

Archaeological Services

An Archaeological, Strip, Map and Sample Excavation At Barn Farm, Weston by Welland, Northamptonshire (NGR SP 769 913)

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ULAS Report No 2012-157 ©2012 An Archaeological Strip, Map and Sample Excavation at Barn Farm, Weston by Welland Northamptonshire SP 769 913

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Summary

An archaeological watching brief was carried out at Barn Farm, Weston by Welland Northamptonshire (SP 769 913) by University of Leicester Archaeological Services between 12th and 18th April 2012. The work took place during topsoil stripping and ground reduction for a new circular barn on a site which has previously produced evidence suggesting that it was occupied by a Roman marching camp. The current intervention was located on the presumed interior of the camp and revealed pits, gullies, post holes and rows of stake-holes, dating predominantly to the late Iron Age/Roman transitional period. Although there are hints of more than one phase of activity at the site, many of the features are likely to be associated with the marching camp. One of the pits was thought to represent an oven, which probably originally had a wattle and daub structure. A group of late Iron Age coins and an antler fragment were deposited at the base of the feature. The archive will be held by ULAS until such time as appropriate facilities are available at Northamptonshire County Council under the site code BFW 12.

Introduction

Consent has been granted for a new circular barn on land at Barn Farm, Weston by Welland, Northamptonshire (Planning Application Ref: 11/00951/FUL). University of Leicester Archaeological Services (ULAS) were commissioned by Mr. C. Parker to carry out an archaeological strip, map and sample excavation during the groundworks. Previous archaeological work undertaken at Barn Farm had located ditches that confirmed the existence of a Roman marching camp, which had been previously identified through aerial photography (Harvey 2011). The Planning Archaeologist at Northamptonshire County Council, therefore requested archaeological mitigation, due to the significant archaeological potential of the site (Northamptonshire County Council Brief 2011). The work was undertaken in accordance with National Planning Policy Framework (NPPF): Section 12 Conserving and Enhancing the Historic Environment.

Location and Geology

The proposed development area is located c.5km north-east of Market Harborough and 0.8km west of Weston by Welland (SP 769 913) in Kettering Borough. The site is located on a prominent hilltop, at approximately 112m OD, The topography of the development area itself is flat and currently consists of pasture, situated adjacent to a farmyard with associated cattle pens and grain store.

In the wider landscape the land drops away steeply to the north, south and west towards the River Welland to around 70m OD. The bedrock is made up of Whitby Mudstone Formation consisting of medium and dark grey fossiliferous mudstone and siltstone, while the superficial deposits consist of mid Pleistocene Till (Geology of Britain viewer (http://www.bgs.ac.uk/opengeoscience/ Accessed 30th April 2012).



Figure 1: Site Location

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Historical and Archaeological Background

The prominent position of the hilltop suggests that it is a prime location for archaeological activity. The landscape surrounding the development area is very rich in Iron Age and Roman sites and artefacts. The most significant of these is the Gartree Road (MLE2292), which runs south-east out of Leicester into Northamptonshire through the Roman town Medbourne (MLE2005), located *c*. 3km to the north-east of the site. It has also been suggested that the Roman road that runs from Ermine Street to King's Cliffe in Northamptonshire is likely to continue to Medbourne (MLE2067) with further notable Roman activity recorded at Drayton, Slawston and Great Easton along these recorded road networks.

The site has been subject to particular archaeological interest since the RCHME aerial reconnaissance programme undertook a study of a selection of aerial photographs on the area during the summer of 1996 that appeared to show a two-sided rectilinear

cropmark with a quarter circle corner and possible entrance on its south-east side. The cropmark is spread across three fields and was interpreted as a possible Roman fort (RCHME 26/07/96; SMR Ref. 7072/1/1; pl. 1). Two of the fields were subsequently fieldwalked in late 1996 although only pottery dating to the medieval/post-medieval period and modern brick was recorded. Further evaluative work was undertaken during the construction of a grain store located opposite the possible entranceway, c. 40m outside the cropmark to the south-east (Meek 1997, 1). The work consisted of the excavation of three trenches on the line of the wall footings and associated drainage trenches as well as a comprehensive metal detector survey of the removed soil. However no deposits relating to Roman activity, or any other period were observed and only modern debris was recorded. The report also included a plan, believed to have been supplied by the Sites and Monuments record (SMR), suggesting a further rectilinear cropmark inside the entrance of the main cropmark although no reference to the source of this cropmark information was included (Meek 1997, fig.2). This feature is not clearly visible on any of the aerial photographs recently supplied by Northamptonshire SMR.

Recent geophysical survey of the site did not identify any anomalies which could be positively interpreted as deposits relating to the possible Roman fort (Haddrell 2011). Subsequent archaeological trial trench evaluation, comprising four trenches was undertaken (Harvey 2011) and trenches alongside the existing cattle pen confirmed the presence of the south-eastern side of the cropmark. A large 'V' shaped ditch was recorded in one trench that supports the interpretation that the cropmark relates to a Roman military structure (Fig. 2; Trench 4). Another trench partially exposed a large square ditch terminal, which confirmed the entranceway suggested by a break in the cropmark which can be seen in the aerial photograph (Fig. 2; Trench 3). The lack of material recovered from within the ditch suggests that the activity on site was relatively short lived and possible evidence of deliberate back-filling of the ditch was also recorded.

The combination of the archaeological evidence appears to suggest that these ditches form part of the remains of a Roman marching camp. This represents the first confirmed Roman military installation recorded in Northamptonshire. However, Trenches 1 and 2 located within the proposed development area produced no evidence of archaeological activity relating to the cropmark.



Figure 2: Trench location plan incorporating the geophysical survey and cropmarks.

Archaeological Objectives

The main aim of the archaeological work was to determine and understand the nature, function and character of any significant archaeological deposits on the site in its cultural and environmental setting.

The main objectives of the archaeological work were:

- To identify the presence/absence of any archaeological deposits.
- To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.
- To record any archaeological deposits to be affected by the groundworks
- To produce an archive and report of any results.

Methodology

All work followed the Institute for Archaeologists (IfA) *Code of Conduct* (2010) and adhered to their *Standards and Guidance for Archaeological Watching Briefs* (2008). *A Written Scheme of Investigation for Archaeological Observation, Investigation, Recording, Analysis and Publication* was produced by ULAS prior to the archaeological work being undertaken.

