

# A BRONZE AGE ROUND BARROW AT KETTON QUARRY, RUTLAND

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with contributions from:

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An early Bronze Age round barrow, excavated in 2005 in advance of a quarry extension, was situated on sloping ground at the edge of a spur overlooking the River Chater. The ring ditch enclosed an area 26m in diameter, but all traces of a former mound had been lost to later cultivation. Near the centre of the barrow a small pit contained an almost complete cremation burial of an adult, accompanied by a miniature cup, mixed with pyre debris that had been still smouldering when deposited. Oak sapwood charcoal from the pyre has given a radiocarbon date of 1940–1770 cal BC (68 per cent confidence). A nearby pit contained parts of two small collared urns. Another pit contained cremated bone from a child, aged 8–13 years, and some pyre debris. The primary ditch fills contained much limestone, suggesting that the barrow mound had either a stone revetment or capping. Most sections showed a dark secondary soil horizon, probably a buried turf line. The homogeneous upper fill contained a little Bronze Age pottery and a length of a human femur, perhaps from disturbed burials, and some Iron Age pottery.

## INTRODUCTION

### The round barrow

The round barrow lies in the parish of Ketton, Rutland (NGR SK 9723 0480: Fig. 1), and was excavated by Northamptonshire Archaeology in 2005 in advance of the land being lost within a southward extension to Ketton limestone quarry, which occupies a large tract of land to the north-west of the village of Ketton on the slopes overlooking the River Chater, a tributary of the Welland, which lies a little further to the east.

The ditch surrounding the levelled round barrow had been identified by aerial photography and its presence was confirmed by both geophysical survey and trial trenching in 2000 (NA 2000a), carried out as part of the investigation of a proposed quarry extension across fields to the immediate north and south of the Empingham Road. No other round barrows are known to lie nearby.

The excavation was carried out in October and November 2005 by a team led by Christopher Jones, under project manager Ian Meadows. The full report, prepared in 2012 (Chapman and Jones) and available online through the Archaeology Data Service (ADS), has formed the basis for this article.

### Ketton Quarry extension

In 2000, Castle Cement (now Hanson Cement, part of the Heidelberg Cement Group) received planning permission to extend its existing quarries at Ketton, Rutland. Extensive archaeological investigation, comprising examination of aerial photographs, fieldwalking, geophysical survey and targeted trial excavation within the area of the proposed quarry extension was carried out by Northamptonshire Archaeology, and the results were included in an environmental statement prepared in February 2000 (Castle Cement 2000a) and in a supplementary document issued in December 2000 (Castle Cement 2000b).

Castle Cement recognised that the quarry extension would affect archaeological deposits within the area, and resources and time have been made available for proper investigation and reporting of these remains. The identified ring ditch (Site AP8) lay near the eastern edge of the proposed quarry extension and a decision was made to excavate this monument well in advance of the quarrying.

Detailed decisions on the scale of the works are made at each stage of the quarry extension plan, following the overall strategy that has operated successfully during previous years, and working in conjunction with Rutland Council with archaeological advice from Richard Clark, Senior Planning Archaeologist, Leicestershire County Council.

### The archaeological background

From the late 1990s there has been an ongoing programme of archaeological investigation at Ketton Quarry comprising desk-based assessment, fieldwalking, geophysical survey and trial trenching on areas proposed for future quarrying and other quarry works (Masters and Shaw 1997; Soden and Burgess 1999; Meadows 2000; NA 2000a; NA 2000b; Jones 2004; Holmes and Fisher 2007; Simmonds 2007; Simmonds, Holmes and Fisher 2008; Jones 2009; Morris 2009).

Within the main quarry there has been open area excavation of Roman, late Saxon and medieval settlements, all on the spur of Blisworth Limestone that lies to the north of the spur including the barrow and windmill (Fig. 1: Chapman *et al.* forthcoming). A group of Roman burials and an associated coin hoard have been excavated to the north-east of the quarry (Carlyle 2008).

### Topography and geology

The field including the round barrow was under arable cultivation at the time of excavation. It lies on the upper slopes, overlooking the valley of the River Chater to the south-east (Fig. 1). The modern ground levels fell by 1.5m from west to east across the excavation area, from 82.8–81.3m aOD, while there was a fall in the natural of 1.15m across the width of the round barrow from west to east, from 82.25–81.30m aOD. To the south-east the valley floor lies at 30m aOD. The River Chater flows north-eastwards, running parallel to the River Welland before joining it only 2km to the north-east of Ketton.

The barrow was situated on a spur between two side valleys that cut back into the limestone plateau. To the south of the barrow, and south of the Empingham Road, there is the derelict tower of Ketton windmill (Fig. 1).

