AGRICULTURE AND INDUSTRY: ROMANO-BRITISH AND ANGLO-SAXON EVIDENCE AT CARSONS DRIVE, GREAT CORNARD

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Summary

An archaeological excavation to the east of Carsons Drive, Great Cornard, revealed evidence spanning the Mesolithic to medieval periods, with a particular emphasis on Romano-British and Anglo-Saxon activity. The Romano-British site incorporated a possible working hollow and quarry pits, while Anglo-Saxon features included a pit containing a notable concentration of iron slag and furnace material. Evidence of local agriculture was ubiquitous. The findings complement earlier discoveries of Roman and Saxon material from across the site, and add usefully to our knowledge of past settlement and economy within the immediate landscape.

INTRODUCTION

THE VILLAGE OF GREAT CORNARD is located to the south-west of Sudbury, approximately 1.5km to the east of the river Stour (Fig. 125); the river flows into the North Sea at Harwich, some 38km to the east-south-east. The Carsons Drive site occupies an area of agricultural land (measuring almost 13ha), located on the eastern edge of the village (NGR TL 8969 4037; Fig. 125). The locally undulating topography rises from *c*.35m AOD to *c*.62m within the site (Fig. 126), above clays, silts and sands of the London Clay Formation.¹

The current project was also preceded by a geophysical survey and trial trench evaluation.² Previous finds from the site include concentrations of struck flint (Mesolithic to early Bronze Age) in the central and eastern areas.³ A small assemblage of late Bronze Age/Iron Age pottery was also found close to the site's highest point, and probably relates to activity of this date in the immediate vicinity.⁴

A dense scatter of late Iron Age/Romano-British material is recorded in the north-east of the site, including brooches and a coin of Nero (dated AD 45–68).⁵ Other coins and pottery from the site span the entire occupation, culminating with a silver coin of Honorius (Western Roman Emperor AD 393 to 423).⁶ A Roman coin was also found by metal detecting in fields to the north-east of Great Cornard, and surface scatters of Roman building material have been observed further to the south.⁷ Local infrastructure notably includes sections of a Roman road (Margary 322), the *c*. north-south route of which passes some 1.4km to the east of the site.⁸

Anglo-Saxon material is largely confined to the higher ground in the north-east of the site; the pottery indicates a particular emphasis on the fifth century AD and significant finds include a belt buckle set, an *amphora*-type strap-end and brooches (of later Roman style).⁹ A sixth-century AD cruciform brooch and pottery are also recorded from the site, while the trial trench evaluation recovered a socketed iron spearhead of possible Saxon date.¹⁰ Three Saxon



FIG. 125 - Site location.



FIG. 126 - Topography of the natural geology (excavation area).

coins (*sceattas*) are recorded to the south of Great Cornard, in the area of Blackhouse Farm, and may be part of a hoard or associated with a nearby barrow burial.¹¹

The forerunning geophysical survey of the site by GSB Prospection Ltd encountered a small number of pits and short ditch sections, validated by the subsequent trial trench evaluation.¹² The latter also encountered the remains of a possible pond barrow.

SUMMARY OF EXCAVATION RESULTS

Most of the encountered archaeology (Fig. 127) was dated to the early Romano-British period (first to second century AD), or early to middle Anglo-Saxon period (late fourth to mid-eighth century AD). A single late Romano-British (third to fourth century AD) pit was also present in addition to a modest assemblage of late Roman pottery from other features. A small collection of Mesolithic to early Bronze Age struck flint and trace medieval pottery was recovered, although no features of these dates were encountered. The majority of the flint represents residual material from the fills of a natural hollow in the north of the excavation, and a series of undated 'ard' marks encountered within the base of this hollow (collectively numbered F1135) are thought to indicate limited prehistoric activity. This type of shallow mark is synonymous with a simple form of ploughing, whereby the share or ard is dragged through the soil.¹³ Complete project outcomes, including full specialist data and analyses are presented in the research archive, deposited with the Suffolk County Council Archaeological store.¹⁴

THE ROMANO-BRITISH EVIDENCE

The early Romano-British landscape was characterised by a series of ditches, including possible boundary ditches, with a clear concentration associated with a natural hollow

(F1135), in the north-east of the excavation (Figs 126–128). Several ditches had been cut into the base of the hollow, while others appeared to demarcate its north-western edge; the recutting of two of these marginal ditches suggests a degree of maintenance or development of boundaries over time. The basal layer within Hollow F1135 (L1136) yielded a significant quantity of early Roman pottery and was stratigraphically later than the majority of Phase 1 features in this area. A small number of possible boundary ditches were present to the south of Hollow F1135 and are thought to represent the partial remains of a system of ditched agricultural enclosures. Other early Romano-British features comprise pits and post-holes, including an intercutting group of possible quarry pits, distributed across the excavation.

A single late Romano-British pit (F1115) was also encountered towards the centre of the excavation (Fig. 127). Its fill yielded just one sherd (40g) of Hadham oxidised ware mortaria; F1115 is not discussed further here. Despite this dearth of archaeology, the overall late Roman pottery assemblage, largely from the upper fill of Hollow F1135, attests to continued local consumption between the mid-third and fourth centuries AD.

The early Romano-British features

Early Romano-British ditches, numbering seventeen in total, were confined to the central and north-eastern area of the excavation where they displayed clear associations with Natural Hollow F1135 (Figs 127–129). To the south, six linear ditches formed remnant boundary features, thought to be elements of a ditched enclosure system. Enclosed Roman landscapes of this type are typical of the 'extensively and continuously bounded landscapes' recorded across much of post-Conquest England.¹⁵ These may have been related to linear ditches cut into the base of F1135 (Fig. 128: F1196 and F1194), although overall the ditches displayed little in the way of coherent spatial patterning. One clear boundary alignment was, however, formed by parallel Ditches F1003, F1077 and F1142 (Fig. 127). Ditch F1003 recut the northeastern edge of F1077, suggesting some degree of maintenance/development of boundaries over time, while its northernmost end turned sharply to the north-east, towards the area of Hollow F1135 and Ditch F1196. A gap between the termini of these ditches may represent an access point, possibly between enclosures (Fig. 127).

