Part One
Setting the Scene

John Thomas

H1\Introduction

In the spring and autumn of 1976 two Early Bronze Age round barrows were excavated within the gravel quarry at Cossington, Leicestershire, by Leicestershire Museums Archaeological Unit, under the direction of Colm O'Brien (NGR SK 605128). A third barrow was excavated in the quarry over the summer of 1999 by a team from University of Leicester Archaeological Services (ULAS) (NGR SK 613102). A Watching Brief in an area of the quarry to the north of the third barrow resulted in a small rescue excavation in 2001 (NGR SK 601135). The survival of the third barrow as a low earthwork presented an extremely rare opportunity in the context of the East Midlands to examine a well-preserved Early Bronze Age monument in detail. The three barrows form part of a small, dispersed cemetery that has been revealed by aerial survey at the confluence of the Rivers Soar and Wreake (Figs. 1 and 2). Two further barrows identified as cropmarks (Leicestershire SMR Ref. SK61 SW CB) lie to the south of the river Wreake, away from the area of quarrying.

Collectively the results of the three barrow excavations provide valuable information on a wide range of research issues including both the complexities of monumental architecture and changing funerary practices, and also reveal a remarkable history of use and re-use over *c.* 2500 years, culminating in the siting of an Anglo-Saxon inhumation cemetery on the denuded remains of the mound of Barrow 3.

This report presents the results of the three barrow excavations as well as a consideration of their immediate environs, which, although limited in evidence, has enabled a wider picture of the surrounding land use to be drawn.

The site archives and finds have been deposited with Leicestershire County Council Environment and Heritage Services (Museums) under the following accession numbers: L.A982.1975 (1976 excavations); XA35.1999 (1999 excavations and watching brief); and XA99.2001 (2001 excavations).

H2\Site location

The excavations lay on the southern side of the village of Cossington, 11km north of Leicester. Barrows 1 and 2 (excavated in 1976) lay in the southern part the quarry, on a sand and gravel terrace 300m north of the River Wreake, close to its confluence with the Soar (Fig. 3). Barrow 3 (excavated in 1999) lay approximately 500m to the north-west (Fig. 4). The watching brief examined the area to the east of Barrow 3, up to the eastern quarry limit (Areas B–C). The 2001 excavation (Area E) was located approximately 60m north of Barrow 3, in the adjacent field. In addition to the main excavation areas, a palaeochannel was observed and recorded during the extension of the quarry area in 1999, 700m to the north-north-west of Barrow 3 (Area D), close to the River Soar.

H2\Aims and objectives

The fieldwork was undertaken with the following research aims:

- The study of variation in Neolithic–Bronze Age funerary practices and associated ritual activity both nationally and in the East Midlands.
- The study of land use and settlement in the Soar Valley.
- Processes of change: from ceremonial use in the Early Bronze Age, to settlement during the Iron Age, and re-use as a burial area in the Anglo-Saxon period.
- The transition from Bronze Age to Iron Age landscapes.
- The re-use of monuments.
- Settlement and land use during the Neolithic and Bronze Age.

H2\The structure of the report

The main excavations that are the subject of this report were undertaken under varying conditions in two separate campaigns over 20 years apart, resulting in two very different archives. To bring the sites together in a way that would communicate the results of the project in an informative way, it was decided to follow a fairly 'traditional' archaeological format. The report is therefore divided into four main parts: Part One introduces the sites, presents the archaeological background and summarises the palaeoenvironmental evidence for the surrounding landscape within which the monuments were constructed and used; Part Two presents the results of the 1976 excavations; Part Three details the results of the 1999 and 2001 phases of work; and, finally, Part Four offers a conclusion that draws the excavation results together in a wider archaeological and theoretical context. Parts 2 and 3 follow a broadly similar format, first presenting the excavated evidence, followed by the specialist reports and then a general discussion of the site findings. The report on the radiocarbon dating of the various sites did not easily fit this format and has been placed in full in Part Three. Several specialist reports originally prepared for the publication of the 1970s excavations are included here: specifically, reports on the human bone and the charred plant remains. The reader should bear in mind that these contributions were produced over twenty years ago and have not been updated in the light of more recent research.

The site phasing is based on the original site records, stratigraphic analysis, radiocarbon dating, and relevant information from particular specialist reports. In the report, the main features are referred to by feature number, for example F12; other deposits and fills are described as contexts and are defined by rounded parentheses, for example Context (13). In addition, finds from the earlier excavations were allocated a two-letter code (e.g. AB, AY) denoting their provenance. These are sometimes referred to in the finds reports below.

H2\Radiocarbon dates

Calibrated date ranges given in regular type are conventional radiocarbon ages, which relate the radiocarbon measurements directly to calendar dates. All have been calculated using the calibration curve of Reimer *et al.* (2004), the computer programme OxCal (v3.10) (Bronk Ramsey 1995; 1998; 2001) and the maximum intercept method (Stuiver and Reimer 1986). The calibrated date ranges cited in the text are those for 95% confidence. They are quoted in the form recommended by Mook (1986), with the end points rounded outwards to 10 years if the error term is greater than or equal to 25 radiocarbon years, or to 5 years if it is less. The ranges quoted in *italics* are posterior density estimates derived from mathematical modelling of archaeological problems (Marshall *et al.* below).

H1\The Archaeological Background

Examination of the archaeological record for the 2km wide area surrounding Cossington provides a good indication of the local settlement and funerary context of the barrows during their periods of use and re-use. Evidence from cropmarks, finds scatters and excavations was gathered from the Leicestershire Historic Environment Record, published reports, and unpublished grey literature sources. Excavation in the area has arisen as a result of threats from pipelines, quarrying, and road schemes as well as several residential developments. As a result the archaeological record is somewhat fragmentary, although the overall picture is augmented by evidence from aerial photography, fieldwalking, and metal-detecting.

H2\Neolithic and Bronze Age (Fig. 5)

Much of the evidence for early occupation of the area has been revealed through fieldwalking, with numerous lithic scatters and stray finds in the vicinity of the barrows. Given the potential biases inherent in such evidence, interpretation must be cautious, yet it is noticeable that the majority of the evidence derives from the slightly higher ground overlooking the confluence zone. Recently one of these scatters, located at Rothley to the west of the barrows, was the focus of excavation in advance of development. This work

revealed a remarkable Late Neolithic occupation site consisting of a pit complex and structure associated with a rich assemblage of Grooved ware and an engraved stone plaque (Cooper and Hunt 2005). The richness of the Rothley assemblage is rare in the local context, which until relatively recently was severely lacking in tangible evidence for Neolithic and Early Bronze Age occupation.

Fieldwork at Wanlip has located pits in association with Peterborough ware and Grooved ware (Ripper 1999), and contemporary flintwork was recovered during a separate excavation approximately 200m to the south (Cooper and Humphrey 1998; Beamish 1998). Another mixed assemblage of Grooved ware and Peterborough ware has also been recovered from a small pit group found during excavations ahead of the Rearsby bypass (Clarke 2007). To the east of the Cossington barrows, an isolated pit containing Grooved ware and lithics was revealed at Syston (Meek 1998), whilst Peterborough ware has also been found in association with a small pit group at Ratcliffe-on-the-Wreake during fieldwork in advance of the Ashby Folville to Thurcaston gas pipeline (Cater 2006, 227).

In contrast to the recent increase in evidence for Neolithic activity in the area, comparable finds of Early Bronze Age occupation remains have continued to be elusive, the only recent exceptions being the discovery of a pit group containing the remains of several Collared Urns at Birstall (Speed 2006) and the recovery of Early Bronze Age pottery from pits during the Rearsby bypass fieldwork (Clarke 2007). Evidence of Middle Bronze Age occupation close to the barrows, including a roundhouse and possible enclosure, has recently been found during the Ashby Folville to Thurcaston pipeline work (Cater 2006, 228).

In common with other parts of the country, cropmark remains of round barrows offer the most visible evidence for Early Bronze Age activity in Leicestershire, and many examples are recorded in the area around Cossington. Like the lithic scatter sites, many of these monuments appear to reflect activity on the higher ground above the confluence zone. To the west, a ring ditch has been identified on a low ridge above the Rothley Brook and the cropmark of a substantial round barrow is also known at Thurmaston. East of Cossington two small clusters of round barrows are known: at Syston, where three round barrows occupy a low ridge on the river gravel terrace, and at Queniborough, where a double and a single ring monument have been revealed in close association (Pickering and Hartley 1985, 38–9, figs. 5 and 7). The positioning and orientation of the Queniborough barrows is remarkably similar to the arrangement of Barrows 1 and 2 at Cossington (Fig. 6). Another possible barrow, in association with Early Bronze Age cremations, has also been partially excavated at Shipley Hill, north of Syston (Beamish 1992). Slightly further afield, at Eye Kettleby near Melton Mowbray, extensive excavations have revealed a series of Early Bronze Age ceremonial monuments in close association with a large cremation burial cemetery, some phases of which are broadly comparable with activities at Cossington (Finn 1999).

H2\Iron Age and Romano-British (Fig. 7)

In addition to the frequent cropmark enclosures that occupy the surrounding landscape, a series of excavations to the west of Cossington have revealed much about the later prehistoric and Roman occupation of the area. At Wanlip a small Middle Iron Age settlement including a roundhouse, an enclosure, and a cremation burial, was revealed prior to a new road development (Beamish 1998). More recently, excavations in advance of a pipeline to the north of this settlement revealed evidence of several Mid to Late Iron Age foci including possible enclosures, a roundhouse, pits, and associated field systems. Occupation on the site continued into the Roman period and remains of several rectangular buildings, boundary systems, and pits were all associated with this period of settlement (Thomas 2003a).

To the south of these sites an open area excavation at Hallam Fields, Birstall, has revealed extensive Mid–Late Iron Age settlement based on a series of enclosures containing stock control features, roundhouses and metalworking evidence (Speed 2006). To the east of Cossington, recent fieldwork in advance of the Rearsby bypass and the Ashby Folville to Thurcaston pipeline has identified areas of Iron Age and Roman occupation including enclosures, boundary systems and roundhouses (Cater 2006, 227; Clarke 2007). Cropmark evidence suggests that extant round barrows formed important focal points in the later prehistoric landscape, serving as reference for the positioning of linear boundaries, or by attracting nearby settlement (Pickering and Hartley 1985, 38–9).

H2\Anglo-Saxon (Fig. 8)

Understanding of the extent of Anglo-Saxon occupation in the area has also, until relatively recently, been limited. Much of the evidence is based on the results of discoveries made during fieldwalking or metal-detecting surveys, although several recent excavations close to Cossington have helped develop understanding of the Anglo-Saxon settlement pattern. East of Cossington at Eye Kettleby, an extensive area of occupation has been excavated, including numerous sunken-featured buildings (SFBs) and timber halls (Finn 1996). At Wanlip, to the west of Cossington, several SFBs, pits, and ditches revealed over a relatively large area during pipeline work also suggest an area of extensive Anglo-Saxon settlement (Thomas 2003a).

Cemetery sites are also known from the area. To the south of the Wanlip settlement, an inhumation cemetery including burials with weapons and a horse burial was partially revealed during development (Liddle 1980) and at Thurmaston a cremation cemetery has been recorded (Williams 1983). Other possible cemeteries in the area – suggested by metalwork finds – include Queniborough, Rothley, and Barrow-upon-Soar (Clough *et al*. 1975, Knox 2004).

H1\The Environmental Setting

Well-preserved pollen profiles recovered from two areas of the quarry, in the vicinity of the three barrow excavations, have permitted detailed analysis of the surrounding environment of the monuments. A pollen core taken from the palaeochannel observed in Area D some 700m to the north-north-west of Barrow 3 is dated to the late third millennium cal BC and probably infilled over a period of one or two centuries, thus providing a broad environmental setting for the landscape in which the barrows were established. No suitable samples of organic material were available to submit for dating the 'marshy' deposits located in Area C, although the results of pollen analysis suggest a later date for their formation (Greig below).

The Late Neolithic environment at Cossington appears to have been one in which a fairly high degree of wildwood persisted. Pollen indicators, with supporting evidence from insect remains, show that mixed woodland existed close to the Area D palaeochannel (Greig below; Smith below). Species such as alder, lime, oak, and elm appear to have been predominant and other species such as birch also grew in the area. Other woodland species include ivy, hawthorn, sloe or cherry, wild raspberry or bramble, with wood club-rush, bugler, and nettle representing a herb layer in the woodland. Species of beetle feeding on lime, alder, dead wood, and nettles support the picture of mixed woodland at this time. Evidence of water and waterside vegetation was present throughout, providing information about the watercourse from insect and plant remains.

Other evidence suggests that the area was not completely covered by woodland and indicates that human activity had begun to make a mark on the landscape. Pioneer species such as ash and elder suggest areas of clearing or marginal areas of the woodland, perhaps associated with human activity. Nearby human occupation is also indicated by persistent charcoal remains in much of the pollen profile, as well as species indicative of trampled or disturbed ground such as fat hen, chickweed and parsley piert. Whilst evidence for cereal growing is limited, seeds of grassland plants such as mouse-ear chickweed, plantain, hawkbit, and pollen of white clover, alongside dung beetle remains all suggest the nearby presence of a significant area of open grassland, perhaps maintained by grazing animals. Although a mixed assemblage, the animal bones from the palaeochannel base include butchered remains and domestic cattle species, adding further to the evidence for human occupation at Cossington during the Late Neolithic.

Some evidence for the gradual clearance of the alder carr woodland is indicated by the decreasing representation of its pollen from the profile over time. This is likely to be an indicator either of increased human activity in the area or that these activites were taking place closer to the channel. Although undated the pollen profile from the marshy ground in Area C provides further evidence for the increased effects of human activity on the Cossington landscape. Here tree pollen was noticeably lower than in the Area D profile, corresponding with increased evidence for species associated with open, occupied and cultivated land. There is also some suggestion that heathland may have developed in the sandy soils, perhaps as a result of grazing. All of the evidence from Area C suggests that these developments relate to increased or more intensive occupation and use of the landscape, indicative perhaps of activities relating to later prehistoric periods. Limited evidence for Iron Age and later cereal production was recovered as charred remains in settlement features, although the sparse assemblage did not inform greatly on the surrounding environment (Monckton below).

Part Two
Barrows 1 and 2

John Thomas with James Gossip

H1\Introduction and methodology

Barrows 1 and 2 were excavated in 1976. Following topsoil removal by a mechanical excavator under archaeological supervision, the underlying ploughsoil was removed by hand to reveal the natural sand and gravel and archaeological features (Fig. 9). The sand and gravel of the river terrace lay immediately under the ploughsoil and no former ground surface or former ploughsoils were evident. Extensive periglacial disturbance of the river terrace was apparent from the aerial photographs and upon excavation the underlying surface of the site was patchy, with areas of coarse sand and gravel, fine silty sand and pockets of clay all visible. Several natural hollows were examined in order to distinguish them from the archaeological features. Barrow 1 was fully excavated, planned, and recorded, as were the surrounding features. All internal features of Barrow 2 were fully excavated and recorded, together with approximately 70% of the surrounding ditches.

H1\Barrow 1

Barrow 1 was the smaller of the two barrows investigated and consisted of a relatively small, sub-circular monument defined by ditches (Fig. 10). Excavation revealed two main phases of ditch although there were evidently a number of sub-phases reflecting maintenance and redefinition of the barrow (Fig. 11). The first main phase, Fl, was the inner ditch, which had a diameter of approximately 16m; F5 represented the second phase outer recut. The outer ditch would have increased the diameter of the ring ditch to approximately 18m. The width of the ring ditch varied between 2.5m and 4.0m. Only one internal feature, a rectangular pit close to the centre of barrow, was identified. Immediately to the south-east of the barrow was a group of eleven cremation deposits; a further cremation had been dug into the top of the phase 1 ditch (Fig. 12).

H2\Phase 1: The original monument

The first phase ring ditch (F1) delimited an irregular, sub-circular area approximately 16m in diameter. Overall the ditch was approximately 1m deep and had a U-shaped profile, widening towards the top as a result of weathering, and varying in width between 1.6m and 2.0m. In the clearest of the section drawings (Fig. 13, Section B), it is apparent that the ditch circuit was redefined by a single recut. Although differences in the various excavated sections were apparent, generally the fills of the ditch were consistent throughout.

H3\The primary ditch

Much of the profile of the original ditch had been removed as a result of the recutting episode, although enough remained to indicate that it had fairly steep, sloping sides leading to a narrow, rounded base. The single visible fill of the primary ditch consisted of pebbles and coarse sand mixed with finer silt. This layer had apparently filled the ditch to at least half of its depth before it was recut, perhaps suggesting deliberate backfilling or the collapse of material from an associated mound (Fig. 13, Sections A, B and C).

H3\The ditch recut

At some stage, the original ditch circuit was redefined and replaced with a slightly shallower feature with a broadly similar profile (F1a; Fig. 13, all sections). The earliest fill of this ditch was a layer of fine silt that was almost entirely stone-free. Above this, a stony and silty layer was recorded. A fine silt layer overlay this fill, and this was in turn covered by the uppermost fill of the ditch, which consisted of fine grained light yellowish brown sand. In places, patches of iron panning existed between the upper and lower layers. Small

amounts of charcoal within the ditch fills indicated the presence of oak, maple, and hawthorn in the surrounding environment. In all ditch fills apart from the uppermost deposit, silting lines gave a good indication of the gradual infilling of the ditch over time. No positive evidence was recovered to indicate that slipping soil from any associated mound material had helped to fill the ditch, possibly suggesting the former existence of a berm between the ditch and mound. It is clear from the sections that the ditch had almost completely infilled by the time the second phase ditch (F5) was constructed.

H3\Charcoal deposits

Seven substantial deposits of charcoal were recorded towards the top of the largely infilled Phase 1 ditch, before it had finally silted up (Fig. 12; Fig. 13, Sections B and C). Their distribution was noticeably biased to the eastern side of the ring ditch and each deposit was broadly distinct from the others, indicating they were the result of separate episodes of activity. In some cases the charcoal deposit was associated with an apparent 'bedding' of small pebbles suggestive of hearths although none was associated with *in situ* burning. Charcoal of oak, poplar, hazel, and maple was represented as well as the hedgerow species, buckthorn, blackthorn and hawthorn-type. In comparison to the other F1 ditch fills, the contexts associated with the charcoal deposits held more numerous flint finds, with particular concentrations in and close to the charcoal. Waste flakes and cores were represented, as well as finished artefacts, of which scrapers were the most common implement (L. Cooper, below). The stratigraphic position of the charcoal patches suggests that they were deposited over a relatively short space of time, before the ditch became completely full. A radiocarbon date from bulked unidentified charcoal from one of these patches provides a terminus post quem for activities associated with these deposits of 1880–1620 cal. BC (HAR-4897).

H3\A primary burial?

Only one internal feature was identified within the area defined by the ring ditch, situated just to the north of its centre (Fig. 12). This was a rectangular pit (F2) measuring 2.5m long x 0.6m wide x 0. 15m deep, filled with homogenous light brown silt. No finds were recovered from the pit, and no evidence was recovered of any soil staining that might have indicated the original presence of a burial. Phosphate analysis conducted on samples of the fill by T. Sturge, former conservator for Leicestershire Museums, did show traces of phosphorous, although similar levels were recorded in surrounding natural deposits, possibly due to the modern use of chemical fertilizers. The purpose of this pit therefore remains somewhat in doubt. In all likelihood, however, given the dimensions and context of the feature, it represents the remains of an inhumation without any surviving grave goods. The acidic soils into which the feature was cut could easily have destroyed all other evidence of a burial.

H2\Phase 2: Re-defining the monument

After the first phase ditch had almost completely infilled, the monument was redefined, with the construction of a fresh ditch (F5), which effectively enlarged the diameter of the enclosed area to 18m. This ditch was shallower than its predecessor, with a maximum depth of 0.60m (only 0.50m in the south-western quarter; Fig. 13, Section C), and had less steep sides and a flat base. Generally the fills of F5 were similar to those of Fl, although only three broad episodes could be clearly distinguished. Despite some evidence for natural collapse of the edges, ditch F5 appeared to be a single phase feature that had been allowed to infill gradually. The primary fill was represented by a stony layer mixed with sand and silt. Overlying this was a layer of silt, which was in turn overlain by the uppermost fill of fine sand. This was barely distinguishable from the uppermost fill of ditch Fl, although a clear cut was observed in the north-east sector (Fig. 13, Section A), where a break in the silting could be seen rising to the top of the section, and in the north-west quarter a line of iron staining was visible, forming a clear interface between the two ditches (Fig. 13 Section C). Medieval pottery from the uppermost fill of the two ditches suggests that the monument had become levelled as a result of ploughing by this time.

H2\Phase 3: Re-use of the monument

H3\The cremation burials

A linear group of eleven cremation burials was located just outside the monument, closely respecting the south-eastern outer edge of ditch F5 (Fig. 14). An isolated pit containing cremated human bone, F4, had also been cut into the top fill of Fl, the first phase ring ditch. All the cremation burials lay directly beneath the ploughsoil and many had been badly damaged by ploughing. Despite this, it was possible to distinguish individual cremation deposits, and in most cases to ascertain the nature of the burial practices involved.

The majority of the cremations were placed in Early Bronze Age urns, which were often inverted. Substantial amounts of three deposits (F6, F9 and F24) appeared to be intact, and had cremated bone adhering securely to the urns, while in other cases sherds of pottery survived alongside the bone fragments. No pottery was present in deposit F7, whilst adjacent deposits F8 and F21 both contained body sherds, making it possible that some of this pottery originated from F7. Insufficient data makes this impossible to verify, although a spread of pottery was apparently located to the west of F7, suggesting that this deposit may have been disturbed by ploughing, spreading it in this direction.

In two instances (F4 and F23), the cremation deposits had been placed in pits. F4 had no associated pottery, whilst F23 yielded only two sherds. Some cremations appeared to have been capped by limestone slabs (F6 and F24), and others were contained within rudimentary cists (F7 and F8). The cremated bone of F25 was deposited on top of a flat slab. The different deposits are described below; the pottery is presented in detail and illustrated in the following section (Allen below).

H4\F3. Adult cremation burial in inverted urn

Cremation burial F3 was initially identified as a spread of burnt bone, although excavation subsequently revealed three rim sherds in their original positions beneath the spread, suggesting the cremated remains had once been contained within an inverted urn (Fig. 15). Another rim sherd and other possibly associated fragments were located nearby, supporting this idea. Cremated bone was located in the centre of the remaining urn fragments, representing all parts of the skeleton. Analysis suggests the cremated remains belonged to an adult of indeterminate age and sex.

H4\F4. Pit containing cremated bone

F4 contained a small collection of cremated human bone that had been deposited in a small pit, 0.25m by 0.25m and 0. 15m deep. Unlike the cremation burials nearby, F4 had a clear association with the infilled first phase ring ditch of the monument (F1), having been cut into its upper fill. Only a small amount of cremated bone was present in this deposit, but included long bone, rib, and cranial fragments, apparently representing an adult (age and sex unknown). A possible occipital bone submitted for radiocarbon dating, produced a surprisingly early determination of 2930–2870 cal BC (SUERC-11272; 4285±35 BP).

H4\F6. Adult ?male cremation burial in inverted urn

This cremation burial was in an inverted urn placed in a shallow pit on a bed of small pebbles (Fig. 16). Only the lower part of the pit was recorded, since it was unidentifiable in the upper fills, and its full dimensions are therefore unknown. The pit contained the complete rim of an inverted urn with cord impressed decoration, surviving intact to a depth of approximately 0.15m (see Fig. 33.10 below). Cremated bone had spilled out from the open neck of the urn into the bottom of the pit. All parts of the skeleton had survived within the remains of the urn, and indicated a possible male of adult years. A flint fabricator, deposited as a grave good, was also present within the urn (L. Cooper below). Cremated bone (a possible fibula fragment) from F6 is estimated to date to 1740–1520 cal. BC (SUERC-11273; 3340±35 BP).

H4\F7. Adult urned cremation burial in cist

Cremation burial F7 was represented by a small cluster of cremated bone fragments, 0.10m–0.15m in diameter. Immediately to the east of these were four limestone slabs, one standing on edge beside the bone, the others apparently disturbed. Fragments of pottery were found to the west and south-west of the cremation deposit, although these could not be firmly attributed to F7, and could have derived from disturbance of nearby deposits F8 and F21. Nonetheless, F7 probably represents a badly disturbed cremation in an urn and cist. Consequently, the skeleton was poorly represented, although analysis suggests the burial was of an adult of indeterminate age or sex.

H4\F8. Adult urned cremation burial in cist

This cremation burial was originally revealed as a spread of burnt bone and pottery fragments from an urn surrounding a stone slab. The slab was lifted to reveal a concentration of bone and fragments of pottery (Fig. 34.13), perhaps crushed by the stone, which may have once have been the side wall of a cist. Fragments of bone, pottery, and stone were spread around the deposit, particularly to the north, indicating further disturbance of the burial. The majority of the identifiable body parts proved to be either longbone or cranial fragments representating an adult. Two flint scrapers (Nos 264 and 267) located nearby were also possibly associated with this cremation.

H4\F9. Adult cremation burial in inverted urn
F9 was the disturbed cremation burial of an adult (age and sex unknown), originally contained within an inverted urn (Fig. 17). Excavation revealed the complete diameter of an inverted urn with cord-impressed decoration (Fig. 33.11), containing cremated bone (fragments of longbones and cranium). Further fragments of bone and pottery possibly associated with this deposit were recovered from the immediately surrounding area. A possible tibia or ulna fragment gave an estimated date of 1690–1525 cal BC (OxA-16157; 3359±34 BP).

H4\F20. Adult cremation burial in inverted urn
Feature F20 probably represented the disturbed remains of a cremation burial once contained within an inverted urn. Fragments of cremated bone were concentrated in a small area approximately 0.15m in diameter. Three rim sherds to the south-west of the bone appeared to be *in situ*, whilst further rim sherds and eight body sherds from a bipartite urn were recovered close by. Fragments of cremated bone and pottery were also scattered to the south-east. Analysis of the cremated bone indicates an adult individual, although age and sex could not be determined. A possible tibia fragment is estimated to date to 1950–1740 cal BC (SUERC-11274).

H4\F21. Cremation burial in inverted urn
F21 was a badly disturbed feature, probably representing the remains of a cremation burial within an inverted urn. The remains consisted of a few very small fragments of burnt human bone contained within a group of *in situ* rim sherds from an urn (Fig. 34.14). Other possibly associated fragments of bone and pottery were recovered to the south and south-west of F21. Not enough positively identifiable bone was present in this burial to provide any information on the individual represented.

H4\F22. Adult cremation burial in inverted urn
Cremation burial F22 was represented by a small collection of burnt human bone and pottery fragments including four rim and several body sherds from an urn (Fig. 18; Fig. 34.15). Analysis of the bone indicates an adult, although age and sex could not be determined. A possible proximal radius fragment from F22 is estimated to date to 1750–1530 cal BC (SUERC-11275).

H4\F23. Urn and cremated bone placed in pit defined by ?pebble markers
F23 was contained within a small circular pit, 0.25m in diameter and 0.10m in depth. The upper limits of the pit were partially defined by several large pebbles located around its edge. The cremation deposit comprised a very small collection of cremated bone and pottery fragments, surrounded by charcoal staining in the upper part of the pit. One rim and one body sherd were recovered from the pit fill and several possibly associated sherds were found to the south-west of the pit. It is unclear whether this deposit represents a formal cremation burial or a small group of artefacts selected for burial. The urn from F23, although only partially represented, stands out from the others by being apparently undecorated (Fig. 34.16).

H4\F24. Adult male cremation burial in upright urn
This cremation burial was the most complete from the group and comprised the remains of an adult, possibly male, around 25 years in age, contained within an upright urn (Fig. 19). Despite some damage to the top of the urn, it was otherwise intact (Fig. 33.12), and was filled with cremated bone. Other sherds of pottery were found in the vicinity, and to the south a disturbed stone slab may possibly have once been used as a capping for the burial. Cremated bone (humerus/femur fragment) from F24 is estimated to date to 1740–1520 cal BC (OxA-16155).

H4\F25. Disturbed cremation burial
F25 was represented by fragments of cremated bone situated on top of a triangular limestone slab (Fig. 20). Pottery fragments, including rim sherds, were found immediately to the south of this deposit (Fig. 34.17), which, if associated with the cremated deposit, could represent an urned cremation burial that had been inverted onto a stone slab, and subsequently had been badly disturbed. A cranial bone fragment from the deposit is estimated to date to 1690–1500 cal BC (OxA-16156).

The location of another cist burial was indicated by three small limestone slabs lying close to a few bone fragments 2m to the south of F22. Several urn sherds representing three further vessels (Fig. 34.18–20) were also recovered from unstratified contexts, not associated with cremation deposits. They provide a good measure of the damage the site had suffered from ploughing and some indication that the cremation cemetery may once have covered a somewhat wider area.