The project involved the supervision of groundworks by an experienced professional archaeologist and consisted of the removal of topsoil and reduction of ground level, using a Xaxis 130 LCN with a 1.6m ditching bucket. The work took place between the 12th and the 18th April 2012.

Results

The area of the new building lay within the south-east corner of the projected lines of the Roman camp (Fig. 3). The circular area of the building was stripped down to a depth of 0.25-0.35m, removing the topsoil and exposing the subsoil.

The topsoil consisted of dark brown, silty-clay loam, with occasional stones, pebbles coal and charcoal flecks, below which was a thin interface between the topsoil and the natural substrata, which consisted of mottled yellow slightly sandy clay with occasional small, gritty stones and larger rounded pebbles. In places there were irregular intrusions of topsoil into the subsoil, which can probably be accounted for by root action, burrowing activities and possibly ploughing. The eastern part of the strip revealed the remains of infilled furrows running north-west to south-east. These showed up as irregular stripes of grey brown silty clay, which proved on investigation to be shallow.



Figure 3: Location of the new building, in relation to the projected line of the Roman camp

Twenty archaeological features were identified within the stripped area. All were cleaned, sample excavated and recorded and are described below (Fig. 4).



Figure 4: Overview of site, showing location of features in relation to each other

Pit [103] Context Numbers: (102) [103] Sample No: 1

A circular pit was identified in the north-west quarter of the stripped area (Fig. 4). This had a diameter of 2.1m and gently sloping sides down to a flat base. The pit was very shallow, with a depth of 0.12m, suggesting that it had been previously truncated. The edges were well-defined and the fill (103) consisted of mid grey-brown silty-clay, with mottles of orange sand. Inclusions consisted of moderate charcoal flecks, occasional flints and occasional chalky stones. The feature was quartered, with two quadrants excavated.

Finds included eight sherds of pottery deriving from jars of the 1st century AD (Appendix 2); bones from sheep/goat and pig, as well as several burnt fragments (Appendix 7) and four flint flakes, thought to be re-deposited (Appendix 6). An iron nail, probably Roman, was also recovered (Appendix 5). The environmental samples revealed low numbers of cereal remains, along with grass seeds and dock (Appendix 8).





Oven/pit [134]

Context Numbers: [134]; (104); (109); (110); (131); (132); (133); (135); (136); **Sample Nos:** 2; 3; 5; 6; 7; 9; 10; 11; 12; 13;

A pit was observed, close to the centre of the site, which was first seen as a horseshoe shaped patch of charcoal and burnt daub (Fig. 4, [134]). On investigation it was shown to be a large oval pit measuring 1.96m in length and with a width of 0.65m. The sides were steeply sloping down to a flat base, 0.4m deep (Fig. 6). The feature was initially carefully half-sectioned lengthways and at the end of recording, the other side was excavated to check that the sequence of fills was the same and to recover any further finds.

Eight fills were recorded (Fig. 6). The upper deposits appear to represent a series of backfills, presumably occurring during abandonment, after initial collapse and disuse of the feature. The latest deposit was a backfill in the centre and towards the southwest side (132), which consisted of light greyish brown silty clay, similar to the subsoil overlying the feature but containing occasional fragments of daub and charcoal. Below this layer was mid grey-brown silty clay, containing frequent charcoal, daub and occasional small stones (109). A thin layer of mid yellow-brown silty clay, with occasional charcoal flecks (110), perhaps representing a period of silting, appeared to separate context (109) from the burnt fill at the north-east end (104). This burnt fill comprised mid grey-brown silty clay, containing charcoal flecks and fragments of daub. Directly below this was a thin layer composed almost completely of charcoal fragments (131), which lay in the centre of the feature on top of two more solid fills, (133) at the south-west end and (135) at the north-east end., which may represent part of a collapsed structure.

Contexts (133) and (135) were very similar and primarily composed of chunks of charcoal and fragments of daub in a slightly sandy clay matrix, with occasional stones and flints. The distinction between them was more to do with their position than their composition, although context (135) appeared to contain slightly more charcoal than (133). In both contexts the chunks of charcoal and daub were larger towards the base of the fill. Together these fills followed the edge of the cut, leaving a hollow 'bowl' shape in the centre within which the upper fills were contained. At the very base of the feature there was a thin layer consisting of light grey, slightly, sandy clay with occasional charcoal flecks and small stones (136). This effectively lines the base of the cut.

A small hoard of Iron Age coins and a red deer antler were deposited together at the base of the pit in the north-western quadrant (context 133, Appendices 4 and 7). The group of six small silver coins appear to have been clustered together and the true number was not established until they were separated during initial cleaning and conservation back in the laboratory. Although they await final identification, these appear to be Iron Age silver coins of the North-Eastern regional tradition attributed to the *Corieltavi*, who inhabited the East Midlands in the Iron Age. Initial examination suggests that these are of the VOLISIOS type and similar examples were found at the nearby Iron Age shrine at Hallaton (Leins 2011). Inscribed Corieltavi coins are dated to the 1st half of the 1st century AD and the Hallaton coins appear to have been minted between the AD 30s – AD 50s. The coins and appear to have been heated and may therefore provide a *terminus post quem* for the construction of the feature.



Figure 6: Plan and section of pit/oven [134]

The pottery from the pit comprises wheel-thrown sherds from a jar (context 104) and a flagon (context 135) both suggesting a late 1st or 2nd century Roman date. Evidence for burning suggests that they these became incorporated into the feature while it was still active (Appendix 2). The abundant fired clay/burnt daub found in contexts 104, 109, 133 and 135 carried impressions indicating that they came from a wattle and daub structure (Appendix 3).

The environmental samples from context 133 contained small numbers of grass seeds, conceivably from kindling, while the charcoal from the feature consisted predominantly of oak and hazel, along with some evidence for willow/poplar and ash. Elder seeds were also present in context 133 and 135 (Appendix 8).

Gully [108] and Post-hole [106].

Context Numbers: Gully, (107), [108]; post-hole (105), [106]

A single post-hole [106] was identified in the north-east quadrant of the stripped area (Fig. 4). It was oval with steeply sloping sides, tapering to a pointed base and measured $0.25m \times 0.20m$ with a depth of 0.23m. The fill consisted of mid grey brown silty clay with orange sandy mottling, with occasional large pebbles and charcoal flecks (Fig. 7). The nearest feature was gully [108], which was located nearly seven metres to the northwest.