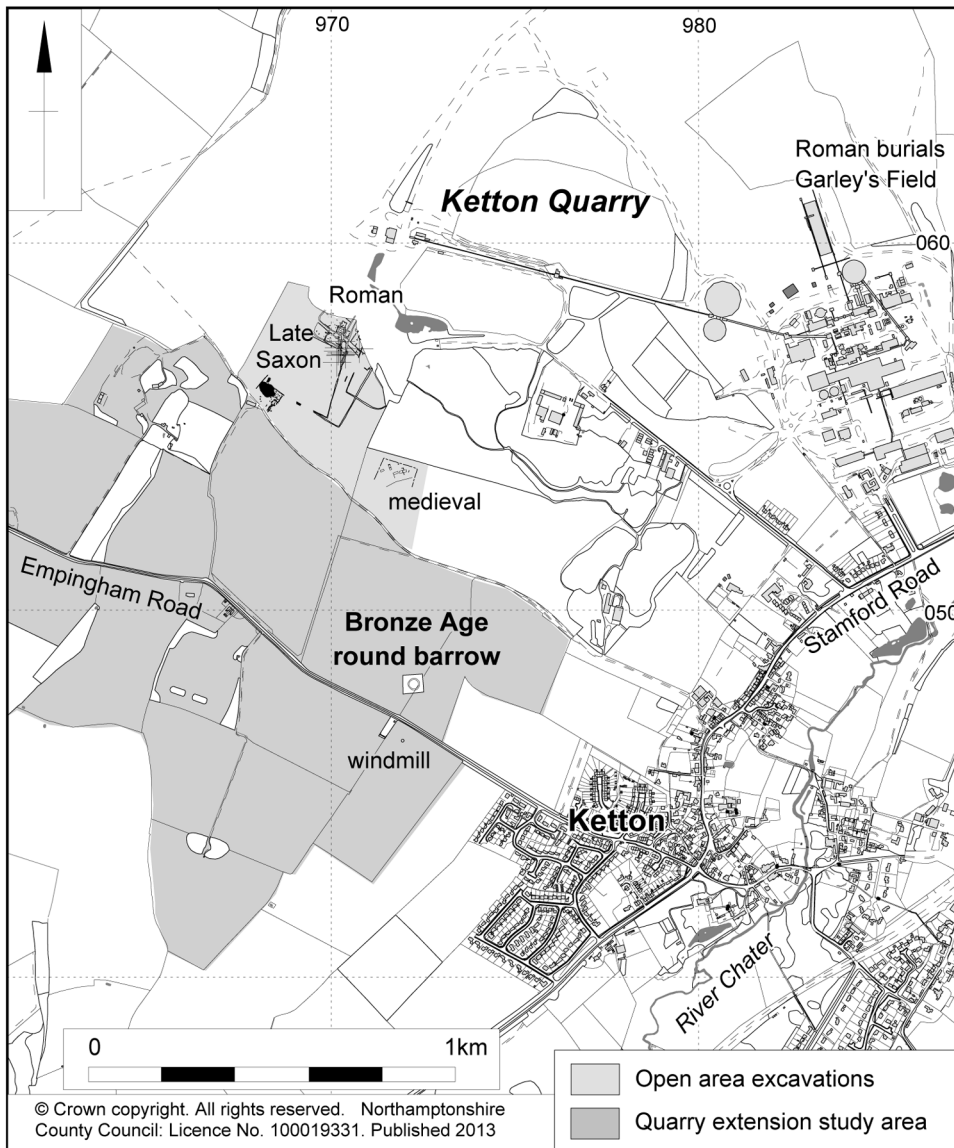


Fig. 1. The site location.

The underlying geology is primarily Upper Lincolnshire Limestone, Upper Estuarine Series material and Blisworth Limestone, although small pockets of Boulder Clay may overlie the solid geology (*Geological Survey of Great Britain Sheet 157: Stamford*, 1978 edition). The round barrow sits on clay with limestone above Blisworth Limestone, with Rutland Clays and Lincolnshire Limestone on the lower slopes to the south-east.

## THE BRONZE AGE ROUND BARROW

Topsoil and subsoil was removed, using a 360° mechanical excavator, across a near square area, measuring 55m by 50m, 0.275ha (Figs 2 and 3). All features were excavated by hand. A systematic metal-detecting survey did not locate any further archaeological finds.

## Pre-barrow features

The natural comprised light yellow-brown clay containing frequent fragments of limestone. Across this surface there was a scatter of shallow and generally irregular features. The majority of these were sectioned and shown to be of natural origin, probably tree-throw holes (Fig. 2). They were typically 0.35–0.45m deep with asymmetrical profiles, one near vertical side and the other less steep. The fills of red-brown silty clay contained quantities of limestone, often concentrated towards the steeper edge and near vertically inclined, lying parallel to the edge. The edges were often difficult to define in excavation.

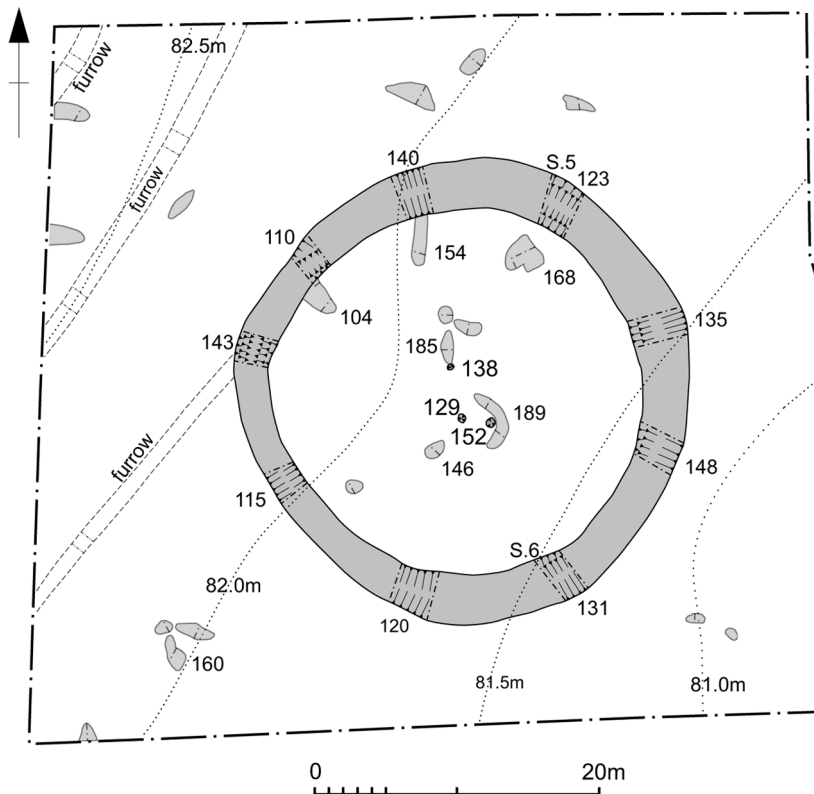


Fig. 2. The round barrow.



Fig. 3. The round barrow during excavation, looking north-west.

A little south of the centre of the barrow and immediately east of cremation burial 152, there was a curving gully, 189, 4.0m long by 0.70m wide and 0.35m deep; perhaps a further tree throw. A little north of centre and immediately north of cremation burial 138, a cluster of three features, 185, also had asymmetrical profiles and fills of red-brown silty clay containing quantities of limestone, indicating that they too were tree-throw holes.

Three of the probable tree-throw holes, 154 and 168 within the barrow ditch and 160 to the south-west, produced small quantities of prehistoric pottery, a total of 14 sherds weighing only 85g. The sherds contain either flint or crushed shell inclusions, but are too fragmentary to date more precisely.

### The barrow ditch and its silting

The ditch was near circular in plan, enclosing an area 26m in diameter (Fig. 2). For most of the circuit the ditch was 3.5–3.9m wide and 1.05–1.15m deep, although it was a little narrower and shallower to the west. It had a broad V-shaped profile with the upper edges heavily eroded, indicating that it had silted slowly (Fig. 4, ditches 123 and 131; Figs 5 and 6). The probable original profile was preserved at the base of a few sections, such as ditch 123, where there was a narrow, 0.3m wide, flat base and steeply inclined sides, which suggest that the original width would have been around 1.8–2.0m.

