea of the levels of religious concern. This was done in Table 2. The difficulty comes in labelling the indicators of piety. Certainly an indicator should be something beyond the perfunctory commitment of the soul in the preamble, or beyond the obligatory bequest to the high altar in one's parish church in pre-Reformation Colchester. In this paper, the following have been designated as 'indicators' of religious concern: 1) a charitable bequest; 2) a request for prayer for the soul; 3) the ownership of a religious artifact or religious books; 4) an unusually heart-felt preamble or religious statement (admittedly a subjective judgement on the part of the reader); 5) the mentioning of a specific clergyman; 6) having godchildren who are obviously not related; 7) the ownership of a Bible; 8) bequest for sermons to be preached; 9) the giving of Biblical names not in common usage to one's children. Each indicator garnered a point on the chart for the testator, but allowance was made if an indicator went far beyond the expectations of ordinary piety, in which case 2 points (but no more) were given.

Using this system of indicators of pious concern in order to compile Table 2, this method was used: a '0' was given to any testator who gave no indication of religion whatsoever, and a '1' was given to those exhibiting only the marks of a conventional religion found in most wills of the period, such as the religious preamble and the bequest to the high altar. The points garnered from the indicators were then added to the basic '1' of nominal religiosity, up to the score of '5'. Thus, a '2' would be a mark of the 'average' or moderately pious testator, '3', above average, '4', high; and '5', a mark of the highest concern for piety on the part of the testator.

Though judgements about the piety of testators are fraught with difficulty, Table 2 gives something of a picture of the concern for pious deeds and words among the Colchester testators. On the table, the Tudor period was divided for comparison into 3 somewhat arbitrary periods: the Catholic period (1485-1529), the period of transition

YEARS No. of WILLS 0 No Religious Concern 1 Nominally Religious 2 Moderately Pious 3 Above Average in Piety 4 Highly Pious 5 Extrem Pion CATHOLIC YEARS:	
CATHOLIC YEARS: 1485-99 17 - 1 6% 3 18% 13 1500-09 82 11 13% 14 17% 26 32% 16 20% 15 1510-19 64 4 6% 16 25% 19 30% 9 14% 16 1520-29 43 4 9% 11 26% 17 40% 7 16% 4 Total: - - - - - - - - 1485-1529 206 19 9% 41 20% 63 31% 35 17% 48 TRANSITION YEARS: - <t< th=""><th>nely 18</th></t<>	nely 18
1485-99 17 1 6% 3 18% 13 1500-09 82 11 13% 14 17% 26 32% 16 20% 15 1510-19 64 4 6% 16 25% 19 30% 9 14% 16 1520-29 43 4 9% 11 26% 17 40% 7 16% 4 Total:	
1500-09 82 11 13% 14 17% 26 32% 16 20% 15 1510-19 64 4 6% 16 25% 19 30% 9 14% 16 1520-29 43 4 9% 11 26% 17 40% 7 16% 4 Total: -	76%
1510-19 64 4 6% 16 25% 19 30% 9 14% 16 1520-29 43 4 9% 11 26% 17 40% 7 16% 4 Total:	18%
1520-29 43 4 9% 11 26% 17 40% 7 16% 4 Total: Image: Constraint of the state of the stat	25%
Total: Image: Constraint of the state	9%
1485-1529 206 19 9% 41 20% 63 31% 35 17% 48 TRANSITION YEARS: 1530-39 60 15 25% 19 32% 11 18% 10 17% 5 1540-49 71 15 21% 28 39% 20 28% 4 6% 4	
TRANSITION YEARS: 1530-39 60 15 25% 19 32% 11 18% 10 17% 5 1540-49 71 15 21% 28 39% 20 28% 4 6% 4	23%
1530-39 60 15 25% 19 32% 11 18% 10 17% 5 1540-49 71 15 21% 28 39% 20 28% 4 6% 4	
1540-49 71 15 21% 28 39% 20 28% 4 6% 4	8%
	6%
1550-59 93 1 1% 49 53% 25 27% 14 15% 4 4% 0	0%
Total:	
1530-1559 224 1 0.5% 79 35% 72 32% 45 20% 18 8% 9	4%
PROTESTANT YEARS:	
1560-69 77 3 4% 23 30% 34 44% 9 12% 4 5% 4	5%
<u>1570-79</u> <u>108</u> <u>2</u> <u>2</u> % <u>39</u> <u>36</u> % <u>33</u> <u>31</u> % <u>18</u> <u>17</u> % <u>8</u> <u>7</u> % <u>8</u>	7%
1580-89 126 4 3% 30 24% 41 33% 25 20% 18 14% 8	6%
1590-99 136 8 6% 36 26% 32 24% 23 17% 18 13% 19	14%
1600-03 65 2 3% 20 31% 16 25% 18 28% 8 12% 1	2%
Total:	
1560-1603 512 19 4% 148 29% 156 30% 93 18% 56 11% 40	8%
TOTAL TUDOR PERIOD:	
1485-1603 942 20 2% 246 26% 269 29% 201 21% 109 12% 97	10%

Table 2: Levels of Religious Concern

(1530-1559), and the Protestant period (1560-1603), and probably a comparison of the sub-totals for the three periods yields the most valid picture. For example, as Table 2 shows, everyone in pre-Reformation Colchester was at least nominally religious, whereas the Protestant years began to spawn a few who seemingly had no concern whatsoever for religious matters. The '1' category, the nominally religious, was small in the Catholic years (only 9%) but grew to around a third of the testators in the succeeding periods (35% and 29%). At the other end of the scale, the Catholic period had a high number (23% of its testators) who were extremely pious, compared to 4% in the troubled transition years, and 8% in the Protestant period. Most testators — close to 50% in all three periods — were in the broad middle range of the moderately pious and slightly above average in piety.

Table 2 seems to indicate that Catholic Colchester was, generally, more religious than Protestant Colchester. Certainly, religion was more comprehensive in the early period; everyone had a stake in it. On the other hand, one might argue that the seemingly greater piety of the Catholic era might be due to the 'salvation by works' orientation of that time; after all, good works are easier to measure than the Protestant reliance on faith within one's heart. One of the difficulties of trying to compare the piety of Catholics and Protestants in this manner quickly emerges, then, so Table 2 must be used cautiously. However, Table 2 does tell us one important fact: that religion was of great consequence in the thinking and practices of many of the people of Tudor Colchester, whatever the date. Those people put into their religion their hearts, their money, and even their lives.

Let us now consider early Tudor, Catholic Colchester in some detail. Religion centered around the parish church, for it was there that some of the major events of life occurred, and giving to the parish church was encouraged. Forty per cent of testators left money to the parish church in that early period (Higgs 1983, 218), and that was apart from the almost universal bequest to the high altar of one's parish church. There was a lot of church building going on; the survey of historical buildings made by the Royal Commission on Historical Monuments in 1922 revealed that at least 10 out of the 16 parish churches in the whole borough of Colchester were engaged in some rebuilding of their fabric in the late 15th and early 16th centuries.8 St. James' Church rebuilt the entire east end of its church, adding chapels and a vestry, and today it has much the same handsome appearance that it took at that time. Indicating their love for their parish church, parishioners also left money and gifts for the adornment of the churches; Margaret Thorne left 'my best beads of jet' to be worn by the statue of Our Lady in St. Botolph's Church, and William Wheler gave to St. James' Church 'a coverlet with birds and flowers' to be laid on a stool, apparently a covering for the seat for women who were being purified after the birth of a child. Regard for the parish church was even shown by the names given to Colchester ships; John Leveson's will of 1492 revealed that he owned part or all of 3 ships, the Giles, the Leonard, and the Nicholas, all names of Colchester parishes.9

The church was important to the parishioner because of the priestly services offered, and a number of priests were needed in Colchester, both for parish duties and to pray for the dead. The wills indicate that the priestly system was much in evidence in Colchester; 63% of the early wills (Table 3) mentioned a specific clergyman. Many clergy witnessed, and perhaps wrote, the wills; others were bequeathed money or items. Clergy were named as executors or supervisors in 13% of the early wills (Higgs 1983, 261), but this was a low figure compared to Norwich, where between 1/4 and 1/3 of the lay testators from 1370 to 1517 chose a cleric as executor or supervisor (Tanner 1984, 14). A few testators named a specific clergyman when they requested prayers for the soul in purgatory, but sometimes the bequests for prayers were revealing in that they indicated concern about the behaviour of the priests. Alderman George Aleyn in 1510 demanded 'an honest and an able priest to sing for my soul', and Henry Bear in 1512 wanted 'an honest and wellbespoke priest'. The borough court rolls manifest some outbursts of anticlericalism in Colchester in 1511 and in 1527, in each case just after diocesan church authorities had moved against heretics in the town, even burning two men in 1511 (Higgs 1983, 298). But the wills also give examples of priests who were loved in Colchester. Before heresy became a factor in the religious picture of the town, Nicholas Clere, in an unusual request in 1500, asked to be buried next to a priest, John Adam, who had died 9 years earlier. Adam's will is extant, and he genuinely seemed to have concern for the spiritual welfare of his parishioners. Adam, who had been rector at St. James' Church for 21 years, left his portuse (breviary) and all his bound books to his parish church so that they could be chained by the Bible in one of the chapels, thus making them accessible to the people. The people of Colchester therefore had some good Christian models among their priests, and they even had the remarkable opportunity of access to a Bible, at least for a time.10

Priests were especially needed to offer masses and prayers for the dead. Historian Bernard Hamilton has an interesting observation on that priestly function:

It is arguable that medieval people valued the institutional church above all else as intercessor for the dead. The laity could at need baptize their own children; they did not have to get married in church; some of them rarely if ever went to mass or received the sacraments; some did not even receive the last rites because they knew that their salvation was not contingent upon doing so; but everybody recognized that the church alone could pray them out of purgatory (122).

Certainly Colchester testators were keenly aware of the need for the prayers of priests; about two/thirds of the Colchester testators from 1485 to 1529 requested prayers to help obtain a quick release of their soul from purgatory (Table 3). Prayers for the dead took many forms in Colchester, such as extra prayers at burial, trentals of masses, annual obits (anniversary obituary masses), prayers by stipendiary or chantry priests, prayers by gilds, or simply being included on the bede-roll of the parish church. Forty testators in the early Tudor period arranged for the hiring of a stipendiary priest to pray for their soul for a set period of time, usually a year. Three perpetual chantries, one housed in St. Peter's Church and two in St. Leonard's, were founded near the beginning of the Tudor period, and previous chantry foundations were still in existence (Higgs 1983, 234). Colchester

Table 3: Indicators of Piety in Wills

YEARS	No. of		CHAI	ARITABLE BEQUESTS				BEQUEST MENTION			OWNS UNUSUALLY		GOD-		OWNS A		BEQUEST		USE OF				
	WILLS	Poor, p hosp almshou scholars, of poo	risoners, bitals, ses, poor marriage or girls	Parish c religiou (fabr furnis	hurch or is house ric or hings)	Civic	bequest	FOR OF A PRAYERS SPECIFIC includes bequests to guilds; for lights and pilgrimages		RELIGIOUS PIOUS ARTIFACT PREAMBLE OR BOOK OR (not Bible) STATEMENT		(Only those not related)		BIBLE		FOR SERMONS		BIBLICAL NAMES					
CATHOLI	IC YEARS:													•									
1485-99	17	11	65%	16	94%	6	35%	16	94%	14	82%	1	6%										
1500-09	82	21	26%	39	48%	6	7%	50	61%	50	61%	I	1%										
1510-19	64	18	28%	25	39%	4	6%	47	73%	43	67%	0	0%			3	5%					1	2%
1520-29	43	16	37%	12	28%	1	2%	23	53%	23	53%	0	0%			3	7%		_	1	2%	0	0%
Total:					i																		
1485-1529	206	66	32%	92	45%	17	8%	136	66%	130	63%	2	1%			6	3%			1	.5%	1	.5%
TRANSIT	ION YEAR	RS:	_					_															
1530-39	60	13	22%	12	20%	4	7%	24	40%	30	50%	2	3%	4	7%	1	2%			1	2%	0	0%
1540-49	71	20	28%	9	13%	7	10%	4	6%	35	49%	0	0%	12	17%	7	10%			2	3%	0	0%
1550-59	93	27	29%	0	0%	2	2%	2	2%	10	11%	Ð	0%	12	13%	3	3%			0	0%	2	2%
Total:																							
1530-1559	224	60	27%	21	9%	13	6%	30	13%	75	33%	2	1%	28	13%	_11	5%			3	1%	2	1%
PROTEST	ANT YEA	RS;																					
1560-69	77	28	36%	4	5%	2	3%	_	-	22	29%	0	0%	12	16%	2	3%			4	5%	1	1%
1570-79	108	36	33%	3	3%	4	4%			19	18%	0	0%	40	37%	3	3%	3	3%	8	7%	1	1%
1580-89	126	45	36%	2	2%	2	2%			28	22%	0	0%	68	54%	4	3%	2	2%	3	2%	0	0%
1590-99	136	52	38%	3	2%	1	1%			41	30%	1	1%	70	51%	1	1%	3	2%	4	3%	5	4%
1600-03	65	14	22%	1	2%	0	0%			17	26%	0	0%	37	57%	1	2%	1	2%	0	0%	1	2%
Total:				<u> </u>																		_	
1560-1603	512	175	34%	13	3%	9	2%			127	25%	1	0.2%	227	44%	11	2%	9	2%	19	4%	8	2%
TOTAL T	UDOR PE	RIOD:																					
1485-1603	942	301	32%	126	13%	39	4%	166	18%	332	35%	5	1%	255	27%	28	3%	9	1%	23	2%	11	1%

wills indicate that at least one parish gild was of importance in the early Tudor period, the Gild of Jesus Mass in St. Peter's Church; its major purpose was to pray for deceased members, both at burial and on the anniversaries of deaths. From the 14 bequests to the gild, some of which were quite detailed, it can be surmised that the gild had its own chapel in the church, in which were an altar, images of Jesus and Mary, and large torches and smaller lights which were burned at burials, on Sundays, holy days, and on Fridays at the elevation of the eucharistic bread (Higgs 1983, 237-9). The gild apparently had its own mass every Friday, which was the day on which some aspect of the passion of Jesus was commonly commemorated, and the masters of the gild, who were lay administrators, were responsible for hiring a chaplain to celebrate the mass. Gilds in 8 other parish churches were mentioned in the wills, but the others seem not to have been so active or so well supported as the gild in St. Peter's Church.11 With the large number of bequests for prayers and all the different methods of providing for prayers, one begins to wonder if the whole system was not over-balanced on the side of praying for the dead.

Although it is helpful to count the number of testators who requested prayers and even the kinds of prayers requested (Higgs 1983, 218, 231), the language with which the prayers were requested is also revealing. Some testators showed their anxiety by carefully giving details of the kinds of prayers wanted. Alice Piggisley, for example, requested in 1506 that 'there be sung for me and my friends six masses of the resurrection, five masses of the holy cross and thirty masses for a trental as soon after my burying as it may conveniently be done.' The most common request for prayers (by 43 testators) was for the yearly obit, which had the advantage of being affordable for more people in Colchester. Again, the anxiety for one's soul was revealed by the care with which many gave details about the finance and procedure of the obit. John Camoke's directions in his 1514 will are typical:

I bequeath to the church of St. Giles for to keep an obit yearly during the world in the week afore the Purification Our Lady for my soul, my wife's soul, and all Christian souls and for to be prayed for in the bede-roll 2 kine price 20s., 8 ewe sheep price 10s. to be at the letting or keeping of the churchwardens within the parish of St. Giles and my obit to be kept under this manner and form. The curate to have for bede-roll 12d., dirige and light 10d., the clerk for the knell ringing and dirige 6d., the sexton for the herse 2d., the churchwardens for my mass penny and for their labor to see this mine obit kept 9d. The residue of the profits of my obit left to go to the reparation of the church.¹²

The language of these two rather typical wills revealed an urgency that the testators felt about the prayers for their souls. Alice Piggisley wanted her prayers said 'as soon after my burying as it may conveniently be done,' a common request. John Camoke, who seemed to be a husbandman, did not have Piggisley's resources to order a lot of prayers immediately after his death, so he settled for a long-term investment in prayers for his soul; they were only to be 'yearly during the world.' Others had these same concerns. Alderman George Aleyn in 1510 left money for a priest to pray for his soul for a year, but he also wanted the insurance of a trental (30 masses) 'during the term of five years every quarter of a year.' In different ways, then, testators revealed an anxiety about their condition in the afterlife. Though they might be assured of an eventual place in heaven, the prospect of an interim in purgatory was not something that the dying person relished.¹³

Charitable bequests of money to the poor also indicated anxiety on the part of many testators. Almsgiving was a favourite virtue in the Middle Ages; it was thought to be good for the soul and a means of laying up riches in the next world. According to the Dreamer in the 14th century work, Piers Plowman, one of the purposes of charity was the purchase of prayers: 'So my advice to all Christian people is to build their lives on charity; for Charity, most certainly, frees the spirit, and releases many souls from Purgatory by its prayers' (Langland, XV, 343-5). Almost a third of Colchester testators from 1485 to 1529 (Table 3) made some kind of benefaction to the poor;¹⁴ a few (nine) of the testators specifically mentioned that the poor were to pray for the donor. Five testators left money to be given weekly, usually on Friday, to a certain number of poor people for a specified period of time, from 1 year to 20 years; interestingly, each of those five donors stated that the prayers of the recipients were expected. As John Salough put it in 1511: 'To five bedefolk they to pray for my soul, my wife's soul, and all Christian souls for 3 years, every one of them to have week and weekly, 3d., on the Friday in every week to be paid by the hands of my executors.' John Salough did not want to be forgotten.15

Beyond the obvious religious bequests, certain phrasing in the wills reveal something of the religious mentality of the testators. Towards the end of the wills, the residue of any goods beyond the stated legacies was usually left to the executors, and the testator frequently charged the recipient of the goods to use them 'to dispose for my soul as they think best,' as William Man instructed in 1501. Or, sometimes the testator inserted a proviso, such as that by shipowner John Leveson in 1492, who stated that if all his family were to die, then his money and goods were for deeds of charity, 'to the pleasure of God and profit of my soul.' Though Leveson and others spoke of 'the pleasure of God,' yet the primary concern in the wills was for the testator's soul.¹⁶

In the expression of that concern for one's soul, the testators used some revealing images. In the earlier years, up to around 1510, the primary imagery when asking for the performance of good deeds for the soul was from the marketplace, such as John Leveson's phrase, 'profit to my soul,' as if comfort for the soul could be bought. Although 'profit' was the most common economic term used, a few, like Rose Semer in 1504, instructed their executors 'to do for me in deeds of alms ... for the wealth of my soul.' Even more frequent than the economic imagery was language related to the well being of the soul, as if the soul were a body which could be diseased or in health. The first instance in Colchester wills was in Robert Whithed's will in 1502; he instructed his wife to dispose of the residue of his goods 'for health of my soul.' Like phrases were also used, such as 'for the welfare of my soul' or even 'for the well of my soul.' A third type of phrase was first found in gentleman

Edmund Honyngton's 1514 will, when he directed his wife to use the residue of his goods 'to the honor of God and consolation of my soul.' Sometimes the phrase used was 'comfort and consolation of my soul.' It was not really an image such as the economic and 'body' images were and, perhaps for that very reason, did not have the same attractiveness or popularity; nevertheless, the phrase lasted longer, to 1541.¹⁷ Such phrases were tied to Catholic beliefs, and they lasted longer in more conservative areas such as the South-West of England, where such phrases were found as late as 1560 (Whiting 1983, 84). The phrases, along with the many bequests for prayers, indicate a high level of concern, even anxiety, about the state of the soul after death.

In a matter of such concern, the testator needed all the help he could get. Indeed, testators seemed to be conscious of a community of souls, both of the living and the dead, with the living, who were themselves in future need of prayers in purgatory, helping to supply prayers and calling upon the community of saints already in heaven to pray also. Getting to heaven was a communal effort. Testators often asked for prayers for relatives and friends, but the most frequent phrase was for prayers 'for all Christian souls,' an echo of the prayer after the reading of the bede-roll, a list of the dead, in the Sunday worship: 'God have mercy on these souls and on all Christian souls' (Quoted in Gasquet 1929, 223).

'God have mercy on these souls' sums it all up; anxiety, at least for some, was a part of the process of dying and making a will, and therefore all the attempts to assuage that fear by the right kind of legacies emerged. On the other hand, it would be unfair to say that anxiety was universally present, for one can also serve God out of love and reverence, rather than out of fear. The language in Richard Ruoke's will of 1510, though awkward, placed more emphasis on honoring God than did most wills: 'I will that ... the churchwardens ... shall receive the said money and they to bestow it in such things to the honor and worship of God by them most necessary and needful to be done within the said church as to books, vestments, copes or other things to the honor and worship of God.'¹⁸

The whole religious system revolved around clerics, but it was not just the clerics who were important in the honoring and worshipping of God — the laity, the church, depended on each other to pray, to execute wills, including religious bequests, to administer religious gilds, to serve on the church vestry and as churchwardens, to serve as godparents, and to remind each other of their religious obligations. Soon the laity would find themselves confronted by changes which would place a greater onus for religious responsibility on the lay individual, taking away a system which had not only a comfortable sense of community and reliance on clergy, but also an anxiety-producing doctrine of purgatory. The changes which came with Protestantism and their results in Elizabethan Colchester will now be considered.

The 224 wills written in the three decades of transition (1530-1559) between Catholic Colchester and Protestant Colchester reveal in types of bequest as well as in language the changes and uncertainty of the time; in 1540, Robert Saunderson was correct when he called it an 'unstable and mutable world.' The changes brought confusion, but the

Reformation also heralded a broadening of ideas. An obvious change in the wills was that bequests for prayers for the soul fell dramatically, particularly after the Ten Articles of 1536 demoted saints and denied the doctrine of purgatory. In the 1540s only four people requested prayers for the soul, and in the 1550s, only two (Table 3). The widow of an alderman, Katherine Lowthe, was the last to bequeath money especially for a priest to pray for her soul. In 1545 she left $\pounds 6.13.4.$, desiring that 'an honest priest sing for me and my friends' souls one whole year.' The two wills written in the 1550s requesting prayers asked only that the poor pray for their souls; during Mary's reign, William Wyseman set up two almshouses in 1557, requesting that the two inhabitants 'pray for my soul.'¹⁹

Significantly, Wyseman's will was one of the few in the 1550s to include in the preamble to his will a commendation of his soul to the Virgin Mary. The Catholic preamble had been a fairly set formula, similar to John Honyngton's preamble in his will back in 1485, in which he commended his soul 'to almighty God and Our Lady St. Mary and to all the holy company of heaven.'²⁰ The vast majority of the wills through the pre-Reformation years included such phrasing, with only slight variations, but beginning in the 1530s uncertainty was revealed in the language of the preambles. In that decade (Table 4), six testators omitted the commendation altogether, which had happened only once in the earlier wills, and two men bequeathed their souls and bodies, but failed to say to whom they were bequeathing them!

The inclusion of Mary in the preamble was rare after 1546; only five testators did so, all during Queen Mary's reign, indicating a Protestant Colchester, at least in contrast to places such as the city of York, where 88.5% of the wills retained traditional preambles (Palliser 1979, 251-3). Increasingly, Colchester testators began to commend their souls to God alone, usually to 'almighty God,' but often adding 'maker and redeemer' or a variant of that phrase. Even when the commendation was not to God alone, new phraseology in reference to God was emerging. In 1540, John Prestney commended his soul to 'the hands and mercy' of God, and in 1541, gentleman Richard Weston left his soul 'to the infinite and inestimable mercy and goodness of almighty God, the very creator and redeemer of the same.'²¹

Both 'Catholic' and 'Protestant' testators (if we can simplistically classify them as Catholic when they commended their soul to Mary and the saints and/or asked for prayers for the soul) appealed to the 'mercy' of God, but the reference to the 'hands' of God was more commonly used by Protestants. Its first use in Colchester wills was in Alderman John Clere's will of 1538, which was significant because it was the first Colchester will which was openly Protestant; Clere commended his soul 'unto the hands of almighty God, trusting that by his mercy and by the merits, passion and blood shedding of his dear and only son, Jesus Christ, to have forgiveness of my sins.' Gradually, more testators began referring to the 'hands' of God, and only one of those testators, John Prestney in 1540, quoted in the above paragraph, was obviously Catholic. Only three testators in the 1540s used 'hands,'22 but usage increased steadily until, by the 1590s, 60% of the testators used the word 'hands'

		TRA	ADITI	IONA	L						PROT	TEST /	ANT			
YEARS	No. of WILLS	GMS	GS	TMS	GJMS	JMS	GA	Almighty God	God, Maker & Redeemer*	GH	Т	GJ	1	Om	No Pre	Inc
1485-99	17	14	1			1]									1
1500-09	82	78						2	1							1
1510-19	64	58	1	2				3								
1520-29	43	33				2		4					3			1
1530-39	60	32		1		1		13	2	-	2	1		8		
1540-49	71	34	1	1		2		13	8		4	4	3	1		
1550-59	93	3	2	1	1		1	35	32			11	5		1	1
1560-69	77							44	15	1	4	7	2	2	2	
1570-79	108							26	31		27	19	2	1	2	
1580-89	126							31	15		35	32	4	5	4	
1590-99	136							23	10		42	48	1	1	11	
1600-03	65							14	7		20	19	2		3	
TOTAL:	942	252	5	5	1	6	1	208	121	1	134	141	22	18	23	4

Table 4: Commendations of Testators' Souls

Key: G = God

M = Mary

S = Saints

J = Jesus

T = Trinity

H = Holy Spirit

A = Angels

Om = Omitted commendation in preamble; many were noncupative, i.e. given orally and later reported by witnesses.

No Pre = No preamble included

Inc = Incomplete; only an incomplete transcript has survived

* = Or, a variant, such as 'creator & redeemer'. The use of redeemer is interesting; it may or may not be referring to God the Son, as the Old Testament sometimes used 'redeemer' when speaking of Jehovah God.

in their preambles. Reference to the 'hands' of God was perhaps indicative of a belief in a more personal and caring God; Colchester was moving, it seems, to a more inward kind of piety based upon a more personal relationship with God.

There was another indication in Clere's preamble that Protestantism involved a more intimate relationship with God, for the relationship to God began to center on the person of Jesus, rather than a relationship through the mediation of Mary or the saints or a priest. References to Jesus were not common in the Colchester wills from 1485 to 1529.23 Protestant Clere, quoted above, affirmed in 1538 that his salvation was by the 'passion and blood shedding' of Jesus; after Clere's will, a few others began, for the first time, bequeathing the soul simply to 'the Father, the Son, and the Holy Ghost,' with no mention of the Virgin Mary or of the saints. Robert Saunderson in 1540 illustrated an intermediate phase in the thinking of the people in his preamble. 'First I humbly commend my soul unto almighty God, creator and redeemer of the same and unto his blessed mother, Mary, Virgin, and to all the holy company of heaven, most truly beseeching them to be mediator and intercessor unto the blessed Trinity, the Father, the Son, the Holy Ghost, three persons and one God.' Saunderson was the testator who spoke of 'this unstable and mutable world,' so it is not surprising that he tried to please both Protestants and Catholics.24

The person of Jesus became the basis of Protestant confidence. Not until 1545, though, did other preambles begin speaking, as Clere had earlier in 1538, of the forgiveness of sins produced by the death of Jesus, or of the confidence of salvation through Jesus (Table 5). George Beckett's will in 1545 stated, 'I commend my soul to Christ Jesus, my maker and redeemer, in whom and by the merit of whose blessed passion is all my whole trust of clean remission and forgiveness of my sins.' Seven testators in the 1540s spoke of their trust in Jesus; in the turbulent 1550s with its swings from Catholicism to Protestantism, a few more testators, eighteen in all, mentioned Jesus in their preambles, but only five used the Protestant linkage of trust and the remission of sins through Jesus. However, the Elizabethan wills increasingly showed an awareness of Jesus' role in the testator's salvation. The statements of faith began to be more fulsome in the 1570s, with adverbs abounding, e.g. 'assuredly trusting to be saved,' 'perfectly trusting to be saved,' and 'faithfully trusting.' In the 1570s, the verb 'believe' and its variations began to be used with some frequency, and in the 1580s, and throughout the rest of the Tudor period, 'believe' was the most common term used in the strong expressions of faith. Widow Joan Lewis stated in 1570, '... steadfastly believing to obtain and gain forgiveness of all my sins through the death and merits of my Lord and Saviour, Jesus Christ' Other terms were also used to communicate one's convictions, particularly 'assured' and 'persuaded.' Gentleman George Sayer wrote in 1595, '... being undoubtedly assured that by the death of Jesus Christ am pardoned of all my sins and that thereby I shall enjoy the heavenly felicity with the saints of God.'25

In the 1580s, for the first time, testators who included Jesus in the commendations of their souls outnumbered those who commended their souls to God alone (71 to 46; see Table 4), and that trend continued throughout the Elizabethan period. Moreover, reference to the death and 'bloodshedding' of Jesus was at a high point in the 1580s, when 36% of the testators made such an allusion (Table 5). In the same decade, 37% made a strong statement of belief or trust in God and all but four mentioned Jesus by name, and those four were obviously referring to Jesus; e.g. Elizabeth Clere spoke of 'his precious bloodshedding.'²⁶

The linkage of trust with the name of Jesus was important because it indicated a significant shift in religious mentality so that one begins to see a change, though halting at times, from religious anxiety to religious confidence in the minds of the pious testators in Colchester. The words 'trust,' 'believe' and 'hope' became fairly common, revealing an inner confidence, missing in the earlier wills, about the state of the soul immediately after death. No longer was the testator dependent upon someone else's prayers, whether of the saints in heaven or of a priest on earth, but it was the faith or trust of the testator which made the sacrifice of

DATES	No. of WILLS	Mercy of God; merciful Lord; merciful hands		Jesus' p bloodsl His me	assion & nedding; death; rits	Trust salva stead believin	ing for ation; lfastly 1g; faith	Forgiv sins; re par	eness of mission; don	One elec cho	of the ct or osen	Hope of resurrection; everlasting life	
1530-39	60	1	2%	1	2%	1	2%	1	2%				
1540-49	71	6	8%	6	8%	7	10%	6	8%	1	1%	1	1%
1550-59	93	10	11%	5	5%	8	9%	3	3%	2	2%	4	4%
1560-69	77	6	8%	6	8%	8	10%	3	4%	3	4%	4	5%
1570-79	108	10	9%	28	26%	29	27%	17	16%	4	4%	12	11%
1580-89	126	10	8%	45	36%	47	37%	22	17%	8	6%	16	13%
1590-99	136	17	13%	39	29%	44	32%	15	11%	3	2%	17	13%
1600-03	65	15	23%	21	32%	22	34%	13	20%	2	3%	13	20%
TOTALS:	736	75	10%	151	21%	166	23%	80	11%	23	3%	67	9%

Table 5: Prevalence of some Religious Ideas, 1530-1603

Jesus valid for himself. Each person was responsible for his own relationship with God in that he consciously placed his trust in God; he was going beyond mere belief to an active faith in the atoning sacrifice of Jesus through which one received forgiveness of sins. Jesus then became, through His high office in the plan of salvation, one's personal savior. As George Nichols expressed it so simply in 1576, '... my soul to be saved by Jesus Christ.' Others were more elaborate in their declaration of faith in Christ; Robert Baker in 1578 was 'hoping and assuredly believing to have pardon and forgiveness of all my sins in, by and through the merits, death and passion of my Lord and Saviour, Jesus Christ crucified, my only and alone and by none other means or manner.'²⁷

The emphasis on salvation in Christ alone was important for another reason: priestly services were no longer absolutely necessary to enter heaven. Saying that Christ was one's only savior was a rejection of the Catholic mass, which was a repeated sacrifice of the body and blood of Jesus each time it occurred; therefore, no mass, no priests. As Protestant preacher Hugh Latimer stated it in 1548, 'Then let us trust upon his [Jesus'] only death, and look for none other sacrifice propitiatory ... Why then, it is not the mass that availeth or profiteth for the quick and the dead' ('Sermon of the Plough,' 73-4). In Catholic Colchester, it had been necessary for a priest to preside over the mass, and that key role no doubt accounted for the frequent occurrence of priests' names in Catholic wills; significantly, the mention of specific clergymen dropped in the wills at the same time that the name of Jesus became more common (Tables 3 and 4), Emphasis on the name of Jesus, then, indicated both a change in the religious system and in individual attitudes toward religion.

One of the changes in the individual was an alleviation of the fear of spending lengthy years of suffering in purgatory. The extra-biblical doctrine of purgatory had been discounted by the Protestants, and, along with the statements of confidence of salvation in Jesus, testators began to speak of their hope of the resurrection and the joys of eternal life in heaven. None were more emphatic or insistant than humble weaver John Halle in 1559 when he echoed the words of the burial service in the Book of Common Prayer: '... my body to the earth. Earth to earth, dust to dust, and ashes to ashes for I believe steadfastly that I shall arise again in the great day of the Lord and through the merciful design of our Saviour Christ that I have and shall have remission of all my sins and to be annointed as one of the number of those that shall reign with Christ everlasting in glory. This faith is fast in my heart.' Increasingly in the later Tudor wills, the section of the preamble dealing with the disposition of the body after death came to be an occasion for affirming one's belief in the joining of the soul and body together in a bodily resurrection on the last day. John Pullyn's will in 1592 stated, '... believing verily ... that by the power of His resurrection this my weak body shall in the last day rise again to immortality when body and soul being joined together I shall be made partaker of Christ's excellent glory and live and reign with Him forever in joys unspeakable.²⁸ Belief in the bodily resurrection was a tangible and glorious affirmation of the Protestant Christian's faith and trust in

God, and it certainly eased the mind at the point of death. Anxiety had given way to confidence.

A source of this confidence might also be the belief that one was of the number of the elect souls destined for salvation; as Jacques Tompson put it in 1590, 'assuring myself that by the death of Christ my sins are forgiven me and that thereby as one of His elect I shall inherit the kingdom of heaven.'²⁹ However, Calvinistic predestination, which emphasized the election of saints, apparently had not made strong inroads into Colchester thinking, as only 23 testators stated that they were of the elect or chosen (Table 5), and six of those wills seem to have been written by one scribe, William Ram, who possibly influenced the terminology used.

Certainly, many Elizabethan testators, even if they did not speak of being one of the elect, were more confident in their faith and more willing to verbalize it in their wills, but it was supposed to be a faith of the heart. As Hugh Latimer preached, 'This faith must not be only in our mouth, in our tongue, but it must be in our hearts' (Latimer 1844, 504). Testator Margaret Boniure spoke of her private relationship with God when she commended her soul 'to almighty God, my creator and maker, and to Jesus Christ, my redeemer and atonement maker for my sins, and to the Holy Ghost, my sanctifier, in private of my heart to call upon him in all my trouble.'³⁰

Because the Protestant faith was of the heart, it had the potential for being much more individualistic than was the earlier faith in Colchester, and individualism often brings with it a change in the old, traditional ways. Indeed, the old community geared toward getting one through purgatory was gone, and the parish churches had fallen on hard times. Most of the parish churches had been under the patronage of two of the religious houses in Colchester, the Augustinian St. Botolph's Priory and the Benedictine St. John's Abbey, and when they were dissolved in the 1530s, the parish churches suffered. Some livings apparently lapsed (Ward 1983, 87). By the end of the Edwardian Reformation, both parish churches and priests had changed; the Catholic priest had become a Protestant minister and the altar had become a communion table. Even the appearance of the churches had changed; walls were whitewashed and stained glass was replaced by plain glass. Images had been removed. The wills reflect those changes as bequests to the fabric or furnishing of the parish church fell drastically -- from 45% (1485-1529) down to 3% in Elizabethan Colchester (Table 3). Services had changed; the Book of Common Prayer had abolished the mass, prayers for the dead, private confession, and many ceremonies. With the dissolution of the chantries, religious gilds, and anniversary obituary masses, the number of priests and services were fewer (Higgs 1983, 313-14). Queen Mary tried to reverse the changes, but she failed. The medieval religious system had disappeared in Colchester.

Finally, let us consider what replaced the reliance on the parish church and priestly services in Colchester. Concomitant with the new confidence in the individual which was centered on Jesus, who was the living Word, came a new reliance on the written Word of God, the Bible, but especially on the preaching of that Word. Money left for sermons to be preached was generally a mark of Protestant-

tism in wills, though wealthy merchant Thomas Christmas had directed in 1520 that his executors provide 20s. yearly for 80 years 'toward the maintenance of sermons ... every Sunday in Lent.' The next mention of sermons in Colchester wills was in the first Protestant will, that of John Clere in 1538, who requested that 'five sermons be made in the parish church of St. James by the most discretist, wisest, and best learned men that can be gotten,' within one year after his decease, 'to the laud, honor and praise of almighty God and to the true setting forth of His word.' After Clere's will, sermon requests were more frequent, and they were apparently seen as part of the burial arrangements. In 1540, Richard Colbrande, who seemed to have been a fan of the king, wanted 'a sermon in setting out of the glory of God and the honor of our most noble prince.' John Smyth in 1545 requested a sermon 'for preaching the holy gospel of our Saviour Jesus Christ.'31

In Elizabethan Colchester, requests for sermons at burial services continued, but there were fewer requests than one might have expected — only 19 in all of the Elizabethan period. Probably preaching had already become more common in Colchester, but also the burial sermon had become controversial, having been condemned by radical reformers as unscriptural, of pagan origin, and subject to misconstruction as a Catholic ritual (Tromly). But the burial sermon had its defenders among the more traditional Anglicans, and in Colchester the burial sermon, by the 1570s, seems to have become something of a status symbol. Five out of the eight testators requesting sermons in the 1570s were aldermen of the town, and the higher payment, 10s. given for each sermon, reflected the elitist tendencies.

The aldermen of the town took up the slack left by the decline of the parish churches by organizing preaching lectureship. The leaders of the town had always taken some part in religious matters; in earlier times, for example, they were entrusted with oversight of several of the older perpetual chantries, and they were instrumental in helping the Crosed Friars to re-establish themselves in Colchester in 1499 (Higgs 1983, 268-9). Ward has noted that the town leaders were generally cautious in adopting Protestantism, and the majority of the earlier Protestants in Colchester were traders and craftsmen (Ward 1983, 91). When the reformed church seemed to be permanent under Elizabeth, however, the town leaders began to take an active role in its development in Colchester, especially through the lectureship. A document dated October 2, 1564, lists the 2 bailiffs, 8 aldermen, and 35 other men who contributed 'toward the advancement of the preacher's living.' On November 20, 1564, the borough court roll records that William Cole, 'common preacher of the town' was admitted as a burgess. Cole had been educated at Corpus Christi College, Oxford, and was one of the translators of the Geneva Bible (Davids 1863, 107). The wills began to reflect Cole's presence in the town; clothier John Beriff in 1566 left 5s.8d. to Cole 'to preach the glad tidings of the Gospel at my burial.' Nicholas Challoner, who succeeded Cole as 'the common preacher,' was the favorite sermon-maker of the testators during his tenure, from about 1573 to his death in 1580.32

The wills reveal a high regard for preachers in the town.