A concentration of shallow ditches was encountered in the northern part of the excavation, within and around Natural Hollow F1135 (Fig. 128), and no doubt relates to a focus of early Romano-British activity. Ditches F1129, F1131, F1156, F1158 and F1160 appeared to demarcate the edge of the hollow, while others truncated its base (e.g. F1162, F1177 and F1196) (Fig. 128). Where relationships existed, the ditches on the edge of F1135 were chronologically later; those within the hollow being either stratigraphically or physically sealed by the basal fill of L1136. The function of the early Romano-British features in the north of the excavation remains uncertain, although F1135 may represent a working hollow. Working hollows are common to a number of periods,¹⁶ with Romano-British examples known from Littlehampton (West Sussex), Spong Hill, North Elmham and High Noon Road, Colby (Norfolk).¹⁷ Military sites with working hollows include Binchester Roman Fort, County Durham.¹⁸ These hollows can have a number of uses, including metalworking and agricultural processing.¹⁹ A processing hollow at Littlehampton contained various pits and post-holes/stakeholes associated with its use. The basal fill of F1135 at Great Cornard was also cut by thirteen early Romano-British post-holes, although their distribution appears random/non-structural.

Besides boundary ditches, the southern excavation area contained a number of early Romano-British pits and post-holes, including a linear arrangement of five post-holes running parallel to Ditches F1003 and F1077 and possibly forming a fenceline or similar (Fig. 127). A less coherent alignment of eight post-holes ran approximately east to west from the southern



FIG. 127 – Phased excavation plan.



FIG. 128 - Natural Hollow F1135.



FIG. 129 - Early Romano-British features within and around Natural Hollow F1135 (mid-excavation).

terminus of Ditch F1077, although its function is less clear. Fencelines are a commonly occurring feature on rural sites of this period and include a landscape of enclosures and fencelines excavated at Cedars Park, Stowmarket.²⁰ At Great Cornard, the possible fenceline(s) appear to have existed in unison with enclosure ditches, helping to further partition the agricultural landscape.

Twelve intercutting pits were encountered in the southern area (Figs 127 and 130). The constituent features were all relatively large in plan, ranging between 1.50+m and 2.80m in maximum diameter, and displayed relatively uniform depths of between 0.36m and 0.50m. Despite a general lack of finds and environmental evidence (see below), the consistency in size and shape displayed by these features would tend to suggest that they were dug within a limited time frame and/or for a similar purpose, potentially low level quarrying activity.

The Roman pottery (Andrew Peachey)

The recovered Roman pottery constitutes 658 sherds (10,924g) in a slightly abraded condition. Early Roman fabric types predominate (Table 1), although diagnostic forms are limited; they do, however, include a south Gaulish Samian ware mould-decorated bowl and an inkwell; as well as storage jars, jars and bowls in locally produced coarsewares. Form and fabric types generally reflect a date around the late first century AD. The sparse late Roman sherds include bowls in Oxfordshire red-slipped ware, locally produced grey mortaria and shell-tempered jars that are consistent with consumption in the fourth century AD. A crucible of possible Roman date was also recovered.



FIG. 130 - Possible quarry pits.

Fabric Code	Fabric Description				
LGF SA	La Graufesenque Samian ware. ²¹				
LEZ SA2	Lezoux Samian ware 2. ²²				
GRF1	Fine greyware.				
OXF RS	Oxfordshire red-slipped ware. ²³				
LNV CC	Lower Nene Valley colour-coated ware. ²⁴				
HAD OX	Hadham oxidised ware. ²⁵				
UNS WH1	White ware 1. Possibly a product of kilns at Two Mile Bottom, Norfolk. ²⁶				
UNS WH2	White ware 2. An imitation of imported Gallo-Belgic white wares.				
COL WH	Colchester white ware. ²⁷				
SOB GT	Southern British ('Belgic') grog-tempered ware, ²⁸				
BSW1	Black-surfaced/Romanizing reduced ware 1.				
GRS1	Sandy greyware 1.				
OXS1	Sandy oxidised ware 1.				
WAT RE	Wattisfield/Waveney Valley reduced ware. ²⁹				
HAD RE1	Hadham reduced ware. ³⁰				
ROB SH	Romano-British shell-tempered ware. ³¹				
EAA RE (M)	East Anglian reduced ware mortaria. ³²				
HAD OX (M)	Hadham oxidised ware mortaria. ³³				
BAT AM2	Baetican (Late) amphorae 2. ³⁴				
CRUC	Crucible fabric. Surfaces are dark red-brown over thick red margins and a mid-dark grey core. Inclusions comprise common-abundant quartz (generally 0.1-0.25mm, with sparse polycrystalline grains to 2.5mm) and sparse red iron oxide grains (<0.5mm). This fabric is exceptionally hard to the point of vitrification, with lumpy slightly abrasive surfaces (in part due to crude hand-formed manufacture).				

TABLE 1 - Roman pottery fabric descriptions.