The primary fills typically contained quantities of irregular fragments of limestone, often 200–300mm long, in a matrix of brown silty clay, with little evidence for previous accumulation of a silty primary fill. It is suggested that the

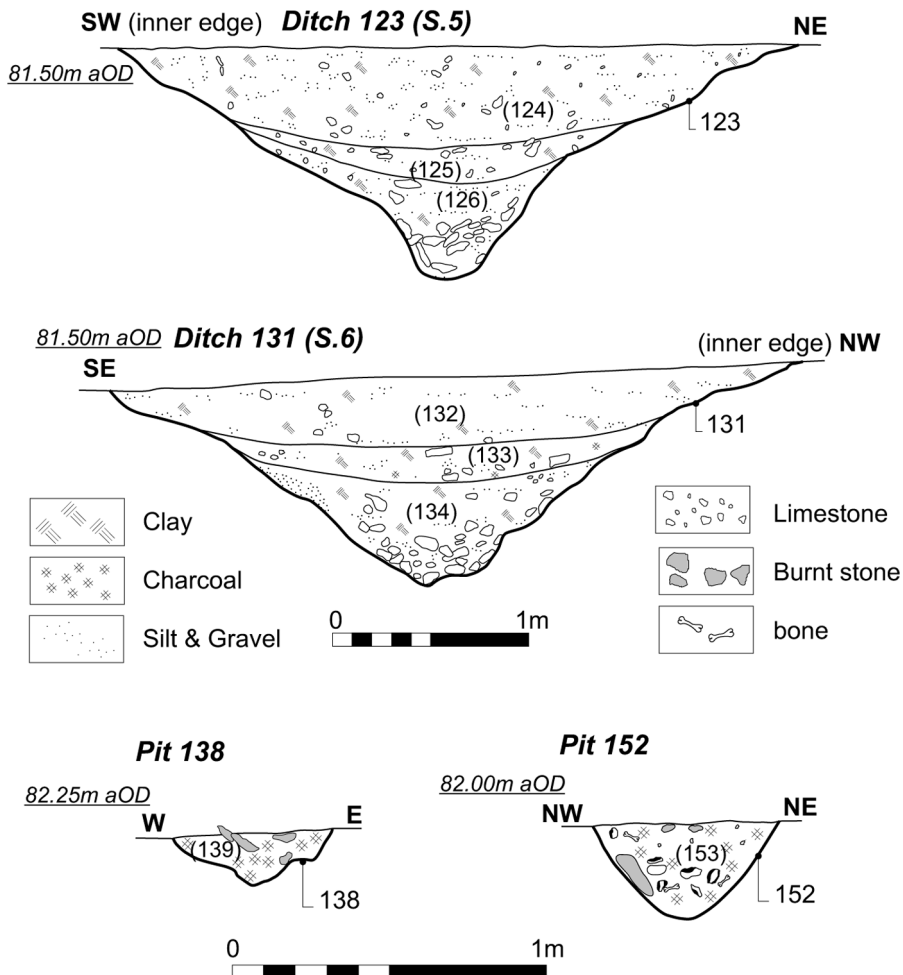


Fig. 4. Sections of barrow ditches 123 and 131, and central pits 138 and 152.

limestone probably came from slippage and erosion of a central mound with at least an outer revetment, if not a capping, of limestone. This would imply that this was a bowl barrow, with no significant berm between mound and ditch.

Once the silting had accumulated to a depth of around 0.5m and the upper ditch edges had eroded back to a shallow angle, a stable profile was achieved. Most sections show a distinctive dark soil horizon, up to 0.18m thick, which probably denotes the establishment of a turf line (Fig. 4, ditch 123, layer 125 and ditch 131, layer 133; Figs 5 and 6).

The upper ditch fill was a homogeneous deposit, up to 0.5m thick, of brown clayey loam, which could be interpreted as the result of a slow process of silting or, perhaps less likely, a single act of ditch infilling and mound levelling to make way for ploughing. The upper fills contained a little pottery, including decorated Bronze



Fig. 5. Ditch 131 (Section 6, reversed), looking south-west, inner edge to the left.



Fig. 6. Ditch 135 (Section 7), looking north, inner edge to the left.

Age pottery that may have been associated with a burial set into the mound, and a length of human femur shaft might have come from a disturbed inhumation burial, perhaps indicating that the mound was re-used for burial in the Roman or early Saxon periods. None of the pottery from the ditch appears to be later in date than the middle Iron Age. There was no surviving subsidence hollow above the final fill, indicating that the ground levels had been heavily truncated by a combination of past and recent ploughing.

### The central pits

None of the internal features lay at the centre of the barrow (Fig. 2). Pit 138 was just under 2m to the north-west of centre, pit 129 lay a similar distance to the south and pit 152 lay just over 3m to the south-east of centre. Whether any one of these was the primary deposit cannot be determined and they may be best regarded as a group of contemporary or near contemporary deposits all pre-dating the construction of the barrow mound.

Pit 138 was near circular, 0.37–0.50m in diameter, with steep sides and an uneven base, up to 0.14m deep (Fig. 4). The pit fill of brown silty clay contained 370g of cremated bone, including many large fragments (see Fig. 14). The fill also included some grey-black patches of soil with comminuted charcoal from the pyre. A few small fragments of limestone with burnt edges suggest that the upper fill included material scraped up from the ground beneath the pyre. The soil adhering to the bone was typically brown in colour, indicating that the bone had been picked from the pyre to separate it from the charcoal-rich pyre debris. This deposit comprised bone from a single individual, a child aged 8–13, and the quantity present suggests that most of the bone available was recovered from the pyre.

Pit 152 was near circular, 0.54–0.60m in diameter, with a bowl-shaped profile up to 0.30m deep (Fig. 4). The sides of the pit were heat-reddened around the full circumference (Fig. 7), and the fill was a deposit of pyre debris comprising 1,350g of cremated bone, including many large bone fragments (see Fig. 15), within a matrix of grey-black clayey silt, from which 340g of charcoal was recovered, as well as the occasional small piece of burnt limestone and flint. The evidence suggests that the pit was filled with mixed pyre debris of bone and charcoal deposited when it was not only still hot, but perhaps while much of the charcoal was still smouldering, so that the pit sides were scorched by the heat. This has been seen in other cremation deposits in both Leicestershire and Lincolnshire, including three satellite cremation burials at Sproxton, Leicestershire (Clay 1981, 9).

The bone weight represents near full recovery of the bone from the pyre, and there had been no attempt to separate bone from the other pyre debris. A sub-sample of 25g of charcoal submitted for analysis indicated that the pyre had comprised almost exclusively oak, with both sap and heartwood present, while a single piece of the 179 fragments identified was of hazel. The pyre debris also included a miniature cup that had been shattered by the heat of the pyre, and a length of copper alloy rod (see Figs 10, 11 and 13). The bone deposit was from a single adult, aged 25–45 years, together with pieces of burnt mammal and bird bone, not identified to species.





Fig. 7. Pit 152 showing the dark ring of scorching on the pit sides.

Lab No. (Sample)	Context	$^{13}\text{C}/^{12}\text{C}$ ratio	Conventional Radiocarbon Age (BP)	Calibrated Age intercept 68% confidence 95% confidence
Beta-214230 (KAP8/153)	Charcoal Oak sp. ( <i>Quercus</i> ) sapwood	-22.7‰	3,540+/-50BP	1890 cal BC 1940-1770 2010-1740

Laboratory: Beta Analytic, Miami, Florida, USA.

Method: Radiometric: standard.

Calibration: INTCAL 98. Plot: OxCal 3.8.

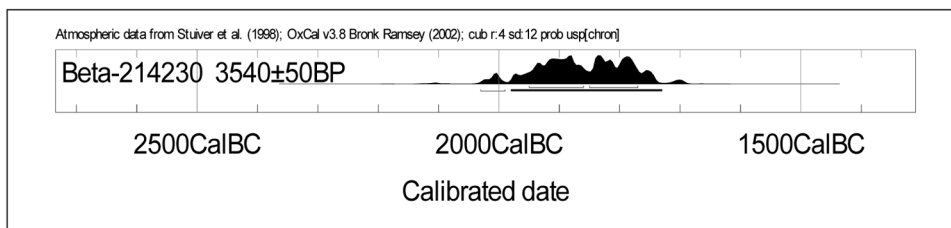


Table 1. Radiocarbon date.