Figure 7: Plan and sections of gully [108] and post hole [106]

Gully [108] lay 6.75m north-west of post hole [106] (Figs 4 and 7). This linear feature with rounded ends was orientated north-east to south-west and was 1.4m long and 0.30m wide. It was 0.15m deep and contained mid yellow-brown silty clay, with occasional charcoal flecks. Seven pottery sherds, dating to the late Iron Age or transitional Roman period, were recovered from the upper part of the fill (Appendix 2).

Group of stake-holes, with gully and pit.

Context Numbers: Stake-holes: (111), [112]; (113), [114]; (115), [116]; (117), [118]; (119), [120]; (121), [122]; (123), [124]; (125), [126]; Pit: (127), [128] Gully: (129), [130]

Eight stake-holes forming two perpendicular lines were present in the centre of the area (Fig. 4). Six stakes holes, aligned north-west to south-east measured 3.93m ([112] – [122]). The two at the north-west end, [112] and [114], were situated close together but the remainder were fairly evenly spaced with gaps ranging from 0.63m to 0.84m (Fig. 9).

The south-eastern stake-hole [122] also forms part of a south-west to north-east alignment, together with [124] and [126] (Fig. 8). In this case the gaps between the features are far greater; 1.60m between [122] and [124] and 2.15m between [124] and [126]. Seven of the features contained almost identical fills consisting of soft brownish-grey, silty clay containing charcoal flecks and burnt daub. The eighth stake-hole, [126], located on the north-eastern edge of the group, was filled by firm dark bluish-grey silty clay with charcoal flecks but no daub, differentiating it from the others.

Only two contexts produced any finds; a sherd of mid-1st century pottery from context 123 and a fragment of burnt daub in context 115.

Context	Cut	Length (m)	Width (m)	Depth (m)
111	[112]	0.12	0.12	0.07
113	[114]	0.17	0.17	0.11
115	[116]	0.20	0.12	0.16
117	[118]	0.18	0.12	0.14
119	[120]	0.22	0.12	0.16
121	[122]	0.14	0.14	0.13
123	[124]	0.12	0.12	0.11
125	[126]	0.16	0.16	0.08
137	[138]	0.34	0.18	0.14
139	[140]	0.28	0.16	0.10
141	[142]	0.16	0.16	0.05

Table 1: Dimensions of the post-holes and stake-holes observed



Figure 8: Plan and sections of stake-holes, pit and gully group

An oval pit [128], orientated north-east to south-west, was located 0.35m from stakehole [122]. It measured 1.04m by 0.38m and had nearly vertical sides and a flat base but was only 0.14m deep (Fig. 8). The fill consisted of dark brownish-grey, clayey silt with charcoal flecks, burnt daub and both burnt and unburnt stones. Four sherds of late transitional Iron Age/Roman pottery were recovered from the fill (Appendix 2). The environmental samples produced evidence for spelt, wheat, barley, grasses and docks. Parasite eggs from whipworm, which would have come from the intestinal tract, suggest that either animal or human faeces were also disposed of in the pit (Appendix 8).

A short linear gully (129) [130], with dimensions of $2.02m \times c$. 0.25m, was identified to the west of the stake-holes. It was orientated east west but was wider at the western end, tapering to the east. This was an indistinct feature, only 0.06m deep with a fill consisting of mottled orange brownish-grey silty clay, with occasional charcoal flecks, from which no finds were recovered. It is uncertain whether this was of archaeological origin or the remains of a natural feature, such as an animal burrow.

Group of stake-holes

Context Numbers: (137), [138]; (139), [140]; (141), [142]; (143), [144]

A group of three stake-holes, on a south-west to north-east orientated alignment, were identified towards the north-eastern side of the stripped area (Figs 4 and 9). All three were oval in shape with near vertical sloping sides and a tapered or pointed base (Figure 9: Plan and sections of stake-holes [138] to [144]

). There was 0.6m between [138] and [140] and 1.0m between [140] and [142]. The fills were very similar, consisting of soft brownish grey silty clay with frequent charcoal and small crumbled fragments of burnt daub. Table 1 lists the stake-hole dimensions.

A single stake-hole [144] was recorded at the eastern edge of the site, east of stakeholes [138], [140] and [142]. This small oval feature with tapering sides measured $0.12m \ge 0.10m$ and was 0.09m deep with a soft greyish-black silty fill (143) composed almost entirely of charcoal. (Fig. 9). The composition of the environmental sample proved to be very similar to that from the oven or pit 134, with evidence for grasses, elder seeds and oak and poplar/willow charcoal (Appendix 8).



Figure 9: Plan and sections of stake-holes [138] to [144]

Stake-holes

Context Numbers: (145), [146]; (147), [148];

Two further stake-holes were identified between the oven/pit [134] and the stake-hole alignment (Fig. 4). These were positioned 2m apart. Feature [146] contained greyishbrown silty clay fill (145), with charcoal fragments and burnt daub. It had a diameter of 0.14m and was 0.08m deep, with steep sides and a pointed base (Fig. 10). Feature [148] contained soft reddish-orange silty clay with burnt daub and occasional charcoal flecks (147). It was very small and circular, measuring 0.1m in diameter and was 0.07m deep, with nearly vertical sides tapering to a point (Fig. 10). No finds were recovered from either fills.



Figure 10: Plan of stake-holes [146] and [148]

Discussion (with contribution from James Harvey)

The archaeological work undertaken at Barn Farm has produced further evidence for late Iron Age and Roman activity on the prominent hilltop. Trial trenching conducted in 2011 had already confirmed the existence of a large ditch, previously suggested by cropmark evidence and geophysical survey. The form of this two-sided cropmark with its characteristic quarter circle corner, combined with the excavated evidence of a large 'V' shaped ditch and the apparent absence of other archaeological activity strongly suggests that the site was a Roman military marching camp. A clear entranceway into the camp was recorded, which aligns with a gap in the aerial photograph cropmark. This comprised a clearly squared ditch terminal, representing the south-western side of the entrance. The profile of the excavated ditch conforms to the classic 'V' shaped 'fossa fastigata' described by the Roman writer Hyginus (Johnson 1983, 47). The ditch also exhibited the 'ankle breaker' or 'cleaning slot', a characteristic often ascribed to military ditches but rarely found. This comprised an abrupt vertical slot excavated at the bottom of the ditch thought to be a way of making the ditch difficult to breach. The ditches were backfilled with clay, similar to the natural subsoil, while evidence for clods of earth was identified in the base. These lumps of soil may represent the remains of turf revetments forming the face of the rampart, which would be the first material to be pushed back into the ditch. The homogenous clay above could represent the up-cast from the ditch that would have formed the main body of the rampart. The ditch sections produced little in the way of artefactual evidence.