Early Roman

Eight sherds of Samian ware (predominantly from south Gaul (LGF SA)) were recovered. Form types include a mould-decorated bowl (Dr.37), a platter (Dr.15/17), cups (Dr.27 and 33), and an inkpot (Ritterling 13), collectively dating to the late first/early second century AD. The Dr.37 bowl (Fig. 131: 1) exhibits a panelled design below a double-bordered ovolo with a (split?) tongue to left, a hollow rosette tip, and beaded border. One panel includes the figure of Oedipus (O.837/D.488A), unfortunately with the face chipped (probably incidental). The decorative scheme suggests this bowl was made by Amandus iii of La Graufesenque, or possibly the connected Mas-iv; both of whom operated *c*.AD 100–120. A small basal stamp with a partial maker's stamp (Fig. 131: 2) from L1137 may be from the same Dr.27 cup recovered from L1136. The stamp reads, '...RTVS]', part of die 4a of Libertus I of La Graufesenque, dated *c*.AD 50–75.³⁵ The top of a Ritterling 13 inkwell was recovered from Layer L1136. It is a near flat disc, rising slightly towards a central circular aperture (Fig. 131: 3), which exhibits the fractured edge of a down-turned non-spill lip, comparable to examples recorded by Oswald and Pryce.³⁶ Inkwells like this are more common on Romano-British military sites, although a single mid first-century AD example is recorded from Colchester, while another was found at Elms Farm, Heybridge.³⁷ The Great Cornard inkwell likely relates to a substantive Roman presence in the Sudbury environs as previously indicated by the discovery of the only intact example in Britain of a Roman bronze lantern. Willis notes that inkwells are 'very functionally specific and rare, and almost invariably associated with military sites and major civil centres'.³⁸

Other early Roman fine wares are restricted to very rare sherds of GRF1 and UNS WH2; the former limited to small plain sherds almost certainly from beakers, and the latter including a butt beaker from Ditch F1003 (Fig. 131: 4) that imitates Gallo-Belgic imports. The UNS WH2 beaker is comparable to (post-Conquest) mid first-century AD vessels at Sheepen, Colchester, where it may have been produced.³⁹ Colchester was also the source of scarce white ware (COL WH), including part of a hemispherical-flanged bowl.⁴⁰ A single body sherd of Baetican *amphorae* (BAT AM2) from Ditch F1156 is almost certainly derived from a Dressel 20 *amphorae* used to transport olive oil from southern Spain.

The bulk of the post-Conquest pottery comprises coarsewares with black to dark-grey surfaces and varying densities of grog temper, split between wheel-made Belgic fabrics (SOB GT) and Romanising fabrics (BSW1) (Table 1). There is a bias towards large jars and storage jars, probably a direct chronological trend related to the ascendancy of the Romanising fabrics (BSW1) during the mid–late first century AD. Nonetheless, the SOB GT includes large, wide-mouthed jars with shoulder cordons (Figs 131: 5–6),⁴¹ which are paralleled in Claudian/Neronian (mid–late first century AD) groups at Sheepen, Colchester.⁴² These large jars are approximately matched in quantity (R.EVE) by storage jars with rim diameters of c.35cm.

The Romanising greywares (BSW1) present a contrasting picture, corresponding with their ascendancy as utilitarian wares, although diagnostic sherds are limited. Vessels include necked, cordoned bowls, with one example exhibiting a cordon decorated with oblique burnished lines (a regionally common first-century AD variant).⁴³ Also in BSW1 are small fragments of everted bead rims, potentially from bowls or jars. The Romanising greywares are supplemented in the early Romano-British period by limited quantities of ubiquitous Roman sandy greyware (GRS1), almost certainly produced locally; while occasional sherds of micaceous reduced wares from north Suffolk (WAT RE) are also present (Table 1). Diagnostic vessels in GRS1 are scarce, but include a necked bowl with a plain shoulder cordon and angular girth (Fig. 131: 7).

Late Roman

The few late Roman sherds illustrate a focus around the products of major industries at Hadham (HAD OX, HAD RE1), Oxfordshire (OXF RS), the Lower Nene Valley (LNV CC) and probably Harrold, Bedfordshire (ROB SH). The relative absence of local coarsewares, with no diagnostic sherds and only rare potentially undifferentiated GRS1 body sherds, is also notable. Broadly, this supply pattern is consistent with mid third- to mid fourth-century Colchester.⁴⁴ This date would also be consistent with the developing domination of the Hadham industry across East Anglia, supplemented by the fine wares LNV CC and OXF RS, as characterised in groups from Great Chesterford, for example.⁴⁵ Form types from the late Roman industries described below are extensively paralleled in the groups from the urban centres of Colchester and Great Chesterford, as well as the smaller settlements at Icklingham and Gestingthorpe, and the fort at Burgh.





Shell-tempered (ROB SH) vessels appear limited to jars with slightly drooping or hooked everted triangular bead rims. Similarly, the oxidised Hadham wares (HAD OX) are primarily limited to everted triangular bead rims with facet-burnished exteriors, probably from wide-mouthed jars or bowl jars. However, the HAD OX also includes part of a hemispherical-flanged bowl, and the two-rib handle of a flagon. The reduced wares from Hadham (HAD RE1) are equally highly burnished (inside and out), and are limited to fragments from one or more bead-and-flange rim dishes. There are no diagnostic sherds of LNV CC, while the OXF RS includes a hemispherical-flanged bowl, imitating Samian form Dr.38.⁴⁶

Two interesting vessels of more local origin comprise a small jar in the relatively sandy UNS WH1, which has a plain everted rim and oblique lines of applied rusticated decoration on the shoulder, suggesting it may have been produced in fourth-century AD kilns at Two Mile Bottom, Norfolk.⁴⁷ The second vessel belongs to the class of reduced ware mortaria (EAA RE (M)) that were produced in several East Anglian centres. A mortar from Hollow F1135 (L1137) has an upright grooved bead with a slightly bulbous drooping flange, probably imitating types produced in the Oxfordshire kilns, and is comparable to an example recorded at the shore fort at Caister-on-Sea.⁴⁸

