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Archaeological Services

**An Archaeological Excavation on Land at
Old Warren Farm (New Lubbesthorpe Area 4),
Lubbesthorpe, Leicestershire
NGR: SK 52883 02064**

Wayne Jarvis



ULAS Report No. 2018-168

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For: Mather Jamie on behalf of Drummond

Filename/Version	Checked by	Date
2018-168.docx	Vicki Score	12/11/2018
2018-168_VSedit.docx	John Thomas	13/02/2019

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ULAS Report Number **2018-168**

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Accession Number X.A112.2011

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Summary

University of Leicester Archaeological Services (ULAS) carried out an Archaeological Excavation on Land at Old Warren Farm (New Lubbesthorpe, Area 4), Lubbesthorpe, Leicestershire, prior to construction work as part of the New Lubbesthorpe scheme. The development area is located on arable land to the west of Old Warren Farm (SK 52883 02064).

Initial trial-trenching work identified two cremations in urns, both very plough truncated. The subsequent mitigation strategy saw part of the development area (measuring approximately 55m by 30m) stripped under archaeological control. Although no further cremations were identified, two further features were recorded close to the original cremations. Both features were very shallow and did not contain in situ urns or primary cremation material, with only charcoal and flecks of possible human burnt bone present. The strip also identified the full extent of a pit feature to the north of the urns, previously only partly exposed in the evaluation trial trenching. This substantial pit held a series of fills, some containing oak charcoal - possibly pyre rakings, and also produced small unburnt bone fragments that may not have been human bone. There was no evidence for a pyre on site, apart from these possible rakings.

Analysis of the funerary remains indicated that the individual cremation event involved the bodies being quite thoroughly burned. Moderate fragmentation of all of the cremated bone assemblages was observed, with the majority of bone in the burial deposits being quite small. The quantity of cremated bone recovered is quite low, which is probably the result of funerary practices as well as preservation biases. Despite the moderately heavy fragmentation of the bone, it was still possible to positively identify skeletal elements in both of the cremation burials, and the burials were both adults. Radiocarbon determinations from calcined bone produced date ranges of 1404-1227 (SUERC-75446) and 1419-1262 cal BC (SUERC-75447), indicating a date near the start of the Middle Bronze Age. The cremation vessels are of a bucket urn form, and belong to the Deverel-Rimbury Tradition.

Thirty metres to the north-east of the main group of features, two further insubstantial features were identified. One was a very truncated scoop-like feature that produced some charcoal, but no dating evidence. Close by, a small possible stake-hole was excavated which also produced a little charcoal. No further features were exposed, and no unstratified material was recovered during the stripping of the area.

The character of the cremation package has parallels from sites both nearby and further afield, and the common traits are part of a known burial tradition. This tradition consists of small clusters of two or three cremations alongside less formal deposits, and often isolated from any associated occupation or other activities. The clusters could represent kin groups rather than community groups. The cremations showed no evidence for status or social differentiation - being devoid of grave goods or any clear above ground indications. Nevertheless the evidence indicates that only a small proportion of the population received this treatment in death, as there are far fewer cremations than there is evidence for occupation.

The site archive will be held by the Leicestershire County Council Museum Services under the Accession No. X.A112.2011, and forms part of the larger New Lubbesthorpe archive.

1. Introduction

In accordance with National Planning Policy Framework (NPPF) Section 16 *Conserving and Enhancing the Historic Environment*, this document forms the report for an open-area excavation carried out at Old Warren Farm, Lubbesthorpe. The site lies south of Leicester Forest East. The proposed site is a mixed use development.

In view of the archaeological potential of the site, The Planning Archaeologist for Leicestershire County Council (on behalf of Blaby District Council) required a programme of archaeological work to be undertaken as mitigation prior to any development. This work was undertaken at the site during September 2015 by University of Leicester Archaeological Services on behalf of Mather Jamie and followed the procedures laid out in the approved Written Scheme of Investigation (WSI; Clay 2015).

2. Site Description, Topography and Geology

The Old Warren Farm site (New Lubbesthorpe, hereinafter Area 4) is located in the parish of Lubbesthorpe, south of Leicester Forest East, to the east of Beggars Lane, and north of Lubbesthorpe Bridle Road (SK 52883 02064; Fig. 1). The site is one of the agricultural fields to the west of Old Warren Farm, and is usually under pasture. In the landscape, the area is a subtle plateau and the site is virtually flat at around 100.5m aOD across the area, but with the ground dropping somewhat to the south.

The geology, according to the Ordnance Survey Geological Survey of Great Britain Sheet 156, is likely to consist of alluvium and river gravels overlying boulder clay and Mercia Mudstone, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>.

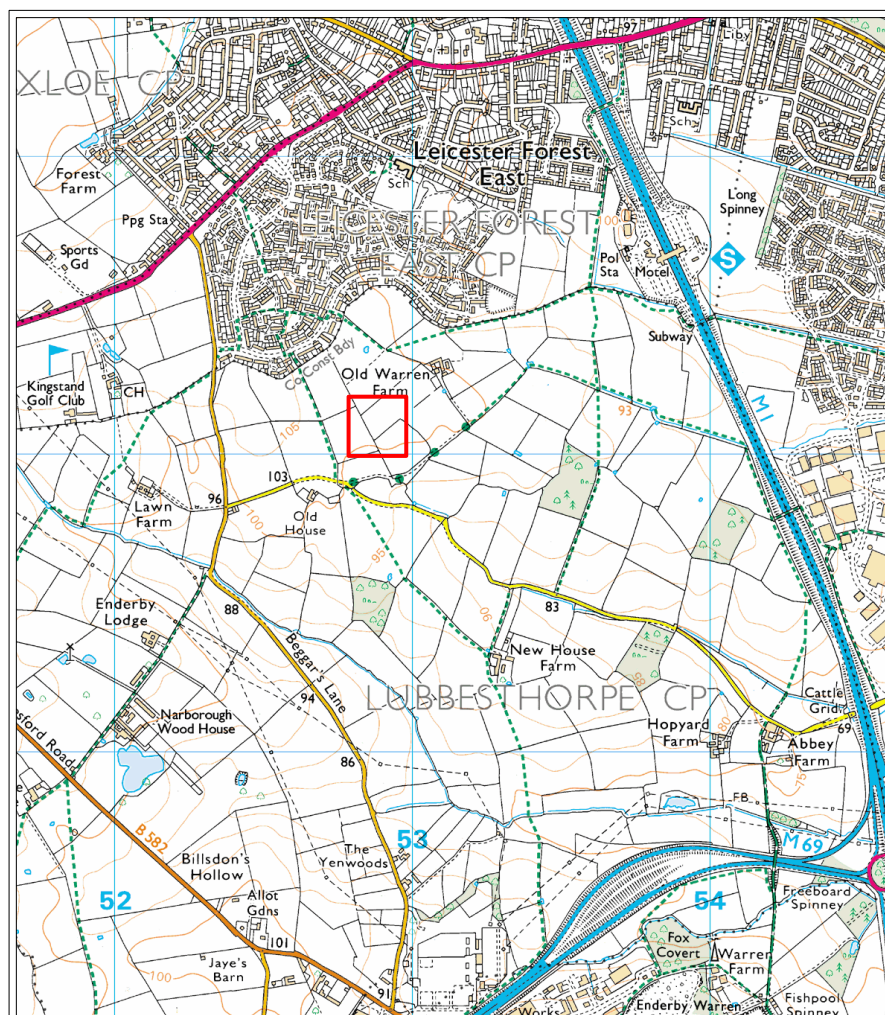


Figure 1: Site location, and area of Figure 2 shown

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3. Historical and Archaeological Background

For the larger New Lubbesthorpe project area an Archaeological Desk Based Assessment (Hunt 2008), geophysical surveys (Haddrell 2009; 2010), Landscape Assessment (Clay & Courtney 2011), targeted trial trenching (Jarvis 2015a; 2015b, 2016) and an Environmental Statement (Clay 2017) have been prepared.

The Historic Environment Record (HER) for Leicestershire and Rutland shows that there are known archaeological sites within the vicinity of the New Lubbesthorpe site area. The following details these sites in the vicinity (Hunt 2008).

Prehistoric. There are three prehistoric sites within the assessment area. A Middle Bronze Age palstave was discovered at a site close to the north-west corner of the assessment area (MLE6268). To the south of this, close to the site of the Old House, is a ring ditch cropmark, which most likely denotes the site of a Bronze Age barrow (MLE218). Shards of Iron Age

pottery were found during fieldwalking close to Abbey Farm (**MLE7386**). Iron Age coins have been found around 1km to the south-west of Area 1 (**MLE8487**, **MLE9080** & **MLE9081**). North of Fishpool Spinney in the south of the New Lubbesthorpe area an assemblage of prehistoric flint tools were found, including a blade and scraper (**MLE7375**) with a further scatter nearby (**MLE7376**). To the south-east of Fishpool Spinney a scatter of flint tools dated to the Early Neolithic to Bronze Age have been discovered (**MLE7378**). Close by is a group of Bronze Age pottery that may suggest an occupation site (**MLE6259**). Excavations at Grove Park, which lay around 500m to the east of Area 2, have revealed a large Iron Age occupation site (Clay 1992; Meek, et al 2004; **MLE79**, **MLE112**, **MLE113**). Neolithic finds were also discovered during these excavations (**MLE7123**). The evaluation to date has located Bronze Age cremations.

Roman. Inspection during a watching brief on a pipeline trench within the medieval earthworks at Abbey Farm revealed Roman pottery and other possible occupation evidence (**MLE219**) (Field Archaeology Section Leicestershire Museums 1975). There are also several sites dated to the Romano-British period (c. AD 43-410) to the west of the assessment area. These include a late Roman crossbow brooch found just to the west of Beggars Lane (**MLE7716**), a coin hoard found around 800m to the west of Beggars Lane (**MLE16619**) and a large number of artefacts such as brooches, coins and a mortared floor, suggesting a high status building (**MLE5979**; Gossip 1997). Further evidence for Roman occupation in this area is also in evidence (**MLE8347** & **MLE8488**). Roman pottery and tile are also known from the area to the east of the assessment area (**MLE223** & **MLE7717**). Close to Fishpool Spinney, fieldwalking has revealed pottery and kiln bars dated to the Romano-British period (**MLE84**). In the northern part of the area, close to the M69 a Romano-British key tumbler (lock) has been found (**MLE9797**). Several Roman coins and other metal artefacts have been found in the Grove Park area (**MLE7686** & **MLE7684**).

Anglo-Saxon. Fieldwalking close to Abbey Farm has produced sherds of Early Anglo-Saxon (c. AD 410-650) pottery, which may be evidence of a settlement site (**MLE233**); further pottery from the Late Saxon period (c. AD 850-1066) was found nearby (**MLE234**).