Though bequests for burial sermons were fewer after the 1570s, legacies of money began to be left to preachers. George Northey succeeded Challoner as common preacher in December, 1580, and Alderman Richard Thurston, in his 1581 will, bequeathed to Northey '40s. as a token of my zeal and hearty goodwill to him. In 1583, Northey ran afoul of the restrictions placed on preaching by the new archbishop, John Whitgift, and he was suspended from preaching for a year. The Colchester bailiffs repeatedly petitioned their influential friends to interfere on behalf of Northey, and eventually Northey was restored (Davids 1863, 75-81, 106-7). By Northey's time, however, there were other preachers in Colchester who had the respect of testators. William Markaunt in 1582 left money to Northey and to 3 other preachers: Lewis at St. Peter's; Loe at St. Leonard's; and Searles at Lexden. Merchant Robert Lambert in 1590 left money to 'my loving friends, the preachers of God's holy words': Northey, Lewis, Monck, Upcher, and Wilton.33

The reliance on 'God's holy words' meant that a Bible became a treasured possession in Colchester. In the early Tudor period, testators owned religious artifacts, such as 'my best rosary,' left by Joan Bretton in 1500, or 'my cross of silver,' bequeathed by Dame Margaret Teye to her son in 1519, but lay people were not permitted to have the complete Bible in English. The first lay person recorded by the wills to own a Bible was Joan Dybney, who in 1571 bequeathed a Geneva Bible to her eldest son and left money to buy books for a student. Dybney had possibly been a refugee on the Continent during the years of Queen Mary, as she mentions 'the chest that I brought from beyond the sea.' Protestant books were also prized; William Markaunt left to his master, Sir Thomas Lucas, 'my great books of divinity called 'Master Calvin's Institutions,' and my book of the New Testament of 'Mr Beza his translation.'34

Close contact with the Word of God through listening to preaching or reading the Bible had other effects which can be found in wills: giving to one's children Biblical or religious names which were not in common usage. For example, Robert Fawkon, in his 1554 will, referred to daughters Grace and Faith, and Adam and Bridget Reve had sons named Samson and Israel. Adam was the son of the Joan Dybney mentioned in the paragraph above, who owned the Geneva Bible in 1571. Adam and his wife, Bridget, died 20 years later, in 1591. Bridget, who died last, left a Bible (possibly Joan's) to their son, Israel, so the Reves were a good example of the value placed upon the Bible in one Colchester family.³⁵

Exposure to preaching and to the Bible probably account for the greater theological awareness and verbalization of beliefs evident in the later Tudor wills. A related concern was the greater awareness of the need for the education of minor children. In the pre-Reformation wills, only a few testators said anything about the upbringing of their minor children, and it was usually something rather general, such as shoemaker John Fraunces' guidance to his wife in 1514 to 'keep and bring forth honestly my children and hers.' There were surprisingly few references to the education of minor children up through the mid-Tudor period, but one Protestant will stood out. William Alldust's 1553 will stated, 'I will also that my wife shall bring up my children in the fear of God. And that my sons shall learn to write and read til they be able to be bound prentice.' There was increasing concern that children be brought up virtuously; mercer Thomas Washington in 1579 wanted his 5 children brought up 'in the fear and service of God.' Likewise, the linkage between godly upbringing and schooling grew. Richard Plaistow in 1571 instructed that his 2 children be brought up 'in the fear of God' and 'to school.' Gentlemen John Markaunt wrote that his wife was to care for the children, 'in the fear of God and good manners and ... cause ... to be taught and instructed in good literature and learning according to their several capacities.'³⁶

Just as more people were expressing concern about the virtuous upbringing of their minor children, so concern about the spiritual condition of fellow townsmen was being articulated in the late Tudor wills, particularly in the instructions about the message to be given in burial sermons. John Markaunt in 1583 requested that a 'zealous and learned preacher' give 'a godly sermon' at his funeral, so that the hearers 'may be taught and exhorted ... to the amendment of life, preparation for death and to live so well that likewise they may die well and end their days in peace.' And, Markaunt made sure that hearers would be present by instructing that 40s, be distributed to the 'needy poor' who were present to hear the sermon. Alderman Thomas Lawrence in 1594 likewise wanted a sermon 'to the stirring up of those that shall be there present to the amendment of their lives,' though Lawrence's sharp business sense emerged when he added that the payment of 10s, to the preacher was not to be made until 'after the sermon ended,"37

William Markaunt provided a model of such amendment of life in his 1582 will, in which he gave money 'by way of restitution' to 16 named people who had paid interest of 10% on money which they had borrowed from Markaunt. He also wanted to reward the righteous when he left money to be distributed 'among the poorest of my kindred, especially those who are given to advance and further the Word of God and the Light of His most holy Gospel, and practices the same in life and conversation.'³⁸ Contact with the Word of God could change lives, and the godly felt that they had a responsibility to share that Good News and to exhort others to good behaviour. The aldermen felt their responsibility in that area, and they increasingly tried to regulate the moral behaviour of the inhabitants of the town.

This concern for 'the amendment of life' of others reveals the fact that the leaders in Colchester believed that there were many in the town who did not share their zeal for religion. They were probably right. Certainly Table 2 indicates that religious concern was less comprehensive than it had been in the early Tudor period, as there were far more people -33% — in the 2 lowest levels of religious concern than ever before. Probably one reason for this change was the breakdown of the system of parish churches, which, when working properly, was a fairly efficient system of keeping people in line. Also, the increasing secularization of society, which was even reflected in the wills, must have been a factor. As the century progressed, secular concerns often began to be mentioned first in the wills, unlike the earlier period, when religious bequests took precedence. Also, the demands were different under Protestantism. Good deeds and conformity to religious practices would eventually gain one an entrance to heaven in the earlier period, whereas Protestantism demanded interior piety and individual responsibility for obeying the Word of God. Perhaps those demands were too great for some. A fourth factor was possibly the development of what seemed to be a spiritual elite among the 'better sort' of people in Colchester, with the result that the lesser people of the town might possibly have become disengaged from religious concerns.

Colchester, then, had lost its comprehensive church with its wide inclusion of everyone. This points up a basic difference between Catholic and Protestant views of what constituted the church. The comprehensive Catholic Church was ready to include all segments of a society, but Protestants, to varying degrees, considered themselves to be the 'called out' people in a society. Protestantism, then, lent itself to the development of the spiritually elite, and this could certainly include lay people since the laity were considered to be quite capable of having a relationship with God without the mediation of the priest. A feeling of superiority could easily emerge if one considered oneself to be one of the 'called out,' or, under Calvinistic predestination, one of the 'elect.' Those in Colchester who were concerned about the 'amendment of life' of others had possibly fallen into the trap of considering themselves superior to those who were not so righteous or knowledgeable about the Word of God as they thought themselves to be.

A lay spiritual elite was especially noticeable in the strong connection between the religious and the secular governance of Elizabethan Colchester, seen most clearly in the establishment of the town lectureship. Not only did the town leaders hire and pay the town preacher, but some of the sermons were connected to the ceremonial of the town; the Assembly Book in 1585 noted that the town preacher was to deliver sermons on 7 specified days, attended by the aldermen and council in their liveries.³⁹

The wills show, then, that Colchester moved from a comprehensive religion centered on the parish church and its priests, to a religion based on preaching, partly controlled by the lay leaders of the town. Protestantism had brought an emphasis on the individual's response to the Word of God; the individual had taken on more responsibility for himself and for others, but at the expense of the unity of the community. Thinking for one's self meant that people might come up with different answers to questions which in turn might produce divisions within the community. Indeed, there were serious disagreements in Elizabethan Colchester, and social unity was threatened. The aldermen did what they felt necessary in taking on responsibility for some of the religious teaching of the town and for the moral behaviour of the inhabitants.

The Reformation was the catalyst for an enormous social and religious revolution in Tudor England; it is hard for us moderns to appreciate the distress of mind produced by the strangeness and uncertainties of new doctrines and practices, and the courage needed by ordinary people to adhere to their convictions. The wills have shown us that the ordinary person in the Catholic years was caught up in a system of priests and prayers for the dead, and of trying to make sure that all the right things were done. On the positive side, there was a sense of unity and community, which, later from the distance of the turbulent Reformation years, must have appeared amazingly comfortable and simple. And yet the wills have also shown that the Catholic beliefs about purgatory and hell were harsh and fear-producing, and the church had a monopoly of the only avenue of escape.

When the ordinary person could finally grasp it, it must have been a relief, even liberating, to set aside the doctrine of purgatory, to know that one's sins were already forgiven by the one-time sacrifice of Christ, and to understand that one did not need the mediation of the priest to offer more sacrificial masses and prayers. Moreover, the ordinary person could have a direct relationship with God through Jesus and could learn about him through the written Word, and that in his own language! The wills have shown us that it was exhilarating for the individual to be able to consider the Word and its promises and to know that they applied to him.

Death had been a fearful matter for many Catholic testators, but for the committed Protestant, death was the gateway to a glorious new life. Like John Harvey in 1602, one could face death unafraid, waiting with expectation and hope '... until the general resurrection at what time I am assured I shall rise again and behold my Lord and Saviour, Jesus Christ, with these my bodily eyes, to my endless joy and comfort.²⁴⁰

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Footnotes

1. Wills of Crakebone, E.R.O. D/ACR2/197; Van Delft, E.R.O. D/ABW38/217; and Robertes, E.R.O. D/ACW3/216. The majority of Colchester wills are housed in the Essex Record Office (E.R.O.) in Chelmsford and the Public Record Office (P.R.O.) in London, and my thanks go to both record offices for their kind permission for me to read the Colchester wills. A few wills are recorded in the Colchester borough court records, which are housed in the Colchester office of the E.R.O. My appreciation must be expressed to Dr. F.G. Emmison and the Friends of Historic Essex, who permitted me to make notes from Dr. Emmison's transcriptions of Elizabethan wills which are yet unpublished. Dr. Emmison's valuable transcriptions do not include preambles, however, so it was still necessary to consult the original wills for the preambles as well as for the precise wording of religious allusions. For Dr. Emmison's published transcriptions of wills, see the following books, all edited by F.G. Emmison: Elizabethan Life: Wills of Essex Gentry and Merchants, E.R.O. Publication No. 71 (Chelmsford: Essex County Council, 1978); Elizabethan Life: Wills of Essex Gentry and Yeomen, E.R.O. Publication No. 75 (Chelmsford: Essex County Council, 1980); Essex Wills, Vol. 1, 1558-1565 (Washington, D.C., National Genealogical Society, 1982); Essex Wills, Vol. 2, 1565-1571 (Boston: New England Historic Genealogical Society, 1983); Essex Wills, Vol. 3, 1571-1577 (Boston: New England Historic Genealogical Society, 1986); and Essex Wills, Vol. 4: The Archdeaconry Courts, 1577-1584 (Chelmsford: Essex Record Office, 1987). Also, six of the early Tudor Colchester wills have been published in an article by G. Montagu Benton, 'Essex Wills at Canterbury,' Essex Archaeological Society Transactions, n.s., 21 (1933-37), 234-69. Spelling and the dating of years have been modernized throughout this paper.

- E.R.O. D/ACR2/44. For the development of the will in England, see Michael M. Sheehan, *The Will in Medieval England* (Toronto: Pontifical Institute of Medieval Studies, 1963).
- 3. For some examples of the use of wills and cautions about them, see R.C. Richardson, 'Wills and Will-Makers in the Sixteenth and Seventeenth Centuries: Some Lancashire Evidence,' Local Population Studies, 9 (1972), 33-42; Michael L. Zell, 'The Use of Preambles As a Measure of Religious Belief in the Sixteenth Century,' Bulletin of the Institute of Historical Research, 50 (1977), 246-9; Attreed, Lorraine C., 'Preparation for Death in Sixteenth-Century Northern England,' Sixteenth Century Journal, 13 (1982), 37-66; Claire Cross, 'The Development of Protestantism in Leeds and Hull, 1520-1640: The Evidence from Wills,' Northern History, 18 (1982), 230-238; G.J. Mayhew, 'The Progress of the Reformation in East Sussex 1530-1559: The Evidence from Wills,' Southern History, 5 (1983), 38-67; and Clive Burgess, 'By Quick and by Dead': Wills and Pious Provision in Late Medieval Bristol,' The English Historical Review, 102 (1987), 837-858.
- E.g. Richard Spery, common councillor (1510-1538) and attorney in the borough court, witnessed 13 wills from 1518 to 1536, and he probably wrote at least some of them.
- Mauncell's will, E.R.O. D/ABW39/48. Rigbe was described in P.R.O. 45 Dixy and E.R.O. D/ACV2; he identified himself as writer in E.R.O. D/ACW3/42 and E.R.O. D/ABW5/331.
- 6. Only 7 Colchester wills dated prior to 1485 are in existence. The Tudor Colchester wills housed in the E.R.O. are indexed in F.G. Emmison, ed., Wills at Chelmsford. Vol. 1: 1400-1619. The Index Library, No. 78 (London: The British Record Society, 1958). The wills housed at the P.R.O. are indexed in 3 volumes: J. Challenor C. Smith, Index of Wills Proved in the Prerogative Court of Canterbury, 1383-1558, The Index Library, Nos 10 and 11 (London: British Record Society, 1893); S.A. Smith and L.L. Duncan, eds., Index of Wills Proved in the Prerogative Court of Canterbury, 1558-1583, The Index Library, No. 18 (London: British Record Society, 1898); S.A. Smith and E.A. Fry, eds., Index of Wills Proved in the Prerogative Court of Canterbury, 1584-1604, The Index Library, No. 25 (London: British Record Society, 1901). Seven wills of Dutch immigrants have not been included in this study as I was unable to decipher the language. I hope to solve that problem and write a short paper contrasting the Dutch and English wills.
- 7. The number of wills increased in 1500 because it was not until then that the wills enrolled in the Court of the Archdeacon of Colchester (now housed in the E.R.O.) were preserved in any number. All but 3 of the 17 extant wills from 1485 to 1499 were enrolled in the Prerogative Court of Canterbury (now housed at the P.R.O.), which handled wills whose testators owned land in more than one diocese. That explains why, in Table 2, there was a disproportionate number in the extremely pious category for the earliest years (1485-99); they were wealthier testators and had the money to provide for many pious deeds or prayers.
- 8. R.C.H.M. Essex, III, 32-46. Some of the Tudor churches had already been torn down in 1922, so it is possible that more than 10 churches were rebuilt in the early Tudor period.
- Wills of Thorne, E.R.O. D/ACR1/112; Wheler, P.R.O. 24 Dogett; and Leveson, P.R.O. 13 Dogett.
- Wills of Aleyn, P.R.O. 1 Fetiplace; Bear, E.R.O. D/ACR1/200; Clere, P.R.O. 17 Moone; and Adam, P.R.O. 7 Vox.
- 11. For a listing of the other gilds, see Higgs, 279, note 53. Here, let me mention that the figures for prayer bequests given in my 1983 work vary slightly from those in this paper. Since the first writing, I have found an additional three wills from the period, and I also decided that the few testators who requested prayers in a general way, even though they did not specify the kind of prayers, should be included.
- Wills of Piggisley, E.R.O. D/ACR1/113, and Camoke, E.R.O. D/ACR1/222.
- 13. Will of George Aleyn, P.R.O. 1 Fetiplace.
- 14. Included in these figures are general bequests for money to be 'disposed in alms,' as well as the bequests in the few wills by clerics, so the figures are higher than my earlier ones; see Higgs, 218.
- 15. Will of John Salough, P.R.O. 3 Fetiplace.
- 16. Wills of Man, E.R.O. D/ACR1/16, and Leveson, P.R.O. 13 Dogett.

- 17. Wills of Semer, E.R.O. D/ACR1/84, and Whithed, E.R.O. D/ACR1/51, and similar phrases in P.R.O. 30 Blamyr and E.R.O. D/ACR1/112, both in 1503. Will of Honyngton, E.R.O. D/ACR2/70, and the 1541 will, E.R.O. D/ACR4/147. The economic imagery ended in 1521 (E.R.O. D/ACR2/123), although there was an isolated usage of 'wealth of my soul' in the will of widow Anne Coksale in 1538 (P.R.O. 26 Dyngeley). The health imagery ended in 1536 (Guildhall Library MSS.9171, vol. 11, folio 84) except for an isolated instance of the phrase, 'for the health of my soul,' during the Marian period in 1556, possibly signifying the Catholic bent of William Cornewell (E.R.O. D/ABW8/245).
- 18. Will of Richard Ruoke, E.R.O. CR1/171.
- Wills of Saunderson, E.R.O. D/ACR4/80; Lowthe, E.R.O. D/ACR3/100; and Wyseman, E.R.O. D/ABW39/198.
- 20. Will of Honyngton, P.R.O. 18 Logge.
- Wills of Prestney, E.R.O. D/ABW28/51, and Weston, E.R.O. D/ABW39/51.
- 22. Will of John Clere, P.R.O. 25 Dyngeley. My thanks to Virginia Bainbridge, who pointed out the significance of the use of 'hands' in a talk which she gave in 1987 at the Institute of Historical Research in London on 'Popular Religious Devotion in Cambridgeshire, 1500-1558.'
- 23. An interesting exception occurred in the 1520s, when the testators of 3 wills William Damyon, 1525 (E.R.O. D/ACR2/178); Henry Thorpe, 1527 (E.R.O. D/ACR2/200); Robert Thorpe, 1528 (E.R.O. D/ACR2/208) commended their souls only to Jesus Christ. They were, however, all apparently written by Sir John Thixstill, whose name occurs first in the list of witnesses in each of the wills. Sir John, described in the wills as curate in St. Botolph's parish, was the sacrist at St. Botolph's Augustinian Priory, according to the Colchester borough court records of 1526-1527, roll 19 (where he was charged with ill rule with the wife of the late Richard Rychold!).
- The early wills with no mention of Mary or the saints: E.R.O. D/ACR4/25; E.R.O. D/ACR4/33; E.R.O. D/ACR4/81. Saunderson's will, E.R.O. D/ACR4/80.
- Wills of Beckett, E.RO. D/ABW3/104; Lewis, E.RO. D/ABW23/176; and Sayer, P.R.O. 73 Drake.
- 26. Will of Clere, E.R.O. D/ACR7/262.
- 27. Wills of Nichols, E.R.O. D/ACR6/454, and Baker, E.R.O. D/ACW7/10.
- Wills of Halle, and E.R.O. D/ACR5/36, and Pullyn, E.R.O. D/ACW2/147. Pullyn was probably the son of an ardent reformer, John Pullen, who had been appointed Archdeacon of Colchester in 1559.
- 29. Will of Tompson, E.R.O. D/ACW2/45.
- 30. Will of Boniure, E.R.O. D/ACR6/433.
- Wills of Christmas, P.R.O. 28 Ayloffe; Clere, P.R.O. 25 Dyngeley; Colbrande, E.R.O. D/ACR4/82; and Smyth, E.R.O. D/ABW33/126.
- 32. The document of 1564, E.R.O. D/Y2/2; will of Beriff, P.R.O. 17 Crymes. Cole was last mentioned as common preacher in a will of 1568 (E.R.O. D/ACR6/96). George Withers, Archdeacon of Colchester, was mentioned in the parish records of St. Nicholas' Church as town preacher in 1570, but that is the only mention of him in that capacity that I have found. In the will of Alderman Nicholas Clere in 1579 (P.R.O. 25 Bakon), Challoner was said to be a cousin of Clere's. George Northey, who succeeded Challoner as town preacher, apparently married Challoner's widow (see Northey's will, E.R.O. D/ACW3/14).
- About Northey's becoming common preacher, Assembly Book, 1/21d; wills of Thurston, P.R.O. 30 Darcy, Markaunt, P.R.O. 12 Rowe; and Lambert, P.R.O. 67 Harrington.
- 34. Wills of Bretton, Colchester court roll, 1541, roll 6; Teye, E.R.O. D/ACR2/98; Joan Dybney, E.R.O. D/ACR6/219; and Maukaunt, P.R.O. 12 Rowe. A Margaret Dibney from Colchester was a refugee living in Aarau in Switzerland, according to Oxley, 204. The student to whom Joan Dybney left money for books was Samuel Halsnoth (or Harsnett), who later became Master of Pembroke College, Cambridge, and Archbishop of York from 1628 to 1631; see Martin, 1959, 51; V.C.H., II, 504.
- Wills of Fawkon, E.R.O. D/ABW14/77; Adam Reve, E.R.O. D/ABW32/24; and Bridget Reve, E.R.O. D/ABW32/33.
- 36. Wills of Fraunces, E.R.O. D/ACR2/1; Alldust, E.R.O.

D/ABW1/90; Washington, E.R.O. D/ACR7/208; Plaistow, E.R.O. D/ACR6/314; and Markaunt, P.R.O. 49 Brudenell.

- Wills of Markaunt, P.R.O. 49 Brudenell, and Lawrence, P.R.O. 80 Dixy.
- 38. Will of Markaunt, P.R.O. 12 Rowe.
- 39. 1/39. My thanks to Dr. Janet Cooper and her V.C.H. staff for sharing their notes on the town preacher. Also very helpful was the report given by Mark Byford in Chelmsford in March, 1987, to the Essex Branch of the Historical Association.
- 40. Will of Harvey, E.R.O. D/ABW20/22.

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An Archaeological Sequence at the Edge of Old Harlow Marketplace

by David Andrews, with a pottery report by Helen Walker

Excavation on the north side of Market Street, Old Harlow, revealed evidence for a structure built with earth-fast posts datable to the 13th century, succeeded by a more permanent timber-framed building dating to the 13th-14th century. These were located at the edge of the gravel-surfaced marketplace. Subsequently the gravel surfacing was extended to cover the site of these buildings, but a further building was erected in much the same place in the 17th century. The medieval pottery found is assumed to have been made locally, and is the first significant assemblage of the products of this important industry to be published.

Introduction

An excavation in 1971-72 by Mike Jury adjacent to the Chequers public house in Market Street, Old Harlow (Fig. 1), revealed deep waterlogged deposits containing an abundance of medieval pottery datable from the 13th to the 15th/16th centuries. Proposals to redevelop the site in 1988 prompted an archaeological response leading to an excavation in September 1989, undertaken by Essex County Council and the Harlow Archaeological Group. Since the area next to the Chequers served as the site access, the excavation was located to the west of the area where the waterlogged deposits were found, the trench measuring about 6m by 7m.

Although relatively straightforward, there are aspects of the sequence which are problematic. What is presented here is a rationalisation of it, adjusted to make better sense as a series of structural events. A full examination of these problems can be found in the site archive.¹

Historical Context

The medieval topography of Harlow is complex, comprising as many as seven manors, on which are overlaid the town (or old town since 1947) and the hamlets of Mulberry Green, Churchgate Street, and Potter Street.² The principal manor was Harlowbury, which was given in 1044 to the abbey of Bury St. Edmunds. In 1218, abbot Hugh II obtained the grant of a Monday market and annual fair, something which as so often happened at this period gave rise to the growth of a town. The marketplace lies about half a mile due southeast of Harlowbury, beside a junction where the roads leading north-south from Epping and London through to Newmarket and Norwich, and east-west from Hertford to Dunmow, intersect. It was doubtless this road junction that led to the site being chosen. Whether there was anything there beforehand is another matter. It is unlikely that the site was totally unoccupied, and indeed Fisher (1937, 139) argued the possibility of there having been a market in the

reign of Stephen. Rentals of 1302 and 1430 list 54 tenants in the marketplace (Fisher 1937, 138). Many of these also held strips in Chipping Field to the south of the marketplace, that part of the field being known as Molland. Although abbot Hugh gave the tenants a charter allowing them to hold their tenements 'as freely as our burgesses of St. Edmund and our other burgesses', an inquisition held in 1290 concluded that the market tenants were of villein status, even if they paid rent rather than carrying out customary services.

Excavation

Period I (Fig. 2)3

The natural was a yellowish, brownish sand with iron panning, found at a depth of 1.0-1.2m. This was overlain by loamy gravel, in turn covered by a very weathered dark brown sandy loam, with some rounded flints and stones. The latter was probably a buried soil. The presence of prehistoric flint tools and pottery, very abraded Roman brick and tile and pottery, a piece of daub, and some medieval sherds, indicate that this layer had formed over a considerable period of time.

A line of north-south post holes (82, 75, 90) and a probable east-west return (110), represented a structure located to the N of gravel metalling (115) which ran along the S side of the site. The post holes were cut into an extensive layer of olive-brown sandy loam (77), which contained fragments of Roman brick and tile and therefore probably also formed part of an old soil. The post holes themselves were large (800-900mm across), though of variable depth (250-780mm), and were filled with yellow-brown chalky clay. Other smaller post holes and shallow depressions may have been related to this structure, in particular to attempts to reinforce or repair it. A small portion of an east-west slot (119) may have been associated with a wall alignment on the north side of this structure, or may have been an earlier feature.

In view of the use to which this area was put, it is reasonable to conclude that the post holes represent a market building. It would, however, be hazardous to attempt a detailed reconstruction of it, beyond noting that it was 4-5m wide, and may have been open on its south side where it adjoined the marketplace. This argument is to a degree strengthened by the establishment from this time of alignments that have endured until the present day. Thus the apparent west, south and probably the north sides of the structure correspond with those of the building of the next period, whilst the south side (as represented by the extent of the gravel metalling and post hole 69) survived as the line of the frontage until the 20th century.

The gravel to the south represents the marketplace surface. It is possible that gravel metalling (73) to the west of

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Fig. 1 Location plan.



Fig. 2 Plan of period I features.

the structure assigned to the following period was already in position by this time. Since the post hole structure was not located over an area of gravel metalling, it could be argued that it was integral to the market lay-out.

The pottery from this period dates mainly to the 12th and 13th centuries, consisting for the most part of medieval Harlow Ware. The use and abandonment of the building may be assigned to the 13th century.

Period II (Fig. 3)

A layer of yellow brown chalky clay (59) covered the northeast part of the site. To the west and south of it, there were gravel spreads (73, 115). There can be no doubt that 58 represented the floor of a timber-framed building, the walls of which have left no trace, but which would have been located at the edges of the clay. To the north, the clay had been cut away by a later feature, but it might well be that the edge of the building was here in much the same position as that of the structure of the earlier period, and near the limit of excavation. If so it seems to have been about 5m wide with its long axis aligned east-west.

It could be argued that the period I structure, which might have been a sort of stall, had been succeeded by a more permanent shop with residential quarters. The recovery of a fragment of window glass from 59 could be taken to imply that the building was of a reasonable quality. The

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Fig. 3 Plan of period II features.

pottery assemblage is much the same date as that from period I, again comprising mainly medieval Harlow Ware, but with the appearance of Mill Green Ware. A late 13th to 14th century date might be suggested for this building.

Period III

The period II building was covered by a layer of hard dark yellow brown gravel (60), which was cut by an east-west linear feature (56) at least 450mm wide and 120mm deep, and a post hole (54). It seems that the buildings of the two previous periods were succeeded by an open metalled area. The linear feature 56 was too wide to have been a wall of either a brick or timber-framed building, though it is in much the same position as the N side of the period I structure. It was the only context in this period that contained datable finds, its fill producing pot of the 15th-16th century. This would be consistent with a 14th-16th century date range for the period which can be inferred from the rather better dating evidence for periods II and IV.

Period IV (Fig. 4)

A layer of gravel (2) about 200mm thick was recorded as covering the entire site. Other gravel layers (99, 105) in the southern part of the site were probably resurfacings of this. On this gravel there was then erected a building represented by layers and features which, although in some cases quite
clearly chronologically separate, can only exceptionally be demonstrated to be so stratigraphically. This may in part be explained by a reduction in ground level which occurred when the building was demolished in this century.

Directly overlying the gravel were patches of clay flooring (21 and 29). Context 21 was in fact two layers, a burnt one overlain by a thicker cleaner one of clay. The west and south walls (9, 5) of this building were found in the excavated area. Both had brick footings ranging from about 220-260mm in width, and made of two parallel courses of stretchers and brickbats, bonded with mortar. The bricks were 'Tudor' in type, perhaps datable to the 17th century.

Inside the building, there were two groups of features that clearly had structural significance, though quite what, is less certain. In the north-east corner of the excavation, there was a rectilinear cut feature (23) measuring 1.0×0.75 m internally, and up to 0.14m deep. It was lined with re-used bricks, and filled with a blackish silty loam containing mortar, flint, brick and burnt wood. Cut through the west half of this was a slot running north-south (17) and returning east-west (19), about 500mm wide and 50-90mm deep. It was filled with a hard mortar mix containing some brick and tile. To the west, three slots (13, 11, 36) formed a reversed Fshaped configuration. These were 300-400mm wide, and about 100mm deep. Cut into the north-south slot were three post holes (30, 32, 34). Inside the building, a number of post holes of varying sizes were found.

Externally, several post holes (92, 112, 114, 121, 129, 133, 127) were cut into the gravel metalling, which was renewed with more gravel (72), in which was cut a trench (3) parallel to the south wall of the house. This trench was too wide to be related to the construction of wall 5, and instead must have been connected with some late phase of repair or alteration. It also, of course, cut through post-holes 127, 92, 112 and 114. Set in it at the east edge of the excavation was a row of bricks (44).

The main gravel deposit (2) contained, as well as medieval Harlow Ware, post-medieval red earthenware datable to the 16th-17th century. Similarly datable postmedieval red earthenware was recovered from clay floor 21 and the fill of feature 23.

Slot 17 cutting 23 contained 19th century pottery. The fill of slot 13 in the reversed F-shaped feature to the west contained 19th-20th century pottery, and two pennies dated 1861 and 1904. Slot 36 forming part of the same feature contained a large quantity of late 19th to early 20th century artefacts and building debris. In contrast, the post holes 30 and 34 cut into it produced a little late medieval pottery and some daub. Finds were recovered from only one (40) of the scatter of postholes inside the house, namely a residual medieval sherd. The external gravel (72) contained pottery of the first half of the 19th century, and also a halfpenny of 1899. The fill of the trench (3) along the south side of the house produced finds of the first half of the 19th century. Wall 44 was made with frogged bricks.

The layer of gravel (2) seems to represent a major renewal of the market surface, dating from the 16th-17th century. The building represented by walls 5 and 9 must have been timber-framed, and of similar date. As is not uncommon, it seems to have endured for two hundred years or more, with doubtless several phases of reconstruction, for which there was little archaeological evidence. Its south wall was in much the same position as that of earlier buildings, only encroaching very modestly on to the marketplace. Assuming it to be 6-7m wide, its north wall would have been just beyond the northern limit of excavation. Its west wall seems to have occupied a new alignment.

The building may originally have been clay-floored, though the clay layers (21, 29) could represent a levelling of the site preparatory to the construction of the building. Some of the reversed F-shaped group of slots may have been for sleeper walls for a suspended floor, as well as possibly for partition walls. The recovery of a few fragments of red clay pammets and yellowish flooring bricks show that some of the floors were made with these materials. The sunken rectilinear feature (23) with its blackish fill which included a little burnt wood, tile and daub might conceivably have been an ashpit, whilst the later slots cutting it might have been for a chimney. The clay layers in this area had been burnt or contained burnt material. It would also make it possible for the building to have had a lobby entrance type plan. If 44 is interpreted as the base for a step, then it would be in the right place for an entrance opposite the postulated fireplace. Lead window came and window glass from the fills of the latest features indicate that the windows had leaded lights with diamond quarries, though the presence of plate glass no doubt shows that some of these had been replaced with sashes or larger windows.

The appearance of the building seems thus to have always been that of a modest cottage which never underwent substantial improvement. In view of its location, it would be reasonable to conclude that it served as a shop, as well as being residential. Externally, some of the postholes cut into the gravel form a convincing line at right angles to the building, suggestive of some light structure such as a stall. These were sealed by a remetalling of the gravel probably in the first half of the 19th century. At much the same time, slot 3 was excavated. It is conceivable that this was associated with a refacing of the building in brick.

The finds and debris from the reversed F-shaped feature suggests that the building was demolished early in the 20th century. This is reasonably consistent with the cartographic evidence. From the time of the first surviving large scale map, the 1849 tithe map,⁴ to the OS map of 1921, a row of three properties set back from the street is shown to the west of the Chequers (Fig. 1). The excavated structure may be identified with the largest and most westerly of these. On the 1948 map the front part of this western property is empty, but the warehouse existing at the time of the excavation occupied the rear of the property. In other words, the building was demolished at some time between 1921 and 1948. The tithe map describes as a cottage in the occupancy of George Deard, who according to contemporary directories was a plumber and glazier.

Period V

The remains of the period IV building were covered by several layers of tarmac and a concrete hardstanding. The



Fig. 4 Plan of period IV features.

most recent of these, at least, were associated with the postwar warehouse that occupied the northern part of the property until 1989. In creating this yard, the site had probably been levelled off with some degree of ground reduction. Certainly the shallowness of some of the postholes within the period IV building suggested there had been truncation. The yard was later enlarged by demolishing the surviving properties adjacent to the Chequers, an event which prompted Mike Jury's excavations of 1971-72.

The Finds

The Flint by Hazel Martingell

Thirteen pieces of residual worked flint were recovered from the excavation. They comprised cores, flakes and a rod fabricator. The latter is probably Mesolithic/Early Neolithic, as later examples are usually larger and do not have the characteristic blade-like whale-back appearance of this piece.

The Prehistoric Pottery by Nigel Brown

A single prehistoric rim sherd was found in the buried soil. It is a flat-topped rim in a flint-tempered fabric, probably from a simple coarse-ware bowl. It is not closely datable: such vessels could occur in flint-tempered fabrics in most periods from the Early Neolithic to the Iron Age.

Roman Finds

These consisted mainly of brick and tile fragments, including a piece of combed box flue tile, and were concentrated in the buried soil, though a few were present in medieval contexts. Copper alloy objects comprise a 3rd century barbarous radiate, and a Hod Hill-type brooch. Six potsherds were recovered. The fabrics present comprise sandy grey ware, Hadham Oxidised Ware, and samian (?South Gaulish).⁵

Fabric																									
		<u> </u>	onlext/feature	Relationships	Early medieval ware	Early medieval transitional	Medieval coarse ware	Sandy orange ware	Medieval Harlow ware	London-type ware	Mill Green ware	Post-medieval red earthenware	Metropolitan slipware	Notis/Derby stoneware	Modern stoneware	Chinese porcelain	English porcelain	Сгеатware	Yellow ware	Pearlware	Ironstone	Misc. post 1750	Flowerpot fabric	Dating	Comments
		8	fill of linear feature 7		-	-	-	-	1	-	-	-	-	-	1	-'	-	-	-	1	-	-	2	late 18th C onwards	
	ĺ	41	fill of		_	<u> </u>	-	_	1	-	1	-	-	-	_	_	_	_	_	-	-	1	_	residua) modioval	
			fill of linear		<u> </u> _		_	-	12	_	_	17	_	1	3	-	1	11	1	5	а	1	1	early 19th C	Base of ?Leeds
		-	feature 3 oravel		-	┝		-	12			" "	-	-	-		ŀ	-	ŀ		-	-	-		creamware leapot Harlow ware handled
		72	metalling		-	-	-	-	11	1	_	э	-	-	2	۲.	-	<u> </u>	~	4	3	_	_	• •	bowl (no. 11)
		135	posthole 133		-	-	-	-	-	-	-	-	-		1	-	-	2	-	-	-	-	-	from later 18th C	
		122	fill of posthole 121		-	-	-	1	-	i –	-	-	-	-	-	-	-	-	-	-	-	-	-	residual medieval	
		118	petch of flints	above 99/105	-	-	-		-	-	—	-	-	-	-	-	-	-	-	_	-	1	-	post 1750	
		99	gravel spread	same as, but	-	-	-	-	_	-	-	1	-	_	-	-	-	1	-	-	-	-	-	from later 18th C	
	IV	105	grável	?equates	_	-	-		12	-	-	14	1	-	-	[_	_	_	-	-	_'	-		17 lh C	Black-glazed ware; rim of Metropolitan slipware dish
		130	fill of cut	WILD Z	1_	-	_	-	-	-	_	3	_	-	-	-	-	-	-	_	-	1	_	15th/16th C	Slip-painted red
		14	fill of E-W	above 31	-	-	-	_	_	_	_	-	_	-	2	-	2	-	1	6	8	1	-	Victorian	Bears grease pot lid:
		31	lill of		1_	-	-	_	2		-	_	_	_	_	_	_	-	_	_	_	_	_	residual	(nano-pained saucer(no io)
		35	fill of		1_	-	_	_	2	_	-	-	_	-	_	_	_	_	_	_	-	1	-	residual	
		18	fill of	cuts 22	<u> </u> _	-		_	_	_	-	2	_	-	_		-	_	1	-	1	-	2	191h/201h C	Ironstone with green
		24	fill of rectilinear		_	-	_	1	2	-	_	3	_	-	-	-	-		_	_	-	1	-	16th/17th C	Harlow ware jug rim (no. 12);
		22	clay loam layer		╞	t _	_	_	_	_	_	1	_	-	_	-	-	-		_	_	-	_	161h C	
		2	gravel spread	?equates with	-	-	-	_	10	_	_	12	_	-		-	-		-		_	_	-	from 16th C	Lid-seated cauldron or
Period	111	67	fill of linear	99/105	-	-	_	1	ю 6	_	_	18	_	1	_	_	_	_	_	-	_	_	-	15th/16th C	pipkin rim (no.14) Fragment from
		73	sand/gravel	above 74	-	5	2	ج	50	2		7	_	-	-	_	_	-	-	_	_	-	-	from mid 13th C	Several illustrated
	п	7.0	spread sand /gravel		┢_	Ľ	2	Ľ	he	-	-	<u> </u>	-	_		┣_	-	<u> </u> _	-	_	_	_	_	Pintrusive fabric 40 early to	sherds (nos. 4.7-10,13) Harlow Rouen-style
		74	spread clay spread/		-	-	2	-	20	-	-		-	_	-					_	_	_		mid 13th C one 15th-16th C	jug handle Fabric 13t bowl
		59	floor		-	10	1	3	11	-	_	-	-	_	_	-	-	-	<u> </u>	-	_	<u> </u>	_	sherd late 12th to	rim (no.1)
		83	posthole 82	cuts 77	-	<u> -</u>	Ŀ	-	1	-	-	-	-		<u> </u>	-	-	-	-	1-	-	-	-	mid-13th C	
	1	76	posthole 75	cuts 77	Ŀ	1	1-	-	2	1	-	-	-	-	<u> -</u>	-	-	-	-	-		-	-	d De	
		91	fill of N+S positiole 90	cuts 77	_	-	-	-	2	-	-	-	-	_	-	-	-	-	<u> -</u>	-	-	-	-	" h	-
		77	layer		-	1	1	2	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	late 12th to mid-13th C	Sandy orange wares (nos. 2-3)
		108	clay capping of posthole 110	above 109	-	-	-	-	з	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		109	lower fill of post pipe 117		-	-	-	-	11	-	-	–	-	-	-	_	<u> </u> _	-	-	-	I	-	-	4	Harlow ware cooking pot with cordon (no.5)
		103	upper fill of posthole 102		1	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-		Harlow ware cooking pot rim (np. 6)
		107	fill of posthole 106		2	-	-	-	3	-	-	-	-	-	-	-	[-	-	-	-	-	-	-		
	-	104	?buried soil		-	-	2		1	-	-	-	-	-	-	-	[-	-	-	-	-	-	-	1) II	Prehistoric, Roman and Saxon pottery also found
•					₽	₽	8	5	뎚	36	35	å	40A	45G	45M	48A	48B	480	48E	48P	48D	48X	518		

Table 1.

Saxon Pottery by Susan Tyler

Six Saxon sherds were found, five of them in the buried soil 104, the rest in late and post-medieval contexts. The sherds divide equally into sandy and vegetable-tempered fabrics. A single rim, in a sandy fabric, is a simple everted type and cannot be closely dated but certainly belongs to the period AD 550-750. The presence of some sherds with vegetable tempering, which at some Essex sites seems to have been most common during the 6th and 7th centuries (Hamerow 1988), is compatible with the date indicated by the rim.