The current known distribution of Roman marching camps across England demonstrates a clear bias towards the marginal lands to the north and west. The most comprehensive published study of camps in England was compiled by Humphrey

Welfare and Vivien Swan (1995); at that time there were over 130 known camps with more being identified every year. The Roman British Organisation (RBO) currently lists 163 camps in England (<u>http://www.roman-britain.org/military/camps_england.htm</u>). However, the distribution of marching camps in the East Midlands is very sparse; eight have been identified within Nottinghamshire and Lincolnshire but there have been no confirmed examples further south. Evidence of Roman military activity in general is very sparse in the southern and eastern parts of the region with no other previously confirmed military sites in Northamptonshire (Taylor 2006, 143).



Figure 11: Contour plan of the surrounding topography including the camp cropmark and known Roman networks (1 km grid; contour lines at 5m intervals) Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. Crown Copyright 1996. Licence Number AL 100029495

Contemporary sources suggest that the direction of travel and the position of the enemy were the most important factors when positioning a camp (Vegetius I, 23). However the local topography and site specific factors are likely to be equally influential. It is clear the location of the monument at Weston has been carefully selected on the basis of the local topography. It is located on a spur at the end of a long ridge and is positioned on a relatively flat parcel of land that gently slopes northwesterly overlooking a long stretch of the River Welland. The ridge narrows to the south-east with the ground sloping away significantly in all other directions and dropping at least 40m over a distance of 0.5km away from the monument. Presumably this would have provided clear panoramic views across the wide areas of the Welland Valley, including the Gartree Roman road and its possible crossing at Medbourne, c.3km to the north-east. The orientation of the probable entrance on the south-east side of the monument is directly facing the line of the ridge that rises slowly away from the site. It seems reasonable to suggest that the ridge provided the most suitable entrance into the camp from the south-east. It is not yet clear if the camp was located on an existing roadway but it is certainly likely to be connected with the larger Roman settlements in the landscape. A road running perpendicular to the entrance might link the Roman settlement at Market Harborough with Medbourne and perhaps more importantly this projected line would continue to the Pre-Flavian auxiliary fort at Great Casterton, Rutland, which is located on the major Roman road of Ermine Street (MLE5293). Similarly, a road running through the camp along to the ridge to the south-east might lead to the Roman town at Kettering and wider road networks.

The current project was concerned with the interior of the camp, as this was the location for the new circular barn. Prior to the 2011 evaluation, a detailed magnetic survey (gradiometry) and earth resistance (resistivity) had been undertaken within the proposed development area (Haddrell 2011), which also covered the area of a internal cropmark suggested by an earlier evaluation (Meek 1997). The survey revealed three discrete anomalies in the north-east of the site, possibly indicating archaeological pits, and also identified agricultural marks, magnetic debris and magnetic spikes, as well as some high resistance anomalies of a probable natural origin. No evidence for internal structures was recorded within the 2011 trial trenches, which also targeted the internal cropmark (Harvey 2011, 18).

However, the topsoil strip for the new barn revealed a number of archaeological features, consisting of a pit and probable oven, two gullies, post-holes and several rows of stake-holes, as detailed above. There are a number of factors which would help explain why these were not identified during previous work. With the exception of the oven/pit [134], these were shallow features and mostly very small; therefore difficult to identify using geophysical techniques. In addition, the majority of the archaeological features were located on the eastern side of the site, away from the 2011 trial trenches, which were located more centrally. The difficulty in identifying small features, such as stake-holes, within the confines of a narrow evaluation trench should not be under-estimated, as these are more easily seen as groups or rows in a wider area.

It is highly likely that the camp was in use for only a short period of time and therefore would not be expected to generate large amounts of cultural material in the same way as a long-standing settlement. The central area of the camp would probably have been occupied by the administrative headquarters and stores, with lines of tents occupying the forward and rearward portions of the defences. It is therefore possible that the stake-holes found at the site, which are clearly aligned in rows, may represent the locations for some of these temporary structures. If so, their survival is both unusual and fortuitous, in view of their small size and shallow depth.

The most substantial feature on the site was the pit [134], which was filled with burnt daub. This feature is interpreted as some form of oven; the burnt daub has wattle impressions indicating that the superstructure of the feature was formed by wattle and daub. Grass was presumably used as kindling and, there was also evidence for fuel; oak, hazel ash and poplar/willow. Unfortunately the environmental and artefactual evidence is not sufficient to confidently determine the purpose of the structure.

The presence of the coins in the base of the feature is significant. These appear to be Iron Age silver coins of the VOLISIOS type, in the North-Eastern regional tradition which is attributed to the local people who inhabited the East Midlands, the Corieltavi. VOLISIOS coins are rare and were under-represented at the nearby Iron Age shrine of Hallaton (Leins 2011). Their placement in the base of the structure, along with a fragment of antler, suggests a possible ritual element to their deposition. They are clearly heat-affected and were therefore sited before or while the oven was in use, suggesting an early post-conquest period date for the construction of the feature. However, the feature also contained Roman wheel-thrown wares, mixed among the collapsed debris, which are burnt and therefore presumably became incorporated into the feature while it was still in use. The presence of this type of pottery would tend to date the feature to a later phase of occupation to that indicated by the coins. Cooper suggests two possibilities (see Appendix 2); firstly that the feature was still in use beyond the period of the marching camp and secondly that the pottery was transported from the south-east of Britain, where such types were current from the conquest period, although he notes that a detailed fabric comparison with similar vessels from Leicester does not suggest the latter. The Roman army did not usually carry ceramics while they were on the move, preferring to use metal cooking pots, which therefore raises the possibility that occupation on the site continued or resumed in some form after the conquest period. Unfortunately, the evidence is still rather limited and future research would be necessary to shed further light on the activities on the site.