Medieval. The most significant site within the assessment area is the Scheduled Monument of Lubbesthorpe deserted medieval village (DMV; **MLE216** and SM30274). This monument includes the remains of the medieval settlement and part of the adjacent field systems at Abbey Farm. The remains consist of earthworks and other buried features. These features represent the gradual contraction in size of the medieval village and its eventual abandonment. Several building platforms in the shape of low sub-rectangular mounds are visible to the south of the Lubbesthorpe Bridle Road, along with boundaries and trackways. To the east and west of the settlement are the strips of heavy medieval ploughing known as ridge and furrow. These appear to run north to south and are divided into groups by larger parallel ditches. There are also up to five terraced rectilinear enclosures or paddocks to the immediate south of the stream, which were once visible on aerial photographs but have more recently been obscured by soil tipping. These deposits have also covered further building platforms and a pond. Archaeological work to the north and north-east of Abbey Farm in advance of pipeline construction revealed evidence of medieval settlement in the form of stone building foundations and post-holes. The evaluations also yielded pottery dated to the 13th and 16th centuries (Jarrett 1982). A geophysical survey carried out in 2007 revealed evidence of further archaeological features including trackways, enclosures and a possible boundary ditch (**MLE16845** & **MLE16846**). Further anomalies were located south of Hopyard Farm, although these may be associated with the construction of the M69 (**MLE16847**; Chester 2007). A large fishpond, most likely of medieval origin is located east of the Old House at SK 529 019 (**MLE222**). A fishpond is mentioned in this area in 1295 and in 1348. A few hundred metres to the west of this area is a medieval rabbit warren

(**MLE221**), which is also a Scheduled Monument (SM30239). During stripping for the M69 a scatter of medieval pottery was found (**MLE6646**), with a lead seal matrix close by (**MLE9798**). The fishpond at Fishpool Spinney is believed to be medieval in date (**MLE82**). There is medieval fishpond within The Park (Area 2), which was once associated with the Enderby Hall estate (**MLE105**).

Post-medieval The substantial remains of a 16th century house, with its own chapel, survive at Abbey Farm (see above; **MLE227**). The site of the kiln used to fire the Tudor style bricks used to build Abbey Farm may have been located by fieldwalking

Following National Planning Policy Framework (NPPF): Section 12 Conserving and Enhancing the Historic Environment Leicestershire County Council, Historic and Natural Environment Team (LCCHNET) as archaeological advisors to the planning authority required that further evaluation by trial trenching and open area excavation be undertaken to further define, characterise and to record the archaeological deposits in advance of the development.

4. Archaeological Objectives

Archaeological excavation is an intrusive form of investigation that will demonstrate the existence of archaeological features that may exist within the area.

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 ground works.
- To advance understanding of the heritage assets
- To produce an archive and report of any results.

Within the stated project objectives, the principal aim of the investigation was to establish the nature, extent, date, depth, significance and state of preservation of archaeological deposits on the site in order to determine the potential impact upon them from the proposed development.

Draft Research Themes

All exploratory and mitigation work was considered in light of the East Midlands Research Framework (Cooper ed. 2006) and strategy (Knight et al 2012), along with targeting national research aims. Potential research objectives that this scheme might contribute towards include the following:

The Bronze Age (Clay 2006; Knight et al. 2012, 70-81). The evaluation and excavation results indicated there are Bronze Age burials which will be affected by the scheme.

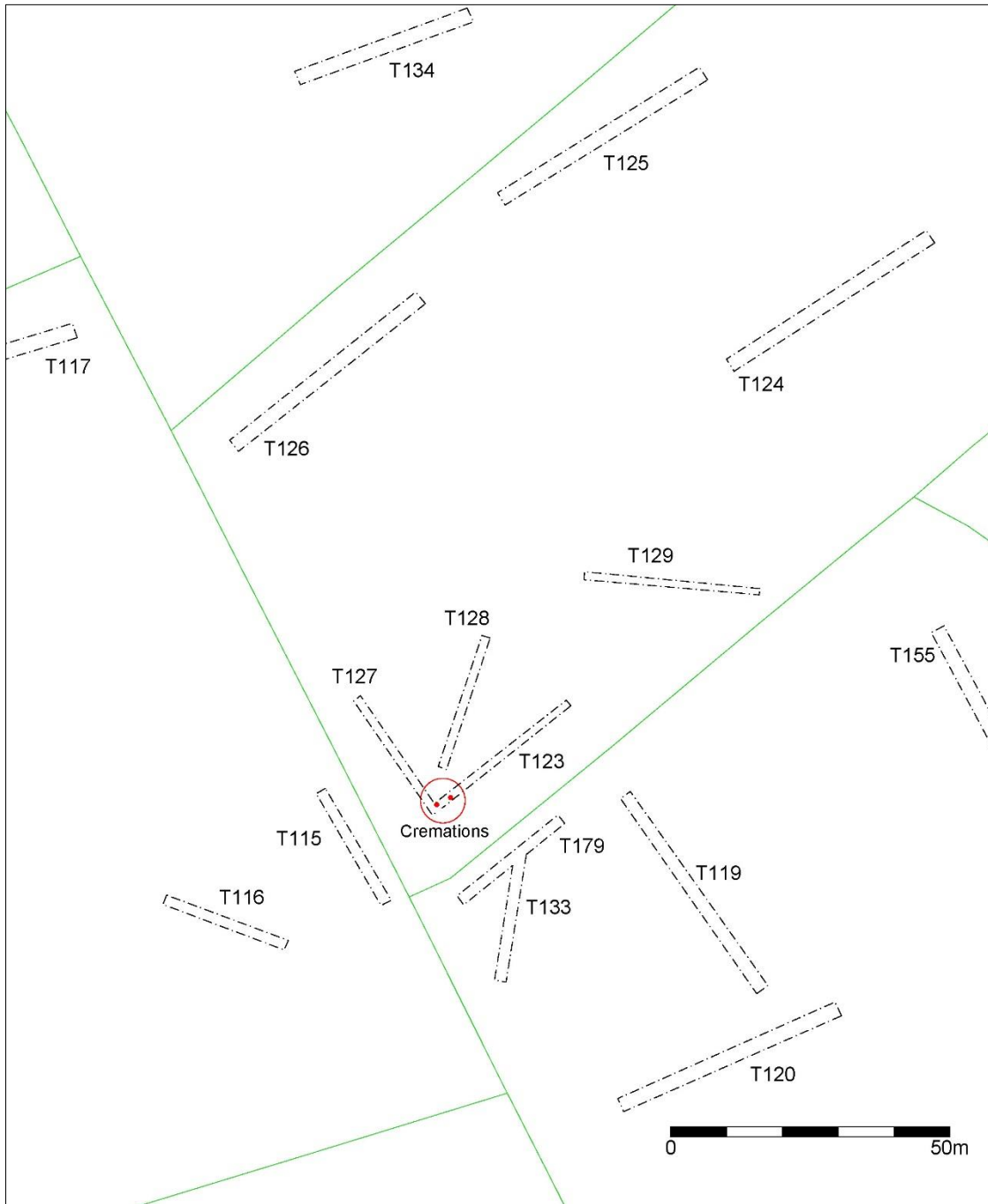


Figure 2: Initial trial trench locations and cremations. See Figure 1 for location.

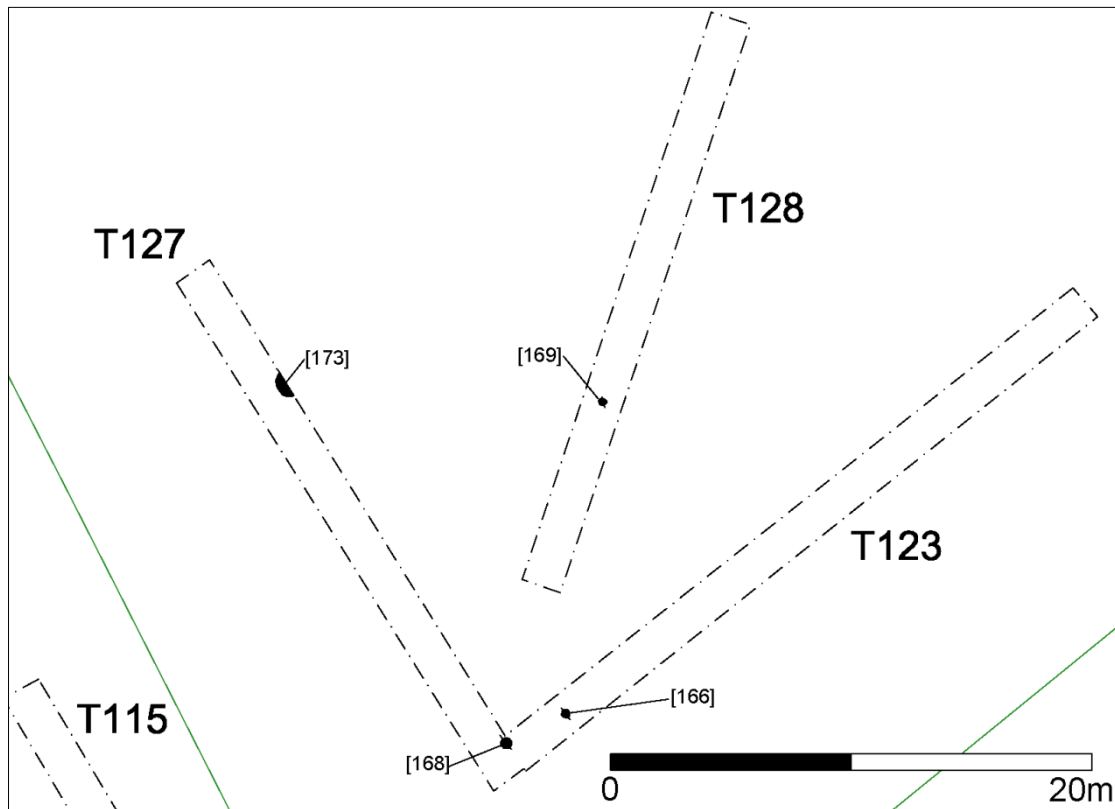


Figure 3: Cremation area: initial trenching results showing identified features.

5. Methodology

The ground was reduced in spits by a 360 machine using a flat bladed bucket under archaeological supervision, until the undisturbed natural substratum or the top of archaeological features were exposed. All archaeological features were hand cleaned, planned, photographed and sample excavated, as detailed in the approved WSI (Clay 2015).

All work was undertaken in accordance with the Chartered Institute for Archaeologists (CIfA) *Code of Conduct* (2014a) and adhered to their *Standard and Guidance for Archaeological Field Evaluation and Archaeological Excavations* (2014a).

6. Results

Cremation Group - Cremations [166] and [168], and [173=183], [180], [182]. Isolated features [169], [190] and [193].