The Medieval and Later Pottery by Helen Walker Introduction

A total of 418 sherds weighing 4.85kg was excavated. Much of the pottery is medieval Harlow Ware in a variety of forms. Later pottery spanning the 16th-20th centuries was found, with much of it datable to the turn of the 19th century.

The pottery has been classified using Cunningham's typology (Cunningham 1985a, 1-4), and quantified by weight and sherd count. The pottery from the individual periods and from buried soil 104 is summarised in table 1.



Fig. 5 Medieval pottery.

The Fabrics (Fig. 5)

Early Medieval Ware (Fabric 13)

See Cunningham 1982, 358; and Drury, forthcoming. Handmade, with coarse sand tempering, and typically with a grey core and red-brown surfaces. The suggested date range for this fabric in central Essex is 11th century to c.1200. Only three sherds were found, all in period 1.

Early Medieval Ware - transitional (Fabric 13t)

This ware appears to be transitional between Early Medieval Ware and Medieval Coarse Ware. It has a fine matrix, tempered with abundant sub-rounded, grey, white and colourless sands, and is micaceous. Surfaces are smooth, sometimes knife trimmed. Like Early Medieval Ware, it tends to be oxidised. Its colour is buff-brown to red, sometimes with a grey core. But in common with Medieval Coarse Ware, at least some vessels are wheel-thrown and cooking pot rims tend to be developed. It resembles an early fabric from a Hedingham coarse ware kiln at Hole Farm in north Essex (Walker in prep.). It has also been recognized at a settlement site at Molehill Green, Stansted (Walker in prep.), where it occurred with fine wares dated to around the middle of the 13th century. At Harlow Market Street, it first appears in period I. One form is present, the rim of a large bowl (no. 1).

Medieval Coarse Ware (Fabric 20)

A hard coarse sand-tempered fabric (but not as coarse as Fabric 13), usually grey in colour. It derives from a variety of sources spanning the 12th-14th centuries. For a more detailed description see Cunningham 1982, 359, 363, and Drury, forthcoming. Here it is found in periods I and II, but no forms are present. Some of the sherds could be reduced Harlow Ware.

Sandy Orange Ware (Fabric 21)

Any sand-tempered, oxidised fabric, typically orange with a grey core. Usually of local origin, with a date range from the 13th to the 16th century. Discussed in Cunningham 1982, 359 and Cunningham 1985a, 1. Examples found at Harlow Market Street comprise jar rims and sherds from jugs, often decorated (nos. 2-4).

Medieval Harlow Ware (Fabric 21D)

A type of sandy orange ware probably made at Harlow. It is tempered with well-sorted, rounded sands 0.25-0.50mm in size, often with a red or amber sheen. It is micaceous, and also contains occasional chalk flecks and red oxides. The texture is pimply, and it has a hackly fracture. The colour is typically dull orange-brown, sometimes with a pale creamy orange core or margins, but a bright orange fabric with a grey core is also found at Market Street.

There is only circumstantial evidence that this ware was made in or around Harlow, as no medieval kilns have been discovered. However, there is documentary evidence of potters there from the 13th century (Newton and Bibbings 1960, 360). Other find spots include Canes Lane and Eastwick near Harlow (W. Davey pers. comm.), and Molehill Green near Stansted. At the latter it was associated with fine wares of around the mid-13th century. The fabric may have been continuously produced throughout the later Middle Ages and into the post-medieval period, eventually evolving into the well known Metropolitan Ware industry.

This was by far the most frequent fabric found at Market Street, accounting for nearly 45% of the pottery by sherd count. It first appears in period I. Forms comprise cooking pots. These are wheel thrown and come in a variety of types, of which the main ones have been illustrated (nos. 5-7, 10). All the cooking pots have sagging bases, and often have a plain splashed glaze inside the base extending up the sides of the pot. There are two slip-painted bowl rims, one with a handle (nos. 8, 11). One jug rim in a later version of the fabric is illustrated (no. 12). In addition, there are six jug handles. One is decorated (no. 9), while another handle is of Rouen style and is described in the text. All handles are round or oval in section. There is one thumbed jug base and one recessed jug base. Several sherds exhibit cream slippainted decoration under a plain lead glaze, and there are five instances of cream slip coating under a plain lead or green glaze. One of the latter shows combed decoration, giving a yellow and brown striped effect. These examples probably also come from jugs.

London-type Ware (Fabric 36)

A red-firing sandy fabric produced in the City, or more likely just outside it, from the mid-12th to the early 14th century, and fully described by Pearce *et al.* (1985). At Harlow, and nearby at Weald Hall, it has already been found in small quantities in late 12th and early 13th century contexts, but is absent in late 13th to early 14th century ones (Pearce *et al.* 1985, fig. 1, 2 & 3). It may have reached Harlow from London via the river Lea.

At Market Street, a total of eight sherds were excavated, first appearing in period I. No forms are present, apart from a thumbed jug base which is found on most jug types throughout the period of production (Pearce *et al.* 1985, 26). Decorative types can sometimes be dated more closely. The sherd from period I just has a plain lead glaze, but two from period II have a white slip coating with combed decoration beneath a green glaze (no. 13). However, combing is found on both early style jugs of the late 12th century, and on highly decorated jugs of the mid-13th century (Pearce *et al.* 1985, 30, fig. 18.29).

Mill Green Ware (Fabric 35)

A fine micaceous fabric usually brick red with a grey core, described by Pearce *et al.* (1982), and made at Mill Green near Ingatestone in central Essex. The products were traded around the Home Counties, especially Essex and Kent, with large amounts exported to London where it has been excavated from Thames waterfront deposits dating from the later 13th to the mid-14th century. However, at North Shoebury in south-east Essex, Mill Green Ware was found stratified with London-type wares of the early to mid-13th century (Walker forthcoming), so perhaps the industry was already in existence before trade with London began. Mill Green Ware has already been found in small quantities at Harlow and just to the north-east at Sheering (Pearce *et al.* 1982, fig. 2).

At Market Street, Mill Green Ware was only found in period II.

Post-medieval Red Earthenware (Fabric 40)

Described by Cunningham 1985a, 1-2. It first appeared in the late 15th century and was current throughout the postmedieval period. The fabric changes little throughout the centuries, but examples can sometimes be dated from surface treatment or form. At Harlow Market Street, it first appears in period III. Two sherds are illustrated (nos. 14, 15).

Metropolitan Slipware (Fabric 40A)

A type of post-medieval red earthenware decorated with trailed white pipe clay, and covered in a clear lead glaze giving a bright ginger-brown surface and yellow slip decoration. It was manufactured at Harlow from the 17th century (Noel Hume 1970, 102-3). Only one sherd is present, in period IV.

Nottingham/Derby type stoneware (Fabric 45G)

A thin-walled stoneware with a lustrous brown glaze manufactured throughout the 18th century (Noel Hume 1969, 36). One sherd only was found, in period IV.

English Stoneware (Fabric 45M)

First manufactured in the late 17th century (Draper 1984, 33).

Chinese porcelain (Fabric 48A)

Imported in quantity from the late 17th to the end of the 18th century.

English porcelain (Fabric 48B)

Described by Draper (1984, 53, 55) and first produced c.1745.

Creamware (Fabric 48C)

A fine smooth pale earthenware covered with a liquid lead glaze to give a pale yellow body. It was first produced in the 1750s. As time went on, Creamware was improved and made whiter. It can be distinguished from Pearlware by the greenish yellow colour of surplus glaze around the footrims and handles (Noel Hume 1969, 25).

Most of the Creamware found here is almost white and is probably late 18th century rather than mid-18th century. Forms are mainly undecorated flanged plate rims. There is one cup rim, also undecorated, and a moulded base possibly from a teapot.

Yellow Ware (Fabric 48E)

A thick-walled yellow-glazed ware, decorated with bands of blue, and sometimes with a dendritic pattern known as mocha. It dates from the later 18th to the 20th century.

Pearlware (Fabric 48P)

Similar to Creamware, but made whiter by the addition of cobalt to the glaze in order to neutralize the yellow of the lead glaze. It was made from about 1779 and remained popular until about 1830. It can be distinguished from Creamware by the concentration of blue in any build-up of surplus glaze (Noel Hume 1969, 25).

Staffordshire-type Ironstone (Fabric 48D)

Essentially modern china, first produced in the early 19th century.

Miscellaneous post-1750 (Fabric 48X) Modern flower pot fabric (Fabric 51B)

Pottery from Period I

The fabrics found comprise Early Medieval Ware (including Fabric 13t); Medieval Coarse Ware; Sandy Orange Ware; Medieval Harlow Ware; and one sherd of London-type Ware. The latter is undiagnostic, but is the most accurately dated fabric, giving a probable date range of late 12th to mid-13th century. The pottery gives the impression of being an approximately contemporary assemblage.

Two Harlow Ware rims are illustrated. No. 5 is a large cooking pot decorated with a thumbed cordon and shows signs of having been heated in a fire, while no. 6 is smaller and plain. Two sandy orange ware sherds from the sandy loam layer 77 are of interest, a jar or cooking pot rim (no. 2) and the stump of a jug handle (no. 3). The latter is glazed and slip-painted, with a vertical thumbed applied strip beneath the handle.

Pottery from Period II

Quite a dense concentration of pottery was found in gravel spread 73, and a smaller amount in floor 59, which produced a similar range of fabrics to that found in period I. A large Fabric 13t bowl with stab marks on the rim (no. 1) is noteworthy. Large bowls in this fabric were found at Molehill Green, Stansted (Walker in prep.). They may have had a dairying use such as heating milk to separate the cream, and indeed there are signs of sooting on the outside of the vessel.

Gravel spread 73 contained mainly medieval Harlow Ware. This included a jug handle (too abraded to draw) with thumbed 'ears' at each side of the upper attachment reminiscent of Rouen jugs from northern France. It is known that Rouen jugs were copied in London-type Ware during the early to mid-13th century so perhaps this Harlow Ware version is of the same date. A Harlow Ware jug handle decorated with slip dots (no. 9) is illustrated, as are a slip-painted bowl rim (no. 8) and two cooking pot rims (nos 7 & 10). No. 7 shows signs of having been heated in a fire.

Other wares from 73 which are illustrated are a sherd of sandy orange ware with sgraffito decoration (no. 4), and a London-type ware sherd with combed decoration (no. 13).

Appearing in 73 for the first time in the sequence are Mill Green Ware and post-medieval red earthenware. The Mill Green sherds have a cream slip coating under a mottled green glaze. One sherd is combed, a typical Mill Green style of decoration. The red earthenware consists of a pad base from a jug with an all-over dark green glaze which could be as late as the 17th century. This may be regarded as being intrusive, or as indicating that the gravel surface remained exposed for a long period of time.

Apart from the post-medieval red earthenware, the latest pottery is Mill Green Ware dating from the later 13th century, or before, until the mid-14th century. Otherwise, the presence of highly decorated sherds could indicate a 13th century date, and if the London-type ware sherd is of the 'Highly Decorated' style, this gives a mid-13th century date which may be taken as an approximate *terminus post quem* for gravel 73.

Pottery from Period III

Only one context from this period produced pottery, namely the fill of linear feature 56. The latest datable sherds are of slip-painted unglazed post-medieval red-earthenware, probably from large jugs or cisterns datable to the 15th-16th centuries, and the remains of a glazed pedestal-base cup in the same fabric and of similar date (*cf.* Cunningham 1985b, 71).

Pottery from Period IV

Pottery dating from the 15th/16th century up to the 20th century was recovered from period IV. Gravel spread 2 produced medieval Harlow Ware, and a post-medieval red earthenware lid-seated cauldron/pipkin rim (no. 14) dating from the 16th century. Of the somewhat later gravels in the southern part of the site, 105 produced a fragment of a blackglazed tyg and part of a Metropolitan slipware dish both belonging to the 17th century; and 99 a Creamware sherd datable to the later 18th century. A repair in stone and flint (118) to these gravels also produced late 18th century pottery.

In the fill (24) of rectilinear feature 23 there were a Harlow Ware jug rim (no. 12) which is high-fired and could easily be early post-medieval, and a rim from a post-medieval red earthenware large jug or cistern of the 15th-16th century (Cunningham 1985a, fig. 6-8). Also of interest from this context is small glazed bead rim jar in the same fabric which has been used as a paint pot (no. 15) which may be of 17th century date.

The renewed gravel surface south of the building (72) contained a residual medieval Harlow Ware slip-painted handled bowl (no. 11). Alternatively it could be a dripping dish, but these are not usually decorated. Otherwise this gravel and the linear feature 3 cut into it produced rather similar assemblages. Diagnostic sherds from 72 include:

the footring base of a Chinese porcelain tea-bowl or saucer with underglaze blue painting, dating from the 1720s;

part of a stoneware tavern mug of a type made at Fulham, Southwark and elsewhere during the 18th century;

a moulded Creamware base from a Leeds teapot dated 1780-1800, similar to one published by the Victoria and Albert Museum (1984, plate 25);

a Pearlware plate rim with blue moulded edges dating to c.1800 (Noel Hume 1969, fig. 23);

a Pearlware sherd, engine-turned with annular decoration, dating from 1795-1815 (Noel Hume 1969, 132).

The latest pottery is ironstone, dating from the early 19th-20th centuries, but most pottery is about a century earlier than the coin dating evidence from 72, an 1899 halfpenny.

Two of the postholes (30, 34) cutting the reversed Fshaped feature contained residual medieval pottery, but slot 13 produced 18th and 19th century pottery. Sherds of interest comprise a hand-painted Pearlware saucer (no. 16); a sherd from a marmalade jar and part of a lid from a pot which contained bear's grease. The lid is transfer printed in grey and depicts a bear with a chain and the words 'BEARS GREASE, BOND STREET, LONDON, price 4s/-'. It is the same as a Victorian pot lid published by Jackson (1984, 18) and was manufactured by James Atkinson, and used as a hair dressing.

A sherd of green transfer printed ironstone in the fill of slot 17, one of the arms of the L-shaped feature that cut feature 23, indicates a 19th-20th century date.

Discussion

The preponderance of medieval Harlow Ware lends weight to the argument that it is indeed a local product. It is interesting to note that there is no change in the coarseness of the fabric used for cooking vessels and table wares (i.e. decorated jugs), whereas other Essex potteries such as Hedingham and Mill Green produced separate coarse and fine wares. It is difficult to see where Harlow Ware's origins and affinities lie. The only other Essex sandy orange ware to be identified and described is Colchester Ware, but Colchester is too distant for the industries to be necessarily connected. From the excavations at Market Street, it appears that Harlow Ware may be contemporary with London-type Ware, and indeed it is superficially similar, both having dull red-brown surfaces. However Harlow Ware features and methods of decoration such as thumbed applied strips under the handle, slip dots on handles and cooking pot rim forms are not paralleled in London-type Ware. Both fabrics can be slip-painted but slip-painting is almost universal in this region.

The pattern of sooting on cooking pots 5 and 7 where there is blackening up to the shoulder and beneath the rim is typical of Essex cooking pots examined by the author, and is consistent with the vessel being placed in, or at the edge of, a wood burning hearth. Signs of heating were also found on bowls 1 and 8.

Catalogue

The illustrations are arranged in fabric, and then period order.

1. Bowl rim: Fabric 13t; red-brown with a grey core; blackened on external surface with patches of sooting; stabbed decoration on rim. Contexts 59 & 73. Period II.

2. Jar or cooking pot rim: sandy orange ware; redbrown surfaces, thick grey core. Context 77. Period I.

3. Stump of lower handle attachment from a jug: sandy orange ware; thick blue-grey core, orange margins and dull red-brown surfaces; fabric contains chalk; decorated with a thumbed applied strip and white slip-painting under a partial, pale green glaze. *Context* 77. *Period I.*

4. Decorated sherd: sandy orange ware; dull orangebrown surfaces, thick grey core; white slip-coating beneath a mottled green glaze; sgraffito decoration, possibly in the form of a spoked wheel. *Context 73. Period II.*

5. Large cooking pot: medieval Harlow Ware; dull orange-brown, with a grey core where the vessel is at its thickest, and a pale creamy orange core elsewhere; thumbed applied cordon; blackening on shoulder and beneath rim. *Context 109. Period I.*

6. Cooking pot rim: medieval Harlow Ware; dull orange-brown surfaces, orange margins and grey core. *Contexts 103 and 77. Period I.*

7. Cooking pot: medieval Harlow ware; similar to no. 6; blackening on shoulder; patch of pale orange deposit on inside, possibly slip; four small glaze splashes on inside. Contexts 2 & 73. Periods II and IV.

8. Bowl rim: medieval Harlow Ware; dull orangebrown surfaces, paler margins and grey core; internal white slip-painting and internal splash glaze; knife trimmed on outside; sooting on rim. *Context 73. Period II.*

9. Jug handle: medieval Harlow Ware; orange-brown surface, thick grey core; painted cream slip dots; unglazed. Context 73. Period II.

10. Cooking pot rim: medieval Harlow Ware; dull orange-brown surfaces, and grey core; moderate chalk flecks especially on external surface. *Context 73. Period II.*

11. ?handled bowl rim: medieval Harlow Ware; dull orange-brown surfaces, thick grey core; white slip-painted stripe with traces of slip on the handle; partial pale grey internal glaze. Residual in context 72. *Period IV*.

12. Jug rim: medieval Harlow Ware; dull orange-brown surfaces, thick grey core; unglazed. Context 24. Period IV.

13. Decorated sherd: London-type ware; purple-brown surface, thick grey core, coating of white slip which has been combed; covered by a mottled green glaze. *Context 73. Period II.*

14. Lid-seated rim: post-medieval red earthenware; red fabric but with dark purplish surfaces; external partial plain lead glaze, also glazed on inside of rim; patches of internal lime scale; ?from a pipkin or cauldron. *Context 2. Period IV*.

15. Jar rim: post-medieval red earthenware; all-over internal plain lead glaze; white paint on rim with runs of white paint down the outside, overlain by green paint on the rim. *Context 24. Period IV.*

16. Saucer: Pearlware; overglaze painted floral decoration. Context 14. Period IV.

Small Finds

The only small finds recovered from medieval contexts were corroded iron objects. Indeed, small finds were only at all common in contexts associated with the demolition of the period IV building. They were late 19th to early 20th century in date, and included copper alloy pins, buttons, hooks and eyes, washers and fittings; glass beads and marbles, as well as a little bottle and vessel glass; and, in bone, a crochet hook, a few buttons, a small round spoon with a spatula-shaped handle, and a turned fitting.

Clay Pipes

A small number of clay pipe fragments, mostly stems, were recovered from period IV contexts. Marked items comprise the following: a foot with the initials H?S, possibly Henry Strutt, recorded at Romford in 1839 (Oswald 1975, 170); a bowl with a fragmentary inscription ... US ...

... OE ..; and a bowl with a shield on the back with the words BALM ... MILE

??D (END),

and the letters TB on the spur. Thomas Balme was a London maker active in the period 1805-45 (Oswald 1975, 132).

Window Glass and Lead Window Came

A fragment of window glass from the period II clay floor (59) ought, if correctly excavated and processed, to be datable to the 13th-14th century. It is a piece of good quality glass 1.3-2.0mm thick, blue-greenish in hue, but

now iridescent with slight milky lamination. The presence of a rounded edge suggests it is broad glass.

A fairly large quantity of window glass, and some window came, was found in contexts associated with the destruction of the period IV building, and in particular in the fill of slot 36. The came was from diamond-shaped quarries, a corner piece (i.e. one triangular in shape) being found intact and measuring $85 \times 65 \times 75$ mm. The glass in this was 1.9mm thick, and greenish, with iridescent weathering and slight lamination. Much of the glass could be seen to be from quarries, most of it somewhat weathered, though a few pieces were in unweathered modern plate glass. An almost equal quantity of modern plate glass was found. Also present were four pieces of crown glass with pontil scars. The considerable variety of qualities and colours of glass may be related to various phases of reglazing of the building, and perhaps the substitution of sashes for casements in its facade, but it may be more correct to link it to the fact that for several decades in the 19th century it was occupied by a plumber and glazier (see above).

Brick

Of some interest was a fragment of perforated brick with holes about 4mm square, from the fill of slot 56 (period III). Bricks with such perforations, which were doubtless intended to give a key, have been found at Waltham Abbey (Huggins 1972, 113); and also from excavations carried out by Essex County Council by the Cornmill Stream in 1990. Some of the older bricks found at Harlow (though not the perforated fragment) were characterised by chalk inclusions. A brick collected from wall 5 is in an orangey fabric, and has square edges but creased and rough surfaces. It measures $220 \times 50 \times 105$ -108mm, and may be dated approximately to the 17th century.

Discussion and Conclusions

The presence of a small quantity of Roman finds is not to be wondered at in view of the existence of a Roman temple at Stonegrove Hill about half a mile to the north, and another Roman building less than half that distance away in Station Street. The abraded condition of the finds may indicate that the site had been ploughed. More surprising were the few Saxon sherds, as such wares have yet to be identified from the temple excavations. However, this may simply be because of the difficulty in distinguishing between Middle Iron Age and Saxon pottery.

There was nothing found to indicate convincingly that the use of this part of the marketplace preceded the 13th century, when the existence of the market first becomes clearly documented. The excavation is mainly of interest in having revealed a sequence of buildings in, or at the edge of, the marketplace. The earliest was of wood, built with earthfast posts. Too little of it was uncovered to attempt a detailed reconstruction, but it is tempting to identify it as a stall or similar structure. Although the size of the posts show it to have been relatively substantial, the technique of construction was not very durable. It would be of considerable interest were it to represent the remains of a seld, of which a number were mentioned in the marketplace in a rental of 1383 (Fisher 1939, 251). Fisher interprets a seld in this context as a stall. At London, however, it seems to have been something more substantial, a covered single storey structure to the rear of a building on the frontage (Keene 1985, 12).

If the excavation has been accurately interpreted, then this structure was an original feature of this part of the marketplace, since it seems not to have been erected over a previously metalled surface. Its replacement by a more permanent timber-framed and clay-floored building that presumably had at least in part a residential function would seem to represent encroachment on the marketplace. This process of market infill is a well known phenomenon, but one that seems not to have been analysed in detail. Thus to see it as simply the erection of buildings rather than stalls to obtain permanent access to trading areas is probably simplistic.

The life cycle of markets can be complex. That there is today a market in much the same place as there was in the 13th century is not to say there has always been one there. Thus at Harlow the market seems to have lapsed at the end of the 16th century, and thereafter to have been held only sporadically (Fisher 1937, 140; VCH, 142). On the evidence of Pigot's and Kelly's Directories, the market was said to have been formerly held on a Wednesday in 1823-24, was still discontinued in 1839, seems to have been revived by 1845 though described as small and insignificant, and had lapsed again by 1850. Marketplaces would prima facie seem most vulnerable to encroachment when markets were in abeyance. It may or may not be a coincidence that the construction of the timber-framed building found in the upper levels of the excavation can be dated to the 17th century, a time when the market seems to have been discontinued. Whether a market was held or not was presumably the decision of the manorial lord, a decision that would reflect economic conditions without necessarily being a simple pointer to prosperity or recession. It may be that rents from permanent buildings could prove to be a more secure form of income than profits from stalls and tolls.

By modern standards, Harlow Market Street is a well preserved marketplace, with a clearly defined 'row' representing infilling down the middle of it, separating Back Street from Fore Street (though some of this row shown on the 1897 map has since been demolished). However, like other marketplaces that seem well preserved, it is much reduced in size, the encroachment that has taken place being more extensive than the erection of a single row of buildings. Fisher (1937, 141) noted a difference in the layout of the holdings on the south side of the market, which occupy large plots, and those on the north side, which are much more cramped. In fact, the houses fronting on the north side of Market Street or Back Street, which include the excavated tenement, form another row, which Fisher (1939, 256) identified with the Midil Rowe or media rangea, referred to in a survey of 1431. This is evident as the houses lack gardens or closes, and on the 1897 map, as on the 1849 tithe map and the 1777 Chapman and André map, have a back lane running directly behind them. Clearly the boundary of the market lay further north, though quite where is an open question; probably at least as far as St. John's churchyard, maybe further still. Some idea of the extent of land that a market could occupy is given by the horse market indicated on the 1897 map, though this was no doubt of 19th century origin. It is also conveyed by the name attached to it in the 1431 survey, the 'market playne'.

As well as market infill, encroachment on the space between the market rows has also occurred, the existing frontage of Market Street (formerly Back Street) being the result of such encroachment. Thus the excavated building was set back from the present street, originally forming a terrace with the two properties to the east of it. The front of these aligned with the back half of the Chequers, presumably the oldest part of this double pile building.

Finally, it remains to consider the difference between the sequence excavated in 1989 and the waterlogged deposits found only a few metres to the east by Mike Jury in 1971/72. These are presumably to be explained by the existence of a pond, which in view of the nature of the subsoil had no doubt formed on the site of an old gravel quarry. What this was doing in the area of the marketplace is not so easy to explain. It may be that it was infilled when the area came to be actively used as a marketplace. Whatever the case, the date range of the pottery shows that it remained liable to subsidence and required periodic levelling up for several hundred years.

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Notes

- 1. The archive report and finds are stored at Harlow Museum, as are Mike Jury's finds.
- 2. This brief historical introduction, and any historical references below, are based on Fisher 1937 and 1939, and the VCH.
- The levels on the plans relate to a site datum which has been given the arbitrary value of 10m.
- 4. Essex Record Office D/CT 164.
- 5. Identification by Colin Wallace.

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Temple Mills as an Industrial Site in the 17th Century

by K.R. Fairclough

In 1897 the Eastern Counties Railway Company moved their wagon building department to an area in Leyton known as Temple Mills, and the present industrial estate on the site still retains the name. The area is so named because in the early medieval period a water mill was erected on the site by the Knights Templar, and thereafter water mills bearing the name Temple Mills remained on the site until 1854 when they were finally dismantled. Today even the river on which these mills stood is no longer visible, for the Channelsea River, an ancient branch of the Lea, has been culverted, and the only visible evidence of its existence is the intake pipe at its mouth where it leaves the Lea.

During its early history the Temple Mills were probably used for corn milling, but from the early seventeenth century onwards they were used for a series of differing industrial processes. A location close to London with good water transport facilities, with adequate water power to drive more than one mill, and sufficient land to build on, all meant that it became an important site attractive to prospective industrialists. The purpose of this article is to provide some detail about the earliest industrial activities on the site, even though many important questions cannot be answered. The absence of any detailed plans or descriptions of the mills during the seventeenth century means that no precise details are available about the layout of the Temple Mills, and little evidence is available about other water mills on the site. Yet the evidence does show that several smaller mills were erected, that the millstream feeding Temple Mills was altered so as to accommodate this additional capacity, and that these separate facilities were at times let to different tenants. A sketch map drawn in 1676 (Fig. 1) provides no detail of the actual site, but does indicate the interdependence between the various tide mills along the lower Lea. If this sketch map is an accurate reflection, then it does show how different was the layout of these various millstreams when compared to later maps.

The site did have adequate water supplies from the Lea, not only the fresh waters coming downstream but also from the tidal waters which came up the lower Lea and Channelsea as far as Hackney and thus provided additional power at the ebb, but no evidence is available as to how the mills were worked. Was the ebbing tide a dominant feature as it was at the tide mills further downstream in Stratford where the mills worked in two short daily shifts whatever time of day or night the ebb was available, or was Temple Mills so far upstream that the ebb was not so dominant and the mills could be worked regularly throughout the day with water from the normal river regime? Also the lower Lea was navigable, and common sense would suggest that both the gunpowder producers and those grinding logwoods would use such facilities to bring in raw materials and take out the finished product, but no evidence remains to show that they ever did.

Temple Mills received its name from its original owners. the Knights Templar, who had been granted land in this area by William of Hastings, steward to Henry II. Originally there had been no mill, but by 1278 there was a water mill at Leyton, and by 1308 it was described as two mills under one roof (i.e. two pairs of stones), one in Leyton and the other in Hackney.¹ Later descriptions continued to note two mills under one roof standing on the shire stream in these two separate parishes, and often different names were given to the two mills, Rockholt Mills and Temple Mills, though which ones were so named was never specified.² When the Templars were suppressed by the decree of the Council of Vienna in 1312, the mills passed to the Hospital of St. John of Jerusalem and remained in their hands until this order was dissolved in 1540. The mills then passed to the King and passed down with the manor of Hackney Kingshold until 1615 when the manor was granted into private hands, but the mills were specifically reserved, and thereafter had a separate pattern of ownership from the manor.3

In June 1531 John Mustyan, miller, took out a 60 year lease on the mills and on eight acres of meadow which were attached at a rent of £11 6s. 8d. a year, the property having been previously let to Henry Knight, miller. This lease was still operative in 1576 when Edward Biggs, who had held it for some time, surrendered it and took out a new one for 40 years on the same terms. Biggs had lived at Leyton but when he died in 1588-89 he was living in Warwick Lane in London. In his will he left this lease, together with £500 and some furniture to his daughter, Johane Biggs, with the proviso she paid her mother, Elizabeth, an annuity of £50.4 What Johane did with this inheritance has not been discovered, but in June 1593 Letters Patent granted the property to Clement Goldsmith of Crayford in Kent, Esquire, still at the same rent of £11 6s. 8d. In October 1599 Goldsmith sub-let the mills to Edward Ryder, citizen and haberdasher, for 21 years at £43 a year. Ryder, whose brother was to become Lord Mayor of London the following year, had purchased the manor of Leyton earlier in the year. Ryder did not retain the lease to the mills. In April 1601 he passed it on to George Bromley of Ware yeoman.⁵

In 1601 the two mills under one roof were still corn mills, as the evidence suggests they had been throughout the sixteenth century, but the 1601 document also referred to 'a piece of grounde whereon a little leather myll sometyme stoode with the watercourse thereunto belonging'. When Bromley took over the lease, Ryder retained the fishing rights attached to the mills, and Bromley promised to maintain the 'fludd gates lately made or repayred by the said Edward'.



Fig. 1 Sketch map of mill streams in Stratford, derived from Guildhall Library MS 13532. (By kind permission of Christ's Hospital and the Guildhall Library.) The original document from which this is taken is endorsed on the back 'The Discription of Severall Mills at Bowe', c. 1676. Drawn by Mr Mark Barber. No scale no orientation.

Bromley also promised to grind toll free five quarters of grain every week on Ryder's behalf, Ryder delivering the grain on a Friday and receiving the meal the following day. However in December 1601 Bromley assigned the lease to John Nicholls of Sheering in Essex, yeoman, who assigned it to Richard Spencer of Roydon in Essex, yeoman, who assigned it to Francis Mason of Leyton, miller, in November 1605. The Leyton parish registers show that Mason was still the miller in 1610.⁶ The evidence suggests that the mills were still corn mills, but nothing is known of the erstwhile leather mill.

Soon afterwards the mills were converted to oil and blue starch mills, but at present the exact date of the change cannot be established. The Leyton parish registers show that Mr Abraham Baker was the tenant of Temple Mills in March 1620, and since he was appointed churchwarden in 1620 and 1621 it seems probable that he had been at the mills for some years. What is known of his career seems to confirm this. Baker was a Dutchman born in Flanders, who for a long time held a monopoly for the making of smalt or blue starch for use in the washing of linen. Smalt was a type of glass, coloured deep blue, which was cooled and pulverised for use as a pigment in the starch. As early as 1609 he held such a monopoly, and in February 1618 he was granted a patent. He managed to retain this monopoly, despite accusations that he had stolen the idea from Christian Wilhelm, another Dutchman, despite serious business difficulties in 1623, and despite the parliamentary abolition of most monopolies in 1624, for his patent for smalt was one of the few specifically exempted.

In 1626 Baker began to expand his production capacity by building a new mill and by opening an additional headstream to supply more water. Both this new capacity and the existing mills were to be put to the same uses, the grinding of rapeseed and the manufacture of smalt. Whether oil production was a new venture in 1626 or not has not been discovered. These expansion plans brought him into conflict with the Lea bargemen who felt that too much water would be taken from the navigable channel, and with the City of London who felt that the supply of water to their two mills further downstream, Saynes Mill and Spilmans Mill, would be reduced. Such opposition thwarted his plans at first, but eventually agreement was reached and the expansion went ahead.⁷

One point to emerge from the arguments over Baker's plans was that in the vicinity of Baker's new mill there had once been 'a powder mill erected on the west side of the said stream near unto the said old mills and that the powder mill being afterwards blown up the said waste served a cutters mill erected in the room thereof and that mill being now also decayed the water runneth waste'. The dating of this short-lived gunpowder mill cannot be precise, but it is further evidence that in the late sixteenth century and early seventeenth century several mills along the lower tidal Lea were used to produce powder, notwithstanding the monopoly powers granted to producers based in Surrey. Nothing further is known of the cutters mill.⁸

Abraham Baker continued to work Temple Mills until his death in 1642, employing several Dutchmen in the enterprise. In 1637 he took out a new 32 year lease at \pounds 50 a year from John Trafford, whose father, Richard Trafford had earlier acquired the mills from the King.⁹ After Abraham's death, his son, John Baker, citizen and grocer, inherited the mills but did not continue the business. Instead he sub-let the mills to John Berisford, citizen and grocer, for 21 years at \pounds 100 a year from Michaelmas 1642. Berisford was one of the major producers of gunpowder throughout the 1640s, emerging as a major supplier to the parliamentary supporters at the beginning of the Civil War, but retiring from the business at the end of the decade. After taking over Temple Mills he converted them to gunpowder production, and this site and Sewardstone Mills further up the Lea valley were the main centres of his business.¹⁰

In March 1650 Berisford assigned his lease to George Boreman and Josias Dewye. The evidence suggests that these two had entered a partnership with William Pennoyer to produce powder at Temple Mills. Pennoyer, a London merchant certainly signed a contract in April 1650 to supply powder to the government, but any partnership seems to have been short-lived. Pennoyer was not to be associated with the industry after 1652. Dewye was to become one of the leading power producers in the country, but not at the Temple Mills, but at Chilworth and Guildford Mills in the 1650s, and at Carshalton after 1661. Boreman never became a major producer, instead he invested in corn mills at Stratford and in a lease for obtaining ballasting materials from the Thames, though he does seem to have been involved with Dewye at Carshalton. If these partners ever produced any powder at Temple Mills it was only for a short time, for in September 1651 Boreman assigned the lease to John Barcroft and Thomas Colwell who seem to have had no connection with the industry, and in March 1653 the government faced with a shortage of powder as a result of the 1st Dutch War (1652-54) specifically enquired whether Temple Mills could be used to produce powder.¹¹

With the failure of this partnership it is difficult to establish what happened next. Berisford had paid the church rate on the mills in 1651 despite having assigned the lease, but from 1652 until his death in July 1664 it was John Baker who paid these rates, so presumably Berisford had terminated his lease with Baker's agreement. There was some activity at the site, but just what cannot be established. In April 1656 the London aldermen were concerned about 'the River which was latelie cutt out of the Maine River called Lee River unto certaine new Mills neere Temple Mills', whilst the rates books do refer to a tenant at Temple Mills in 1660. However a Chancery case in 1668 makes it clear that in 1663 Temple Mills had been derelict, and that two years rent was then owed by the lessees. Unfortunately the evidence produced for this case gives no indication of events at the mills after the termination of partnership in the early 1650s. The action was brought by Margaret Baker, widow and executrix of the estate of John Baker, against Pennoyer, Dewye, Boreman, and Rowland Berisford, the heir of John Berisford. She argued that the sub-lease in 1642 had specified that a 'Blue Starch Mill and an Oyle or Gunpowder Mill' would be in existence at the end of the lease in 1663, that this had not been fulfilled, and that now five years later the mills

were still too ruinous to let. She won the case, receiving damages of £1,285 and her costs.¹²

By this date the 32 year lease taken out by Abraham Baker in 1637 was about to terminate, and the owners were prepared to sell. When the Trafford family held the property there had been two head leases, for periods of 99 years and 200 years respectively, but in 1650 John Trafford had mortgaged the property and by 1663 it was in the hands of John Wollaston and Joseph Ayloffe. Then in August 1668 all concerned parties agreed to sell the two head leases to George Chamberlayne of Moulsey, gentleman, for £900. Chamberlayne was acting as an agent for his father-in-law, John Samyne, who ever since the 1640s had been a major producer of gunpowder and saltpetre. His main production sites were at the nearby Walthamstow Mills and at East Molesey in Surrey. In July 1665 much of his capacity at the latter site was destroyed in an explosion, and his efforts to rebuild met with opposition from local inhabitants and increased his financial problems. This purchase of Temple Mills in 1678, close to his other main site at Walthamstow and close to his home at Bromley Hall near the mouth of the Lea, does suggest that he intended to produce powder at Temple Mills, but there is no evidence to suggest that he ever did, and the available evidence suggests that he let the property to other parties.13

In the years immediately after Samyne's purchase no name is specified in the Leyton parish rate books, but in 1671 and 1672 a Daniel Ham paid the rates, between 1673 and 1677 it was a Mr Matthewes, and in 1679 it was a Mr Calthorp.14 In March 1672 Daniel Ham took out a lease on the Abbey Mills at Stratford where he remained until his death in 1691, practising the trade of a corn miller. There was a William Ham, powdermaker, who signed his one and only contract with the Ordnance Board in June 1673 so Daniel may have had some link with that trade. However there is a reference to Daniel as a millwright, and he did erect windmills at the Abbey Mills and at Rotherhithe so he may merely have taken over Temple Mills in order to rebuild them and then let. The evidence does not allow for any firm conclusion.¹⁵ So far Mathewes and Calthorp have not been identified, but they seem to have been involved in the use of Temple Mills to produce guns and cannon.

In 1697 Daniel Defoe spoke warmly of the encouragement that Prince Rupert, uncle to Charles II, gave to projects for economic improvement. In particular

The Prince has left us a Metal call'd by his name; and the first Project upon that was, as I remember, Casting of Guns of that Metal, and boring them; done both by a peculiar Method of his own, and which died with him, to the great loss of the Undertaker, who to that purpose had with no small Charge, erected a Water-Mill at Hackney-Marsh, known by the name of the Temple-Mill: Which Mill very happily perform'd all parts of the Work; and I have seen of those Guns on board the Royal Charles, a First-rate Ship, being of a Reddish Colour, different either from Brass or Copper. I have heard some Reasons of State assign'd why that Project was not permitted to go forward; but I omit them because I have no good Authority for it

As early as August 1672 there are references in the records of the Board of Ordnance to an engine at Temple Mills, and there are subsequent references to this engine, to engraving guns, turning shells and brass instruments, and proofing at the site during the rest of the decade. Furthermore the Leyton parish registers make numerous references to workers at the mills between 1677 and 1681 so it was a thriving site. However in July 1681 the Ordnance officers were asked to investigate what stores had been sent to the mills so that they could be returned, and orders were given that 'severall Brass Morterpeeces now lyeing att Temple Mills lately caste out of his Ma(jesty's) Mettle by ye agents of John Browne esq his Ma(jesty's) Late Gunfounder be forthwith removed ... to Greenwich'. Such evidence suggests that Mathewes and Calthorp were agents of Brown, and that from 1672 until 1681 Temple Mills was used to pursue Prince Rupert's schemes, but further evidence is obviously required.¹⁶

Several factors probably combined to bring production at the site to an end in the early 1680s. There were financial problems in exploiting the patents, Prince Rupert died in 1682, and in 1680 the Samyne family sold Temple Mills as part of a Chancery settlement over Samyne's estate. It can be noted that in 1680 the property was valued at £140 a year.¹⁷ Who was the purchaser and to what use the site was then put has not been discovered, but by 1687 gunpowder was being produced once more. A survey of the powder industry in that year noted that Monsieur de Paine had the capacity to produce one and a half barrels of powder a day at Temple Mills, and the following year Peter Pain, probably a Huguenot refugee, advertised his services

Mr Pain who made the shining Gun-Powder at Jersey, liveth now at Temple-Mill upon Bow River, where he maketh Powder for his Majesty's Service; he maketh some also of several Prices, and will be sold by whole Barrels, and by Retail, by Mr Pluet living at the Peacock in York-Street Covent Garden, where he'll be found both in the Morning and Afternoon, and at Exchange time upon the French-walk.