Oak sapwood charcoal from the pyre has been radiocarbon dated to 1940–1770 cal BC (68 per cent confidence, 3,540+/-50BP, Beta-214230), centred on the nineteenth century BC (Table 1).

Pit 129 was a small oval pit, up to 0.35m in diameter and 0.14m deep, with sloping sides and an uneven base, and a fill of dark orange-brown silty clay (Fig. 2).

The fill also contained a few sherds from two collared urns (see Figs 8–10). There is around 25 per cent of the rim and collar from one urn, and perhaps some 15 per cent of the entire vessel. The second collared urn is represented by only a small section of the collar and a further four small abraded sherds.

Miniature collared urns as accessory vessels to cremation burials, deposited in a nearby pit, are quite common, but usually comprise the entire vessel. In this instance, the fragmentary nature of the vessels may be due to later truncation and disturbance, but this is unclear as the disposition of the pottery was not recorded during excavation.

Pit 146 was an oval pit, 1.5m long by 0.9m wide and 0.37m deep, with steep sides, lying to the immediate south-west of the burial deposits (Fig. 2). It may have been contemporary with the burials, rather than a further tree-throw hole, as the fill was of dark brown clay with small limestone fragments, which differs from the natural features, although the absence of any charcoal or finds leaves it uncertain whether this pit was of natural or human origin.

#### LATER ACTIVITY

Across the north-western part of the area there were truncated bases of three furrows, 1.4m wide by 0.10m deep, from a former ridge and furrow field system (Fig. 3). No furrows survived across the barrow or to the north-east or south-west, so there was no indication as to whether the barrow mound had still been extant during the usage of the medieval field system.

The thin subsoil, only some 30–40mm thick, was of dark yellow-brown clay with moderate inclusions of small stones. The topsoil was dark brown loamy clay up to 0.30m thick, containing frequent small stones and limestone fragments.

#### THE FLINT

*Andy Chapman*

A heavily patinated flint blade, 34mm long (tip broken) by 15mm wide, came from the upper fill of barrow ditch 115. Four pieces of heat-shattered flint came from the pyre debris in pit 152. None of the pieces retain any evidence that they had been retouched implements.

#### THE PREHISTORIC POTTERY

*Andy Chapman*

##### **The collared urns from pit 129**

Vessel 1 comprises joining sherds from the rim and collar of a miniature plain collared urn (Figs 8 and 10). It had a rim diameter of 135mm and would have stood *c.*150–160mm high. The fabric is 6–7mm thick, well-fired and contains sparse small, angular grit, and has a grey/black core and pale brown surfaces.

Vessel 2 comprises five small non-joining sherds from the collar of a second similar miniature plain collared urn (Fig. 9). This is in a softer, less well-fired fabric, with a pink core and pale brown surfaces. It was poorly made, and the base of the

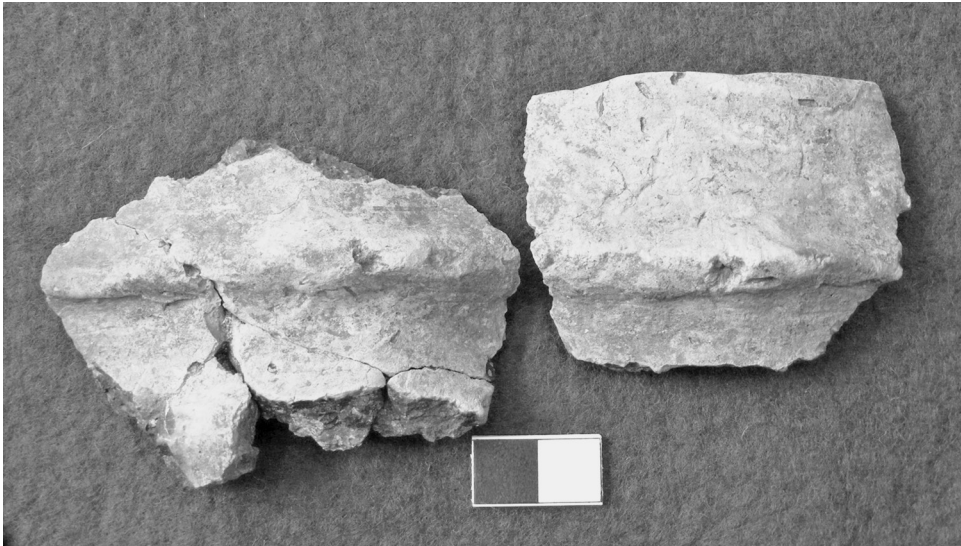


Fig. 8. Rim of collared urn from pit 129, Vessel 1 (scale 20mm).

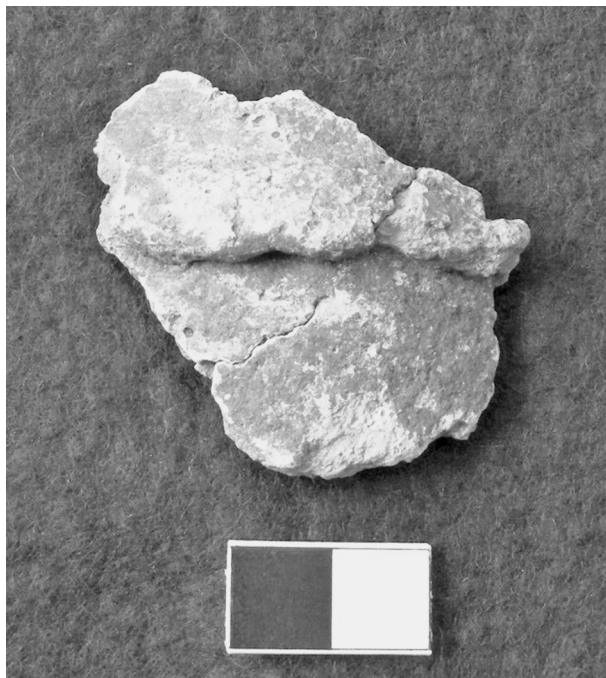


Fig. 9. Fragment of collared urn from pit 129, Vessel 2 (scale 20mm).

collar, which had been applied separately, is irregular and poorly bonded to the body.

The deposition of plain or simply decorated miniature collared urns as accessory vessels, in association with cremation deposits, is well attested in the Midland counties, with examples from West Cotton, Raunds, Northamptonshire (Harding and Healy 2007), and Gayhurst Quarry and Broughton Barn, Milton Keynes (Chapman 2007 and 2009). A small collared urn was also found at Cossington, Leicestershire, in a pit cut into the fill above a child inhumation in Barrow 2, and was accompanied by a miniature cup (Thomas 2008, 26 and 30, fig. 33,7).