H1\Barrow 2

Barrow 2 was situated 100m south-east of Barrow 1 and consisted of two concentric ditches, both of which formed a fairly regular, somewhat angular enclosed area (Fig. 21). Both ditches gave the appearance of having been constructed of a series of short, interlinked straight sections giving rise to the distinctly angular plan of the monument. Like Barrow 1, Barrow 2 had suffered heavy plough-damage and none of the original mound material survived. The internal diameter of the inner ring ditch (F12) was 35m, while the internal diameter of the outer ring ditch (F13) was 51.50m. Within the area defined by the inner ditch a series of sequential burials had been placed, including several cremation burials and a crouched inhumation with associated grave goods. A number of worked flints were recovered from the two ditches although in lesser quantities than from Barrow 1 (see L. Cooper below).

H2\The inner ditch

The inner ditch of Barrow 2 (F12), where excavated, was between 2m and 2.5m wide and was up to 0.85m deep with a shallow overall profile, flat at the bottom and widened by erosion towards the top (Fig. 22, Sections E–H). In contrast to the Barrow 1 ditch fills, the layers within F12 were less regular due to the patchy nature of the natural subsoil, although evidence of possibly three phases of use was apparent from the excavated sections.

H3\The primary ditch (F12)

Evidence for a primary phase of F12 was recovered from all excavated sections of the ditch. This earliest boundary had a fairly flat narrow base and was associated with steeply sloping lower sides that became wider towards the top of the feature. In Sections E and F the fills suggest gradual infilling/silting of the ditch over time in what can be seen of the feature. In contrast, however, Sections G and H both display evidence of distinctly stony deposits in the base of the ditch, indicative of material from a collapsed bank filling the feature from the inner edge. A mix of maple and oak charcoal was recovered from the inner ditch during excavation.

H3\The first recut (F12a)

After it had apparently almost completely filled up, F12 was recut in the form of a new ditch with a broadly similar profile, adopting a flat narrow base and sloping edges (F12a). This seems to have been almost entirely filled with light brown fine sands, perhaps suggesting it had been deliberately infilled. Evidence for this recut was not apparent throughout thecircuit, and may have been removed by the second recut.

H3\The second recut (F12b)

The inner ditch was redefined for a second time when a much shallower boundary was created (F12b), cutting though or removing the infilled remains of the first recut along at least part of the circuit (Fig. 22, Section E). The profile of this new ditch was gently rounded, with sloping sides and a curved base. It is

likely, given the softer soils into which it was cut, that the final profile of F12b was a result of weathering. The infilling of this phase of ditch consisted of several layers of silty sands with occasional patches of stonier soil, suggesting the feature had become infilled gradually over a period of time, during which the initial shape of the profile could have been lost.

All three phases of the inner ditch were eventually covered by a silty layer containing patches of sands and pebbles, which in turn was covered by a fine sandy deposit. Roman, Anglo-Saxon and Medieval pottery sherds located within these upper fills indicate the gradual infilling of the ditch over time.

H2\The outer ditch

The outer ditch circuit (F13) closely mirrored the shape of the inner circuit and similarly measured between 2m and 2.5m in width. Excavation revealed the ditch to have a predominantly V-shaped profile although the sharpness of the edges varied within the overall circuit. The depth of the ditch also varied and was recorded as between a maximum of lm and a minimum of 0.70m which coincided with the more gently sloping edges of the feature (Fig. 23, Sections I–K).

H3\Localised recut (F13a) on northern side

In contrast to the inner ditch (F12), no definitive evidence was revealed to suggest major episodes of recutting for F13. Sections I and J on the northern side of the monument revealed evidence of a single recut (F13a), although this was not observed elsewhere on the circuit. The recut F13a apparently redefined the ditch on this side of the monument along a broadly similar, but slightly shallower profile. Interestingly, this evidence occurs in the same area of the monument which saw most recutting of the inner ditch, perhaps indicating that the natural subsoil here was softer, so necessitating more frequent maintenance of the features. This also further emphasizes the apparently segmented nature of the ditches. No specific records exist to corroborate this theory although the patchiness of the natural subsoil here was commented on.

H3\Other areas of ditch F13

A more complex sequence of fills was observed during the excavation of F13, with no clear correlation between layers observed in the different sections. The ditch fills could, however, be broadly divided into three main layers. The primary fill consisted of coarse sand and pebbles, perhaps indicating infilling as a result of initial weathering. This was overlain by a layer of fine-grained silts, which was itself covered by a final layer of fine-grained sand that was very similar to the surrounding natural subsoil.

H2\The burials and associated features

A number of burials and associated features were revealed within the area defined by the inner ditch (F12). These lay in two small clusters, one around the centre of the enclosed area and another closer to the ditch in the north-western part of the area (see Fig. 21 above). Both inhumation and cremation burial was represented among the remains. A combination of the results of pottery analysis and complementary radiocarbon dates has suggested a chronological sequence of the funerary activity associated with this barrow.

H3\The primary burial: adult cremation with Beaker pottery sherds (F17)

The primary burial within Barrow 2, F17, was located approximately 4m south of the centre of the barrow; it was also the most complete cremation burial from all three of the barrows (Fig. 24). It comprised the cremated remains of an adult, along with two small pottery sherds representing two different Beaker pots (Fig. 33.1–2), surrounded by pebbles. All were contained within a sub-rectangular pit measuring 1.10m x 0.75m and 1.0m in depth (Fig. 25). The burial remains were represented by a central deposit of cremated bone and oak charcoal packed tightly into a rectangle 0.50m x 0.30m and 0.06m in depth, perhaps indicating they were originally contained within a wooden box. The area containing the remains was surrounded by a packing of large rounded pebbles. Apart from the Beaker sherds, no other grave goods accompanied the burial. A radiocarbon date of 2140–1930 cal BC (SUERC-11277) was obtained from a piece of cremated bone (humerus or radius), which accords with the pottery included.

H3\The secondary burial: crouched inhumation with grave goods (F15)

The second burial in Barrow 2 was located a little to the north of the primary interment, just to the north-east of the centre of the enclosed area (Fig. 21 above). This burial (F15) consisted of a crouched inhumation in a steep-sided rectangular pit measuring 2m x 1.2m and 1m in depth, oriented on a north-west to south-east alignment (Figs 26 and 27). The grave fill was a homogenous mixed sand and silt with occasional pebbles, sticky in texture and damp at the bottom.

Within the grave, the poorly preserved remains of a child aged around 8 years consisted of several long bones, part of a mandible with four remaining teeth and other smaller fragments. Despite the poor preservation of the body, the arrangement of the bones suggested that the body had been placed in a crouched position, lying on its right hand side, with the head facing south-west (Fig. 28).

Accompanying the body was an arrangement of grave goods, located at various points within the grave (Fig. 28, A–F). A large ridged Food Vessel (A) stood upright close to the head, approximately 0.30m from the skull. An incomplete flint knife (D) was found close to the teeth and may have been placed in the mouth at the time of burial. At the opposite end of the body, presumably close to the feet, lay a small pygmy cup or miniature Food Vessel (B), and beyond this at the south-eastern end of the grave were the fragments of a small, round bowl carved from soft sandstone (C) and two more flint knives, one a complete plano-convex knife (E), the other broken (F). Interestingly the stone bowl had been decorated with V-shaped marks on the exterior which matched those on the enlarged Food Vessel, suggesting they were meant to be kept or deposited together.

A sample of bone from the inhumation was submitted for radiocarbon dating subsequent to the original excavation, but this unfortunately was insufficient to produce a result. There are no surviving remains of this inhumation available for further study. The range of accompanying grave goods, however, provide a reasonable estimate of the date of the burial. In particular the small accessory cup conforms to a type that is generally attributed to the Early Bronze Age period in the first half of the second millennium cal BC (see Allen below).

H3\Food Vessel within a small pit (F16)

Approximately 4m south-west of inhumation F15, close to the primary burial F17, was F16 (Fig. 29): a shallow pit 0.90m x 0.50m, within which was a bowl-shaped Food Vessel (Fig. 32.4), likely to be of a similar Early Bronze Age date to that found in F15 (above). The vessel stood upright in the pit and was largely intact although the top had been damaged. Although this feature resembled cremation burials found on the site, no associated cremated bone was recovered. It is possible that the pot had been placed unaccompanied within the monument, perhaps representing, or containing an offering. The exact function of the pit must remain uncertain, however, and it is equally possible, given the acidic soils, that it represents the truncated remains of a much larger grave intended for an inhumation.

H2\Later burials

The remains of several later burials with Collared Urns were also found at Barrow 2, reflecting slightly later episodes of burial.

H3\Shallow pit containing a Collared Urn (F15a)

This feature comprised a shallow pit (F15a), no more than 0.15m deep, that had been cut into the top of inhumation F15 on its north-eastern side. This scoop contained a small Collared Urn (Fig. 33.7), but was otherwise lacking in finds or evidence for an associated burial. It is possible that the urn once accompanied an inhumation placed in a shallow grave that has since been destroyed or completely deteriorated. Alternatively this feature may be the deliberate burial of a Collared Urn at a significant location. The relationship to the former inhumation is uncertain. The later pit may have been deliberately sited in reference to the earlier feature, particularly if the location had been marked in some way. If this was originally a grave, the position of the feature may well reflect a desire to occupy the central area of the barrow.

H3\Adult, ?male cremation burial with Collared Urn (F14)

Six metres to the north of inhumation F15 lay a cremation burial in a small pit 0.35m x 0.35m x 0.10m deep. The pit had a characteristic ledge on the northern side and was deeper to the south (Fig. 30). A Collared Urn lay on its side within the pit, the top damaged by ploughing (Fig. 31 and Fig. 33.8). Cremated bone and charcoal (oak, poplar, and maple) lay in the pit beside and in front of the urn, suggesting that the pot had fallen over at some point during the pit's infilling. It is possible that the cremation may have been spilled when the pot moved, although there was no trace of any cremated bone within the vessel. Perhaps a more likely situation is that the urn was originally placed standing on the ledge, accompanying the cremation burial, which lay in the deeper part of the pit below. A ?tibia fragment from this burial produced a radiocarbon date of 1880–1630 cal BC (SUERC-11276).

H3\Possible disturbed cremation burial in inner ditch F12

The rim and collar of a Collared Urn and cremated bone were recovered from the inner ditch (F12) on the north-western side of the monument (Fig. 33.9). These are likely to represent another cremation burial, possibly disturbed during the recutting of the ditch. On the north-eastern side of F12 a patch of charcoal – similar to those revealed in the ditch of Barrow 1 – was also discovered, although the relationship, if any, between it and the Collared Urn deposit is unclear. The lack of associated finds suggested that this charcoal patch was not itself a cremation burial, but it may have been a deposit of pyre remains associated with one of the cremations within the ditched area.

H2\Other features within Barrow 2

Three other features were revealed within the central area of the barrow (F10, F11 and F18), although none of these could be clearly associated with a distinct burial. F10 and F11 were located approximately 12m north-west of inhumation F15 (see Fig. 21). These features comprised two piles of limestone slabs, of the same type used in features at Barrow 1. These slabs lay on top of the gravel, immediately beneath the ploughsoil. A similar pile of limestone slabs (F18) lay on the gravel 6m south of F15. It is possible that these represent the badly disturbed remains of cist burials, as was suggested at Barrow 1. Given the general absence of any associated evidence for burial, however, these features might equally represent the basal remains of markers, constructed to indicate the location of burials.

H1\The Finds

H2\The Bronze Age pottery and stone bowl *– Carol Allen*

H3\Quantification and catalogue

A total of 277 sherds of pottery, weighing 8872g, were found in Barrows 1 and 2. All the pots also have numerous small fragments, which are included in the pot weights but were not counted. The identified sherds represent 19 separate vessels of Bronze Age date, all of which are illustrated. Six complete profiles were present, from almost complete pots (each recorded as one sherd). All the pottery is listed in Appendix 1. In addition, there were some sherds which could not be identified to a particular pot type and these have been designated simply as Bronze Age. These are likely to represent another five vessels.

A broken stone bowl was also found in inhumation F15. Ten pieces of the bowl, weighing 89g, were found and the complete profile can be determined.

H3\Methodology

The pottery was recorded and described according to the guidelines of the PCRG (1997). All the sherds were counted, weighed, and recorded, including wall thickness, fabric type, the abrasion level of the sherds, and the part of the pot (rim, body or base) represented (see Appendix 1). All the sherds were examined using a x2 binocular microscope in order to allow the fabric types to be characterised. Four sherds representing the main tempering types observed were sent for thin-section analysis (see Appendix 2 below).

H3\Fabrics

Three different fabric types were recognised following examination of the sherds by eye and with a x2 binocular microscope. The division of the fabric types was based on the apparent tempering materials visible by eye and on the appearance, colour and firing of the sherds. This assumes that the potters were aiming to produce pots with a distinctive appearance and tempering. There were some problems in identifying fabric inclusions particularly when the vessels were complete, as it was not possible to examine a sherd break under the microscope. In addition, some of the pots had been treated in the past prior to reconstruction. However, this problem was reasonably resolved by the thin-section analysis.

The three fabric types are summarised below in Table 1. Full details of the three types are provided in Appendix 2, where the coding, quantity and sizes of the inclusions are shown. Four sherds were sent for thin-section analysis, selected from contexts in which there were suitable sherds. Two sherds were selected from fabric 1 (Contexts F9 and F24), one from fabric 2 (F6), and one sherd from fabric 3 (F16). These represented the main tempering materials in the assemblage.

Table 1: Bronze Age pottery: summary of fabric types.

As Table 1 indicates, all three fabric types were used at each barrow. At the possibly earlier site (Barrow 2), fabric 2 with igneous tempering predominated, with the quartz and sandstone fabric 3 being used for the manufacture of the Beaker pottery; a modest amount of fabric 1 was present. At Barrow 1, most of the pottery was made from fabric 1 with granitic tempering, with fabric 2 forming the next most important group; only a tiny amount of fabric 3 was present. Changes in the fabric types used for prehistoric pottery through time are commonly seen even on the same site (Allen 1991, 4–5; Chowne *et al.* 2001), as traditions changed, with the tempering materials varying according to the region (Allen and Hopkins 2000, fig. 8; Cleal 1995).

The thin-section analysis indicated that the granitic material used in fabric 1 probably came from the distinctive granodiorite sands about 10 miles south of Cossington. It is likely that these sands and gravels originated in a stream cutting a Mountsorrel outcrop. The igneous rock used in fabric 2 was noted as black inclusions seen by eye, although it was sometimes difficult to distinguish between the granitic and igneous rocks when sherd breaks could not be examined under a microscope. It is likely that these black igneous inclusions are of local origin, deriving from glacial erratics. The quartz and sandstone of fabric 3 are also likely to have originated in the local boulder clay.

All the tempering materials appear to have fairly local sources, although it appears that the traditions for using different materials did change over time. The inclusion of granodiorite material, which is found to the south of the site, is of interest as it has been suggested that this material may have held particular significance in this region (Knight *et al.* 2003, 121). The granodiorite in the pots was usually clearly visible; the use of this material as tempering in pots used for burials could suggest ancestral links or connections with the Mountsorrel region.

H3\Types of pottery

A total of 19 vessels was clearly identified. Eight pots and the stone bowl were found in Barrow 2; the remaining eleven pots come from Barrow 1. All the pots are Early Bronze Age in date. The eight vessels in Barrow 2 comprise sherds from two Beaker pots, two Food Vessels, one small Early Bronze Age Accessory Cup, and three Collared Urns. The eleven vessels from Barrow 1 are all Early Bronze Age Urns. The vessels are described below in chronological order, and their dating and relevant parallels discussed.

In addition, a number of sherds that could not be securely dated were found in both barrows. From their context, colour, fabric, and thickness most of these sherds are very likely to be Bronze Age. These were found in Contexts F7, F8, F22 and F23 in Barrow 1, and in Barrow 2 in Contexts F12, F13 and unstratified. In total, Barrow 2 yielded 45 sherds weighing 4174g, Barrow 1 232 sherds weighing 4698g.

H3\Barrow 2 – Early Bronze Age pottery and stone bowl

H4\Beakers

Two sherds of Beaker pottery representing two different vessels were found in pit F17 in Barrow 2. This sub-rectangular pit contained what may be the earliest cremation on the site. One rim sherd (Fig. 32.1) is decorated with diagonal comb decoration; the second body sherd (Fig. 32.2), which is of lighter colour, has zoned comb decoration and a plain bar.

The form of these vessels is unclear, but the decoration suggests that these vessels belong to the period of the long-necked Beakers with zoned decoration which are thought to date to about 2200–1900 cal BC (Needham 2005, 195). This date is consistent with the radiocarbon date obtained from the cremated human bone in this burial.

Similar pottery is known elsewhere in the region, indicating that these sherds conform to the local types. A Beaker sherd with comb decoration and similar rounded rim was recently found at a settlement site at Ridlington, Rutland (Beamish 2005, 18). A number of vessels with comb decoration have been found in the past, some with zones and plain bars, for example at Knipton and Melton Mowbray in Leicestershire (Clarke 1970, figs 955 and 762).

H4\Accessory cup and stone bowl

Inhumation F15 in Barrow 2 yielded a Food Vessel (see below), a stone bowl, an accessory cup and some flint knives. The accessory cup is bowl-shaped with a flat rim (Fig. 32.3). It has decoration, probably made by impressions of a twig end, all over the pot in roughly horizontal rows as well as on the rim. It had seven small pierced lugs irregularly spaced around the vessel, and a slightly dished base. Small cups with lugs are unusual, with lugs usually being found on larger Food Vessel pots. In this region, however, a small undecorated cup with five pierced lugs is known from Mountsorrel (Allen 1988, no. 297), suggesting this may be a local style.

Cups of this type are generally dated to the first half of the second millennium cal BC (Allen and Hopkins 2000, 303). A bulk sample of unidentified charcoal provides a *terminus post quem* of 1870–1430 cal BC (BM-453; 3324±81 BP) for an undecorated accessory cup found with a Collared Urn at Bedd Branwen, Anglesey (Lynch 1971). It is thought that such cups came into use with the varied styles of pottery seen in this period around 1800–1700 cal BC (Needham 1996, 131). The cups may have had a particular use in the burial ceremony (Allen and Hopkins 2000, 313).

The small stone bowl (Fig. 32.5) appears to have been carved from a piece of local sandstone. It is an unusual find and has V-shaped decoration on the exterior walls which matches well with the decoration on the enlarged Food Vessel, suggesting that these were meant to be kept or deposited together. There is no indication of the stone bowl having been used and it is likely to have been buried complete and broken by subsequent agricultural activity. There are few parallels for the stone bowl in Early Bronze Age contexts, although a small bowl or cup made of sandstone was found on Stanton Moor in Derbyshire in the nineteenth century (Ward 1900). However, that cup was incomplete with the upper part missing and its exact context was uncertain, although it was thought to have been found with a cremation burial. Marks on the base of the Cossington cup are recorded but may be the result of modern damage.

H4\Food Vessels

The Food Vessel from F15 (Fig. 32.6) is an enlarged Food Vessel Urn or vase-shaped pot. The height is greater than the width and it has five raised cordons with finger-nail impressions on the first cordon, and incised V-shaped decoration between the other cordons. Food Vessel Urns are not common in this area, and bowl types of Food Vessel are better known, as discussed below.

Larger vase-shaped vessels are seen in the Peak District and northern Britain, where similar tall vessels with cordons and decoration are more often found. A decorated vessel with three cordons is known from Lean Low, Derbyshire (Manby 1957, fig. 3.A20) and several similar vessels come from northern Britain (Cowie 1978). A large Food Vessel also with five cordons is also recorded from Fishguard, Pembrokeshire (Burgess 1980, fig. 3.3.15). Cordoned Urns, although similar in profile, usually have conspicuously raised cordons, wider bases and are usually restricted to Scotland and Ireland, with a few examples found in Wales (Sheridan 2003, fig. 13.2.2).

A recent Scottish study suggests that Vase Urns were first seen by about 2000 cal BC (Sheridan 2003, 203) and generally in Britain are thought to be in use from about 2050–1700 cal BC (Needham 1996, 130).

A second Food Vessel (Fig. 32.4) was found in shallow pit F16, which contained no bones or other finds. This is a bowl-shaped vessel with a bevelled rim with small circular impressions, a narrow collar, and whipped cord impressions on the collar, neck, shoulder and part of the lower body.

A number of bowl-shaped Food Vessels are known in this region. A bowl of very similar shape was found at Croxton, Leicestershire (Allen 1988, no. 156). The Croxton bowl has similar decoration and rim shape, but also has twisted cord decoration. Other bowl-shaped Food Vessels are known in Leicestershire from Langham (Vine 1982, no. 602) and Market Bosworth (*ibid*., no. 603); part of a decorated biconical Food Vessel which may be bowl-shaped was found at Eye Kettleby (Woodward forthcoming), and an unstratified Food Vessel rim was found at Grove Farm, Enderby (Clay 1992, 45). This suggests that the Cossington Food Vessel follows the bowl Food Vessel tradition in this locality. Also, similar bowl-shaped vessels are known in the region in Lincolnshire (May 1976, figs 47 and 48) and in Derbyshire (Manby 1957).

Although bowls may be considered earlier than vase-types the dates suggested above of 2050–1700 cal BC may also be appropriate for this pot.

H4\Collared Urns

Three Collared Urns were found in and around Barrow 2. One was found in a shallow pit (F15a) cut into the upper part of inhumation F15, and a second in a small pit 6m to the north (F14). The rim and collar of a third Collared Urn were uncovered in the inner ditch surrounding Barrow 2 (F12).

The Collared Urn from F15a (Fig. 33.7) was almost complete with a flat rim and incised decoration on the collar in a random lattice-like pattern. The pot has small circular impressions below the collar, incised decoration diagonally on the neck, and has a flat base.

The Collared Urn from F14 (Fig. 33.8) was also almost complete with a flat rim. This pot has whipped cord decoration in herringbone pattern on the neck and shoulder. The associated cremated human bone gave a radiocarbon date of 1880–1630 cal BC (SUERC 11276).

The rim of the Collared Urn from F12 (Fig. 33.9) was rounded and tapered internally; it was decorated with parallel rows of twisted cord, and the collar has twisted cord decoration in a diagonal lattice pattern.

Two similar Collared Urns are known from the barrow at Sproxton, Leicestershire (Clay 1981). One of the Sproxton vessels had poorly executed twisted cord decoration on the collar and neck and the other larger vessel had whipped cord decoration in a herringbone pattern. The shapes of the vessels at Cossington and Sproxton are similar but not identical, and indicate that the Cossington pots conform to a local tradition. Similar pots with twisted cord decoration and whipped cord decoration in herringbone pattern are known in the area from Salmonby and Caythorpe in Lincolnshire and Desborough, Northamptonshire (Longworth 1984, nos 902, 886 and 1003).

The pot from F15a belongs to Longworth's (1984) Secondary Series and that from F14 to his Primary Series; the form of the third Collared Urn is unclear. However, this scheme of typology and dating is now considered suspect, as it is now known that there is a gap of many hundreds of years between the suggested preceding style of Fengate ware and the emergence of Collared Urns probably around 2200 cal BC (Gibson 2002, 96; Sheridan 2003, 203). The radiocarbon date for the Cossington pot is consistent with the dating for all styles of Collared Urns, which indicates that most types were in use within the first half of the second millennium cal BC (Needham 1996, 131–2).

H3\Barrow 1 – Early Bronze Age Pottery

H4\Urns and cremations

A number of cremations were found lying in a flat cemetery to the south-east of Barrow 1 (Table 2). Six of the 13 cremations were found with pottery sherds (F3, F7, F21, F22, F23 and F25). Further sherds from an undecorated urn were originally recorded from F20, but these were not found and thus could not be included in the current report. Four cremations were contained within urns (F6, F8, F9 and F24). Two cremations did not have any pottery (F4 and F1). A further three vessels (AA, AY1 and AY2) were unstratified and could not be securely linked with any of the cremation deposits (Stirland below).

Six of the urns were inverted (F3, F6, F9, F20 [missing], F21 and F22), two urns were found in cists (F7 and F8), two were found in pits with pebbles or stones (F23 and F25), and one urn was upright (F24). Many had been damaged by subsequent plough activity. Eleven vessels, representative of the pottery assemblage from this barrow, are illustrated.

Table 2: Pottery, cremations, and absolute dates from Barrow 1.

H4\Pot forms and rims

The forms of the Cossington pots fall into two main groups. Three are straight-sided and have a fairly upright form: pots 10, 11 and 16. Eight vessels are jar-shaped and have an inturned upper portion: pots 12, 13, 14, 15, 17, 18, 19 and 20; pots 15, 17 and 19 also have a slight shoulder (Figs 33–34).

Rim types vary. Seven pots – 10, 11, 13, 14, 17, 18 and 19 – have rims which are bevelled internally. Pot 12 has a rounded and slightly inturning rim and pot 20 has a rim which is thin, rounded and inturning. There are two pots with flat rims, 15 and 16. These forms and rims show similarities to vessels found in cremation cemeteries in the East Midlands such as Coneygre Farm, Nottinghamshire (Allen *et al*. 1987, 190–1).

H4\Decoration

One urn does not have any apparent decoration, but only a small part of this vessel remains (pot 16). All the remaining urns retain some decoration.

Twisted cord decoration, in both horizontal and V-shaped patterns, is seen on the upper part of four urns (pots 10, 12, 15, and 17). Horizontal grooves were apparent below the rim of one straight-sided urn (pot 11). Incised horizontal and diagonal lines were seen on two pots (13 and 14), and incised horizontal lines on two further vessels (18 and 19). One vessel (20) has comb decoration below the rim.

Four vessels show slightly raised cordons at the shoulder level (pots 12, 14, 15 and 17). These cordons are not comparable with the multiple cordoned vessels apparent at some Bronze Age cemeteries such as Eaglestone Flat in Derbyshire (Barnatt 1994, fig. 12).

H4\Pot types

The forms and rims of the vessels from this cremation cemetery are comparable to others in Midlands cremation cemeteries such as Coneygre Farm (Allen *at al*. 1987) and Eye Kettleby (Woodward forthcoming). However, the decoration seen at Cossington – twisted cord, grooves, comb and incision – is seen less often at such sites, where cordons, finger-tip and finger-nail impressions are common.

Some similarity of the twisted cord decoration seen on the upper part of the Cossington urns is apparent in the Biconical Urn tradition. However, Biconical Urns generally have a profile of two opposed truncated cones and they are considered to be restricted to areas of southern Britain (Gibson 2002, 102–3), and the Cossington pots do not fall into this category.

Decorative parallels for the Cossington pots are seen at Bronze Age sites elsewhere. Twisted cord decoration and raised cordons were apparent on bucket-shaped urns at a cremation cemetery at Tucklesholme Farm in Staffordshire (Martin and Allen 2001, fig. 7). At the cremation cemetery of Langford, Nottinghamshire (Allen 2004), pot 4 has a horizontal groove on the upper body comparable to the Cossington pot from F9 (Fig. 33.11), and grooves are also seen on similar pots at Catfoss, East Yorkshire (McInnes 1968, P2 and P4). Incised decoration can be seen on vessels at the Middle Bronze Age settlement of Billingborough, Lincolnshire (Chowne *et al*. 2001, figs 21–23).

Pot 20 from Cossington has comb decoration but as there is only a small part of the pot remaining it is not possible to determine its form. Comb decoration of this type is seen on Early Bronze Age pottery such as Beakers and also on Collared Urns, for example at Fengate, Cambridgeshire (Pryor 1980, fig. 59.26). The Pot 20 sherd is unstratified and it is not possible to clarify its relationship to the other vessels.

The Cossington vessels seem to show the most similarity to vessels from Beacon Hill, Cleethorpes (Allen 1988, 415; May 1976, fig. 45). Pot 10 at Cossington shows similarity of form and twisted cord decoration to Beacon Hill pot 6, although that pot was not associated with others found within a barrow. However, a small urn with inturning upper portion and V-shaped twisted cord decoration on the upper body, similar to several of the Cossington pots, was found at Beacon Hill barrow. This was found in association with both decorated and undecorated Collared Urns considered to be Early Bronze Age in date (Allen 1988). The decorated Collared Urn (Pot 4) from Beacon Hill also has vertical twisted cord patterning. This suggests that the Cossington urns show decorative traits – comb decoration (see Fengate above) and twisted cord – often seen on Collared Urns, but also seen at Beacon Hill, on jar-like vessels used in burials associated with Collared Urns.

The urns from the Cossington cremation cemetery show formal and decorative traits of some Early Bronze Age vessels, and similarity of form, rim, and some decoration to pots from other cremation cemeteries. However, dating of the supposed Middle Bronze Age cremation cemeteries in the East Midlands, where these latter pots were seen, tends to rely on the similarity of the pottery to vessels from elsewhere and on the contexts of the finds, rather than absolute dating (e.g. at Coneygre Farm and Tucklesholme Farm). The simple urns seen in these cemeteries are thought to have emerged about 1700–1500 cal BC (Needham

1996, 133) and many cemeteries in this region can only be dated broadly to within the second millennium BC, as at Ropsley and Humby, Lincolnshire (Lane 1995, 18).