The crucible

A single fragment of crucible (CRUC) was recovered from Hollow F1135 (L1137). Crucibles are problematic for dating; with this example (Fig. 131: 8) being a handmade, hemispherical bowl, with a slightly insloping, approximately squared rim. The crucible is relatively large with an outer rim diameter of c.32cm and walls 30–35mm thick. Large crucibles such as this were used in the Roman period with similar baggy examples associated with ironworking at the villa at Little Oakley and settlement complex at Elms Farm, Heybridge.⁴⁹ However, comparable examples were also utilised in the tenth–thirteenth centuries.⁵⁰

Ceramic building materials (CBM) (by Andrew Peachey)

The bulk of the Roman CBM, including daub and hearth lining, was from Hollow F1135, predominantly comprising tegulae roof-tile as well as sparse box flue-tile. Collectively, the Roman CBM appears consistent with the presence of a substantive building in the local area, though the lack of denser dump deposits suggests that the site is not immediately adjacent.

The agricultural economy

Animal bone (by Julia E.M. Cussans)

Animal bone from early Romano-British contexts was almost entirely contained by Natural Hollow F1135 (L1136), and represents the usual suite of domestic mammals for the period. Of the sixty-eight bone fragments from L1136, only twelve could be identified to specific taxa; in order of abundance: cattle (*Bos taurus*), sheep/goat (*Ovis aries/Capra hircus*), horse (*Equus caballus*), pig (*Sus scrofa*) and deer (*Cervus elaphus* or *Dama dama*). A fragment of badger (*Meles meles*) mandible was also identified.

Bones were fairly sparsely spread throughout L1136, with no apparent clustering of individual taxa. For all identified taxa, body parts represented were limited to head (including teeth) and foot elements. Given the small sample size it is difficult to determine if this is due to issues of preservation, or selective deposition, e.g. as butchery waste. No butchered, ageable or pathological cattle bones were present. The sheep/goat assemblage included the only butchered bone, a metatarsal fragment with possible skinning marks. Two mandibular third molars were also present and indicate the presence of adult animals.

Environmental remains (by John R. Summers)

Cereal remains were recovered from almost 69 per cent of early Romano-British samples, thus indicating their frequent use and carbonisation. Wheat (*Triticum* sp.) was most ubiquitous (*c.*47 per cent of samples), followed by barley (*Hordeum* sp. [*c.*36 per cent]) and oat (*Avena* sp. [*c.*9 per cent]). Amongst the wheat remains, glume wheat (*Triticum dicoccum/spelta*) was most frequently recorded (in 25 per cent of samples) over free-threshing type wheat (*T. aestivum/turgidum* type), which was present in *c.*6 per cent of samples. Hulled barley grains were recorded in approximately 14 per cent of samples, with a small number of asymmetric grains indicating the primary cultivation of hulled, six-row barley (*H. vulgare* var. *vulgare*). In addition to cereals, flax (*Linum usitatissimum*) was identified in *c.*3 per cent of samples. This is a low ubiquity but the nature of flax and its processing for oil or fibre means that it rarely comes into contact with fire and is often underrepresented in archaeobotanical assemblages.

A notable concentration of chaff from Pit Fill L1168 is predominantly made up of spelt wheat dehusking waste, a by-product of bulk processing and a common occurrence on Romano-British sites. It is frequently preserved due to its regular use as fuel in a range of agricultural and industrial kilns.⁵¹ The material from L1168 may therefore represent a dump of spent fuel debris from a nearby hearth or kiln.

A small proportion (15 per cent) of the wheat grains showed evidence of germination in the form of a scar on the dorsal surface, and signs of pitting and collapse of the grain. In addition, there were five detached coleoptiles (sprouts) and a detached embryo. This may be indicative of deliberate malting as a kiln product, although other possibilities exist. The presence of a high proportion of barley may indicate the mixing of products from multiple kiln firings, or that barley was the primary kiln product, with spoiled wheat grains accompanying the chaff as fuel. Malted spelt wheat was a common product, sometimes associated with specialised buildings interpreted as maltings, including examples at Beck Row and North Stud, Woodditton.⁵²

Wheat processing by-products were identified in all samples in the form of glume bases, a small proportion of which were spelt. Glume bases outnumbered glume wheat grains in all but one sample and it is likely that crop processing by-products made a contribution to these carbonised remains. This further suggests that cereal processing activities were being undertaken in the near vicinity.

A few specimens of free-threshing type wheat rachis were identified which suggests that this species may have been cultivated and processed by the local population, rather than simply representing a minor weed contaminant. However, it is clear that spelt wheat was the dominant cultivar. A small number of barley rachis segments indicate local processing of barley crops in addition to the bulk processing of spelt wheat.

THE EARLY TO MIDDLE ANGLO-SAXON EVIDENCE

Two pits and a single post-hole were dated to the early to middle Anglo-Saxon period (Fig. 127). Of these, only Post-hole F1115 yielded post-Roman pottery, comprising a single sherd (25g) of early Saxon grass- and sand-tempered ware. Of intrinsic interest, however, was the significant assemblage of iron slag and furnace material from Pit F1121 (Fig. 132). Roundwood charcoal from the primary fill of this feature produced a calibrated radiocarbon date range of 406–544 calAD at 95.4% confidence. The bulk of the Saxon pottery assemblage was recovered from L1137, the uppermost layer within Natural Hollow F1135 (Fig. 128).