### The miniature cup from pit 152

A complete miniature cup was found among the bone and charcoal of the cremation deposit in pit 152 (Figs 10 and 11). The vessel is distorted and shattered as a result of heating on the pyre, and the fabric is grey and cindery, somewhat similar to a crucible fabric, while the outer surface is light brown. The heating had also crazed the surface, particularly the base, and vertical cracks had formed around the rim prior to the vessel fragmenting. The condition of the vessel is indicative of the high temperature reached within the pyre, perhaps approaching 1,000°C, similar to an activity such as copper casting.

The miniature cup stands 50mm high and has a bi-conical profile; 66mm in diameter at the rim, 84mm in diameter at its widest and 45mm in diameter at the base. The rim has an internal chamfer, decorated with two encircling lines of twisted cord decoration. The outer surface of the cup is decorated with running chevrons on

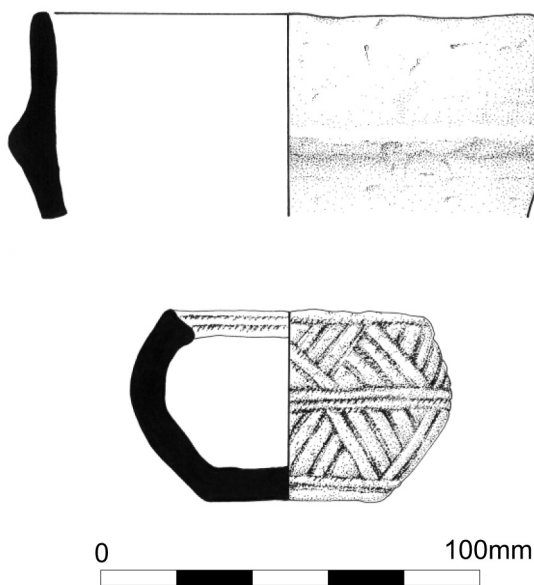


Fig. 10. The collared urn and miniature cup.



Fig. 11. The miniature cup from pit 152, showing the decorated rim (scale 10mm).

the upper and lower parts, with double encircling lines at the base and middle, and a single line at the top. This has been executed using twisted cord, although given the poor state of preservation the cord impressions are only partially evident.

Miniature cups are frequently found accompanying urned cremation burials of the early second millennium, often in association with food vessels (Gibson and Woods 1997, 226–7). They appear in a wide variety of forms, often highly decorated and sometimes perforated (Gibson 2002, 104, fig. 50). A simple bowl-shaped cup, with perforated lugs, was found together with a food vessel accompanying the inhumation burial of a child, aged 8, in Barrow 2 at Cossington, Leicestershire (Thomas 2008, figs 28 and 32). Examples with a similar form and decorative scheme to the Ketton example are known from as far apart as Boyton, Wiltshire (Annable and Simpson 1964, No. 441, 59 and 114) and Aberdeen, Scotland (Abercromby 1912, cinerary urns No. 332).

#### Pottery from the barrow ditch

Sixty-four sherds of pottery, weighing 430g, were recovered from the fills of six of the nine sections across the barrow ditch. In most instances this comprises only one or two sherds per ditch section, indicating a very low level of deposition, although there were two exceptions. There are six sherds from ditch section 110, but these are

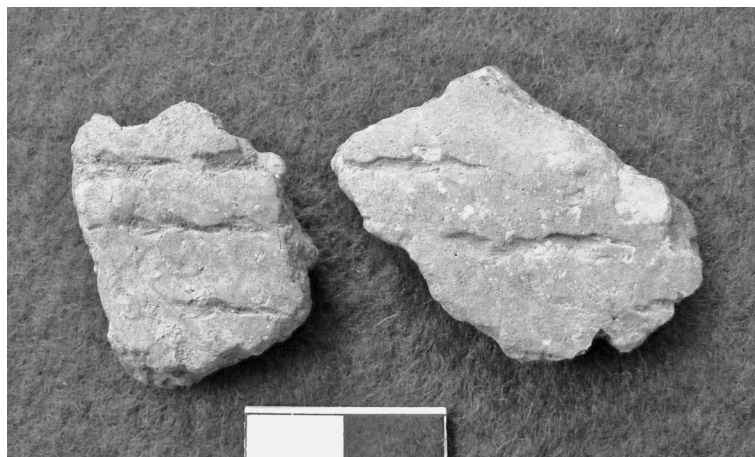


Fig. 12. Bronze Age pottery with twisted cord decoration from barrow ditch 110 (scale 20mm).

small sherds, so the total weight is comparable to the other small groups. The largest group, from ditch 115, comprises *c.*50 abraded sherds, weighing 260g, all from the base and lower body of a single vessel.

From the upper fill of ditch 110, to the north-west, there are two body sherds of Bronze Age pottery with twisted cord decoration, in a soft grey-brown fabric with light grey surfaces, containing small pellets of grog (Fig. 12). They probably derive from activity on the barrow, and they may have been incorporated into the upper ditch fills when the mound was levelled.

A plain body sherd from ditch 115 has a grey core, light brown surfaces and contains dense crushed flint. The rest of the material is all in fabrics containing dense finely crushed shell, typically with grey cores and either grey or brown surfaces. This mainly comprises plain body sherds, with a single rim sherd from either an open bowl or a neckless jar, with a simple rounded rim. The only large group, from ditch 115, comprises small sherds from the flat base and lower body of a single vessel. Given the lack of diagnostic features, it is difficult to provide a date for this material beyond a broad attribution spanning the middle Bronze Age to middle Iron Age.

It appears that in a few sections small amounts of pottery entered the primary fills of the ditch, prior to the establishment of the stable soil horizon, but the majority of the pottery was in the upper fills. The latest likely date for the pottery is middle Iron Age, so it may be postulated that the stable soil horizon was established no later than the middle Iron Age, but while the upper fill contained no later pottery it seems unlikely that the mound was levelled at such an early date.

## OTHER BRONZE AGE FINDS

*Andy Chapman*

Within the pyre debris in pit 152 there was a short length of poorly preserved copper alloy that is probably part of a larger object that had been deposited on the funeral

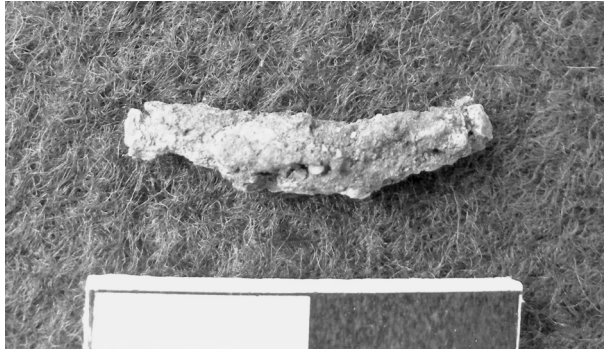


Fig. 13. Copper alloy object from the bone deposit in pit 152 (scale 20mm).

pyre. What survives is a slightly curving length of rod, with a near circular section, 17mm long and 2.0–2.5mm in diameter (Fig. 13).