Another advert the following year claimed that he had invented the 'Shining Jersey Powder' and stated that it could be purchased from 'Mr John De la Perelle, Grocer, living in Newport-Court, by Leicester-fields near the Rose'. It can be noted that in 1688 the rates on Temple Mills were paid by a Mr Nathan Summers, who in the following century was described as a former tenant, but nothing else has been established as to his involvement. Disaster struck. On April 26 1690 John Richard Pine Coffin noted in his diary 'On Satturday last, being Easter Eve about 7 at night, 2 powdermills with a vast quantity of powder, was blown up at Hackney, and about some seaven persons killed, all French, one of them a minister'. The West Ham parish registers noted that Peter Paine, his wife, his son Peter, a parson and a maidservant were all killed by this explosion.¹⁸

By Christmas 1691 new mills had been erected and working for some time, grinding logwood, brazil wood and other woods to produce mordants for use in the local dyeing industry at Stratford and Bow.¹⁹ Sir Talbot Clark of Putney and George Moore of London, merchant, held a patent for an invention for 'rasping of wood for dyers', and Moore had taken a lease on the Temple Mills in order to exploit this patent. By Christmas the partners had met with difficulties so they approached Henry Corbett of Southwark, blacksmith, with an offer of partnership. Corbett accepted, on the understanding that he would not invest much money himself, but would manage the business in return for wages. In addition to grinding wood this partnership also intended to use the site for 'Smelting, melting and refineing of severall sorts of Mineralls & Mettalls or Oares Forging plateing & making all Sorts of Copper plates & in Forgeing & makeing of Frying panns dripping panns & all other sorts of Iron plates'.

In 1686 Talbot Clark had been one of a group granted a 'benefit of an invention for 14 years for cheap extracting of metals, esp gold, silver, copper, lead & iron', and it seems likely that he wished to exploit this patent. The partners had other ambitions as well. By 1692 they, along with a new partner Thomas Addison, petitioned for the right to set up a jointstock company, the Governors and Company for making Iron with Pit-Coal, in order to exploit a method they had discovered to smelt iron with pit-coal, and in April 1693 this petition was granted. Except that it failed little is known of this Company. Their venture at Temple Mills foundered after financial difficulties arose, and after the three partners failed to sell a proposed fourth share. In a Chancery case in 1697 they accused each other of not paying debts and failing to meet their mutual obligations toward the partnership.²⁰

After this failure Dr William Savage, the owner of Temple Mills, tried to interest another group of investors in taking out a lease on the mills, which were described as 'two Water Mills and a Millhouse ... with two water Wheels carrying two pair of Millstones for the grinding of Brazil Wood, Redd Wood, Logg Wood, and other wood for the use and Service of Dyers and others trading in these Commodities ... (and) an engine for rasping wood'. No mention was made of any other activity at the site. To encourage these prospective tenants Savage promised that if more water power was needed to drive the mills then he would erect a weir in the river Lea to turn more water down the head stream, assuring them that he had sufficient authority to erect such a weir by virtue of a lease that he had signed with the City of London with regard to an alleged new cut along the lower Lea.

On 26 April 1700 the new tenants, Edward Ettricke, Thomas Aleyn and John Banner salters, John Dickinson, grocer, and George Ludlam, wax chandler, took out a 14 year lease at £100 a year. They immediately erected a new mill and four warehouses, and put in four new millstones, investing over £200 in the improvements. The partners soon decided that they needed more water, so they asked Savage to fulfill his promise. Savage began to erect the weir, but he was immediately ordered to remove it by the City of London after bargemen had complained that it impeded the navigation. After this failure to fulfill the promise the partners took legal action against Savage, and in December 1704 Savage was ordered to pay them £100 compensation, but other arguments about the rent due after 1702 were to be the subject of a Chancery case in 1707, by which time Savage was dead and the mills had passed to his widow, Margaret, for her life, with the intent that they should then pass to his grandson, Savage Elderton.²¹

What else emerged from the Chancery case in 1707 was that whilst the partners had leased the main site, the Temple and Rockholt Mills, Savage had also erected and let two other mills, on another arm of the head stream. The use to which these mills were put is not known, but in 1700 one was let to Mr Evenden, and the other was let to Messrs Bennet and Johnson at £40 a year. At some date after that Bennet and Johnson's mill had been shut down in order to make more water available to the logwood partners at the main site, but Evenden's mill (or both according to the logwood partners) had been let to 'the Company of Plumbers of London or to some Members thereof . . . for the Melting of Lead'. In 1706-07 both the logwood and lead mills were still in operation, but by October 1711 the mills were described as being empty in the Leyton rate books, and it was not until October 1718 that Savage Elderton began to pay rates on the mills once more.²²

Despite this absence of rates it is possible that Temple Mills were in use once more soon after being described empty in 1711. In 1742 a petition from bargemen referred to changes made about thirty years ago to the mouth of the head stream leading to the Temple Mills, whilst evidence to a Commission of Sewers in 1743 implied that lead mills had been in operation from about 1716 onwards. Lead production was to continue on the site for another century. In 1735 Seymour so described the mills, as did Lyson in 1795, and the Victoria County History refers to production in 1814. Between 1723 and 1732 the mills were worked by Meyger Knight and William Knight, citizen and plumber, in 1740 and 1743 it was John Batten & Co., and from the mid-1750s to the late 1780s it was Mr Matthews or Matthews & Co.²³

Some writers have linked these mills with the Proprietors or Company of the Temple Mill Brass Works which faced difficulties in the aftermath of the South Sea Bubble, but this company worked at the Temple Mills in Buckinghamshire.²⁴ Also during the eighteenth century, as earlier, there were other activities besides those at the main mills. From 1738 onwards there was a mill for twining and twisting yarn, whilst from the 1760s onwards there were references to silk printing, calico printing and flock manufacture. When the mills were advertised for sale in 1828 after the flock manufacturer had gone bankrupt it was stressed that the mills could be 'Advantageously employed as paper mills, in conjunction with the present manufactory'. However in 1834 the East London Waterworks Company purchased the mills in order to control and increase the flow of water available for water consumption. Then an Act of Parliament in 1850 authorised the Trustees of the River Lee to purchase the mills from the East London Waterworks Company, and decreed that future tenants should not have water to drive the mills. Soon afterwards, in 1854, the mills were pulled down.²⁵

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Footnotes

Abbre	viations	used:
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- CLRO City of London Record Office CSPD Calendar of State Papers
- ERO Essex Record Office
- GLRO Greater London Record Office
- HRO Hertford Record Office
- PRO Public Record Office
- VCH Victoria County History
- VCH Essex vi. 201; London Borough of Hackney Library Services (hereafter Hackney), D/F/TYS 37, fos. 223-230; B.A. Lees, ed, Records of the Templars in England in the Twelfth Century, British Academy Records of the Social and Economic History of England, ix (1935), 172-73.
- 1542:- GLRO, M79/KH/42/1/3; 1550:- Hackney, D/F/TYS 42 fo. 81; 1593:- ERO, D/DU 194/23; 1601:- Hackney, M793; 1614:- PRO, C2 James I/538/69; 1668:- Hackney, M795-96; 1682:- PRO, C7 302/58; 1747:- GLRO, MDR/1747/1/329.
- M. Gervers, The Hospitaller Cartulary in the British Library, Pontifical Institute of Medieval Studies, Studies and Texts no. 50 (Toronto, 1981); W. Robinson, The History and Antiquities of the parish of Hackney (2 vols, 1842) i. 80-81, 310-14; Hackney, D/F/TYS 42 fos. 81, 338-39, 519, D/F/TYS 46 fos. 292-333, M793; GLRO, M79/KH/44/1/2.
- GLRO, M79/KH/42/1/3; Calendar Patent Rolls 1575-78, 93-94; PRO, PROB 11/75(3).
- Hackney, M793; ERO, D/DU 194/23; PRO, E/310/19/96 fo. 12 VCH Essex vi. 185-6. In 1601 Bromley's in-laws, the Leonard family of Ware worked Ware Mills and owned Ware Westmill. In 1616 Richard Leonard sold Ware Westmill to George Bromley, and he or an heir called George still owned the mill on their death in the early 1660s. ERO, D/AMR 5A/232; PRO, PROB 11/63(6); HRO, H1 fos. 37-38, 89.
- Hackney, M793; ERO, D/DU 194/23-24; Vestry House Museum, Walthamstow, Index of Leyton People.
- Vestry House Museum, Walthamstow, Transcript of Burials Register for parish of Leyton, March 21 1620, Index of Leyton People; CSPD 1603-10, 501, CSPD 1619-23, 15, 586, CSPD 1627-28, 526, CSPD 1635-36, 58, CSPD 1638-39, 250; B. Woodcroft, editor, Subject Index of Patents of Invention (2 vols, London, 1854), i. 249; W. Notestein, The House of Commons 1604-10 (London & New Haven, 1971), 168; W.R. Scott, The Constitution and Finance of English, Scottish and Irish Joint-Stock Companies to 1720 (3 vols, London, 1910-12), i. 178; CLRO, Repertories 40 fo. 316, 41 fo. 349, Bridge House Committee Order Book 1611-1741, fos. 27-28, 41-47; ERO, T/P 48/1, Court of Sewers, 29 September 1627, 8 October 1627, 11 August 1628.
- ERO, T/P 48/1, Court of Sewers, 11 August 1628; VCH Surrey, ii. 306-329. In 1588 the Three Mills at Stratford were described as 'but 1 corn mill and 1 powder mill, which powder mill standeth still more than she goeth'. James Monnson was master of this powder mill. In 1589 George Hali of Blackwall and in 1598 William Smyth of West Ham made powder, and in 1597 and 1622 St. Thomas Mill in Stratford was described as a powder mill: ERO, T/P 48/1, Court of Sewers, 17 October 1588, 11 May 1596, Sessions Rolls, Epiphany 1598/9; PRO, REQ 2 65/42; CLRO, Bridge House Plans 52A.
- 9. PRO, C6 193/4; VCH Essex vi. 201.
- PRO, C6 193/4; M. Fitch, ed, Prerogative Court of Canterbury, Administrations, Vol. 6 1631-48, British Record Society Publications no. 100 (London, 1986), 18; CSPD 1644-45, 88; CSPD 1645-47, 381; CSPD 1648-49, 35; CSPD 1649-50, 584; PRO, WO 47/1; K.R. Fairclough, 'Early Gunpowder Production at Waltham', Essex Journal xx pt. 1 (1985), 11-16.
- PRO, C6 193/4; CSPD 1650, 85, 536, CSPD 1651-52, 115, 144, CSPD 1652-53, 538, 539; CSPD 1655-56, 270; Glenys Crocker, Chilworth Gunpowder (1984), 2-5; Crocker, editor, Gunpowder Mills Gazateer (London, 1988), 19; M. Wilks, 'Josias Dewye and the Carshalton Gunpowder Mills', Gunpowder Mills Study Group Newsletter no. 8 (1990), 9-14; ERO, T/P 48/1, Court of Sewers, March 22 1654, April 1 1654, D/DAc 114-15; Guildhall Library, MS 13532, Indenture 23 June 1661; PRO, C6 193/4, WO 47/2, unfoliated, 10 March 1653.

- Vestry House Museum, L55.6 P1, Leyton Book of Parish Rates 1651-54; CLRO, Repettories 64 fo. 130; PRO, C6 193/4.
- Hackney, M795-796; 29 & 30 Car II, c.19 PR; K.R. Fairclough, 'John Samyne: 17th Century Gunpowder Maker', Gunpowder Mills Study Group Newsletter no. 7 (May 1990), 2-6; K.R. Fairclough, 'Mills and ferries along the lower Lea', Essex Archaeology and History, forthcoming.
- 14. Vestry House Museum, L55.6 P1.
- Guildhall Library, MS 13532 nos. 7, 8, MS 13539; PRO, PROB 4/15936; PRO, WO 47/19B, unfoliated, 13 January 1674, WO 48/12 fo. 344; PROB 4/15936; Guildhall Library, MS 12811, Volume V, fo. 565.
- Daniel Defoe, An Essay upon Projects (London, 1697), 25-26; private communication from Sarah Barter Bailey, 16/2/90; Vestry House Museum, Transcript of Burials Register for parish of Leyton 1617-1726; PRO, WO 47/11, fos, 14, 15; CSPD 1671, 196, 572.
- 17. PRO, C78/1302(7).
- 18. PRO, WO 49/220; London Gazette nos. 2335, 2504; Vestry House Museum, L55.6 P1; Historical Manuscripts Commission, 5th Report (1897), 380; GLRO, MDR/1747/1/329; D. Lyson, The environs of London (4 vols, London, 1792-96), iv. 267. In 1682 a James Tiphaine and family, including a son Peter, were naturalised: W.A. Shaw, Letters of Denization and Acts of Naturalization for Aliens in England and Ireland 1603-1700, Publications of the Huguenot Society, xviii (1911), 157, 170. Huguenots had links with other powder mills, at Faversham, Hounslow and Dartford: J.S. Tassell, 'Notes on the French Congregation at Faversham, Kent, and the Part Played by the Families of Grueber and Pigou in the Manufacture of Gunpowder', Proceedings of the Huguenot Society of London, xx (London, 1958-64), 139-41.
- 19. The woods of many trees contain substances that can be used as dyes in the old mordant-dyeing process and the mills were used to grind the timber into a state in which it could be used by the dyers. In mordant-dyeing the textile is first treated with the salt(s) of metals such as aluminium, iron, chromium or tin so that the insoluble hydroxide or basic salt can be deposited within the fibre. When the textile was then treated with the dye, the dye substance combined chemically with the mordant substance to produce an insoluble coloured substance inside the fibre. Brazilwoods contained the dye brazilein which was used to produce pinks and purples on alum or alum/iron mordants, logwood contained the dye haematein and gave violet blues on alum or black on iron and chrome mordants, and several other woods were also used. With the development of the chemical industry during the last century the use of woods as dyeing substances declined until now it is only for high quality ladies' black nylon underwear that logwood is still used: personal communication Ralph Broadhurst, 2 September 1981. The use of Temple Mills to grind logwoods and brazilwoods was a sensible locational decision as Bow and Stratford emerged in the seventeenth and early eighteenth centuries as a major centre of the dyeing industry, and there was even one high quality dye known as 'Bow Scarlet'. Towards the end of the eighteenth century the industry disappeared from the area: Franco Brunello, The Art of Dyeing in the History of Mankind (London, 1973 English ed.), 200, 211-12; Samuel Simpson, The Agreeable Historian (2 vols, London, 1746), i. 622; Henry Chamberlain, A New and Compleat History and Survey of London and Westminster, the Borough of Southwark, and parts adjacent (London, 1771), 616; Lyson, Supplement to the first edition of the historical account of the environs of London (London, 1811), 307.
- PRO, C7 59/50; CSPD 1686-87, 157, 201; CSPD 1689-90, 31-32 CSPD 1691-92, 137, 178, 518, 523-34; CSPD 1693, 114; W.R. Scott, op cit, ii. 428, 462-67; W. Rees, Industry before the Industrial Revolution (London, 1968), 294-95.
- 21. PRO, C6 349/17. It is not clear when Savage first came into possession of Temple Mills. The mills were put up for sale in 1680 as part of a settlement of the estate of John Samyne, but it is not until the later 1690s that Savage's ownership can definitely be established. However since he approached the City of London as early as October 1690 with the proposals which eventually led to his leasing the alledged new cut from them, it seems sensible to assume that he must have owned Temple Mills in 1690. For further details about Savage and

the curious story of how the City of London mistakenly claimed that they had built a canal or new cut as a result of an act of parliament in 1571: K.R. Fairclough, 'The City's claim to have built a new cut along the lower Lea', *Journal of the Railway and Canal Historical Society*, vol. 30 pt. 4 (March 1991), 178-88.

- 22. PRO, C6 394/17; ERO, D/SH1, Court of Sewers 6 April 1706; Vestry House Museum, L55.6 P1.
- CLRO, Court of Aldermen, Reports & Papers, September 1742; PRO, RAIL 845/53, Court of Sewers, 28 January 1743; Robert Seymour, A Survey of the Cities of London and Westminster (London, 1735), 781; D. Lyson, The Environs of London, iv. 182; VCH Essex vi. 201; Vestry House Museum, L55.6 P2-P4; GLRO, MDR/1747/1/329.
- Lyson, op cit, iv. 182; W. Robinson, op cit, i. 67-68; Scott, op cit, ii. 428; VCH Essex, vi. 201; D. Defoe, A Tour Thro the Whole Island of Great Britain (2 vols, 1928 ed, London) i. 300.
- For instance: London Gazette nos. 9969, 11523, 11844, 13377, 15701, 16506, 16219, 17972, 18373, 18876; Guildhall Library, MS 11936/158, 217375, MS 11936/141, 187526; GLRO, Acc 2558/EL/1/19/1; The Times, March 27 1828; Science Museum Library, Simmons collection 2/59; VCH Essex, vi. 201; 13 & 14 Vict. c.109.

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'Dutch' Cottages in Essex

by M.R. Eddy

with contributions by D.M. Archer, B.H. Milton and P.M. Ryan

Limited excavations and structural recording of two octagonal cottages, at Rayleigh and on Canvey Island are described. Traditionally such cottages are associated with Dutch 'wallers' of the early seventeenth century, but direct dating evidence of the Dutch connection is slight and equivocal. Both cottages are later than the main period of land reclamation, though Dutch influence is not discounted.

Introduction

Renovation of the Dutch Cottage, Rayleigh, was begun by Rochford District Council, the owners, in the spring of 1982 and, when work on the main fireplace revealed a number of Delft-ware tiles, Essex County Council Archaeology Section was called in to examine the building before conversion to a council house. In 1988 the Dutch Cottage Museum on Canvey Island was also renovated and E.C.C. Archaeology Section was again invited to record such archaeological evidence as might be revealed.

Although other octagonal cottages exist in Essex, only four have been attributed to the early-seventeenth-century Dutch 'wallers' (land reclaimers). Of these four only three are still standing. The standing cottages are all two-storeyed, of plastered timber framing on brick plinths, and with thatched roofs. They are octagonal in plan with a central chimney stack which acts as the main structural element of the building. The fourth cottage is known only from excavation (Francis 1937, 273; Payne 1967, 85).

The investigation of two of the standing cottages within a relatively short period of time provides an opportunity to review the available evidence for these supposedly 'Dutch' cottages.

The Dutch Community in Eastern England (Fig. 1)

The importance of the Dutch in all aspects of seventeenthcentury English life was considerable (Trevelyan 1967, 222), despite fierce commercial rivalry which resulted in the Anglo-Dutch wars of the mid-seventeenth century.

Dutch immigrants had, however, been moving into eastern England since before the sixteenth-century rise in migration due to Spanish persecution of Protestants and the wars of independence in Holland. By 1550 the first Dutch Reformed Church had been established in London. At the first Synod of the English Dutch Reformed Church, held in London in 1573, church representatives are listed from London, Sandwich, Maidstone, Colchester, Norwich, Yarmouth and Thetford (Guild Hall Library, MS/7411/1). A Dutch church was subsequently built on Canvey Island, after petition to the Crown, in 1631 (Whittaker 1980, 26) and a further Dutch church was established in 1652 at Sandtoft, South Humberside (Roker 1963, 76). Whittaker (1980) published a mid-nineteenth-century woodcut of the Canvey Island Dutch church which was apparently of horizontal planking and what appears to be a wood shingle roof. However, Daly (1902, 26) recorded that the original Dutch church was destroyed and rebuilt as a Church of England church in 1712.

The Canvey Island Dutch church was indeed disposed of at some time during the eighteenth century, the last Dutch Church land being sold in 1800 (Whittaker 1980, 25), presumably to a William Gardener of Rayleigh (Knightley 1978, 114). The last minister, Emilius van Cuilenborg, was recorded in 1703/4 (Whittaker 1980, 26). It was then (op. cit., 25) that the Dutch community on Canvey was dispersed, though Roker (1963, 75) claims that the last Dutchman disappeared from Canvey in the 1790s and that Dutch was still spoken amongst their descendants on the island until the outbreak of the First World War.

The presence of Dutchmen in England was not, however, welcomed by the local population, though it was supported by the Crown, and Roker (1963, 55) notes the murder of Flemings during the Peasant's Revolt. The sixteenth century seems to have seen a general improvement in relations as a result of the Anglo-Dutch alliance against the Spanish. However, the introduction of numbers of Dutch labourers, paid in land, to work on drainage works along the east coast led to considerable local conflict throughout the seventeenth century (McCave 1933, 45) caused in the main by disputes over land use. The nadir of relations between the two communities came with the Anglo-Dutch wars of the second half of the century, and 1653 saw the publication of a scurrilous pamphlet, entitled 'The Dutchmen's Pedigree ...,', in which it was suggested that the Dutch were 'first bred from a horse turd enclosed in a butter box', though perhaps it was the 'wicked traiterous and unjust wringing of all trade out of other men's hands' that really most concerned the anonymous author (Knightley 1978, 37).

As a consequence, Dutch settlements suffered much damage from violent attacks by local people. Cory (1985, 60) and Stovin (Chesterman 1956, 9) record the partial destruction of Sandtoft in 1651 and 1656, and rioting took place on Canvey Island in 1657 (Whittaker 1980, 26) and in the Fens under the Commonwealth (McCave 1933, 45). Further destruction of the Dutch settlement on Canvey occurred in 1667 when the Dutch navy raided the Thames estuary and burnt the church.



Fig. 1 Dutch Reformed Churches in England, 16th to 18th centuries. 1: London, 2: Maidstone, 3: Sandwich, 4: Canvey Island, 5: Colchester, 6: Ipswich, 7: Great Yarmouth, 8: Norwich, 9: Thetford, 10: Sandtoft.

During the following century specifically Dutch surnames disappeared from the parish registers (Knightley 1978, 45), and by 1706 only the London and Norwich Dutch churches survived (op. cit., 15). Beyond Essex, Cory (1985, 80) notes that ill feeling between the descendants of the settlers and the local population was last recorded in 1719. Certainly throughout that century the lack of maintenance of the sea walls proved a constant problem and has been taken to indicate the dispersal of the Dutch communities (Whittaker 1980, 25; McCave 1933, 53).

Presumably local ill feeling caused the Dutch immigrants either to return to Holland or to integrate more fully into English society. In the present context it is interesting to note Whittaker's (1980, 25) suggestion that the descendants of the Dutch wallers took their agricultural expertise with them to upland places in Essex, 'such as Rochford', during the eighteenth century.

'Dutch' Cottages in Essex

Destruction in rioting, decay and perhaps flooding have left only four examples of octagonal cottages with Dutch associations (Figs 2, 3 and 7):

 Dutch Cottage Museum, Canvey Island (Essex Sites and Monuments Record 7124). TQ 779832. Date plaque 1618. Reputedly the external wall sits on a base of old wagon wheels laid flat (RCHM, Essex, IV, 1923, 23, but see below).

- Canvey Island Dutch Cottage (ESMR TQ 77/23). TQ 774837. Date plaque 1621. Private house (RCHM, Essex IV, 1923, 23).
- Dutch Cottage, Rayleigh (ESMR TQ89/2). TQ 805907. Date plaque 1621. Council house (RCHM, Essex, IV??).
- 4. Butler's Farm, Shopland (ESMR TQ88/10). TQ 898895. Excavation of a low mound near Butler's Farm revealed two building phases, the later of which was an early-seventeenth-century circular or octagonal structure some 24 feet (7.3 m) across. The excavator interpreted this structure as a Dutch octagonal cottage with a central chimney stack (Francis 1937).

Four more octagonal cottages with central stacks are known from Essex:

- 5. Harlow Round House, Latton. 'Late eighteenth century, two storeys. Small square (?) house with a first floor, three sided bay to the front resting on rustic tree trunks, a plain outshot at the rear. Rendered frame. Oval thatched roof. Leaded 'Gothick' coupled casements.' (Listed Buildings list, 1948). The caption to Fig. 46 in Wellings (1984) records the building's demolition in 1955 and suggests that it was built c. 1750 by one of the Althams of Mark Hall as a fashionable, picturesque farmworker's cottage 'of Dutch origin'.
- 6. The Round House, Finchingfield. 'Octagonal two storeyed, thatched cottage, timber framed and plastered, central chimney stack. Diamond leaded casements with pointed heads in square frames and with hood moulds. Small projecting gabled porch. Probably eighteenth century and perhaps copied from similar seventeenth century 'Dutch' cottages found in the Thames-side area of the county.' (Listed Buildings list, 1948).
- 7. East Gores, Great Tey. A single storey octagonal cottage with a central stack and steeply pitched, tiled roof. (Photograph in the Essex Record Office, June Beardsley, pers. comm.).

 East Ham. Two storeyed octagonal cottage with a tiled or slated roof and central stack (Stokes 1933, photograph without accompanying text).

The Dutch Cottage, Rayleigh, 1982

i. Documentary History

The limited documentary material relating to the cottage has been published elsewhere (English 1985; English, n.d.). The cottage was first referred to in 1835 when it was described as the 'Octagon Cottage' in the Overseers' Rates; its first Dutch attribution is in the 1913 deeds - the earliest surviving - to the property, in which it is known as the 'Old Dutch Cottage'. However, the land on which the cottage stands has a longer recorded history, being first mentioned in 1557 as 'Rammes Crofte' when bought at auction by John Cooke (English, n.d., 1-3). Benton (1877, II, 720) shows that 'Ramscroft' was held by Obadiah Barker of Faversham in 1713 and that John Barker, a Tollesbury mariner, sold it in 1774 to Thomas Harridge of Leigh. In 1811 it passed to William Butler, who let it to Joseph Prentice who sub-let to Thomas Porter. Unfortunately Benton does not comment on the cottage or its origins.

During the nineteenth century the cottage was let to John Bright and family (between 1859/61 and 1870/76) and to William Hurrell and family (1870/76 to ?1883/1920). Hurrell's wife, Naomi, was born in a Dutch cottage on Canvey where her father was a ferryman, and English (n.d., 4) suggests that this family may have 'transformed the Octagon



Fig. 2 The location of the supposed 'Dutch' cottages in south-east Essex. 1: Dutch Cottage Museum, Canvey Island, 2: Canvey Island Dutch Cottage, 3: Dutch Cottage, Rayleigh, 4: Butler's Farm, Shopland.



Fig. 3. The location of the Dutch Cottage, Rayleigh.

Cottage into the "Dutch Cottage" '. Certainly Naomi Hurrell was the most likely person to have renamed the cottage and may perhaps have introduced the Delft tiles.

As only five of the tiles are of nineteenth-century date, the others -31 dating from the first half of or the mideighteenth century, and 13 from the seventeenth century may have been heirlooms brought by Mrs. Hurrell from Canvey. Being tenants with nine children the Hurrells would probably have found the outright purchase of the collection prohibitive and casual collecting over time would have run a high risk of breakages. However, the addition of four or five tiles to an inherited collection would have allowed her to embellish the cottage more economically.

Naomi Hurrell is also thought to be the elderly woman who agilely used the 'straight ladder for a staircase to the bedroom', when Rev. Gridlestone Fryer first visited the cottage around 1907 (Gridlestone Fryer 1932, 94; English n.d.).

The cottage finally passed into public ownership in 1964, although it remained tenanted until shortly before the 1982 renovations were begun.

ii. Architectural Description

The Dutch Cottage is of two storeys and octagonal in plan with a small single storey extension to the rear (Figs 4 and 5). The external walls, as they existed in 1982, were timber framed and plastered and sat on a brick plinth, the lower part of which was cement rendered. A wood fascia board

ran round the external wall face at the base of the timber framing. The whole structure was supported by the central chimney stack, which was triangular at ground level and circular at roof level. Two fire places and a kitchen range were built into the stack to serve the ground floor rooms. In 1982 timber framed and plastered partitions divided the ground floor into a kitchen, with the later extension off, and a single large sitting room, which may have been further sub-divided at an earlier date. Coner cupboards, located where the partitions meet the outer walls or chimney, provided storage space. The sitting room was floored with softwood boards resting on timber joists, and was well lit with three windows. The brick-floored kitchen had a single window, and from this room a steep, narrow staircase gave access to the upper storey. This was divided into two rooms by a light timber framed partition which stopped short of the rear dormer window, the only source of natural light.

The thatched roof was as much as 0.9 m thick in places, and originally of reed but covered with straw added in later years.

The two fire-place surrounds were put in during the inter-war period, and on removal of the surround of the fire place opposite the blocked front door the earlier fire surround of Delft tiles was found.

Architectural opinion is that the building is probably of eighteenth-century construction (Pevsner and Radcliffe 1965, 322). The Listed Buildings list (1948) considers that



Fig. 4 The west elevation of the Dutch Cottage, Rayleigh.

DUTCH COTTAGE, CROWN HILL RAYLEIGH



Fig. 5 The ground-floor and first-floor plans, Dutch Cottage, Rayleigh.

'it may be an eighteenth-century copy or reconstruction' of a Dutch cottage and concludes that there were no seventeenth-century features. M. Wadhams (Essex County Council, Listed Buildings Section, pers. com.) considers the cottage to have been built in the first half of the eighteenth century on the basis of the extensive use of softwood.

iii. The Excavations

Two small areas were excavated by hand after removal of floor boards in the lounge (Fig. 6). In both areas the boards rested on rough softwood joists which in turn sat on more substantial timbers taken from an earlier timber framed building of more orthodox design. Because of their structural importance and the limited space available, it was not possible to examine these timbers in detail. The space between boards, joists and the re-used timbers was filled with household dust and modern rubbish (context 1).

The re-used timbers and context 1 sat upon a brown clay (2) which contained plaster or mortar fragments. A thin layer of mortar or plaster (4) separated the upper clay from a more compact clay (3). The mortar layer (4) was shown to dip slightly towards the exterior of the cottage and to butt against a dump of soft brown clay (6) which dipped towards the centre of the cottage. It would seem that a clay foundation (6) was first laid to support the external walls before the central chimney stack was erected on a prepared clay base (3), and the internal area was then levelled up with more clay (2). Context 2 produced a few tiny yellow brick fragments.

Context 5 was a hard yellow grey sand partly used as infilling and partly as bedding for the Delft ware tiles. It contained no finds.

iv. The First Floor

In order to establish changes in the use of the upper floor the floorboards were planned. These boards are much more varied than the ground-floor boards and alignments of oblique joins between boards suggest the existence of a number of former partition walls running from the central stack to the outer walls (Fig. 5).

The floor is particularly heavily patched around the stack and a ladder access may have existed at almost any point around the chimney, though any one group of boards would have provided a very restricted access. However, if by a 'straight ladder' Gridlestone Fryer (1932, 94) meant a vertical ladder, it could not have been placed by the chimney as the stack tapers inwards. The floor-board plan suggests the former existence of a trapezoidal access under the east side of the dormer. This would have provided a vertical ascent by a ladder up the south wall or perhaps up the kitchen/living room partition. Construction of the relatively modern rear extension would have required the blocking of this access and its replacement by a staircase.

v. The Exterior

Outside the cottage a gully (c. 0.6 m wide and 0.1 m deep) was observed on the west side of the cottage. Its centre point was more or less below the outermost edge of the thatched roof. No similar gully existed on the east side where there was a concrete path. This apparent eaves-drip gully was traced, however, to a broken soakaway at the junction of the extension and the main cottage.

DUTCH COTTAGE, CROWN HILL RAYLEIGH



Fig. 6 The excavated areas and section, Dutch Cottage, Rayleigh.



Fig. 7 The location of the Canvey Island Dutch Cottages and the church built on the site of the Dutch chapel.

The Dutch Cottage Museum, Canvey Island, 1988 by B.H. Milton

i. Background and Architectural Description

In the winter of 1988 repairs were carried out to the Dutch Cottage Museum, Canvey Island, which due to the nature of the subsoil was subsiding and cracking badly. The work involved laying a concrete raft beneath the entire building; removing and rebuilding the internal wall, fireplace and chimney; reflooring and reroofing the whole building; and general repairs to the external walls as necessary. Provision was obtained by Essex County Council Archaeology Section to undertake an excavation and watching brief during building works. The cottage is located near the centre of Canvey Island (Fig. 7), in an area now known as 'Dutch Village'. It stands on a slight rise, which may or may not be man-made, adjacent to the present B1014 road. The natural subsoil of the area is alluvial clay.

The cottage is a small, two-storey octagonal structure, 4.2 m across internally, with a thatched roof. It is divided by an internal partition into a living room with fireplace and a small hallway downstairs, and a large and a small bedroom upstairs. A date, 1618, is inscribed into the external plasterwork above the front door. A small, single-room extension was added to the south, provided with a rear entrance and an internal doorway leading into the hallway.

ii. Documentary History

The Dutch engineer, Cornelius Vermuyden was employed by Canvey landowners in 1622 to carry out reclamation work, for which a number of Dutch labourers were employed. These workers are thought to have been housed in small cottages similar to the two which still survive on the island. The pre-1622 dates attached to the two surviving cottages suggest that there may have already been Dutch settlers on the island before Vermuyden - or the dates are spurious. The dates are those given by the RCHM (Essex, IV, 1923, 23), and so were presumably incorporated into the plasterwork before 1923. The museum cottage seems to be indicated on the Pitsea tithe map of 1845 (ERO D/CT199), the other cottage on the Laindon tithe map of 1839 (ERO D/CT274). The museum cottage also appears to be indicated on the surveyors' drawings for the first edition of the Ordnance Survey, 1798-9.

iii. The Excavations

A small trench, c. 1 m by 0.5 m, was dug by hand outside the building against one of the corners. The purpose of the trench was to examine the foundations of the structure and the stratigraphy outside the cottage. However, the water table, only 0.2 m below the present external ground level, inhibited investigation. Topsoil, c. 0.3 m deep, overlay a grey silty clay subsoil. The wall base continued down to the top, approximately, of this natural subsoil. It consisted entirely of buff grey bricks with small frogs, dating to the late-eighteenth/early nine-teenth century. No features were found in the natural. Further external trenches were planned but continued wet weather ensured that the water table remained high, and these plans were abandoned as they would have been unproductive.

iv. The Interior

After the floor, which consisted of worn red bricks, of nineteenth-century date, had been removed, the underlying soil, a grey silty clay only slightly darker than the natural, was cleaned over with a trowel in the areas where it showed above the water table. No internal features were encountered. Small areas were taken down deeper in order to locate earlier floor levels, but none were found, even in the hallway where the floor was c. 0.1 m higher than in the main room.

v. The Watching Brief

As building work took place, all the cottage's brick plinth was revealed and large portions of the external wall frame were exposed. The wall plinth was seen to be made of the same buff grey bricks as were found in the excavated trench.



Fig. 8 The ground-floor plan of the Dutch Cottage Museum, Canvey Island.





The Finds

i. The Tiles (Dutch Cottage, Rayleigh)

by D.M. Archer

Not illustrated, the tiles and colour photographs are in the care of Rochford District Council and a photocopy of the photographs has been lodged with Essex County Council's Sites and Monuments Record. The tiles have a wide date range from the seventeenth century to the nineteenth century and were incorporated into the principal fire surround at some time between 1850 and 1870 in all probability. The numbers refer to Rochford District Council's numbered photographs.

1. English, Bristol. 1740-60.

4, 25-29, 31, 37-42. Dutch. 17th century.

5, 19, 20, 30, 32-35, 43-47. Dutch. First half of the 18th century.

2, 3, 6, 7, 11-18, 21, 23, 24. Dutch. Mid-18th century.

10. Dutch. Late 18th century onwards.

8, 9, 22, 36. Dutch. 19th century.

There are eight half tiles (10, 11, 22, 23, 27, 28, 32, 33) and a number which are incomplete or badly fire damaged (29, 31, 34, 35, 41, 42, 46, 47). The others are complete, slightly trimmed or edge damaged.

ii. The Bricks (Museum Cottage, Canvey)

by P.M. Ryan

All the brick recovered was of late-eighteenth or early-nineteenth-century date.

Type 1. Grey gault brick with shallow frog impressed with 'P'; 220 by 100 by 60 mm, irregular form. 19th century.

Type 2. Red flooring brick; 220 by 105 by 40 mm; smooth under sidte, worn upper face, sides slightly creased, very regular. 19th century. Type 3. Yellow and purple London stock brick; 210 by 100 by 50 mm; one face worn, stick or straw impressions on one side, very irregular; 18th and 19th centuries. Often used for flooring during the 19th century. Fragments of yellow stock brick were found in the rubbish between the floor joists at the Rayleigh cottage, though the kitchen floor was of red bricks of between 220 \times 105 mm and 229 \times 112 mm, and the rear extension's floor was of red brick 222 by 105 mm.

Discussion

Neither of the two cottages investigated revealed clear evidence of seventeenth-century occupation, still less of any direct Dutch connection. There are no known examples of such cottages in the Netherlands (Knightley 1978, 33) and architectural opinion favours an eighteenth-century construction date for both cottages, and for the other octagonal cottages in the country.

In the case of the Rayleigh cottage alternative functions have been put forward to explain the unusual form. English (n.d., 1) records the possibility that it was a toll house, though toll gates were only proprosed for the town in 1841 and it seems unlikely that they were ever built. Furthermore the cottage stands well back from Crown Hill. Gridlestone Fryer (1932, 94) records that Mr. Nash (died 1859) of Rayleigh Place 'built or secured the Octagon House for the keeper of his hounds'. The pack, however, was not Nash's alone, but shared with Thomas Brewitt of Down Hall, who died in 1830, five years before the Octagon Cottage was first mentioned in documents. If Nash 'secured' the cottage, he may have rented it from either Harridge or Butler, presumably before Brewitt's death in 1830.

The possibility exists, of course, that it was built purely as a flight of fancy by Butler, Harridge or one of the Barkers. However, Whittaker's suggestion (1980, 25) that some of the Dutch community moved inland during the eighteenth century may provide an alternative solution, if the Dutch involvement is accepted.

In the Canvey Museum case, Milton (pers. comm.) was surprised to encounter only single brick floor of nineteenthcentury brick, even though the cottage apparently was in existence by the very end of the eighteenth century and had, at some stage in the past, 'five separate layers to the present floor' (Benfleet, D.H.S., n.d.). It has proved impossible to trace the author of this guide booklet, and it remains unknown if the brick floor was relaid since the booklet was written, destroying the original floor levels. It might equally be the case that those floor levels are to be found below the level reached in the 1988 excavations. At Shopland the earliest building was some 1.5 m below the surface of the surviving mound and some 0.45 m below the second structure on the site (Francis 1937, Fig. 3). In view of the present high water table it seems not unlikely that the Canvey Museum cottage site may have been artificially raised to avoid flooding, thus concealing earlier floor levels below the water table.