Pit F1121 (with Andrew A.S. Newton and John R. Summers)

Anglo-Saxon Pit F1121 (Fig. 132) contained the bulk of the recovered slag assemblage, totalling *c*.4252 pieces (29,691g). The observed pattern of infilling strongly suggests that



FIG. 132 - Pit F1121.

F1121 received dumps of metalworking debris associated with the final firing and demolition of a smelting furnace. The basal fill of L1122 contained primarily tap slag (2846 pieces (21,538g)), alongside what appears to be 'furnace slag' from the base of the furnace.⁵³ In addition to this was a small quantity of orange-brown fired clay that is most likely to be derived from the furnace lining or superstructure. Secondary Fill L1123 contained considerably less slag (943 pieces [2,738g]), although it was consistent with the tap slag from L1122. A small amount of hard, porous slag and small fragments of fired and vitrified clay were also recovered. Uppermost Fill L1124 contained less slag again (*c*.463 pieces [4,952g]), although comprising larger, heavy fragments. The slag again comprised tap slag alongside a dark-grey pumice-like material and slightly over 2kg of baked clay, several pieces of which had black, glossy, vitrified surfaces with a backing of oxidised dark red-brown clay. This represents furnace lining, although the pieces are highly abraded and fragmentary, making it impossible to identify them as particular elements of the furnace structure.

The above pattern of infilling is interesting. The first fill was a large dump of slag (primarily tap slag), followed by a second similar deposit, although containing less slag. The final fill contained larger, heavier pieces of slag in addition to pieces of furnace superstructure. This

suggests that the furnace was cleaned out after its last firing, with the tap slag cleared away and any slag that remained inside the furnace removed, before examination of the furnace structure itself was carried out. Once the decision was made that it was beyond repair, it was dismantled and the material deposited into the same pit as the slag. Crew notes that the amount of slag which can be expected at a primary iron production site varies considerably by period.⁵⁴ The slightly over 30kg recovered from Pit F1121 represents only smallscale iron production or, given the pattern of deposition, the product (or part thereof) of a single smelt. Unless the furnace in question was only used once, and the ironworking undertaken in this area was of a particularly small scale, further evidence for iron production may be present in the surrounding area.

Charcoal from F1121 was dominated by ash (*Fraxinus* sp.) with lesser quantities of oak (*Quercus* sp.) and other species. This abundance of ash might suggest that oak, the traditionally preferred fuel wood for industrial processes, was not readily available within the surrounding landscape. However, the densities of oak and ash wood are identical, at 550kg per cubic meter, making both species highly desirable as fuel.⁵⁵ A sample of roundwood charcoal from primary fill L1122 was submitted to the Scottish Universities Environmental Research Centre (SUERC) for radiocarbon dating. The sample produced a calibrated radiocarbon date range of 406–544 calAD at 95.4% confidence (Table 2). Calibrated age ranges were determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).⁵⁶ Conventional ages and calibrated age ranges were calculated by Dr Brian Tripney (SUERC).

Feature	Context	Sample Type	Genus/ Species	Lab. No. (SUERC-)	Date BP	Calibrated Date Range at 95.4% Confidence
Pit F1121	L1122	Roundwood charcoal	<i>Fraxinus</i> sp.	5075701 (GU45808)	1586±30	406-544 calAD

TABLE 2 – Radiocarbon determinations (calibrated using OxCal4). BP = before present (AD 1950).

Material from Layer L1137 (Natural Hollow F1135)

Layer L1137 yielded the bulk of the Saxon pottery from the site (see below). The assemblage is heavily abraded, implying re-deposition/reworking. L1137 had a dark, humic appearance and the animal bone from this layer displayed a clear pattern of distribution, with cattle dominating from the southern part, and horse being most abundant in the north-west. This clear spatial patterning is thought to represent separate episodes of dumping, probably in quick succession, with only minimal disturbance (post-deposition). This would tend to suggest that L1137 actually represents a midden deposit, similar to L1136, with the abraded Saxon pottery having been introduced from elsewhere; possibly a primary midden deposit(s) or other surface accumulation.

The Saxon pottery (by Peter Thompson)

Twenty-nine sherds (329g) of early to middle Saxon pottery were recovered, predominantly from Fill L1137 of Natural Hollow F1135. The sherds constitute four main fabric groups (Table 3).

Code	Fabric No.	Description	Date	Sherd No.	Fabric Weight (g)
ESO1	2.01	Early Saxon Grass Tempered	Late 4th- mid 8th	1	6
ESO2	2.02	Early Saxon Grass and Sand Tempered	Late 4th- mid 8th	4	105
ESCQ	2.03	Early Saxon Coarse Quartz	Late 4th- mid 8th	17	143
ESFS	2.04	Early Saxon Fine Sand	Late 4th- mid 8th	7	75
Total				29	329

TABLE 3 - Quantification of Saxon fabrics.

The handmade fabric types are typical of the early Saxon period, as are five simple upright or slightly outturned rim sherds recovered from Layer L1137; two measurable rims derive from fairly small vessels between *c*.16cm and 22cm in diameter. Identifiable forms comprise a simple upright rim to a globular or ovoid pot and a similar form with a slightly outturned rim. A sagging base/body angle sherd was also recovered. The presence of sooting or charcoal residue on several sherds indicates a domestic function (including cooking pots).

The only decorated sherd is an ESCQ body sherd from L1137, displaying a horizontal applied cordon decorated with dispersed diagonal incised decoration. The cordon is bordered on each side by a horizontal incised line. Although decoration of this type is also common to the late Iron Age, the sherd in question displays clear associations with the remaining Saxon assemblage. Three burnished sherds and another part burnished sherd were also recovered.