A range of copper alloy pins of various designs have been recovered in association with miniature vessels of the Wessex culture, as at Aldbourne and Normanton, Wiltshire (Ashbee 1960, figs 45 and 46).

## THE CREMATED BONE

*Sarah Inskip*

During the cremation process, heat causes bone to fragment and warp, making osteological analysis challenging, but it is still possible to glean information from cremated bone. Data was collected following the guidelines of the IfA (Brickley and McKinley 2004) and English Heritage (Mays, Brickley and Dodwell 2004).

Pit 138 contained 372g and pit 152 contained 1,350g of cremated bone. Unusually large fragments of bone were recovered from both deposits: 50 per cent of the material measured 10mm or larger and three-quarters of the bone was identifiable, suggesting that there was no post-cremation fragmentation of the remains (Tables 2 and 3, Figs 14 and 15).

All parts of the skeleton are represented in both deposits, including small elements such as finger and toe bones, indicating both that whole bodies were placed on the pyre and that an attempt was made to recover all of the bone from the pyre debris. Modern studies demonstrate that a complete cremated adult skeleton

Size group/ bone weight	Pit 138	Pit 152
> 10mm	193g	753g
5–10mm	144g	513g
2–5mm	16g	52g
< 2mm	19g	32g
Total	372g	1,350g
Largest fragment	104mm	68mm

Table 2. Bone sieve fraction weights.

Skeletal element	Pit 138	Pit 152
Skull	32g	318g
Vert. & ribs	25g	173g
Lower limbs	82g	209g
Upper limbs	72g	168g
Hands & feet	12g	33g
Pelvis	8g	75g
Long bones	50g	21g
Unident.	91g (25%)	353g (26%)

Table 3. Skeletal element representation by weight (g).

should produce in excess of 1.0kg of bone (McKinley 2000, 404; Mays 2010, 326) and juveniles around 0.5kg (Trotter and Hixon 1973), so it seems that both deposits represent fairly complete collection from the pyre.

Both deposits contain bones largely white in colour, indicating that the pyre temperature was in excess of 600°C and oxygenation was high (McKinley 1997; Mays 2010). A greater proportion of grey fragments are seen in pit 152, where the hands in particular are grey, suggesting that they lay towards the edge of the pyre, where temperatures were lower, 300–600°C.



Fig. 14. The bone deposit from pit 138 (scale 50mm).





Fig. 15. The bone deposit from pit 152 (scale 50mm).

There are no age inconsistencies or duplications, indicating there was just one individual in each deposit. The individual in pit 138 was between eight and 13 years of age. The roots of the incisors were complete suggesting an age above eight years, while one of the earliest fusing long bone epiphysis, the proximal radius, was unfused, indicating an age below 13 years, and other unfused epiphyses confirmed this. The individual in pit 152 was a young to middle-aged adult, aged 25–45 years. The long bones were all fused with no visible fusion lines, and fusion of the spinal column was complete suggesting an age above 25 years. There was no evidence of osteoarthritis on any of the observable joint surfaces, which may imply that the individual was not significantly advanced in age. This individual appeared to be small, but no skeletal elements with defining sex characteristics were observable.

#### ANIMAL AND HUMAN BONE FROM THE BARROW DITCH

*Andy Chapman with identifications by Laszlo Lichtenstein*

There is a small assemblage of animal bone from the barrow ditch, *c.*143 fragments weighing nearly 1.5kg, but the majority of the ditch sections produced only a handful of bone fragments, less than 100g each. In general, the bone is fragmented and

often abraded, comprising lengths of long bone shafts and metapodial bones, some fragments of skull, horn core and loose teeth. The identified species in ascending order by quantity are pig (*sus*), sheep/goat (*ovicaprid*) and cattle (*bos*).

Ditch section 148, to the east, produced bone from both the primary and secondary fills totalling 845g, 57 per cent of the total recovered. From the secondary fill there are numerous fragments of a cattle skull and loose teeth, which might derive from a skull originally placed either on the barrow mound or in the ditch. This fill also contained two joining fragments, 165mm long, from the shaft of a human femur, probably adult but not particularly robust. It is in a similar condition to the animal bone, both fragmented and abraded. It may have come from an inhumation burial set into the mound that was later broken up and redeposited into the ditch. It is impossible to provide a specific date for its origin, but Roman and Saxon reuse of Bronze Age burial mounds as inhumation cemeteries is well attested.

## THE WOOD CHARCOALS

*Rowena Gale*

The charcoal from the cremation deposit in pit 152 was firm and well preserved. It was prepared using standard methods (Gale and Cutler 2000), and anatomical structures were examined at magnifications up to  $\times 400$  and matched to prepared reference slides of modern wood. When possible, the maturity of the wood was assessed:

- 87  $\times$  oak (*Quercus* sp) sapwood
- 91  $\times$  oak (*Quercus* sp) heartwood
- 1  $\times$  hazel (*Corylus avellana*).

The sample comprises almost exclusively oak, with an equal balance of the heartwood and sapwood. There was a single specimen of hazel.

## DISCUSSION

### Round barrows in Leicestershire and Rutland

This isolated ring ditch of a ploughed-out early Bronze Age round barrow adds to the small corpus of excavated sites within Rutland and neighbouring Leicestershire. In his assessment of the Neolithic and Bronze Age within these two counties, Clay (1999, 10) listed a single nearby site, a ring ditch at Tixover, which is discussed below. Other local ring ditches are recorded on the Leicestershire and Rutland Historic Environment Record (Fig. 16). Some 2.5–3.0km to the north-east of the Ketton barrow, between Ketton and Tinwell, near Tinwell Lodge Farm, there are cropmarks of an individual ring ditch and a pair of ring ditches (SK 993 070 and SK 991 061). These lie on the east-facing slopes overlooking the confluence of the River Chater with the River Welland, similar to the Ketton barrow, with a Bronze Age barrow cemetery (SK 001 053) lying on lower ground close to the River Chater. A denuded barrow was trial trenched in 1989, but no finds were recovered