Several of the other features; pit [103], gully [108], stake-hole [124] and associated gully [128]; contained pottery from the Iron Age Scored Ware tradition, which could either pre-date the proposed conquest-period marching camp, be broadly contemporary or even post-date it (Cooper Appendix 2). In the absence of clear dating evidence, it cannot be stated with absolute certainty that the features found on the interior of the ditch structure are either all contemporary or even directly associated with the marching camp phase of the site. For example, the pit [103] is located at some distance from the other features, contains small amounts of cereal waste and may conceivably represent a different phase of activity. However, the similar position and form of the stake-holes do suggest that they are part of the same event. The stake-holes appear to be possibly associated with the oven [134] by the resemblance between the fills of stake-hole [144] and that of the oven [134], which suggests that they were probably backfilled at the same time.

Following on from the 2011 trial trenching, the archaeological strip, map and sample has provided a valuable opportunity to gain further insights into a rare and poorly-understood monument. While many of the features are likely to be surviving remnants of internal features of the camp, there are hints that there is more than one phase of activity at the site.

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The author would like to thank Chris Parker, Tom and Nick, for their help and cooperation during the work. The fieldwork was carried out by Jennifer Browning and Mathew Morris. Vicki Score managed the project and ULAS staff processed, cleaned and identified the finds.

Archive

The archive for this project will be retained by ULAS, until such time as facilities are available in Northamptonshire and consists of the following

Digital photographs

Black and white contact prints and negatives

Photo Index

Site notes

Site recording forms (context sheets and indices)

Permatrace plans and sections

Finds, as detailed in the Appendices

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11.10.2012

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Appendix 1: List of Contexts

Appendix 2: Late Iron Age or transitional Roman handmade Pottery and Roman wheel thrown pottery

Nicholas J. Cooper

Introduction

Twenty-one sherds of Late Iron Age or Transitional Roman handmade pottery weighing 102g were retrieved from four contexts comprising pit fill (102) [103], gully (107) [108], stake-hole (123), [124] and associated gully (127) [128]. Additionally, two sherds of Roman wheel thrown pottery weighing 45g were recovered from two contexts, both fills of oven/pit [134].

Methodology

The pottery has been analysed by form and fabric using the Leicestershire County Museums prehistoric and Roman pottery fabric series (Marsden 2011, 62, Table 1; Pollard 1994, 110-114), and quantified by sherd count and weight.

Analysis of Assemblage by Fabric, Form and Decoration

The details of the late Iron Age or transitional Roman assemblage are presented below (Table 2).

BFW 12 Late Iron Age or Transitional Roman Handmade Pottery							
Context	Cut	Fabric	Form	Туре	Dec	Sherds	Weight
102	103	Q1/SW	jar	misc	horizcomb	1	18
102	103	Q1/SW	jar	upright rim		1	1
102	103	Q1/SW	jar	misc		3	5
102	103	S1/CG1	jar	misc		3	3
107	108	S1/CG1	jar	misc		7	38
123	124	S1/CG1	jar	misc		2	16
127	128	Q1/SW	jar	misc		1	10
127	128	S1/CG1	jar	misc		3	11
Total						21	102

 Table 2: Quantified record of Iron Age or transitional Roman handmade pottery

The material is in poor condition as indicated by the low average sherd weight of 5g and the leaching of the shell-tempering used in the majority, which may suggest long exposure before incorporation into features, and introduces the possibility of residuality or re-deposition. The sherds are rather undiagnostic body sherds deriving from jar forms, one of which from (102) had a small plain upright rim, broadly comparable with those found in East Midlands scored ware tradition (Elsdon 1992), although none of the sherds has scored decoration. One from (102) does, however, have horizontally combed decoration which would more typically be found on jars in the middle decades of the 1st century AD. The fabrics, being a mixture of sand tempered (Iron Age fabric Q1; Roman fabric SW) and shell-tempered (Iron Age fabric CG1), would also appear most likely to belong to the middle decades of the first century, as the earlier, scored ware assemblages would

typically be only shell-tempered in the south-eastern part of Leicestershire and into Northamptonshire and Rutland (Cooper 2000). The likelihood is, therefore, that the features containing this pottery are broadly contemporary with the proposed conquestperiod marching camp, could have preceded it, or conceivably post-dated it.

The pit/oven [134] in contrast contained only Roman wheel-thrown wares, the full record of which is presented below (Table 3).

BFW 12 I	Roman	Pottery			
Context	Cut	Fabric	Form	Sherds	Weight
104	134	GW3	jar	1	20
135	134	WW2	flagon	1	25
Total				2	45

Table 3: Quantified record of Roman pottery

Neither of the sherds is very diagnostic but both are in much better condition (22.5g average sherd weight) than the Iron Age/Transitional sherds from the other contexts. They also both show signs of burning, indication that they were incorporated into the structure whilst it was still operative. Normally, fine examples of these white ware (WW2) and grey ware (GW3) fabrics would probably be dated to the later decades of the first century or into the second, and the lack of the transitional material found in the other features would tend to indicate they belong to a later phase of occupation. This conflicts with the proposed early post-conquest foundation of the oven structure as suggested by the coins, or at least stretches the life of the structure into decades rather than years. One possibility is that these sherds belong to vessels brought up from the south-east of Britain, where they were current from the conquest period, but the detailed fabric comparison with such vessels found in Leicester (e.g. Fabric WW3 used for butt beakers) does not suggest this. The problem with dating the marching camp structure to which these features must, in the broadest terms, relate is that, almost by definition, the army did not carry ceramics on campaign, using metal cooking vessels instead, and pottery was only supplied once a fort was established. Very little datable rubbish was therefore generated.

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Elsdon, S.M., 1992 'East Midlands Scored Ware' *Transactions of the Leicestershire* Archaeological and Historical Society **66**, 83-91.

Marsden, P., 2011 The Prehistoric pottery and briquetage in J. Thomas, *Two Iron Age* Aggregated Settlements in the Environs of Leicester: Excavations at Beaumont Leys

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Appendix 3: Fired Clay or Daub by Nicholas J. Cooper

A total of 103 fragments of fired clay (2195g) were recovered from the fills of pit oven [134] with a single fragment (5g) coming from stake-hole fill (115) as detailed in below (Table 4).