The agricultural economy

Animal bone (by Julia E.M. Cussans)

The vast majority of the Anglo-Saxon animal bone came from L1137, by far the largest animal bone deposit encountered (Fig. 133). Overall the L1137 assemblage constituted 374 bone fragments, of which 112 could be identified to species. Cattle were the most abundant, accounting for half of the assemblage, approximately one quarter of the assemblage was sheep/goat and of the remaining quarter, two thirds belonged to pig and one third to horse.

The distribution of animal bones across L1137 is quite distinctive, with bones clearly concentrated towards the centre of this context. Most are from grid squares A4, A5, B4 and B5, representing a good mix of taxa. To the south, cattle predominate, whereas the majority of horse bones were confined to the north-west area. This grouping of the bones of particular taxa would seem to indicate deposition within several different groups as a series of closely spaced events.

A mix of cattle elements attest to the presence of whole carcasses, while two fragments displayed butchery marks. These were a metacarpal with possible skinning marks and an astragalus with marks indicative of carcass dismemberment. This combination of marks and anatomical elements is a clear indication of primary butchery processes. Ageable elements included a third molar from an old adult (Grant's wear stage j; Halstead's age stage H).⁵⁷ Three unfused long bone diaphysis (a distal radius, a distal tibia and a proximal calcaneus) indicate the presence of relatively young animals.⁵⁸ A small quantity of articulating cattle bone was present in grid square A8; these were a naviculocuboid, a metatarsal and a first phalange.



FIG. 133 - Bone distribution within L1137.

The sheep/goat, pig and horse assemblages were dominated by head and foot elements; teeth were particularly prominent. A single butchered sheep/goat bone was noted, comprising a metatarsal with diagonal cuts on the posterior of the shaft. A number of ageable sheep/goat teeth were present and indicate a range of ages, although no particularly young animals were present; while ageable pig elements included a lower third molar from an animal aged 21–27 months.

Summary and discussion

Bone from L1137 was better preserved than that from underlying deposit L1136 (see above), and deposition appeared more discreet/contained. Several different deposition events appear to be represented. Once again the usual suite of domesticates were present, although no firm interpretations of site economy are possible due to the small sample size.⁵⁹ The Anglo-Saxon remains included some evidence of primary butchery being carried out at or near the site.

Environmental remains (by John R. Summers)

Environmental remains from Anglo-Saxon deposits were quite limited. Carbonised plant macrofossils were present in only low concentrations, most likely representing the accumulation of dispersed debris rather than discrete dumps of material. Overall, wheat was most ubiquitous, followed by barley, oat and rye.

DISCUSSION

Landscape setting

The layout and development of the site was no doubt heavily influenced by its location, on fertile land close to the navigable river Stour. The site occupies the interface of 'rolling valley farmlands' and 'ancient rolling farmlands', close to the meadowlands of the Stour Valley. The site affords good access to water, an important factor for the rearing of livestock, particularly cattle, and contains a range of geological resources.⁶⁰ Evidence of historical quarrying includes medieval sand quarries at Bulmer Road (Sudbury).⁶¹ The historically wooded character of this landscape would also have offered a good supply of timber, as well as (possibly) seasonal pannage.⁶²

The early Romano-British evidence

The early Romano-British landscape appeared distinctly agricultural, being chiefly defined by a system of boundary ditches, albeit fragmentary, which are thought to have formed parts of enclosures. Also present was a possible working hollow, contained by Natural Hollow F1135 and further defined by a series of short, curvilinear ditches. An early post-Conquest layer (L1136) contained significant quantities of domestic refuse thought to derive from a nearby settlement or possibly a substantial building. Although the hollow represents a clear focus of early Romano-British activity, the precise nature of this activity remains unclear.

Evidence of activity

Of the early Romano-British boundaries, the best surviving ran for approximately 27.5m down the slope of the site (Fig. 127). Although this probably represents an enclosure boundary, no enclosures were positively identifiable within the excavated area. At least one fenceline was also identified. Romano-British enclosures are common across East Anglia, with local examples including field boundaries at Great Cornard Reinforcement Main, Little Cornard, some 2km to the south-east, and settlement ditches recorded at Bramertons, Long Melford.⁶³ Suffolk sites including more extensive boundary systems include Beck Row,

Mildenhall, Cedars Park, Stowmarket, and Church Road, Snape.⁶⁴ While the ascribed functions of Romano-British fields and enclosures differ from site to site, the Mildenhall and Stowmarket examples were primarily agricultural. Substantial agricultural enclosures have also been excavated at North Stud, Woodditton and Childerley Gate, Cambridgeshire; both sites were characterised by mixed agricultural economies.⁶⁵ The environmental remains from Great Cornard suggest a similarly mixed economic base, principally comprising crop husbandry, with a particular focus on spelt wheat and hulled barley, and pastoral activity (albeit only poorly understood). The overall finds assemblage indicates the presence of a nearby Romano-British settlement, possibly to the north-east of the excavation. It is conceivable, therefore, that any enclosures may represent elements of an 'infield/outfield' agricultural system on the immediate periphery of this settlement.⁶⁶

Natural Hollow F1135 was the focus of at least two episodes of ditch digging. While the earlier ditches are difficult to interpret, those on the edge of F1135 appear to deliberately demarcate it. The lack of obviously 'special' or structured deposits associated with Hollow F1135 might suggest that it formed a midden, following the backfilling of features cutting its base, or a possible working hollow, intentionally demarcated by the surrounding ditches. The expedient disposal of refuse into natural features is common to many periods,⁶⁷ with Romano-British examples including a backfilled pit or hollow at Acle, Springfield (Norfolk) which yielded over 5000 sherds of Roman pottery, CBM, animal bone and shell.⁶⁸ Layer L1136 at Great Cornard contained a notable concentration of early Roman pottery with lesser quantities of other material, and most probably represents domestic refuse disposal. Working hollows are also common to numerous periods, although the function of the current example (if genuine) remains unknown.