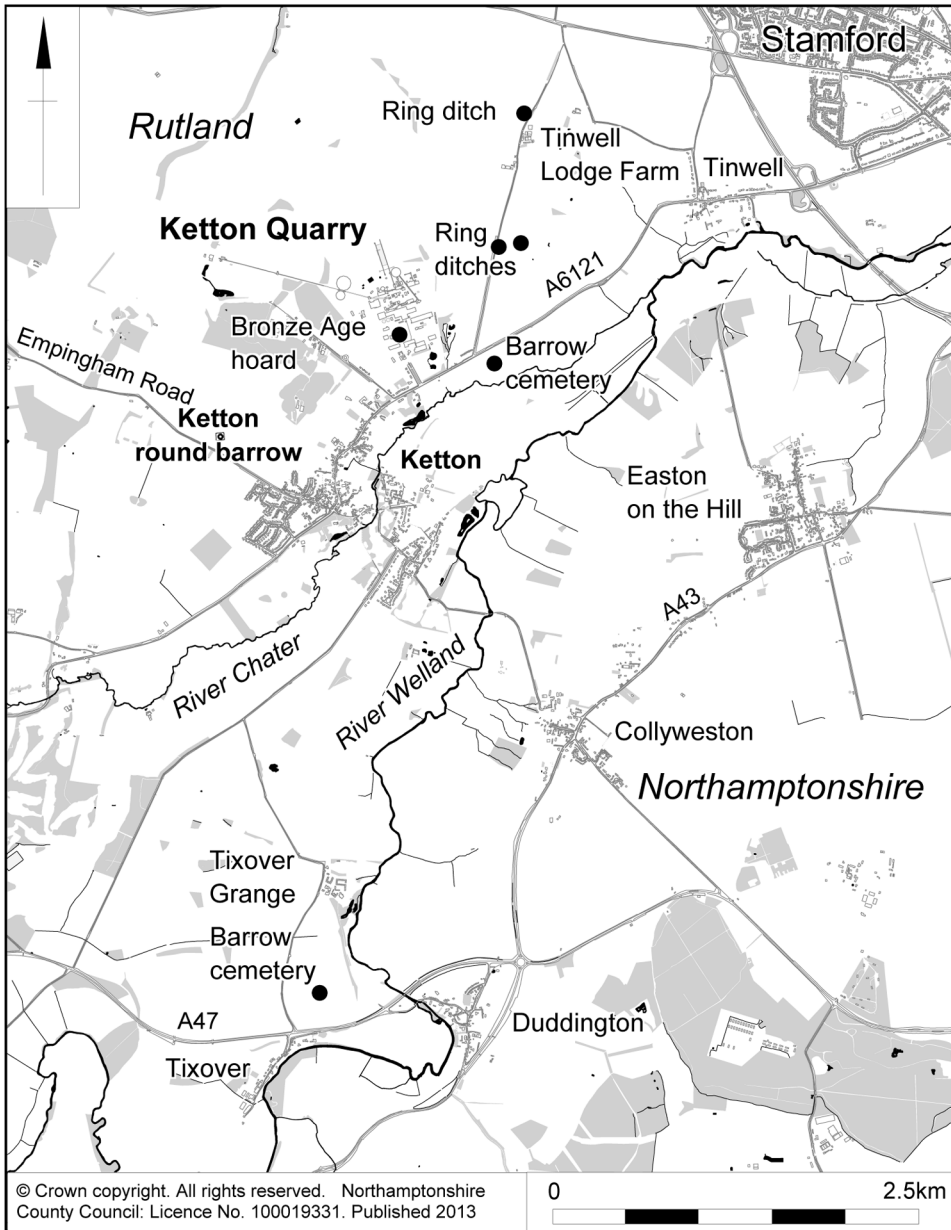


Fig. 16. Ring ditches in the environs of Ketton.

(SK 9928 0612). Just over 1km to the north-east of the Ketton barrow (SK 9845 0550) a hoard of Bronze Age metalwork included 19 socketed and looped axes, a looped knife and a fragment of ingot.

Some 4km south of Ketton, and south of Tixover Grange (SK 979 010), there are cropmarks of 16 ring ditches forming a classic barrow cemetery overlooking the

River Welland. One barrow was excavated in 1991 on a water pipeline. The barrow ditch was 23m in diameter and there was a central pit containing a cremation burial, although much had been lost to plough damage (Beamish 1991; Beamish with Clay draft text). The ring ditch had been recut early in the first millennium BC to form a penannular enclosure with an opening to the west, 0.8m wide. Between the terminals, there was a pit containing a complete pottery bowl, indicating that the ring ditch had continued to hold symbolic meaning to the local inhabitants.

To the east of Ketton on the slopes east of the River Welland, in Northamptonshire, ring ditches have been recorded by aerial photography in the parishes of Easton on the Hill and Collyweston, but none have been excavated (RCHME 1975).

Further afield, to the south-west of Oakham, a small site that began life as a Neolithic pit circle ended in the early Bronze Age with a small ring ditch, 10m in diameter, enclosing a grave containing the crouched inhumation of an adolescent boy, radiocarbon dated to 1860–1620 cal BC (68 per cent confidence) (Clay 1998). The major barrows and barrow cemeteries investigated in Leicestershire are those at Sproxtton and Eaton (Clay 1981), Lockington (Hughes 2000) and Cossington (Thomas 2008), all of which lie away from the Welland valley.

### The Ketton round barrow

The Ketton barrow was constructed during the early Bronze Age, the nineteenth century BC. It had a classic location, sitting on sloping ground towards the edge of a prominent spur between incised valleys, overlooking the valley of the rivers Chater and Welland. The barrow would have been visible against the skyline from below, and the same prominent spur was later chosen as an appropriate location for a windmill. Aerial photography identified just a single ring ditch, and further survey work within the quarry extension study area, including geophysical survey, has not identified any other ring ditches, confirming that this was an isolated round barrow.

There were two primary cremation burials, one of an adult and the other of a child aged 8–13, both in shallow pits. For both burials the collection of bone from the pyre had been very thorough. For the child the bone had been collected separately from the other pyre debris, and individual finger bones are present. A token quantity of pyre debris was mixed with the soil above the bone deposit. For the adult, the deposit comprised most of the available bone, again including finger bones, but this was still mixed with the other pyre debris. Scorching on the sides of the pit suggests that the pyre debris was collected and deposited whilst the charcoal was still smouldering, indicating that the pyre was nearby. A decorated, bi-conical miniature cup within the mass of bone and pyre debris had shattered through heating on the pyre, which had comprised almost exclusively oak timbers.

Between the two burial deposits, which lay to either side of the centre of the ring ditch, another pit contained the fragmented remains of a small plain collared urn, and a very small amount from a further collared urn. It is suggested that at the least the larger of the two urns had probably been deposited as a complete vessel, but had been largely lost to later truncation.

This was a small barrow, 26m in diameter, with a single ditch surrounding a mound capped with limestone, taken from the upcast clays excavated from the

barrow ditch. Fragments of limestone had started to fall back into the ditch soon after its construction, indicating that this was a bowl barrow, with no significant berm between mound and ditch. It was probably either capped with limestone or had an outer stone revetment.

There was a little evidence that later burials had been inserted into the mound. Sherds of decorated pottery might derive from an early Bronze Age burial and a single length of human tibia is probably from an inhumation burial, perhaps denoting a Roman or Saxon reuse of the mound. The pottery from the barrow ditch was no later in date than the Iron Age, and a stable soil horizon had formed within the ditch during this period. The barrow mound may well have stood until more intensive arable exploitation began, and the remnant furrows might suggest that this occurred in the medieval period, with further degradation of the ground level being caused by modern ploughing.