These cremation cemeteries were in use for some time throughout the Early and Middle Bronze Age. At Bromfield in Shropshire, the flat cremation cemetery containing urns with cremations developed over a long period of time, from about 2000 to 1000 cal BC (Woodward 1995a, 85). Dates between 2199–1510 cal BC (GU-5102) and 1510–1270 cal BC (GU-5100) were obtained for material associated with Deverel Rimbury pots in a cremation cemetery at Brightlingsea, Essex (N. Brown 1995, 128), and at the cremation cemetery of Eye Kettleby, burials were made between 1740–1610 and 1410–1310 cal BC (Bayliss *et al*. forthcoming). It is also clear that the Deverel-Rimbury type pots often associated with these flat cemeteries were in use alongside Collared Urns at Oversley Farm, Cheshire (Allen 2007, 65).

The style of cremation urns found in the Cossington cemetery cannot be precisely defined, as they do not fit into any prescribed typological scheme. Radiocarbon dates from cremated human bone associated with the urns indicate that the cemetery was in use between 1910–1690 cal BC (at 95% probability) and 1660–1520 cal BC (at 95% probability). Therefore, these pots seem likely from their form and decoration to be of Early Bronze Age date. The vessels were deposited in a flat cremation cemetery outside a barrow, and this dating can be seen to comply with pots and burials deposited in similar contexts elsewhere.

H3\Context and discussion

H4\Barrow 2

The sherds from the two Beaker pots were found with the cremation burial of an adult (F17). This was found in a pit packed by large pebbles and was the most complete cremation to survive. The dating and typology of the pottery suggests that this is likely to have been the first burial made on the site. A burial amongst pebbles, with the remains of two Beaker pots, was found at the Bronze Age cemetery of Ewanrigg in Cumbria (Bewley *et al*. 1992). A central Food Vessel burial and burials with Collared Urns were also found at that site, suggesting this succession of burials may be a widespread tradition in the earlier Bronze Age.

The stone bowl, accessory cup, and flints were found with the inhumation of a child aged about 8 years, together with the Food Vessel Urn (F15). This large Food Vessel is unusual in this area and suggests connections further north. Such a combination of unusual artefacts with a burial may be unique and certainly is very rare. There was no stratigraphic connection, but the bowl-shaped Food Vessel (F16) with no other finds uncovered in a shallow pit to the south of the inhumation was probably of similar Early Bronze Age date.

The burials of the three Collared Urns (F15a, F14 and F12) in the barrow will have been later deposits. The pit for pot F15a cut the upper part of F15; it contained no other finds or bone. The pit for pot F14 lay further north, and contained the cremated remains of an adult. All the burials in Barrow 2 lie within an area defined by the barrow ring ditch apart from part of a Collared Urn (pot 9) which lay within the cut of the inner ring ditch (F12). Some pottery which could not be assigned more closely than 'Bronze Age' was also found in the outer ditch (F13).

The pottery and dating from Barrow 2 suggest that use of this barrow commenced earlier than Barrow 1, but that there is likely to have been some overlap of use between the two monuments.

H4\Barrow 1

The context in which these urns were found is similar to many cremation cemeteries elsewhere in the Midlands, for example at Coneygre Farm, Nottinghamshire, Pasture Lodge Farm, Lincolnshire (Allen *et al.* 1987), Tucklesholme Farm, Staffordshire (Martin and Allen 2001), Eye Kettleby, Leicestershire (Woodward forthcoming) and Bromfield, Shropshire (Stanford 1982). These are flat cemeteries of Bronze Age date where cremations were placed often within pots and sometimes, but not always, in or around ditched enclosures, as at Cossington. These cremation cemeteries are considered to be of Early to Middle Bronze Age date as discussed above.

The Early Bronze Age urns found at Cossington were deposited within a cremation cemetery in pits outside a barrow. The pots were found with cremations lying to the east and south-east of the ring ditch, which is comparable to Langford, Nottinghamshire (Allen 2004) and Tucklesholme Farm (Martin and Allen 2001). This is a regional trend, but is also seen at sites further afield, such as Simons Ground in Dorset (White 1982). As at Cossington, cremation urns were also found to be both inverted and upright at the Simons Ground site. At Coneygre Farm cremations were placed in pots, cists or were unurned, and at

Cossington too some cremations were in pots or unurned. The reasons for these variations in Bronze Age burial mode are not known, but could be associated with family or other traditions.

It has been noted that careful and deliberate selection of vessels was apparent in some cemeteries in southern Britain (Woodward 1995b, 200) and this was also noted in the East Midlands at the cremation cemeteries of Coneygre Farm and Pasture Lodge Farm (Allen *et al*. 1987, fig. 20), where smaller pots were used for the burial of children and larger pots were employed for adults. However, no children were recorded amongst the cremation burials at Cossington Barrow 1, and no relationship can be demonstrated between vessel size and the individual cremation burials.

The use of granitic tempering for the pots in this barrow suggests that wider contacts existed for the materials used to manufacture these pots. It is considered likely that the use of the area surrounding this barrow as a cremation cemetery may have overlapped with the use of Barrow 2.

HA1\Appendix 1: Catalogue of prehistoric pottery and stone bowl

HA1\Appendix 2: Fabric analysis *– Carol Allen and Alan Vince*

HA2\Fabric types – Carol Allen

Three main fabric types were identified, containing mainly granitic rock, igneous rock, or quartz and sandstone. The fabrics are designated by a code, of which the first two letters indicate the type of inclusion, the third letter shows the quantity of that inclusion, and the fourth letter indicates the modal size of the inclusions:

Type	GD	granodiorite
	IG	igneous
	QU	quartz
	SS	sandstone
Quantification	Rare	<3%
	Sparse	>3–10%
	Moderate	11–19%
	Common	20–30%
Size Range	Fine	<0.25mm
	Medium	0.25–1.00mm
	Coarse	>1.00–3.00mm
	Very coarse	>3.00mm

Fabric 1 – GDCV/QUSC
This contained a common amount of poorly sorted and subangular/subrounded granitic material of low sphericity and very coarse size. There was also some sparse fine quartz present. The exterior of the sherds is generally orange to brown in colour and oxidised, the interior is black and irregularly fired and the core is black and unoxidised.

Fabric 2 – IGMC/QURF
This contained a moderate amount of black igneous rock, which was poorly sorted and subangular of low sphericity and of coarse size. There was also a rare quantity of fine quartz present and a number of clay pellets. The exterior of the sherds was orange and brown and oxidised, the interior was orange and black and irregularly fired; the core was black and unoxidised.

Fabric 3 – QUMC/SSSM
The fabric contained a moderate amount of moderately sorted angular quartz of low sphericity and medium size, and a sparse quantity of moderately sorted sandstone high sphericity of medium size. The sherds are brown and grey, being irregularly fired on the exterior and interior and having a black and unoxidised core.

HA2\Thin-section analysis – Alan Vince

Samples of four prehistoric vessels were submitted for thin-section analysis (Table 3). Thin sections were produced by Steve Caldwell, University of Manchester, and stained using Dickson's method (Dickson 1965).

Table 3: Pottery samples submitted for thin-section analysis.

- V4085 (Fabric 1)

The following inclusion types were noted:
Acid Igneous Rock. Abundant subangular fragments of a medium-grained rock, *c*.0.5mm to 2.0mm across, composed of well-sorted euhedral crystals, most of which are zoned feldspars with quartz/feldspar intergrowth, including graphic intergrowth. Opaque accessory minerals *c*.0.1mm across are present. Some large twinned grains are clouded with micaceous alteration products (sericite or muscovite).
Basic Igneous Rock. A single subangular fragment 2.0mm across containing sparse euhedral crystals of olivine and an unidentified brown mineral. The groundmass is composed of altered glass and abundant opaque grains *c*.0.05mm across.
Clay Pellets. Abundant angular and subangular fragments with a similar colour and texture to the groundmass, up to 2.0mm across. These are probably clay relicts.
Quartz. Sparse rounded and subangular grains up to 0.5mm across. Most are unstrained but polycrystalline grains with a strained mosaic crystallisation are present.
The groundmass consists of optically anisotropic baked clay minerals, sparse angular quartz up to 0.05mm across and rare muscovite laths up to 0.1mm long. The core and interior of the vessel are opaque as a result of carbon and the outer margin is oxidized.

- V4086 (Fabric 3)

The following inclusion types were noted:
Quartz. Moderate subangular and rounded grains up to 0.4mm across. Most are unstrained, monocrystalline grains.
Sandstone. Rare rounded fragments of a fine-grained sandstone up to 0.4mm across with grains c.0.1mm to 0.2mm across.
Chert. Rare rounded fragments up to 0.4mm across.
Clay Pellets. Moderate subangular fragments with no visible inclusions. Some have an opaque core and were originally organic.
Voids (probably bivalve shell). Rare voids up to 1.5mm long and 0.3mm wide.
Muscovite. Rare laths up to 0.2mm long.
The groundmass consists of optically anisotropic baked clay with few inclusions less than 0.1mm across.

- V4087 (Fabric 1)

The following inclusion types were noted:
Acid Igneous Rock. Abundant subangular fragments up to 2.0mm across similar in character to those in V4085 but with perhaps a higher quartz content and with biotite.
Quartz. Abundant subangular and rounded grains up to 0.3mm across
Chert. Sparse rounded grains up to 0.4mm across.
Clay pellets. Sparse rounded clay pellets up to 0.5mm across and with the same texture and quartz inclusions as the groundmass.
Muscovite. Sparse laths up to 0.2mm long.
The groundmass consists of optically anisotropic baked clay minerals with few visible inclusions.

- V4088 (Fabric 2)

The following inclusion types were noted:
Basic igneous rock. Moderate fragments similar in character to that in V4085.
Quartz. Moderate rounded and subangular grains, up to 0.4mm across. Mostly monocrystalline and unstrained but including strained and polycrystalline grains. In addition, a single overgrown grain 0.7mm across was noted.
Chert. A single angular fragment 1.0mm long and 0.3mm wide.
Clay pellets. Moderate subangular fragments of similar colour and texture to the groundmass.
The groundmass consists of optically anisotropic baked clay minerals with sparse angular quartz and muscovite laths up to 0.1mm long. The groundmass is opaque as a result of carbon except at the original surfaces.

HA2\Discussion

Cossington lies immediately to the east of the Mountsorrel inlier, which is composed of a mixture of rocks of pre-Cambrian age, including the Mountsorrel granodiorite (Hains and Horton 1969, 6–9). Boulder clay in this area includes Lower Jurassic *gryphaea* and is presumably in the main redeposited Lower Jurassic material (*ibid*., 89–101).

The rock fragments found in V4085 and V4087 show some signs of rounding and therefore come from a natural coarse sand or gravel rather than fire-cracked rock fragments or a talus formed at the base of an outcrop. Their petrology suggests that they are syenite/markfieldite, which outcrops about ten miles west of Cossington (*ibid*.). Sands

composed of Mountsorrel granodiorite and other rocks of Charnian origin occur to the south, south-west and south-east of the outcrops. These two fabrics were probably made of raw materials collected to the south of Cossington.

The basic igneous rock fragments noted in V4088 and, rarely, in V4085, might be of local pre-Charnian origin (for example, the Nuneaton outcrop; *ibid*., 6) although the presence of a large overgrown quartz grain suggests the presence of Millstone Grit. If so, then these rock fragments may be from the Derbyshire Traps (although a local outcrop of Millstone Grit occurs near Melbourne, to the north-west of Cossington; *ibid*., 38). As with the acid igneous rocks, however, there are signs of rounding which preclude the use of crushed rock fragments or talus. The presence of a rounded quartzose sand of Triassic source excludes a source in the Peak District, however, and favours either a north-eastern Leicestershire origin for the rocks, or glacial erratics from northern England.

The inclusionless clay noted in V4086 is likely to be of Jurassic origin, whilst the inclusions are probably derived from a rounded quartzose sand of Triassic origin. Such sands form the majority of the terrace sands found in the Trent valley but have a wider distribution. This vessel may therefore have been produced in the Trent valley using an outcrop of lower Jurassic clay, but it is more likely to have been made from a local boulder clay.

H2\The human bone *– Ann Stirland (1980)*

The remains from the two barrows exhibit different features, suggesting a variation in burial practice between the two monuments. All the burials from Barrow 1 are cremations, while Barrow 2 contains both cremations and a single inhumation. All the burials are incomplete, although two of them, namely F17 and F24, have survived much better than the others. A single feature, the centrally placed inhumation in Barrow 2 (F15) represents the burial of a child, all the others are probably adult. Barrow 1 contains 14 groups of bone, although these may well represent fewer than 14 individuals. Only three burials survive from Barrow 2. All cremations were weighed after cleaning.

The dearth of comparative material when this analysis was originally undertaken hindered the overall identification. In the particular case of Cossington, these problems were heightened by the fact that the cremation ritual appears to have been very effective, the bodies having been burnt to a high temperature, thus producing a marked degree of calcination, and much twisting and cracking. After burning, certainly in the case of the inverted urn burials, the bone seems to have been broken into small pieces, presumably to facilitate insertion into the urns. The exceptions to this are F24, which survived in an upright urn, and F17, the tightly-packed pit burial. All these have bigger fragments surviving, as does F14. The other cases of bigger fragments from Barrow 1 all occur in the surface spread. The size of the majority of the fragments, and the efficiency of the burning has made the ageing and sexing of these remains impossible in most cases. Those that have been sexed are all male.

The surviving bone is largely very light in colour and clean and unstained. There is no ‘deeply blackened’ bone to suggest that flesh was still present (Brothwell 1972, 19), when burning occurred. Both clean, unstained bone such as this, and deeply blackened bone have been observed at other local barrow sites and commented upon by the author elsewhere (e.g. Sproxton round barrow and Eaton multi-phase Barrow, Stirland 1981). The one exception is F24, where quite a lot of the bone is speckled with black or brown staining. It is of interest that this is not only the most complete of the Barrow 1 burials, but also the only one contained in an upright urn. Some of the other remains – namely AY from Barrow 1 and F14 and F17 from Barrow 2 – have tiny green copper-like flecks on some of the endocranial fragments. These phenomena were also observed in one of the cremations from Sproxton, namely F48 (Stirland 1981, 18).

H3\Barrow 1

H4\F3. Adult. Age and sex unknown. Weight 440g.

All parts of the skeleton are represented although incompletely, and no fragments are big enough to be diagnostically useful in terms of either age or sex. Fragments of the roots of seven teeth survive, and the condition of both these and the fragment of finger phalanx indicate an adult. There is a small amount of blue bone present in the material from the surface (AD), which would be consistent with burning at a somewhat lower temperature than the rest. These parts of the skeleton may well have been away from the centre of the fire. The surviving fragments are consistently small, the biggest being only 62mm long.

H4\F4. Adult? Age and sex unknown. Weight 35g.

These very few remains of a probable adult consist of a few extremely small fragments of cranium, ribs and longbones, all burnt to a high temperature.

H4\F6. Adult. Age unknown. Possibly male. Weight 1,400g.
It will be seen from the weight that this cremation survives much more completely than many of the others, and this may well be a result of a much longer survival of its containing urn, although only the rim was present on excavation. The remains of the roots of 19 adult teeth are present, some of which are fragments. All parts of the skeleton seem well represented, including, unusually, two sesamoid bones from the hand. There is a small amount of blue bone, and the fragments are a little larger than is the case with others in the group, the longest being 100mm.

H4\F7. Adult. Age and sex unknown. Weight 700g.
No hands or feet survive for this cremation, the fragments being mostly those of the cranium and longbones. There are pieces of possibly 10 teeth, and the fragments appear to be small, in spite of the absence of an urn, the longest being 55mm. The condition and colour of many of the fragments suggest that this body was probably burnt at a lower temperature than the others.

H4\F8. Adult. Age and sex unknown. Weight 525g.
The surviving remains of this cremation appear to be confined to the top part of the skeleton, and consist largely of longbone and cranial fragments. The fragments are very small, and include the remains of the roots of probably 14 teeth, and one proximal thumb phalanx. The temperature of firing would appear to have been high, many of the fragments being both very white, and cracked and distorted.

H4\F9. Adult. Age and sex unknown. Weight 825g.
The biggest fragments of this cremation occur in the loose material from the surface (AZ). These are fragments of longbone and of cranium. Of the contents of the urn (CA), only two teeth survive, although there appear to be fragments from most of the rest of the skeleton, and these again are very small.

H4\F20. Adult. Age unknown. Probably male. Weight 175g.
These sparse fragments appear, based on the survival of a fused finger phalanx, to belong to an adult. The thickness of the walls of the longbone fragments and their generally heavy appearance, suggest a male. Only one tiny fragment of tooth root survives.

H4\F21. A few very small fragments of human bone, weighing 25g.

H4\F22. A few fragments of adult human bone. Weight 50g.
The presence of a tiny fragment of metatarsal with a fused epiphysis suggests an adult of more than 22 years.

H4\F23. Two tiny fragments of human bone.

H4\F24. Adult. Age: about 25 years? Possibly male. Weight 1,470g.
This cremation, the only one contained in an upright urn, is the most complete surviving from Barrow 1. Altogether, the roots of 23 adult teeth survive, and the crowns of six molars and premolars. From the former, a tentative age of 25 years is suggested. Both the broken fragments of longbones (CM), and the urn contents (CO) contain quite a lot of bone which is stained black and brown, suggesting the possible presence of flesh and blood when this body was burnt (Brothwell 1972, 19). The pelvis appears to be male from the condition of the fragment which includes a piece of the sacro-iliac joint (Bass 1971, 160). All parts of the skeleton appear to be represented, with many more big fragments than is the case is the other burials in this group, the longest being a fragment of femur 70mm in length.

H4\F25. A very few fragments of human bone, weighing 25g.

H4\AY. Young adult, possibly male. Weight 125g.
This material cannot be assigned to any particular cremation. AY represents finds from the first cleaning of the site; the material consists largely of animal bone, mostly in the form of tooth fragments, and some human

bone. The human remains include fragments of cranium with very fresh-looking sutures, thus suggesting a young adult. Fragments of three adult teeth survive, including the root of a lower incisor. Longbone and pelvic fragments survive. Included with the latter are a piece of ilium which has a flat sacro-iliac articulation, suggesting a male (Bass 1971, 160, fig. 102). Some of the endocranial fragments have very small green copper-like flecks. The fragments are consistently small, the longest being only 56mm, and were probably broken after burning.

H3\Barrow 2

H4\F14. Adult. Age unknown. Probably male. Weight 900g.
The pit fill (BN) includes some very large pieces of cranium which are much bigger than those which survive with the cremations from Barrow 1. The biggest of these fragments is 46mm x 25mm, but there are others of a similar size. Both the mastoids survive, and they suggest a male, along with the muscle markings on the occiput, and the thickness of the bone. There are the remains of the roots of 18 teeth, and the prevailing bone appears to be from the upper part of the skeleton. The bone seems to have been burnt to a high temperature. Two pieces of parietal and the inner table of a piece of occipital have the tiny green, copper-like flecks noted above.

H4\F15. Child. Age: c.8 years. Sex unknown.
This, the only inhumation surviving from either barrow, consists of the mixed dentition of a child's upper jaw, plus some fragments of longbones in a very poor condition. The condition of the teeth would appear to have been:

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76ede21  12ede67
R              L
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There is no caries or calculus on the teeth of this maxilla. Also surviving are two loose second molars from the child's mandible and one loose and caried erupted molar from the same jaw. The surviving fragments of longbone are so leached and eroded as to make any identification impossible.

H4\F17. Adult. Age: possibly early 20's. Male? Weight 1,925g.
This is by far the most complete of the cremations to survive from either barrow, as may be seen from the weight. The whole skeleton is well represented, including easily identified pieces of vertebrae, acetabulae, femur, tibia, ulna etc. Many of the fragments are large, especially those of the longbones, the longest being 80mm. Although surviving epiphyses, such as those of the phalanges, are united, they appear very fresh, suggesting a young adult. The surviving, isolated mastoid is big, as are the 14 tooth roots composed of seven incisors, four canines and three molars. The finger phalanges have strong muscle markings. All these factors suggest a male, as do the thick-walled, heavy looking longbone fragments. There is, again, some slight green staining of some ectocranial fragments.

H4\Dentition formula
1 medial adult incisor
2 lateral adult incisor
c milk canine
d lst milk premolar
e 2nd milk premolar
6 1st adult molar
7 2nd adult molar
W tooth not yet erupted
3 tooth present but socket missing

H2\The worked flint *– Lynden Cooper*

The lithics from Barrows 1 and 2 were analysed by James Gossip for his MA thesis (Gossip 1994). This report summarises his work and attempts to reconcile methodological and terminological differences with the study of the Barrow 3 assemblage (L. Cooper below). The finds are illustrated with the flints from Barrow 3 (below).

The assemblage is mostly of flint (bar one chert core) and was recovered from topsoil, barrow ditches, cremation pits and the central burial of Barrow 2. The stratified material was recorded by context but not plotted spatially.

H3\Raw material

The great majority of the material is typical of local till flint, that is, semi-translucent and predominantly grey brown in colour with thin, smooth cortex. However, one of the knives from the Barrow 2 inhumation burial (F15) (Fig. 28, D; and Fig. 71.16 below) appears to have been made of an exotic flint, an opaque, light brown material with chalky cortex.

H3\Debitage

The blades and bladelets show no signs of platform preparation but considerable care in core front preparation, with overhang removals and platform edge abrasion. It would seem that this component is of Mesolithic date. Three bladelet cores were reported; these are also of likely Mesolithic date.

The majority of flakes were produced by hard hammer percussion with little evidence for platform and core front preparation, evident from plain and cortical butts and overhang remains. Visual examination suggests a very high proportion of cortical flakes, a feature observed in later Bronze Age collections (Butler 2005). It would seem that much of the primary knapping occurred on site.

H3\Tools

The formal tools were dominated by short end scrapers, with many examples on cortical flakes. Tentatively, this would suggest a later prehistoric date. One thumbnail scraper approaches a 'fancy' form in that it displays semi-invasive retouch scars, and as such can be considered Early Bronze Age. The fabricators were both of types often associated with burials of the Early Bronze Age. One was found from the upper fill of the second phase ditch of Barrow 1 (F5), the other from cremation F6. The latter was calcined and it would be reasonable to assume that this was incorporated in the pyre. Calcined flint tools were also recovered from a cremation burial in a barrow at Lockington (Posnansky 1955a).

The three knives from inhumation burial F15 in Barrow 2 are certainly grave goods and are well-crafted prestige items. One knife (Fig. 71.16) is missing its proximal end, another (Fig. 71.17) is more fragmentary, while the plano-convex knife (Fig. 71.18) is complete. The last used a patinated (Mesolithic?) blade as its blank. The re-use of earlier material in the Bronze Age has been noted at other local sites (Cooper 2005) but also at a national level (Butler 2005, 179). While the re-use of this piece could be simply a result of expedient selection strategy it is also feasible that the selection of ancient flint, in this instance, held a certain resonance.

Table 4: Breakdown of the flint assemblages from Barrows 1 and 2

H3\Conclusion

The prestige flint items from the funerary contexts contrasts sharply with the remaining collection. Gossip (1994) suggested that much of the recovered flint was probably residual in the original mound. A similar interpretation was applied to the assemblage recovered from a barrow at Lockington (Young and Bevan 2000). While there is a minimal Mesolithic component, there are typo-technological traits that suggest that much of the flintwork is Bronze Age and may have been deposited at the barrow following its initial construction. Indeed, one of the original excavators recalls that there was much worked flint at the same levels as the charcoal deposits in Barrow 2 (P. Clay pers. comm.).

H1\The Environmental Evidence

H2\The charred plant remains *– Daryl Garton (1980)*

Samples were taken by the excavator wherever charcoal appeared to be present in the sands and silts. The charred material was floated off, and collected in a sieve, mesh size *c*.1.5mm, and then sorted. The discarded flot and the residues were not retained for examination by the writer.

The samples from the primary silting of the ring ditch (F1) of Barrow 1 contained charred hazelnut shells (*Corylus avellana* L.), and seeds of ivy-leaved speedwell (*Veronica hederifolia* L.). The hazelnut shells could represent a food resource; they are frequently found on archaeological sites from the Mesolithic period onwards (Godwin 1975, 269), for example from the 'pre-barrow' Neolithic pit at Aston on Trent, Derbyshire (Reany 1966, 103). Ivy-leaved speedwell is a low sprawling weed of cultivation (Clapham *et al*. 1962, 695).

The sample from the small pit (F23/CK) among the cremations to the south-east of Barrow 1 contained charred tubers of onion couch grass (*Arrhenatherum elatius* var. *bulbosum* L.), which is a weed of cultivated ground. Onion couch grass tubers have also been reported from the Middle Bronze Age cremation pits at the Ashville Trading Estate site, Abingdon, where they were associated with cereal grain and weed seeds (Jones 1978, 107–8). On the basis that it is unlikely that the tubers being carried far by natural means, Jones (*ibid*.), has interpreted the plant remains as part of a possible ritual food offering. At Cossington the tubers are not associated with grain or weed seeds (perhaps a function of the collection method), so no definite ritual inference should be made; their occurrence may simply be due to accidental charring beneath a fire.

The sample from pit F14, within the double ring ditch of Barrow 2, contained seeds of ivy-leaved speedwell (*Veronica hederifolia* L.), black bindweed (*Polygonum convolvulus* L.), one indeterminate fragment of a cereal caryopsis, and two indeterminate seed fragments. Both ivy-leaved speedwell and black bindweed are common weeds of cultivated ground. The rectangular stone lined pit (F17) from Barrow 2 also contained seeds of ivy-leaved speedwell.

The four species recovered from this excavation are all native, common on disturbed ground, and have all been recovered from other sites of Bronze Age date (Godwin 1975).

H2\The charcoal – *Graham Morgan*

The following species were identified among the charcoal recovered from the two barrows: oak (*Quercus* sp.), field maple (*Acer campestre*), hazel (*Corylus avellana*) or possibly alder (*Alnus* sp.), hawthorn type (*Crataegus* sp.), poplar (*Populus* sp.) or willow (*Salix* sp.), buckthorn (*Rhamnus cathartica*), and blackthorn (*Prunus spinosa*).

Table 5: The charcoal remains from Barrows 1 and 2.

H1\Discussion – *John Thomas*

H2\Pre-barrow activity

Very little evidence was recovered from the excavations to provide an indication of activities at the site before the construction of the monuments. A small number of blades in the lithic assemblages from both barrows indicate a Mesolithic presence in the area. Further possible evidence for early activity on the site was obtained, surprisingly, from what was originally thought to be a Bronze Age cremation deposit cutting the top fill of the first phase of the Barrow 1 ditch. Cremated human bone from this feature, F4, produced a Neolithic radiocarbon date of 2930–2870 cal BC, although it was stratigraphically later than an Early Bronze Age deposit also located within the fills of the barrow ditch. There can be little doubt that the feature was created during the Bronze Age and that the sample of bone chosen for dating must therefore have been residual. The fact that it had become incorporated into the fill of F4, however, may provide evidence for pre-barrow funerary activity on the site in the Neolithic period.

It is possible that the human remains from F4 represented a disturbed Neolithic cremation, perhaps revealed during the creation or redefinition of the barrow in the Early Bronze Age. The cremated bone assemblage from the feature is small, although what remained appears to represent a single adult individual (Stirland above). This would suggest that all the bone is contemporary, and that the dated sample was not simply an anomaly that had been accidentally incorporated into the fill of the pit, but had been deliberately reburied. Whilst the presence of Neolithic cremated remains on the site might at first sight be puzzling, it raises the possibility that an earlier monument existed here, later becoming the focus for the Bronze Age

activity. Although structural evidence to support this suggestion is lacking, a similar situation was revealed at West Ashby, Lincolnshire, where a Class I henge monument later became the focus for a barrow (Field 1985). Neolithic activity has also been revealed as a precursor to Bronze Age ceremonial activity at Lockington (Hughes 2000) and Eye Kettleby, Leicestershire (Finn forthcoming). The association of a Late Neolithic date with cremated remains is also unusual as inhumation appears to have become the more accepted burial tradition by that time, although Late Neolithic cremated remains are not unheard of (Thomas 1999, 153). At Buckskin barrow, Basingstoke, Hampshire, for example, a cremated burial in a pit, associated with an oblique arrowhead and a sherd of Peterborough ware, was found to pre-date the construction of the Bronze Age monument (Allen *et al.* 1995, 160).

H2\The Early Bronze Age

H3\Barrow 1

The exact form of the barrow in its early stages is difficult to establish, although concentrations of gravel and pebbles infilling the primary ditch may reflect the accumulation of material from an eroding mound. Whilst it seems likely that the soils excavated from the ditches could have been deposited inside the enclosed area to form a low mound, it is equally plausible that the monument was defined by an embanked ditch without a central mound, similar to the example preserved beneath alluvium at Willington, Derbyshire (Beamish 2001, 10). The original architecture of plough-damaged barrow remains is difficult to assess, although it is clear from better preserved examples in the region that Early Bronze Age monuments adopted a wide variety of forms (Clay 2006, 81).

The dating for the establishment of Barrow 1 is uncertain, although a *terminus post quem* of 1940–1620 cal BC (HAR-4987) for secondary activities associated with the barrow was obtained from a charcoal deposit situated between some of the latest fills of the recut first phase ditch. The initial monument was fairly simple, defined by a sub-circular ditch that apparently encircled an inhumation placed in a rectangular grave that lay slightly off-centre to the enclosed area. In plan the barrow resembles other relatively simple contemporary monuments excavated in the East Midlands, such as Willington (Beamish 2001) and Castle Donington (Coward and Ripper 1998) and in the West Midlands, for example Barton-under-Needwood, Staffordshire (Martin and Allen 2001). Before the initial ditch was allowed to fill up completely it was recut, effectively redefining the monument and its importance to those who used it.