The early Romano-British economy

Despite being peripheral to any settlement core, the current site produced some interesting economic evidence. The animal bone, mostly from Layer L1136, was dominated by cattle and sheep/goat. While the immediate landscape is best suited to cereal agriculture, grazing and pig rearing are both historically attested within the parish, while more intensive grazing no doubt occurred within the permanent grassland of the Stour Valley.⁶⁹ If animals were being farmed at the current site, some level of transhumance between this location and more favourable grazing lands might be inferred. The largescale transhumance of livestock in Roman Britain has been widely suggested, not least based on the demands of the Roman military population of the frontier.⁷⁰

Environmental remains attest to local crop husbandry, dominated by the production and processing/use of spelt wheat and hulled barley. Oat and flax also made a minor economic contribution, although flax may be underrepresented. The predominance of spelt wheat and barley within Romano-British arable systems is evidenced at numerous sites, including Higham Ferrers Site 3 (Northamptonshire), Great Holts Farm (Essex), Haddon (Peterborough).⁷¹ It is probable that the current site had strong economic ties to local/regional market centres, including Wixoe to the west, Long Melford to the north and Colchester (Camulodunum) to the south-east. The extent to which local agricultural products were supplied to these towns is difficult to determine, nonetheless, the presence of fine wares including Samian ware in the pottery assemblage does indicate some degree of access to broader Roman markets including continental Europe; also indicated by the sherd of Dressel 20 *amphorae* from Ditch F1156.

The Samian ware inkwell from Layer L1136 is of particular note. Inkwells of this type are scarce and typically associated with military sites or major civil centres.⁷² The Great Cornard example is therefore likely to relate to a significant Roman presence in the local environs

during the early post-Conquest era, possibly relating to military activity, and potentially complementing the range of evidence for Roman military activity at Long Melford to the north. The north-south course of a Roman road (Margary 322) passes within 2km of the site and would most likely have required a significant military presence during its initial construction.

Late Romano-British evidence

The late Romano-British period is almost exclusively evidenced by material from Layer L1137, the domestic character of which implies continued settlement within the immediate vicinity. The late Roman pottery from this layer, comprising just thirty-six sherds, appears consistent with domestic consumption and discard, and is not significantly abraded. L1137 also contained the majority of the Saxon pottery assemblage, all of which is heavily abraded. Of note from this layer is a fragment of crucible, of Romano-British or later date; this cannot, however, be confidently linked to the slag and furnace material from Anglo-Saxon Pit F1121 (see below).

Early to middle Anglo-Saxon evidence

Other than continued activity/discard within the area of Hollow L1135, there is little evidence from the excavation to suggest direct continuity of late Romano-British and early Anglo-Saxon settlement. Nonetheless, such might be inferred based on earlier finds from the site of fifth-century AD belt fittings of a type usually associated with Romans of an official or military position.⁷³ However, the current evidence, predominantly derived from Layer L1137, appears largely indicative of agricultural exploitation of the site, with the abraded nature of the Saxon pottery possibly suggesting re-deposition/reworking as a result of ploughing (or other processes). It is also possible that the pottery, totalling just twenty-nine sherds, was introduced from middens located elsewhere within the landscape, via manuring. It is not thought that the assemblage is of a size or quality to indicate the presence of a settlement within the immediate area of the excavation.⁷⁴ Soil improvement strategies may well have been the source of the Saxon pottery, especially as middens of this date (and associated settlement archaeology) were not identified within the excavation.75 The clear spatial patterning of animal bone within Layer L1137 at Great Cornard strongly suggests that this context was subject to only minimal disturbance and may in fact represent a substantial in situ Anglo-Saxon midden deposit, albeit incorporating some earlier material.

Pit F1121

Radiocarbon dating of Pit F1121 produced a calibrated date range of 406–544 calAD at 95.4% confidence. Although incorporating the very final years of the Roman occupation (dated AD 43–410), the vast majority of this range sits within the Anglo-Saxon period. F1121 is thought to have been deliberately dug for the disposal of industrial waste associated with the final firing and dismantling of an iron furnace. The slag assemblage was dominated by tap slag, indicative of a high temperature process, while ash charcoal was the most abundant fuel type, with lesser quantities of oak; ash and oak are both highly efficient fuels.⁷⁶ A middle Saxon 'developed bowl' furnace with slag tapping facilities has previously been identified at Ramsbury in Wiltshire, while an iron furnace of the same date is reported from the Suffolk site of Burrow Hill.⁷⁷ Anglo-Saxon smelting and smithing slags in conjunction with charcoal have also been found at Mucking in Essex.⁷⁸ The material from F1121 at Great Cornard is unlikely to have been transported any great distance for deposition, and it is very probable that the furnace site is located close to the area of excavation.

CONCLUSIONS

The encountered first- to early second-century AD archaeology adds usefully to our understanding of the early post-Conquest period around Great Cornard. While buildings and other primary evidence of occupation were lacking, the nature of the recovered finds assemblage, including a significant quantity of pottery, strongly suggests a settlement of some description, probably a farmstead, in the immediate vicinity. A concentration of Roman pottery and CBM in the north-east of excavation, within and around Natural Hollow F1135, may indicate that the core of settlement lay only a short distance to the east or north-east. F1135 may have been used as a working hollow, although the precise nature of associated activity is difficult to define. The early Romano-British economy appears to have been overwhelmingly agricultural, however, including good evidence of crop husbandry on the site's easily tilled, fertile soils. The poor preservation of animal bone prevents any detailed analysis of the pastoral economy although all major domestic species are represented, in keeping with the regional pattern of mixed agriculture at this time.