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### BIBLIOGRAPHY

- Abercromby, J., 1912 *A Study of the Bronze Age Pottery of Great Britain and Ireland, and its Associated Grave-goods* (vol. 2). Oxford, Clarendon Press.
- Annable, F. K. and Simpson, D. D. A., 1964 *Guide Catalogue of the Neolithic and Bronze Age Collections in Devizes Museum*. Wiltshire Archaeological and Natural History Society.
- Ashbee, P., 1960 *The Bronze Age Round Barrow in Britain*. London: Phoenix House.
- Beamish, M., 1991 *Excavations at Tixover*. Leicestershire Archaeological Unit.
- Beamish, M. with Clay, P., 1991 Draft text *Transect of a Landscape: Excavations of prehistoric and medieval sites at Tixover, Rutland, Leicestershire*.
- Brickley, M. and McKinley, J. I., 2004 'Guidelines to the standards of recording human remains', *Institute for Archaeologists* 7, 14–17.
- Carlyle, S., 2008 'A Late Roman Coin Hoard and Burials from Garley's Field, Ketton, Rutland, 2002–2003', *Transactions of the Leicestershire Archaeological and Historical Society* 82, 79–112.
- Castle Cement, 2000a *Grange Top Quarry, Ketton, Application for Additional Reserves, Environmental Statement*. Castle Cement.

- Castle Cement, 2000b *Grange Top Quarry, Ketton, Application for Additional Reserves, Environmental Statement, Section 11, Additional Information.* Castle Cement.
- Chapman, A., 2007 'A Bronze Age barrow cemetery and later boundaries, pit alignments and enclosures at Gayhurst Quarry, Newport Pagnell, Buckinghamshire', *Records of Buckinghamshire* 47.2, 81–211.
- Chapman, A., 2009 'Bronze Age burial and late Iron Age and Roman settlement at Broughton Barn Quarry, Milton Keynes, Buckinghamshire', *Records of Buckinghamshire* 49, 9–41.
- Chapman, A., Meadows, I. and Jones, C., forthcoming *Late Saxon and medieval settlements at Ketton Quarry, Rutland.* Northamptonshire Archaeology report.
- Clay, P., 1981 *The excavation of two multi-phase barrows at Sproxtton and Eaton, Leicestershire.* Leicestershire Museums, Art Galleries and Records Service, Archaeological Reports Series 2.
- Clay, P., 1998 'Neolithic/Early Bronze Age Pit Circles and their Environs at Oakham, Rutland', *Proceedings of the Prehistoric Society* 64, 293–330.
- Clay, P., 1999 'The Neolithic and Bronze Age of Leicestershire and Rutland', *Transactions of the Leicestershire Archaeological and Historical Society* 73, 1–18.
- Cox, M. and Mays, S. (eds), 2000 *Human Osteology in Archaeology and Forensic Science.* London: GMM Press.
- Fitzpatrick, A. P. (ed.), 1997 *Archaeological Excavations on the Route of the A27 Westhampnett Bypass, West Sussex, 1992 Volume 2.* Wessex Archaeological Report 12.
- Gale, R. and Cutler, D., 2000 *Plants in Archaeology.* Otley/London: Westbury Publishing and Royal Botanic Gardens, Kew.
- Gibson, A., 2002 *Prehistoric Pottery in Britain and Ireland.* Tempus.
- Gibson, A. and Woods, A., 1997 *Prehistoric pottery for the Archaeologist.* Leicester University Press.
- Harding, J. and Healy, F., 2007 *Raunds Area Project: The Neolithic and Bronze Age landscapes of West Cotton, Stanwick and Irthlingborough, Northamptonshire.* Oxbow books.
- Holmes, M. and Fisher, I., 2007 *Archaeological geophysical survey in support of a proposed quarry extension, Ketton, Rutland: November 2006–May 2007.* Northamptonshire Archaeology report 07/082.
- Hughes, G., 2000 *The Lockington Gold Hoard: An Early Bronze Age Barrow Cemetery at Lockington, Leicestershire.* Oxbow Books.
- Jones, C., 2004 *Archaeological trial excavation at proposed extension of Ketton Quarry, Ketton, Rutland – October 2003.* Northamptonshire Archaeology report 3470.
- Jones, C., 2009 *Archaeological Trial Trenching at Ketton Quarry, Ketton, Rutland: July 2009.* Northamptonshire Archaeology report 09/119.
- McKinley, J. I., 1997 'The cremated human bone from burial and cremation-related contexts', in A. P. Fitzpatrick (ed.), 55–72.
- McKinley, J. I., 2000 'The Analysis of Cremated bone', in M. Cox and S. Mays (eds), 439–54.

- Masters, P. and Shaw, M., 1997 *Archaeological Evaluation at Castle Cement Quarry, Ketton, Rutland: February–April 1997*. Northamptonshire Archaeology report 01965.
- Mays, S. A., 2010 *The Archaeology of Human Bones*. London: Routledge.
- Mays, S., Brickley, M. and Dodwell, N., 2004 *Human bones from archaeological sites: Guidelines for producing assessment documents and analytical reports*. BABAO/English Heritage, Centre for Archaeology Guidelines.
- Meadows, I., 2000 *Magnetometer survey and trial excavation prior to the construction of new settling ponds at Castle Cement, Ketton, Rutland: December 1999–January 2000*. Northamptonshire Archaeology report 2503.
- Morris, S., 2009 *Archaeological fieldwalking, geophysical and metal detection surveys in support of a proposed quarry extension, Ketton, Rutland*. Northamptonshire Archaeology report 08/101.
- NA, 2000a ‘Archaeological Assessment’, in Castle Cement, 2000a, Section 11.
- NA, 2000b *Castle Cement Ltd, Grange Top Quarry, Ketton: Application for additional reserves – Archaeological Assessment Supplementary Report*. Northamptonshire Archaeology report, 2466.
- NA, 2003 *Archaeological Trial Excavation at proposed extension of Ketton Quarry, Ketton, Rutland, October 2003*. Northamptonshire Archaeological report.
- RCHME, 1975 *An Inventory of the Historical Monuments in the County of Northampton, Vol. 1, Archaeological Sites in North-East Northamptonshire*. Royal Commission on Historical Monuments (England).
- Simmonds, C., 2007 *Desk-based Assessment for proposed quarry extension at Ketton, Rutland: January 2007*, Northamptonshire Archaeology report 07/06.
- Simmonds, C., Holmes, M. and Fisher, I., 2008 *Archaeological geophysical survey in support of a proposed quarry extension, Ketton, Rutland: August–September 2007*. Northamptonshire Archaeology report 08/15.
- Soden, I. and Burgess, C., 1999 *Castle Cement, Ketton Quarry, Rutland, Proposed Extension: Archaeological Desk-Based Assessment*. Northamptonshire Archaeology Report.
- Thomas, J., 2008 *Monument, Memory, and Myth: Use and Re-use of Three Bronze Age Round Barrows at Cossington, Leicestershire*. Leicester University Monograph 14.
- Trotter, M. and Hixon, B. B., 1974 ‘Sequential changes in weight, density and percentage ash weight of human skeletons from early foetal periods through to old age’, *Anatomical Record* 179, 1–18.