After the newly defined ditch had been open for some time, and had begun to fill up, a series of discrete charcoal patches were deposited on the top of the penultimate ditch fill at various points around the eastern side of the monument. Several of the charcoal deposits were associated with flint scrapers and waste flakes and some had been carefully placed on a supporting layer of pebbles, although in no instance was there evidence for *in situ* burning. Exactly what these charcoal deposits represent is debatable. Their spatial patterning suggests a degree of structure to their deposition, as each patch is distinct from the others, and there seems to have been a deliberate choice of location for the deposits, with a preference for the eastern side of the monument. Earlier interpretations of these deposits suggested they might have been hearths, with the partly-filled ditch being used as shelter for transient episodes of occupation at a time when the monument had gone into decline (O'Brien 1978, 7). A similar interpretation was put forward for discrete charcoal deposits within the barrow ditches at Eaton, Leicestershire (Clay 1981, 30).

Given the evidence for the continued importance of these monuments through time, however, these suggestions are difficult to reconcile in terms of secular events. Other examples of this type of deposit within partially infilled barrow ditches could suggest episodes of barrow maintenance, with scrub charcoal perhaps reflecting the burning of scrub from the mound (Healy and Harding 2007, 65). However the Cossington deposits, with their high oak and maple content, require an alternative explanation. It is possible, given their context, that the charcoal deposits relate to the disposal of pyre debris from cremation ceremonies associated with the monument. McKinley (1997, 138) has described a range of contexts where carefully deposited accumulations of pyre debris have been recorded at barrow sites, including disposal in pre-cut features such as ditches. Admittedly no cremated bone was found with the charcoal deposits from Barrow 1, but there is accumulating evidence from a number of sites to suggest that cremated bone and pyre debris was distinguished by careful sorting prior to final deposition (Finn forthcoming). If this interpretation is correct, then we are perhaps missing a phase of burial at Barrow 1 for which there is no other evidence, having perhaps been ploughed away or removed when the barrow was enlarged.

Following the eventual infilling of the first phase of the ditch, a small pit containing Neolithic cremated human bone was inserted into the upper fill on the inner lip of the ditch on the eastern side of the monument. The deliberate burial of the bones in this way and at this point in the barrow's history, strongly suggests that this was an act of structured deposition, and can be interpreted as a closure deposit. The careful burial of the old bones also hints at their perceived importance by the users of Barrow 1, and that they perhaps fulfilled an ancestral role, legitimising ownership or land rights during ceremonies involved with this period of the barrow's use.

Eventually the monument was redefined by the creation of a new ditch that enlarged the circumference of the barrow but also carefully referenced the outer edge of the original boundary. This new ditch was somewhat shallower than its predecessor but would have served effectively to demarcate the monument afresh. No obvious evidence for funerary activity is associated with this redefinition of the barrow ditch, although some might be expected given the evidence of renewed interest in the monument. It is possible, however, that any associated burials were placed in the surviving barrow mound and have since been ploughed away. Alternatively this phase of the monument's redefinition may be related to the establishment and use of the cremation cemetery on the south-eastern edge of the barrow (see below). Equally, as Clay has suggested for an enlargement of the barrow at Sproxton, the very act of maintaining the monument may have been important enough to warrant its redefinition (1981, 13).

H3\The cremation cemetery

A compact, linear arrangement of 13 cremation burials was created to the south-east of Barrow 1 towards the end of the Early Bronze Age. Modelling suggests that use of the cemetery began in 1910–1690 cal BC and ended in 1660–1520 cal BC with a span of use between 80 to 360 years (all at 95% probability). The small number of dates from the group does, however, exaggerate the time-span of activities. The dating of this cremation group overlaps with the large flat cremation cemetery at Eye Kettleby, which was in use between 1750–1630 cal BC (95% probability) and 1400–1280 cal BC (95% probability), spanning the Early–Middle Bronze Age transition (Bayliss *et al*. forthcoming). In common with the Cossington group, an Early Bronze Age monument provided the focus for the cremation burials at Eye Kettleby and other such cemeteries are known from similar contexts throughout the East Midlands (e.g. Coneygre Farm, Nottinghamshire, and Pasture Lodge Farm, Lincolnshire (Allen *et al.* 1987); Tucklesholme Farm, Staffordshire (Martin and Allen 2001); and Bromfield, Shropshire (Stanford 1982)).

The sites at Coneygre Farm and Pasture Lodge do not have any absolute dates but were assumed to be of Middle Bronze Age date based on their context and morphology (Allen *et al.* 1987). Such cemeteries often form characteristic clusters, usually to the south or south-east of an earlier monument (Woodward 2000, 43). This pattern can be clearly seen at Cossington and in other East Midlands examples such as Langford, Nottinghamshire (Allen 2004), and Barton-under-Needwood, Staffordshire (Martin and Allen 2001), and can also be seen to be part of a more widespread trend evident in other parts of the country (e.g. at Simons Ground, Dorset; White 1982). The creation of these distinct clusters over a fairly limited amount of time may be a reflection of particular family or other social groups, related to nearby settlement (Woodward 2000, 45).

In spite of the similarities between these cemetery sites, it is clear that simple classification based on poorly dated evidence may over-simplify what appears to have been a complex and long-lived tradition. The indication from sites such as Cossington, Eye Kettleby, and Bromfield (in use between *c.*2000 and *c.*1000 cal BC) is that these cremation cemeteries had a long currency, beginning at the end of the Early Bronze Age and should not be thought of as a strictly Middle Bronze Age phenomenon. Despite the general similarities shared by the cremation cemeteries, the Cossington urns have proved difficult to compare with other assemblages owing to their distinctive style, which combines elements of form and decoration from other broadly contemporary cemetery assemblages. It is tempting to speculate that this 'pick and mix' approach to the outward appearance of the Cossington urns, as also seen at other cremation cemeteries in the East Midlands, was a deliberate policy to create a sense of personal or group identity through the pots.

Given the disturbed state of the site, any discussion of trends within the cemetery is bound to be compromised, although a number of points can be made. It is evident that various rites of burial were practiced at the site. Of the 13 cremations, six were deposited in inverted urns, two had been placed in cists, and a further two burials had been placed in pits with pebbles and stones. A single cremation had been buried in an upright urn. There does not appear to have been any particular spatial division within the cemetery according to style of burial. The majority of the group form a central cluster and there are outliers to the

north (F25 – urn in pit with pebbles and stones and F24 – upright urn) and to the south (F22 – inverted urn). Each burial appears to have held the remains of a single individual, although ageing and assigning gender has been impeded by the condition of the bone, which is very fragmentary as a result of the efficient burning, and in some cases deliberate breakage, to which it was subjected. A single cremation (F6), also contained a calcined flint fabricator or 'strike-a-light', perhaps included as a grave good. A similar phenomenon occured at Lockington Barrow 1, where four plano-convex knives and a broken barbed and tanged arrowhead – all of which were calcined – were found with the central cremation burial group (Posnansky 1955, 20). The implication of the finds from Lockington and Cossington is that they were burnt with the body during the cremation ritual and carefully retrieved for inclusion in the burial. In contrast, the flints recovered in association with the charcoal or pyre deposits are all unburnt.

H3\Barrow 2

Barrow 2 was a larger and more elaborate monument than Barrow 1, consisting of two concentric ditches that defined an area containing a range of Early Bronze Age burials. Dating for Barrow 2 is also unclear, although the range of associated burials indicate a broad Early Bronze Age date for its initial construction.

The distinctly 'angular' plan form adopted by the two ditches is striking and can be paralleled locally at Eye Kettleby (Finn forthcoming) and the monuments at Sproxton and Eaton (Clay 1981). An Early Bronze Age palisade slot that pre-dated the construction of Lockington Barrow VI (Hughes 2000, 9) also followed a similar plan, and at Lockington Barrow I the excavator described the ditch as being 'excavated by means of sausage-shaped depressions which did not always connect' (Posnansky 1955, 20). The concentric form of Barrow 2 is also similar to a double ring-ditch cropmark recorded at Queniborough, east of Cossington (Pickering and Hartley 1985, 39, fig. 5b) and the excavated monument at Eaton (Clay 1981), although this had more phases and the ditches were more substantial. The dimensions of the inner ditch of Barrow 2 are almost identical to those of the Lockington palisade (Hughes 2000, 9) and the northern ring ditch at Eye Kettleby, suggesting a localised tradition of monumental architecture (Finn forthcoming).

Like the ditches associated with Barrow 1, it is evident that the Barrow 2 ditches had a complex history, particularly the inner ditch, which underwent several phases of redefinition. Given the sequence of burials within the monument, it is tempting to equate each episode of recutting with a different phase of use, with each redefinition re-emphasising the contining importance of the monument (Mizoguchi 1992). In practice, however, this is difficult to prove in the absence of any dating from the ditches and it is even uncertain how they relate sequentially. Evidence from Eaton suggests that the monument grew outwards with each separate redefinition (Clay 1981, 32) and this may also have been the case with the outer ditch of Barrow 2. The very precise mirroring of the plan shape adopted by both ditches, however, does suggest a degree of contemporaneity at some stage, indicating that for a time, the monument was defined by two open ditches. It seems likely, given the size of the enclosed area in relation to the surrounding ditches, that Barrow 2 would never have had a large central mound. It perhaps was more of a ceremonial enclosure or 'open arena' site (Garwood 2007, 34–6), defining space in a similar way to the northern ring ditch at Eye Kettleby (Finn forthcoming). Some evidence from the inner ditch implies infilling from an internal bank, which would support this idea.

The burials associated with Barrow 2 reflect both a long period of use in the Early Bronze Age and a range of burial practices. The earliest was the cremation burial of a young adult ?male (F17), deposited between 2140–1930 cal BC. The remains of the individual appear to have been packed into an organic container along with pyre debris, before being placed in the burial pit and surrounded by packing stones. The burial was accompanied by the fragmentary remains of two Beaker vessels, broken in antiquity, perhaps included as grave goods. A similar burial was found at Eaton (feature F11), where a compact group of calcined bones in association with broken Beaker pottery had been placed into the side of a pit, perhaps also in an organic container, and held in place with packing stones (Clay 1981, 30). Similar finds of partial Beaker vessels in association with unusual pits and burials have been highlighted as potential structured deposits, perhaps reflecting the procurement and deposition of heirlooms or relics (e.g at Lockington: Woodward 2000, 59; and Whitemoor Haye quarry, Staffordshire: Coates and Woodward 2002, 81). Although other burials were located close to F17 it was not impinged upon, perhaps hinting that the burial was marked in some way to avoid later disturbance. A nearby concentration of stones (F18) may be the remains of such a marker.

Two features associated with Food Vessels probably represent funerary activity closely contemporary with F17, but following very different burial traditions. The crouched inhumation of a child, approximately 8 years of age, close to the centre of the enclosed area (F15) was accompanied by a combination of unusual artefacts – including an enlarged Food Vessel, an accessory cup, a stone bowl and three flint knives – which may be unique to the area. Similarities between the decoration on the stone bowl and the Food Vessel suggest the two were linked in some way and may have been intentionally placed in the grave together. The body of a slightly older child (*c.* 13–14 years old) buried within a ring ditch at Burley Road, Oakham, was also accompanied by three flint knives, one of which was in an unused state and may have been created specifically as a grave offering (Healey 1998, 317). No absolute dating is available grave for F15, but a similar Food Vessel from Eye Kettleby was interred in 2140–1940 cal BC (95% probability) (Woodward forthcoming). The Eye Kettleby example was associated with a cremation burial, but lay in a similar central position within a ring ditch (Finn forthcoming). To the south-west of F15 a second Food Vessel was placed upright in a shallow pit (F16) with no other finds. The dimensions of the pit appear too small for it to have been intended for an inhumation, although the degree of truncation it had suffered is unknown. The possibility remains that F16 is the much truncated base of a pit intended for inhumation. Alternatively it may represent the deliberate burial of the pot within the monument.

Later activity is indicated by the deposition of three Collared Urns within Barrow 2. One was found in a shallow pit (F15a) that had been partially cut into the upper levels of the inhumation F15. Like the previously discussed feature containing a Food Vessel (F16), no other finds were recovered and it is possible that F15a too represents either the truncated remains of a grave, or a deliberately placed pot. Whatever the explanation, the locations of both F15a and F16 in relation to the inhumation might indicate that it was once covered by a small mound, which acted as a focus for later activity. Later truncation of the monument would have removed most of the evidence for any features not inserted directly into the natural subsoil, possibly accounting for the shallowness of these pits. An adult cremation burial (F14), placed in the ground between 1880–1630 cal BC was also associated with a Collared Urn. The cremated remains and urn had been placed in a pit together although there was a clear separation between the pot and the cremated remains. The cremation burial had been placed in the lower part of the burial pit and the pottery vessel had been placed on a raised ledge adjacent, almost as if the urn had been intended as an accompaniment to the cremation, rather than a container. The special nature of pottery vessels in the Neolithic and Bronze Age has recently been discussed and it is possible that this arrangement provides a reflection of the relationship between the pot and the buried person in life (Woodward 1995b; 2002, 1041–2). The rim of a third Collared Urn was found within the inner ditch (F12) although at what location or depth is now uncertain. The pottery was in an unabraded condition suggesting it had been rapidly buried after deposition. It is possible that this represents a disturbed burial, although no other finds were apparently found in association. Alternatively the vessel may have been deliberately deposited within the ditch in an act of structured deposition, possibly coinciding with one of the other burials.

H3\Later activity

Given the ploughed state of Barrows 1 and 2, evidence for later activity focused on the two monuments is limited. Continued Bronze Age activity is attested in the lithics assemblage, a large proportion of which displays typological characteristics of the period (L. Cooper above). The high degree of cortical flakes from the assemblage also suggests that primary knapping took place here, indicative of the continued importance of the monuments over time, or that the surviving barrow earthworks acted as convenient foci for meetings and group activities. A similar scenario is reflected in the evidence for Later Bronze Age activities at Barrow 3 (Part Three below) and has also been witnessed locally at Lockington (Hughes 2000, 100) as well as in the wider context of the East Midlands at Raunds, Northamptonshire (Healy and Harding 2007, 67). In later, historic periods it is uncertain how prominent the Barrow 1 and 2 earthworks would have been in the landscape to act as foci for activity. A scatter of Romano-British pottery was recovered from across the site during the excavation of Barrow 1, and a single sherd was intrusive in cremation burial F9. A small amount of Anglo-Saxon pottery was also present across the site. Roman and Anglo-Saxon pottery sherds were found in F12, the inner ditch of Barrow 2, and Saxon sherds were also retrieved from the outer ditch, F13. An unstratified Anglo-Saxon loomweight was also found at the site. Although in relatively small numbers the concentration of Roman and Anglo-Saxon sherds in the ditches of the two monuments may be the vestiges of more widespread activities associated with the remains of the monuments, involving the deliberate burial of

pottery vessels, as seen more clearly at Barrow 3, which was in contrast, better preserved (see below). A single medieval sherd was recovered from the upper levels of ditch F5, and two sherds from the inner ditch of Barrow 2 (F12), perhaps reflecting a time when the earthworks were becoming levelled by expanding agriculture.

Part Three

Barrow 3 and its environs

John Thomas with Susan Ripper

H1\Introduction

In contrast to the excavations of Barrows 1 and 2, a relatively larger area was available for examination around Barrow 3, enabling consideration of the local environs of the monument, and of the part it played in the development of the surrounding landscape.

This part of the site was divided into five discrete areas (A–E) according to particular phases of work (Fig. 35). Area A was the main area of excavation, focussed on Barrow 3, and covered *c.*4335m^2 (0.43ha). As well as the Early Bronze Age barrow and its associated features, Area A included possible Neolithic remains, Iron Age and Roman occupation, with evidence of monument re-use, and finally a small Anglo Saxon inhumation cemetery focussing on the barrow mound.

Two further zones of quarrying, a little to the east, were monitored as part of a watching brief (Areas B and C). A combination of trenching and larger area stripping uncovered a range of archaeological features including a small oval enclosure, a post alignment, and numerous landscape boundary features indicating successive periods of land allotment over time.

Two large palaeochannels were also observed during the stripping of alluvial clays approximately 600m to the north-north-west of the main excavations (Area D). The channels contained waterlogged deposits, which yielded both organic and faunal remains.

Following the positive results of the work in Areas A–C, a further watching brief was undertaken in 2001 during the extension of the quarry work in fields immediately north of Area A (Higgins 2002). A large amount of topsoil stripping had already taken place here before archaeological monitoring was in place, and some areas had even been quarried; however one small 'island' of archaeology *c.*70m x 35m was recognised and recorded. Area E contained further Iron Age and Anglo-Saxon settlement features. Given the circumstances of discovery, the information from this area is somewhat patchy, but is nonetheless important in providing a wider context for the Iron Age and Anglo-Saxon phases recorded in Area A.

H2\Methodology

In the main excavation area (Area A), topsoil was removed by machine in spits under full archaeological supervision until archaeological deposits or natural substrata were revealed (Fig. 35). The Barrow 3 mound was hand cleaned by draw hoe and the cleaned surface scanned by metal-detector. Cut features were extremely difficult to detect owing to post-depositional homogenisation of the mound material. Trial scanning for cut features, using a gradiometer, proved unsuccessful. The barrow mound was therefore divided into quadrants for careful hand excavation in controlled (100mm) spits. The location of all recovered artefacts was recorded three-dimensionally using an Electronic Distance Measurer linked to a data-logger.

Bone preservation on the site was minimal due to the acidity of the soils and bone was only retrieved from relatively modern features. In view of this, routine bulk sampling was undertaken from suspected graves to sieve for tooth enamel. Phosphate samples were also taken along the axis of possible graves and extended into areas slightly beyond each feature's edges.

Some areas of the eroded mound beyond the ring ditch were examined by controlled machine stripping following hand cleaning. The area containing the Iron Age building was hand cleaned and a 50% sample of the ring gully, post holes and associated features was excavated, planned and recorded.

In the watching brief (Areas B and C), topsoil was cleared by machine stripping under constant archaeological supervision. The archaeological features revealed were then planned using an Electronic Distance Measurer and data logger, and a sample of features was hand excavated, with particular attention

given to areas showing stratigraphic relationships, those sealed beneath alluvium, and deposits containing organic material.

Environmental sampling was undertaken across the site on a representative range of feature types with datable, well-sealed material. 40 litre bulk samples were taken from non-waterlogged deposits and a minimum of 5 litres was taken for waterlogged deposits. The waterlogged remains in Areas C and D were sampled for pollen, plant macrofossils and insect remains in consultation with Dr. James Greig.

H1\Area A

H2\Pre-barrow activity

Evidence for archaeological activity pre-dating the construction of Barrow 3 comprised a pit circle and associated features to the west of the barrow, a cluster of pits and post holes beneath the mound and various scattered features to the north and south of the monument (Fig. 36). A concentration of narrow, erratic linear features also had a focus beneath the barrow mound. Definition of these features was poor in the sandy subsoils and the majority of them are thought to be the result of animal activity.

H3\Pit circle and associated features

A discrete group of pits and post holes lay beneath the subsoil on the western outskirts of the barrow area. Their stratigraphic position and similar chacteristics to features lying beneath the mound (see below) indicated that they pre-dated the construction of Barrow 3. The focus of the group appears to have been a pit circle, comprising eight pits defining an elliptical area of *c.*89m^2. The excavated features of this group (F642, F658, F674 and F692) varied in shape between circular and sub-circular or oval and were generally fairly shallow; all were between 0.5–2.10m in diameter, and ranged in depth from *c.*0.10m to *c.*0.40m (Fig. 37). The pits were consistently filled with loose sandy deposits containing iron panning and most were characterised by their general lack of finds. Pit F692 however, was remarkable as it contained four worked flints, cereal grains, and a number of burnt cobbles. Unfortunately, radiocarbon dating of material from this feature was considered problematic due to the amount of burrowing activity in the immediate vicinity, coupled with the loose, mobile nature of the soils.

A curving group of pits and possible post holes was located slightly to the west of the pit circle. The positioning of these features seemed to respect the curvature of the pit circle, suggesting a degree of contemporaneity; indeed, they may represent an additional phase of the circle. Of these, only F663 was excavated (Fig. 37). This shallow sub-circular pit was filled with similar material to the pit circle features.

After the pit circle features had become infilled, a further phase of pre-barrow activity was indicated by the presence of a localised scatter of post holes. Their location coincides with the area defined by the pit circle, and several post holes clearly cut into the backfilled pits. Not all of these features were excavated; in plan they were all circular with an average diameter of 0.30m.

H3\Pit and post hole cluster beneath the barrow mound

A concentration of shallow, roughly circular features was located directly beneath the Barrow 3 mound material, mainly clustering on the eastern side of the area. Although in plan some of the features resembled pits or post holes, many were poorly defined and may have been naturally created. The nature of the fills of these features was very similar to the natural subsoil, making identification and definition extremely difficult. Of note, however, was F711, a sub-circular feature *c.*1m in diameter and 0.25m deep located in the northern half of the cluster. This was filled with mottled greyish orange silty sand and contained cereal grains, burnt bone, and charcoal flecks. Because of the high incidence of naturally derived features within and beneath the mound, this feature, like F692 above, was considered problematic for absolute dating which was therefore not undertaken.

H3\Natural features beneath the barrow mound

Numerous narrow linear features were located beneath the barrow mound and were concentrated within the area defined by the ring ditch. The cuts for many of these features were poorly defined and formed erratic

shapes in plan. In the absence of any clearly defined structure, or other evidence to suggest they related to archaeological activities, it is considered most likely that they were the remains of animal burrows. A combination of the upstanding barrow earthwork and soft, sandy soils would have provided an attractive habitat for the local burrowing wildlife.

H3\Linear features south-west of the barrow

Two narrow ditches were located in the south-western part of Area A (F77 and F101=116). Both were clearly cut by the gully of the Iron Age roundhouse although no other evidence was retrieved to provide a clear date for their use. F77 was aligned south-west to north-east and had a steep sided, V-shaped profile. It was filled with friable light yellowish brown silty sand containing occasional pebbles. Slightly to the east of this feature, F101=116 was a curvilinear section of ditch with steep sides and a rounded base. This feature had two fills, the earliest being pale greyish brown sand which was subsequently covered with a deposit of loose reddish brown sand. Due to the lack of datable finds from these features it is difficult to assign them to a particular phase but it is possible that they were associated with the Bronze Age barrow activity or earlier phases of occupation on the site.

H2\The Early Bronze Age

H3\Barrow 3

Barrow 3 was defined by two phases of sub-circular ring ditch (F368 and F368a), which enclosed an area with an internal diameter of 25m (Figs. 38 and 39). The ditch varied in profile and dimensions within the excavated sections but was generally fairly steeply sided with a slightly rounded base; it measured between 2.5m and 3.5m in width and was on average 1.2m deep. The fills of the ring ditch were removed in 14 separate segments around the circuit, each segment being 1.50m wide. In all approximately 25% of the Barrow 3 ditch was completely excavated (Selected sections from each quadrant are shown in Fig. 40).

H4\The barrow ditch – Phase 1
The original monument was defined by a circular ditch, enclosing an area of some 25m in diameter (F368). Due to the sandy nature of the subsoils into which it had been cut, erosion of the upper ditch edges had resulted in a wide upper profile that varied between 2.5m and 3.5m in width around the circuit. The lower sections of ditch F368, however, cut into subsoil with a higher clay content and had retained a profile more representative of its original form. Here the base of the ditch had a relatively narrow profile, displaying a fairly flat base and steeply sloping sides. The infilling of the ditch varied in detail from section to section around the circuit, but in general terms, the feature had three distinct fills. The primary fills were often almost clean sand with whirling lenses of manganese stains, suggesting wind blown sands, indicative of the initial silting of the ditch. This was overlain by a layer of loose orange/grey sand and finally a layer of loose brownish orange sand. The two latter fills were separated by a distinct iron panning horizon.

H4\The barrow ditch – Phase 2
After the original ditch had almost completely silted up the monument was redefined through the construction of a new ditch (F368a) that closely followed the circuit established in the first phase. F368a was generally narrower than its predecessor, between 1.10m and 1.50m wide, and retained a fairly sharp, steep sided profile perhaps suggesting that it had not been left open for long enough for much weathering to occur. Like the earlier phase, the fills varied throughout the excavated sections of the ditch, although again three general deposits were consistently observed. The layers filling the second phase ditch were also noticeably siltier in character. The earliest fill of F368a consisted of dark yellowish brown friable silty sand. This was covered by a layer of reddish grey sand and finally an upper fill of dark greyish brown sand that appeared markedly different, in plan, as a separate fill, distinct from to the lighter surrounding soils of the phase 1 upper ditch fill. Radiocarbon dates obtained from charcoal recovered from the upper fills of the ditch (Contexts 637 and 675) suggest that it had become infilled by the early second millennium cal BC (see Marshall *et al.* below).

H4\The barrow mound

The barrow mound was poorly preserved but survived as a low earthwork with a maximum height of *c.*0.50m, and consisted of mid-brown slightly silty sand. Over time the mound material had slipped, covering an area approximately 60m in diameter and overlying both the silted ditches and some of the features beyond the edges of the monument. Homogenisation of the soils meant that no traces of the constructional sequence could be discerned within the mound deposits. Over 1000 flints were recovered from the mound during its removal (L. Cooper below).

H3\Features contemporary with the Bronze Age use of Barrow 3

No evidence for a central burial was recovered from Barrow 3. A rectangular cut located slightly to north of the barrow's centre (F491) was investigated, but was found to contain modern pottery. One feature on the south-eastern edge of the barrow, however, did yield evidence for a Bronze Age burial in the form of an exquisite composite bead necklace with accompanying flint blade. A number of stone clusters were also revealed during excavation of the barrow mound and ditches that may have been grave markers (Fig. 41).

H4\Inhumation with composite bead necklace

Evidence for a probable secondary inhumation (F58) was revealed in the south-eastern quarter of the barrow, located close to the inner edge of the ditch. This was initially revealed as a linear concentration of large, flat stone fragments demarcating an area of *c.*1.80m x 0.90m (Fig. 42). Beneath the stone layer a deposit of mottled, mid-brown silty sand formed the only fill of the grave, within which were several more flat stones, occasional charcoal flecks, cereal grains, a struck flint blade, and, towards the south-western end, the remains of a composite bead necklace of Early Bronze Age date (Sheridan below). The group included ten amber beads, two made of jet and a single faience bead. Five of the beads were recovered *in situ*, indicating that the necklace had been complete when it entered the grave (Figs. 43 and 44; see also Figs. 73 and 74).

Excavation conditions were such that the necklace was unfortunately partly disturbed during discovery, although the remaining beads were recovered from the excavated spoil from the feature. It seems likely that the necklace entered the grave around the neck of an individual whose head lay at the south-western end of the grave. From the position of the necklace and the dimensions of the grave cut, it can also be inferred that the individual was buried in a crouched position, and laid on their left side, facing north. The fine appearance of the flint blade suggests that this too was intentionally deposited as a grave good; unfortunately the location of this item in the grave is not known.

After excavation the grave cut of F58 measured approximately 1.50m x 0.70m x 0.40m deep, although plough-truncation had disturbed the southern side. The edges of the grave were particularly difficult to see in the sandy soils and the grave fill was indistinguishable from the mound soils. In spite of the difficulties presented by the homogenous soils, several stones laid on edge appeared to partially demarcate the extent of the burial. It is possible that the stones were the remains of a much denuded cist, although the burial could equally have been cut into the mound at a later date, with the stones being placed to mark the grave.

H4\Deposit within the ring ditch fills, containing cremated bone

An organic-rich deposit containing small quantities of burnt bone was revealed during excavation of the south-west quadrant of the barrow ditch (Context 724). This deposit lay beneath the uppermost fill of the ditch and was less than 0.05m thick, having similarities with the charcoal deposits in the upper ditch levels of Barrows 1 and 2. The location of the deposit was adjacent to the burial containing the composite bead necklace (F58), although the relationship between the two is unclear. The burnt bone was too small to identify as human, hindering the interpretation of this feature. No dating has been obtained for this deposit.

H4\Stone clusters

During the removal of the barrow mound several clusters of sandstone fragments and/or cobbles were revealed (see Fig. 41 for locations). Two of the clusters appeared to have been cut into the mound, near the centre of the monument; the others were cut into the mound soils and uppermost fills of the barrow ditch in its northern arc. Three of the clusters were associated with poorly defined circular cuts (Features F69, F179 and F329), but all stood out from the otherwise stone-free mound material. No bone was recorded with these groups of stones, but it is possible that they were originally placed to mark the location of perishable deposits.

Cluster F69 consisted of a closely grouped patch of burnt stones measuring 0.40m x 0.40m x 0.15m deep. They lay directly beneath the subsoil and had apparently been cut into the top of mound material on the northern side of the monument.