In the initial evaluation work, Trench 123 exposed two urned cremations in small pits, contexts [166] and [168] (Jarvis 2015a; Figs 3-4). The cremations survived immediately below the topsoil and had clearly been heavily plough-damaged, with as little as ten centimetres of the urns surviving. Trenches 127 and 128 were added near to the cremations and these both also exposed single features, pit [173] and ‘post-hole’ [169]. Pit [173] was exposed in part only within Trench 127 but was probably part of a circular feature, steep sided with a flat base, 1.1m diameter and 0.25m deep. It contained a fill (174) which comprised of a series of lenses of charcoal in a dark grey clayey-silt with occasional large charcoal chips and flecks of bone. Although 16m from the cremations, the amount of charcoal in this feature suggested it may be related to them. Twelve metres to the east, post-hole [169] was sub-circular, fairly steep sided with a flattish base, and

measured 0.3m in diameter and 0.25m deep. The fill (170) was a brownish grey sandy-silt with occasional gravel. Also recovered were charcoal, a fragment of hazelnut shell, and a very small amount of calcined bone that could not be categorised as human. Trenches 129 and 133 were also added to the trench layout (Fig. 2). Trench 129 was negative but Trench 133 contained a plough-disturbed charcoal lens (172) potentially indicating further archaeological deposits located to the south of the cremations.

Follow up work involved secondary trial trenching to the north and south of the cremations area (Jarvis 2015b, 2016). These trenches (including T179 and T201 on Figure 4) were all negative. A mitigation strip was then carried out that consisted of an area extending for 54m from the initial positive results eastwards towards the negative Trench 129 and north for 35m up to an easement for the overhead power lines (Fig. 4).

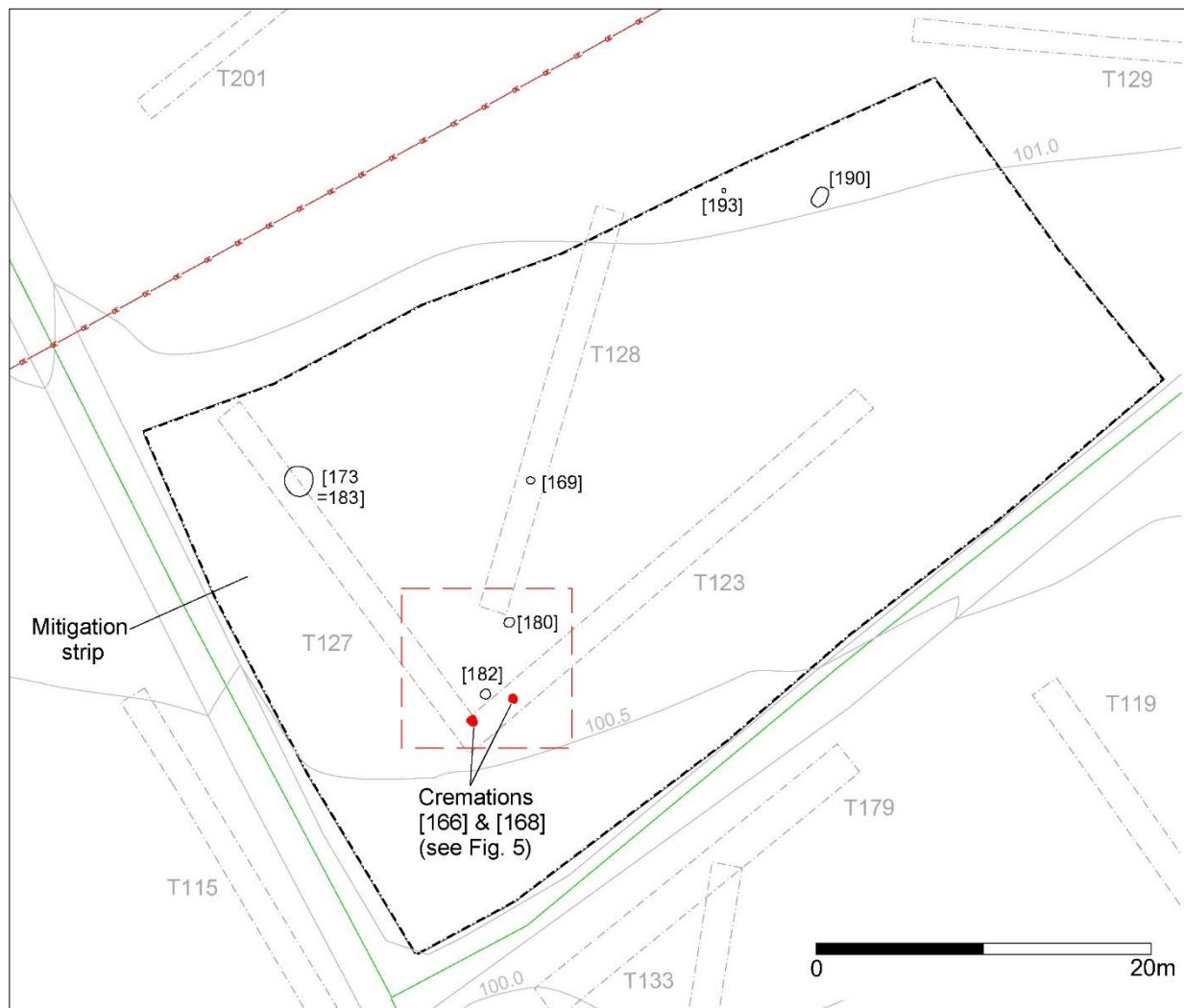


Figure 4: Mitigation strip, all features plan.

The Cremations

The two urned cremations [166] and [168] were identified some 2.5m apart (Figure 5). They were both in small shallow pits less than twenty centimetres deep, being heavily truncated by plough damage (Figure 6 - Figure 7). Pit [166] was sub-circular, steep sided with a flat base, and

measured 0.35m in diameter and with a depth of 0.14m (Figs 6-7). The fill (165) around the urn was a dark grey-brown clayey-silt with frequent charcoal and burnt bone and occasional gravel. The remains of the urn (Vessel 1) consisted of part of the base and wall of a bucket urn. Sixty sherds were recovered of this vessel, and the interior of the base had remains of sooting.

Cremation pit [168] was circular, steep sided and also with a flat base, 0.4m in diameter and 0.12m deep (Figs 8-10). Separate fills were visible within and outside the urn, although the outer deposit could have been re-deposited from plough action. Inside the urn was (167) a grey brown clayey-silt with much burnt bone and charcoal. Surrounding the urn was (171) a brown-grey silty-deposit also with much bone and charcoal. This urn (Vessel 2) had a slightly narrower base than Vessel 1 from [166], but with flared walls producing a girth of 180mm. Eighty sherds of this were recovered during the excavations. Neither vessel showed decoration although the basal zone of these urns is frequently undecorated even on examples with designs further up the body. The presence of base sherds of both urns would indicate that the urns were buried more or less upright in the ground.

The lack of any substantial feature, such as a boundary ditch, demarcating the cremation group is commonplace, with flat cremation cemeteries becoming the usual burial practice in the Middle Bronze Age, replacing the use of barrows (Clay 2001). Urns tended to be buried either in these unmarked flat sites or very occasionally reusing earlier monuments *if present* (Caswell & Roberts 2018). The absence of grave goods or any special treatment or deposits was also the custom, with “little evidence for social differentiation at the point of burial” (*ibid.*, 1).

At evaluation stage the urned cremations were tentatively identified as belonging to the Deverel-Rimbury Tradition of Middle Bronze Age date (Cooper 2015a). This was based on the fact that these are almost unknown from other chronologically similar periods (the 2nd-1st Millennium BC) in the East Midlands (Willis 2006, 117). The vessel from (165) had granodiorite inclusions with biotite mica, that from (167/171) more likely a syenite with only rare mica. Although the R2 fabric has also been found during previous work on the Iron Age nearby, the thickness and coarseness of the current vessels recalls the bucket urn fragments from Willow Farm, Castle Donington (Marsden 1999). The bases of three Middle Bronze Age cremation vessels of similar size to these, but in a grog-tempered fabric, were recently excavated at nearby Countesthorpe (Barclay 2012, 41); the radiocarbon dates suggesting their deposition in the early part of the Middle Bronze Age. The radiocarbon regime has also confirmed a Middle Bronze Age date for these Area 4 cremations (see Jarvis below).

The cremated bone was analysed by York Osteoarchaeology (Keefe and Holst 2017; see below). The recovered calcined bone was only a very partial amount of the individuals represented. Although the bone was fully calcined indicating an effective cremation process, the majority of it was very fragmentary, probably due in part to plough damage. Only a small amount of human bone (14.2g) was recovered from cremation [166]. Cremation [168] produced slightly more bone (151g), but still considerably less than the average for an archaeologically recovered ‘complete’ cremation (between 250-2500g; *ibid.*). Despite the moderately heavy fragmentation of the burials, bone fragments up to 10mm could be identified and it was still possible to positively identify skeletal elements in the material. The robust nature of the bone and dental development suggested that the individuals buried were adults, at least sixteen years old, but possibly considerably older. No palaeopathology or sex determination could be made from the material.