Barn Farm Weston Burnt Daub						
Context	Cut	Frags	Weight	Features		
104	134	24	150	perforations		
109	134	20	75	perforations		
133	134	52	1710	perforations		
135	134	7	260	perforations		
115	116	1	5			
Total		104	2200			

Table 4: Fired clay/daub from pit oven [134] and elsewhere

Many of the larger fragments, which weigh up to 150g, bore the edges of circular perforations consistent with them being part of a wattle and daub structure. In one straight edged fragment two parallel perforations were preserved, but each was of a different diameter; 12mm and 25mm. Perforation lengths of up to 60mm were preserved. The variation in diameter might suggest that these are wattle perforations rather than the generally larger holes deliberately driven through an oven structure to ventilate it as seen locally at Empingham, Rutland (Cooper 2000, 70, fig. 33) and more completely at Little Woodbury, Wilts., where the ovens were thought to be beehive-shaped (Brailsford 1949, 161). The present assemblage is rather too fragmentary to allow any such reconstruction and the remains, having collapsed into the pit structure, appear to have been exposed to weathering before being buried.

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Appendix 4: Interim Statement on Coins

Vicki Score

The six small coins recovered from the base of feature [134] will be fully identified and reported on following cleaning/conservation as part of the Treasure process.

The coins are in a fairly fragile condition and appear to have been subjected to heating. All are very thin in section. One of the coins has a piece missing and one is a fragment (Figs 12-13).

These appear to be Iron Age silver coins of the North-Eastern regional tradition attributed to the local people who inhabited the East Midlands, the *Corieltavi*. All of the coins appear to be of a similar size (approx. 1200mm wide) and type with a right facing horse on the reverse and an inscription in two lines on the obverse. All are dished as is usual with silver Iron Age coins as a result of the way the coins are struck.

From initial study these appear to be of the **VOLISIOS** type. There are just over 100 examples of this coin known with 15 from the nearby Iron Age shrine at Hallaton (Leins 2011). Inscribed Corieltavi coins are generally dated to the first half of the 1st century AD and the Hallaton coins appear to have been minted between the AD 30s – AD 50s although their deposition might be considerably later than this.

VOLISIOS coins are mostly known from the north of the *Corieltavi* area (particularly around the Humber estuary) and were found in two hoards in Honley and Lightcliffe, both in Yorkshire. They carry the name **VOLISIOS** on the obverse, while a variety of other names are featured on the reverse. Three names are known, **DUMNOCOVEROS**, **DUMNOVELLAUNOS** and **CARTIVELLAUNOS**. The use of two names in contrast to the single names found on most of the North-Eastern inscribed coins seems to suggest an alternative type of leadership or minting (Leins 2011, 46). This could be a main ruler (**VOLISIOS**) with sub-rulers or a dual rulership. It has also been suggested that **VOLISIOS** could be a patronymic, with the secondary names representing his sons (Rudd 2010).

The inscriptions on the coins are hard to read but they all appear to be VOLISIOS DVMNOCOVEROS //DUMNOVELLAUNOS (types VDC/VDV as identified at Hallaton; Leins 2011, Appendix 1, 183) with at least one seeming to be DVMNOCOVEROS (Ian Leins pers.comm.).

VOLISIOS coins are under-represented at Hallaton making up only 0.3% of the total assemblage of over 5000 (Leins 201, 50). In his analysis of the Hallaton coins Ian Leins suggests that the small numbers of **VOLISIOS** coins might suggest that they belong to a more northerly tradition (Leins 2011, 57). The presence of six coins of this type on their own at Weston by Welland is therefore intriguing.

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Figure 12: Reverse side of the coins



Figure 13: Obverse side of the coins

Appendix 5: Iron Objects

Nicholas J. Cooper

A tapering shaft fragment of square section and probably from an iron nail was recovered from pit fill (102) [103]. Its measurements are 57mm long with a maximum width of 9mm. This is a relatively unusual find on a Conquest period site as nails and clamps are rarely used in Iron Age carpentry and so it provides a tentative pointer to a Roman military presence on the site, even though timber structures are unlikely to have been erected in a marching camp as such.

An unstratified modern nail of circular section with a rounded head was also recovered from the site.

Appendix 6: Prehistoric Worked Flint

Lynden Cooper

A total of 18 pieces of worked flint were recovered, eight being stratified in (102) and ten unstratified, as detailed in Table 5 below.

Table 5: Record of flint recovered from the site.

Weston b	Weston by Welland Worked Flint						
Context	Cut	Description					
102	103	Four secondary flakes, three tertiary flakes and fragment of shatter					
US		Straight edged scraper					
US		Retouched flake, a secondary flake and seven tertiary flakes					

The group represents a rather undiagnostic collection manufactured from local till flint using hard hammer percussion and probably dating Late Bronze Age date. The material from (102) is therefore redeposited.

Appendix 7: The Animal Bones

Jennifer Browning

Introduction

An animal bone assemblage numbering 85 fragments was recovered during excavations carried out by ULAS at Barn Farm, Weston by Welland, Northamptonshire. Re-assembly of joining fragments reduced the total number of specimens to 74. The bones were recovered during the excavation of three features of Roman date; oven/pit [134]; pit [103] and gully [108].

Methods

Bones were identified using the skeletal reference collection housed at the School of Archaeology and Ancient History, University of Leicester. Information was compiled directly into a spreadsheet with facility for recording data on species, bone element, state of epiphysial fusion and completeness to elicit information on species proportions, skeletal representation, age and condition. Where possible, the anatomical parts present for each skeletal element were recorded using the 'zones' defined by Serjeantson (1996), with additional zones ascribed to mandibles based on Dobney and Reilly (1988). Preservation was assessed on a four-point scale with reference to Harland et al (2003). Measurements were taken when bone completeness permitted, following von den Driesch (1976) and Payne and Bull (1988). Recording of tooth eruption and wear for cattle, sheep and pig followed Grant (1982). Information was recorded into a pro forma spreadsheet. Where fragments were not sufficiently diagnostic to identify to species, they were assigned to one of the following categories based on characteristics such as size and thickness of the cortical surface: 'large mammal', represents undiagnostic fragments probably from cattle, horse or red deer, while 'medium mammal' bones were likely to derive from sheep, goat, pig, roe deer or possibly dog.

Results

Preservation was predominantly poor, with exfoliated surfaces and fragmentation common (table 6). These factors, coupled with the small size of the fragments, suggest that bone survival is relatively poor on the site. In particular, poor surface condition is likely to have obscured butchery marks.