F118 was found in the upper levels of the mound material during removal of the first spit in the south-western quadrant. The group of stones was located slightly south of the centre of the monument and consisted of burnt and water-worn cobbles defining an area of *c.*0.40m x 0.30m. A flint core (SF363) was associated with this cluster.

F179 was another small cluster of burnt cobbles, measuring 0.53m x 0.46m x *c.*0.10m deep, located 2.6m east of F118.

F180 consisted of a small concentration of burnt stones cutting the northern arc of the barrow ditch. No associated cut was revealed suggesting the stones had been deposited on the infilled surface of the ditch.

Several metres to the north-west of F69, a distinct patch of burnt cobbles (327) was revealed cutting the top of the backfilled barrow ditch. These were subsequently found to be the upper fill of an oval pit (F329). Beneath the stones was a second fill of mottled mid-orange brown sand (328), which contained occasional charcoal flecks and flint.

H2\The Later Bronze Age

Barrow 3 continued to be the focus of activity during the Bronze Age, as indicated by the large assemblage of struck flints recovered during the removal of the mound material. Much of this assemblage displayed Later Bronze Age characteristics and was indicative of primary knapping activities, as also hinted at in the assemblages from Barrows 1 and 2. The presence of this large assemblage and apparent focus of knapping activity at Barrow 3 illustrates the continued importance of the monument over time, either as a point of spiritual reference or a convenient venue for meetings and group activities.

H2\The Iron Age and Roman periods

Iron Age occupation on the site was represented by a roundhouse facing east-south-east and a scatter of contemporary features, some of which were cut into the remains of the barrow mound and partially silted ring ditch (Fig. 45).

H3\The roundhouse

The main Iron Age feature was a well-defined roundhouse which lay 35 metres to the south-west of Barrow 3. The roundhouse was defined by a penannular eavesdrip gully (F8), which had a diameter of 11.5m with a break on the east-south-east side, forming an entrance. On average this gully was *c.*0.35m wide by 0.20m deep and had steep sloping sides and a rounded base. The overall shallowness of the gully suggested that the cut had suffered truncation from ploughing. The fill of the gully consisted of friable, greyish brown silty sand with frequent iron pan mottling. Excavation of the feature recovered abundant Iron Age pottery and occasional cereal grains, with a marked concentration in the northern gully terminal. Pottery recovered was all of the East Midlands scored ware tradition dating to the mid–late Iron Age (Fig. 75). Of the few organic remains, examples of emmer or spelt wheat and a seed of fat hen type were recovered from the fill of the gully.

H4\Pits/post holes within the roundhouse

Seventeen small circular features were identified within the roundhouse ring gully, which may represent the truncated remnants of a post-built circular structure. These were mostly scattered around the entrance to the building, with a few extending northwards, forming an arc just inside the circumference of the ring gully. Due to plough truncation almost all of the cuts were shallow and poorly defined, with the exception of F20, a post hole situated just inside the southern side of the entrance. This feature was sub-circular and 0.45m deep and filled with large cobble post-packing stones. Packing stones also survived in F12, a smaller post hole on

the northern side of the building and the remains of a post-pipe were still visible in F10, a post hole in the entrance cluster. On the southern side of the entrance area post hole F14 contained burnt clay/daub remains.

H4\Pits/post holes immediately outside the roundhouse
Numerous circular and sub-circular features were identified in the vicinity of the roundhouse, outside the ring gully. A group of features around the entrance with similar fills (Features F48, F614 and F612) may have been post holes supporting a fence or windbreak leading to the entrance. Other possible features in the vicinity of the roundhouse had characteristics of post holes or pits, although they yielded no finds and micromorphological analysis of the fills from a sample of these features suggested that they were more likely to have formed through natural processes (M. Canti pers. comm.).

H3\Iron Age and Roman re-use of the monument

A group of features clustering close to and on the remains of the Barrow 3 mound, reflected the continued importance of the monument as a focus for activities into the Iron Age and Romano-British periods. Some of the features comprised discrete concentrations of stone while others contained unusual deposits of whole or near complete pottery vessels suggesting the barrow also maintained spiritual significance in these later periods (Fig. 46).

H4\Iron Age pits and pottery inserted into the barrow
To the west of the barrow a small oval-shaped pit (F2, measuring 0.65m x 0.40m x 0.28m deep) contained a near complete Iron Age scored ware vessel. This had apparently been deposited in a broken state in antiquity, although substantial fragments of the base, body, and rim of the vessel were recovered (see Marsden below). Further sherds of Iron Age pottery were found in association with two concentrations of stones buried within the mound. Context (635), located in the southern part of the mound, comprised two sub-rectangular blocks of granite with pottery between them. To the north of this, close to the centre of the mound, Context (636) consisted of a cluster of large pebbles and associated pottery.

H4\Roman activity
Similar activities evidently continued into the Roman period, and as with the Iron Age features, were characterised by discrete deposits of pottery into the mound material. In the north-western quarter of the mound a complete pottery vessel of the 1st or 2nd century AD had been placed, inverted, in the ground (Context 82; Fig. 47 and Fig. 76.1). Although common sense suggests that the pot must have been placed in some sort of pit, no discernible cut could be recognised. It therefore seems likely that whatever type of hole the pot was placed in, it was rapidly backfilled after the event. Examination of the soils from within the pot revealed a cereal grain, a tuber, and two fragments of hazelnut shell. The significance of these inclusions is uncertain, but given the highly mobile nature of the sandy mound material it is likely that these single items were intrusive.

A little to the south of the middle of the mound, a short linear feature (F355) contained a near complete 1st or 2nd century AD pedestal from a jar or beaker (Fig. 76.2), along with fragments of tile and an iron object. A third example was recorded to the north-west where a near complete Roman pot had been inserted into the edge of the infilled ring ditch (Context 344; Fig. 76.3), although no discernible cut was evident. In contrast to the other Roman pots deposited into the mound, this third example was later in date (late 3rd to 4th century AD); it was also more abraded and may even have been placed in the ground at the time of the Anglo-Saxon use of the site (Marsden below). Numerous scattered Iron Age and Romano-British sherds were also recovered from the mound itself, showing a marked concentration in the north-eastern quadrant of the monument. No evidence was recovered to suggest that human remains had been associated with any of these features, but it is conceivable that they were the result of specific episodes of ritual offerings relating to the continued significance of the barrow mound to those who lived near it.

H4\Undated pits/post holes post-dating the mound
Several small pits were also revealed cutting the uppermost barrow ditch fills. In the north-east quadrant a group of three small pits (F348, F350 and F352) were located in close proximity to one another. The three features were typically shallow and sub-rounded and were filled with mixed silty sands. All three contained flint debitage and charcoal and, of particular note, pit F352 also contained burnt stones and a rich lens of

charcoal, perhaps indicating dumped hearth remains. A similar feature was also located to the south (F362); this was sub-angular in shape and was found to contain a single large stone, possibly used to support a post.

H2\The early Anglo-Saxon period

The barrow mound was once again re-used during the early Anglo-Saxon period (6th–7th century AD), when it formed the focus for a small inhumation cemetery (Fig. 48). Due to the acidity of the surrounding soils no trace of human remains survived, although a metal detector survey of the site recovered fifty-one fragments of metalwork from the mound and its immediate environs, some of which were found in distinct groups, evidently indicating the location of specific graves. As with other features on this site, finding the edges of the grave cuts proved difficult, but two definite grave cuts (F345 and F85, Graves 1 and 2 respectively) were identified. In other parts of the cemetery, discrete groups of finds indicated the probable location of further graves and a scatter of other artefacts hinted at the former presence of yet more graves that had since been disturbed by ploughing. The metalwork included spears, knives, a fragmented shield boss and numerous rivets, two fragments of bucket bindings, a possible brooch fragment, and iron nails. Several of the artefacts had preserved textile impressions in the corrosion products adhering to them. The evidence for the individual graves and associated artefacts is described below.

H3\Catalogue of Anglo-Saxon graves – Peter Liddle and Richard Knox

H4\Grave 1 (F345) (Fig. 49)
Grave 1 comprises roughly north-south burial cut, although it is impossible to gauge the orientation of the body. The dimensions of the cut are approximately 1.6m by 0.5m. The two rivets and nails were located around the edge of the grave and they probably represent a wooden coffin. The knife and the buckle seem to be in the centre of the burial, suggesting attachment to a waist belt. The small iron buckle could have been worn by either sex. The knife blade has different types of fabric on either side, suggesting that it was worn between two layers of clothing, perhaps a tunic and a cloak. The curving copper alloy bar is too fragmentary to identify, but likely possibilities include a chatelaine suspension ring or a penannular brooch, both of which suggest a female burial.
1. Small fragment of curving copper alloy bar (SF1000). Length 15mm, width 4mm. (Not illustrated)
2. Iron rivet with domed head (SF1001). Length 11mm, width of head 7mm (from x-ray).
3. Flint (SF1002; not illustrated).
4. Iron nail or rivet head with a slim shank and a circular, domed head (SF1003). Length 13mm, width of head 7mm (from x-ray).
5. Iron nail (SF1004). Length 11mm, width of head 4mm (from x-ray).
6. Iron rivet with domed head (SF1005). Similar to no. 2. Length 11mm, width of head 7mm (from x-ray).
7. Iron buckle and pin; D-shaped frame (SF1006). Length of frame 14mm, width 15mm (from x-ray).
8. Iron tanged knife (SF1007). Length 105mm, width 17mm. The sharp edge is in line with the tang. Evison (1987) Group 3 or 4. Herringbone pattern textile on back of blade and a different textile on the other surface.

H4\Grave 2 (F85) (Figs. 50–51)
Grave 2 had a notably wide, roughly north–south orientated burial cut, 1.66m long by 1.10m maximum width. The inclusion of a spearhead within the grave suggests a male burial, while its location at the southern end of the grave implies that the head was to the south. The knife and buckle are just into the north-western sector of the grave, suggesting attachment to a waist belt. A group of unidentified iron stains are to the east of the body and north of the spearhead. Given the width of the grave and the clear grouping of the objects it is possible that two individuals were interred in this cut. If so, the body on the east side must be male, while the other may be female.
9. Iron buckle plate, frame and pin (SF322). D-shaped frame of round section. Accretion on the upper surface of the pin. Length of frame 15mm, width 21mm (from x-ray).
10. Iron tanged knife (SF321). Length 146mm, max. width 20mm. It has a V-section blade with the sharp edge in line with the tang. Possible traces of wood on one of the flat surfaces. Evison (1987) Group 3, dated 6th–8th centuries AD.
11. Complete iron spearhead, with a slim socket with closed split (SF290). It has a gently tapering blade with gently angled shoulders. Length 430mm (socket 135mm), maximum width 36mm. Probably a Swanton

(1973) Type E3, 'The commonest of the late pagan types'. Mineralised wood (possibly field maple), showing eight annual rings, survives inside the socket and there are considerable areas of mineralised fabric on the blade. The fabric was woven in a 2 x 2 herringbone weave, using both S and Z spun thread, probably wool.

H4\Grave 3 (F6) (Fig. 52)
The evidence for Grave 3 consists of a male grave group with no discernable grave cut. The presence of a spear and shield boss suggest a warrior status. There is no indication as to the orientation of the original burial. A pottery vessel contained within F6 is thought likely to be Anglo-Saxon but no longer survives.
12. Iron tanged knife (SF203). Possibly of Evison (1987) Group 2, dated 450–600 AD. There are traces of wood, possibly hazel, on the tang and mineralised cow hide on the blade tip, representing the leather sheath. Length 90mm. Width 20mm.
13. Iron spearhead with split socket (SF37 and SF204). The shoulders are incomplete and now appear rounded, but may well have originally been angular. The gently tapering blade is of flattened diamond section and its point is missing. Socket length 104mm, max. width 21mm. Blade length (broken) 131mm, max. width 49mm. The socket contains wood (field maple) and is split for its entire length. The x-ray clearly shows an iron nail holding the wooden shaft in place but this is not now visible from the outside. It is likely to be a Swanton Type E2 or 3, dated to the 6th or early 7th century AD. A flat iron object, 4mm thick, appears to be rusted onto one side of the socket.
14. Iron shield boss (SF5). Several fragments representing most of the circumference of the rim of a shield boss, with three small Iron rivets surviving. The outer flange and the side wall survive, just up to the angle of a carination. Flange width 15mm, side wall is 18mm to the carination. There are traces of wood, representing the shield board, under the flange. Possible parallels from Morningthorpe (Green *et al*. 1987, fig. 433, Grave 374 Gi or F271 Grave 271 Ci).

H4\Grave 4 (F584) (Fig. 53)
A male burial group with no clear association to a grave cut. As the surviving grave finds have clearly been disturbed there is no chance of determining the original orientation.
15. Iron tanged knife with V-shaped section and near symmetrical point (SF248). Most of the tang is missing. Length 110mm, width 25mm. Evison (1987) Type 3, 5, or 6, dated to the late 7th century AD.
16. Iron spearhead (SF205 and SF247). The short split socket contains wood and the blade is split along its surfaces through corrosion but was probably elliptical in section. Length (broken) 285mm, width of blade 30mm. The shoulders are very gently angled, suggesting a Swanton (1973) Type E or, more probably, Type G.

H4\Grave 5? (F4)
17. Anglo-Saxon pottery. The fragmentary remains of the flat base of a globular vessel, tempered with granodiorite, may represent a burial without other grave finds. (Not illustrated)

H4\Unassociated objects which might represent disturbed burials
Although there are no discernable grave cuts or other material associated with these objects, which were found in the mound area and nearby. These items could represent separate burials of indeterminate sex. Given the distance from the other burials, it seems unlikely that they have been dragged by ploughing.

18. A small pottery bowl with an upright rim found in the ditch fill (Context 370; exact location unrecorded). May represent a burial in the already infilled ditch or a burial from higher in the mound that has been redeposited by the plough. (Not illustrated)

19. Bead from near F355 and F580 (SF380). Polychrome glass bead with two dark intersecting trails on a light field. Diam 8 mm, Ht 5mm. Probably of early Anglo-Saxon date, although the two spurs of glass on both surfaces of one side are unusual. (Fig. 54, 19)

20. Copper alloy annular brooch (SF307)from small cut (F179) near the centre of the barrow also containing several burnt cobbles. Cast with an ovate section and a segmented upper surface. External diameter 44mm, width of section 5mm. Remnants of an iron pin survive wrapped around the brooch ring. Another blob of

iron suggests a separate iron object in the cut, unless the pin was bent back. There are fragments of mineralised textile on the lower surface of the pin and on the upper surface of the second area of iron corrosion. There are traces of a rare, Z-spun linen on the upper surface and another fabric is represented on the lower surface. Finds of single annular brooches in Anglo-Saxon graves are known at Morningthorpe (Graves 334 and 203; Green *et al*. 1987) and Bergh Apton (Green and Rogerson 1978). This could represent a low status female burial. (Fig. 54, 307)

21. Iron tanged knife with V-shaped section and seax shaped blade (SF237). Length 101mm, max. width 21mm, max. thickness 7mm. Evison (1987) Type 4. (Fig. 54, 237)

22. Iron tanged knife (SF292). Most of blade missing. Preserved length 52mm, width 15mm. (Not illustrated)

23. Iron object (SF231). A slightly tapering iron strip with one rivet and half of a circular hole at one end. Length 54mm, width 14mm. Likely to be a buckle plate (cf. Morningthorpe Grave 311 c; Green *et al*. 1987), or a tub escutcheon (cf. Westgarth Gardens Grave 66 D; West 1988). (Fig 54, 231)

H4\Other possible Anglo-Saxon material (Fig. 55)

24. Iron fitting (SF232). Now corroded to fragments, this had a circular looped terminal at one end and tapering out to a broad flat surface containing a large circular hole flanked vertically by two small holes, possibly for rivets. Length 35mm, width 13mm. Could be a suspension escutcheon.

25. S-shaped iron object with a rectangular section (SF240). The form twists like a cork screw on the tight curl of the S shape. Length 53mm, width 120mm, max. thickness 6mm. Could be a tub handle that has unravelled. Otherwise the twisting curve could have gripped a rod *c*.12mm in diameter.

26. Broad, thin iron bar with a near symmetrically pointed end (SF238). Length 68mm, width 34mm. Likely to be a spear or even a sword tip, but not obviously fitting on any other surviving finds. Context not recorded.

H3\Other features associated with the cemetery

Also associated with the Anglo-Saxon cemetery were two sub-rectangular pits, F31 and F35 (Figs. 56–59), located on the western edge of the barrow. Both pits had steeply sloping edges and flat bases; they also had similar dimensions, *c*.2 x 1m by 0.30m deep, and both contained abundant charcoal remains and heat affected cobbles, although no evidence of *in situ* burning was apparent. The northernmost pit (F35), also contained a large ceramic fragment representing the complete profile of a substantial globular vessel (Fig. 77.1). This had been placed on the base of the pit before the burnt stones had been deposited (Fig. 59, Section Z) and, although broken, appeared to have been used as an implement in its own right. The edges of the pot were discoloured through heat and vitrification had crazed the edges of the item. Although some sort of link between the pit contents is fairly self-evident, it is not entirely clear what the function of the vessel fragment could have been. The location of the pits suggests a strong link with the cemetery and associated burial rituals and the pit shapes are strikingly grave-like in appearance. It is also noticeable how the location of the pits, as with the discernible graves, falls strictly within the bounds of the barrow mound.

The small pottery bowl recovered from the northern part of the barrow ditch (No 18 above, Context 370) could conceivably have functioned as an accessory vessel to a grave. The precise context of the find is uncertain, making it difficult to associate the pot with a particular grave group. Alternatively, the pot may have been deliberately placed in the ditch fill during the time of the cemetery's use, or may have become dislocated from a grave group as the mound soils slipped.

The remains of an upturned horse skull were represented by two sets of *in situ* horse teeth, together with a few fragments of maxillary bone. These were found in the upper levels of the mound material, at a similar level to the remains of the Anglo Saxon cemetery. No dates were obtained for these bones and therefore interpretation must be cautious, but it is possible that they were once part of the cemetery and represent the much disturbed remains of an associated horse burial. Few local parallels are available for comparison but a

horse burial was recorded as part of the Anglo-Saxon cemetery at Wanlip. Here a horse was found buried with its bridle, lying beneath two shields, although its association with nearby human remains was unclear (Liddle 1980, 18–20).

A single sherd of Anglo-Saxon pottery was recovered from a smaller pit located to the west of the barrow (F71). This feature was filled with mottled greyish brown silty sand and measured 1.20m x 0.95m x 0.28m deep.

H2\Modern pits and ditches

A number of modern features were also evident cutting the remains of the barrow mound. In comparison to the earlier features the definition of these later intrusions was very clear against the sandy subsoil. A short linear feature (F42) was recorded on the western side of the mound. This was *c.*6m in length x 2m wide x 0.80m deep and was filled with dark silty sand. The feature lay beneath a dump of modern material that had been cut into the topsoil and may possibly have been related. In the south-east quadrant of the mound, a modern pig burial was revealed (F81), the bones of which were in a very good state of preservation, highlighting it as a fairly recent deposit. A rectangular cut in the centre of the mound (F491) was initially thought to be a central burial, but on excavation was found to contain modern pottery and other materials.

H1\Areas B and C

Areas B and C, to the east of Area A, were monitored as part of a watching brief. Within the two areas a range of archaeological features were exposed including a small oval enclosure, a post alignment, and numerous landscape boundary features indicating successive periods of land allotment over time (Fig. 60). Excavation focused on a sample of features in order to determine stratigraphic relationships and provide dating evidence, although very few finds were retrieved from these areas.

H2\Area B

H3\ Small oval enclosure and associated features (Figs. 61 and 62)

One of the stratigraphically earlier features towards the north-west side of Area B consisted of a small oval enclosure measuring roughly 3.6m in length by 2.6m in width, enclosing an area of some 7m^2 (F275). The gully was narrow (*c.*0.50m wide) and had a distinct U-shaped profile, varying in depth between 0.35m and 0.50m. No evidence for an entrance was recovered although the northern side of the enclosure was obscured by later ditches. The gully had a series of sandy fills interspersed with siltier lenses and the overall impression was that the feature had become infilled naturally as a result of either wind or water-borne deposits.

Within the enclosure three features were located towards the southern end. A shallow circular pit (F315, 0.90m in diameter by 0.35m deep) lay adjacent to the inner edge of the gully. This feature was filled with a very pale silty sand with darker lenses, similar to the fills of the gully. Slightly to the west of the pit were two small post holes (F295, 0.40m diameter by 0.13m deep; F323, 0.35m diameter by 0.07m deep). Both were very shallow but may be the remains of an internal structure. Two further postholes (F297, 0.25m diameter by 0.15m deep; F305, 0.30m diameter by 0.10m deep) were also noted immediately outside the enclosure, one to the south-west, the other to the north-east. All the post holes were filled with similar pale silty sands to those in the gully and pit and remain undated. No artefacts were recovered.

H3\Linear features

Area B was dominated by a palimpsest of linear features on various alignments. Many were sample excavated although very little associated dating evidence was retrieved.

One of the earliest linear features in Area B appeared to be F274, a single ditch running on a north-west to south-east alignment on the eastern side of the area. Ditch F274 was 0.70m wide by 0.26m deep, with a V-shaped profile. It was observed, running fairly straight, over a *c.*25m stretch, although it had been truncated at both its northern and southern extents. The ditch was filled with dark greyish brown silty sand from which several burnt stones and a number of undiagnostic struck flints were recovered.

The ditch was spatially associated with a number of other features that may have been contemporary. At its northern end an arrangement of short gullies (F322 and another not recorded in detail) appeared to respect the alignment of F274. One short length of gully ran alongside the ditch and the other, F322, lay at right angles. F322 was approximately 3m long x 0.49m wide and 0.2m deep and was filled with dark greyish brown silty sand, similar to the nearby ditch. An undiagnostic struck flint was found in the feature fill.

A scatter of small pits and postholes also lay on the western side of Ditch F274, one of which was investigated. Pit F313 was sub-circular with steeply sloping sides and a rounded base, measuring 1.07m x 0.75m x 0.29m deep. It was filled with dark greyish brown silty clay but was again undated. An associated curving gully (F309) lay adjacent and to the east of the pits. This was fairly irregularly shaped but had a regular profile with steep sloping edges and a flat base. The feature was filled with a mixture of sandy silts and darker, more organic lenses. Slightly to the north of this another short gully, F264, had a steep-sided V-shaped profile and contained a charcoal-rich organic deposit over a more substantial fill of greyish brown silty sand. It had an uncertain relationship with F274 and was similarly undated.

Running across the south-eastern part of Area B was a single ditch on a north-north-east to south-south-west alignment (F197=252). It measured 1.10m wide by 0.95m deep and had a steep sided profile with a rounded base, and was filled with alternating layers of dark organic silty sand and layers of almost pure sand, suggesting it had become infilled as a result of episodes of flooding. This ditch is one of a pair of prominent landscape features visible on aerial photographs, originally interpreted as pit alignments (see Fig. 6 above; SMR Ref. 61 SW AV), which cross at right angles a short distance to the south of the excavation. The continuation of this ditch was observed in Trench 5, 35m to the north.

Numerous intercutting curvilinear ditches weres revealed cutting a swathe across the middle of Area B. They were generally aligned north-west to south-east although there was a distinctive westward curve at the northern end of the group. In general the features in with this group were fairly shallow, between 0.08m and 0.26m deep, and ranged in width between 0.20m and 1.25m. Despite the variations in width the ditches were similar in profile, having steeply sloping edges and rounded bases. It was evident that several phases of boundary activity were represented, although phasing of the ditches was made difficult by the homogenous nature of their fills – typically a greyish brown friable sand with iron pan mottling. Although a few struck flints were recovered from these features, there was little evidence to date them positively. When compared to the pattern of the medieval ridge and furrow here (Hartley 1989), the ditches coincide with a possible headland and it is likely that these ditches are also medieval in date.

A number of pits, post holes, and possible gullies were identified scattered across Area B. A limited sample was excavated, but no finds were recovered.

H2\Area C

H3\Area of marshy ground

The north-east quarter of the watching brief area (Area C) was covered by a rich organic deposit, *c.*0.35m deep, in association with silty clay layers and a covering band of iron-rich alluvium. This was first observed in Trench 1, and was sampled for environmental evidence (Core C; Greig below), but was subsequently only seen intermittently during the machine stripping. The layers indicated the former presence of an area of marshy ground in this part of the site, although exactly when this was remains uncertain. Flint artefacts recovered from the deposit suggest it may have formed in prehistoric times although they are undiagnostic.

H3\Post alignment

A row of 13 post holes indicated a former wooden boundary running into the southern edge of the marshy area. The alignment was exposed over a length of approximately 30m and ran from north-west to south-east. Each of the pits was *c.*0.40m in diameter and spaced roughly 1.4m apart. The depths of the post holes varied from 0.5–0.1m and they became progressively shallower towards the southern end of the alignment, indicating that this part of the site may once have been sloping and had since been landscaped, removing evidence for further posts in the alignment. Most of the pits were filled with a dark grey/black peaty clay and contained little in the way of datable material. Only pit F207 contained two undiagnostic worked flints and some animal bone fragments. The pits were thought to either pre-date or be contemporary with the marshy

ground (above), but the relationship could not be clearly defined due to the similarity between the pit fills and the peaty layers associated with the marshy ground.

H3\East–west ditches

Further episodes of landscape allotment were indicated by two intersecting linear ditches that were observed in Area C, but were not excavated. Ditch F181/186 was on an east–west alignment and was observed over some 46m. Ditch F184/185 lay on an east-north-east/west-south-west alignment and was observed in Areas B and C over a distance of approximately 67m. No datable material was recovered from the surfaces of the ditches but the western continuation of F184 was truncated by one of the multiple north–south ditches in the centre of Area B. Both these ditches were on a markedly different alignment to other boundary features observed in the watching brief area. They both crossed the course of the post hole alignment although the relationship was unclear. It is conceivable that Ditch F181/186 may have removed evidence of a post hole from the alignment where a slightly wider than average gap occurs between the posts.

H3\Features east of the post alignment

A small group of features was located to the east of the post hole alignment including a curving gully (F192), an elongated pit (F193), a small post hole (F194), and a circular pit (F220). Of these features only pit F220 was excavated. This feature was shallow and filled with compact greyish sand. No finds were recovered.

H3\Features at the northern end of Ditch F197

A similar cluster of features was revealed towards the northern end of the linear boundary F197 in the northern part of Area C. Here a narrow gully (F339) lay beneath the peat layer associated with the marshy ground and ran parallel with F197. The gully was V-shaped and filled with waterlogged organic-rich clay. Adjacent to the gully on its eastern side was a sub-circular pit (F337) that was also filled with an organic-rich clay. No finds were associated with either feature. A little to the north, a curving gully was revealed, along with with several post holes. All contained organic-rich fills; however, they were not excavated and provided no dating evidence.

H1\Area D: Palaeochannels

During the stripping of alluvial clays during gravel extraction in 1999, two large palaeochannels were observed in Area D some 700m to the north-north-west of Barrow 3. Both were seen primarily in section and partly in plan and appeared to be on a roughly north–south alignment. They are likely to be former channels of the River Soar. The more westerly of the channels was observed in the western section of the quarried area. A sample of the section was drawn and eight layers of river silts identified. Following consultation with archaeobotanist James Greig, the paucity of visible organic material within the silts suggested it would not be useful to sample for environmental remains.

The more easterly palaeochannel was seen both in plan (over a distance of some 20m) and in section. Eight layers of river silts were identified in section, all containing a quantity of surviving organic material. Within the lowest layer (Context 163), large animal bones were also seen (aurochs, red deer, and pig) and a sample collected. There were indications of butchery on one of the red deer antlers. Bulk samples for environmental analysis and a pollen column (Core D) were taken (Fig. 63; Greig below).

H1\ Area E – *John Thomas*

Approximately 60m to the north of Barrow 3, salvage recording of a small ‘island’ of archaeology in 2001 revealed further Iron Age and Anglo-Saxon settlement features. The information from this area is limited, but nonetheless helps to provide a wider context for the contemporary activity recorded in more detail in Area A to the south.

H2\Iron Age features

Iron Age occupation was indicated by several large ditches, probably relating to enclosures. The most complete lay on the northern side of the area where a right-angled ditch containing Iron Age pottery indicated the presence of a small enclosure (F49) (Fig. 66). The exposed part of the enclosure measured approximately 15m in width and may have been part of a larger, rectilinear compound. The ditch (F49) was up to 2.70m wide and 0.60m deep and had a variable profile suggestive of a series of recuts. The homogenous nature of its pale silty sand fill, however, made recognition of any phasing difficult.

Several other ditches were located on the western side of the area. Two converging ditches (F77 and F89) formed the northernmost pair. The earliest of these was Ditch F89, which had a steep sided, rounded profile towards its base, but wider, weathered upper edges up to 2.30m wide. Several thin silting fills were observed at the base of the feature, but generally the ditch was filled with greyish brown sand. Cutting this was another ditch (F77), which had a much sharper V-shaped profile, perhaps suggesting it had been filled rapidly before the effects of weathering could alter its shape. This ditch contained only one fill consisting of mottled, pale brown sand, from which Iron Age pottery was recovered.