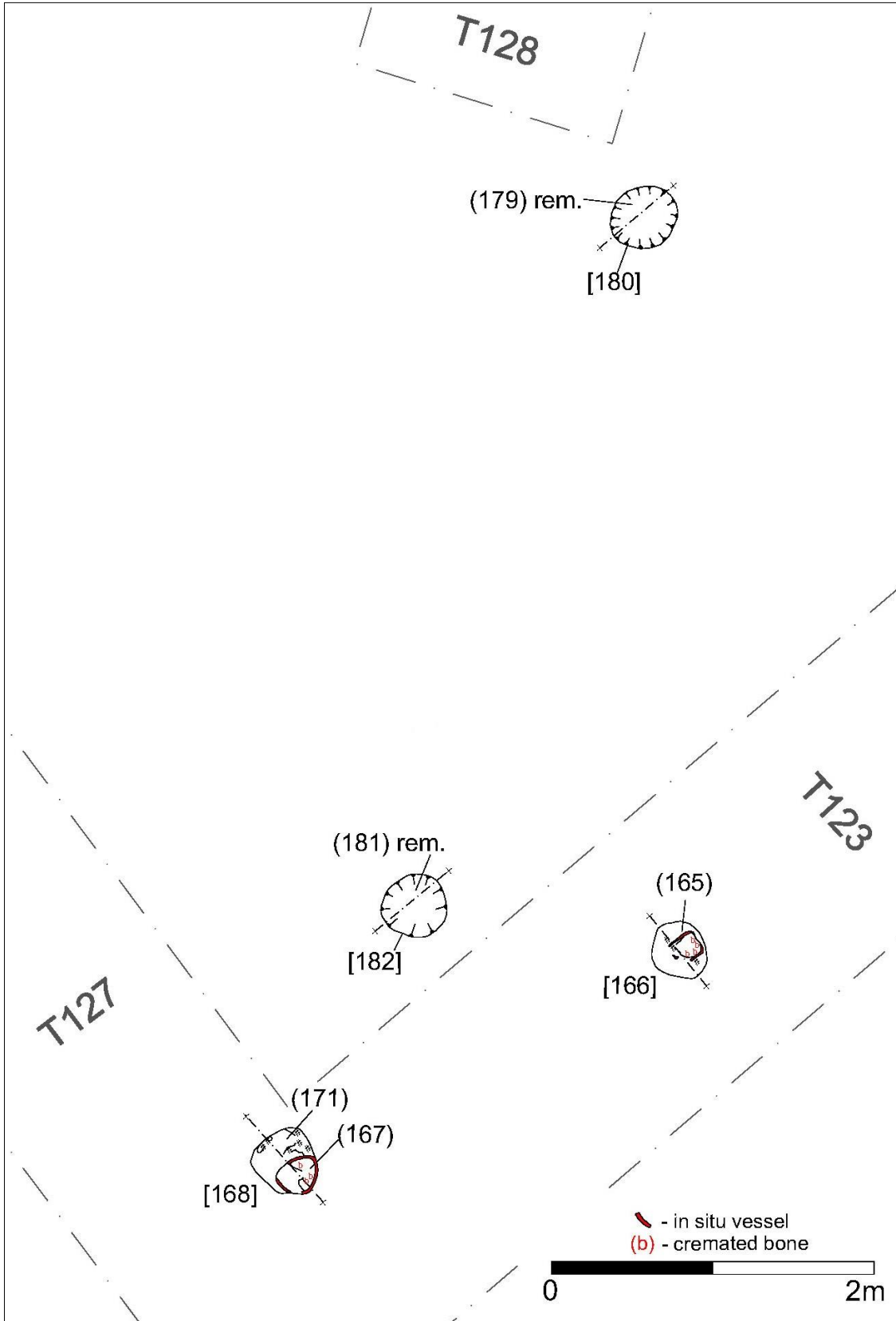


Figure 5: Cremations [166] and [168], and nearby features.

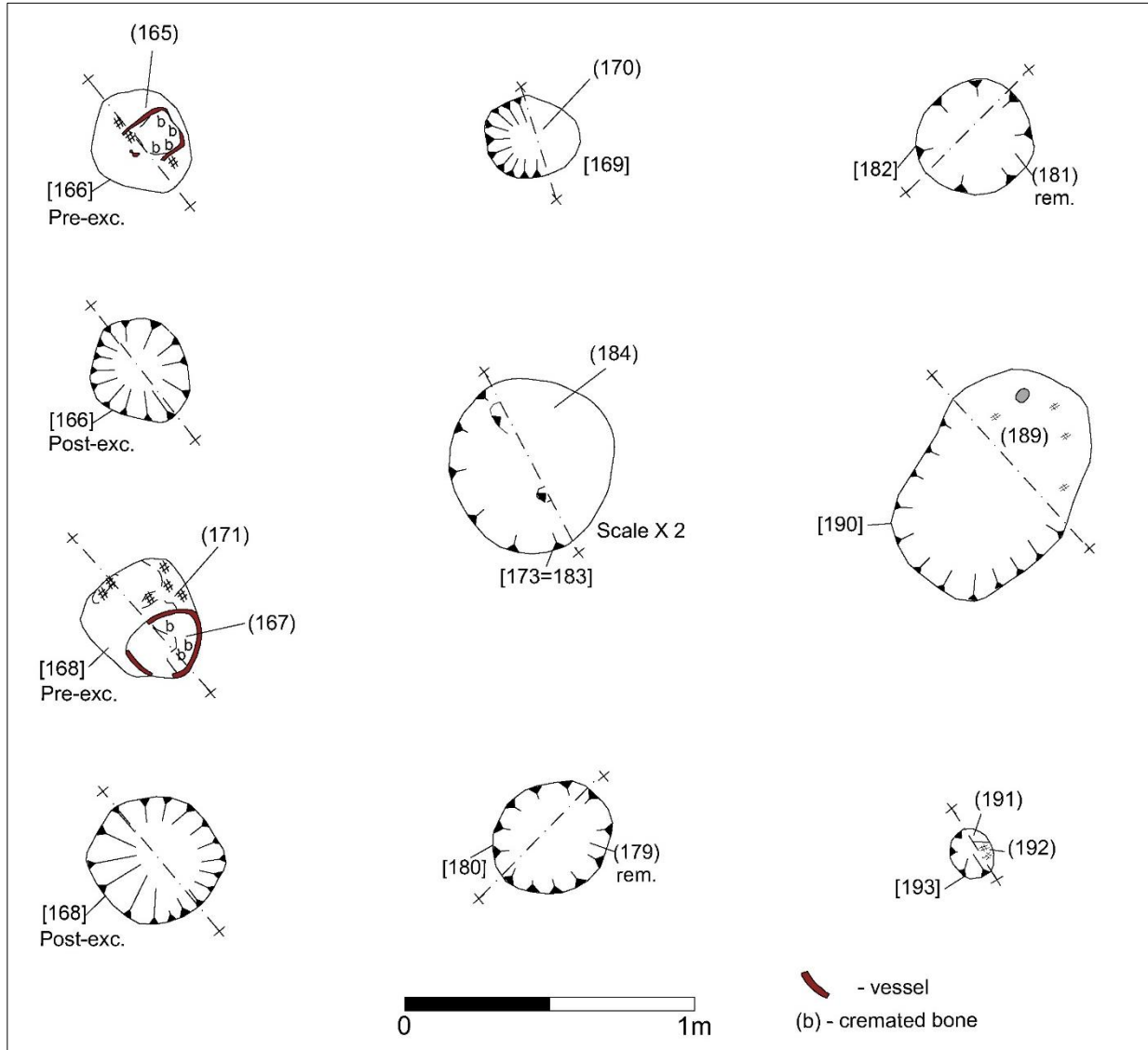


Figure 6: Features identified, plans.

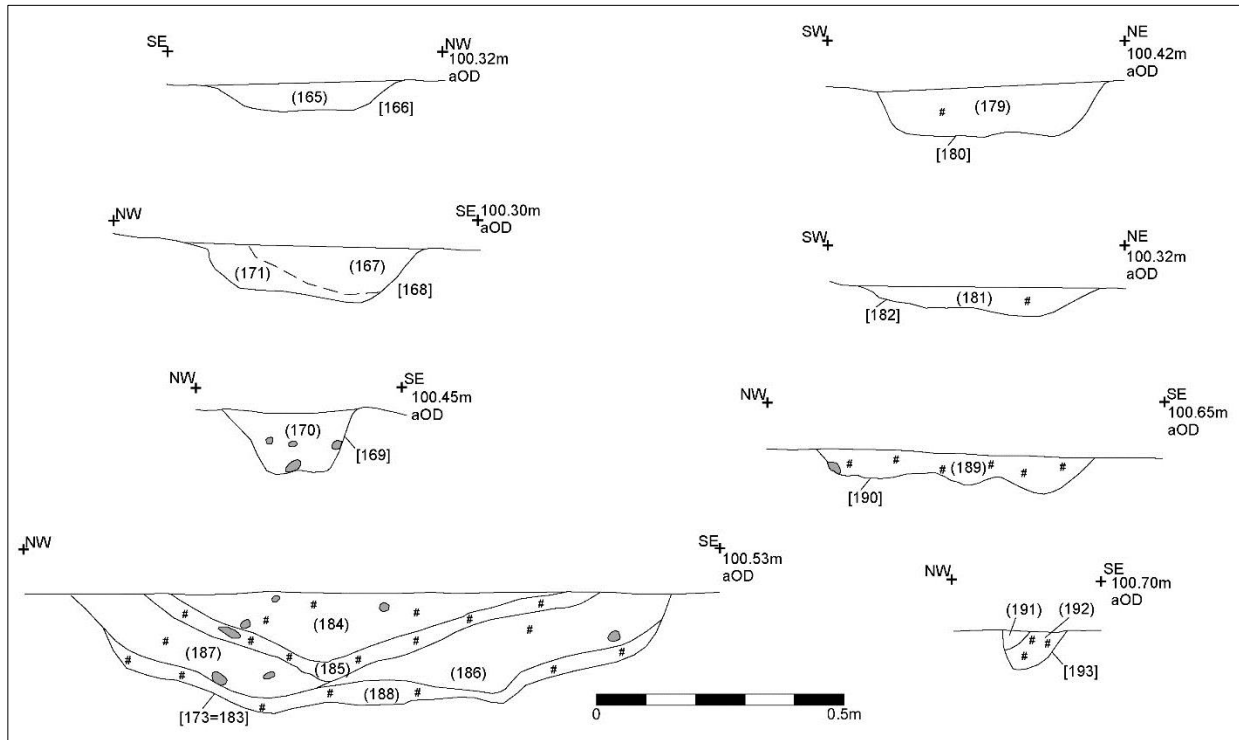


Figure 7: Features identified, sections.



Figure 8: Cremation [166] prior to excavation.



Figure 9: Cremation pit [166] after excavation.



Figure 10: Cremation [168] prior to excavation.



Figure 11: Cremation [168] continued, after removing the calcined bone, exposing remains of pottery vessel.

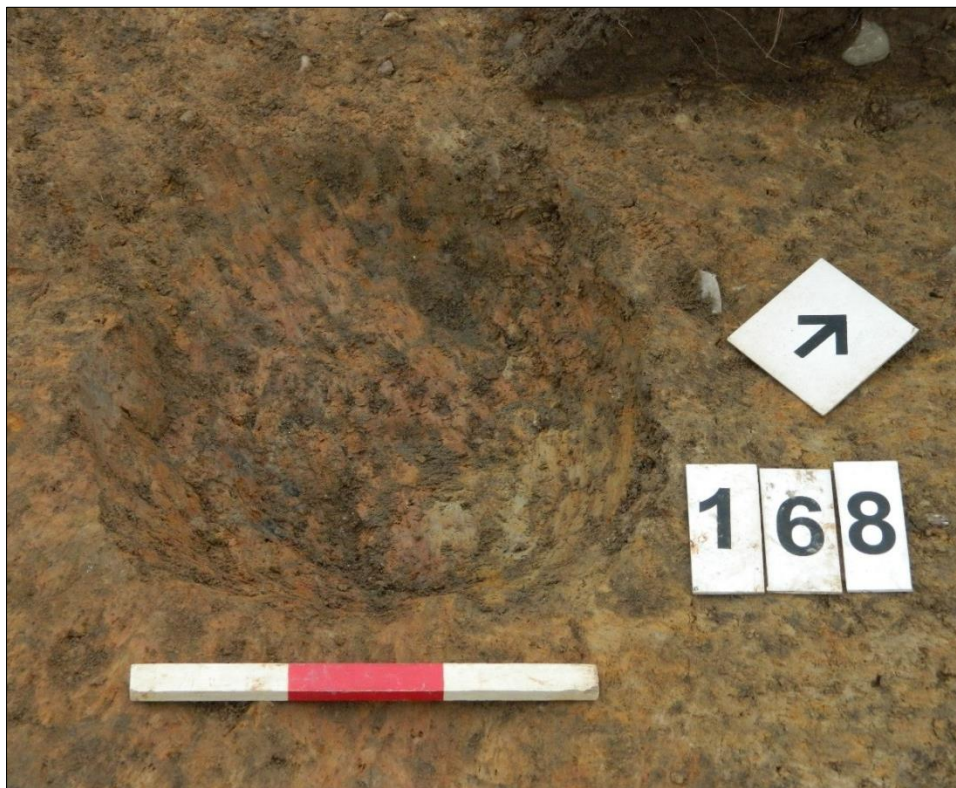


Figure 12: Cremation pit cut [168] after excavation.