	103	108	134	Total
Fair: surface solid in places, but flaky or powdery on up to 49% of	13	1	1	15
specimen.				
Poor: surface flaky or powdery over 50% of specimen	53	5	1	59
	66	6	2	74

 Table 6: State of preservation (definitions after Harland et al 2003)

Table 7 shows the numbers of bones attributed to each species and shows that only 9.5% were identifiable to taxon, with the largest proportion consisting of small undiagnostic shaft fragments from large, medium or indeterminate mammal bones. However, cattle, sheep/goat and pig are all positively represented in the assemblage, with pig contributing the largest number of fragments. Red deer was represented by the pedicle and beam of an antler which was recovered from the base of feature [134].

No measureable bones were recovered from any of the features and there was no ageing evidence from either teeth or post-cranial bones.

Pit [103] produced the largest number of bones, which included evidence for sheep/goat and pig. The sheep/goat bone was a radius shaft fragment and the pig bones consisted of two ulnae fragments and part of a mandible. Several charred and calcined bones, none identifiable, were also recovered from the pit and could represent an accumulation of domestic debris.

	Context 102	107	133	Total
	Pit [103]	Gully [108]	oven/pit [134]	
cattle		1	1	2
sheep/goat	1			1
pig	3			3
red deer			1	1
Total identified	4	1	2	7
large mammal	12			12
Medium mammal	26	1		27
indeterminate	24	4		28
Total	66	6	2	74

Table 7 : Number of bone fragments from each context

The oven/pit [134] produced little faunal evidence, consisting only of part of a cattle atlas and the red deer antler. The cattle atlas fragments were un-burnt and may have become incorporated after the feature became disused. By contrast the antler fragment was apparently placed at the very base of the pit in association with several Iron Age coins (Fig. 14). While the antler is clearly heat-affected, exhibiting brittleness and distortion of the surface, it is neither charred nor calcined, suggesting that it was 'baked' rather than exposed directly to the flames. This suggests that it was deposited during the construction of the feature rather than during its use. Since part of the pedicle remains, the antler must have come from a hunted animal, rather than having been collected after it was shed. The surviving part of the beam has broken into three fragments and measures 220mm from the bony coronet. Chop marks were present on the pedicle, showing that it had been chopped from the skull. Although some heat-distortion has occurred, the spindly appearance of the beam suggests that it belonged either to a young male or was possibly still in growth.

Conclusions

A faunal assemblage was recovered from an oven/pit, a pit, and a gully within a probable Roman marching camp. Pig, cattle, sheep/goat and deer were identified. The assemblage was not of sufficient size to provide reliable information on diet or husbandry practices at the site and was poorly preserved. A pit produced bones exhibiting signs of burning and probably resulting from domestic activity. The deposition of a red deer antler at the base of an oven/pit was associated with the find of several Iron Age coins and almost certainly pre-dates the use of the feature. The association with the coins, in particular, suggest that this could be a symbolic act, perhaps forming some manner of 'foundation deposit'.



Figure 14: The antler from pit [134]

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Appendix 8: The Archaeobotanical Remains,

Anita Radini

Introduction

During an 'Archaeological Strip, Map and Sample Excavation' at Barn Farm, Weston by Welland, Northamptonshire (SP 769 913), conducted by the University of Leicester Archaeological Services, thirteen environmental samples were taken for the recovery of plant and animal remains and with the potential to provide evidence of domestic and other activities on the site, as well as evidence of food consumption and disposal. All the samples are dated to the Early Roman period.

Materials and Methods

Seven samples were chosen for environmental analysis. The samples were selected upon their archaeological integrity, from features that had potential for the recovery of plant remains, such as pit fills, and to clarify the use of a possible oven/kiln. One sample from a stake-hole was also examined.

The selected samples were processed at ULAS using standard procedures, by sieving tank with 0.5mm mesh and with flotation into a 0.3mm mesh sieve. Residues were all air-dried and separated on a 4mm mesh riddle. The coarse fractions (CF), over 4mm, were sorted for all remains and finds, which are included in the relevant sections (see results) of this report. The fine fractions (FF), below 4mm, were reserved for sorting during the analysis stage if required. The flotation fractions (flots) were transferred from the sieve into plastic boxes and air-dried.

All flots from the samples were scanned under magnifications between 20x and 40x. Small sub-samples of un-processed soil from the pit contexts were 'squashed' over a slide and examined under high magnification (400x) to assess the presence of human and animal parasite ova, which would indicate the disposal of cess material.

All plant remains consisting of charred and un-charred seeds were noted according to the species present. The quantification method was based on the minimum number of characteristic plant parts, while for their identification, morphological criteria, modern reference material and seed identification manuals (e.g. Cappers *et al.* 2006) were employed.

The identification of charcoal fragments was conducted observing the wood anatomy under a microscope with magnification range between 40x to 200x. Identification keys and reference collection were also consulted. Where needed, a needle or a razor was used to break the charcoal in fragments to make the characteristics of the wood visible. Many species of wood do not have anatomical features that allow precise identification, for example, oak (*Quercus* spp.), willow (*Salix* spp.) and poplar (*Populus* spp.). In the same way, it is not always possible to distinguish between willow and poplar; both are in fact part of the same family (Salicaceae) and have similar anatomical characteristics. The identification between willows and poplars is based on the differences existing between rays, which are not always clearly visible in tangential sections (Schweingruber, 1982). As the differences in the rays were not visible in the analyzed material, the charcoal has been described as willow/poplar (*Salix/Populus*).

Nomenclature adopted for this report is shown below:

<i>Corylus avellana</i> L.	Hazel		
Fraxinus excelsior L.	Ash		
Quercus spp.	Oak		
Salix/Populus	Willow/Poplar		

Plant names follow Stace (1997). An overall table (Table 8 is presented with the report, where volume of soil processed and finds are recorded, together with contextual information.

Results

All of the samples had a high quantity of charcoal, which appeared in smaller fragments in the pit fills and stake-hole and in larger ones in the context coming from the possible oven. A brief description of the finds by type in provided below and presented in Table 8.