The absence of such structures in the Low Countries does not necessarily imply their non Dutch origin. The cottages were built quickly as temporary accommodation for wallers during the process of inning, presumably with the intention of replacing them with more substantial structures later. The sod houses built in the Prairies in the last century by pioneers find no parallel in twentieth-century Britain (Laver 1909), though some American examples are still inhabited today.

Acknowledgements

I am grateful to Brian Milton and David Buckley of Essex County Council's Archaeology Section for permission to include the Canvey Island investigation in this report. My gratitude is also owed to Pat Ryan and David Buckley for answering my often vague enquiries with detailed facts; to Pat Ryan and Michael Archer for their specialist reports; to Brian Broadbent of Rochford District Council for his assistance before, during and after the recording work at Rayleigh; to Moira Eddy and Steve Godbold who assisted in the work at Rayleigh and Canvey respectively; and to Mr. A. Walsh and June Beardsley for information on Sandtoft, Humberside and octagonal cottages in Essex respectively.

Both Brian Milton and I are grateful to Mr. Whitley of Castle Point District Council, which funded the work at Canvey, for making the necessary arrangements for recording the Museum cottage, and to R.W. King for cooperating with the archaeological work.

Illustrations are by the author, except Figs 7, 8 and 9 which are by Roger Massey-Ryan.

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Modern Woodwork by H. & K. Mabbitt in Birdbrook Church

by Christine Mabbitt

In the early 1930s Kenneth Mabbitt and his brother Harold set up a woodcarving business at their home in Mersea Road, Colchester. Trading as H. & K. Mabbitt, they soon became noted for, amongst other high class woodwork, church woodwork and fittings. About a quarter of their work was carried out under the direction of architects. Ken usually being asked to design any carving details. Much of the rest was to Ken's own designs 'tailor-made' for the proposed sites. Examples of his craftsmanship can be seen in many places in Essex and beyond.1 Within the county some of his more notable work can be seen in churches at Dedham, Copford, Frinton, Little Clacton and Birch (recently declared redundant) and the Essex Regimental Chapel at Warley. Ken remained active in the business for over fifty years, completing his last work in September 1987. In that year the goodwill of the business was sold to Bakers of Danbury Ltd, where it continues under the management of his nephew, Tom Mabbitt. Ken died on 27th November 1989 at the age of ninety.

On 6th April 1960 Ken received a letter commencing thus: 'I was given your name by Mr. G.J. Bragg as a likely person to help' and this was the beginning of an association with Birdbrook Church which lasted for nineteen years, most of them in co-operation with the incumbent, the Revd. Fred. Cordingley. (Mr. G.J. Bragg was a Chelmsford architect).

Ken visited Birdbrook. Mr. Cordingley was full of ideas for his church. Indeed, during the years that followed, he had many ideas, and Ken had to devote much time and thought to direct these into forms which would be acceptable to the P.C.C., and, above all, to the Diocesan Advisory Committee before seeking faculties. On his first visit, Ken collected a panel and bench end formerly belonging to the choir stalls. Mr. Cordingley thought that these could form part of a priest's desk for visiting clergy. The chair to match would be new. He also asked that various armorials on wall tablets be cleaned and re-coloured, and a blank shield from one of the wall posts was to bear the arms of Clare College, one of the patrons of the living. An uncoloured, metal Royal Arms with the lion's tail missing was also collected, along with a hatchment. These were to be repaired, cleaned, and the Royal Arms coloured. The cleaning and colouring were entrusted to the writer of this paper.

The first design for the chair and desk were considered too plain. Ken had suggested that the woodwork should be lightened, but Mr. Cordingley, having just cleaned and polished his choir stalls (to his great satisfaction) wanted the new work on the chair and desk darkened to match. The second design included a hand rest on each arm in the form of a bird. This Mr. Cordingley loved, and spoke of having more furniture in 'the dim future' with birds as carved motifs. All this work was completed by June 1961.

In November 1961, Mr. Cordingley had another

project in view. This was an elaborate List of Rectors on which he wanted the arms of the four dioceses (London, St. Albans, Rochester and Chelmsford) and also the arms of the patrons. He wanted it to go on the north wall under the hatchment - a most unsuitable position in Ken's view as the light was very poor. In May 1962 Ken produced drawings of a hymnboard, noticeboard, a sketch of a pulpit rail and a drawing of the List of Rectors. This List of Rectors had received much thought. 'The St. Augustine shield is flanked by the arms of the four sees. There is an odd number of patrons, so I have shown Clare by itself in the centre of the base. The arms of the Province of Canterbury have been omitted as I can find no place for them that would be in accordance with their seniority or that would not upset the symmetry of the design. Possible non-availability of the arms of all patrons is sure to be a cause of criticism of the design especially by the Diocesan Advisory Committee. I think any such criticism could probably be averted by proposing the use of carved and coloured monograms in place of shields where arms cannot be ascertained'. Ken suggested silver lettering on a black panel (blackened wood or formica) as he had seen this used very effectively in Ely Cathedral. Mr. Cordingley, however, did not approve and wanted gold leaf on oak which, Ken maintained, would not show up in the bad light in the suggested position. A stalemate ensued -no doubt things would resolve themselves in time. The hymnboard, with additional cresting, was agreed, but the handrail sketch was returned for further elaboration. However, these and the noticeboard were completed by the end of 1962.

In December 1963 Mr. Cordingley wrote again with 'another brainwave'. There was already panelling behind the altar, and he wanted new panelling extended round the sanctuary. Ken voiced his doubt. The Diocesan Advisory Committee did not approve of such panelling, so he suggested that they should consult the Revd. Eric Turner, a member of the D.A.C. who had had architectural training in his youth. This was agreed, and a discussion on site ensued. Suggestions included removing the existing reredos panelling and replacing it with a line of new panelling right across the east wall below the string, continuing round the north and south walls as far as the sanctuary step. This would not be overpowering as the string was low, passing below the very deep east window. Mr. Turner did not favour the suggestion of carrying the panelling further along the north wall to the choir stalls to form a List of Rectors, but liked the idea of incorporating a cross in the centre panel with armorials in the other panels. On January 11th 1964, a plaintive letter arrived from Mr. Cordingley. He was sorry that the existing sanctuary panelling was to be removed - could it be used for a List of Rectors elsewhere in the church? He



Fig. 1 Birdbrook church. Working drawings.

preferred a free-standing cross. He added that representations of the Diocesan Arms were to be reserved for the new glass in the lancet windows either side of the sanctuary. Again Ken visited Birdbrook, and after long discussions with Mr. Cordingley produced, in June 1964, a suggested design for all the sanctuary woodwork, with the arms of the patrons on the panelling, a new altar table, a chest for the alcove and sedilia. Final drawings were produced in September for submission to the Diocesan Advisory Committee, but, as Ken had feared, they did not favour the scheme. Mr. Cordingley felt that he had been 'most scurvily treated'. But he persevered with his plans and, by May 1965 approval was finally granted. Ken acknowledged the order saying 'it is very encouraging to think that, at long last, the all clear has been given to go ahead with the project. May I congratulate you on the determination with which you pursued your object'. So, after much research into armorial details of successive patrons of the living, and many hours of work producing full-size drawings of the shields and other carving details, the work proceeded and was finally completed in February 1966. 'We are very satisfied with the altar, panelling and chest' wrote Mr. Cordingley, 'Nothing but praise even from the more cantankerous'.

New requests followed rapidly. A desk for the sedilia, a small altar desk, a pulpit desk, a stand for the new almsdish and a flower stand, and perhaps the old unwanted sanctuary panelling could be used for the List of Rectors and placed at the west end? The subsequent drawings were all agreed with the request that the carving on the front of the desk should depict a squirrel eating a nut.

Meanwhile, Mr. Stephen Dykes Bower, consulting architect to Chelmsford Cathedral as well as to Westminster



Fig. 2 Birdbrook church. Working drawings.

Abbey, had been called in to advise on moving the organ to create more space in the chancel. In fact the organ was sold and a new electronic one bought, so, in 1967 Ken Mabbitt again visited the church to discuss, with Mr. Cordingley, the re-ordering of the chancel. The outcome was to move existing choir stalls to the west end, and to make new stalls and desks. The stall ends were to be decorated with animals and birds of the district, and the desk panelling on the north side to be continued in front of the new organ to form a screen. A suggestion, later implemented, was to continue the backs of the stalls up to the transom, bringing them into line with the sanctuary panelling. Mr. Cordingley proposed that the seat backs should be decorated with the four horsemen of the apocalypse and the seven virtues or the seven deadly sins: later he suggested Ezekiel's visions and parables. Ken persuaded him that these were not really suitable. However, his next idea was a splendid one: to use the panels to commemorate the men of Birdbrook lost in the two world wars and the Korean War. It took Ken many

months to produce the final design, other commitments filling his time. But, prompted by another plaintive letter: 'So, please, Mr. Mabbitt, let me have something. The money to pay is sitting in the bank waiting and I am sitting in my study waiting', he completed the drawings. The faculty was granted in January 1969 and the work completed in the autumn. The re-ordering of the west end using the old choir stalls and reredos panelling was carried out a year later, in 1970.

Meanwhile a scheme for reseating the nave had been mooted. The work could not yet be carried out for lack of funds but Mr. Cordingley, who was retiring from Birdbrook due to ill-health, wished to present a drawing to the P.C.C. and to put the scheme on record. Ken produced a design with quite low pew-ends which would not obtrude into the vista of the east end. In his letter telling Ken of his impending retirement, Mr. Cordingley wrote 'What a splendid day it was for Birdbrook when Mr. Bragg recommended you to me! I shall miss dealing with you — it has always been a





pleasure'. Finally, on 3rd April 1971, as he left the parish, Mr. Cordingley wrote: 'All these years we have worked amicably together and I do appreciate all you have done for me and for Birdbrook and Sturmer. It has been a pleasure. Please pass on my very good wishes to your staff'. In reply, Ken wrote 'I shall miss very much my periodical "conferences" with you in which you usually provided the ideas and I subsequently "engineered" them towards realisation'. So ended a fruitful partnership. Mr. Cordingley had found it difficult to accept ideas formulated by architects, but he and Ken seemed to complement one another, and together they achieved much.

In June 1973 Ken met the Revd. B.W. Ottaway, Mr. Cordingley's successor, and the matter of the nave seating was raised. The motifs on the ends would be flowers. No further progress seems to have been made until 1976 when, in addition to the pews, a publications stand, bookcase and bookrack were discussed. The final pew drawings were accepted without question by the Rector, the P.C.C. and the Diocesan Advisory Committee and a faculty was granted. Mr. Ottaway placed an order for all the work, payment being spread over three years. The re-seating was completed in January 1979. Finally, also in 1979, the List of Rectors was at last realised — painted on the panels of the desk in front of the south range of pews!

Carving Details

East Wall

1. Sanctuary Panelling

The armorials of the patrons are carved and coloured within a carved wreath of Tudor roses, roses with leaves, or oak leaves.

- North Wall i. Inscription
 - ii. Arms of St. Augustine (tudor roses) Sable a cross argent with the cross of an archbishop surmounted by a pall or in the 1st quarter and a lify with its leaves argent in the 2nd quarter. A mitre or surmounts the shield.
 - iii. Gilbert Peche (roses and leaves) Argent, a fesse between two chevrons gules.
 - iv. King Edward I (roses) Gules, three lions passant guardant in pale or.

- w. Westminster Abbey (oak leaves)
 Pre-dissolution arms.
 Azure, a chief indented or charged with a crozier and a mitre gules.
- vi. Tyrrell (oak leaves)
- Argent two chevronels az, a border engrailed gules. vii. Queen Elizabeth I
 - France modern and England quarterly. Surrounded by the Garter.
- viii. Gent (roses and leaves) Ermine, on a chief indented sable two eagles displayed or. On an escutcheon argent a fess and, in chief, a lion passant gules.
- South Wall ix. Dalston (roses) Ar, a chevron between 3 daws heads erased sable beaked or.
 - x. Alleyn (roses and leaves) Sable, a cross potent or.
 - xi Howard (roses and leaves)

Quarterly. 1. Gules, a bend between six cross crosslets fitchée argent, on the bend an escutcheon or, charged with a demi-lion rampant pierced through the mouth with an arrow and within a double tressure flory counterflory gules.

2. Gules, three lions passant guardant in pale or and a label of 3 points argent.

- 3. Chequy or and azure,
- 4. Gules, a lion rampant, argent.
- xii. Rush (roses) Gules, on a fesse or, between three horses passant argent as many hurts.
- xiii. Clare College (oak leaves)
 - Or, 3 chevrons gules impaling or, a cross gules, all within a border sable, gutté-d'or.

2. Chest

The chest is in an alcove on the north side of the Sanctuary. Two spandrels depicting a kingfisher and bluetit decorate the top face of the alcove. The four carvings on the front of the chest depict rural life: a tree-feller, a reaper, a fruit-picker and a shepherd.

3. Altar

The altar table has a long carved panel along the top frame. With the carved monogram IHS in the centre, a trail of vine leaves and fruit interspersed with three birds, a mouse, a caterpillar and a bumble bee runs along the entire panel.

4. Memorial Panelling behind the choir stalls

Eleven regiments are depicted. There are three names under each of the

ESSEX ARCHAEOLOGY AND HISTORY



Plate I







Plate II





Birdbrook church: animal carvings in the choir stalls - duck, owl, squirrel and hedgehog (Photographs by Stan Hyland).

Suffolk and Essex Regiments, and one name under each of the others the Rifle Brigade, the Royal Army Service Corps, the Royal Engineers, the Royal Air Force, the Royal Horse Artillery, the South Wales Borderers, the Royal Fusiliers, the Beds and Herts Regt., the Royal Scots Greys and, in the last panel, a general inscription.

5. Choir Stalls (Plates 1-IV)

With regard to the naturalistic carvings on the hand-rests of the stalls, it must be remembered that the creatures depicted are carved from the solid oak ends, and therefore their dimensions are governed by the thickness of the wood. Also, the fewer protruberances there are, the better; beaks, ears and tails have to be designed in such a way that they do not catch and tear surplice sleeves. This compactness also prevents the vulnerable parts from being broken off, especially if they are running across the grain of the wood. The creatures on the stalls are: Swan, Hare, Dog, Vole, Fox, Thrush, Woodpecker, Rabbit, Owl, Hedgehog, Squirrel, Hawk, Otter and Duck. 6. Choir desks and Organ Screen

Trails of oak, hazel and vine decorate the front of the choir desks and organ screen. Various small birds, animals and insects including a dragonfly are included in the trails.

7. Pews

Roundels containing carved leaves and flowers of the district decorate the pew ends. North side: Dogwood, wheat, ox-eye daisy, sweet pea (Unwins, the growers, live in the district), hop, ash, white bryony, lime, poppy, ox-lip. South side: Violet, blackberry, oak, hazel, elm, apple and dogrose (Fig. 3). Along the back of the rearmost pews are paterae of stylised motifs representing a sycamore leaf, kingcup, acorn, holly, daisy, bryony and thistle.

Author: Christine Mabbitt, 71 High Street, Colchester.

Footnote

1. Over 200 Essex churches contain work by the firm ranging from the single tablet to almost complete furnishing or re-furnishing. The writer is compiling a list of ecclesiastical and important secular work in Essex which, in due course, will be placed with the other Mabbitt drawings and records already in the Colchester branch of the Essex Record Office. There are difficulties in listing as some records of early work appear to be commissioned by the donors with no mention of the parish. In parishes where there is more than one church, it is not always clear in which church the work was to be put. Nor is it always clear if an architect was involved. Subsequent re-ordering of the church can mean that work is no longer in the position for which it was designed, the most notable example of this being Chelmsford Cathedral for which Ken designed much furniture in the 1950s and 60s.

Outside the county, Ken was particularly proud of the font cover at Hawkhurst (Kent) and the stallwork in the new extension to Lancing College Chapel (both under the direction of S.E. Dykes Bower Esq., M.A., F.R.I.B.A., F.S.A.), the restoration, after a disastrous fire, of a carved staircase at Bentley Priory, Stanmore, organ pipe shades in Canterbury Cathedral and parclose screens at Isleham church near Ely.

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I would like to thank Ray Powell for his encouragement and advice, Gus Edwards for checking the heraldry phraseology and Stan Hyland for taking the photographs.

Work of the Essex County Council Archaeology Section, 1990

Edited by P.J. Gilman and A. Bennett

This annual report enables the Section to publish notes on a number of watching briefs and chance finds made during the year, as well as final reports on a number of smaller excavations. Summaries of the larger excavations can be found elsewhere in this volume (p. 148-161).

Reports are arranged in chronological order or, in the case of multi-period sites, under the principal period represented. The Section is grateful to all who have undertaken work on its behalf, especially those providing specialist reports and museums who have allowed finds to be published here. The illustrations are by the following: Lesley Collett (Figs 1, 2, and 6), Sue Holden (Fig. 3), Stewart MacNeill (Figs 5, 7, and 8) and Nick Nethercoat (Figs 4 and 9).

Full details of all these sites and finds can be found in the County Sites and Monuments Record.

Little Burstead, Broomhills Chase Paul Gilman and Hazel Martingell

A Neolithic flaked axe (Fig. 1) was kindly loaned to the Archaeology Section for recording by the finder. The axe is made of flint, with inclusions, and is black to grey in colour, stained a light khaki. The axe has a pointed butt and convex sides to a narrow curved blade. The ventral surface carries transverse flake removals across the blade end.

Finds: private possession.

Witham, The Avenue

Howard Brooks

A fine barbed-and-tanged flint arrowhead (Fig. 2) was discovered here and was kindly reported by the owner. The



Fig. 1 Neolithic flint axe from Little Burstead.

arrowhead approximates most closely to Green's (1980) Green Low type g, and is of early or mid second millenium BC date. The material is light brown flint, with fine serration on both edges.

Finds: private possession.



Fig. 2 Flint arrowhead from Witham.



Fig. 3 Bronze Age spearhead from Boreham.

Boreham

Nigel Brown

A complete peg-hole spearhead (Fig. 3) was recovered from a field surface in Boreham. There is some ancient damage to the blade edges and the socket is cracked. The blade is bent. The surface is largely obscured by corrosion, predominantly blue grey with some patches of green patina. There is also recent damage to the tip, mid-rib and socket. The spearhead has a lanceleote blade, the curve of the blade from base to point of maximum width to tip is continuously convex (Burgess, Coombs and Davies 1972), with a roundsectioned mid-rib. There is a deep, broad groove on the blade parallel to the edge bevel, giving the blade profile a somewhat step-like appearance particularly towards the tip.

The spearhead belongs to the Late Bronze Age (LBA) peg hole series, and is a further addition to the marked concentration of LBA metalwork finds in the Boreham area, 3-4 km east of the major LBA site at Springfield Lyons (Buckley, Brown and Greenwood, 1986). Much of this metalwork is of the Ewart Park phase. However, this spearhead may be slightly earlier. The blade profile is reminiscent of the step bladed spearheads of the Wilburton phase, and the lanceleote blade form becomes less common in the Ewart Park phase (Burgess, Coombs and Davies 1972).

Finds: private possession

Takeley

Hilary Major

A carved stone object (Fig. 4) was found by a farmer in a field near Takeley, and kindly lent to the Archaeology Section for study. The stone is limestone from an unknown source, with a light brown patina. It is rather crudely carved in the round in the shape of a scabbard. It may once have been part of a larger carving — there is a possible attachment point on the back — although the fact that it is carved in the round suggests other-wise. The piece of stone utilised may have been an erratic.

The top is flat and smooth, with a slight upward projection on one side. This may have been mirrored on the other side, but the stone is slightly damaged there. The front has a slight flange all the way round the top, with a rather crudely carved central rib on the front. A second flange circles the scabbard further down. This lower flange utilises a natural band of harder, greyer stone within the limestone. The front of the object is smoothly finished, the back less so. There is some slight surface damage, particularly on the back of the lower flange, and if the object was originally part of a larger object, it must have been attached at this point.

The carved detail appears rather crudely done, although this effect may be partly the result of damage. This must have been ancient, though, since the patina covers most of the irregularities in the stone, particularly the vertical rib. The bedding plane present has been carefully utilised as part of the design.

Assigning a date to the object is difficult, although it is probably Roman or later. The decoration is not distinctive of a particular period, and although the relatively broad,



Fig. 4 Stone object from near Takeley.

short shape may suggest Roman rather than medieval scabbards, since this appears to be a piece of vernacular sculpture possibly made from an erratic of fortuitous shape, it seems unwise to date it from shape alone. There is a known Roman site close to the findspot, but medieval finds have been recorded from the same field. The central division on the upper part can be paralleled on medieval leather knife scabbards from London (e.g. Cowgill *et al* 1987, 126, nos. 400-401).

Finds: private possession

Ashdon and Hadstock

Howard Brooks

A watching brief was undertaken on a 4.8 km long water pipe-line from Hadstock (Essex) to Linton (Cambs), sponsored by the National Rivers Authority Anglia Region. This report is on the Essex section only (i.e. the southern 4.1 km, from Ashdon to Hadstock). Although no known Essex sites were cut by the projected line, three lay adjacent to it. These were a field containing a circular cropmark, presumably prehistoric, and two brick scatters of unknown date.

Only 650 m at the northern end of the projected line was ploughed before pipe-laying, therefore only limited fieldwalking was possible. However, the whole of the length of pipe was observed after stripping of topsoil, and certain sections were observed during the digging of the pipe trench. Apart from modern agricultural drains, the only features observed were areas of infill associated with the now disused Saffron Walden-Linton-Cambridge railway line and two modern pipe trenches.

Finds were equally scarce, consisting (with the exclusion of post-medieval brick or tile fragments) of a single sherd of orange fabric pottery (possibly Roman), post-medieval glazed pottery and glass, flint cores, and a flint flake.

The lack of finds may be due to a combination of different factors: the necessarily short length of pipe which could be walked before topsoil was stripped (0.65 km); the lengths of trench where contractors did not strip right down to subsoil (0.4 km); the southern end where the pipe was trench-laid without any preliminary stripping (1.18 km); the areas obscured by recent infill (0.24 km); and the relatively short lengths of pipe trench actually observed during pipelaying (0.36 km).

Despite all these variables, the lack of finds is still very noticeable, when contrasted with the profusion of finds visible on the surface on the Linton villa site in Cambridgeshire and on a nearby Roman site in Essex. It is likely therefore, that the lack of pottery finds reflects a type of land usage in the Roman and medieval periods which did not involve dispersal of potsherds during manuring operations. In other
words, it is possible that the area was either wooded, or was predominantly pasture rather than arable land in those periods.

Finds: E.C.C.; to go to S.W.M.

Great Dunmow, rear of 39/41 High Street (TL61/55) Howard Brooks and Richard Havis

An evaluation excavation prior to redevelopment was sponsored by Shackmay Ltd. A triangular area of 80 m^2 was selected, as close to the street frontage as possible, but modern pipe trenches reduced the area available for excavation to a trench 7 x 1.5 m. It was evident that the area had been much disturbed in the post-medieval period, and it is unlikely that much medieval or Roman stratigraphy survives. Finds of pottery, all from a residual context, included Early Medieval Ware (fabric 12), 15th-16th century Black-Glazed ware, and a single sherd of Roman sandy grey ware, all from a residual context.

Finds: E.C.C.; to go to S.W.M.

Great Tey, St. Barnabas Church, Great Tey (TL82/49) Howard Brooks

A watching brief on a narrow trench close to the west end of the church revealed a piece of masonry (flint or septaria rubble) foundation. The outer edge of the masonry was 30 cm north of a line projected from the north wall of the present north porch. Its south edge could not be identified with any certainty, but it was certainly over 25 cm wide. The observed wall line must be part of the old church, before its drastic Victorian reduction. To the south of the wall line was an intermittent tile layer at a depth of 25 cm below ground level. The contractor said that in a previous trench, south of the present one, he saw the same tiles continuing to the edge of the present lawn — this is 3 m south of a line projected from the south wall of the present south porch. Because this is within the area occupied by the old church, it is possible that the tile is the damaged remains of an old floor surface in the west end of the old church, but it is more likely to be demolition debris from the Victorian reduction.

A stair riser from the old church was found during the digging of the previous trench, and has been relaid at modern ground level, west of the west end.

Finds from the trench include: Roman brick with pale brown mortar adhering to the underside; medieval peg tile; a corner fragment of a glazed floor tile (patchy dark greeny brown surface glaze, unpatterned), typical of the 15/16th century, and possibly imported; and fragments of probably postmedieval floor brick.

Acknowledgements:

Ivan Dyer and Tom Chipperfield are thanked for information and assistance on site. The finds were identified by David Andrews.

Finds: E.C.C.; to go to C.E.M.

Newport, White House, High St. (TL53/15) Howard Brooks

Foundation trenches for a new building to the rear (west) of White House were observed. Several features were seen in section, including a tree pit, a post medieval brick box, and an undated pit/ditch. There were no finds from the trench, but two pieces of worked stone were recovered (Fig. 5).



Fig. 5 Newport, White House: worked stone.

apparently from a recently demolished garden wall to the rear of the property. These were of a fine-grained, light brownish-grey limestone and comprise:

1. A block with one flat face and a recessed chamfer.

2. A window mullion with simple roll moulding, recessed chamfers, and a glazing groove (c. 14/15th century date). Two small pieces of unworked clunch were also found, but were not kept.

Finds: E.C.C.; to go to S.W.M.

Newport, Church House (TL53/154)

Howard Brooks and Richard Havis

Two small trenches, approx 1m square, had been excavated by contractors against the south and north walls of Church House (TP1, TP2). No features were visible within either trench, apart from the house foundations. One of the trenches was inside the churchyard (TP2) and produced 3 sherds of Early Medieval Ware (Fabric 13) and animal bone. The other trench produced only post-medieval red earthenware.

Finds: E.C.C.; to go to S.W.M.

Widdington, Priors Hall Farm and Barn (TL53/48)

Howard Brooks

A watching brief was kept on a drainage trench north of the farm buildings. Only one feature of interest was revealed, possibly an old infilled pond. A single piece of early medieval tile came from the fill. This work coincided with a watching brief being carried out by Vivienne Coad in the barn, on behalf of English Heritage. A narrow (20 cm) trench was being dug north-south across the clay floor on the east side of the third bay from the east. Despite poor lighting, a feature (a pit?) had been observed, sealed by the earthen barn floor. The pit produced a small group of Early Medieval ware (Fabrics 12 and 13) representing the remains of at least two cooking pots (Fig. 6). In this position, the medieval pit probably represents pre-barn domestic activity associated with the earlier phases of Prior's Hall, itself now known to have its origins in the Anglo-Saxon period (Kerr and Smith 1989).



Fig. 6 Widdington, Prior's Hall Barn: medieval pottery.

Saffron Walden, (TL53/10)

Howard Brooks

Trenches dug out for footings for a new extension to the rear (west) of 19 High Street were examined (Fig. 7), and a timber frame embedded in the party wall between 19 and 21 High Street was recorded (Fig. 8).

The trenches (A-E), running anti-clockwise along the south and west walls, revealed the following stratigraphy (all depths are below site level):

(A) Topsoil at 1.1. m.

(B) Medium brown clay over natural chalk at 1.9 m.

(C) On the east side, natural chalk/clay at 1.8 m, but on the west some sort of cut feature down to 2.0 m. This was dug out by the contractors, but produced no finds.

(D) A flint in mortar surface, with a well opening, at 1.0 m. The wall of the well was of one build with the flint surface, and was visible down to 1.4 m. It was not possible to say with any certainty whether the inner surface of the well was plastered or not. The top of the well was infilled with loose black soil, which was probed down to 3.0 m. This infilling may be equated with the dumped soil sealed by the brick wall in hole (E) below.

(E) Natural chalk/clay mix at 1.9 m. At 0.4 m was the top of two courses of unfrogged brick (18th century?), running north-south at right angles to the easternmost extent of the timber frame observed in the north wall of the property. This is taken to be the rear wall of part of an outbuilding behind 19 High St.

The timber frame was visible, embedded in the south property boundary wall (Fig. 7, between points F and G). This must be the side of the building (now demolished) which is shown in this position on the R.C.H.M. Inventory (1916, p. 249 no. 46). The timber frame was the south wall of a two-bay structure. The bays were 10 ft. (3.1 m) wide, and 11ft 8 inches (3.6 m) high from the top of a modern brick plinth which had been inserted to replace the original sill beam. The central bay-post was tenoned and pegged into the underside of the top plate, and the mid rails were tenoned and pegged into the bay post. The central bay post had a stain and a ridge of surviving mortar showing that something had been attached at 3.6 ft (1.1 m) below the top of the top plate. The eastern bay post was jowled, and had an empty tenon hole with a peg in situ indicating the position of a former top plate(?) in the east wall of this structure. This former timber wall lined up exactly with a brick footing seen in the east face of footing pit E — evidently both are part of the same wall.

An old chimney breast, plastered over, occupied the western half of the west bay. The bulk of this must originally have protruded into what is now the adjacent property (no. 21). Apart from the chimney, the infill of the timber frame was as follows: studs with Tudor brick infill (plastered over) below the mid rail, and lath and plaster work above it. To the west of the chimney breast, there is an area of infill consisting of fragments of an old stone mantel-piece and an assortment of worked stone and brick debris, plastered over. The irregular position of some of the stone shows that even if the possible mantel piece is *in situ*, the rest cannot be. The stone is very crumbly soft brown limestone, and grey clunch.



Fig. 7 Saffron Walden. Rear of 19 High Street. Plan.

Chipping Ongar, Cock Tavern, High St. (TL50/2) Howard Brooks

During watching brief work, a well shaft was recorded at the rear of the Cock Tavern. The constructional details of the well (header-built in unmortared red brick with shallow rounded frog) suggest a 19th century date. The internal diameter was 4'6" (1.4 m) and the depth 25' to the water level (7.6 m) although this was obscured by rubble which had fallen in when the well top was removed.

The arrangement for extracting water is of interest, as this was intended from the outset to be a pump rather than an open well. The brick dome was of one build with the well shaft, and was below ground level (i.e. only an aboveground pump would be visible). Water was lifted through a 2.5" (6.4 cm) lead pipe which was supported by 2.5" \times 4" (6.4 \times 10.2 cm) timber braces let into the brickwork at 7' and 15'6" (2.1 and 4.7 m) below modern ground level, the lower of which was seen *in situ*. The bottom of the pipe was stopped up with a square wooden plug, 6" long, which would have lifted the pipe bottom above the muddy waters at the bottom of the well, allowing clean water to enter through two diametrically opposed pairs of drilled holes in the sides of the lower end of the pipe. At the upper end, the lead pipe cut through the brickwork and proceeded underground towards the house (presumably the kitchen).

Clavering, Starling's Green (TL43/20) Richard Havis

A watching brief was undertaken at Starling's Green moat, where three sides of the moat had been cleared out with a mechanical digger. On the western side, in the bottom of the moat, a linear strip of white clay with a large quantity of chalk mixed in with it, was visible. It seems probable that this is a natural feature as no cuts were visible in the side of the moat. No finds were present. Also visible at the base of the section cut across the moat was a 50 cm thick deposit of black humic material.



Fig. 8 Saffron Walden. Rear of 19 High Street. Elevation.

Ingatestone, Ingatestone Hall (TQ69/1) Dave Smith and Steve Wallis

During the laying of telephone cables to the north of the drive of Ingatestone Hall, parts of a wall and vaulted drain, both of brick, were exposed. Both these features are apparently shown on an estate map of 1566, the wall forming the northern boundary of an entrance yard called the 'cawsy'.¹

Boreham, Bulls Lodge Farm (TL71/79) Simon Bryant

Two trenches were dug by machine across an earthen causeway near Bulls Lodge Farm. The causeway (180 m long) is almost certainly a dam, probably of Tudor origin, which once served to form a large fish-pond (no pond survives today). The trenches were excavated in response to a planning application to lower the causeway by at least 1.5 m to create a wider access road to the new Bull's Lodge quarry. In determining the application it was felt important to know the extent to which the original earthwork (which had clearly modern material in its top surface) might be damaged by this, and the relevant information could only be obtained by archaeological investigation. The trenches were about 90 m apart. Both were 1.2 m deep and revealed similar stratigraphy. The upper 50-60 cm was made up of relatively modern metalling, with bricks of late 19th or early 20th century date. Below this was clean yellow clay or silty clay, with lenses of variable stoniness. This represents

the core of the original causeway, or dam, which was clearly of a simple dump construction, and likely to be of Tudor date. Because of this finding, it was evident that any proposal to lower the existing causeway by 1.5 m would remove a large part of the original earthwork. The planning proposal was therefore withdrawn and an access road constructed, parallel to the causeway, a little to the east

Boxted, Boxted Cross Public House Alison Bennett

During refurbishment of this property the timber frame was exposed. The building had the appearance of a three bay structure. However, closer examination revealed that two of the bays were distinct in construction. Dating evidence, particularly the roof, indicates that the two bays, together with the brick stack, positioned centrally at the back, were built in the late 16th to early 17th centuries. Of particular interest is the thickening of the girt, where it is jointed to the bridging joist over the fireplace, which is a typical Suffolk feature of this period. This two-bay structure was originally jettied at one end, and there were indications that a window may have been positioned centrally at first floor level over the jetty. Another window may have been positioned below the jetty, but to one side. The position of the jetty indicates that this two-bay structure may originally have been a cross wing of another building. Carpenters marks were observed on some of the timbers and may indicate

reused timbers. The third bay of the present structure represents a later addition to the jettied end.

Acknowledgement:

David Stenning is thanked for his assistance in interpreting the building.

Aerial Survey 1990

Paul Gilman

1990 again proved to be a successful year for aerial survey in Essex, as a result of the relatively dry winter of 1989/90, which in turn was followed by another dry summer. Attention continued to concentrate on the north-west and centre of the county. Eight flights were carried out during June-August. As in 1989 the best cropmarks appeared in June and early July in ripening cereals. The prolonged dry spell resulted in several new sites being observed on the boulder clay plateau, which is not normally conducive to the formation of cropmarks.

Although all of this year's photographs have not yet been analysed, it is clear that many new sites have been discovered. They include single ring ditches at Birdbrook. New cropmark features were also recorded at a number of already known sites. The photographs from which these results are drawn were all taken by ECC staff; no new sites were accessioned to the SMR from other sources as funding for this backlog plotting was once more not forthcoming. The following is a selection of the most interesting of the new cropmarks.

Thaxted

A subrectangular, almost D-shaped enclosure (Fig. 9.1), c.60 \times 40 m (0.25 ha), with a much smaller enclosure immediately adjacent, as well as linear features, the latter probably remains of old field boundaries. The larger enclosure most closely approximates to Priddy and Buckley's type Ciii (1987, 74), i.e. sub-rectangular/D-shaped enclosures ranging from 0.10-0.25 ha, in their classification of Essex enclosures based on excavated examples. The vast majority of excavated enclosures of this type in Essex date to the Middle or Late Iron Age and several have subsidiary enclosures. This particular cropmark is noteworthy for its apparent location on the boulder clay plateau. The attribution of this cropmark to the Iron Age is strengthened by evidence from the Stansted Airport project, where excavations have shown that the boulder clay plateau was settled from at least the Late Bronze Age/Early Iron Age.

Thaxted

This rectilinear enclosure (Fig. 9.2) measures $c. 80 \times 70$ m (0.6 ha), exhibiting internal subdivisions, and with a smaller enclosure attached to one corner. This enclosure is also interesting in view of its situation, again seeming to be on the boulder clay plateau. Rectilinear enclosures under 1 ha in area vary widely in form and regularity. However, almost all excavated examples belong to the Late Iron Age and Roman periods (Priddy and Buckley 1987, 74).

Danbury

This rectilinear enclosure (Fig. 9.3) measures c. 100×70 m (0.7 ha) and has an apparently inturned entrance in the eastern side. A Late Iron Age or Roman date can be surmised for this cropmark also.

Halstead

A subrectangular enclosure (Fig. 9.4) measuring $c. 90 \times 70$ m (0.6 ha), with an entrance in the south side, situated on the southern flank of the Colne Valley. As with the three enclosures described above, a Late Iron Age or Roman date would be most likely for this cropmark. This enclosure is of particular interest because of its proximity to a probable Roman villa site, which was partially excavated in the 1950s (VCH III 1963, 137). Other crop-marks are also known from the vicinity, including a curvilinear enclosure with a broad ditch.

Helions Bumpstead

A small, circular enclosure c. 30 m in diameter (Fig. 9.5), with opposing entrance causeways aligned roughly east-west, with some signs of thickened ditch terminals. There are two large pits outside the western entrance. Circular enclosures are consistently among the earliest recorded in Essex. This particular example can be readily attributed to Priddy and Buckley's type Aiii (1987, 72), defined as circular enclosures 30-40 m in diameter with opposed causeways. These enclosures are grouped by Priddy and Buckley with small penannular enclosures and small annular enclosures. Outside Essex, such enclosures have been attributed to the Late Neolithic/Bronze Age, and labelled as 'hengiform' (Wainwright 1969). Essex examples include a penannular cropmark at Sturmer, although probable wind mill cross trees within that enclosure are indications as to its true origin. Only one site in this group has been excavated, at Lawford. This had been postulated to be a 'henge' monument. However, the ditch was noticeably irregular and excavation showed it to have enclosed a Neolithic domestic structure. The Helions Bumpstead enclosure is well outside the known distribution of small circular enclosures which is centred on the Tendring plateau. It is hoped that fieldwalking may provide firmer dating evidence.

Helions Bumpstead

A rather oval-shaped ring ditch (Fig. 9.6), with a diameter of c. 20 m. As with many of the cropmark ring ditches known from Essex, this would normally be presumed to represent a ploughed-out barrow. However, the Chapman and Andre map of 1777 shows a wind mill in the approximate location of the cropmark.²

Abbreviations: see p. 161.

Notes

1. E.R.O. D/DP P1 2. Plate II



Fig. 9 Cropmark sites at Thaxted (1 and 2), Danbury (3), Halstead (4), Helions Bumpstead (5 and 6).

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Excavations in Essex 1990

Edited by P.J. Gilman

This annual report, prepared at the request of the Advisory Committee for Archaeological Excavation in Essex, comprises summaries of archaeological excavation and fieldwork carried out during the year. The longevity of many projects often results in a lengthy post-excavation and publication process. The publication of these summaries therefore provides a useful guide to current archaeological research, and the opportunity to take an overview of significant advances. This year 52 projects were reported to the County Archaeological Section (Fig. 1).

Sites are listed alphabetically by parish; the directors of excavations, organisations involved and information regarding the location of finds and places of final report are listed, where known. Excavations continuing from previous years are indicated by reference to previous summaries in the relevant 'Excavations in Essex 19 '.

Contributors are once more warmly thanked for providing information. The illustrations are by: Lesley Collett (Figs 1 and 3), Nick Lavender (Fig. 2), and Stewart MacNeill (Fig. 4).

The original reports have been added to the County Sites and Monuments Record held by the Archaeology Section at the Essex County Council, Planning Department, County Hall, Chelmsford. For details of sites in the London Boroughs, contact the Passmore Edwards Museum, Stratford.

Progress in Essex Archaeology 1990

The number of projects (52) is in line with recent years (53 in 1989, 54 in 1988). Again, most are new projects, demonstrating that development continues to pose a high level of threat to the archaeology of Essex. Road schemes and pipelines, as well as posing a danger to known sites, often result in the discovery of new sites, as for example the new A120 Trunk Road (1) and the Halstead area mains replacement (24). The County Archaeology Section's own projects show a continuation of the trends noticed in recent years, i.e. increasing numbers of smaller excavations, in particular site assessments, and survey projects. Aerial archaeologists have again profited from the dry summer weather which has resulted in the discovery of new cropmarks as well as new features at a number of already-known sites. The introduction of non-destructive techniques of site assessment, such as radar, at Barking (3, 4) is an interesting pointer for the future.