Other features

Only a few further features were exposed within the stripped area. Just north of the two urned cremations a third possible cremation was investigated ([182]; Figure 5). Like the urned cremations, this was also severely truncated by ploughing. The feature comprised a small circular pit, 0.35m across and only 0.05m deep (Figure 13 - Figure 14). The fill (181) had rare flecks of bone and much charcoal, however the bone could not be identified as human at the analysis stage. Some four metres further north a similar feature pit [180] measured 0.45m by 0.36m across and 0.09m deep (Figure 5, Figure 15 - Figure 16). Again the fill (179) incorporated much charcoal and some burnt bone that again could not be further identified to species level. It seems reasonably likely that these two additional features are in some way related to the two urned cremations to the south.

The strip also exposed the other half of pit [173=183] seen in evaluation Trench 127, some 16m north of the cremations (Figure 4 - Figure 7, Figure 17 - Figure 18). This pit measured 1.2m in diameter and 0.22m in depth. A series of fills were identified, contexts (184-188). Primary fill (188) was a 0.03m lens thick of charcoally sand. The secondary fills (187-184) also formed similar thin tip lines with charcoal in the silty sand matrix. A fragment of fired clay was recovered from this feature, possibly a pottery sherd. Due to the presence of bone it was thought possible that this feature could be associated with pyre cleanings, however the bone that was recovered was not cremated and could not even be positively identified as human. Charcoal from the features was largely fragmentary with some indications of oak being present, but survival was too poor for any evidence of woodland management.

The only other features identified in the strip lay at the north-east corner of the area some 20m to the north of the cremation group (Figure 4). Pit [190] was an oval feature measuring 0.8m by 0.55m and just 0.08m deep (Figure 6 - Figure 7). The fill (189) was a pale grey silty sand with frequent charcoal, but no dating evidence. Five metres to the west was an isolated stakehole [193]. This was 0.1m across and 0.08m deep, with two fills (191) (192) (Figure 6 - Figure 7). The primary fill (192) was a dark silty sand, the secondary fill was redeposited natural sandy clay.

Very little other material has been identified in the vicinity. The original evaluation in 2015 had identified an isolated feature of uncertain origin 130 metres to the north (Figure 2, Trench 134), which produced a small amount of Iron Age pottery (Jarvis 2015-040). An unstratified denticulate flint was also recovered from this trench, probably of Neolithic or Bronze Age date. A single body sherd of Middle Bronze Age pottery thought also to be an urn, was also recovered, a further 70 metres to the north-east (Trench 140, *ibid.*).

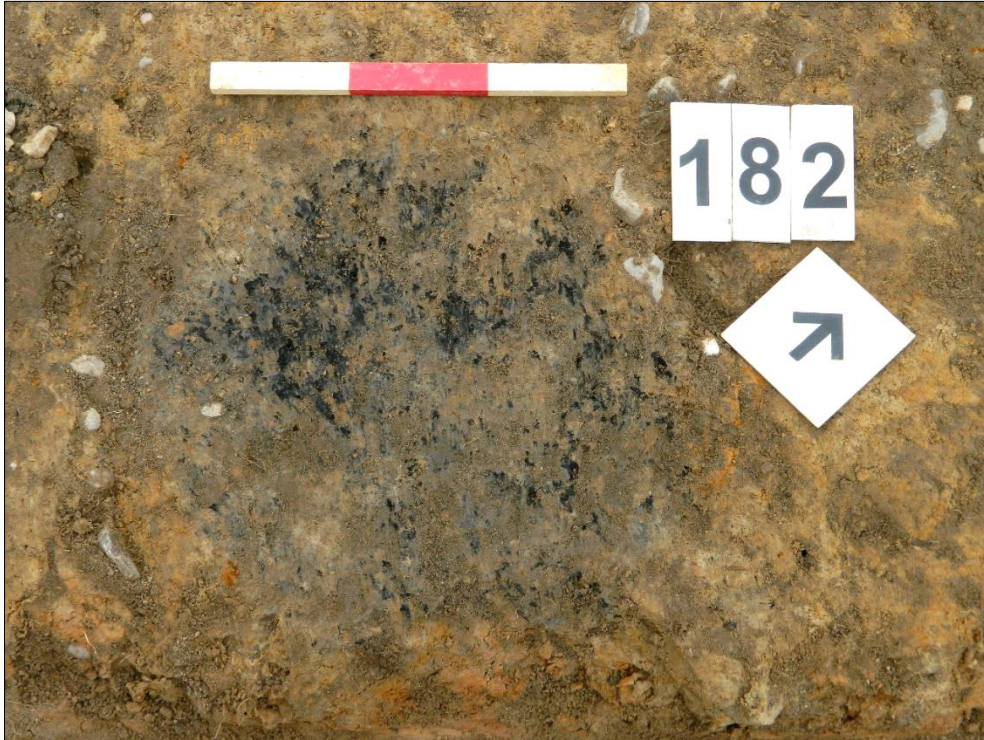


Figure 13: Feature [182] prior to excavation.



Figure 14: Feature [182] after excavation

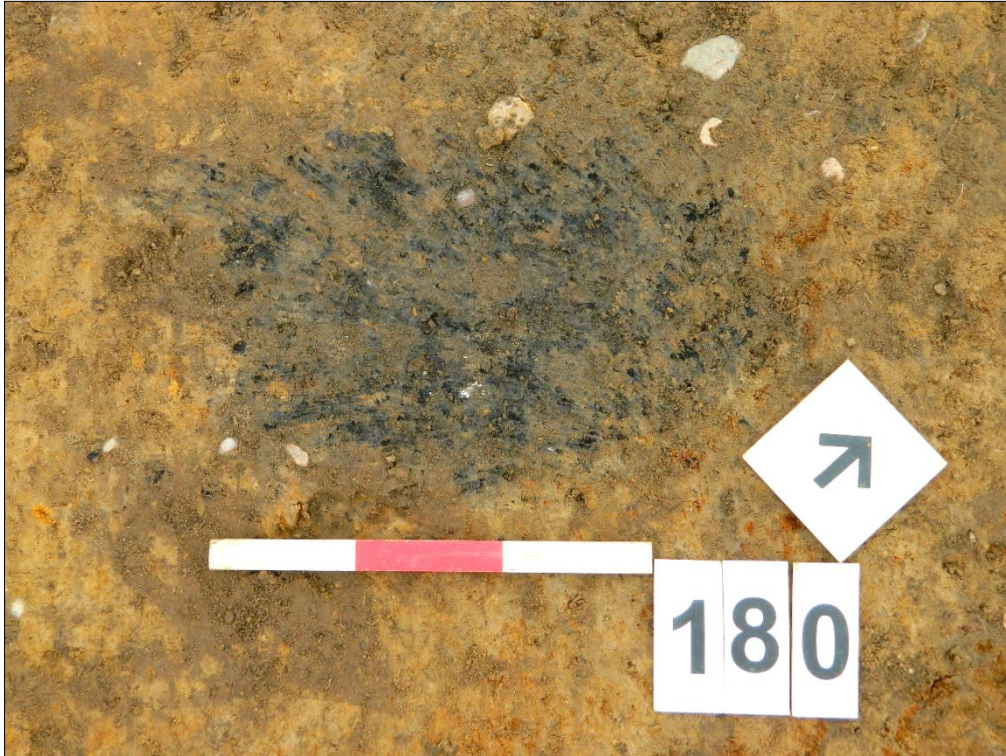


Figure 15: Feature [180] prior to excavation.



Figure 16: Feature [180] after excavation.



Figure 17: Feature [183] during excavation.



Figure 18: Feature [183] after excavation.

THE FINDS

Middle Bronze Age Cremation Urns and Iron Age Pottery by *Nicholas J. Cooper*

Introduction

A total of 141 sherds (1181g) of Middle Bronze Age pottery and 11 sherds (160g) of Iron Age pottery were retrieved during the evaluation stage, and no further pottery of this date was recovered during the subsequent area stripping. The Middle Bronze Age pottery comprises the remains of two cremation urns from Trench 123 [166] and [168] with another urn represented by a single sherd from Trench 140 [177], whilst the Iron Age pottery came from a single feature in Trench 134 [175]. A small fragment of fired clay was also retrieved from pit [173].

Methodology

The pottery has been analysed by form and fabric using the Leicestershire County Museums prehistoric pottery fabric series (Marsden 2011, 62, Table 1), with reference to the Prehistoric Ceramic Research Groups Guidelines (PCRG 1997), and quantified by sherd count and weight. Where possible, vessel dimensions have been recorded. The assemblage is recorded on an MS Excel workbook which is presented below (Tables 1 and 2).

The Middle Bronze Age Cremations

The fragmentary remains of three vessels, with body thicknesses of 15-20mm were recovered. All three are manufactured in clay fabrics employing crushed granodiorite as the principal opening material (Fabric R1), derived from the local Charnwood outcrops at Mountsorrel (Knight *et al.* 2003) with the angular inclusion size varying between 1mm and 5mm, and large flakes of the constituent biotite mica often separated from the rest of the rock fragment. Each vessel is oxidised orange to buff on the external surface and margin grey in colour in the core internal margin and surface either due to reduction of the clay fabric or, more likely, the presence of un-combusted carbonaceous material. The interior of the base of Vessel 1, shows signs of sooting.

Vessel 1 is represented by 60 fragmentary sherds belonging to a base of 130mm diameter from (165) [166], (Figure 19.1). Vessel 2 is represented by eighty body sherds and two from the base of a vessel with a girth of 180mm from (167) (171) [168] (Figure 19.2). Vessel 3 is a single body sherd from a vessel with a thickness of 15mm from (178) [177], which was too small to gauge the diameter.

Table 1: Quantified record of Middle Bronze Age pottery

Middle Bronze Age Pottery from Area 4 (2015 Evaluation)							
Trench	Context	Cut	Fabric	Form	Diameter	Sherds	Weight
123	165	166	R1	Urn	130mm base	60	440
123	167	168	R1	Urn	180mm girth	50	500
123	171	168	R1	Urn		30	200
140	178	177	R1	Urn		1	41
Total						141	1181



Figure 19 Middle Bronze Age cremation urns.