Of principal significance within the Anglo-Saxon site was Pit F1121. Slag and furnace material from this feature attests to industrial activity within the immediate vicinity, almost certainly linked to a neighbouring settlement. Previous finds of Anglo-Saxon material, including pottery, brooches and coins from within the current site, also attest to a local focus of activity, with an emphasis on the fifth century AD. Abraded Saxon pottery from Layer L1136 has been dated between the fifth and eighth centuries AD, while a single grass-tempered sherd appears to be of sixth–seventh-century date. Natural Hollow F1135 appears to have received a variety of Anglo-Saxon midden material, once again indicating nearby settlement activity. However, Saxon pottery from L1137 was heavily abraded, strongly suggesting at least secondary deposition into the hollow from elsewhere.

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NOTES

- 1 http://mapapps.bgs.ac.uk/geologyofbritain/home.html.
- 2 GSB Prospection Ltd 2009; Muldowney 2009.
- 3 Cf. Muldowney 2009, 1.
- 4 Muldowney 2009, 1.
- 5 Suffolk HER no. COG 011.
- 6 Scarre 1995, 229.
- 7 Suffolk HER no. COG Misc.
- 8 Suffolk HER nos ACT 019, NEN 002 and WFG 015.
- 9 Suffolk HER no. COG 011.
- 10 Muldowney 2009, 37.

- 11 Suffolk HER no. COL 024.
- 12 GSB Prospection Ltd 2009; Muldowney 2009.
- 13 Darvill 2003, 23.
- 14 Mustchin and Bull, 2017.
- 15 Taylor 2007, 113.
- 16 E.g. Bishop and Proctor 2011, 94; Lovell 2002, 52.
- 17 Lovell 2002, 27; Rickett 1995, 32, 35 and 151; Wilson et al. 2012, 85.
- 18 http://binchester.blogspot.co.uk/2015/05/exciting-new-dating-evidence-from.html
- 19 E.g. Lovell 2002, 27; Wilson et al. 2012, 85.
- 20 Nicholson and Woolhouse 2016.
- 21 Tomber and Dore 1998, 28.
- 22 Tomber and Dore 1998, 32.
- 23 Tomber and Dore 1998, 177.
- 24 Tomber and Dore 1998, 118.
- 25 Tomber and Dore 1998, 151.
- 26 Bates and Lyons 2003, 99, fabric PWW.
- 27 Tomber and Dore 1998, 133.
- 28 Tomber and Dore 1998, 214.
- 29 Tomber and Dore 1998, 184.
- 30 Tomber and Dore 1998, 152.
- 31 Tomber and Dore 1998, 212.
- 32 Tomber and Dore 1998, 130.
- 33 Tomber and Dore 1998, 151.
- 34 Tomber and Dore 1998, 85.
- 35 Hartley and Dickinson 2010.
- 36 Oswald and Pryce 1920.
- 37 Willis 2005, 8.22-6 and database.
- 38 Willis 2015.
- 39 Niblett 1985, 62, figs 23.28 and 33.
- 40 Symonds and Wade 1999: Cam.46/311.
- 41 Thompson 1982, 183, type B3-10.
- 42 Niblett 1985, figs 19.178, 24.51 and 26.100.
- 43 Arthur 2004, 165-66, type 19.
- 44 Symonds and Wade 1999, 496-97.
- 45 Martin 2011, 305.
- 46 Young 2000, 160, type C51.
- 47 Bates and Lyons 2003, 86, vessel 4.10.1.
- 48 Darling and Gurney 1993, 199, fig. 160.756.
- 49 Barford 2002, 91, MD1-2; Major 2015, fig. 555.3.
- 50 Bayley 1992, 4-5.
- 51 E.g. Carruthers 2008, 34.9–10; Fryer 2004; Mustchin *et al.* 2016, 28; Summers 2013; 2014; 2015; van der Veen 1989.
- 52 Bales 2004; Mustchin et al. 2016.
- 53 Crew 1995.
- 54 Crew 1995.
- 55 Mytting 2015, 58 and 62.
- 56 Reimer et al. 2013.
- 57 Grant 1982; Halstead 1985.
- 58 O'Connor 1989.
- 59 Holmes 2014.
- 60 Dryden 2008, 121, fig. 8.4; Miller 1979, 209-10.
- 61 Suffolk HER no. SUY 133; Picard 2013.
- 62 Cf. Szabó 2013.
- 63 Little Cornard: Suffolk HER no. COL 033; Long Melford: Suffolk HER no. LMD 131.
- 64 Beck Row, Mildenhall: Bales 2004; Cedars Park, Stowmarket: Nicholson and Woolhouse 2016; Church Road, Snape: Mustchin and Peachey forthcoming.
- 65 North Stud, Woodditton: Abrams and Ingram 2008; Childerley Gate, Cambridgeshire: Mustchin et al. 2016.

- 66 Cf. Fowler 2002, 216.
- 67 E.g. Garrow 2000; Wilson et al. 2012, 130.
- 68 Whitmore 2009, 135.
- 69 Soil Survey of England and Wales 1983, 19.
- 70 Cf. Stallibrass 2009.
- 71 Campbell 2008; Carruthers 2004; Fryer 2003; Murphy 2003; Pelling 2008; 2011.
- 72 Willis 2015.
- 73 After Rolfe 2007, 6.
- 74 Cf. Barford 2002, 198.
- 75 Cf. Banham and Faith 2014, 43.
- 76 Mytting 2015, 58 and 62.
- 77 Ramsbury, Wiltshire: Haslam et al. 1980; Burrow Hill, Suffolk: Suffolk HER no. BUT 001.
- 78 After Hinton 2003, 262.

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