1990 was notable for the publication of the Department of the Environment's Planning and Policy Guidance Note 16, on 'Archaeology and Planning'. This aimed to regularise the position of archaeology in the planning process. There is much in the document to be welcomed, notably the presumption in favour of preservation of important archaeological sites and their settings; the stress on early consultation between developers and planning authorities; the emphasis given to field evaluations prior to the determining of planning applications; and the advice that where important archaeological remains are known, planning permission will not be given unless the applicant can demonstrate that provision will be made for archaeological investigation and recording. It is already apparent that local planning authorities, developers and consultants are taking this advice seriously. The document should help to ensure that protection is provided for the county's important archaeological sites and that funding is obtained for excavation where preservation is not a practical proposition.

To date, 'competitive tendering' or 'contract archaeology' has had little impact on archaeology in Essex. However, this situation is unlikely to last for long. Developers are increasingly having to take note of archaeological requirements and a number of large organisations have responded by engaging archaeological units and consultants to act for them on a nationwide basis. The site at Little Hallingbury (28) is one of the first instances of an 'outside' contractor working in Essex. There has naturally been concern that the high standards of fieldwork set by organisations working in Essex should be maintained. Towards this end, the County Archaeological Section has produced guidelines for outside bodies working in Essex. These deal with questions such as museum storage of archives and finds; liaison with professionals within the county; and final publication of the results of excavations and surveys.

The earliest prehistoric features investigated in 1990 were the important peat deposits at Enfield Lock (47), which are reported on elsewhere in this volume. For Neolithic studies, the discovery of a causewayed enclosure at Springfield (39) is of major importance, particularly as it is only the second such enclosure known from the county. Neolithic features were also recorded at Great Baddow (18) and Great Totham (23). It is to be hoped that analysis of the finds from survey at Brightlingsea will lead to the discovery of settlement sites contemporary with the Middle Bronze Age ring ditch cemetery excavated in 1989. Confirmation of the Late Bronze Age date presumed for a cropmark enclosure at Great Baddow (18) is especially interesting in view of its relative proximity to the well-known, totally excavated enclosure at Springfield. Also of interest for students of this period are the buildings found at Great Totham, the trackway and palaeoenvironmental evidence from Rainham (34), and the Middle to Late Bronze Age cremation at Stansted (40), the earliest feature so far known from the area of the airport. New Iron Age sites included



Fig. 1 Locations of excavations in Essex 1990

Middle Iron Age enclosures at Great Totham and Stansted (40). The dating of the construction of the hill fort at South Weald (38) to the Late Iron Age is the first such attribution from Essex.

Roman rural settlement sites were well to the fore this year, including evidence for a large villa estate near Harlow (25). The identification of a possible rural administrative building at Boreham (7) is potentially a very exciting discovery indeed, since only one other example is known from the country. There was renewed investigation in Roman towns, with the uncovering of public buildings in Colchester (11, 13) and exploration of the Roman waterfront at Chelmsford (9).

Although relatively few projects encountered Saxon remains, they included further evidence for glass manufacturing at Barking (3), with the possible identification of a glass kiln. Limited excavation at Waltham Holy Cross (43) has helped clarify the form of the pre-Conquest churches. Turning to medieval archaeology, there was little urban archaeology worthy of note, apart from evidence for riverside land reclamation at Chelmsford. Religious houses were a little more prominent with work at Barking, and at Maldon (29). The latter should provide welcome information about the hitherto little understood Carmelite Friary. With regard to rural settlement, several small-scale excavations in advance of pipeline projects (14, 24) are proving valuable for research into medieval settlement patterns in north Essex. Activity in post-medieval archaeology continues to uncover information about the county's defences, at West Tilbury (48) and at Dovercourt (16). A more surprising discovery was that of a 17th-century mill at Harlowbury (26). At Cressing (15), useful evidence continues to be found for the layout of the Tudor and later walled garden.

1. A120 Trunk Road

M. Medlycott, E.C.C.

Survey in advance of construction of the new A120 Trunk Road from the M11 to Braintree included fieldwalking of land under cultivation and the monitoring of bore holes. Some 36 sites of archaeological interest and 4 of palaeoenvironmental interest were found.

2. Abridge, Little London (TQ 457964)

F. Clark, W.E.A.G.

An attempt was made to trace a large Roman ditch found in excavations in 1974 and to ascertain whether it formed a defensive work. The ditch was traced for a further 10 m but did not recur in a trench placed 10 m beyond. The ditch presumably stops or turns somewhere in the intervening space. A timber-built well was found, 3 m from the ditch. This degenerated into a water hole, the access to which was repaired by a layer of pebbly gravel on at least three occasions, the final one of which overlaid a small bank on the east side of the ditch. The side of the bank bore traces of a wooden structure. There were also two large post-holes that formed part of a large circular feature found in 1974. The well is probably late 4th century in date. Some 60 m away, in an area 4×4 m, thirteen cremation burials were found, as well as the inhumation of a child. Coins were found with half the burials. The opportunity was also taken to excavate in advance of construction of a new roundabout on the A113 at Gravel Lane. However, the area proved to be sterile.

Finds: P.E.M.

Final Report: W.E.A.G. monograph

3. Barking, Amberley House (TQ 439838) K.J. MacGowan, P.E.M.

Excavation in advance of development was preceded by a radar survey to test its potential as a non-destructive form of investigation. The aims of the excavation were to investigate: the extent of the medieval Barking Abbey and landuse at this period; the extent and type of Saxon habitation; and to determine the position of the Saxon Abbey Church of 666 A.D. In 1985 an exploratory trench had been excavated to the east and south of the 1990 excavation area. This produced a number of Saxon pits, one of which contained evidence of Saxon glass working, and a medieval cellar or warderobe.

Removal of the overlying concrete revealed a number of medieval features. Firstly, in the east were the remnants of the east, south, and west wall footings of the building associated with the cellar. These were very fragmentary, made of flint, chalk and ragstone and were approximately 200 mm wide. The building measured approximately $11 \times$ 8 m, and had two clay floors superimposed one above the other. Both had pitched tile hearths, which, in the final phase had been used to melt lead, possibly from the Abbey at its dissolution in 1541. Secondly, in the west of the trench a major wall footing was found, of chalk, flint and ragstone, measuring 1 m wide, 1 m deep and running the length of the site in a northerly direction. The southern four metres of this wall had been robbed out. To its west were two garderobes: one, semi-circular, butted this wall whilst the second was to the north of the first and was probably square.

The medieval features lay above or cut an horticultural horizon. Removal of this soil revealed Saxon features. These comprised pits and a boundary ditch running east-west dividing the site in half. The pits produced bone, pottery, and lots of charcoal. However, one produced material used in glass working which comprised half of a tuyere, crucibles, slag, kiln-lining material, parts of a possible glass tank as well as window and vessel glass, one three cm millifiore rod, many reticella rods, together with worked pieces of this type of glass. The possible source of this material was found to the north-east of the site. The glass-kiln base measured 2 m in diameter with 200 mm thick clay walls which survived to a height of 300 mm. The base was covered with pieces of neatly laid Roman tile which had been pressed into unfired clay. Archaeomagnetic dating indicates a date for the last firing from this possible glass kiln of 920 \pm 50, with a 98% confidence reading. Further research will shortly begin to examine firing temperatures of the clay and tile, together with work on the glass itself.

Previous Summaries: Priddy (ed.) 1986, 156 Finds: P.E.M. Final Report: P.E.M. monograph

4. Barking, St. Margaret's Church (TQ 441839) K.J. MacGowan, P.E.M.

To minimise disturbance to burials, it had been decided to construct the new Church Hall on a raft foundation. To establish the depth for placing the raft, the ground was surveyed by ground penetrating radar. The survey showed a large number of buried structures. The signal from these structures varied and therefore 10 test pits were dug in an endeavour to elucidate their meaning. The test pits revealed that the signals originated in variously shaped brick plinths that lay at least one metre above the grave. A number of family vaults were also present. It was found possible to remove the one metre of spoil without the need to remove or record any articulated skeletons. One chalk, mortar and flint wall footing was recorded in the western part of the site, orientated at right angles to the Church wall.

5. Billericay, Little Burstead, High View (TL 67529096)

S.P.G. Weller, B.A.H.S.

A small exploratory trench 2.9 m × 2 m was excavated within an area scheduled for site clearance by the owner of High View. The work revealed some scattered, tiny (c. 5 mm × 5 mm) unidentifiable fragments of cremated bone, mostly within the topsoil, and human skeletal material (skull, teeth, and long bone fragments) from beneath the topsoil. No grave outline was located and the arrangement of the long bone fragments suggests that the remains are from a burial disturbed after deposition. The finds, none of which, unfortunately, could be directly linked to the skeletal remains or to each other, included fragments from a miniature Romano-British jar, a spindle whorl fashioned from a sherd of Roman grey ware, and two joining sherds from the base of a Samian vessel (f27) dated to the first half of the 2nd century A.D. Human skeletal material has been recovered elsewhere within the boundaries of this plotland site on four previous occasions:- during building work by the owner in 1974 and 1975 and by B.A.H.S. during some limited exploration in advance of site clearance by the owner in 1984 and 1985.

Finds: B.A.H.S.

6. Boreham, Bulls Lodge Farm (TL743102)

S. Bryant, E.C.C. See this volume, p. 144.

7. Boreham, Bulls Lodge Quarry (TL 747107)

N. Lavender, E.C.C.

Fieldwalking in advance of mineral extraction resulted in the location of a concentration of Roman roof-tile fragments. This was followed by excavation which revealed the remains of a hitherto unknown Roman building complex. The main building lay at the top of a gentle slope, facing east, down towards a spring-fed stream. The nearest Roman road (the old Colchester road) is about half a mile away. The building's most prominent features were an unusually large apse, ten metres across the chord, and an irregular ground plan (Fig. 2, Building A). At the eastern end of the building were two smaller chambers, one square, one apsidal. The latter was originally interpreted as a possible small bath-house, although subsequent doubt has been cast on this. The badlydamaged footings of further structures extended down the slope towards the stream, culminating in a smaller building which passed under the eastern limit of excavation, and thus has not been completely observed. An area of rough cobbling was associated with this structure, and overlay its southern wall in two places. Whether this represents entrances cut through the wall, or the laying of a cobbled surface following its demolition, is uncertain, since the cobbles survived badly as a result of subsequent ploughing. The eastern half of the site was marked by a series of earlier Roman pits and ditches, forming part of at least one rectangular enclosure. A ditch to the north, running east-west, cut through these earlier features, and may be associated with masonry buildings. Collapsed into the top of it were the remains of a coarse cobbled surface, relating to a late phase



Fig. 2 Plan of the excavations at Boreham

in the life of the building. The ditch produced considerable amounts of tile, as well as pottery, hobnails from a boot, bone pins, and a few coins. Other finds include a pair of bronze tweezers and part of a bronze spatula.

The many tile fragments include a number of 'wasters' and it is likely that a tile kiln lies nearby, perhaps in a wood behind the excavated area. The date range for the pottery spans the 1st to the 3rd centuries A.D. The reason for the abandonment of the site is not yet known, but what is clear is that it was very thoroughly robbed of all reusable building materials.

Originally, the buildings were thought to represent a villa. However, it is now suggested that they belonged to a local administrative centre. This is because of a number of factors which include the lack of domestic material finds from contexts directly associated with the buildings themselves. Such finds are all from the earlier pits and ditches. In addition to this, comparison of the plan of the main building with that of a structure at Sonea in Cambridgeshire reveals many points of similarity, and leads to a tentative interpretation of it as the principia, or headquarters building of an Imperial estate. The Stonea example and others abroad, possess what is referred to as a 'forehall', often apsidal, running at right angles across the front of the building, divided into waiting rooms or reception areas. This arrangement tallies quite closely with the two small rooms at the eastern end of the Boreham site.

Finds: E.C.C.; to go to Ch.E.M.

8. Brightlingsea (TM 073181)

C.P. Clarke, E.C.C.

Excavation of the Middle Bronze Age ring ditch cemetery (Gilman ed. 1990, 128), has been followed by a fieldwalking survey aimed at locating contemporary settlements. Fieldwalking was preceded by aerial survey, a notable result of which is the possible identification of a cursus. Of 250 ha available for fieldwalking, 225 ha had been walked by the end of 1990. The remainder would be done in February 1991. The survey methodology involved the walking of a 10% sample of the whole area followed by more detailed walking of find concentrations. Almost 10,000 finds have been recovered. Most, some 95%, are struck and burnt flint in roughly equal proportions. The remaining 5% is mainly Roman brick and pottery. The latter included discrete concentrations of Roman brick on the western tip of the Brightlingsea peninsula, provisionally interpreted as kiln sites. No prehistoric pottery was found, possibly due to the very high degree of soil breakdown achieved by the advanced soil preparation machinery in use. The main hope for the identification of prehistoric settlement lies in the flintwork. It is hoped that analysis of the distributions of tool types and waste material will lead to the recognition of sites of different types over the whole landscape.

Previous Summaries: Gilman (ed.) 1990, 128. Final Report: Proc. Prehist. Soc. or East Anglian Archaeol. Finds: E.C.C.; to go to C.E.M.

9. Cheimsford, Kings Head Meadow (TL 71060641) P. Allen, E.C.C.

A trial trench was excavated on the Baddow Road frontage, in the area of the former Odeon Cinema. A dump of Roman burnt debris was overlain by a rammed gravel surface dated to the 4th century, which may have been related to development of the south bank of the river Can. Subsequently, a thick reclamation dump dated to the mid-late 13th century formed a bank for the laying-out of Baddow Road. Brickearth surfaces above the reclamation may represent timber buildings on the north side of Baddow Road. Machine trenches excavated along the south bank of the Can showed that any possible Roman or medieval waterfronts had been destroyed by 19th and 20th-century river embankments. Further excavation alongside Baddow Road, and also in the area of 42-3 High Street is planned in 1991 in advance of the main phase of development.

Finds: E.C.C.; to go to Ch.E.M. Final Report: Essex Archaeol. Hist.

10. Clacton-on-Sea, Little Clacton and Weeley Heath Bypass

S. Wallis and M. Atkinson, E.C.C.

Fieldwalking in advance of the construction of the new road resulted in the discovery of two new sites, one Roman, the other medieval. Medieval pottery was also found to be associated with the known moated site at Gutteridge Hall. Other new sites may be indicated by several flint concentrations and one of burnt clay.

Finds: E.C.C.; to go to C.E.M.

11. Colchester, East Stockwell Street (TL 996252) S. Benfield and S. Garrod, C.A.T.

Early Roman occupation was observed in section beneath excavated levels, principally a wall of early colonial date. Over this, in the mid-2nd century, the levels of the site were raised to match that of the southern end of the insula creating a level platform for a large public building of uncertain purpose. In the late 12th to early 13th century the foundations of this building were extensively robbed. The area of the site was terraced in the 17th century removing the floor levels of the Roman building over the northern half of the site and post-Roman occupation over the southern area.

Finds: C.E.M. Final Report: Essex Archaeol. Hist.

12. Colchester, Queen Street Bus Station (TM 000251)

C. Crossan, C.A.T.

Exploratory trenches in advance of redevelopment revealed parts of two Roman buildings, both within insula 39. The buried north elevation of the town wall was probed at two points where extant Roman wall facing was found to extend to within 1.4 m and 0.7 m of ground level.

Finds: C.A.T.; to go to C.E.M. Final Report: C.A.T. monograph

13. Colchester, St. Johns Street (TL 994249) S. Benfield and S. Garrod, C.A.T.

An early road leading to the south-west entrance of the *colonia* was located and probable roadside occupation encountered. In the late 1st to early 2nd century, this road went out of use and a large quantity of make-up was deposited over the area. This formed a construction platform on the slope for a public building, the north wall of which was located. This building was demolished and its foundations robbed in the later Roman period. No late Roman or post-Roman levels survived on the site.

Finds: C.E.M. Final Report: Essex Archaeol. Hist.

14. Colne Engaine, Brickhouse Road (TL 853309) S. Wallis, E.C.C.

Observation of water main replacement resulted in the discovery of a rubbish pit and a ditch of later medieval date, and a large cut feature, probably of the early post-medieval period.

Finds: E.C.C. Final Report: Essex Archaeol. Hist.

15. Cressing, Cressing Temple (TL 799187) T. Robey, E.C.C.

Following trial excavations in 1989, excavation has been concentrated in the south-west corner of the walled garden where pre-garden features had been found to be best-preserved. Prior to the excavation, a combined resistivity and magnetometer survey of the garden was carried out. The results were generally disappointing, and the subsequent excavation of two areas which gave notably anomalous readings revealed only 18th-century material. The main excavation comprised an area roughly 16 m square, with a smaller outshot trench 8 m \times 6 m to the south. These revealed gardenrelated features dating back to the 16th century, including brick and gravel paths, field drains, plant beds, and planting trenches. As yet the excavation has not been fully phased, but already it is clear that the garden has been extensively landscaped and re-modelled at least twice since its creation. The first of these occasions dates to the late 17th or early 18th centuries, and may well be contemporary with the demolition of the 'Greate House' and chapel, and the building of the south-west wall of the garden. At this time the wide brick path along the west and south side of the garden was covered over. The second re-modelling probably occurred towards the end of the 18th century, when the original terrace on the east side of the garden was demolished and considerable quantities of topsoil imported to landscape the surface. At this time the garden was divided into a grid of rectangular beds, the basis for the modern layout. The orchard shown on the 1875 O.S. map may date from this phase.

Previous Summaries: Gilman (ed.) 1989, 161-2; 1990, 130-1; Brown and Flook 1990. Finds: E.C.C. Final Report: Essex Archaeol. Hist.

16. Dovercourt, Bathside Bay (TM 258324)

S. Godbold, E.C.C.

Excavation in advance of the Dovercourt by-pass uncovered two of the gun platforms of the semi-circular Napoleonic gun battery, together with a large section of the wall of the battery. A third gun battery awaits investigation in 1992 when construction of the by-pass is further advanced. Finds included several coins and a large variety of clay pipes, some decorated.

Finds: E.C.C.; to go to C.E.M.

Final Report: Post-medieval Archaeol.

17. Foulness, Rushley Island and Oxenham Farm (TQ 9689)

R.W. Crump, A.W.R.E.

Field survey of Foulness and the surrounding islands continued during 1990. Pottery fragments, accompanied by a small percentage of briquetage was found on two more sites: Rushley Island (north-west); and the approach to Oxenham Farm. These latest discoveries were made inside the perimeter of large patches of red earth, close to tidal inlets. Therefore, it could be safe to assume that again these are the remains of ploughed out red hills. These latest discoveries bring the total probable red hills located in the area so far to 8.

Previous Summaries: Gilman (ed.) 1990, 131. Finds: A.W.R.E.

18. Great Baddow, Manor Farm (TL 734054)

N. Brown and N. Lavender, E.C.C.

A circular cropmark enclosure was trial trenched in order to confirm its form and dimensions, and to recover evidence for its date. The length of ditch uncovered included the site of a 1.6 m wide causeway, which formed an eastern entrance to the enclosure, which has an overall diameter of c. 60 m. The terminal of the southern ditch was excavated and found to be 2 m deep from the modern ground surface. The inner edge of the ditch had been preserved from erosion by deposits interpreted as deriving from the early slumping of an internal bank. Pottery and flints from the ditch confirmed a Late Bronze Age date for the enclosure. Grooved Ware was recovered from a pit in the interior of the enclosure. Other features excavated included four post-holes. Three lay outside the enclosure and formed an irregularly spaced line some 8 m long, aligned north-west to south-west. A small amount of abraded Late Bronze Age pottery was found in two of these features. The fourth post-hole was within the enclosure, but produced no finds. The site is broadly contemporary with the Springfield Lyons enclosure 5 km to the north, on the opposite slope of the Chelmer Valley (Buckley and Hedges 1987).

Finds: E.C.C.; to go to Ch.E.M. Final Report:?

19. Great Chesterford, Adj. Flint Cottage, Carmen Street (TL 50514309)
H. Brooks, E.C.C./P.E. Dey, G.C.A.G.
See this volume, p. 38-45.

Finds: E.C.C.; to go to S.W.M.

20. Great Chesterford, 1 Park Cottages, Rose Lane (TL 51084277) H. Brooks, E.C.C./P.E. Dey, G.C.A.G. See this volume, p. 38-45.

Finds: E.C.C.; to go to S.W.M.

21. Great Dunmow, 39/41 High Street (TL 62832185)H. Brooks and R. Havis, E.C.C.

See this volume, p. 141.

22. Great Tey, Teybrook Farm (TL 89102474) A.J. Fawn, C.A.G.

Excavation has confirmed that a cropmark visible on aerial photographs is a Roman road with three tracks and four ditches. It is aligned with and continues from a straight length of the existing road running northwards from the A120 to Great Tey. Being above plough depth, the flint metalling has disappeared apart from one small area, but the three clay road-beds remain. The overall width is c. 19 m, indicating that the road falls within Margary's 'secondary' classification. The reasonable state of the beds and the ditches suggests that it did not experience much wear, tear, and repair before it went out of use. Apart from Roman material, the finds also included Late Bronze Age and Early to Middle Iron Age pottery, perhaps associated with a cropmark enclosure about 60 m from the site of the excavation.

Final Report: C.A.G. Annual Bulletin.

23. Great Totham, Howells Farm (TL 855095) S. Wallis, E.C.C.

Excavation in advance of construction of an agricultural reservoir revealed evidence of multi-period occupation. Four

field ditches and a curved partial enclosure ditch had shown as cropmarks on aerial photographs of the site. However, after removal of the ploughsoil, a number of other archaeological features were visible. Trial excavations yielded sufficiently interesting results to justify further, more detailed excavation.

Four areas, (A to D) were surface-cleaned by machine. Area A contained the earliest datable feature on the site, a small pit containing Neolithic pottery and flint flakes. Area A also produced evidence, in the form of two parallel lines of four post-holes, for a rectangular Bronze Age building. When the building went out of use, the timbers had apparently been taken out for reuse. A cylindrical loomweight was found in one of the post-holes. Most of the remaining features of area A formed part of a Middle Iron Age settlement. A roundhouse and numerous post-holes were investigated, and other structures may have existed in the unexcavated area to the west. Several lengths of ditch (the largest of which had appeared as a cropmark) formed an enclosure around the settlement.

Most of the datable features in areas B, C and D were Late Iron Age or Roman in date. These included rubbish pits, ditches and gullies. Of particular interest were a possible building in area B, and a large gravel-quarrying pit in area C.

Finds: E.C.C.; to go to C.E.M. Final Report: East Anglian Archaeol.

24. Halstead area mains replacement

Belchamp St. Paul, Church Street (TL 796426) S. Wallis, E.C.C.

Several clay patches associated with later medieval pottery probably represent floor surfaces. They indicate ribbon development along Church Street, which may explain the present separation of the village's modern centre (over 100 m to the south of the present site) and St. Andrew's Church (800 m to the north).

Belchamp Walter, Hopkins Farm (TL 798394)

A backfilled pond, a rubbish pit and a possible slot were identified, all of later medieval date. The features may represent occupation preceding the present, 17th-century farm, or may indicate a former hamlet.

Finds: E.C.C. Final Report: Essex Archaeol. Hist.

25. Harlow, Gilden Way (TL 47801170) R. Bartlett, H.M.

An intensive fieldwalking programme was undertaken on land south of the River Stort and east of Old Harlow, where the existence of a substantial Roman building had been indicated by previous field-work. The aim was to provide a detailed archaeological assessment in the face of proposed development. In addition to accurately locating the building (believed to be 75 m²), other significant concentrations of Roman building materials were located, possibly evidence for a large villa estate.

Large quantities of worked flint artefacts were also recovered including cores, axe fragments, arrowheads, blades and burins from over the whole area. The major concentration appears to be focussed on the higher sandier soils overlooking the south bank of the River Stort. Detailed study will take place over the winter but it is clear that a number of hitherto unrecorded sites, both prehistoric and Roman, have now been identified.

Finds: H.M.

26. Harlow Harlowbury (TL 47801213)

D. Andrews, E.C.C.

Six trial trenches, aligned east-west, were excavated in the field to the east of Harlowbury manor prior to development. Waterlogged grey silts found in the eastern half of the trenches related to the former course of the Harlowbury Brook. Modern infill above these silts, up to 1.5 m or more deep in places, derived from the levelling of the field in the late 19th century, a process which involved scraping off the deposits above the subsoil in the western half to raise the level in the eastern one. This levelling operation was followed by the laying down of a succession of metalled surfaces to consolidate the ground for stock or wheeled traffic.

A few concentrations of features were found, cut into the natural subsoil, on orangey silty clay. The most distinctive had vertical sides and a blackish organic fill, and contained 11th-12th century pottery, including types hitherto not seen before though generally classified as early medieval ware. The smaller features may have been post-holes, whilst the larger could have been rubbish pits. They imply some form of occupation in the immediate vicinity, being too far away from the manor house to be directly connected with that. Unfortunately, the truncation of the archaeological deposits meant that any traces of the context in which they were located had been removed. Other features, best described as pits, produced 13th-14th century pottery, whilst others were of post-medieval date. In the north-east corner of the field, a layer of grey silt contained 13th-14th century pottery, implying the silting-up or reclamation of a pond or part of the stream course at that period. The silts in the other trenches seemed to be more recent, directly underlying late-19th century levelling layers. However, the history of this valley bottom, the stream course, and the ponds that seem to have formed in it must be very complex. This became particularly evident when examination of a timber revetment at the edge of the silts in one of the trenches revealed it to be the wheel race of a breastshot water mill. Pottery finds, and the carpentry, which was nailed rather than jointed, showed this to be post-medieval, perhaps 17thcentury in date. This mill has vanished leaving no obvious trace in the landscape (there is, for instance, nothing to hint at the former existence of a dam) nor historical records, even though it clearly went out of use only in the 18th-19th centuries. Though there were no obvious indications of an earlier structure on the site, it is likely that there had been

a mill in the vicinity for many centuries, no doubt since Domesday. This would provide a context for the medieval cut features nearby. Hitherto, it has always been supposed that Harlowbury mill was located to the north of the Stort.

Finds: E.C.C.; to go to H.M. Final Report: Essex Archaeol. Hist.

27. Harlow, Priory Avenue, Old Harlow (TL 473123) R. Bartlett, H.M.

Trial trenching in advance of development was undertaken at 2-4 Priory Avenue, Old Harlow, adjacent to a site excavated in 1962. This had produced evidence of 3rd-4th century industrial metal-working. The trial trenching confirmed that the industrial activity did not extend beyond the limits previously defined. Some pottery and metalwork was recovered, as were Neolithic flint artefacts, but no structures associated with the metalworking site were identified.

Finds: H.M.

28. Little Hallingbury, South House Farm (TL 492161)

M. Bennell, R.P.S. Clouston

Monitoring of topsoil stripping along the route of water pipeline improvements revealed Roman building material and pottery to the south of the known site of a Roman villa (V.C.H. III 1963, 136-7). The majority of the pottery, some of which has been tentatively dated to the 3rd century, came from a waterlogged area beside a small ditch. Four test pits were dug to try and define the limits and nature of the area of Roman material. It was established that the material did not reach as far as the most easterly trench which was 34 m from the ditch. The two central trenches contained quantities of unstratified brick, tile, mortar, plaster, tesserae and a few grey ware sherds. This was removed and revealed a hard cement floor. It was hoped that the extent of this floor could be ascertained when the pipeline itself was laid. The other trench, in the waterlogged area, was interpreted as being at the edge of the old river floodplain prior to canalisation. The material here appeared to be shallow dumps in small depressions. Burnt building material was excavated, possibly from an early phase of the villa which was subsequently destroyed.

Finds: with excavator; to go to S.W.M.

29. Maldon, Maldon Friary (TL 850069)

S. Bryant, E.C.C.

Excavations in advance of the extension of a car park, prior to construction of a new library in the car park itself, revealed the remains of a substantial masonry building. This measured 5.4×9.2 m and dated to around the founding of the Carmelite friary in 1293. A 12.5 m long timber extension was added later, possibly in the middle of the 15th century, along with an associated brick drain. No clue was found as to its function. This building was demolished, probably in the later 16th century when a Tudor mansion was built nearby. A large brick culvert related to this had bisected most of the earlier structures. After demolition of the medieval buildings, the site was used for rubbish pits and open ground with only a few small timber sheds being built during this period. One of the surviving walls of the first building was used as a base for a timber wall. The site was eventually used as a garden from about 1800.

Finds: with E.C.C.; to C.E.M. Final Report: Essex Archaeol. Hist.

30. Maldon, Maldon Landfill Site (TL 863057) S. Wallis, E.C.C. See this volume, p. 167-170.

31. Maldon, Southern Bypass (TL 844056) M. Rees, M.A.G.

Continued excavation has revealed a complex pattern of interconnecting ditches. No definite structures were located, however lines of septaria associated with clay stained green, possibly from animal urine, may indicate the site of a byre. The finds range in date from the 1st century B.C. to the 3rd/4th centuries A.D. They include over 100 Samian sherds, 7 Roman coins, and two bronze objects.

Previous Summaries: Gilman (ed.) 1989, 164; 1990, 134. Finds: M.A.G. Final Report: Essex Archaeol. Hist.

32. Pentlow, Pentlow Hall (TL 812462)

D. Andrews, E.C.C. See this volume, p. 176-180.

Finds: Private possession.

33. Quendon and Rickling, Quendon Park (TL 51653142)

M. Medlycott, E.C.C.

A Scheduled mound in Quendon Park was surveyed and trial-trenched to establish the nature of the site and to evaluate damage caused in 1989 by rutting deer. Excavation revealed the remains of a bonfire containing large quantities of burnt and unburnt hay. The bonfire appears to have lain directly on top of the sand and gravel sub-soil. No traces of any archaeological deposits or features were found.

34. Rainham, Bridge Road (TL 321823)

F.M. Meddens, P.E.M.

Three trenches were excavated in advance of development. The base geology of the site consists of Reading and Woolwich beds of Tertiary date. The superimposed stratigraphic sequence consisted of deposits representing dry periods and flooding events. Six phases of human land use were uncovered, the earliest consisting of a trench and stake holes cut into Tertiary deposits. Unfortunately, no dating evidence is available. These features were sealed by foreshore deposits probably associated with a river or stream. Stake lines and wattle fences stood on this foreshore and some pits with fire-cracked pebbles were cut into it. Possibly as a result of a river meander being cut off, peat formation commenced on the foreshore. A brush wood trackway was associated with the lower part of this peat sequence and preliminary dating places this trackway in the Bronze Age. The peat sequence was sealed by silt and clay layers representing periods of flooding. The first silty clay deposit was cut by a rubbish pit filled with animal bone and pottery, dating to late in the 1st century A.D. Much of this pottery was Late Iron Age in tradition. The animal bone indicated hunting, fishing and agricultural activities. Further out in the marsh area contemporary with these remains drainage ditches were located. Further alluvial clay layers sealed these features and the final part of the sequence consisted of Victorian bottle dumps. Analysis of the cultural and environmental evidence continues.

Previous Summaries: Meddens 1990, 242-248. Finds: P.E.M. Final Report: P.E.M. monograph.

35. Roydon, Nether Hall (TL 39760828)

H. Brooks, E.C.C.

The brick-built gatehouse of this fine moated site was surveyed as the first stage of a programme of repair and restoration.

36. Saffron Walden, Fairycroft House (TL 540383) H. Brooks, E.C.C.

See report in this volume, p. 183-187.

37. Southchurch, Southchurch Hall (TQ 894855) K. Crowe, S.M.

A watching brief was maintained during the excavation (by hand) of two small (c. 2×1 m) foundation trenches for a new bridge to open the moat to the north of the house. The southern foundation trench revealed eleven distinct artificial layers, to a depth (excavated) of about 2 m, confirming the results of earlier excavations by John Jackson. The northern foundation trench was excavated within the 'medieval' bridge support. This again confirmed the results of earlier investigations, and also allowed the opportunity to record the internal structure in some detail. It was clear that this stone structure had been built from 'inside' and spreads of chalk in the fill presumably marked the various building 'platforms' created by filling in the structure to create a higher platform from which to work. Fragments of glazed roof tile were the only finds.

Previous Summaries: Couchman (ed.) 1977, 104; Eddy (ed.) 1979, 108; 1980, 47; 1981, 54; Priddy (ed.) 1982, 142; 1983, 168; 1984-5, 133. Finds: S.M.

38. South Weald, South Weald Camp (TL 578945) O. Bedwin and S. Godbold, E.C.C.

A small research excavation aimed to date the construction of this hill fort, and to recover information about the contemporary environment. This consisted of two trial trenches, c. 20 m long, sectioning the univallate defences of the Camp; one trench was in the north-west quadrant, the other in the south-west quadrant. The ditch was shown to be a maximum of 1.4 m deep, and up to 3.4 m wide at the top. Its profile was symmetrical and steep-sided, with a flat bottom, c. 1.5 m wide. Pottery from just above the ditch floor dated to the 1st century B.C./1st century A.D., and this is the most likely date for the hill fort's construction. Sections through the bank revealed much disturbance, with none of the original earthwork surviving. There was consequently no buried soil, and so no possibility of pollen analysis. The damage done to the bank seems to have been fairly recent, and may well have resulted from the use of the area as a military training ground during the second world war.

Finds: E.C.C. Final Report: Essex Archaeol. Hist.

39. Springfield, Springfield Lyons (TL 736082) D.G. Buckley, E.C.C.

1990 saw the ninth season at the multi-period site at Springfield Lyons. Two large Middle Neolithic pits had previously been excavated, and the presence of a causewayed enclosure was suspected. Four slit trenches were therefore excavated along the postulated line of the enclosure (Fig. 3), and parts of large Neolithic features were found in three of them. Finds included pottery and flintwork. It is now considered that the Neolithic site at Springfield is a causewayed enclosure with at least one interrupted ditch, partly visible on aerial photographs, and internal features, some of which were excavated in 1988. However, the overall extent of the enclosed area is still unknown.

Previous Summaries: Priddy (ed.) 1982, 142; 1983, 168; 1984-5, 134; 1986, 163; 1987, 108; 1988, 268; Gilman (ed.) 1989, 165.

Finds: E.C.C.; to go to B.M.

Final Report: East Anglian Archaeol.



Fig. 3 Springfield Lyons. Plan of the causewayed enclosure

ESSEX ARCHAEOLOGY AND HISTORY



Fig. 4 Stansted Airport. Plan of the Car Park 'I' site

40. Stansted, Stansted Airport, Car Park 'I' (TL 522224)

R. Havis, E.C.C.

A new Bronze and Iron Age site was revealed as a result of the stripping of topsoil in advance of construction of part of the long-term car parks (Fig. 4). The new site is 30 m south-east of, and probably related to, the Late Bronze Age/Early Iron Age Social Club site excavated in 1989 (Gilman (ed.) 1990, 135-6). The earliest feature on the new site was a Middle to Late Bronze Age cremation, with a large urn upturned over the cremated bone. In the Early/Middle Iron Age an enclosed settlement was established. The northern and western sides of the enclosing ditch were recorded. Both contained post-holes, providing evidence for the former presence of a substantial timber palisade. A cluster of deep post-holes hints at an imposing timber gateway in the north side of the enclosure, and there is evidence for another substantial timber structure set into the north-west corner. The main feature of the interior was a large roundhouse, whose enclosing gully was c. 15 m in diameter, and had several phases of construction. There were also two fourpost structures, possibly granaries. The double-ditched trackway known from the Social Club site was again encountered 30 m north of the main area of the new site. This Late Iron Age feature (previously incorrectly assigned to the Late Bronze Age) now has a known length of over 120 m. The new site is important because it is the earliest settlement found at Stansted Airport, deomonstrating that the heavy clay soils of the area could support a resident population during both the Bronze and the Iron Ages.

Finds: E.C.C.; to go to S.W.M. Final Report: East Anglian Archaeol.

41. Stanway, (TL 95452255)

D. Shimmin, C.A.T.

Excavation of the most westerly of a series of Iron Age enclosures was completed. Further pits, mostly of Middle Iron Age date, were uncovered, although a quantity of Late Iron Age pottery and a coin were recovered from the enclosure ditch sections. It is hoped to resume work in 1991 on the eastern enclosures.

Previous Summaries: Priddy (ed.) 1988, 270; Gilman (ed.) 1989, 168; 1990, 135. Finds: C.E.M. Final Report: C.A.T. monograph

42. Upminster, Hunts Hill Farm (TQ 560831) P. Greenwood, P.E.M.

Work on the first phase of this major cropmark complex revealed a number of enclosures and field systems, some with subdivisions. These dated mainly to the early Roman period, although a number continued into at least the 4th century A.D. An oven/kiln-like structure has produced an archaeomagnetic date with a 4th-century A.D. date-range. A square timber-lined well of unusual construction, also Roman, was recovered during later salvage work; this is to be sampled for dendrochronological dating. Earlier features consisted of some prehistoric pits with flint-gritted pottery and three round-houses, apparently Early Iron Age in date.

Finds: P.E.M. Final Report: P.E.M. monograph

43. Waltham Holy Cross, Abbey Church (TL 38140065)

P.J. Huggins, W.A.H.S./ W.E.A.G.

A small excavation was undertaken to establish the form of the east ends of the two pre-Conquest stone churches. The first church on the site had been a ground-standing timber church with an associated 7th-century burial. The east end of church 2, a stone church of Brixworth type, ended in a rectangular chancel/sanctuary. Church 3, built by Harold and dedicated c. 1060, included transepts and a crossing but without any eastern extension. The internal details of church 2 were presumably altered to a simple nave arcade, the old foundations being used where possible. The chancel and altar of church 2 could have remained in use while church 3 was being built around it.

Finds: to go to E.F.D.M. Final Report: Archaeol. J.

44. Waltham Holy Cross, Abbey Gardens (TQ 381008)

S. Wallis, E.C.C.

Three trenches were excavated on either side of the Cornmill Stream in advance of construction of a new footbridge. Two trenches, A and B, were on the south side of the stream, separated from one another by a modern drain. The third trench, C, was on the north side. The stratigraphy of the trenches differed considerably. The earliest well-dated context was a feature in trench B. The trench cut through the middle of the feature, and no edges were found. Pottery from the fill is thought to be 11th century in date. A row of three stakes had been driven into the clayey subsoil and ran roughly east-west at the south end of trench A. Though their upper parts had rotted, the parts within the clay were intact. Samples for dendrochronology were taken from two of them. Ceramic evidence, though not conclusive, indicates they are medieval. A likely interpretation is that they were part of the revetment of the earliest bank of the stream, though their alignment was not exactly parallel to the stream's present line. The lowest layers reached in trench C, up to 1.4 m below the modern ground surface, were all silty, perhaps representing flooding deposits from the stream and the River Lea. The earliest of them contained 13th or early 14th-century pottery. A section of north-south oriented wall, mostly robbed, was found in trench C. It corresponds with the position of parchmarks recorded by the Waltham Abbey Historical Society and interpreted as the west wall of a hospital. A gravel trackway in trench B continues the line of a trackway on the stream's north side, also recorded

as a parchmark by the Waltham Abbey Historical Society. It was perhaps associated with the Abbey, or with the farm now incorporated in the Countryside Centre, as a ford was in use at the point of the intended footbridge until recently.