The identification of these cremation vessels as Middle Bronze Age is supported by radiocarbon dates derived from the associated human bone (See Jarvis, below). The bone from context (165) yielded a date of 3052±30BP, 1404-1227calBC, and that from (167) a date of 3077±30BP, 1419-1262calBC. They therefore appear to be contemporary with the cremation vessels from Area 1, 2km or so to the south east which included distinctive finger-impressed applied strap decoration belonging to the Deverel-Rimbury Tradition (see Cooper and Phillips report on MBA urns from Area 1). The bases of three Middle Bronze Age cremation vessels of similar size to these, but in a grog-tempered fabric, were also excavated at nearby Countesthorpe (Barclay 2012, 41), the modelled radiocarbon dates of 1500-1390 cal BC and 1500-1310 cal BC, suggesting their deposition in the early part of the Middle Bronze Age. Middle Bronze Age urn fragments of the Deverel-Rimbury tradition, including one with a finger-impressed strap cordon were also recovered from Willow Farm, Castle Donnington (Woodward 2017, 16-18), although no radiocarbon determinations were undertaken for that site. Whilst the typological affinities of the vessels cannot be precisely identified, due to the lack of the upper parts of the urns, the radiocarbon dates place them within the same broad period as the sequence of ‘Urnfield’ cemeteries at Eye Kettleby near Melton Mowbray during the Early to Middle Bronze Age, supported by a comprehensive radiocarbon sequence (Finn 2011, 44) and the cremation cemeteries at Coneycgre Farm, Nottinghamshire, Pasture Lodge Farm, Lincolnshire, without radiocarbon dating (Allen *et al* 1987). Middle Bronze Age pottery from barrel and bucket urns in the same granodiorite-tempered fabric (R1, formerly RQ1) was recovered from a ditch at Elms Farm, Humberstone, supported by radiocarbon date of 1448-1130 cal BC (Marsden 2000, 172, fig.47).

The Iron Age Pottery

Table 2 details the remains of the vessel from (176) which was a jar, in good condition, with a flattened bead rim of diameter 280mm and the base of a lug handle on a separate sherd, probably from the same vessel (Figure 20.1 & .2).

Table 2: Quantified summary of Iron Age pottery

Iron Age Pottery from 2015 Evaluation									
Trench	Context	Cut	Fabric	Form	Type	Rim	Diameter	Sherds	Weight
134	176	175	R1 Sy	Jar	handled	Flatbead	280mmR	11	160

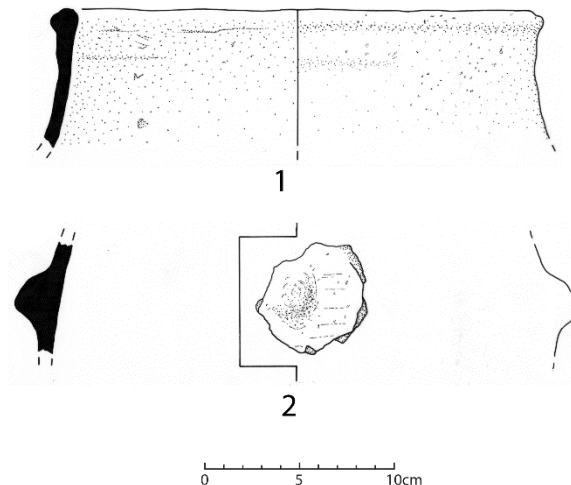


Figure 20 Iron Age pottery from the Area 4 evaluation.

The fabric was the distinctive R1, opened with angular fragments of granitic rock up to 4mm with no plates of biotite mica, suggesting that the rock may be syenite from the nearby Croft deposit, as suggested at sites such as the enclosures at nearby Enderby (Marsden 2004, 24), rather than granodiorite from Mountsorrel which is typical of the sites closer to Charnwood such as Humberstone and Beaumont Leys (Marsden 2011; Knight *et al.* 2003). Vessels with lug handles are relatively unusual within the Middle-late Iron Age East Midlands Scored ware tradition (Elsdon 1992) but examples are known from a number of Northamptonshire sites such as Weekley Ceramic Phase 1 (175 BC- AD20) which had scored decoration (Jackson and Dix 1987, fig31.4), whilst an unscored example (as appears to be the case here) come from the Middle Iron Age settlement, supported by radiocarbon dating, at Pineham North, Upton, Northampton (Perrin and Cooper in prep). The lack of scored decoration on the present vessel, might encourage a date closer to the Middle Iron Age but is difficult to judge on the evidence of a single vessel.

The Cremated Human Bone by *Katie Keefe & Malin Holst*

York Osteoarchaeology Ltd

Report No 1117, April 2017

Summary

York Osteoarchaeology Ltd was commissioned by University of Leicester Archaeological Services (ULAS) to carry out the osteological analysis of three assemblages with cremated bone recovered from Old Warren Farm (Area 4), Lubbesthorpe, Leicestershire (SK 5288 0206).

All of the cremated human bone assemblages were thought to date to the Bronze Age, two of which were urned, the third thought to be an un-urned assemblage but was in fact not definitely cremated human bone, consisting instead of two fragments of unburnt unidentifiable bone. The assemblages appear to have been quite isolated, although extensive plough damage may have removed evidence of insubstantial features.

The largest quantity of bone from the cremation deposits was recovered from an urned burial [168], which constituted over 13.4% of the quantity of bone one would expect from one individual.

The cremation practices involved the burials being quite thoroughly burned. The quantity of cremated bone recovered is low however, which may either be the result of funerary practices or preservation biases. Moderate fragmentation of all of the cremated bone assemblages was observed, with the majority of bone in the burials deriving from the 2mm sieve.

Osteological analysis found that all of the burials contained the remains of adults. Despite the moderately heavy fragmentation of the bone, it was still possible to positively identify skeletal elements in all but one of the burials.

Acknowledgements

York Osteoarchaeology Ltd would like to thank Wayne Jarvis and Nick Cooper of the University of Leicester Archaeological Services for their help and support.

1.0 INTRODUCTION

In March 2017, York Osteoarchaeology Ltd was commissioned by the University of Leicester Archaeological Services (ULAS) to carry out the osteological analysis of seven assemblages of cremated human bone. The skeletal remains were recovered during excavations at Old Warren Farm (Area 4), Lubbesthorpe, Leicestershire (SK 5288 0206) prior to the development of New Lubbesthorpe, a 'new town'. The majority of the New Lubbesthorpe site evaluation work has previously revealed little of archaeological significance, although a large Iron Age to transitional Roman site was identified at the far south end of the development, approximately 2km from where the cremation burials were found.

Table 3 Summary of cremated bone assemblages

Cut No	Fill No	Feature Type	Period	Artefacts and Inclusions	Bone Colour	Preservation	Weight (g)	Percentage of Expected Quantity of Bone
166	165	Urned	Bronze Age	Bucket Urn	White	Moderate	14.2	0.9%
168	167/171	Urned Cremation pit	Bronze Age?	Urned (incomplete)	White	Moderate	151.0	9.3%
169	170	Pit?	Bronze Age?	-	White	Moderate	0.1	0.006%

*Minimum number of two individuals represented in the cremation

Within the development, a small group of cremation burials was excavated at Area 4 (Old Warren Farm). These burials were very plough damaged and consisted of two urned cremation burials in cuts [166] and [168]. Nearby features also produced charcoal and further small amounts of bone, including cuts [169] and [173] (see Table 3). The latter was thought to contain pyre cleaning debris, however, upon analysis the flecks of bone recovered (less than 0.1g) were in fact found not to be cremated and could not be positively identified as human and this has been excluded from the remainder of the report. There was no convincing occupation evidence associated with these cremation burials, perhaps due to the heavily ploughed nature of the area. The urns were also thought to date to the Middle Bronze Age.

1.1 AIMS AND OBJECTIVES

The skeletal assessment aimed to determine age and sex, as well as any manifestations of disease from which the individuals may have suffered. Additionally, information was sought regarding the cremation techniques.

1.2 METHODOLOGY

The cremated bone was sieved through a stack of sieves, with 10mm, 5mm and 2mm mesh sizes. The bone recovered from each sieve was weighed and sorted into identifiable and non-identifiable bone. The identifiable bone was divided into five categories: skull, axial (excluding the skull), upper limb, lower limb and long bone (unidentifiable as to the limb). All identifiable groups of bone were weighed and described in detail.

2.0 OSTEOLOGICAL ANALYSIS

Osteological analysis is concerned with the determination of the demographic profile of the assemblage based on the assessment of sex, age and non-metric traits. This information is essential in order to determine the prevalence of disease types and age-related changes. It is also crucial for identifying gender dimorphism in occupation, lifestyle and diet, as well as the role of different age groups in society.

2.1 PRESERVATION

Skeletal preservation depends upon a number of factors, including the age and sex of the individual as well as the size, shape and robusticity of the bone. Burial environment, post-depositional disturbance and treatment following excavation can also have a considerable impact on bone condition. Preservation of human remains is assessed subjectively, depending on the severity of bone surface erosion and post-mortem breaks, but disregarding completeness.

Preservation was assessed using a grading system of five categories: very poor, poor, moderate, good and excellent. Excellent preservation implied no bone erosion and very few or no post-depositional breaks, whereas very poor preservation indicated complete or almost complete loss of the bone surface due to erosion and severe fragmentation.

The Bronze Age cremated bone survived in moderate condition, with no apparent differences in the state of preservation between the urned and un-urned assemblages. Instead, it is possible that post-burning processes, such as raking of the pyre while the bone was still hot, had a greater effect on the bone preservation. All of the cremations suffered from post depositional alteration, to some extent, and it is likely that bone preservation was affected as a result.

The cremated bone assemblages were in a moderate state of preservation, exhibiting a powdery surface texture with rounded edges. Moderate warping and bone cracking, which occurs commonly during the cremation process, was evident in all of the cremated bone. The fragment size of cremated bone is frequently attributed to post-cremation processes. This is because skeletal elements retrieved from modern crematoria tend to be comparatively large before being ground down for scattering or deposition in the urn. Bone is also prone to fragmentation if it is moved while still hot (McKinley 1994, 340).

The majority of the deposits contained bone fragments that were smaller than 10mm in size (Table 4), with most of the bone being derived from the 2mm sieve.

Table 4 Summary of cremated bone fragment size

Cut No	10mm (g)	10mm (%)	5mm (g)	5mm (%)	2mm (g)	2mm (%)	Residue	Weight (g)
166	1.0	7.0	6.1	43.0	7.0	49.3	0.1	14.2
168	16.5	10.9	53.8	35.6	74.4	49.3	6.5	151.0
169	0.0	0.0	0.0	0.0	0.1	100.0	0.0	0.1

It appears that the fragmentation of the bone was quite severe. The urns provided some protection from post-depositional changes. However, the fact that very little bone from the cremation burials was over 10mm suggests that the bone from these burials was subject to disturbance whilst still hot.