Charcoal and charcoal flecks

The samples appeared very rich in fine charcoal fragments (charcoal flecks), very small in size, almost in form of 'dust'. Some of the charcoal fragments were large enough to be identified. The most common types of wood were oak and hazel but a few finds of ash and willow/poplar were recovered, associated with oak and/or hazel. These last two species were found mainly in the context associated with the oven [134]. Further analysis of some of the larger charcoal fragments is provided in Appendix 9.

Cereals

Cereal remains were found in low numbers in the two pit fills: sample 1 (102) and sample 4 (127). Charred grains of glume wheat were found in samples 1 and 4 and were identified as *Triticum* cf. *spelta* (spelt wheat) on the basis of their morphology. The only way to be sure of species identification is when the chaff is preserved, but notably no chaff was recovered in either the flots or the fine fractions. The grains of glume wheat, such as spelt wheat, remain in husks after threshing and require parching and pounding before consumption by humans (e.g. Hillman 1981). Charred grains of *Hordeum vulgare* L. (barley) were recovered in sample 4 (127).

Wild species

A low number of small seeds of grasses (Poaceae) were recovered in samples 1 (102), 4 (127), 8 (143) and sample 12 (135). A few seeds of docks (*Rumex* sp.) were found in samples 1 and 4 (Table 8).

Un-charred remains

Un-charred seeds of *Sambucus nigra* L. (elder) were encountered in low numbers in samples 7 (135), 8 (143) and 9 (133). Elder is a hedgerow plant, common in waste ground but also edible and possibly useful as wood. The un-charred state of preservation casts doubt on the archaeological veracity of these remains, and they will not be discussed further.

Other notable remains

Significantly, two *Trichuris* sp. ova (whipworm eggs) were recovered from sample 4 (127) when examined under high magnification (400x).

Some root and rootlet fragments were also found in all the samples, suggesting a degree of soil disturbance.

Discussion

Overall, the samples associated to the oven/kiln feature [134] and stake-hole [144] had similar characteristics, being rich in very fine fragments of charcoal. The most common wood resources were consistently represented by oak and hazel, with some remains of willow/poplar and ash. All these species are commonly found in Britain and could have represented vegetation growing nearby the site. The absence of charred cereal grains from the possible oven points to the oven/kiln being used for a short period of time to cook or for more industrial activities such as metal working and pottery making, although no evidence for either activity was recovered from the samples. This may be confirmed by the use of oak and hazel wood, which are known to burn to high with a steady temperature. Seeds of grasses recovered from samples **8** and **12** could have been the result of grasses being used as kindling to light the fires.

In relation to pits [[103] and [128], the low numbers of charred cereal grains do not allow an accurate comparison of the relative importance of wheat and barley although glume wheat grains seem to be more abundant. Barley is a more resilient crop compared to wheat and can withstand poorer soils, drier conditions. It also has a greater tolerance to salinity (Zohary and Hopf: 59; Smartt and Simmonds 1995: 140). Both barley and spelt wheat have been commonly found on Roman sites in Britain. The charred cereal remains represented here are most likely to have resulted from cooking spillage. It is interesting to notice the absence of chaff and weeds, suggesting that the crop was clean when it came into contact with the fire.

The charred wild species may have entered the contexts in several ways. Dock species are commonly associated with cultivated ground and they represent weed seeds brought in with the crops. Alternatively, they may represent wild species growing nearby that were accidentally burnt, or, in the case of grasses, specifically used as kindling. Additionally, several species of docks have young edible leaves and in some cases edible seeds could represent wild food.

The presence of parasite ova of the genus *Trichuris* suggests that human and/or animal cess material was disposed of in at least one of the pits. The genus has two common species: *T. trichiura*, which is parasite of the human large intestine known as round worm or whipworm, and *T. suis*, which is a parasite normally found in pigs known as swine whipworm and which can affect humans as well.

Conclusions

Despite the low density of charred seeds and other identifiable remains, the analysis has provided evidence of food preparation and consumption on site resulting in the disposal and/or accidental burning of cereal grains and accumulation of charcoal.

The overall character of the assemblage points to rubbish deriving from food preparation and consumption being disposed of in pits and charcoal deposits accumulating in the possible oven, possibly for cooking purposes. The absence of chaff and weeds in these features suggested clean crops were being consumed on site. Moreover the similar composition of the charcoal assemblage in all the features points to the same type of wood being used across site for fires. The absence of chaff, the similar composition in wood used for fires and the low concentration of remains might indicate that the site was occupied for a short period of time.

Most importantly, the recovery of charred and un-charred plant remains, together with parasite ova, demonstrates the potential for the good survival of environmental evidence on site, should further work take place, and the need for an appropriate sampling strategy to be adopted if it does.

				V	Charred	Charred		Ch.	
Sample	Context	Cut	Feat.	(L)	grains	seeds	Charcoal	Fl	Other
						Grasses			
					Spelt	x2, docks	Oak,		
1	102	103	Pit	10	wheat x3	x4	hazel	XX	
					Spelt	Grasses			Whipw
					wheat x2,	x2, docks			orm
4	127	128	Pit	8	barley x3	x2	Oak	XX	eggs
							0.1		F11
_	105	10.4	0 0	0			Oak,		Elder
7	135	134	Oven?	8			hazel, ash	XXX	seeds
							Oak,		
			Stake-			Grasses	poplar/		Elder
8	143	144	hole	4		x4	willow	XX	seeds
									Eldor
0	122	124	0	0			Oala		Eldel
9	155	134	Oven?	8		0	Оак	XXX	seeds
10	105	104	0 0	0		Grasses	Oak,		
12	135	134	Oven?	8		x3	hazel	XXX	
							Oak,		
							poplar/		
							willow,		
13	133	134	Oven?	8			hazel	XXX	

Table 8: Results of Environmental analysis.

V=volume, L=Litres, Ch. Fl=charcoal flecks, Feat= Feature x=present; xx=common; xxx=abundant

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Appendix 9: Charcoal Identification

Graham Morgan

The identified species present include Oak (*Quercus* spp.) and Ash (*Fraxinus excelsior*) (*Table 9*).

Other materials identified

(102) SE quad	square section iron nail? fragment.
(104)	iron slag; very dense fayalite slag, possibly tap slag. 25g
	This is a very small piece but could be from iron smelting.

Table 9: Charcoal species identified

Context	Dia	Rings	Age	Species
104	200+	25	80?	ash
131	70	12	20	ash
131	30	8	10	oak

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