A few metres to the south another ditch protruded into the excavation area from the west, curving sharply northwards towards the butt-end of Ditch F77. This ditch had two phases, the earlier of which was F61. F61 had a rounded profile with steep sloping edges and had at least two fills. The primary fill (63) comprised grey silty sands and contained Iron Age pottery and fragmentary animal bone. This was covered by a second fill of lighter grey silty sand (71), which appeared to almost fill the ditch. The ditch was then recut, creating a shallower feature with a wider, but generally rounded profile (F59). The single fill of this ditch (62) comprised light to mid grey silty sand with iron pan staining. Iron Age pottery was present in this fill.

A partly truncated pit (F96) also yielded Iron Age pottery; unfortunately the location of this feature within the site is unknown.

H2\Anglo-Saxon features

Evidence for Anglo-Saxon activity was largely restricted to the eastern side of Area E and comprised a sunken-featured building (SFB) and associated pits, post holes and linear features.

The SFB (F79) was located in the south-eastern corner of the area. It was sub-rectangular in plan, although related features contrived to create an irregular appearance to the north-west corner (Fig. 67). The SFB was fairly shallow, approximately 0.10m deep, with gently sloping sides and a fairly flat base. It measured *c.*4m x 2.7m wide and lay on a north–south orientation. Slightly north of the SFB's centre a shallow, sub-rectangular depression (F80) be the remains of a contemporary pit. Outside the north-western corner of the SFB a possible structural post hole or small pit was located (F81), which contained pottery and burnt stones. Two more post holes were located along the inner edge of the east side of the SFB. All features associated with the SFB were filled with a deposit of friable, mottled dark/light orange sand (Context 26).

The SFB lay within the corner of a right-angled linear feature which apparently respected the building, although this was not investigated. A spread of mid-greyish brown silty sand (Context 76) to the north of the linear may represent a continuation of the feature that had been disturbed in this area. Anglo-Saxon pottery was found in the deposit, which was *c.*0.36m deep. A series of pits and post holes lay in close proximity to the SFB and although no datable evidence was recorded in any of them they are, by association, thought likely to be contemporary.

Approximately 15m west of the SFB, a virtually complete Anglo-Saxon pottery vessel (Fig. 77.2) was recovered in association with part of a doughnut-shaped loomweight during topsoil stripping. The vessel was of a similar form to the example found in the bottom of Pit F35, on the edge of Barrow 3 to the south. Some of the sherds from this deposit also bore evidence for vitrification on their edges, as was seen on the pot from Pit F35, suggesting a similar usage. No evidence was revealed for any associated feature from which the finds must have been disturbed during machining.

A joining sherd from the pottery vessel was, however, recovered from a pit on the northern edge of the area, some 30m away. This pit (F36) was oval in shape and formed part of another cluster of pits and post holes in this part of the site. Rims and shoulder sherds of another two vessels were also recovered from this feature.

H2\Undated features

Various other clusters of pits and post holes were located in the area, several of which yielded small quantities of Anglo-Saxon pottery. Of the rest many remained unexcavated and could quite feasibly belong to either phase of occupation. Of note was a small, steep sided circular pit (F65) to the west of the SFB, which was found to contain charcoal, a burnt stone, and small quantity of burnt bone within its fill. Given the general context of the Cossington site, the feature was recorded as a possible cremation, although the bone was not identifiable. It is perhaps more likely, given the small amount of bone and the presence of a burnt stone, that this was the dumped remains of a hearth; again it could relate to either phase of activity.

H1\The Finds

H2\The worked flint *– Lynden Cooper*

Some 1,235 pieces of flint were retrieved from the excavations in Areas A–E including thirty-four natural pieces that were discarded. The remaining 1,201 pieces were subject to full typo-technological analysis. The debitage was also subject to metrical analysis.

The majority of the flints came from the Barrow 3 site (Area A), with smaller numbers from Areas B and C. A single implement was recovered from Area E. Unfortunately only a very small proportion of the lithics could be assigned to precise contexts during the excavation. Much of the material has been assigned to 'surface', 'transect', or 'quadrant' such that it is not always known if the context was secure. A full breakdown of the material is presented below.

Table 6: Worked flint from from Areas A–C.

H3\Raw material

The assemblage was exclusively of flint, mostly derived till flint typical of the region (Henson 1985). This is generally semi-translucent and of a grey-brown colour, although it can grade into grey through a nodule and sometimes appears opaque. Many of the blades and bladelets were of a high quality semi-translucent flint of yellowish brown colour. It is uncertain if this is choice raw material from the till or represents a different resource. The acidic soil conditions generally precluded patination.

H3\Debitage

Virtually all of the blades and bladelets were the product of true blade technology. Core front preparation in the form of abrasion and/or trimming was prevalent. Platform preparation in the form of partial edge faceting was sometimes employed for both blades and bladelets, but the majority were plain (Table 7). A single blade displays a distinctive dendritic or basketwork patina, a surface alteration often seen on pieces from Mid Devensian contexts (R.M. Jacobi pers. comm.). The remainder were not patinated and were often made from a high quality raw material.

There was a concentration of blades and bladelets across Areas B and C. The high proportion of complete pieces might suggest that this material was in situ below alluvial cover. There were no blade cores but some six bladelet cores, three opposed platform, one keeled platform, a double platform, and a single platform type. Evidence for knapping, along with the cores, comes from a single crested blade and a crested bladelet. It is suggested that much of the material is Mesolithic but the presence of a few examples with platform preparation edge faceting might indicate a Late Upper Palaeolithic component.

Table 7: Platform preparation: butt descriptions for complete and proximal fragments.

The majority of flakes were evidently the product of hard hammer percussion. The majority had plain or cortical butts and very rarely showed any signs of platform or core front preparation. These are features that start to appear towards the end of the Neolithic in domestic contexts and were the norm by the Mid Bronze Age. Poor reduction skills are evident from several examples of mis-hits, large butts and squat shape. The flake cores were generally small (mean weight 19g) and often had only a few removals. As with the flakes there were many examples where mis-hits were evident from incipient cones of percussion. No cores had evidence for core front or platform preparation. In terms of cortex, only 30% of the flakes were tertiary, 64%

were secondary and 6% were primary. The high incidence of flakes with cortex is a feature often seen in later Bronze Age assemblages (Butler 2005).

The metrical analysis of the flake population shows a clear trend for flakes with a squat shape (i.e. length:breadth < 1.0), another feature suggesting a later prehistoric date for much of the debitage (Fig. 68).

The high incidence of shatter fragments illustrates the poor quality of some of the raw material and, to some extent, the lack of knapping skills, again pointing to a rather late date. A low proportion of chips almost certainly reflects recovery bias.

Figure 68: Length:breadth ratios of flakes in increments of 0.1.

H3\Tools and utilised pieces

The tools have been classified by the author following standard British conventions (Butler 2005; Humble 2006). A breakdown is presented graphically in Figure 69.

Figure 69: The worked flint: breakdown of tools by type.

H4\Microliths
Three microliths were recovered, each of which was a long, slender oblique point, one with additional slight retouch at the tip (Fig. 70, 3). These are typical of Deepcar assemblages which are dated from *c.*9,300 BP or *c.*8550 cal BC (Reynier 1998).

H4\Arrowhead
There was a single arrowhead of triangular form. As the ventral side shows only partial retouch this may have been a blank for a Conygar Hill Type barbed and tanged arrowhead (Fig. 70, 8).

H4\Scrapers
Scrapers were the commonest tool with ten of end type, one side type, 11 concave type, ten with straight-edged retouch, and one thumbnail scraper of non-fancy form. Nearly all the scrapers retained cortex, often showing evidence for blanks having been primary flakes. This is a feature commonly seen in later Bronze Age collections. The side scraper was very rolled and likely to be Lower Palaeolithic and derived from the terrace gravels.

H4\Piercers
Each of the six piercers has an *ad hoc* appearance with minimal retouch on suitable protuberances.

H4\Knives
Of the four knives two were rather crude and had minimal retouch. The other two examples displayed greater craftsmanship (Fig. 70, 7 and 9). A further knife (Fig. 71, 15) was recovered from Area E.

H4\Serrated pieces
Two flakes and two blades were serrated (Fig. 70, 11). Serrated pieces have a long currency spanning the Early Mesolithic to Early Bronze Age periods.

H4\Utilised pieces
Four blades, two flakes, and a single bladelet display edge modification that can be described as utilised (Smith 1965). It is possible that some of these were originally serrated pieces that have become worn. Microscopic study of some 'utilised' pieces at Willington, Derbyshire, demonstrated that they were originally serrated (Donahue forthcoming).

H4\Other modified blades
There were two truncated blades (Fig. 70, 4), two retouched blades that might have been knives, and one blade with a rubbed end. The latter type has been recorded at Upper Palaeolithic sites including Hengistbury Head (Mace 1959) and Launde (Cooper 2006)

H4\Denticulates
Six pieces were recorded as denticulates. However, as there were many cores-on-flakes in the assemblage, it is plausible that some of the denticulates were actually cores. Denticulates have a wide currency but Humble (2006) suggest that they are common from the Middle Bronze Age onwards.

H4\Miscellaneous retouched pieces
Fourteen flakes and one natural chunk had minimal retouch and could not be classified to type. It is plausible that many of the pieces were actually used as scrapers (Butler 2005, 182) but this would require microwear analysis to confirm.

H3\Discussion

The flint material from the excavations represents a palimpsest, with material spanning the Lower Palaeolithic to the Bronze Age. The earliest piece is a side scraper of Lower Palaeolithic date, while the blade with dendritic patina is almost certainly Mid-Devensian. A backed blade (Fig. 70.1) is a likely Upper Palaeolithic piece, based on its very wind polished condition and heavily patinated appearance. A small group of blades and bladelets were recovered from various features in Area B. While these might conventionally be regarded as Mesolithic there is some suggestion from the presence of faceted butts that a few may be Late Upper Palaeolithic in date.

Three microliths are Early Mesolithic in date and of Deepcar type (Reynier 1998). Much of the blade and bladelet debitage and tools would also fit into this period. While Deepcar assemblages are common in the south, east, and north of England they do not occur in the central belt of Wales and the Midlands (*ibid.,* fig. 23.3). The Cossington finds, although few, represent a significant addition to the Mesolithic resource of the Midlands and would support Reynier's suggestion that their distribution mirrors the geographical distribution of recent researchers (Reynier 1998).

The aforementioned pieces comprise only 8.2 % of the assemblage. The remainder has typo-technological indications for being Bronze Age, and for the majority being Mid–Late Bronze Age. Apart from the possible laurel leaf point there were no Neolithic types. There are a few examples of Early–Middle Bronze Age prestige items where good craftsmanship is employed. Examples include the knives (Fig. 70.7 and 9) and a fine triangular arrowhead (Fig. 70.8). These could all have been grave goods. A knife (Fig. 71.15) from the 2001 watching brief is also noteworthy, and can be compared to those recovered from Barrow 1 (Fig. 71.16–17).

The remaining tool assemblage is dominated by scrapers, many of which show a crude form. The high proportions of concave and straight edges are typical Mid–Late Bronze Age forms, as are denticulates and piercers (Humble 2006). The flake technology employed was rather poor and is typical of the decline of flint usage in the Bronze Age (Ford *et al*. 1984). Apart from four pieces that were found within the roundhouse gully, the majority of the assemblage was not closely associated with Iron Age features and the author concurs with the views of Saville (1981) that flint usage stopped during the Late Bronze Age. Given the density of the lithic scatter in and around the area of Barrow 3 it seems likely that some residuality in later features will have occurred.

Pre-Barrow features beneath the mound yielded only a few pieces. The majority of flints were recovered during the hand excavation of the barrow mound (Fig. 72). However the taphonomy of the flintwork from the barrow is uncertain. It is plausible that much of the material was residual, being incorporated at the time of barrow construction, a feature seen elsewhere (Saville 1980; 1985, 131; Young and Bevan 2000). It is also plausible that much of the material was deposited on the mound, but incorporated by bioturbation. The balance of the later prehistoric flints might be interpreted as a domestic assemblage, but there were no settlement features at the site. If the flint post-dated the barrow it would seem that it was a focus for knapping activities, tool production and use. The discard of tools immediately following use, i.e. an expedient technology, appears to be a later Bronze Age phenomenon (Butler 2005).

The assemblage composition is similar to that recorded at Barrows 1 and 2, although the assemblages from the latter are smaller. While the non-funerary lithics might relate to activities associated with the phase of cremation burials at Barrow 1 there was no evidence for Bronze Age cremations at Barrow 3. It is uncertain why Barrow 3 should be a focal point for later activity. It is possible that the activities represented by the flintwork were reverential in some way, almost ritualised knapping and tool production. More prosaically it may be that the monument served as a convenient sheltering and meeting point.

Fig. 70. Selected lithics.
1. Backed blade (SF1361); 2. Microlith, obliquely truncated point (SF856); 3. Microlith, obliquely truncated point (SF3); 4. Truncated blade (SF655); 5. Retouched blade (SF229); 6. Laurel leaf? (SF1363); 7. Knife (SF187); 8. Arrowhead (SF362); 9. Knife (SF1357); 10. Scraper (SF450); 11. Serrated blade (SF648).

Fig. 71: Selected lithics.
12. Concave scraper (SF64); 13. Denticulate (SF97); 14. Discoidal scraper (SF321); 15. Scale-flaked knife (Area E, SF5); 16. Scale-flaked knife (Barrow 2, inhumation F15); 17. Scale-flaked knife (Barrow 2, inhumation F15); 18. Plano-convex knife (Barrow 2, inhumation F15).

H2\The Bronze Age composite bead necklace *– Alison Sheridan*

A composite necklace, comprising thirteen beads of amber, faience, Whitby jet, and Kimmeridge shale, was found among material from the oval pit grave F58 on the edge of Barrow 3 (Figs. 73 and 74). Five of the beads were found *in situ*, lying in a line towards the south-western end of the grave, while the others were found in spoil from the grave. From this it seems likely that the necklace had been around the neck of an unburnt body, whose head had been at the south-western end of the grave. To judge from the surviving shape and size (*c.*1.60 x *c.0.*75m) of the grave pit, and from the position of the beads, it seems probable that the corpse had been buried on the left side, in a crouched position.

The five beads found in articulation were as follows, from east to west: two small amber disc beads (SF216 and 215); fusiform bead of Whitby jet (SF213); sub-globular faience bead (SF212); and fusiform bead of Kimmeridge shale (SF214). It is likely that the faience bead formed the centrepiece of the necklace, and that beyond the fusiform beads there had been five amber beads on either side. When laid end to end, the beads currently form a strand 76.35mm long. It is not known whether there had originally been further, organic beads in the necklace; no trace of any was found.

The beads will be described in order of material; all dimensions are in millimetres. Abbreviations, where used: L = length; W = width; D = diameter; PerfD = diameter of perforation; Th = thickness; max = maximum.

H3\Faience

SF212 (Fig. 73, Plates 6 and 7). Small, distorted-spherical bead, L 5.9, W 5.2; Th 7.3, with a circular, smooth-sided horizontal perforation PerfD 2.4. Intact but for a tiny chip from the edge of the perforation.

The bead resembles a lemon with one side distended; this is because, during manufacture, the faience paste had been over-moist, so that when the bead was suspended (on a narrow stick or piece of straw) to dry prior to firing, its lower side sagged. The intended shape would have been roughly spherical, with the perforation passing through its centre. The edges of the perforation project in a collar-like fashion, from where the stick or straw had been pushed through the ball of paste during the bead's manufacture. (The stick/straw will have burned away during firing).

The surface colour consists of various shades of turquoise – pale and greenish on one side, with a darker, greyish patch on the other – with areas where the buff-coloured core material shows through the thin glaze. The inside of the hole is a pale, slightly grey turquoise. The turquoise colour relates to the glaze, which contained a copper-based colourant; the method of glazing cannot be proven, but it may have involved coating the bead with a slurry of glaze. The lighter-coloured side is smooth and has a low sheen from where the constituent sand grains have fused to form a kind of glass. The darker side is marginally less smooth, and matte. A few tiny unfused sand grains are visible.

Compositional analysis (undertaken by K. Eremin using X-ray fluorescence spectroscopy (XRF) and scanning electron microscopy (SEM); see Appendix 3) revealed that the bead is consistent with most other faience beads from Britain and Ireland, in having an appreciable amount of tin, and with a mixed alkali having been used as the fluxing agent (Sheridan *et al.* 2005). Use of the SEM also enabled the surface texture to be examined at high magnification (> x100; Plate 7). There are no obvious signs of wear on the bead, although with faience use-wear can be difficult to detect.

H3\Whitby jet

SF213 (Fig. 73). Fusiform (barrel-shaped) bead, slightly asymmetrical about its long axis, L 16.75, max D 9, with a longitudinal, slightly eccentric perforation, PerfD 2.2.

Survives as three large and two small pieces making up virtually the whole of the bead, broken mostly along natural planes of weakness. Black, compact material, identified macroscopically and through XRF compositional analysis as jet, almost certainly from Whitby. One characteristic feature of Whitby jet (particularly of 'soft' jet) is the way it cracks, in an oval and/or criss-cross pattern; both are visible on the surface of this bead.

The exterior is smooth has been polished to a high sheen, although traces of the manufacturing process are visible in an incompletely smoothed facet, and in faint striations from the process of smoothing through abrasion. The perforation had been drilled from both ends, with the junction (around 2/3 along) clearly visible in the fragments. Also evident are traces of rilling within the borehole, indicating the probable use of a bow drill to effect the perforation. The ends taper gently, and are minimally angled (to allow the bead to sit neatly if strung beside another fusiform bead – see below); there are no obvious signs of use-wear, either from bead-on-bead abrasion or from string wear.

H3\Kimmeridge shale

SF214 (Fig. 73). Incomplete fusiform bead, lacking part of one side, with prominent ridge-like midpoint (from which the body tapers in a partly straight, partly dished way) and slightly eccentric longitudinal perforation.

In two main pieces, broken along a natural plane of weakness, plus several smaller fragments (some of which have been mounted in resin for analysis; see Appendix 3). Surviving L 15.5; estimated original L (if symmetrical) *c.*16.6; max D 8.6; PerfD *c.*2.4. Blackish-brown compact, friable material, with a matte, cracked surface; identified analytically, by J.M. Jones, as Kimmeridge shale (see Appendix 3). Some orange sediment from the grave still adheres. The perforation had been drilled from both ends, with the join occurring close to the surviving end. There is no obvious sign of use-wear on the surviving end, which is largely perpendicular to the rest of the body, but it is possible that the loss of part of one side of the bead occurred in antiquity.

H3\Amber

All the amber beads would originally have been a rich, dark red colour (wth SF220 perhaps a little darker than the others), translucent, and polished to a high sheen; some impression of the original appearance can be seen in fresh fracture surfaces (e.g. beads SF219 and SF220). Oxidation of the surface, a natural degradation process, has opacified the beads and given them a dull, slightly crazed, brownish surface appearance.

The amber beads have all been perforated more or less centrally, through their narrow axis, with the sides of the perforation being parallel (except for SF218) and the edges crisp. The diameter of the perforation varies, but it is generally narrow. There are no obvious signs of either thread wear or bead-on-bead wear, although minor ancient chipping on some beads may indicate damage through use.

The narrowest perforation diameter – 1.5mm, seen in amber bead SF219 – indicates the narrowness of the thread used for this necklace. No trace of the thread was found, but it would have been made of organic material, such as plant fibres or animal sinew. The beads are listed in order of size, starting with the largest (see Fig. 73).

SF221. Relatively large, thick disc bead with straight to gently convex edge and minimally convex sides; the perforation is very slightly eccentric. D 10.9; Th 7.3; PerfD 2.1. Complete.

SF222. Thick disc bead, only marginally smaller than SF221 but considerably thinner, with very slightly convex edge and flat sides; the perforation is central. D 9.8; Th 3.9; PerfD 1.7. Complete. There are a couple of tiny ancient flake scars close to the edge.

SF220. Thick disc bead, intermediate in thickness between SF221 and SF222 and slightly smaller than both, with convex edge. One side is flattish, the other minimally domed, and the perforation is central. D 9.2; Th 4.9; PerfD 2.1. Incomplete (with around a third missing); survives as two pieces.

SF215. Thinner (but still chunky) disc bead, with straight edge, one flat side, and one unevenly domed side; the perforation is minimally eccentric. D 7.4; Th 3.6; PerfD 3.6. Complete. There is a slight unevenness in the surface of the perforation which may indicate that it had been drilled from both sides.

SF216. Thinner disc bead with minimally convex edge, flat sides and central perforation. D 6.85; Th 2.8; PerfD 2.1. One side slopes very slightly to give the bead the hint of a wedge shape. Complete, but with an old flake scar running across its edge, and a recent flake scar.

SF224. Small chunky disc bead with minimally convex edge, flat sides and central perforation. D 5.7; Th 2.7; PerfD 2.2. Complete, but in three pieces, and with an ancient chip scar to the edge.

SF218. Slightly thicker disc bead, cylindrical, with central perforation. D 5.6; Th 3.2; PerfD 1.9. The sides of the perforation are not perfectly parallel; there are hints of a very slight hourglass shape, indicating drilling from both sides, meeting roughly at mid-thickness. Complete; minor spalling to edge in antiquity.

SF217. As 218, but slightly thicker again, and with a slightly eccentric perforation. D 5.5; Th 3.5; PerfD 1.8. The sides and edge are flat, with the junction between them crisply defined. Complete, but with one small recent surface spall scar.

SF219. Small chunky disc bead with convex edge and roughly central perforation. D 5.3; Th 3.8; PerfD 1.5. The sides are flattish, and the junction with the edge is not crisply defined. Complete, but with one small recent surface spall scar.

SF223. Tiny chunky disc bead, cylindrical, with central perforation; in four conjoining fragments, plus crumbs. Estimated D *c.*3.8; Th 2.5; PerfD *c.*2. Complete (albeit in fragments) but for slight surface loss, and too degraded to determine whether any thread wear is evident.

H3\Discussion

This necklace is immediately recognisable as a composite necklace of Early Bronze Age date – a high status artefact – and is of particular interest because the original stringing order of some of the beads has been preserved. The use of a variety of materials and bead shapes for necklaces is attested in Britain from at least as early as the Middle to Late Neolithic period (as at Greenbrae, Aberdeenshire: Kenworthy 1976–7), and the Beaker-associated shale and tubular sheet metal bead necklaces from male graves at Devil's Dyke, Sussex (Kinnes 1985), and from Chilbolton, Hampshire (Russel 1990), show that composite necklaces were in use during the third quarter of the third millennium cal BC. However, the specific tradition of composite necklace use to which the Cossington necklace belongs – featuring the use of more than two materials, and often including 'recycled' components from other necklaces – dates to the first half of the second millennium cal BC.

The distribution of these second millennium cal BC necklaces is heavily biased towards Wessex, where over twenty examples are known to have existed (some of which are illustrated in Annable and Simpson 1964; others are discussed and/or illustrated in publications such as ApSimon 1954, 53; Beck and Shennan 1991; Beck and Stone 1936; Gerloff 1975, 258–60 and Piggott 1938). Examples from outside Wessex are relatively rare but fairly widespread, being found in various parts of England, in north Wales, across the Irish Sea at Tara in County Meath, not far from the eastern coast of Ireland, and across the North Sea at Exloo in the Netherlands (see Table 8 for a list, with references). As argued elsewhere (Haveman and Sheridan 2006; Sheridan and Shortland 2004), this distribution can be explained in terms of the emulation of a Wessex-based fashion – which, in many cases, probably involved the actual importation of components for these necklaces, from Wessex – by leading members of communities who were linked with Wessex through the tin 'trade' and through the socio-ritual attraction of Stonehenge and its environs.

Table 8: Examples of second millennium composite necklaces outside Wessex.
(This list does not purport to be exhaustive.)

These necklaces have mostly been found in association with cremated human remains (inurned or otherwise), although a few have been associated – as seems to have been the case at Cossington – with unburnt bodies. In Wessex one such example, probably of early second millennium cal BC date, is known from a grave conventionally ascribed to the 'Wessex 1' series at the 'Manton' barrow, Preshute, Wiltshire; here the body lay extended on its back (Annable and Simpson 1964, nos. 195–6, 200, 203–4; Cunnington 1908). Another example, from Tara, Co. Meath, was associated with the loosely flexed body of a young man (aged 14–15 yrs), and this seems to have been the final and most high-status interment in an elite cemetery consisting otherwise of graves for cremated remains, set into a pre-existing Neolithic passage tomb (Ó Ríordáin 1955; O'Sullivan 2005).

As for the gender associations of second-millennium composite necklaces, the Tara male – and an older man from Bedd Branwen in Wales (Lynch 1971, 24) – stand out as being the exception to the rule: elsewhere, where the sex of the human remains has been reliably established, it has consistently been female (e.g. at Shrewton barrows 5L and 5J: Green and Rollo-Smith 1984). Furthermore, the use of faience is a predominantly female phenomenon (Sheridan and Shortland 2004). There is thus a reasonable chance that the individual buried at Cossington was a woman.

Individual components of the Cossington necklace are readily parallelled elsewhere. The necklace from Tara offers closely comparable examples of both the larger and the smaller kinds of amber bead (Ó Ríordáin 1955), as do the composite necklaces from Shrewton, Wiltshire (barrow G5J: Green and Rollo-Smith 1984) and Easton Down, Hampshire (grave 3058: Beck and Shennan 1991, 155, fig. 11.4.5). Other parallels for the smaller amber beads, of chunky disc shape, include another necklace from a grave at Easton Down (MARC3 site R7; *ibid.*, 156, fig. 11.4.4); an amber necklace from a Wessex-style grave at Little Cressingham, Norfolk (*ibid.*, 162–3, fig. 11.8); and a recently excavated necklace from Solstice Park, Amesbury, Wiltshire (Sheridan forthcoming). As noted in the Solstice Park report (which includes a list of further parallels), these chunky disc beads of amber are mostly found in Wessex.

The consistency in manufacture of the Cossington amber beads suggests that they may have been made together, as a set, with the non-amber beads being added to them to make the necklace composite. The amber beads do not show obvious signs of use-wear, nor had they been recycled from an amber spacer plate necklace: they are of different shapes from spacer plate necklace beads (see Beck and Shennan 1991 for examples of the latter; and Woodward 2002 and Sheridan *et al.* 2003 for examples of such beads that had been 'recycled' for use as heirlooms). The likely area of origin of the amber beads is discussed below.

The fusiform beads of jet and Kimmeridge shale are of a basic type that originated in the jet spacer plate necklaces of the last quarter of the third millennium cal BC in northern Britain (Sheridan and Davis 2002). It is known that fusiform beads (and more angular, biconical beads) of various materials continued to be made into the second millennium cal BC, and used in other kinds of necklace (Sheridan and Davis 1998; Sheridan forthcoming; cf. Beck and Shennan 1991, fig. 11.17, for amber versions). It seems likely – despite the absence of unequivocal signs of heavy wear – that the two fusiform beads in the Cossington necklace had been recycled from pre-existing necklaces. The question thus arises as to whether they had started their lives as components in a spacer plate necklace, or had been made during the second millennium. It is known that jet spacer plate necklaces – or at least components of them – continued to be used into the second millennium cal BC: at Barrow Bottom, Risby, Suffolk, for example, recycled spacer plates and fusiform beads formed part of a necklace found with the crouched body of a female; an empty inverted Collared Urn was found in the same grave (Longworth 1984, no. 1516; Martin 1976; Gerloff 2004, 84). A bone from this individual was dated to 1910–1730 cal BC (3495±30 BP; GrN-11358). Another grave from Risby, probably of similar date, produced parts of a jet spacer plate necklace (Vatcher and Vatcher 1976).

While the jet bead from Cossington exactly matches spacer plate fusiform beads in shape and size, one might have expected there to be signs of heavy wear if it had come from an ancient spacer plate necklace. Nevertheless, such an origin is indeed possible, bearing in mind that some of the Risby beads show little sign of wear (*ibid.*., pl. 30; cf. fusiform jet beads in similar condition, and also probably recycled from a spacer plate necklace, found in a composite necklace at barrow 16, Barrow Hills, Radley, Oxfordshire: Barclay 1999, fig. 5.12). As for the Kimmeridge shale fusiform bead, it is unlikely that this had come from a spacer plate necklace, since this southern English material was not used for the manufacture of such northern British necklaces (Pollard *et al.* 1981; Sheridan and Davis 2002). A second millennium cal BC date for its manufacture is therefore likely.

The faience bead is of a general type – namely spherical and oblate (squashed spherical) – that is relatively rare (Table 9), with fewer than twenty examples from only eight findspots known (including

Cossington). It is also restricted in its geographical distribution, to north- and east-central England and to greater Wessex (Sheridan and Shortland 2004, fig. 21.7.4). The nearest find to Cossington is an oblate bead from a barrow at Stainsby, Lincolnshire. The dating evidence relating to these *comparanda* is presented in Table 9 and discussed below.

Table 9: The faience bead from Cossington and its comparanda.