The later layers in all trenches were undoubtedly dumped to raise the level of the stream's banks, perhaps to combat a rise in stream level caused by silting. Some of these contained much debris from the Abbey's buildings, whilst the very latest probably consisted of material dredged from the stream itself. One of these later layers contained a commemorative token of the Great Exhibition of 1851, illustrating the 'Crystal Palace'.

Finds: E.C.C.; to go to E.F.D.M. Final Report: Essex Archaeol. Hist.

45. Waltham Holy Cross, Abbey Gardens (TQ 382007)

K. Bascombe, W.A.H.S.

Parchmarks in the Abbey Gardens, which contain the site of the crossing, transepts and presbytery of the Abbey church founded by King Henry II in 1177, were recorded. They appear to represent the northern half of an eastward extension of the plan published in V.C.H. Essex (V 1966, 172) and derived from the excavations by J. Charlton and Professor T. Borenius in 1938. The parchmark at the N.W. corner continued the line of the north wall of the presbytery in the published plan, which could be traced for over 30 m to the west. The evidence suggests a retrochoir c. 10.5 m east to west, with a possible chapel and tomb at the north end, and an eastern chapel some 13 m long and (if symmetrical about the central axis of the church), 4 m wide, with a probable chapel or vestry on the north side. The retrochoir may very possibly be part of the original church, the central part of the published east wall being then the foundation of an altar or reredos; the eastern chapel, probably a Lady Chapel, may be a later addition.

Waltham Holy Cross, Baptist Church site (TL 38100050)

P.J. Huggins, W.A.H.S./W.E.A.G.

The aim of this excavation was to check the line of a ditch surrounding *Eldeworth*, the old enclosure, of 4 acres, mentioned in 1235. A radiocarbon date for vegetation, just to the north at Church Street, calibrated to the Middle Bronze Age. A ditch was found in the expected place but it had been completely dug out in medieval times. A single piece of stamped Saxon pottery (Briscoe type A 5ai) was found and may date to the Pagan period.

Finds: to go to E.F.D.C. museum

47. Waltham Holy Cross, Enfield Lock, former Royal Ordnance Factory (TQ 37429835)
O. Bedwin, E.C.C.
See this volume, p. 162-3.

48. West Tilbury, Tilbury Fort (TQ 651755) P. Moore, P.F.M.

P. Moore, P.E.M.

A watching brief was undertaken during the excavation of a trench for a new sewage tank, to the south-east of the Officers Block. A late 19th-century wall, related to the nearby magazine entrance, formed the southern section with various contemporary deposits extending to the north section. Several 18th century deposits were found over late 17thcentury clay layers. The latter were c. 2.25 m thick, and were deposited to raise the ground level of the fort above the surrounding marsh during the building of the fort in 1670-83. This marsh level was seen in a thin peat layer above a siltedup ditch, which itself cut an earlier pit. No dating evidence was found in either the ditch or pit, but the ditch may be an outer ditch dug in 1588 during the Armada crisis but which had been silted up by the 1640's.

Excavations and a watching brief were also conducted during underpinning and consolidation works on the inner face of the West Curtain wall. The northern end of the wall had been destroyed by a World War II bomb and the bank disturbed by consolidation and rebuilding works in the 1950's. The southern part of the wall and bank contained undisturbed deposits, dating from the late 17th century to the late 19th century, including clay build-up layers and walking platforms made with chalk, shell or gravel. Of particular interest was a late 17th-century domestic ash layer containing large quantities of well-preserved clay pipes, pottery, animal bones, glass, and personal items, showing a wide variety of domestic activities at the fort.

Previous Summaries: Gilman (ed.) 1989, 169; 1990, 138. Finds: P.E.M.

49. Woodford Green, (London Borough of Redbridge), Four Trees Pond (TQ 402992)

E. Dorrington, W.E.A.G.

Excavation was undertaken to locate and check the size, mode of construction and function of a rectangular pond. The pond is believed to date from the 17th century and can be seen on the Chapman and Andre map of 1777, on careful examination. It is thought to be part of a water storage and irrigation system used by the noted botanist Dr. Warner of Hants House. As found, the pond was edged with water worn pebbles set in clay. The sides were located and the bottom was found at c. 1 m. All the finds date from around the middle of the 19th century. It is recorded that the pond was dry in 1840 and perhaps it was cleaned out at this time, hence the date of the finds. Further excavation will be aimed at locating the fourth side of the pond and at examining inlet and outlet feeds.

Finds: P.E.M. Final Report: Essex Archaeol. Hist. or Essex Journal

50. North and East Essex, Aerial Photography I. McMaster, C.A.G.

A total of 10 hours flying was undertaken, producing a number of possible new sites together with additional features at some known sites. It is too early to say how many new sites have been discovered, until the results have been checked against the County Sites and Monuments Record.

51. North-West Essex, Aerial Photography P. Gilman

See this volume, p. 145-6.

52. South-East Essex, Aerial Photography K. Crowe, S.M.

Aerial survey in the early summer of 1990 resulted in the identification of four new sites, including ring ditches and a double-ditched enclosure. The latter was fieldwalked later in the year, but no finds were made.

Abbreviations

A.W.R.E.	A.W.R.E. (Foulness) Archaeological Society
B.A.H.S.	Billericay Archaeological and Historical Society
B.M.	British Museum
C.A.G.	Colchester Archaeological Group
C.A.T.	Colchester Archaeological Trust
C.E.M.	Colchester and Essex Museum
Ch.E.M.	Chelmsford and Essex Museum
E.C.C.	Essex County Council
E.F.D.M.	Epping Forest District Museum
G.C.A.G.	Great Chesterford Archaeological Group
H.M.	Harlow Museum
M.A.G.	Maldon Archaeological Group
P.E.M.	Passmore Edwards Museum
S.M.	Southend Museum
S.W.M.	Saffron Walden Museum
W.A.H.S.	Waltham Abbey Historical Society
W.E.A.G.	West Essex Archaeology Group

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Shorter Notes

An early Flandrian peat in the Lea Valley; excavations at the former Royal Ordnance Factory, Enfield Lock 1990

Owen Bedwin

The purpose of this short report is to draw attention to the results of a sample excavation by the County Council's Archaeology Section at the former Royal Ordnance Factory, Enfield Lock, prior to re-development. Excavation here (at TQ 3742 9835) to expose an early Flandrian peat for palaeoenvironmental information were carried out in March and April 1990 under the direction of the author. The peat was c. 45-50 cm thick (Fig. 1); the date range for its formation was established by radiocarbon dating, at the University of Belfast, as follows:

Top 2 cm 6620 ± 48 b.p. (Date UB 3349) Calibrated age 5510 B.C. 7459 B.P. (but see pollen analysis below)

Bottom 2 cm 9546 \pm 56 b.p. (Date UB 3350) (this is beyond calibration range)

Various bulk samples of the peat (or, more accurately, organic muds), context 14 in Fig. 1, and of a marl layer above, context 13, composed largely of snail shell fragments, were taken for pollen analysis and for examination of insect and mollusc remains. The detailed reports on these studies are inappropriate for full publication in *Essex Archaeology and History*, and are summarised below:

1. Pollen analysis (from report by F.M. Chambers and T. Mighall, University of Keele).

Within the organic muds, the succession of arboreal taxa indicate the Pre-Boreal and the first part of the Boreal Period of the early Flandrian. The pollen chronicles the gradual spread and colonisation of the region by pre-temperate and early temperate trees, culminating in pine-hazel-elm woodland, with oak and alder as later immigrants. The appearance of alder pollen at the top of the organic muds implies a date range of 8500 to 7000 b.p. for these sediments, which is rather older than the uncalibrated radiocarbon date, above. The preferred explanation for this discrepancy is that there is an error in the radiocarbon date, due probably to the presence of very fine modern rootlets in the sample. There was no surviving pollen in the marl, or in the clay above that (context 5 in Fig. 1).

 Insect and mollusc remains (from report by E.P. Allison, H.K. Kenward and T.P. O'Connor, University of York). The organic muds produced small to moderate numbers of insects indicating still to sluggish, weedy, probably nutrient-rich water, with organic-rich mud at the margin, and perhaps some trees or shrubs. There were small numbers of molluscs of limited interpretative value. The marl above was rich in molluscs, particularly freshwater forms. Water quality was good and there were some indications of a gentle flow. The most likely environment suggested by the assemblage is a cut-off meander.

A full report on the excavation and its palaeo-environmental findings may be consulted in the Essex Sites and Monuments Record at County Hall, Chelmsford.

Acknowledgements

The author is grateful to Royal Ordnance and British Aerospace PLC for permission to excavate, and to Trafalgar House Development Holdings Ltd. who funded all excavation and post-excavation work. Thanks are also due to the excavation team (Richard Havis, Alan Davey, Mark Germany and Paul Hutchings), to all the post-excavation specialists named in the report above, and to Miranda Bedwin for Fig. 1.

A Neolithic Adze from Harlow (Gilston) (TL 454 120) Hazel Martingell

Description

A very fine Neolithic flaked flint adze, (Fig. 2) waisted towards the butt end, with a relatively broad butt and narrow blade and with a marked adze-like profile. (Adzes are hafted across the handle, (Fig. 3) unlike axes, hafted parallel with the handle).

The material is glossy black flint, stained brown from the humic, probably peat, deposit that it was found in. In general flaked adzes and axes are left with a flaked surface, it is the other types of stone axes and adzes that are more usually found polished smooth after flaking.

Discovery

This all but complete Neolithic adze was presented to Harlow Museum by Marsh Aid Gravel Extractors in 1990, having been found by them during the course of extracting gravel from the valley of the river Stort. In these gravels, there is present, a thick layer of peat and from within this layer of peat, animal bones have been found including those of *Bos Primigenius* and a quantity of black almost fossilized pieces of wood. Some of these pieces of wood are in the form of thick split blocks of about 15×20 cm, while others are smaller and a few larger. ENFIELD LOCK 1990



Fig. 1 Enfield Lock 1990. Section through deposits showing samples taken for environmental study.

1



Fig. 2 Neolithic adze from Harlow.

Discussion

As it was not possible to study any of this material *in situ*, it must be supposed that the layers of gravel and peat with wood are natural formations of the river valley and that the artifacts found in these formations represent indications of inhabitants in the valley. It would seem reasonable to infer, for instance, that the axe was used to cut the timber in the valley, some of which could be the pieces of wood found in the peat, but there is no evidence to support this assumption.

Two Neolithic axes, one polished and slightly river worn and the other a partly polished type were previously recovered from this area, along with Neolithic worked flint from nearby Gilston Hall and a mace-head from Pole Hill.

Acknowledgements

Stuart Needham of the British Museum, kindly gave comment on the adze.

The bone material is being studied by the British Museum, Natural History.

The adze, bone, wood and other lithic implements mentioned in the text are all housed at Harlow Museum; the author is most grateful to the staff of the Museum for their assistance with her study.



Fig. 3 Method of hafting an adze.

An Early Iron Age Jar from North Shoebury Nigel Brown

Part of a large jar (Fig. 4), was recovered during recording of a small early Saxon inhumation/cremation cemetery at North Shoebury, by D.G. Macleod of Southend Museum. The cemetery lay within an area of extensive Late Bronze and Early Iron Age occupation (Wymer and Brown forthcoming). Macleod's notes indicate that the jar sherds were recovered from the stripped surface, and were not associated with any of the Saxon burials.

The jar has a wide flaring rim, with furrowed neck above a rounded shoulder. The body has rows of cylindrical stabbed impressions bordered by incised lines, arranged in a chevron pattern, between vertical lines of impressions again bordered by incised lines. The fabric is partly vesicular with occasional sand and flint inclusions.

The vessel appears in Myres' corpus of Anglo-Saxon pottery (Myres 1977, Fig. 363 corpus No. 4069). However, the form and fabric are quite unlike the pottery from the North Shoebury cemetery (Tyler and Wymer forthcoming) and cannot be closely matched amongst Saxon pottery from elsewhere (Tyler pers, comms.). The form is a typical Early Iron Age one. The decorative traits can all be matched in Early Iron Age assemblages in Essex; furrowed necks at Lofts Farm (Brown 1988) and cylindrical stabbed impressions at Lofts Farm (Brown 1988) and Mucking (Jones 1979). The form and arrangement of the decoration are closely paralleled by an Early Iron Age jar from Slough House Farm, (Brown in prep.). Further afield, the arrangement of stabbed impressions bounded by incised lines may be matched by a number of vessels in the assemblage from All Cannings Cross (Cunnington 1923). The North Shoebury jar is therefore likely to be Early Iron Age.

It is possible to speculate on how the vessel came to be included in Myres' corpus. The excavator Mr. Macleod was unaware of the vessel's inclusion in the corpus, until it was pointed out to him at Southend Museum in 1978. The North Shoebury cemetery produced a number of fine Saxon pots, none of which are included in the corpus. It is therefore unlikely that any of the North Shoebury pottery was actually seen at Southend Museum. A drawing of the pot had been supplied, together with other information on the North Shoebury site, to the Mucking project, then based at Thurrock Museum. Myres (1977 XVIII) records that drawings of Mucking pottery were supplied by Mr. W.T. Jones. It



Fig. 4 Early Iron Age jar from North Shoebury.

may be that a copy of the drawing of the North Shoebury pot was also sent, and the vessel was included in the corpus on that basis. This might explain why there is no fabric description in the entry in the Descriptive Inventory (Myres 1977, 354), why no mention is made of the cemetery at North Shoebury and why the vessel was given the vague provenance of Shoebury.

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Middle Iron Age Decorated Pottery around the Thames Estuary Nigel Brown

A large Middle Iron Age curvilinear decorated sherd from Prittlewell was published in volume 15 of Essex Archaeology and History. At the time there were few local parallels and reference was made to pottery from the Chilterns and Upper Thames. Since then a number of other sites have produced similar vessels and these are listed below in the gazetteer.

The decoration is characterised by free flowing curvilinear patterns. The vessels on which this decoration occurs are mostly round bodied bowls with everted rims and, where present, footring bases. Assemblages which contain these curvilinear decorated pots, often also contain vessels which have less obvious but nonetheless distinctive decorative traits; vertical striations or lightly tooled lines.

The distribution (Fig. 5) is closely similar to that of the Mucking - Crayford style (Cunliffe 1978). It may be that the curvilinear decoration discussed here, was one of the sources from which the Mucking-Crayford style was developed. There is a clear contrast with the more precise decoration of the Mucking-Crayford style, with its interlocking arcs and stamped impressions. Moreover, Mucking-Crayford style pots are often found in association with 'Belgic' pottery, and in forms and fabrics often comparable to 'Belgic' ceramics. The free-flowing curvilinear decoration occurs on vessels of Middle Iron Age form and fabric. Vessels of this type occur in the material from Little Waltham in central Essex (Drury 1978); however this large assemblage contained no decorated examples. This stylistic difference between south Essex and areas further north, can be traced in a variety of Middle and Late Iron Age artefact distributions, and the implications of this recurrent pattern are discussed elsewhere (Wymer and Brown forthcoming).

For convenience it is suggested that the Middle Iron Age curvilinear pottery be referred to as the Mucking-Oldbury style; Mucking has produced the largest quantity of this pottery so far recovered (S. Trow pers. comm.), and provides a link with the Mucking-Crayford style; Oldbury emphasises the probability of a distribution embracing both sides of the Thames.

Gazetteer Fig. 5 (Illustrated examples in Fig. 6)

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Hamilton, S.,	Environment in South Essex: Rescue
1988	Archaeology along the Grays Bypass 1979/80. E. Anglian Archaeol. 42, 74 & 91
2. Oldbury Thompson, F.H., 1986	^c The Iron Age Hillfort at Oldbury, Kent: Excavations 1983-84' Antiq. J. 1986, 66, II 267-286.
3. Mucking	Many examples largely unpublished. The occurrence of this decoration at Mucking is noted and illustrated by Elsdon (1989, 29, and figs. 8.3 and 9.9).
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Fig. 5 Distribution of Mucking-Oldbury style vessels.



Fig. 6 Examples of Mucking-Oldbury style decoration.



Fig. 7 Maldon landfill: site location.

Maldon Landfill Site

S. Wallis

Introduction

Expansion of the Maldon Landfill Site during 1990 involved the removal of topsoil and over 2 m of subsoil from an area of some 4 hectares to the south-west of the original site. In May 1990, 1 hectare at the south-east end of the expansion area was being stripped of topsoil (Fig. 7). Because of the proximity to the supposed site of the Battle of Maldon, a watching brief was arranged during and after topsoil removal. During an initial site visit, O. Bedwin noted the presence of a number of archaeological features, clustered in a small area.

A week-long excavation of this area then took place under the direction of the author. In the following week, most of the remaining topsoil was stripped, and part of a Bronze Age pot was recovered by three sub-contractor's staff. A number of other features were then excavated over a further week.

Excavation

The archaeological features were on, or just below, the crest of a low hill sloping north-eastwards down to the Blackwater Estuary. The hill commanded good views of the estuary itself, including Northey Island, and the flat landscape of the north-west Dengie peninsula. Before the Landfill site came into existence, equally good views of the land north of the estuary were undoubtedly to be had.

The subsoil was a heavy orangy-brown boulder clay, which tended to tear when stripped by box-scraper. The excavation occurred during a dry spell, which made features other than those with dark fills difficult to identify against the subsoil. Thus, the planned extent of many features may be inaccurate (Fig. 8).

Thirty-six features were investigated, of which less than one-third could be dated with any degree of certainty. Several were of recent origin.

The Excavated Sequence

The Early Bronze Age

This period is represented by the biconical urn (see below) recovered during topsoil stripping. It came almost certainly from F37.

The most likely reason for its deposition is as part of a burial, though no bone was recovered, nor was there any trace of a ring gully, indicating the former existence of a barrow. If a barrow had existed, it would have occupied a prominent position, being on a ridge more clearly visible from the river, than the hilltop behind.

The Early Iron Age

Nearly half of the features excavated produced prehistoric pottery, much of which could be dated to the Early Iron Age. However, only the three large pits F47, F49 and F51, and the ditch F39 produced sufficient pottery to be dated to that period with confidence. Of these, F47 was certainly a rubbish pit (it contained a large amount of bone and its fills were typical of a feature that was filled over a period of time), as perhaps were F49 and F51. F39 was not much longer than the planned length.

MALDON LANDFILL SITE



Fig. 8 Maldon landfill: plan of archaeological features.

The Late Iron Age and Roman periods

Again a number of features contained Late Iron Age/Roman pot, but only the shallow ditch F43 could be confidently dated (see below). However, a cluster of small rubbish pits -F1, F3, F5 and F7 - probably belong to the period. Small amounts of contemporary pottery, as well as oyster and whelk shells, were recovered from the group.

The Saxon Period

Two unstratified sherds were recovered. They were identified by S. Tyler as dating from A.D. 450-750.

The mediaeval period

Three features contained small quantities of mediaeval pottery, though none could be dated to the period with certainty.

The Finds

Prehistoric Pottery (N. Brown)

A small quantity of prehistoric pottery was recovered (203 sherds weighing 2,831 kg). The pottery was recorded using a system devised for later prehistoric pottery in Essex (details in archive report). Fabrics present were:

Fa	bric	% sherd count	% weight
A	Flint, S 2 well sorted	1	1
В	Flint, S-M 2	1	L
С	Flint, S-M with occasional L 2	11	15
D	Flint, S-L 2 poorly sorted	13	28
Ε	Flint and sand, S-M 2	21	33
х	Quartz sand S-L some S-L flint 3	1	6
z	Unclassifiable	51	14
I	Sand, S-M 2-3		
Ν	Vegetable temper	1	2
Q	Flint S-L, Grog S-M 2		
W	here Size of inclusions S - less than	1 mm diameter	
	M — 1-2 mm	1 diameter	
	L – more th	an 2 mm diamete	er
De	nsity of inclusions 1 - less than	6 per cm ²	
	2 - 6-10 per	cm²	
	3 — more the	in 10 per cm ²	

The pottery is largely of Early Iron Age (EIA) date. The assemblage includes a number of sherds of distinctive tripartite bowls, with horizontal grooved lines on the shoulder, typical of the Darmsden-Linton style (Cunliffe 1968; Brown 1988). A sherd of a round-bodied bowl from pit 47 can also be matched in Darmsden-Linton assemblages (eg. Brown 1988, fig. 16.62). Similarly the range of jar rims, largely plain but one with slashed decoration on the rim exterior, is typical of Darmsden-Linton pottery, as is the range of fabrics present (Brown 1988 and forthcoming A). There is nothing which is necessarily earlier, apart from a few sherds from pit 55 one of which may well derive from the Bronze Age vessel described below. The assemblage is of small sherd size (average wt. 4 g) and with a high proportion of abraded sherds (65% by sherd count). This may be a reflection of heavy machine damage and the difficulty of extracting the sherds from the clayey fills. None of the features produced a substantial quantity of pottery although pits 47, 49 and 51 and ditch 39 yielded relatively large amounts.

A large part of a single vessel was collected by machine drivers during topsoil stripping (Fig. 9). The pot was probably complete when deposited; the whole base, a large part of the walls, including a complete rim-to-base profile and about a quarter of the rim survives. The vessel is flint tempered (fabric C); large parts of the surfaces have flaked off (possibly during removal from the clay matrix), but where they survive they are well finished although not carefully smoothed or burnished. The vessel has a marked biconical profile, with sharp shoulder emphasised by neatly pinched-out plain lugs of which four survive. The rim is plain and rounded. The vessel appears to be a Biconical Urn and has general similarities with Biconical Urns in Wessex (Calkin 1962 fig. 4.23) and East Anglia (Clark 1936 fig. 6.4 and 8). Therefore a date in the first half of the 2nd millenium B.C. may be suggested. Biconical Urns are uncommon in Essex; an example with elongated plain shoulder bosses was recovered from an internal pit at Springfield Cursus (Brown forthcoming B). Shoulder sherds of an urn, again with elongated plain shoulder bosses, from a ring ditch at Orsett (Brown 1987), are very similar in fabric and finish to the Maldon vessel.

Late Iron Age and Roman Pottery (C. Wallace)

The ditch F43 was the most securely-dated feature of this period on the site -a number of other contexts produced sherds of grog-tempered, Romanising and other wares, but in such small amount that post-Roman dates for them cannot be ruled out.

The pottery from the hand-excavated section of the ditch (context 46) included a fragment from the rim of a collared flagon of mid first-century

A.D. date, kindly identified by Valery Rigby as matching with the local Silty Wares identified at the King Harry Lane Iron Age cemetery (Stead and Rigby 1989, fig. 68.RF6). Grog-tempered pottery from this context could easily be early post-conquest too (it was mainly sherds of a long-lived jar form, Thompson B1 group).

Machine-excavation of more of the ditch (context 80) yielded a collection of grog-tempered pottery (including a probable pre-conquest platter copy, cf. Cam. 21D/Thompson G1-1). The sole piece of imported pottery, a burnt bodysherd from a White Fine North Gaulish lagena (Tiberian-Neronian, pers. inf. V. Rigby), came from here, as did a Colchester brooch (see below). On balance, an *early post-conquest* date can be suggested for the filling of ditch 43.

A sherd of large coarse storage jar from F3 was re-fired or over-fired. If the latter, nearby pottery production is likely.

Faunal remains (O. Bedwin)

A total of 192 fragments of bone and teeth were examined. Almost all were in good condition, though many of the fragments were very small. For this reason, only 77 fragments could be identified to species level, as follows: *Bos*; 34: *Ovis*; 30: *Sus*; 4: *Equus*; 4: *Homo*; 5:

This material came from 18 different contexts, ranging in date from early Iron Age to modern. The assemblage is so small that no general conclusions can be drawn from it.

It is worth noting the presence of 5 worn, adult human teeth, probably from the same individual, in an early Iron Age context. Scattered human remains are not uncommon on sites of this date; for a full consideration of possible factors leading to the deposition of isolated fragments of human skeleton, see, for example, Walker (1984).

Flintwork (O. Bedwin)

A total of 36 humanly-struck pieces were collected; most were on a poor quality buff-grey flint. All but one were flakes; the exception was a thumbnail scraper.



0 50mm

Fig. 9 Maldon landfill: biconical urn.

The assemblage was largely, if not entirely, residual and was too small to offer much in the way of dating or interpretation; the scraper would have a general Neolithic/Early Bronze Age date.

Copper Alloy (H. Major)

Only three copper alloy objects were found, including a flat perforated disc, diameter 9 mm, from F9, and a fragment of a sheet disc, diameter c. 20 mm, from F21.

(Not illustrated) Colchester brooch (Hull's Type 90), in poor condition. Part of the spring, the catchplate and the pin are missing, and there is damage to the side wings. The catchplate had at least two cutout holes, and the spring probably had six coils. L. 50 mm. Context 80 (ditch F43).

A plain, medium-sized example of this common type, generally dated to the first three-quarters of the 1st century A.D.

Iron (H. Major)

The largest group of iron came from FI comprising fragments of a straightbacked knife blade at least 150 mm long, two pieces of edge binding, small strip fragments, three nails, part of a probable joiner's dog, and an oval block, possibly a weight. The edge binding may have been from a scabbard, perhaps for the knife from the context. Single nails came from F11, F17, F23 and F33, and a sheet fragment from F75. F11 also produced part of a blade, probably a knife.

The Baked Clay (H. Major)

A total of 1075 g of baked clay was recovered. Daub, bearing wattle impressions, came from contexts 4 and 36. The fabric was sandy and fairly hard, with finger smoothed surfaces, forming a coating 12-30 mm thick over wattles 13-15 mm in diameter. In one case the surface may have been deliberately smoothed into a crude chevron pattern.

Fragments of two different triangular loomweights came from F47 and F51, both originally about 70 mm thick, with performations 12-14 mm diam. across at least one apex.

14 small pieces of salt briquetage came from context 80, all body sherds from flat-sided vessels. The presence of this material is not necessarily indicative of a salt-making site in the vicinity. This small assemblage is typical of the baked clay from Late Iron Age sites in Essex.

Tile

Fragments of Roman tile came from F5, F23 and F43 and a piece of peg tile from F35.

Conclusion

Although time and subsoil conditions did not allow a more thorough investigation, activity of several periods was identified - a probable burial of the Early Bronze Age, and occupation of the Early Iron Age and Late Iron Age/Roman periods. The site was on a low hill providing a good vantage point and protection from estuarine flooding.

Acknowledgements

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The excavation team of W. Bowden, C. Forrest, P. Hutchings, D. Smith and G. Taylor are also thanked, especially for working under such arid conditions. The illustrations were by L. Collett, R. Massey-Ryan, N. Nethercoat.

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A Fragmentary Medieval Grave Cover and the Site of Woodham Walter Church

S. Ainsworth, W.D. Cocroft, P. Everson and P.M. Ryan

In the new listed building lists resulting from the recent national re-survey, under the entry for the ruins of Old Woodham Walter Hall (item 3/198) the surveyor noted 'part of a medieval coffin lid was seen at the edge of the moat',1 The find had also been reported to the County Archaeology section. It had been made by Mr. Leonard White, a local resident, on the surface of the ploughed field immediately to the W of the site of the Old Hall. When the earthworks of this splendid former 16th-century house and gardens site were visited in summer 1987 in the course of routine work for O.S. mapping and later surveyed in detail by staff of R.C.H.M.E. in the early months of 1988, an effort was made to trace the whereabouts of the stone. It proved to have been taken into safe care by the late Mr. Alexander of nearby Falconers Lodge, to prevent its loss or damage. Mrs. Alexander kindly gave free access for its examination and has subsequently deposited that part of the grave cover in the Chelmsford and Essex Musuem (Accession number CHMER 1988:170).

A second and very similar fragment of grave cover was later found by Mr. White in the same location. Early in 1991 he kindly allowed it to be drawn and studied in the preparation of this note, and this fragment, too, has now been deposited in the Chelmsford and Essex Museum (Accession number CHMER 1991:12).

Both fragments (Fig. 10 a and b) are of identical goodquality oolitic limestone. The first measures 42 cm tapering to 38 cm in width by a maximum of 50 cm in length, and is slightly coped, measuring 14 cm in maximum



Fig. 10 Fragmentary medieval grave cover from Woodham Walter. (Note fragment b was found first).

surviving thickness at its spine reducing to 11.5 cm at the corresponding edge. The other measures 50 cm tapering to 42 cm in width by 41 cm in length: it, too, is slightly coped with similar thickness at its spine and the corresponding edge. There are narrow incised borders along both edges on both stones and perhaps slight traces of a shaft, clearer on stone (a), along the coped ridge.

The fragments come from the central part of a medieval grave cover whose material and principal decorative feature, the two halves of a double-omega motif, identify it as a product of what Dr. Lawrence Butler has defined as the Barnack School of grave-cover production.² The identity of stone type and of the style and layout of the omegas, together with the correspondence of their tapering form, make it practically certain that they formed adjoined fragments of the same cover. On the analogy of more complete examples, it can be anticipated that the cover was 1.5 to 1.8 m (5-6 ft) long, with some form of cross motif (probably either a cross *pattée* in a circle or a floriate cross) at the wide end and either a repetition of that motif at the narrow end or a stepped base. The incidence of two finished fragments of similar dimensions raises the possibility that the cover was carefully split up, probably into four blocks, for secondary use as building material. Confirmation of this is clearest on fragment (a). Both its broken ends are set accurately at right angles across the cover and have a finished rather than raggedly broken appearance. At both ends the surface dips, perhaps as one side of a marking-out groove to guide the mason's work.

The general date bracket of this group of covers is later 12th and 13th century. The rather exaggerated and elegant form of the terminals of the omega and its full-bodied shape on the Woodham Walter piece make it more similar to examples such as those from Little Shelford or Catworth in Cambridgeshire than to the more angular forms commonly found,³ but without the overall design of the cover to assess, any more precise date than generally 13th century is best avoided. The grave cover may result from the patronage of the family of Fitzwalter, whose possession of the manor and residence at Woodham Walter from the 12th to the early 15th centuries gave the place its distinguishing name.⁴ They had possessed the advowson of the parish church, but granted it to the Knights of St. John of Jerusalem at the end of the 12th century.

Butler's systematic collection and study of these minor monuments of the Barnack school extended south only to Cambridgeshire (with a contemporary 13th-century example as far south as Shudy Camps) but he notes pieces in the Norfolk marshland and considers a riverine and coastal shipping network the principal mode of distribution. This would bring Essex within the scope of this product centre, even if peripherally and exceptionally. The R.C.H.M.E. inventories refer to coffin lids (sic) of 12th- or 13th-century date in something like 60 churches in the county but without sufficient description to identify comparable Barnack examples. The Rodwells' survey of the Archdeaconry of Colchester similarly notes the presence of a number of slabs and covers, but only with the newly (1965) discovered example at Belchamp Otten is the material explicitly said to be Barnack limestone.5 Professor Jope's classic study of the sources and distribution of fine building stone in pre-Conquest masonry structures shows a comparable pattern of movement at an earlier date, to which the recent identification of an early building with Barnack limestone quoins at Priors Hall at Widdington adds a further Essex example.⁶

Such a cover might be expected to derive from the medieval church or churchyard of Woodham Walter. Furthermore the evidence for secondary use of the stone is absolutely typical of the survival pattern of early medieval funerary monuments on a church site, through their re-use as building material in church fabrics. A characteristic circumstance is the clearance of part of an early grave-yard of its visible stone monuments to facilitate the enlargement or rebuilding of the church, such for example as the documented creation or renewal of a north aisle at Woodham Walter in the mid 15th century (below). Even in areas rich in building stone, stone monuments were as a matter of routine cannibalised for quoins and architectural detailing: it is that much more probable that a similar process occurred in Essex with its dearth of quality stone. A medieval parish church at Woodham Walter is indeed documented in all the principal surveys from the 13th century onwards.⁷ The present church of St. Michael is entirely a new building (excepting some re-used items) of the mid 16th century, licensed in 1562 to be built on a new site.8 For in 1562 Thomas Ratcliffe, 3rd Earl of Sussex, having acquired the advowson in 1548, was authorised by Queen Elizabeth I to pull down the church at Woodham Walter and to rebuild it nearer to the village. He was permitted 'to build in a suitable place a new parish church in Woodham Waters, co. Essex; foundation of the said church as the parish church and grant that, when the said church is built, the old church

may no longer be reputed the parish church. At the suit of the said Earl on behalf of the parishioners of Woodham Waters, which is in his patronage and in the diocese of London: the present church has fallen into ruin, and because of its great distance from the town of Woodham Waters the inhabitants can only with difficulty come there to hear divine service'.⁹ The new brick church was built just to the south of the village. A plaque above the vestry door is inscribed 1563.

By the beginning of this century the exact position of the old church had been forgotten, although according to village tradition it had been on the site of Falconers Lodge. formerly The Wilderness.¹⁰ Even the dedication seems to have been in some doubt, for E.A. Fitch suggested that the earlier church had been dedicated to St. Nicholas and not to St. Michael the Archangel: in this he was followed by the Rodwells. This mistake arose from the will of Thomas Hawkyns, grocer of London, dated 1454, which is cited by Fitch. In it Hawkyns gave the following instructions - 'To the church of St. Nicholas in Wodeham Wauter where I was cristened ... as much of my goods be disposed of to the making of a new ile on the north side of the church of Wodeham to be halowed of Our Lady and St. Thomas of Canterbury'.11 His recollection of the dedication of the church was incorrect, since other late medieval documentation demonstrates that it had always been to St. Michael the Archangel. A charter enrolled in the Close Rolls is dated '14 Richard II (1398) at St. Michaels church, Wodeham Walter'.12 In 1522 John Bett directed in his will that he should be buried in the churchyard of St. Michael in Woodham Walter.13

The location of the discovery of both fragments, having been brought to light apparently by ploughing of the arable field lying W of Woodham Walter Hall, coincides in general terms with the local opinion that the medieval church lay somewhere close to the site of the post-medieval house. The exposed core of the NW tower of that house, indeed, contains re-used late medieval masonry details that could derive from a church building. More specifically the earthwork survey by R.C.H.M.E. (N.A.R. no. TL 80 NW 15) identified within the arable to the W of the house a distinct platform at TL 8120 0639 with surface evidence of limestone chips and fragments in addition to pegged roof tile. This observation was followed up by further fieldwalking of the same field following deep ploughing in the autumn of 1990. It revealed a scatter of Roman tile, septaria, building stone, large flints, roof tile and floor tile in an area approximately 40 m in diameter with the centre at TL 8120 0638. An aerial photograph in the Essex SMR shows a rectangular cropmark with an east/west axis and length twice that of its breadth in the position of this scatter of building debris.¹⁴ Though not conclusive, this is a plausible candidate for the site of the earlier church, removed in 1562. It is a third of a mile from the village but only thirty metres from the Radcliffes' mansion. Whether the move was for the benefit of distant parishioners, for the greater privacy and elaboration of the great house, or a reparation of neglect by a family of earlier Marian sympathies remains to be explored. (The authors are grateful to Nick Nethercoat for his drawing of Fig. 10)

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Bradfield, St. Lawrence's Church TM 14423078 P.M. Barford

Observation in October 1989 of stripping of external rendering (on chancel, transepts, porch and organ chamber), and internal plaster stripping (in chancel and parts of nave) revealed new details of the architectural history of this muchaltered church (R.C.H.M. 1922, 11-12; Bayley 1962; Rodwell and Rodwell 1977, 98).

The church had no medieval aisles and the transepts were built in 1840 (Bayley 1962, 10) though containing earlier memorial floor slabs, possibly repositioned. They were built of good quality red brick set in hard white mortar in 'English bond' (A on Fig. 11). The organ chamber, added in 1875 (Bayley 1962, 17-18), was of soft red brick in soft powdery brownish mortar (C), but the east end had been rebuilt with harder darker bricks in brown grey mortar (D) with a clear straight join with the chancel wall. The wall of the 1875 vestry was only partially visible, and seems to be built of brickwork similar to D. It butts the south wall of the chancel with a straight join. The brickwork was similar to (F) described below.

It was not possible to observe external stripping of the north wall of the nave. The south door and porch were dated by the R.C.H.M. (1922, 11) to the fourteenth century (*recte* R.C.H.M., there is no north door). The porch is now seen largely to be a nineteenth-century brick rebuilding on the



Fig. 11 St. Lawrence's church, Bradfield. Plan showing medieval walls (blacked in) and post-medieval elements (after R.C.H.M., with alterations).

south and west sides at least (materials similar to A), with re-set medieval stone mouldings; the east window was later blocked when the 1840 transepts were built. This porch possibly replaces a medieval one.

The external stripping of the chancel showed that in large areas the stonework had been replaced by post-medieval brick (Fig. 12). The earliest work in the east wall was standing only to a height of 1-1.4 m. It was of randomly coursed very crumbly septaria blocks set in a soft brownish sandy clay mortar. On the northeast corner the original grey-white sandy limestone quoins survive. The south wall facing had survived to roof height, but was refaced in brick (K) in 1989. A putlog hole roofed with tile was reported by the workmen in the position shown in Fig. 12; it was not visible inside the church. The lower part of the south wall had previously been refaced with bricks set on edge (E). This brickwork was later than the pillar H described below, and was also later than the brickwork (F) resulting from the nineteenthcentury replacement of the southeast window (the brickwork of this is similar to D, but earlier than the vestry).

The eastern corners of the chancel had been replaced externally by brick pillars (H and I, Fig. 12) in brickwork similar to A, built to support the wall-plate of the barrel roof (1840?); set into these at the same height are two limestone blocks (not the original quoins). Similar brick reinforcement is also visible behind fallen render at the southwest corner of the nave (B). Pillar H cuts a brick replacement of the east wall (G) of English bond of re-used bricks (with limewash on the edges and ends) set in brown mortar. This has traces of an earlier east window 0.3 m below the present one which was built in 1884 (Bayley 1962; 25); this is probably the date of the blocking of the base of this opening (J) of mortared brick on a packing of septaria and pegtile, though this may have been inserted when the chancel floor was raised in 1875 (Bayley 1930). The upper parts of the east wall were not stripped of render in 1989.

Plaster was stripped inside the east end of the chancel from parts of the north and east walls to a height of a metre, and on the south wall almost to the eaves. The back of the external brickwork G, H, and J was visible. The original interior stonework of septaria is in good condition; below the northeast window two large Roman brick fragments were



Fig. 12 St. Lawrence's church, Bradfield. Elevations of the exteriors of the south and east walls of the chancel. (Note stonework shown semi-schematically due to lack of time on site).

visible. The door into the organ chamber is packed with brick, and clearly a modern insertion. The back of the northeast window was not seen, though R.C.H.M. (1922, 11) says it is a reconstruction. The fine 13th-century double piscina on the north side is, as previously suspected, an insertion, packed with peg-tile and nineteenth-century brick. The south wall exhibited no special features, the thirteenth-century piscina and southeast window rear arch are original. The brownish plaster here was about 30 mm deep in places, but examined areas showed no traces of wall-paintings. The minor areas stripped inside the nave exhibited no special features. Unfortunately the relationship between the undatable paired chancel and tower arches with the fabric could not be observed.

The exterior of the tower has not yet been stripped and many features are obscured by rendering. It is built of roughly-coursed septaria with patches of coursed flints, and some fragments of Roman tile, and also a few limestone fragments and peg-tile. The upper two stages are of eighteenth and nineteenth-century brick. The noticeable angle between the tower and the nave seems likely to be due to the west wall of the medieval nave being misaligned. The R.C.H.M. dated the tower to the sixteenth-century, though it contains a fourteenth-century inscribed bell; it is presently impossible to say whether the west windows are inserted or not. The string-course and limestone block facing at the base of the wall (unless inserted) shows that the base of the butresses are contemporary with the tower wall (cf. R.C.H.M. 1922 fig p. 11). Above the nave roof the exterior southeast corner of the tower exhibits quoins similar to those on the northeast corner of the chancel.