The bone assemblages had been thoroughly burned; causing the complete loss of the organic portion of the bone and producing a white colour in all but one of the assemblages (see Table 1). The whiteness of the bone suggests that the cremation act had reached sufficient temperatures, or had been allowed to burn for long enough to fully calcine. The pyre may have been well constructed and allowing adequate airflow for optimal burning. According to McKinley (1989), the body requires a minimum temperature of 500° Celsius over seven to eight hours to achieve complete calcination of the bone.

The bone assemblages ranged in weight from 0.1g to 151g, with a mean weight of 55.1g. The amount of bone retrieved from the burials weighed significantly less than the average bone weight produced by modern crematoria, which tends to range from 1,000.5g to 2,299.1g with a mean of 1,625.9g (McKinley 1993). Wahl (1982, 25) found that archaeologically recovered remains of cremated adults tend to weigh less (between 250g and 2,500g) as a result of the commonly practised custom of selecting only some of the cremated bone from the pyre for inclusion in the burial, thereby representing a symbolic, or token, interment. The greatest proportion of bone was recovered from cremation pit [168], which contained 151.0g of cremated bone.

Between 0% and 72% of the cremated bone could be identified. One of the burials [169] contained no identifiable fragments at all, and could not be positively identified as human. Despite the level of fragmentation of the bone, it was possible to identify skeletal elements in the other two deposits (Table 5). Of the material that contained identifiable human bone, between 66.2% and 72% of the bone from each burial could be identified (Table 3).

Table 5 Summary of identifiable elements in the cremation burials

Cut No	Skull (g)	Skull (%)	Axial (g)	Axial (%)	UL (g)	UL (%)	LL (g)	LL (%)	UIL (g)	UIL (%)	Total ID (g)	Total ID (%)	Total UID (g)	Total UID (%)
166	6.7	47.2	0.1	0.7	0.2	1.4	0.0	0.0	2.4	16.9	9.4	66.2	4.8	33.8
168	3.4	2.3	5.2	3.4	3.7	2.4	25.2	16.7	71.1	47.1	108.6	72.0	42.4	28.0
169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	100

Key: UL – upper limb; LL – lower limb; UIL – unidentified long bone

The majority of identifiable bones derived either from the skull, upper and lower limbs, or unidentified long bone shaft fragments. These included recognisable fragments of orbital rims, temporal bones, fragments of mandible and maxilla, and femoral and tibia shaft fragments. It is not surprising that skull fragments were the most abundant skeletal element recognised in three of the five assemblages with identifiable fragments, since the cranial vault is very distinctive and easily recognisable, even when severely fragmented. Skull fragments often form a large proportion of identified bone fragments in cremated remains (McKinley 1994). Bones representing all parts of the body were recovered, including small hand phalanges (bones in the fingers), fragments of vertebral bodies and ribs. However, unspecified long bone fragments also formed a significant proportion of identifiable remains. With regards to the preferential selection of skeletal elements, no clear trends were observed in the remains from Area 4.

2.2 MINIMUM NUMBER OF INDIVIDUALS

A count of the ‘minimum number of individuals’ (MNI) recovered from a cemetery is carried out as standard procedure during osteological assessments of inhumations in order to establish how many individuals were represented by the articulated and disarticulated human bones (without taking the archaeologically defined graves into account). The MNI is calculated by counting all long bone ends, as well as other larger skeletal elements, such as the hip joints and cranial elements.

It is not possible to calculate the MNI for cremation burials, because only a token selection of bone from the pyre tends to be buried. Double burials can be identified only if skeletal elements are duplicated, or if skeletons of different ages are represented in one burial.

2.3 ASSESSMENT OF AGE

Age was determined using standard ageing techniques, as specified in Scheuer and Black (2000a; 2000b) and Cox (2000). Age estimation relies on the presence of the pelvis and uses different stages of bone development and degeneration in order to calculate the age of an individual. Age is split into a number of categories, from foetus (up to 40 weeks in utero), neonate (around the time of birth), infant (newborn to one year), juvenile (1-12 years), adolescent (13-17 years), young adult (ya; 18-25 years), young middle adult (yma; 26-35 years), old middle adult (oma; 36-45 years), mature adult (ma; 46+) to adult (an individual whose age could not be determined more accurately as over the age of seventeen).

Because none of the criteria normally used for age determination were represented in any of the burials, age determination was based on less reliable criteria.

The bone robusticity and dental development suggested that all of the individuals from the burials containing identifiable human bone were at least sixteen years old, but may have been considerably older.

2.4 SEX DETERMINATION

Sex determination is usually carried out using standard osteological techniques, such as those described by Mays and Cox (2000). Assessment of sex in both males and females relies on the preservation of the skull and the pelvis and can only be carried out once sexual characteristics have developed, during late puberty and early adulthood.

None of the burials contained any diagnostic skeletal elements.

2.5 METRIC ANALYSIS

Cremated bone shrinks at an inconsistent rate (up to 15%) during the cremation process and it was therefore not possible to measure any of the bones from these burials.

2.6 NON-METRIC TRAITS

Non-metric traits are additional sutures, facets, bony processes, canals and foramina, which occur in a minority of skeletons and are believed to suggest hereditary affiliation between skeletons (Saunders 1989). The origins of non-metric traits have been extensively discussed in the osteological literature and it is now thought that while most non-metric traits have genetic

origins, some can be produced by factors such as mechanical stress (Kennedy 1989) or environment (Trinkhaus 1978). No evidence was found of non-metric traits.

PATHOLOGICAL AND DENTAL ANALYSIS

The analysis of skeletal and dental manifestations of disease can provide a vital insight into the health and diet of past populations, as well as their living conditions and occupations. Pathological conditions (disease) can manifest themselves on the skeleton, especially when these are chronic conditions or the result of trauma to the bone. The bone elements to which muscles attach can also provide information on muscle trauma and excessive use of muscles. All bones and teeth recovered were examined macroscopically for evidence of pathological changes.

A number of tooth fragments were recovered, but none of these showed evidence for pathology.

Humans require an adequate supply of nutrients during childhood to support normal growth and development. Particular conditions are associated with the lack of specific nutrients, for example scurvy results from a diet lacking in vitamin C (found in fresh fruit and vegetables, and marine fish) and rickets from a lack of vitamin D (produced by the body during exposure to sunlight). Diagnosis of nutritional deficiencies in ancient populations is complicated by the fact that the skeletal changes can be difficult to diagnose, and that nutritional deficiencies tend not to occur in isolation (a diet deficient in one nutrient is very often deficient in others). In addition, many of the skeletal changes that develop in a child as a response to nutritional deficiency will be largely remodelled by the time the individual reaches adulthood (Ortner 2003, Lewis 2017).

FUNERARY RITUAL

A discrete area of funerary activity was identified at Area 4 (Old Warren Farm, Lubbesthorpe). These were plough damaged and consisted of two urned cremations in cuts [166] [168], both believed to date to the Bronze Age. A nearby feature also produced charcoal and small amounts of burnt bone [169]. There was no occupation evidence associated with these cremation burials, perhaps due to the heavily ploughed nature of the area. A nearby pit [183] with charcoal fills and a shedr from an urn may be rakings from the pyre but did not produce any cremated bone to support this theory.

According to McKinley (1997, 137) widely varying quantities of human bone have been recovered from cremation burials dating to the Bronze Age; in the 4,000 cremation burials of undisturbed adults analysed by her, the amount of bone varied between 57 and 2,200g. No associations as to the quantity of bone and the age and sex of the individual buried have been ascertained (ibid). 'To date, however, only one apparent pattern in the weight of bone in a burial has been evident and that is with relation to "primary" Bronze Age barrow burials. Of the 18 such burials so far examined by the writer [McKinley], all consistently produced weights of bone of between 902.3g and 2747g with an average of 1525.7g.' (ibid, 142).

Kirby Muxloe lies approximately 2km north of the development, where six cremated bone assemblages were recovered from Glenfield Park during archaeological excavations in 2013 (Keefe and Holst 2015a). At this site, all of the assemblages of cremated human bone were recovered from pits located within a 50m diameter enclosure believed to date to the Iron Age. The burials contained comparatively small amounts of bone, representing between 0.03% to the 23.6% of the amount of bone expected from a modern cremation. Osteological analysis found

that all of the burials contained the remains of adults. The bone was relatively well-calcined and had but had only been cremated thoroughly in one out of six cases (ibid).

Excavations at Cadeby Quarry, Kirkby Mallory, Leicestershire (approximately 7km to west of the development) uncovered a Bronze Age ring ditch with associated funerary activity, along with Iron Age and Roman enclosures, and two areas of Saxon settlement (Higgins 2015). Although seven funerary urns dating to the Bronze Age were identified, only one contained cremated bone. However, all of the deposits had been severely truncated and only the base of the urns had survived, which would suggest that post-depositional processes were to blame for the paucity of the cremated remains (Keefe and Holst 2015b). The vessel that contained the surviving cremation was a Collared Urn in a grog-tempered fabric with a short collar and a campanulate internal rim. The vessel's collar was decorated with a herring bone pattern, formed from oblique tapering stab marks on both the internal and external surfaces, the body of the urn was undecorated (Cooper 2015). The vessel was most closely paralleled by an example from Coneygre Farm, Nottinghamshire (Allen et al. 1987, 199. fig.10.53).

DISCUSSION AND SUMMARY

Excavations at Area 4, Old Warren Farm Lubbethorpe, Leicestershire identified a discrete area of funerary activity at the site which produced two cremation burials dating from the Bronze Age. Both of the burials appeared to have been heavily plough damaged.

The cremation burials recovered appear to have been relatively isolated, although extensive plough damage may have removed evidence of shallow features. The bone was quite well calcined but the fairly small amounts of material may have either been the result of differential funerary practices or preservation biases.

Despite the moderately heavy fragmentation of the burials, it was still possible to positively identify skeletal elements in both of the burials. The bone robusticity and dental development suggested that the individuals buried were adults being at least sixteen years old, but may have been considerably older.

FUTURE RECOMMENDATIONS

It is recommended that the undated remains undergo AMS dating, if a satisfactory date cannot be obtained from associated deposits. It may also be possible to use histological techniques to ascertain whether the unidentified cremated bone is human or animal.

Charred Plant Assessment by Wayne Jarvis and Wendy Smith

The charred plant material (including charcoal) from Area 4 was assessed by Wendy Smith as part of the larger Lubbesthorpe project. The results are tabulated below. Small amounts of charcoal fragments were identified, and the overall results for charred plant remains and charcoal was assessed as poor. Pit [173], possible pyre cleanings, produced a larger charcoal assemblage. The material was mostly in the 2mm fraction, no roundwood was identified, and only *cf* oak was observed. Due to the very limited potential, no further work was carried out at analysis stage.