Most, if not all, of the components of the Cossington necklace are non-local in origin. In exploring their likely source areas, a distinction needs to be made between the ultimate origin of the raw materials and the proximate source area from where the beads had been obtained. Regarding the amber components, as argued elsewhere (Haveman and Sheridan 2006; Sheridan *et al.* 2003; Sheridan and Shortland 2004), Denmark was the probable ultimate source of the amber, notwithstanding the availability of sea-borne amber around the East Anglian coast; and Wessex is the most likely area whence the beads were obtained. The Wessex–Danish link is attested by finds such as a segmented faience bead of southern English appearance and composition at Fjallerslev in Denmark (Sheridan and Shortland 2004), and of ribbed biconical beads of amber in Denmark that appear to copy Wessex examples (*ibid.*, fig. 21.9). There is a significant concentration of Early Bronze Age amber artefacts in Wessex (Beck and Shennan 1991), and it seems likely that considerable amounts of amber were being imported from Denmark as raw material, and converted into artefacts by Wessex-based specialists. A Wessex origin for the Cossington amber beads would account for their similarity to examples found in Wessex (and, indeed, for their similarity to the Tara examples which are equally likely to have originated in Wessex).

As for the fusiform beads, the ultimate origin of the jet would have been Whitby on the Yorkshire coast, and that of the Kimmeridge shale is most likely to have been Kimmeridge in Dorset (see Appendix 3 for discussion). The proximate origin for both beads, however, is most probably again Wessex, where *comparanda* in both of these materials are to be found (e.g. jet – Upton Lovell barrow G2a, Wiltshire: Annable and Simpson 1964, nos. 250–2; Kimmeridge shale – Wilsford barrow G32, Wiltshire; material determined analytically by G. Bussell: Bussell *et al.* 1982; Pollard *et al.* 1981). One cannot rule out the possibility that the jet bead had filtered down to Leicestershire through the network of north–south contacts that had brought similar beads to the two aforementioned graves at Risby in Suffolk (Martin 1976; Vatcher and Vatcher 1976); but, given that we know that Whitby jet beads were being circulated around and beyond Wessex in composite necklaces (e.g. the aforementioned Barrow Hills, Radley, example), and that the idea of using composite necklaces is likely to have been adopted from Wessex, then that area seems the most likely proximate source.

Regarding the faience bead, it is unfortunately impossible to pinpoint the area of origin of its raw materials through currently available analytical techniques. However, the variability in the shape, size and manufacture of spherical and oblate faience beads (Table 9) suggests that their production, as indeed of all British and Irish faience beads, was small-scale and localised, with the know-how of faience manufacture being shared around specialists in different regions (Sheridan and Shortland 2004). In theory, all the raw materials needed for the bead's manufacture – namely sand, plant ash, a binder material, tin, and a copper-containing substance (to give the glaze its turquoise colour) – could have been available to a locally-based metalworker, thanks to the movement of metals around Britain at the time. While one cannot rule out the possibility that the relatively large Cossington bead had been imported from Wessex, it is equally likely that it could have been made locally, and added to the rest of the necklace as a precious centrepiece. Elsewhere, the addition of locally-obtained components to an otherwise imported composite necklace is attested in the Exloo necklace in the Netherlands, where some of the amber components are likely to have been made locally and added to a necklace whose other components had almost certainly been imported from Wessex (Haveman and Sheridan 2006).

The materials used for the Cossington necklace – amber, jet, Kimmeridge shale, and faience – are all typical of the kind and range used for second millennium cal BC composite necklaces. Other materials found in such necklaces include wood, bone, animal teeth, sea shells, fired clay, bronze, tin, various kinds of stone, and natural geological freaks such as fossil encrinites (which resemble segmented faience beads). In one necklace, from Stockbridge, Hampshire, a stalactite or stalagmite from a nearby cave is believed to have been the source of the calcite used for its annular beads (Stone and Hill 1940). Furthermore, many such necklaces include components that are clearly 'recycled' from old necklaces.

As argued elsewhere (Sheridan and Shortland 2003; 2004), it seems likely that such materials and components were deliberately selected because they were ascribed magical powers (or looked like other materials that were ascribed such powers). Jet and amber, for example, have been used as amulets around the world and across the millennia, not least because of their electrostatic powers; and Kimmeridge shale, which resembles jet, may have been ascribed similar 'magical' powers by proxy. With faience, its manufacture involves a seemingly magical transformation of unprepossessing-looking raw materials into a jewel-like, turquoise-coloured finished object; furthermore, the high tin levels noted in most British and Irish faience beads suggests the deliberate addition of another 'magical' substance, produced in a similarly mysterious way. (Incidentally, the fact that the Cossington faience bead had become deformed during its manufacture does not seem to have detracted from its putative amuletic power, or to have ruled it out for inclusion in the necklace.) The use of natural geological freaks in some necklaces may well be another example of the deliberate selection of material for its otherworldly connotation; and the cave from which the calcite came for the Stockbridge beads may well have been regarded as a liminal location between this world and the Otherworld. Finally, the use of 'heirloom' components (cf. Woodward 2002) may well have involved the harnessing of the ancestral powers of the former wearers. Thus, these necklaces were not simply worn as an adornment and as a sign of high status, but also as a form of 'supernatural power dressing' – to protect the wearer, especially during her or his hazardous journey into the Otherworld.

Finally, as far as the likely date of the Cossington necklace is concerned, several sources of radiocarbon dating information are available: firstly, the dates relating to the infilling of the nearby ring ditch; secondly, dates relating to composite necklaces; and thirdly, dates relating to spherical and oblate faience beads. As discussed elsewhere in this publication (Marshall *et al.*), the dates from material in the ring ditch fill indicate that its infilling was almost complete by the early second millennium cal BC. While these contexts are not directly related stratigraphically with the necklace grave, it is clear that the grave had been a secondary insertion into the barrow, so that broad contemporaneity with part of the ditch infilling process is possible.

More informative data are provided by the radiocarbon dates relating to composite necklaces in Britain and Ireland (Table 10); these include two (for Tara and Amesbury Solstice Park) that include closely comparable beads to those seen in the Cossington necklace. Indeed, the Amesbury necklace includes *comparanda* for all the bead shapes and materials seen in the Cossington necklace. The overall dating evidence suggests that second-millennium composite necklaces were probably being used as early as the 20th or 19th century cal BC, and that they continued to be used until the 15th century cal BC, with the Tara and Solstice Park examples belonging to the second quarter of the second millennium cal BC. Meanwhile, the dating evidence relating to the use of spherical and oblate faience beads also points towards the second quarter of the second millennium cal BC, and therefore suggests that the later of the dates relating to the ring ditch infill at Cossington may be closest to the date of the burial. In other words, the most likely date of the Cossington necklace is *c.*1750–1450 cal BC. While this is consistent with a broadly held view that the use of faience is an indicator of 'Wessex 2' series graves (e.g. Gerloff 1975), developments in our understanding of the date and nature of 'Wessex 1' and 'Wessex 2' assemblages (e.g. Case *et al.* 2003; Garwood 1999, 285–6 and table 9.4; Haveman and Sheridan 2006, 127 and fig. 13; Taylor 2005) are showing that distinctions between these categories are not as clear-cut as previously thought, and that the use of these labels is unhelpful.

Table 10. Second millennium BC radiocarbon-dated composite necklaces.

HA1\Appendix 3: analysis of the Cossington components

Based on information supplied by K. Eremin (formerly of National Museums Scotland (NMS), now Harvard University; analysis of the faience and jet beads) and J.M. Jones (freelance; analysis of the Kimmeridge shale bead).

HA2\The faience bead (SF212)

The composition of this bead was analysed non-destructively in the NMS laboratories using energy-dispersive X-ray fluorescence spectrometry (XRF) and controlled-pressure scanning electron microscopy with energy-dispersive microanalysis (CP-SEM-EDS). The equipment used for XRF analysis was an Oxford Instruments ED 2000 system; surface analysis produced semi-quantitative data on elements above the atomic number 19. The CP-SEM-EDS investigations (which could capture information on elements lighter than atomic number 19, in addition to those above

this number) were undertaken using a Camscan MX2500 microscope with a Noran Vantage ED microanalysis system; the bead was analysed at 15–20 Pa to prevent charging and at 15–20 kV. The results (which were consistent between the two methods of analysis) show that this bead is compositionally comparable with most other British and Irish Bronze Age faience, being made using a mixed alkali fluxing agent (plant ash) and containing appreciable amounts of tin – more than would be expected had bronze been used as the source of the copper-based glaze colourant. Results of three CP-SEM-EDS analyses are presented in Table 11; the 'bright' area of glaze is on the lighter-coloured side of the bead, where the glaze is best preserved and least weathered.

Table 11. Results of compositional analysis, using CP-SEM-EDS, on three areas of the surface of the faience bead

HA2\The jet bead (SF213)

This was analysed using XRF. The results – with zirconium being present in appreciable amounts, and the iron content being low – are consistent with the material being jet from Whitby in Yorkshire.

HA2\The Kimmeridge shale bead (SF214)

This was examined using reflectance light microscopy; the sample was compared with reference specimens of shales and cannel coals. It was identified as a marine shale, rich in amorphinite, probably Kimmeridge Clay; it contains more than the usual content of plant debris found in the 'Black Band', the richest horizon in the deposit. The Kimmeridge Clay is a bed of amorphinite-rich shale laid down under anoxic conditions in the Upper Jurassic. It outcrops in an irregular band from its type locality in Dorset (at Kimmeridge), running north-east to around the Humber Estuary. In theory the material could have come from anywhere along the line of the outcrop, although the bed is not well exposed away from the Dorset Coast.

H2\The Iron Age pottery *– Patrick Marsden*

H3\Introduction

A total of 409 sherds weighing 5577g was recovered from Area A and 189 sherds weighing 4133g from Area E. The 1999 and 2001 assemblages are treated separately below. During the analysis stage some material was re-allocated to an Anglo-Saxon date. Differentiating Iron Age and Anglo-Saxon pottery from the region can be problematic as similar fabrics, manufacturing techniques, and sometimes surface treatments are used. The pottery is generally typical of the East Midlands Scored ware tradition, suggesting a mid–late Iron Age date. 69% (Area A) and 57% (Area E) of the pottery by weight is scored, although the high proportion from Area E is mainly due to the large number of scored sherds from the same vessel in Context (1). Vessel, rim, and base forms are also typical of the East Midlands Scored wares.

H3\Methodology

The material was examined and recorded according to the guidelines for the analysis of later prehistoric pottery (PCRG 1997). The fabric groups follow the University of Leicester Archaeological Services fabric series for Late Bronze Age and Iron Age pottery (see below, Fabrics). Forms were recorded using guidelines for the recording of later prehistoric pottery from the East Midlands (Knight 1998).

H3\Fabrics

Four main groups of fabrics are represented, based on inclusion type: granitic rock; sandy; mixed inclusions; and shelly. The breakdown of the different fabrics is presented in Tables 12 and 13. The fabrics can be compared to those from other Iron Age sites at Wanlip (Marsden 1998, 45) and Elms Farm, Humberstone (Marsden 2000, 171) and the Late Bronze Age phase at Eye Kettleby (Marsden forthcoming):

R1: similar to RQ1 at Wanlip and Elms Farm, Humberstone and R1 at Eye Kettleby.
R2: similar to Q2 at Wanlip, Elms Farm, Humberstone and Eye Kettleby.
Q1: similar to Q1 at Wanlip and Elms Farm, Humberstone.

S1: similar to S1 at Wanlip and Elms Farm, Humberstone.
S2: similar to S2 at Elms Farm, Humberstone and Eye Kettleby.
M1 and M2: mixed fabrics not relatable to other sites. M1 contains rare manganese, quartz, indeterminate rock and grog all up to 5mm and moderate quartz sand. M2 contains manganese or iron-rich clay pellets up to 3mm, organic inclusions (possibly chaff) up to 5mm in length and moderate quartz sand.

Table 12: Iron Age pottery fabrics – sherd number and weight totals from Area A.

Table 13: Iron Age pottery fabrics – sherd number and weight totals from Area E.

The overall dominance of granitic fabrics (R1 and R2), which constitute *c*.86% of the pottery from both site assemblages, is unsurprising given the close proximity of the granitic outcrops at Mountsorrel, only *c*.5km to the north-west. Such fabrics are characteristic of assemblages from other Iron Age sites in Leicestershire, such as Wanlip (Marsden 1998), Elms Farm, Humberstone (Marsden 2000) and Enderby (Marsden and Morris 2004). They have also been found elsewhere in the East Midlands, for example amongst pottery from Iron Age sites in the Trent valley, such as Gamston (Knight 1992) and Swarkestone Lowes (Knight 1999). The other smaller fabric groups (Q1, S1 and S2) are also typical of Late Bronze Age and Iron Age sites in Leicestershire. Fabrics M1 (Table 12) and M2 (Table 13) are specific to two vessels. The M1 scored vessel was found in the fill of the roundhouse ring gully (Area A, Context 7) and the M2 base sherds were from a scored vessel from the fill of ditch F61 (Area E, see Fig.75.2). The fabrics though, would seem to be anomalous in nature and may represent a one-off experiment in fabric composition by the potter.

H3\Forms

Only one vessel form was identifiable amongst the pottery from either site assemblage, an ellipsoid vessel from a pit south-west of the barrow (Area A, Pit F2, Context 1, see Fig.75.1). Ellipsoid forms are typical of the Scored ware tradition (Knight 2002, 134). Rim forms are dominated by everted flattened and everted rounded types. Bases are similarly characteristic of the Scored ware vessel repertoire. Part of a vessel lid in a fine micaceous version of the Q1 fabric (Area A, from the barrow mound soils; SF790) could be of a Late Iron Age or perhaps early Roman date.

H3\Decoration

The only example of decoration is finger-tip impressions on the lip of the rim on the illustrated vessel from Area A (Fig. 75.1), which is a common feature of Scored wares (*ibid.*).

H3\Surface treatment

As described above, scoring occurs on a significant proportion of the pottery. This is 'random' in nature, rather than forming any clear patterns and includes both the deep and the lighter scratched or brushed types. These techniques have been described and discussed elsewhere (Knight 2002, 133–4; Elsdon 1992). Burnishing is also present upon a small number of sherds, on both the external and internal vessel surface.

H3\Vessel use

Carbonised residues were present on the external surface of a number of the vessels. This is likely to indicate their function as cooking pots.

H3\Pottery by context

H4\Area A, Roundhouse gully F8
This gully yielded 2500g of ceramics, mostly from Contexts (7) and (43). Context (7) contained most of the base and scored sherds from a vessel in Fabric R2, and Context (43) base and scored body sherds from another vessel in Fabric R2.

H4\Area A, Pit F2
This pit contained 2337g of pottery from the same vessel in Fabric R2 (Fig. 75.1; see above, Forms). This includes rim, base, and scored body sherds. Only part of the vessel is present, indicating that it was incomplete on deposition in the pit.

H4\Area A, Small finds from the barrow area
52 sherds of pottery weighing 370g were recorded as small finds from the area of Barrow 3. Although mostly undiagnostic, these include the fragment of vessel lid described above (see Forms), which may be of a Late Iron Age or early Roman date.

H4\Area E, Ditch F61
This ditch produced most of the pottery (3177g) from Area E. This includes base and lower body sherds from two vessels. One of these displays scoring and is illustrated (Fig. 75.2). Rims, other base sherds and a large number of scored sherds were also present.

H3\Summary

The pottery from the 1999 excavations is characteristic of Scored ware assemblages from Iron Age settlements in Leicestershire and the East Midlands. A broad date range of between the 4th or 5th century BC and 1st century AD is therefore indicated. As stated above, the granitic fabrics which dominate the pottery are typical of sites in Leicestershire and the East Midlands. However, the overall small number of rim sherds and lack of vessel profiles hindered more detailed comparison with other sites in the region. The Iron Age pottery from features such as the roundhouse gully, pits and ditches would appear largely to represent typical domestic deposits, although there was a distinct concentration of sherds in the northern gully terminal.

Figure 75: Iron Age pottery from Areas A and E.
1. Rim and upper body, plus lower body and base, Fabric R2, ellipsoid vessel with everted flattened rim (c.26cm diameter, 15% present). Scoring present on external surface, finger-tip impressions on rim lip. Area A, pit F2.
2. Base and lower body, Fabric M2, c.14cm diameter, 60% present. Deep scoring above base. Area E, ditch F61

H2\The Romano-British pottery *– Patrick Marsden*

A total of 170 sherds of Roman pottery, weighing 2231g, was recovered from Area A. The fabrics were identified using the Leicestershire Museums Fabric Series (Pollard 1994). The pottery was counted and weighed (g), and forms were recorded if possible. The finds are summarised in Table 14.

Table 14: The Romano-British pottery from Area A.

H3\Discussion

Three contexts containing Roman pottery were of particular interest as they cut into the Barrow 3 ring ditch. One of these (Context 83, F82) contained a complete pot in a coarse sandy ware fabric of a probable mid 1st to early 2nd century date (Fig. 76.1). Similar fabrics have been found amongst later Iron Age and early Roman pottery from Leicester, such as that from the West Bridge area (Pollard 1994, 73). Although a mid to late 1st century date would seem likely on the basis of fabric, the form is not definitively of this period and an early second century date cannot be completely ruled out. The fact that the vessel was whole when deposited into the Bronze Age barrow and the lack of Roman features in the immediate vicinity would seem to indicate deliberate choosing of this location for the placing of the jar. Fragments of another vessel of an earlier Roman date came from a small pit, which cut the barrow mound (Fig. 76.2, Context 354, F355). This miniature jar or beaker is burnished externally and the fabric is characteristic of early grey wares. A date of mid to late 1st century seems likely for this vessel, although as with the sandy ware jar, an early 2nd century date cannot be entirely ruled out. A further small pit (Context 343, F344) cut into the ring ditch contained fragments, including part of the base, of a colour-coated ware, probably a jar (Fig. 76.3). This vessel,

however, is one of the utilitarian forms of the lower Nene valley, which date to the late 3rd and 4th centuries (Howe *et al*. 1980). Thus both earlier and later Roman material is represented in terms of these deposits cut into the mound and ring ditch, with the two earlier vessels perhaps being roughly contemporary in date, the mid to late 1st century seeming the most likely. In the case of the later Roman colour-coated vessel, it should also be mentioned that the sherds are abraded, so the possibility that the vessel could have been deposited during the Anglo-Saxon period should not be discounted.

Figure 76: Roman-British pottery from Area A.
1. Complete vessel, Fabric SW, necked jar (rim c.19cm diameter, 100% present; base c.10cm, 92% present). Rilling in shoulder area. Context 83, F82.
2. Base and body sherds, Fabric GW, miniature jar or beaker with burnished outer surface (diameter 5.5cm, 64% present). Context 354, F355.
3. Base, Fabric C3, probable jar (diameter 10cm, 31% present). Context 343, cut 344.

H2\The Anglo-Saxon pottery *– Nicholas J. Cooper*

H3\Introduction

A total of 98 sherds of early Anglo-Saxon pottery weighing 2.054kg was retrieved from Area A, with a further 109 sherds weighing 3.159kg from Area E. The material has been quantified by number of sherds and weight (g), and the diameter of rims bases and maximum vessel girth is recorded when possible. With the exception of three sherds in a fine, micaceous, chaff tempered fabric, all of the material had been prepared using crushed or weathered granitic fragments, probably granodiorite from the Charnwood (Mountsorrel) district of north-west Leicestershire (Blinkhorn 1999, 165, fabric 4 of coarse granite; Williams and Vince 1997), and is therefore typical of assemblages from the city and county. Where rims or partial vessel profiles can be reconstructed, the forms are globular, with upright or slightly flaring rims. The significant aspect of the assemblage is that it does not appear to result from domestic rubbish disposal, as the relatively small number of vessels represented and their relative completeness, alongside their context of deposition, suggests a special nature.

H3\Discussion

The pottery from Area A comes predominantly from a series of deposits cut into the round barrow. Context (3)/F4, towards the south-eastern edge of the mound, contained the fragmentary remains of a flat base from a single globular vessel, whilst Context (34)/F35, on the outer edge of the ring ditch, contained joining sherds from the complete profile of a large globular vessel with a flat base and upright rim (Fig. 77.1). This vessel appears to have been deposited in antiquity as a fragment rather than a complete vessel. The edges of the fragment, when reconstructed, are discoloured through heat and the surfaces close to the edges are crazed through vitrification. This could be explained perhaps by the context of the fragment beneath a deposit of burnt pebbles, but does not explain why only the edges are affected. The subsequent breakage of the vessel fragment is more recent.

The third vessel, from Context (370) is a small bowl with an upright rim, very fragmentary and joining with small find nos. 775–6 and 863 that were recovered during removal of the barrow mound. Small deposits of single sherds from Context (70)/F71; Context (80)/F81; and Context (405)/F406, are of uncertain significance and their identification as Anglo-Saxon rather than Iron Age is based largely on surface treatment, as the fabrics are virtually indistinguishable.

The material from Area E shows a similar character and is dominated by the remains of the flat base and lower body of a large globular vessel from Context (7) with joining fragments from (6) and another from (16) (Fig. 77.2). Context (6) also yielded part of a doughnut loomweight. This clearly must have come from a stratified deposit, which was disturbed by the machinery – since Contexts (6) and (7) were allocated to the subsoil and topsoil layers – and maybe resulted in the loss of the top half of the vessel. Again a small number of sherds which appear to come from the vessel show signs of crazing through vitrification. The other significant deposit is (76) which produced rims and shoulders from two vessels.

HA1\Appendix4: Catalogue of Anglo-Saxon pottery

H1\Radiocarbon Dating – *P.D. Marshall, W.D. Hamilton, J. Thomas, G. Cook, and C. Bronk Ramsey*

H2\Introduction

Twenty-two samples from Cossington were submitted for radiocarbon analysis. Nine samples were submitted for dating by Accelerator Mass Spectrometry (AMS) at the Scottish Universities Environmental Research Centre (SUERC), East Kilbride in 2006. The samples consisted of one piece of short-lived charcoal, two pieces of animal bone, and six cremated human bones. The charcoal and animal bone samples were prepared using methods outlined in Slota *et al.* (1987), and the cremated human bone was prepared following Lanting *et al.* (2001). All samples were measured as described by Xu *et al.* (2004).

Eleven samples were dated by the Oxford Radiocarbon Accelerator Unit in 2006, producing a total of 14 results. Five of the samples submitted were short-lived charcoal and waterlogged plant remains. These were prepared following the procedures described in Hedges *et al.* (1989). Three samples of animal bone were submitted, and these were prepared as outlined in Bronk Ramsey *et al.* (2004a). The three samples of cremated human bone were prepared following Lanting *et al.* (2001). All the samples were measured by Accelerator Mass Spectrometry as described by Bronk Ramsey *et al.* (2004b).

Finally, two bulk charcoal samples were submitted to AERE Harwell in 1981. These were processed using the standard liquid scintillation procedure at Harwell, with samples being prepared according to methods outlined in Otlet and Warchal (1978), but combusted to carbon dioxide and synthesised to benzene using a method similar to that initially described by Tamers (1965) and a vanadium-based catalyst (Otlet 1977). The radiocarbon content was measured using liquid scintillation counting as described by Otlet (1979).

The SUERC and Oxford laboratories maintain continual programmes of quality assurance procedures, in addition to participation in international inter-comparisons (Scott 2003). These tests indicate no laboratory offsets and demonstrate the validity of the measurements quoted.

H3\Results

The results, presented in Table 15, are conventional radiocarbon ages (Stuiver and Polach 1977), and are quoted in accordance with the international standard known as the Trondheim convention (Stuiver and Kra 1986).

H3\Calibration

The calibrations of the results, relating the radiocarbon measurements directly to calendar dates, are given in Table 15 and in Figure 78. All have been calculated using the calibration curve of Reimer *et al.* (2004) and the computer program OxCal (v3.10) (Bronk Ramsey 1995; 1998; 2001). The calibrated date ranges cited in the text are those for 95% confidence. They are quoted in the form recommended by Mook (1986), with the end points rounded outwards to 10 years if the error term is greater than or equal to 25 radiocarbon years, or to 5 years if it is less. The ranges quoted in italics are *posterior density estimates* derived from mathematical modelling of archaeological problems (see below). The ranges in plain type in Table 15 have been calculated according to the maximum intercept method (Stuiver and Reimer 1986). All other ranges are derived from the probability method (Stuiver and Reimer 1993).

H3\Objectives

The site was separated into five distinct 'site areas', each with its own set of radiocarbon dating objectives.

H4\Site area 1 – Barrow 1

- To provide a precise estimate for the date of the cremation group
- To elucidate any chronological difference in the age of urned and un-urned cremations
- To ascertain whether cremations inside and outside the ring ditch are contemporary

H4\Site area 2 – Barrow 2
- To provide a date for the period of use of the ring ditch

H4\Site area 3 – Area D Palaeochannel (pollen)
- To provide a chronological framework for the environmental sequence in the palaeochannel

H4\Site area 4 – Area D Palaeochannel (animal bone)
- To provide a date for the animal bone group recovered from the base of the palaeochannel
- To ascertain whether all the animal bones are contemporary

H4\Site area 5 – Barrow 3
- To establish a date for the infilling of the Barrow 3 ditch

H3\Sample selection

The first stage in sample selection was to identify short-lived material, which was demonstrably not residual in the context from which it was recovered. The taphonomic relationship between a sample and its context is the most hazardous link in this process, since the mechanisms by which a sample came to be in its context are a matter of interpretative decision rather than certain knowledge. All samples consisted of single entities (Ashmore 1999). Material was selected only where there was evidence that a sample had been put fresh into its context or where there was an apparent functional relationship between sample and context. The main category of material, which met these taphonomic criteria, was human bone from cremations.

Other samples with a less certain taphonomic origin submitted included material from the primary fill of ditches and from the palaeochannel. Were possible duplicate samples from these contexts were submitted to test the assumption that the material was of the same actual age.

H3\Methodological approach

A Bayesian approach has been adopted for the interpretation of the chronology from the Cossington site (Buck *et al.* 1996). Although the simple calibrated dates are accurate estimates of the dates of the samples, this is usually not what archaeologists really wish to know. It is the dates of the archaeological events, which are represented by those samples, which are of interest. In the case of Site Area 1, it is the chronology of the use of the barrow site for cremation activity that is important, not the dates of individual cremations. The dates of this activity can be estimated not only using the absolute dating information from the radiocarbon measurements on the samples, but also by using the stratigraphic relationships between samples.

Fortunately, methodology is now available which allows the combination of these different types of information explicitly, to produce realistic estimates of the dates of archaeological interest. It should be emphasised that the *posterior density estimates* produced by this modelling are not absolute. They are interpretative *estimates*, which can and will change as further data become available and as other researchers choose to model the existing data from different perspectives.

The technique used is a form of Markov Chain Monte Carlo sampling, and has been applied using the program OxCal v3.10 (http://www.rlaha.ox.ac.uk/), which uses a mixture of the Metropolis-Hastings algorithm and the more specific Gibbs sampler (Gilks *et al.* 1996; Gelfand and Smith 1990). Details of the algorithms employed by this program are available from the on-line manual or in Bronk Ramsey (1995; 1998; 2001). The algorithm used in the models described below can be derived from the structures shown in the figures.

The following sections concentrate on describing the archaeological evidence, which has been incorporated into the chronological model, explaining the reasoning behind the interpretative choices made in producing the models presented. These archaeological decisions fundamentally underpin the choice of statistical model.

H2\Site area 1

Site area 1, the small barrow excavated in 1976, consisted of a ring ditch 1m deep and 2m wide at the top with a diameter of 16m. No bones survived in the rectangular pit close to the centre of the barrow that might have contained the primary burial. A bulk sample of unidentified charcoal (HAR-4897) from a bedding of small pebbles with flint scraper and waste flakes, interpreted as a hearth, came from the silting of the first phase of the ring ditch. Since the hearth pre-dates the re-cutting of the ditch after it had almost completely silted up, HAR-4987 provides a *TPQ* (*terminus post quem*) for the secondary use of the barrow.

One cremation, F4 (a small pit), the only definite un-urned example was cut into the backfilled/silted first phase of the ring ditch (stratigraphically above HAR-4987), and provides the only direct stratigraphic relationship between the barrow and the cremations. However, the single fragment of cremated material (?occipital bone) (SUERC-11272; 4285 ±35 BP), gave a Late Neolithic date of 2930–2870 cal BC, which implies that F4 contained older material.

Just outside the barrow, to the south-east, was a group of eleven cremations closely grouped and without any apparent enclosure or other marking. Three were contained within large urns (F6, F9, F24). Although only the upper of the inverted urn (F6) survived, the cremated material was well preserved with all parts of the skeleton being represented. A single piece of cremated fibula (SUERC-11273; 3340 ±35 BP) was dated. A single fragment of cremated bone, possibly tibia or ulna/radius was submitted from the cranium and long bone skeletal fragments surviving within F9, a disturbed inverted urn. Replicate measurements (OxA-16157; 3359 ±34 BP and OxA-16158; 3306 ±33 BP) are statistically consistent (T'=1.3; v=1; T'(5%)=3.8; Ward and Wilson, 1978) and allow a weighted mean (3332 ±24 BP) to be calculated.

F24 was the most complete urned cremation from which a single piece of cremated human bone (humerus/femur) was dated (OxA-16155).