Shallow drainage work in the churchyard outside the south wall revealed only unstratified black loam with nineteenth-century material and former path surfaces. The fine 'crinkle-crankle' brick wall which forms the boundary of the churchyard on the southeast side and the Hall is worthy of note. The churchyard has been extended southwards, and also to the northwest, which was formerly the site of an inn; grave-digging here in recent years has produced much post-medieval pottery.

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Medieval pottery from Maplecroft, Sudbury Road, Castle Hedingham

Deborah Priddy

Medieval pottery, an Anglo-Saxon coin of Aethelred II and a second identifiable coin were recovered by Mr. C. Bird during excavations for a path around a newly constructed garage. Mr. Bird noted a cobbled surface which appeared to seal most of the pottery and after having the material identified at the Colchester and Essex Museum, gave the Archaeology Section the opportunity to record the section and study the finds. The garage is set some way back from the road frontage. The cutting made for the new path revealed stratified deposits to a depth of c. 1.10 m.

Below a dark brown clay-loom topsoil (1) with patches of bright orange sand was a mixed brown clay loam (2) with occasional flints, flecks of chalk, charcoal and brick. Although medieval pottery was recovered from this layer, this was residual since it also included sherds of stoneware and glass. This sealed a mid-brown loamy clay with chalk chips (3), resembling redeposited chalky boulder clay. Into this was cut a small linear slot (4) with a brown loam fill (5). The most likely interpretation for this appears to be an animal burrow. Below (3) was an area of compact flint cobbles (6), up to 200 mm in size, sitting in a bed of dark grey-brown clay (7). This in turn sealed an orange red sandy clay with patches of burning (8) and a grey-black clay (9) with much charcoal.

These deposits are impossible to interpret given the very small area examined. However, the sequence of burnt material, followed by the cobbled surface and clay layer, all containing a significant amount of pottery and several quern fragments suggest yard activity in the vicinity of domestic buildings. It is also interesting to note the discovery of such an amount of medieval pottery outside the area of the medieval town of Castle Hedingham itself. The presence of the residual Anglo-Saxon coin represents an intriguing mystery.

Medieval Pottery

by Helen Walker

A total of 86 sherds of pottery weighing 736 g was excavated from contexts 2, 3, 7, 8 and 9, and has been recorded using Cunningham's typology (Cunningham 1985, 1-2). Not surprisingly all the pottery (except for some in context 2) is Hedingham ware (Fabric 22), manufactured at Sible Hedingham from the ?mid-12th to the end of the 13th century. Both coarse and fine wares are present although the coarse ware predominates. The fine ware is orange in colour and very micaceous. Decorated jugs are the most common fine ware form. The coarse ware has an added tempering of angular, white, colourless and grey sands with sparse rust-coloured oxides. Sherds tend to be grey sometimes with red cores or margins, buff and red-brown examples also occur. Cooking pots are the only coarse ware form found on this site. There are several cross-fits with the pottery excavated by Mr. Bird.

Pottery from the lowest layer (9) consists entirely of coarse ware. One cooking pot rim is present (Fig. 13.1), it has a squared sloping top and may be datable to the early to mid-13th century (Drury forthcoming).

Layer 8 also contained exclusively coarse ware. There is one cooking pot rim, from the same vessel as No. 1 in layer 9. Some body sherds found in this context are very fine with no obvious sand temper and resemble Roman greyware. However, the fact that these sherds are large and fit together makes the possibility that they are residual Roman sherds most unlikely.

Clay layer 7 yielded a section of strap handle from a Hedingham fine ware jug. The sherd is abraded but traces of a mottled green glaze can still be seen. In addition three small undiagnostic sherds of fine ware were found. The remaining pottery in this layer is coarse ware, including several rims:

гı <u></u> , 13,2	reduced to a dark grey, surfaces are uneven and it ap- pears to be hand-made rather than wheel-thrown. It
	therefore resembles Early Medieval ware but examina- tion of the fabric under the microscope shows it to be
	Hedingham, although it is probably earlier than the rest
	of the group. The inside surface is abraded.
Fig. 13.3	Part of a jar or cooking pot with a hollowed, everted rim.

- Fig. 13.4 One inturned rim, perhaps from a small cooking pot. It has a thick salmon pink core and grey surfaces.
- Not illustrated Part of a cooking pot with a blocked rim and no intervening neck between the rim and body.

The writer has not seen the rim-forms shown in Figs 2-4 in Hedingham ware before. Also from this context are two sherds which cross-fit with a cooking pot found by Mr. Bird. The cooking pot profile is almost complete (Fig. 13.5). This too has a blocked neckless rim.

No pottery was found in context 6 or in slot 5. Layer 3 revealed two undiagnostic sherds of Hedingham fine ware. Coarse ware sherds include one inturned rim from the same vessel as No. 4 in layer 7.

The brown clay loam layer (2) was the uppermost level to contain pottery. As well as Hedingham coarse ware, the pottery comprises one sherd of Early Medieval ware (Fabric 13), a coarse sand tempered fabric which dates from the ?11th century to c. 1200, and a sherd of Mill Green fine ware (Fabric 35, described by Pearce *et al.* 1982) which was made in central Essex during the late 13th to mid-14th century. However the presence of modern stoneware in this layer indicates that the medieval pottery is residual.

An unstratified find is a bung-hole or spigot from a cistern. It is made from medieval sandy orange ware and may or may not be a product of the Hedingham kilns. Sand-tempered oxidised fabrics were made throughout the County and are difficult to distinguish. Medieval bung-hole cisterns are unusual in Essex, although they became common in the 15th/16th century.

Summary

As fragments from the same vessel occur in layers 8 and 9 and layers 3 and 7 this indicates that the pottery was deposited at the same time. The latest



Fig. 13 Medieval pottery from Castle Hedingham.

datable pieces are the developed blocked rim cooking pots which are thought to date from the late 13th to early 14th century (Drury 1976, 271). As Hedingham ware may have gone out of use by the end of the 13th century (Drury forthcoming) this makes a late-13th century date most likely for the deposition of this group.

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Pentlow Hall

by David Andrews, with a pottery report by Helen Walker

Introduction

Pentlow Hall is a timber-framed house that stands within a moat in a bend in the river Stour, about 75 m to the north and west of St. Gregory's church (Fig. 14). The house is generally assigned to the 15th-16th centuries, and is now H-shaped, being but a fragment of a larger complex. The east wing was remodelled in the 18th century and is now plastered. Apart from additions on the north side, the house otherwise has exposed timber framing with narrow studding. In the jettied central wing, there is a massive binding joist with lamb's-tongue chamfer stops for what seems to be an original first floor, where there is a fine oriel. The roof of this wing cannot be examined, but that of the cross-wing to the west seems to be of clasped purlin construction. These features point to a date in the second half of the 16th century, or perhaps a little later. That the house extended further west is evident from open mortices in the frame of the cross-wing. At a distance of abour 27 m from the east front, there is a north-south break in slope suggestive of a house platform and the existence of further structures also in this area.

Excavation in May 1990 for a sunken path about 2.5 m wide and 1.5 m deep running north-south from the south front of the hall down to the moat revealed archaeological deposits which were summarily investigated as work proceeded, the east section being sketched (Fig. 15).

The Archaeological Sequence

The natural was a loose gravelly deposit (9) of fluvial origin, made up of angular flints and small chalk pebbles and pea grit. Above it, there was a dark red-brown to orangey silty sand (8), and an orangey brown stony sandy silt (13, 24), apparently the remains of a subsoil. To the north, where there seems to have been no human interference to the natural strata, there was above this a very clear buried topsoil (25).



Plate I Pentlow Hall; the excavation for the sunken path. The scale (1 metre overall) is resting on the chalk and clay floor.


Fig. 14 Pentlow Hall: plan showing the excavated area and the chalk floor indicating the site of the medieval building.



Fig. 15 Pentlow Hall: section recorded along the east side of the excavation for the sunken path.

The archaeological remains consisted of surfaces representing the floors of buildings, a ditch and several other features, which can be arranged into the following chronological sequence:

I. features earlier than the building. Cut into the subsoil, and sealed by the floors, were i) a feature only seen in a temporary east-west section which was about 400 mm across and 200 mm deep, and had been filled with a mixture of brown loam and orangey sand; ii) another feature (10) about 700 mm wide and 500 mm deep, filled with a blackish sandy loam (11) and orange brown sandy loam with many stones (20). Also cutting the subsoil was a shallow (up to 600 mm) pit (26) at least 2 m long in one dimension, filled with a mixed dark brown sandy silt loam (27) with patches of stones and chalk pea grit, and bone and oyster shell. A small cut feature (18) at the south end of the section may also have been of this phase. No finds were recovered from these deposits.

II. a building, represented by a chalky boulder clay floor which was of at least two phases. The lower part of the floor, about 60 mm thick, was made of pale vellowish clay (6) with pieces of chalk, which extended north-south for about 2 m, and little more than about half way across the width of the trench. Most of this had been scorched red, the sand beneath it also being altered to a deep red colour (7). Overlying this was a very compact surface (5) containing much more chalk, its south end in particular being almost pure chalk. This extended almost to the west edge of the trench, and measured a little in excess of 4 m north-south. This floor was not burnt, but there was a layer of charcoal up to 10 mm thick overlying it in places, suggesting that there was a fire nearby, or else possibly contained in a brazier set on the floor. Elsewhere, and in particular in the temporary east-west section, the chalky floor was covered by a pale yellow chalky clay up to 30-40 mm thick, which looked like another floor except that it was not dirty, and that it had an uneven lumpy surface. Above this, there was a loamy layer about 10 mm thick and an orangey red silty sand, up to 20 mm thick. It was from these layers overlying floor 5 that the later 12th century pottery was recovered.

Linear features bounded the north and south edges of this floor, both being visible in the west as well as the east section. The north one (28) was 700 mm wide, at least 600 mm deep, and was filled with brown sandy silt (29) below a blackish silt (30), overlain by mixed brown sandy silt with many small stones (31). It had cut the aforementioned pit 26. The southern feature (12) was about 750 mm wide and 500 mm deep, and was filled with a mixed dark brown to greenish sandy loam (15) overlain by orangey-brown sand and chalk pea grit in a silty matrix (16). It seemed to have been recut, the recut being filled with dark brown sandy loam.

III. a layer of silty brown loam with many small stones and pea grit, and containing patches of clay (22), overlay feature 12, and just overlapped the chalky floor. It had been cut by a stake hole (24). The angle of slope of the top of this layer (down from south to north) suggests it could represent the tail of a bank at the edge of the moat. Layers with a somewhat similar angle of slope could be seen in the west section. Stratigraphically later than this layer were a layer of stones and flints in a grey-brown sandy loam matrix (3), and an overlying layer (2) which consisted predominantly of stones and gravel in a yellow to orangey brown sandy loam matrix, but which was in fact rather mixed, including discrete deposits of slightly different material and showing evidence of tip lines. To the north, this was sealed by a buried turf line (31).

IV. a relatively thin layer of orangey sand and gravel (32) had been spread over this old land surface. Above it there developed another topsoil (33).

V. the layers described above had been truncated in the course of grading a slope down to the moat edge. Subsequent to this operation, new topsoil (1) had been brought in, merging with the older topsoil to the north.

The Pottery

Introduction

Fifteen medieval sherds (150 g) were excavated from above the floors, and a further 49 sherds (1.2 kg) of similar pottery were collected by the owners who carried out a watching brief in the final stages of the excavation of the sunken path. The material has been classified using Cunningham's typology (Cunningham 1985, 1-4).

The fabrics

Early Medieval sand-with-shell-tempered ware: Fabric 12B, possible date range of 11th to second half of the 12th century.

Early Medieval ware: Fabric 13, possible date range 11th century to c. 1200. Hedingham fine ware: Fabric 22, possible date range of mid-12th to end of 13th century.

Hedingham coarse ware: Fabric 20D, a grey ware tempered with moderate, angular, white colourless and grey sands with sparse rust-coloured oxides. Date range as for the fine ware.

Fine grey ware: Fabric 9/20D, an enigmatic fabric which, under the microscope, appears to be the same as that of Hedingham coarse ware but with finer sand tempering, so that it could easily be classified as Thetford-type ware. This is a wheel-thrown Saxo-Norman fabric described by Rogerson and Dallas (1984, 118), and thought to date from c. 850-1150, flourishing in the 10th and 11th centuries.

Fabrics 12B, 13 and 22 are described by Drury (forthcoming).

Pottery excavated from immediately above the floors (Fig. 16)

This included seven body sherds of early medieval ware. One shows wavy line combing and is from the same vessel as cooking pot no. 3 found during the watching brief. Another sherd of Early Medieval ware is tempered with distinctive rosc/amber quartz. Such tempering has been noted in Early Medieval ware from Great Easton motte and bailey near Great Dunmow (Walker in prep.).

The remaining sherds are of 'fine grey ware'. Two cooking pot rims are present. One has a simple everted rim (no. 5) which is a typical Thetford type (e.g. Rogerson and Dallas 1984, fig. 153.9). The second (no. 6) has a thumbed beaded rim, a type usually found on Early Medieval ware pots. Also in this fabric is a fragment of sagging base. Again, this is an early medieval form as Thetford-type ware bases tend to be flat. However, sagging bases in Thetford-type ware are known, but tend to be of later 11th century date (Jennings 1981, 14).

Pottery collected during the watching brief (Fig. 16)

Three sherds of Hedingham fine ware, probably from a jug, were found. The fabric is slightly darker than usual, with grey cores, a grey-brown internal surface, but an orange external skin. They have a partial covering of pale montled green glaze. One fragment (no. 1) is decorated with vertical applied strips made from pale grey clay, giving pale green strips against a slightly darker background. Another sherd has a broad (15mm) stripe in the same pale grey clay.



Fig. 16 Pentlow Hall: pottery from the layers above the floor and the watching brief. No. 1 Hedingham fine ware; nos 2, 3 Early Medieval ware; no. 4 Hedingham coarse ware; nos 5-9 'fine grey ware'.

Perhaps the earliest sherd collected is a sagging base in early medieval sand-and-shell-tempered ware, but it is untypical in that the fabric is quite fine apart from sparse but large (3 mm) pieces of shell.

Early medieval ware is well represented (13 sherds, 511 g). Two forms are present, a fragment of a ?bowl with a beaded rim (no. 2) and a cooking pot with a slightly beaded rim (no. 3). It is decorated with wavy line combing and vertical thumbed applied strips. This type of decoration is also found on Hedingham coarse ware (Walker in prep.).

Three sherds of Hedingham coarse ware were found, including a cooking pot rim (no. 4). It has a beaded rim with an internal thickening. Such forms were excavated at Pleshey castle, and have been dated to c. 1200 (Williams 1977, fig. 31.9, period 1C).

The remaining pottery is all 'fine grey ware', which was the commonest fabric collected (30 sherds, 529 g). Forms comprise three cooking pot rims (nos 7-9). Nos 7 and 8 are thickened everted rims; although this rim appears in Thetford-type ware, no precisely paralleled rims are published. This rim form is also typical of early medieval ware. Rim no. 9 is definitely not a Thetford-type ware form. Amongst the body sherds there is one example of a thumbed applied strip. None of the sherds exhibit throwing lines, even though the thickness of the sherds is always very even. Some show horizontal ripple marks characteristic of coil-building, so perhaps these vessels were coil-built on a turntable. However, one sherd shows quite pronounced internal rilling consistent with being wheel-thrown. Three sherds are burnt as if from a fire. Rim. no. 9 and one body sherd have sparse shell tempering on the surface but otherwise the fabric is identical to that of the rest of the 'fine grey ware'.

Discussion

As the pottery collected during the watching brief is very similar to that stratified above the floors, it is likely that most of it also derives from contexts associated with the use of the building, though the possibility should be borne in mind that some could come from earlier features like pit 26. The best dating evidence is provided by the Hedingham fine ware strip jug which probably dates from the late 12th to the early 13th century (John Cotter pers. comm.). This also fits in with the date of the Hedingham coarse ware cooking pot (no. 4) paralleled at Pleshey. As for the 'fine grey ware', this seems to have less in common with the Saxo-Norman industries, as represented by the similar Thetford-type ware, than with pottery in the tradition of the early medieval wares, especially as most of the vessels seem to be hand-made.

Interpretation of the Archaeological Sequence

The features earlier than the floor are almost certainly medieval, though no artefacts were found in them. The floor seems to represent a rectangular building 4-5 m wide aligned east-west, the features (12, 28) to north and south of it being eaves-drip ditches. From layers above the floor were recovered a handful of sherds which comprise early medieval ware, and 'fine grey ware', indicating a date in the second half of the 12th century.

The phase III deposits seem to consist mainly of subsoil, and as such must represent upcast from the moat. The identification of the sloping layers at the south end of the section as the edge of a bank is less certain. Whatever the case, the laying out of the moat clearly post-dates the building, and did not exactly replicate the pre-existing site topography. This fits in well with conventional thinking on moats, which is that they are a phenomenon mainly of the 13th-15th centuries. The moat at Pentlow could be described as sub-circular, in which case according to conventional thinking it should be an early example of its kind. Nothing was found to date these deposits, or indeed any of the layers above the level of the floor.

The extensive gravelly layer (32) at the top of the section was no doubt associated with some major phase of building works and landscaping, probably the construction of the existing Hall or subsequent alterations to it. The creation of the slope down to the moat, involving the truncation of much of the upper part of the stratigraphy, presumably dates from the 1930's when the existing concrete revetment wall at its edge is thought to have been built.

The earthworks

In a meadow beyond a formal yew walk to the east of the Hall, ridge and furrow can be traced running north-south. It may also be possible to discern it in a wooded area to the north of the yew walk. To the south of the meadow, any evidence of it was apparently eliminated some years ago when overgrazing by horses reduced the field to a quagmire. Other earthwork features, possibly house platforms, are, it seems, present at the north end of the meadow, but these were not visible when the site was visited because of the length of the grass.

Acknowledgements

The initial recording of the groundworks was done by Phil Clarke. We are very grateful to the owners of Pentlow Hall, Tony Konrath and Bryan Green for their help and encouragement in the investigation of the site, and for pointing out its more interesting features. The illustrations are by Lesley Collett.

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The extended intruded cross-passage D.F. Stenning

Numerous timber-framed houses employ a variation on the 'normal' plan arrangement, where the cross-passage is

located under a storeyed wing, rather than forming part of the open hall.¹ These cross-wings with intruded crosspassages can be found throughout south-east England and occasionally in the Midlands and elsewhere. Probably derived from the spere-truss of the aisled hall, the concept offered the advantage, in restricted urban locations, of a generous hall at the cost of loss of space in the pertinent cross-wing. Such a solution offers an alternative to building at right angles to the frontage, which seems to have been the favoured solution in the most intensively developed urban centres. Nevertheless, the intruded cross-passage solution came to represent one of the 'standard' house arrangements and, perhaps surprisingly, can be found in rural situations where its advantages are not so immediately apparent.

The majority of such cross-wings are two bays in depth, are jettied to the front and contain the usual two service rooms accessed off the cross-passage. The provision of the cross-passage tended to encourage the building of an unusually wide cross-wing, and thus the upper chamber often functioned as a 'solar', being the largest room in a two cross-winged house. In houses with only one cross-wing, the ground floor contained a service room and a parlour and thus provided somewhat restricted accommodation. Again, in urban situations, the front room in a 'low-end' cross-wing was the most obvious location for the provision of a shop, thus further reducing the domestic space.

The obvious solution was to build a deeper cross-wing, over-lapping the hall to the front or the rear and therefore gaining some of the advantages of the 'right-angled' arrangement. In order to provide the necessary circulation route, the cross-passage was extended as an open-sided 'arcade', off which the various compartments could be served.

Marigold Cottage, School Street, Great Chesterford (Fig. 17.1) In the mid-sixteenth century, a three-bay cross-wing was added to an earlier aisled hall. Extending in *front* of the hall, the prolonged cross-passage formed an open-sided porch. The curious hole in the framing of the upper floor of the cross-wing remains unexplained.

Shiptons Farm, Ship Street, Wendens Ambo (Fig. 17.2)

This very similar example survives somewhat more complete. Curiously, the site now contains two abutting crosswings and no trace of a hall. Clearly, one or other of the cross-wings has been moved here from another location.

Cammas Hall, White Roding (Fig. 17.3)

Here a remarkable three-storey cross-wing of the late fourteenth century has the cross-passage extended into open-sided porches at both back and front.

19 High Street, Saffron Walden (Fig. 18.4)

The single cross-wing is four bays deep and provided a typical small shop in the bay nearest the street. Of the mid fifteenth century, this example demonstrates the provision of the maximum accommodation on a tight urban plot, and the rear is 'open-framed' against pre-existing buildings.



Fig. 17 Examples of the extended intruded cross passage. (The area of the cross passage is indicated by hatching).

The Swan public house, Maldon (Fig. 18.5)

In this late fourteenth-century example, similar accommodation is again provided, but in this case there are two crosswings. Originally a merchant's house, with shop and probably ware-housing, the extended cross-wing allows for convenient circulation.

Newlands Hall, Roxwell (Fig. 18.6)

Here, a substantial dwelling in a rural location employs the same technique to provide purely residential accomm-

odation. The elegant arcade, with its four centred arches, seems to have led to a single-aisled kitchen (now destroyed, but heavy sooting of the end wall and peculiarities of structure suggest this interpretation).

Range to the rear of 106, High Street, Braintree (Fig. 18.7) Here the short rear range involves an extraordinary cantilevered first floor, like an oversized jetty. Now partly underbuilt and part supported on a post, it is difficult to imagine it without these later supports.



Fig. 18 Examples of the extended intruded cross passage. (The area of the cross passage is indicated by hatching).

It is suggested that this open-sided cross-passage extension represents a particular building idea which takes into account contemporary structural systems and spatial requirements. It seems to offer further evidence that the medieval carpenter thought in terms of existing methods and was rarely able, or was not permitted, to invent an entirely new concept. The particular process seems to be one of hybridisation, where the carpenter seeks pre-existing techniques and these are combined and adjusted to suit any special requirements. On this basis, the High Street, Braintree, example can be seen as an excessively wide jetty, half of a conventional floor construction, or of the adaptation of the principles of the hammer beam roof!

Notes

 The intruded cross-passage is considered in further detail in 'Historic buildings studies', No. 1, published by Essex County Council Planning Department.

Excavations at Fairycroft House, Saffron Walden, 1990

by Howard Brooks

Two trial trenches (A, B) were cut in the grounds of Fairycroft House to intersect the suspected line of the medieval defences (the magnum fossatum). Although a ditch was located in roughly the expected position, circumstances make it unlikely that it was the magnum fossatum. This fact, combined with observations made during subsequent building works, suggests that the ditch must have run farther south than expected, possibly under Fairycroft House itself (Fig. 19).

Introduction and Background

This is a summary of a full archive report, copies of which have been deposited with the finds at Saffron Walden Museum, and in the Essex Sites and Monuments Record (Archaeology Section, County Hall, Chelmsford). The excavation site code was SW18 (1990). NGR locations were — trench A TL 5404 3827; trench B TL 5402 3827.

Extant earthworks now known as the 'Battle Ditches', or 'Repell Ditches' (which can still be seen in the south-west corner of the town, running south off Abbey Lane) are believed to be the defensive ditches surrounding a new area of town laid out in the thirteenth century, south of the existing 'historic core' of Walden (around the castle and church).

Apart from the surviving south-western angle of the ditches, the rest of the circuit of town defences has been observed during drain digging and various building works (Fig. 20). Thus, Maynard saw the eastern side of the defences in roadworks in Fairycroft Road in 1911 (Bassett 1982, 23), and Stephen Bassett recorded part of the southern side on his excavations at Elm Grove in Audley Road, in 1972-73 (Bassett 1982, fig. 12).

A further opportunity to confirm the course of the southern side of the circuit came in May 1990, shortly before building work was due to start on the site of Fairycroft House, at the corner of Fairycroft Road and Audley Road. Distinct breaks of slope visible in the grounds of Fairycroft House suggested that the ditch might run through the gardens to the north of the house. Trench A was positioned to test this idea, and trench B to demonstrate how well (if at all) the remains of the medieval town survived.

After formal excavation was complete, several 'watching brief' visits made in August 1990, during site clearance and building work confirmed that the *magnum fossatum* did not cross the area enclosed by the broken line in Fig. 19 (C). There were no finds from this watching brief.

Excavation Summary

This refers only to contexts shown on Figs 21, 22.

Period I Natural features.

Natural chalk bedrock (37) was overlain by a light brown loam (16, 31, 39?). The surface of the loam was cut by small channels and depressions (not illustrated), filled with a uniform chocolate brown clay/loam of periglacial origin. Similar periglacial features were found on the Elm Grove site in 1972-3 (Limbrey, in Bassett 1982, 35).

Period 2 Up to 18th century.

Topsoil (14) formed over the old land surface.

Period 3a Early 19th century.

A variety of redeposited soils was dumped over the south end of Trench A (8, 33). This raised local ground level by at least 0.4 m. It seems likely that this was the result of landscaping in the grounds of Fairycroft House. The fact that the depth of dumped soils decreases in a northerly direction away from the house might indicate that the intention of the landscapers was to soften a steep slope on the north side of the house.

Period 3b Mid 19th century?

Although this is presented as a separate site period, this is because it represents a separate event, not necessarily far removed in time from 3a above.

A ditch (34) was cut, penetrating chalk bedrock (37). Its south side was revetted by a flint-and-brick-rubble wall (30), whose relationship with the lower fills of 34 (28, 29) is difficult to demonstrate. Both the bricks of 30 and pottery from 29/28 were 18th/19th century in date.

The question of whether the ditch and wall were visible features for any length of time must be discussed. Although context 14 (continuing from period 2) and 28/29 at the bottom of the ditch could be topsoil layers which might be expected in a period of stabilisation (i.e. in which context 30 was visible), the arrangement of layers around the top of wall 30 is not clear. However, there is one feasible sequence of events: that context 30 rose to above the level of context 8, and supported a layer of topsoil (i.e. 27) lying over context 8, while contexts 28 and 14 were the topsoil layers lying to the north of the wall. Presumably these were all turfed over, and any original cut line in 27 at the appropriate place in section (Fig. 4) was not seen in excavation, or more likely, had been erased by later garden cultivation.

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Fig. 19 Saffron Walden, Fairycroft: location plan. Lower part shows excavated trenches A and B, plus watching brief area, C.



Fig. 20 Saffron Walden, Fairycroft. Course of magnum fossatum.

Period 3c Later 19th century

A further period of dumping deposited more material over the existing topsoils (14, 28). Contexts 20, 32/13, 15, and charcoal layer 21 (representing a bonfire?) were dumped, and covered by topsoils 27 and 40. The slightly greater depth of context 27 over the position of ditch 34 can be put down to sinkage of underlying layers.

Period 4 Mid-late 20th century

Drain dug, more topsoil deposited. Not illustrated. See archive.

Finds

Because the bulk of site contexts were not only 19th century in date, but had also been redeposited at an unknown distance from their original position, detailed publication of finds is not warranted. Finds are fully listed in the archive, and flint, some worked stone and brick are illustrated therein.

Discussion and Conclusions

19th century landscaping in Fairycroft House

One of the principal conclusions drawn from this excavation is that there was a considerable amount of earthmoving in the 19th century. This is probably to be associated with the construction of Fairycroft House (prior to 1877), and also with a later period of landscaping. The Ordnance Survey edition of 1877 shows the house and gardens, but there is no trace of the ditch or wall, which should conceivably have been visible features in the 19th century garden. This implies that if the wall and ditch were visible features, then they (and period 3a-b) must precede 1877. Period 3c (when wall and ditch had definitely been buried) ties in well with the situation shown on the 1877 map, where there is no sign of the wall or ditch, but the drop in level from south to north is implied by several sets of steps in the garden path. Although the Victorian garden path and steps had been removed prior to 1990, the slope in the gardens still visible in 1990 (Fig. 21) may not have changed radically from the Victorian arrangement.

The Magnum Fossatum

The closeness of the position of excavated ditch 34 to the apparent line of the *magnum fossatum* (Fig. 20) begs the question of whether context 34 could conceivably be the truncated lower part of medieval ditch. On the face of it, this seems unlikely, but there are a number of conditions under which this is feasible.

The first condition is that the upper half of the ditch must have been very considerably truncated before the construction of Fairycroft House, otherwise the position of topsoil 14 implies an impossibly shallow ditch (it is normally in the order of 6 metres wide and 2-3 metres deep). The second condition is that the Victorian landscapers must have found the ditch during their work, and clinically cleaned out any primary fills from the bottom, before dumping the topsoil layers 28/29 into the cleared-out ditch. This is feasible, but highly improbable. The balance of the evidence suggests that 34 was not the *magnum fossatum*, but a garden feature of some kind, possibly enhanced, and revetted by wall 30.



Fig. 21 Saffron Walden, Fairycroft. Earthworks and excavations in Fairycroft House grounds; ditch 34 in trench A. Triangular symbols at west edge of trench A show position of Fig. 22.



Fig. 22 Saffron Walden, Fairycroft. Trench A; part of the north-south section of the west face (refer to Fig. 21).

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Book Reviews

Essex on the Map By A. Stuart Mason, M.A., M.D., L.R.C.P. The 18th Century Land-Surveyors of Essex. Foreward by Dr. Helen Wallis. pp. x + 138. 24 colour and 24 half-tone illustrations and a county map (1764) as key. Essex Record Office. 1990. Paperback £14.95.

This is an enchanting and useful book on an enchanting subject, which it must have given the Essex Record Office much pleasure to produce. Way back in 1947 it gave us 'The Art of the Map-maker in Essex' with appropriate plates. Its first catalogue of maps in its own possession appeared the same year, with supplements to follow. We have many debts to Dr. F.G. Emmison, none more rewarding than these.

Dr. A. Stuart Mason, busy medical practitioner researching in his free time, has now taken the eighteenth century under his wing, dividing it into three periods, with subsections for regions of the County, and then sorting a vast array of surveyors into their origins, native or outcounty, as widely different in their manners as the clients who needed them.

The thread which unites them all is pride of possession, as well as use, and coloured and other illustrations add greatly to the joy of the publication, in which the fashionable conventions of rococo or later Adam elegance may be studied alongside more rustic exuberance.

The basic skills of land-measurement could be taught by many a schoolmaster, like Goldsmith's, the wonder of his village,

"Lands he could measure, terms and tides presage,

And e'en the story ran, that he could guage"

the last being the even subtler mathematics of the contents of a barrel. In the early period the result could be delightfully naive, as with Hayward Rush of Wivenhoe. For others it was a side-line in another employment; Benjamin Agnis, farmer, was well able to oblige a neighbour with a plan. But for naivety the widely employed professional Timothy Skynner is Dr. Mason's star-turn, his buildings in plan and elevation recalling those of the late-Tudor Walkers of Hanningfield, so gratefully studied by A.C. Edwards and K.C. Newton.

Another theme is how, as the century advanced and the theory and practice of agriculture improved, great estates employed first-class surveyors not only to map but to manage them. John Storer, working for Nugent, Honywood and Du Cane, also saw to the repair of barns and the sale of timber. But above all such would be a steward, an attorney like Samuel Ennew (also County Clerk) drawing up leases, which included the proper rotation of crops, for Mrs. Rawstorn of Lexden, or John Yeldham Esq., J.P. of Saling Grove, who, working for out-county land-owners like Guy's Hospital, it seems commissioned his own plans for office-use.

But resident grandees were another sort of client. The celebrated and splendid maps by Peter Barnard Scalé for Richard Rigby, have a coffee-table gloss, and the lay-out of private Arcadias invited the attention of yet another breed of surveyor. Work by John Mackoun for the Earl of Rochford at St. Osyth and Barrington at Hatfield Broad Oak is of this kind, almost promissory notes for the pleasures to come when plantations grew and lakes matured.

(Here this reviewer cannot resist mentioning an Ipswich Journal advertisement of 5 March 1768 in which Robert Romley, London bell-founder, offers 'Bells tun'd to the various Chords of Musick, to hand on the necks of Sheep in Gentlemen's Parks, near their Country Seats, which produce most agreeable rural Harmony'.)

And coming down the social scale to such, there is Richard Woods' work (1788) for William Dolby Esq. at Brizes, Kelvedon Hatch, by-product of a rich City-merchant marriage-settlement, to set off the great brick-box mansion assuredly part of it. In H.M. Colvin's Dictionary, Woods also features as an occasional architect, and it is proper to note a regret, murmured in Dr. Helen Wallis's commendatory Foreword, that Mr. F.W. Steer's pioneer collections 1953-66 for a nation-wide Colvin-like Dictionary of Land-Surveyors, shrivelled sadly in later hands, though something may still be achieved from the latent material.

But for Essex here is the work indispensable for the beauty of such productions, with lists of those by the principal performers. For those who know their locality, slip-ups do occur here and there, easily recognisable. p. 82 'Easthope Hall, Coggeshall' is really Easthorpe Hall, near Kelvedon. p. 74, appropriately enough a Suffolk surveyor works for a Mr. 'Season', that is Tobias Searson, well-known inhabitant of Ipswich and Hadleigh. (The E.R.O. catalogues are more accurate.)

The virtual exclusion of printed surveys seems a pity. For Chapman, of Chapman and André, Dr. Mason refers the reader to his own admirable article in the Romford Record Vol. V. 1983. Chapman, amazingly energetic in a short career, made most of the engravings for the Gent's History of 1769-72, and largely from his own drawings on journeys round the county.

Sparrow's map of Colchester (1767) is mentioned. Deane's 'Ichnography' (1748) for Morant is not, probably rightly. It has no scale-bar. But how interesting are Deane's little drawings of mansions and temples which he probably designed himself.

But, as Lord Byron wrote of another occasion, 'let joy be unconfined'. This volume overflows with riches of illustration and biography, for all to revel in.

John Bensusan-Butt

Meagre Harvest, The Essex Farm Workers' Struggle Against Poverty, 1750-1914. By A.F.J. Brown. Essex Record Office 1990 252pp. £8.95

The success of agriculture was a vital factor in the process of industrialization in Britain. Although the Victorian economy relied to an increasing extent on imports of foreign supplies of foodstuffs, domestic production increased during the first three-quarters of the nineteenth-century. It is therefore surprising that comparatively little attention has been given to those at the sharp end of food production, the agricultural labourers. The main focus of historians of labour has been on urban workers and specific occupational groups. While historians of rural England have considered a variety of changes in the Victorian countryside and their impact on rural life, there have been, with some notable exceptions, few studies of those who actually worked the land. Victorian farmworkers remain opaque figures and the story of the communities in which they lived has been a largely neglected part of the social history of the period.

One reason offered for this neglect is the paucity of sources. Yet in Meagre Harvest, The Essex Farm Workers' Struggle Against Poverty, 1750-1914, Dr. Brown has assiduously used a variety of documents, in particular newspapers, to show what can be achieved. In the process he casts valuable light on a group who themselves left few written records. The main concern of the book is the development and decline of the National Agricultural Labourers' Union in Essex between the 1870s and the 1890s and this is placed in a wider context by a survey of the plight of farm workers from the mid-eighteenth century to the outbreak of the First World War. Meagre Harvest contains a wealth of detail about conditions, attitudes and problems in the countryside and contributes to a wider understanding of all sectors of rural Essex. However, the detail is skilfully handled and never obscures the central arguments.

The first chapter examines the changing nature of rural protest against hardship and traces the shift from overt to covert protest. The very first paragraph provides an example of the notion of a moral economy in eighteenth-century food riots, demonstrating the belief of the workers in a 'fair' price rather than one which reflected the fluctuations of the market. However, in view of the problems facing agriculture following the Napoleonic Wars and the harsh repression of protest, especially after the Swing Riots, labourers were forced into other, anonymous methods of expressing their grievances and arson became their major weapon. While farmers consolidated their power in the countryside the older bonds which had sustained rural communities fractured. Farm labourers, meanwhile, were faced with low wages in an over-stocked labour market, lack of work for women and the threat of the New Poor Law. Dr. Brown believes that by the early years of Queen Victoria's reign they had become an alienated sub-class. While agriculture recovered somewhat from mid-century, wages remained often pitifully low and despite the attempts of the rural ruling class to alleviate the situation by invoking religion, providing a modicum of education and, for those deemed deserving, supplying charity, the condition of the labourers remained appalling.

The book then charts the rise and fall of the National Agricultural Labourers' Union in Essex. Union leaders had identified the over-supply of labour as a major problem and encouraged migration to industrial areas to improve the lot of those who remained behind. In some villages this proved successful, albeit as a short term measure. The Union's strength ebbed and flowed until its final collapse in 1894. The response of the farmers was generally hostile and their attitudes are thoroughly explored. Farmers had problems of their own and although a few showed some goodwill, the majority considered the Union to be a threat to the social order. Lock outs were one response to the Union; another was victimization of Union members which made it difficult to find officers for Union branches in the villages. While the Union had some support from urban workers, many rural artisans and shopkeepers who depended on the farmers for custom were hardly in a position to help the labourers. In some cases, however, branches were helped by non-labourers, though these were later excluded by the decision that farm workers themselves should transact their own business.

The question of why some branches succeeded while others failed is tackled by consideration of a number of detailed local studies. Among the variables examined are the social structure and geographical location of the village, the state of the labour market, the role of Nonconformist chapels and the availability of non-agricultural employment. Of particular interest here is the discussion of social solidarity among Essex labouring communities. This theme is developed further when the relationship between branches is examined along with the social implications of trade unionism. Dr. Brown then turns to those who ran the Union. A number of N.A.L.U. organisers and officials showed great dedication to the cause. Though poor themselves they undertook what was often a hazardous task. They exhorted their colleagues to improve their education, to discuss issues of the day such as Parliamentary Reform and Land Reform. They encouraged members to read the Union's newspaper. To subscribe to clubs to help sick members and widows and, less successfully, to embrace Temperance. Yet the espousal of these Victorian values of improvement, self-help, thrift and sobriety did little to raise the labourers' wages or to improve their conditions. Nor did it make much impression on Liberal politicians who did little to help the labourers despite the labourer's support for the Liberals. No exaggerated claims are made about the N.A.L.U. In Essex wages remained the central issue and, while the experience of combination may have helped the labourers to gain some self-respect, the Union was never a serious threat to the rural order.

Meagre Harvest paints a sympathetic picture of Essex farm workers and their struggle for survival. It will help to dispel any lingering myths about some romantic Victorian countryside. It is a well-produced book with detailed notes and references and a comprehensive index. It is a valuable addition to our knowledge of the farm workers' Union and, unlike some studies of the N.A.L.U. in other counties, it follows the story into the 1890s and beyond. But as a contribution to Essex history, it goes further than this. Farm workers and their families formed the majority of the Essex population of the time. While they themselves left little in the way of documentation, Meagre Harvest allows us a significant glimpse into their lives as well as illuminating other aspects of the county's social structure. As such the book contributes to a wider social history and will be required reading for anyone interested in Essex society in the nineteenth century.

Essex Bibliography: January 1991

by A.B. Phillips and P.R. Sealey

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Cover illustration: An early second century bronze jug and patera from a rich burial at the Duckend car park site at Stansted. Originally bought as a matching set, the jug and patera are 15 cm high and 18 cm in diameter, respectively. Both items were on display when the Queen opened the new passenger terminal at Stansted Airport in March 1991. (Photo by Pete Rogers).