Table 6 Assessment of charred plant material (including charcoal)

Sample No	CPR Flot Part No	Context No	Cut No	Feature Type	Floated Volume (L.)	Flot Vol. (ml)	Grain	Chaff	Weeds	Other Charred	Bone	>2mm Charcoal	Mollusc
11	1 of 1	165	166	cremation	5 L	10 ml	-	-	-	-	-	++	-
12	1 of 1	167	168	cremation	2 L	15 ml	-	-	-	-	-	+++	-
13	1 of 1	171	168	cremation	10 L	75 ml	-	-	-	-	-	+++	-
14	1 of 1	170	169	post/ pit fill	4 L	280 ml	-	-	-	++ HNS	-	+++	-
16	1 of 2	179	180	pit fill	10 L	< 5 ml	-	-	-	-	-	-	-
17	1 of 1	181	182	?cremation	10 L	22 ml	-	-	+	+(tuber)	-	++	-
18	1 of 1	185	183	fire pit fill	10 L	50 ml	-	-	-	-	-	+++	-
19	1 of 1	188	183	fire pit fill	10 L	20 ml	-	-	-	-	-	+++	-
20	1 of 2	189	190	pit fill	10 L	25 ml	-	-	-	-	-	++	-
22	1 of 1	195	197	posthole fill	3.5 L	< 10 ml	-	-	-	-	-	++	-

The Radiocarbon Dates *by Wayne Jarvis*

Calcined bone was selected for radiocarbon dating during analysis of the cremation material by Malin Holst of York Osteoarchaeology. Two samples were sent off to the Scottish Universities Environmental Research Centre (SUERC), one each from calcined human bone extracted from the urned cremations (contexts 165 and 167). The returned dates were as follows:- 3052±30BP, 1404-1227calBC (95.4% probability, SUERC-75446) and 3077±30BP, 1419-1262calBC (95.4% probability, SUERC-75447) respectively. These dates are towards the beginning of the Middle Bronze Age for the region (1500-1000BC; Clay 2001). The calibrated date ranges are shown in Figure 21.

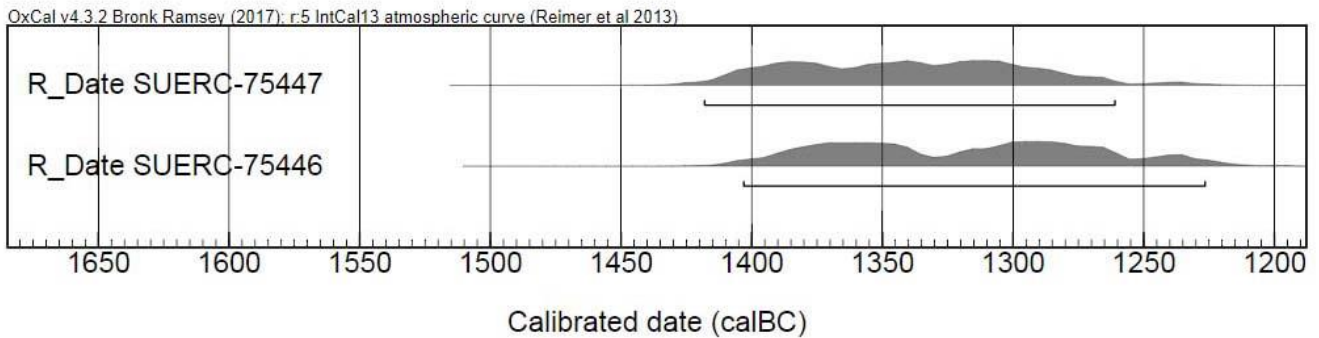


Figure 21: Calibrated dates (calBC) for the Area 4 cremations.

7. Discussion

The presence of this small cremation group is of some significance, primarily as the group provides the first real indications of activity of Middle Bronze Age date in the area. Prior to this the sole evidence was a stray find of a palstave some 600 metres to the west. In fact activity of this period is scarcer than for the late Neolithic/Early Bronze Age period across the East Midlands (Clay 2001). This lack of previous evidence might be partly explained by lack of fieldwork, but also the low visibility of both Middle Bronze Age cemeteries and occupation sites is an issue. Nevertheless the current project has involved considerable trial-trenching in the surrounding area and there is still no substantive evidence for occupation nearby. Traditionally, a spatial connection between burials and occupation sites has been posited for the Middle Bronze Age (e.g. Darvill 1996, 116-7). Recent work has refined this notion, with a large study indicating that actually only 26% of Middle Bronze Age cremation sites were within 300m of a known potential Bronze Age settlement (Caswell and Roberts 2018, 16). There is the real possibility therefore that the Area 4 cremations were relatively isolated from occupation, and the siting of the cremations on the edge of a slight plateau and on what may have been a somewhat liminal location. This could have been relatively marginal land and only newly occupied at this time. At the Area 1 site one kilometre to the east (Clark and Jarvis forthcoming) two urned cremations were excavated sited on a slight terrace overlooking lower ground. They were fairly plough damaged but confirmed by radiocarbon dating to also be of Middle Bronze Age date. Very close to these urns was further burnt bone, most-likely an un-urned cremation. Stripping of this area exposed further features *c.* twelve metres to the west including four roundhouses with associated pits, postholes and gullies and also known to have been of Middle Bronze Age date from pottery and radiocarbon dating. At Leicester Road, Countesthorpe some 4.5 miles to the south east of Lubbesthorpe, two urned cremations were excavated adjacent to a third deposit which contained urn fragments but no cremated bone (O'Neill 2012). The burial site was situated on a slight ridge of ground, and quite isolated from other activity. The cremations were also Middle Bronze Age in date. Although some consideration of the loss of burials (and other features) from plough truncation should be made, there are definite similarities between these small cemeteries. These similarities suggest a tradition of small (perhaps familial) groups of two to three cremations, located on areas of somewhat marginal or liminal slightly higher ground, and with no surviving evidence for associated activity or differentiation in treatment.

Caswell and Roberts (2018) describe a package of traits that may be characteristic of Middle Bronze Age burial practices on a national scale. Firstly, the absence of strong evidence for a nearby funerary pyre led to the conclusion that cremations were probably carried out elsewhere (ibid., 17). It is also clear from the evidence that during the funerary process not all individuals were treated in a way that would lead to their visibility in the archaeological record. Other traits include that cremations may be found “either as isolated features or in small clusters” and only occasionally in close proximity to Bronze Age settlements (ibid., 14). These clusters may be in small groups (n.b. *three* being common, ibid., 16), hence “relatively few sites can be characterised as community cemeteries... instead cemeteries or grouping of burials represent kin groups,” (ibid., 1). Clearly the Area 4 cremations fall into this category of small clusters, perhaps representing a kin group, a pattern quite different to the much larger (and what are now thought to be less common) community cremation cemeteries of between ten and thirty individuals (ibid. 16).

8. Conclusions

A small group of features conceivably all of Middle Bronze Age date were identified at Area 4 (Old Warren Farm). The features were quite truncated by plough activity but most significantly they include two urned cremations, alongside one or more potentially related features. The evidence is that of a Middle Bronze Age flat cremation cemetery, with no indications of them being demarcated with a monument (either contemporary or reuse of an earlier feature). The urns were buried more or less upright in small pits. Near to the urns were deposits that seem to have been related but were not in any way formal burials. The process of cremating the bone was quite effective and although the remains were partial, the cremations could be identified as adults. The small amount of cremated bone is partly due to truncation, but also reflects the practices of the time where incomplete burial was commonplace. The urns typologically belong to the Deverel-Rimbury Tradition being Middle Bronze Age in date; this is confirmed by the radiocarbon dates which indicates a date early in the Middle Bronze Age (14th-13th century cal BC). The group of cremations can be seen to belong to a practice that was quite widespread in the period and consisted of small clusters of burials, perhaps representing kin groups, and often relatively isolated from other activity. The cremation group from Area 4 has provided new evidence for activity of the Middle Bronze Age period in the area, and also added to our knowledge and understanding of Prehistoric burial practices in the region.

9. Publication and Archive

The site archive will be held by the Leicestershire County Council Museum Services under the Accession No. X.A112.2011. It forms part of the larger archive with the same accession number for the New Lubbesthorpe project.

A summary of this report will appear in due course in the *Transactions the Leicestershire Archaeological and Historical Society*. The University of Leicester Archaeological Services supports the Online Access to the Index of Archaeological Investigations (OASIS) project. The online OASIS data entry has been completed detailing the results of the project (see Appendix 5 of this report). This is digitally accessible through The Archaeological Data Services (<http://archaeologydataservice.ac.uk/>).

10. Acknowledgements

Thanks are extended to the client Mather Jamie and Planters (groundworks) for their help and cooperation. I am also particularly grateful to the farmer Mark Smith for cooperation during site works. The fieldwork was carried out by Wayne Jarvis with assistance from Nathan Flavell. I am grateful to Katie Keefe & Malin Holst (York Osteoarchaeology), Nicholas J. Cooper and Mike Hawkes (ULAS), and Wendy Smith (University of Birmingham) for their specialist input. Radiocarbon determinations were provided by the Scottish Universities Environmental Research Centre (SUERC). The project was managed by Patrick Clay and Vicki Score also of ULAS.

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Appendix 1. OASIS Data Entry

	OASIS ID	Universi-0359947
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PROJECT DETAILS	Project Name	Area 4 (Old Warren Farm, Lubbesthorpe), New Lubbesthorpe, Leicestershire
	Start/end dates of field work	02-09-2015 to 10-09-2015
	Previous/Future Work	Yes/No
	Project Type	Recording Project
	Site Status	None
	Current Land Use	Agriculture (pasture)
	Monument Type/Period	Funerary site - burial - cremation burials, pits, post-holes
	Significant Finds/Period	Pottery, human bone
	Development Type	Residential
	Reason for Investigation	NPPF
	Position in the Planning Process	Condition
	Planning Ref.	11/001001/OX
PROJECT LOCATION	Site Address/Postcode	Old Warren Farm, Lubbesthorpe, LE19 4AZ
	Study Area	1700m ²
	Site Coordinates	SK 52883 02064
	Height OD	100.5m aOD
PROJECT CREATORS	Organisation	University of Leicester Archaeological Services
	Project Originator Brief	Local Planning Authority

	Project Design Originator	University of Leicester Archaeological Services		
	Project Manager	Patrick Clay		
	Project Director/Supervisor	Wayne Jarvis		
	Sponsor/Funding Body	Developer		
PROJECT ARCHIVE	Recipient	Physical	Digital	Paper
		Leicestershire County Museums	Leicestershire County Museums	Leicestershire County Museums
	ID (Acc. No.)	XA112.2011	XA112.2011	XA112.2011
	Contents	Finds - pottery, human bone	Digital Photographs PDF_A Report	Site records - paper archive, drawing sheets Unbound copy of report
PROJECT BIBLIOGRAPHY	Type	Grey Literature		
	Title	An Archaeological Excavation on Land at Old Warren Farm (Lubbesthorpe Area 4), Lubbesthorpe, Leicestershire		
	Author	W. Jarvis		
	Other bibliographic details	University of Leicester Archaeological Services Report No. 2018-168		
	Date	2018		
	Publisher/Place	University of Leicester Archaeological Services		
	Description	A4 pdf A		



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