Seven other cremations had fragments of pottery close to or in possible association. These may therefore have been cremations set in urns that have since been almost completely destroyed by ploughing. Material was submitted from three of the seven cremations forming the ?urned group. F20 lay near the centre of the cremation group, from which a fragment of ?tibia (SUERC-11274) was dated. A single piece of cremated human bone (?proximal radius) (SUERC-11275) came from F22, the southernmost cremation in the group. F25 was the northernmost cremation in the group from which a single ?cranial bone fragment (OxA-16156) was dated.

The three measurements on human bone from the urned cremations are statistically consistent (T'=0.2; v=2; T'(5%)=6.0; Ward and Wilson, 1978) and could therefore all be of the same actual age. The three measurements on the ?urned cremations are not statistically consistent (T'=20.5; v=2; T'(5%)=6.0; Ward and Wilson, 1978) and represent material of two different ages. However, of the dated urned and ?urned cremations five produce statistically consistent results (T'=1.0; v=4; T'(5%)=9.5; Ward and Wilson, 1978) if F20, from near the centre of the group is excluded.

The model shown in Figure 78, that excludes SUERC-11272, shows good agreement between the radiocarbon results and stratigraphy ($A_{overall}$=99.1%) as presented in the previous section. This model provides an estimate for the start of the cremation cemetery in *1840–1740 cal BC (68% probability)* or *1910–1690 cal BC (at 95% probability)* (*First cremation)* and end in *1630–1530 cal BC (68% probability)* or *1660–1520 cal BC (at 95% probability)* (*Last cremation)*.

Figure 79 provides an estimate for the length of time over which the cremation cemetery was in use of between *140 and 280 years (at 68% confidence)* and *80 and 360 years (at 95% probability)*. The small number of dates available is, however, likely to mean that the estimate tends to suggest that activity continues for longer than it really did.

Figure 78: Probability distributions of dates from Barrow 1 (Site area 1).

Figure 79: Probability distribution of the number of years during which the cremation cemetery was in use.

H2\Site area 2

Barrow 2 was represented by two concentric ring ditches. Within the central area of the barrow were five pits with burials and associated goods. In the centre a sub-rectangular pit contained a contracted inhumation, with associated grave goods, interpreted at the time of excavation as the primary burial. Bone fragments from the

burial (F15/BT) were submitted to Harwell for dating in 1981, however, in 1985 attempts to obtain a measurement on the small counters were abandoned due to the poor quality of the bone. Six metres north of the central burial a small pit contained a Collared Urn with cremated human bone and charcoal (F14). The two measurements from F14 on charcoal (the remaining fragments of sub-sample were mostly too small to identify but did contain: *Quercus* sp., sapwood and heartwood, Salicaceae and *cf. Acer* sp.) (HAR-4898) and cremated human bone (?tibia) (SUERC-11276) are statistically consistent (T'=0.2; v=1; T'(5%)=3.8), and so could be of the same actual age. This therefore suggests that HAR-4898 did not contain sufficient oak heartwood to produce a significant age at depth offset.

Located 4m south of the central inhumation a rectangular stone-lined pit (a possible cist), F17, was packed with cremated bone and a single sherd of Beaker pottery. A single fragment of cremated human bone (?humerus/radius) was dated (SUERC-11277).

The results (Fig. 80) suggest that site area 2 was the focus of two chronologically distinct periods of activity in the Early Bronze age.

Figure 80: Probability distributions of dates from Barrow 2 (Site area 2).

H2\Site area 3

Two bulk samples of identifiable terrestrial macrofossils were submitted from the pollen monolith taken from the palaeochannel deposits in Area D. The lower sample was split into two sub-samples and the upper sample split into three. The two measurements (OxA-16058–16059) from the lower sample (86–88cm D2) are statistically consistent (T'=0.0, v=1, T'(5%)=3.8; Ward and Wilson 1978). From the upper sample (23–25cm D1), OxA-16055 is nearly 900 radiocarbon years older than the other two samples (OxA-16056–16057, which are statistically consistent (T'=1.3, v=1, T'(5)=3.8). OxA-16055 therefore probably contains material that was residual.

The results (Fig. 81) show that the palaeochannel infilled over a period of one or two centuries in the late third millennium cal BC.

Figure 81: Probability distributions of dates from Area D palaeochannel (Site area 3).

H2\Site area 4

A number of animal bones were recovered from the base of the palaeochannel in Area D (163). Although the bones do not represent the deposition of whole carcasses, it was thought important to ascertain whether or not they were all a contemporaneous assemblage. Three samples were dated, OxA-16054, a left-side rib from an Aurochs, two measurements (OxA-16032 and SUERC-11282) from the left humerus of a domestic cow are statistically consistent (T'=0.1; v=1; T'(5%)=3.8; Ward and Wilson 1978) and allow a weighted mean (4037 ±25 BP) to be calculated before calibration. The two measurements on a red deer antler (OxA-16053 and SUERC-11278, however, are not statistically consistent (T'=6.8; v=1; T'(5%)=3.8; Ward and Wilson 1978). This can probably be explained by the fact that even at the two sigma error term (±2σ) there is still a 1 in 20 chance that the true age lies outside this range (Bowman 1990).

Bones representing material of different ages have clearly accumulated at the base of the palaeoechannel (Fig. 82). OxA-16054 provides a *terminus post quem* of 2550–2300 cal BC for the infilling of the palaeochannel.

Figure 82: Probability distributions of dates from Area D palaeochannel (Site area 4).

H3\The palaeochannel – Sites 3 and 4

Although they are not stratigraphically related, the samples from Sites 3 and 4 both come from the same palaeochannel. The results (Fig. 83) show that the palaeochannel was fairly rapidly infilled in the second half of the third millennium cal BC.

Figure 83 Probability distributions of dates from Area D palaeochannel (Site areas 3 and 4).

H2\Site area 5

Excavation of Barrow 3, enclosed by a single re-cut ring ditch, showed it to have no central feature, although it contained a burial with a jet, amber, and faience bead necklace on the southern edge of the mound. In order to establish a date for the infilling of the ring ditch, two samples were submitted from charcoal-rich patches within the upper backfill. Two measurements from Context (637) (OxA-16060–16061) are statistically consistent (T'=2.1; v=1; T'(5%)=3.8; Ward and Wilson 1978) and allow a weighted mean (3511 ±21 BP) to be calculated before calibration. The other sample (SUERC-11283) came from Context (675).

The results (Fig. 84) suggest that the infilling of the barrow ditch was almost complete by the early second millennium cal BC.

Figure 84: Probability distributions of dates from Barrow 3(Site area 5).

Table 15: The radiocarbon determinations.

H1\The Environmental Evidence

H2\Animal bone *– Jennifer Browning*

H3\Introduction

A small assemblage of animal bone, comprising 75 fragments, was recovered during the excavations. The bone was all hand-recovered; although a programme of sieving was implemented, no further skeletal remains were identified. The sandy soil of the site was not conducive to the survival of bone, and the better preserved fragments were recovered from the palaeochannel deposits in Area D.

Areas A, C and D, each yielded small numbers of bones. The assessment carried out in 2005 concluded that little further work was required for the bone from Areas A and C, due to the fact that they could not be confidently assigned to a particular phase of activity, so no detailed recording was undertaken, and the results from the preliminary work are reiterated here. Samples from the palaeochannel bones (Area D) were submitted for radiocarbon dating, firstly to provide a date for their deposition, and secondly to indicate whether the bones were likely to be a contemporary group. Radiocarbon dates obtained from three bone samples indicate that the material accumulated at different times (Marshall *et al.* above). The latest date of 2550–2300 cal BC (OXA-16054) provides a terminus post quem for this stage in the channel's infilling.

H3\Methodology

The bone from Areas A and C was rapidly scanned to establish anatomy, species, and completeness. The Area D bone was re-examined with reference to skeletal material held by the School of Archaeology and Ancient History, University of Leicester. Species, bone element, completeness and side were recorded, as well as state of fusion, eruption and wear of mandibular teeth following Silver (1969). Particular care was taken to examine the bones for the presence of butchery marks, gnawing, and other modifications, with a view to considering the taphonomy of the assemblage and linkage with human activity in the vicinity. Where possible, measurements have been taken, following Von den Driesch (1976).

H3\Area A

Twelve horse teeth, comprising complete left and right sets of upper cheek teeth (p2-m3), were recovered from the Barrow 3 mound material, along with a few fragments of maxillary bone (SF1270). These were found, apparently *in situ*, with the occlusal surfaces facing upwards. All the teeth were in wear.

A single fragment of cattle-size long bone in a very fragmentary condition was also recovered.

The cranial bones and vertebrae of several small pigs, with unfused epiphysis and deciduous dentition, were recovered from a well-defined pit. The dark fill, clear edges, and good preservation of the bone, compared with other deposits on the site, indicate that this was a modern burial.

H3\Area C

Bone was recovered from deposit 210, an alluvial layer overlying peat, from post hole F207 and also from the watching brief area (SF751). Deposit 210 yielded bones of horse (*Equus caballus*) and cattle (*Bos taurus*), as well as some cattle-sized fragments.

H3\Area D

Eighteen bones were recovered from the base of the silted channel deposit in Area D (Context 163) and a further 16 unstratified bone fragments were found nearby, also thought to belong with the palaeochannel assemblage. No artefacts were found in association with this deposit. Nine of the bone fragments were brown in colour and this seemed to be associated with fairly intact surfaces with little cracking. These distinctions suggest that the assemblage was likely to have resulted from different depositional episodes.

Table 16: Fragment count of the bones from the palaeochannel (Area D).

The bones of aurochs (*Bos primigenius*), domestic cattle (*Bos taurus*), red deer (*Cervus elaphus*), and pig (*Sus scrofa*) were identified in the assemblage. A bird bone (cf. *Anas platyrhynchos,* mallard) was also recovered. Red deer comprised the largest part of the assemblage (see Table 16). None of the palaeochannel bones were unfused, but an unstratified metacarpal from a calf had a porous texture, was probably unfused and appeared to have been gnawed. A mandible of domestic cattle had all three molars in wear but p4 was not fully erupted, suggesting that the animal was a young adult.

Three of the red deer fragments were antler but where it was possible to determine, none of these were shed. This suggests that the crania or even the rest of the deer would have entered the channel along with the antler. A red deer metatarsal had a swelling in the shaft of the bone; this appears to have grown within the bone, distorting the midline (Figs 85–86). The surface of the anomaly is smooth and well healed but there is a small double hole in its centre, possibly as a result of draining pus. The pathology strongly resembles ossified haematomas seen in other archaeological assemblages, such as Dudley Castle (Thomas 2005) and may have been caused by direct trauma such as a hard blow to the bone (Mann and Hunt 2005, 183). The antlers of a red deer had been removed evenly, chopped approximately 40mm above the surface of the skull. This provides the only clear evidence for butchery amongst the assemblage. The skull itself appears large and robust compared with reference material, even taking into account the fact that the reference skull is from a female animal.

Figure 85 (left): Pathology noted on metatarsal of* Cervus elaphus, *resembling an ossified haemotoma. Compare with the normal bone on the right.

Figure 86 (below): Detail of pathology.

H3\Discussion

H4\Area A

There was little bone associated with Barrow 3. Acid sand and gravel soils are detrimental to bone survival and tooth enamel often survives where other bones do not.

The horse teeth (SF1270) appear to belong to a decayed horse cranium (*equus caballus*). Although the possibility remains that they represent the only surviving part of a horse burial, this cannot be proved with the available evidence. There has been some difficulty in establishing the date of finds buried in the mound material, but it is possible that the bones are associated with Anglo-Saxon artefacts also recovered, perhaps associated with the burials of that date.

Pig bones, representing several young animals, were recovered from a square-edged pit dug into the mound. The relatively good condition of this deposit, compared with other bone from the site, along with the absence of other species suggests that these are modern animal burials, perhaps as a result of disease or natural mortality.

H4\Area C

A small group of bones, including horse and domestic cattle, were recovered from a layer overlying marshy ground. Unfortunately, this layer is not securely dated and the bones do not derive from a discrete deposit.

H4\Area D

The small assemblage of bones recovered from the palaeochannel adds useful information to other environmental indicators from the channel about the localised environment in the Neolithic and Early Bronze Age.

A mammoth tusk recovered by a quarry-worker at the time of the excavations provides additional evidence for Pleistocene terraces in the Soar valley, although the lack of precise provenance means that it provides only limited information.

The bones of aurochs (*Bos primigenius*), domestic cattle (*Bos taurus*), red deer (*Cervus elaphus*), and pig (*Sus scrofa*) were identified amongst the bones from the palaeochannel. A red deer metatarsal had a swelling in the shaft of the bone, most likely to be an ossified haematoma. The only conclusive evidence for butchery among the bones examined was found on a red deer skull; the antlers were apparently chopped off. This indicates human activity in the form of hunting and suggests that this animal was exploited for its meat and antler. The breakage in the skull may have occurred as a result of fluvial processes or may suggest that the brain was removed during butchering.

Both the red deer and the aurochs are woodland species (Yalden 1999, 105) suggesting that much of the surrounding area is likely to have been forest. The latest dated aurochs in Britain was retrieved from Early Bronze Age levels at Charterhouse Warren Farm, Somerset, at 3245 bp, although there are possible later but unconfirmed specimens (*ibid*.). The aurochs sample from Cossington was dated to 2550–2300 cal BC (OxA-16054).

The presence of cattle bones may be indirectly representative of human activity, since the domestic species was introduced in the Neolithic.

It is clear that the palaeochannel bones do not represent whole animals. It is not possible to establish where the animals might have entered the water; however, fluvial processes are likely to scatter even whole carcasses. The rate at which the connective tissue weakens varies for different anatomical parts (heads are often lost first) and additionally different bone elements are likely to travel through the water at different rates (Behrensmeyer and Hill 1980, 170–81). Variation in the condition of the bones was also apparent, suggesting different degrees of weathering and possibly different burial conditions. It therefore seems quite likely that the taphonomic processes that led to their deposition were not the same for each bone. Therefore the diverse preservation, along with the radiocarbon ages of the Cossington material suggest that the bones accumulated as the result of successive episodes of fluvial deposition, prior to the silting up of the channel in the Early Bronze Age.

H2\Charred plant remains – *Angela Monckton*

H3\Introduction and methodology

In the course of the Barrow 3 excavations a programme of sampling was undertaken, with specific features targeted for the recovery of charred plant remains. The features sampled included the barrow ditch and mound, which had later features of Roman and Anglo-Saxon date cut into it, an Iron Age roundhouse, and prehistoric and later features in Area C.

Features were sampled if they were likely to be datable and had the potential to contain charred plant remains. Samples were processed from 55 contexts of 1 to 23 litres in size, amounting to 681 litres of soil. The samples were wet sieved in a York tank using a 0.5mm mesh, with flotation into a 0.5mm mesh sieve. The residues were air-dried and the fraction over 4mm sorted for any finds, which are included in the relevant sections of this report. The fraction below 4mm was reserved for sorting later if required. The flotation fraction (flot) was air dried and packed carefully in self-seal polythene bags.

The flots were examined with a x10 stereo microscope, and the plant remains removed to glass specimen tubes. The plant remains were identified and the quantity tabulated (full tables are available in the site archive). All of the fine fraction residues were inspected by eye and little charred material was apparent. Six fine fraction residues from samples with cereal remains in the flot were also examined at x10 magnification to determine if all the plant remains had been recovered by flotation.

H3\Results

Very few charred plant remains were recovered from the flots and sorting some of the fine fraction residues showed that, with the exception of a few indeterminate charred fragments and small charcoal fragments, little was retained in the residues (see Table 17). Hence recovery of remains by flotation was not the problem as the sandy soils were dry when sampled. The plant remains recovered were mostly abraded and broken indicating that they were redeposited material. Of the 55 contexts sampled, 15 produced charred plant remains other than charcoal.

H4\Pre-barrow contexts
Two samples from F692 and F711 produced single grains of wheat (*Triticum* sp.) in the former and indeterminate cereal in the latter.

H4\Bronze Age
The Barrow 3 ditch (Context 368) produced a total of eight charred items from five samples, each containing one or two grains including wheat, a grain of hulled barley (*Hordeum* sp.) of twisted form, indeterminate cereal grains, a smaller grain of cereal or grass (Cereal/Poaceae), and a tuber.

H4\Iron Age
Of the 20 contexts sampled from the roundhouse, only three produced remains: the gully terminal F29 contained a rachis fragment of emmer or spelt (*Triticum dicoccum/spelta*) and a seed of fat-hen type (*Chenopodium album*); post hole F8 contained a cereal grain and a grain of cereal or grass with abundant amorphous charred material fragments which could not be identified further; and gully F50 contained a damaged seed and a few fragments. Other Iron Age contexts with a few remains were a pot from pit F71, which contained a wheat grain, a cereal grain, and a seed fragment; post hole F352 in the barrow mound contained a grain of emmer or spelt. Two pits (F35 and F31) yielded abundant charcoal but no other remains.

H4\Roman
A sample from the fill of a Roman pot from pit F82 contained a cereal grain, a tuber and two fragments of hazelnut shell (*Corylus avellana*).

H4\Anglo-Saxon
Two burials cut into the barrow mound also contained very few remains. F85 produced a grain of emmer or spelt, a wheat grain, a cereal grain, and charcoal. F345 yielded only one wheat grain. Enclosure F295 also contained a wheat grain in the sample.

Table 17: Summary of results from soil samples processed.

H3\Conclusion

There were too few charred plant remains to warrant further analysis. As the remains are at a constant low level over the prehistoric to the Anglo-Saxon period it is impossible to say whether they originate from any particular phase or if they are residual from previous phases. There was considerable soil disturbance apparent in the barrow, so contamination from later phases is also a possibility. The remains found are consistent with those found from the Bronze Age to the Roman period on other sites in the county, and may well date from the Iron Age occupation of the site as a low density scatter of domestic waste. This is with the possible exceptions of the remains from within the Roman pot and the pre-barrow contexts. The very small number of charred remains found included glume wheat, hulled barley, and hazelnut shell; occasional seed fragments and tubers were also present. The small amount of remains may perhaps be explained by the low-lying situation of the site, if pastoral farming was the main economic emphasis of the later settlement, and the ritual use of the site during most of the phases.

H2\Pollen and plant macrofossils *– James Greig*

Well-preserved pollen from Areas C and D and seeds from Area D show what the occupied prehistoric landscape was like over a period of one or two centuries in the late third millennium cal BC. These results add usefully to the available information on the settlement of river valleys in the prehistoric period.

H3\Aims and methods

The pollen and seed analysis of the palaeochannel deposits was undertaken to inform on settlement and land use in the Neolithic and the Bronze Age, and to work out the sequence and dating of the alluvial deposits. Further aims and objectives were to date the environmental remains, to explain what these remains can tell us about the environment at the time, to compare the results from Areas C and D, and to set them in the broader context of research into environment and settlement in the river valleys of the region.

H4\Pollen analysis

Pollen samples taken at an interval of 10cm were processed using the standard method: about 1cm^3 subsamples were dispersed in dilute NaOH and filtered through a 70µm mesh to remove coarser material. The organic part of the sample was concentrated by swirl separation in a shallow dish. Fine material was removed by filtration on a 10µm mesh. The material was acetolysed to remove cellulose, stained with safranin and mounted on microscope slides in glycerol jelly. Counting was done with a Leitz Dialux microscope, initially assessment level counts of about 100 grains in total, and additional counting has been done to make the precentages more accurate and reveal the full range of pollen types present. The total pollen counts range from 138–755 grains, while the counts used for the pollen percentage calculations which exclude *Alnus* and *Corylus* range from 36–184 which are quite low, but reflect the rather small amounts of other pollen that were present, as well as generally low pollen concentrations in some samples, particularly the lowermost ones.

Identification was undertaken using the writer's pollen reference collection, seen with a Leitz Lablux microscope. Standard reference works were used, notably Fægri and Iversen (1989) and Andrew (1984). The results are presented in two pollen diagrams, one from the palaeochannel in Area D (Fig. 87), the other from the organic deposit in Area C (Fig. 88), which have been drawn with TGView software. The nomenclature and order of the taxa follow Bennett (1994), set out in ecological groupings. The pollen percentages have been calculated from the sum of pollen excluding *Alnus*, *Corylus* and aquatic taxa and spores, and shown in black curves for the taxa within the pollen sum.

H4\Plant macrofossils

Subsamples of 100ml material were broken down in water, and the lighter, organic, fraction washed over to separate it from the often rather sandy inorganic material, and caught in a 500µm sieve. This washover was sorted in water under a x10 stereo microscope and the plant remains identified and checked with the writer's own extensive seed reference collections and identification literature. The results are listed in taxonomic order (Kent 1992) in Table 18.

H4\Radiocarbon samples

The material for radiocarbon dating was taken from the pollen monolith boxes. Nothing was identifiable in the material from the three parts of Core C (0–2cm, 4–6cm and 23–25cm) examined, just small amounts of organic debris. Core D consisted of dry woody material, which contained a range of identifiable organic material as well as charcoal in some layers. Material from the more organic levels at 23–25cm and 86–88cm was extracted from the monolith. It was dispersed in water and the lighter fraction washed over into a sieve and sorted for identifiable remains with a binocular microscope. The sorted material from land plants (to avoid possible hard water error from aquatic plants using inorganic carbon) was air dried at ambient temperature, and two batches of each sent for dating. The seeds are listed in Table 18, and the dates are shown on the pollen diagram (Fig. 87).

H3\Area D Palaeochannel (Fig. 87 and Table 18)

The pollen diagram shows 60–70% tree pollen throughout, with a possible slight increase in the top 15cm, which is due to increased *Tilia* (lime). Cyperaceae (sedges) are also increased. This top part also shows less *Alnus* (alder) and *Corylus* (hazel), although still around 150% of the rest of the pollen; in the lower parts

these are extremely abundant, reaching about 500% and 100% of the pollen sum. They (and the aquatics and spores) have been excluded from the pollen sum used in calculating the percentages, so that their very large and fluctuating contribution does not distort the results from the other pollen types, in order to get a better picture of events on dry land. The top part of the diagram seems to show more reed swamp and less alder wood on the site.

H4\Trees and shrubs

The most abundant trees and shrubs are *Alnus* (alder) at 200–600% pollen sum, with abundant macrofossil evidence, and *Corylus* (hazel) with around 50–100% pollen sum. The macrofossils all contain *Alnus* (alder) remains in the form of abundant seeds, catkins, and buds, as well as the presence of a beetle which feeds upon alder (Smith below), showing that an alder carr woodland grew on or very close to the spot. It could have been confined to the palaeochannel margins, or have grown along more widely among braided channels in the valley bottom.

Other tree and shrub pollen is fairly high at around 60–70% throughout the sequence, and the main taxa are *Quercus* (oak) at around 40–50% and *Tilia* (lime), which are also fairly abundant at around 10–20%; there are some less abundant but still fairly common taxa such as *Ulmus* (elm), *Fraxinus* (ash) and *Hedera* (ivy). A possible find of *Tilia* seed (together with the lime feeding beetle *Ernoporus caucasicus*; Smith below) shows that lime woods were probably not far away on dry land, and the palaeochannel may have been an isolated wet part of a landscape which was otherwise covered by mixed wildwood (Rackham 1980), with mainly lime together with elm and oak woodland and a range of other trees such as *Betula* (birch), of which a seed and pollen was found, and *Sambucus nigra* (elder), seeds of which were also present throughout the sequence, although its pollen was only found in one sample. *Crataegus* (hawthorn) fruitstone was also found, as well as pollen, and of *Prunus* (sloe or cherry). Other probable woodland plants include *Solanum dulcamara* (bittersweet) and *Rubus* species (wild raspberry, bramble). Various rather shade tolerant herbs were found, which may well have grown as a herb layer in the woodland, such as *Urtica dioica* (nettle), *Persicaria hydropiper* (water-pepper), *Ajuga reptans* (bugle), and *Scirpus sylvaticus* (wood club-rush). A nettle-feeding beetle was also found (Smith below).

The total picture is of elements of wildwood with lime, oak, and elm and a hazel understory. There are also signs of secondary woodland glades or wood margins with a range of other trees such as the pioneers *Fraxinus* (ash) and *Sambucus* (elder), which can indicate enrichment by human activity, and the wetter alder woodland of the palaeochannel and surroundings. The amount of tree pollen is high, showing a mainly wooded environment, but not high enough to indicate undisturbed woodland, so it is clear that there was human activity.

H4\Dry land plants, weeds etc

The 20–30% herb pollen shown in the pollen diagram includes some taxa with clearly defined habitat requirements which help show what local environments were present. Several pollen records suggest disturbed or arable land, and there are several such plants identified more exactly from macrofossils – such as *Chenopodium album* (fat hen), *Stellaria media* (chickweed), *Brassica* cf. *nigra* (possible black mustard), *Aphanes* sp. (parsley piert), and *Valerianella locusta* – which show the presence of rather light disturbed soils on dry land. This evidence of disturbed ground and the presence of charcoal in all the samples but the two lowermost ones would normally be associated with human activity, unless the river formed sandy banks. The records of cereal type pollen in two samples were marginal as far as their size and therefore suggest rather than prove that cereals were being cultivated. Possible trampled ground is indicated by the presence of *Polygonum aviculare* (knotgrass) seeds. These signs of disturbance do not quite add up to occupation, and it is possible that the site was being used for its resources, or for ceremonial purposes, as it was later on in the Bronze age with the establishment of the barrows nearby, rather than being a centre of settlement.

Grassland is probably shown by the record of around 10% *Plantago lanceolata* (ribwort plantain) throughout the pollen sequence, together with the presence of the seeds of grassland plants such as *Cerastium fontanum* (mouse-ear chickweed), *Potentilla erecta* (tormentil), *Prunella vulgaris* (self-heal), *Plantago major* (plantain), and *Leontodon* sp. (hawkbit). Pollen records such as *Trifolium repens* (white clover) and finds of a clover feeding beetle and of *Phyllopertha horticola*, which feeds on the roots of grassland plants, as well as several dung beetles (Smith below) add to the evidence for grassland. This shows that there was a significant area of open, dry land near the site, probably kept like this by grazing animals,

and therefore a sign of an occupied landscape. Wet grassland seems to be shown by abundant *Lychnis flos-cuculi* (ragged-robin) seeds.

H4\Swamp plants, aquatics

As this is a waterlogged deposit, there is no shortage of plants that grow in or beside water, or on swamps. *Montia fontana* (blinks) grows on bare wet ground; other wet and waterside habitats are shown by the presence of plants such as *Persicaria lapathifolia* (pale persicaria), *P. hydropiper* (water-pepper), *Barbarea* sp. (yellow-cress), *Mentha* sp. (?water mint), *Senecio aquaticus* (marsh ragwort), *Eriophorum* sp. (cotton-grass), *Eleocharis* sp. (spike rush), *Schoenoplectus lacustris* (common club-rush), and probably *Carex* species (sedges), the last four contributing to the Cyperaceae pollen record.

Fully aquatic habitats probably within the palaeochannel are shown by plants such as *Nuphar lutea* (yellow water-lily), *Ranunculus* subg. *Batrachium* (water crowfoot), *Myriophyllum spicatum* (water milfoil), *Alisma* sp. (water-plantain), *Potamogeton* sp. (pondweed), and *Glyceria* sp. (sweet-grass), the pollen of which overlaps in size with those of cereals. These and the large fauna of aquatic molluscs and aquatic beetles (Robinson 2005; Smith below), show that the channel was filled with water and bore an abundant aquatic and swamp flora and fauna.

H4\Change with time

The pollen and seeds are fairly consistent over the 100cm of the profile, but there is one major change marked by a decrease in *Alnus* and *Corylus*, and a corresponding increase in Cyperaceae, which could represent clearance of some of the alder carr and its replacement by sedge swamp. At the same time, *Tilia* pollen increases, which seems unusual, unless clearance of alder carr had the effect of filtering out less of the *Tilia* from the pollen rain on the palaeochannel, therefore increasing its representation. Among the macrofossils, only the lowermost two samples 90–95cm and 95–104cm contained no charcoal, and there were somewhat fewer weed records such as *Chenopodium*, *Atriplex*, and *Brassica* in the bottom three samples (89–90cm, 90–95cm, 95–104cm). This is further evidence that the amount of human activity, or its closeness to the site, increased later in the profile.

The sediment also changes, from sandy at a depth of 100–50cm to peaty at 50–0cm, which may be associated with soil erosion as a result of farming activity.

H3\Area C (Fig. 88)

Pollen was present in the core taken from the Area C marshy deposits, but there were no identifable macrofossils in the sample examined (10–14). These pollen results are different from those of Area D discussed above. Tree pollen is generally lower at 25% (excluding *Alnus* and *Corylus*) and it goes down to about 6% at the top. This suggests that Area C was either more occupied or later in date than Area D. Unfortunately it was not possible to obtain enough suitable organic material to date this profile. The trees and shrubs represented are much the same, with very abundant *Alnus* and *Corylus*, followed by a range of other trees such as *Pinus* (pine), *Quercus* (oak), and *Tilia* (lime). There is some evidence from Ericales (heathers) that heathland may have developed on the sandy soils, perhaps in response to grazing. The main feature is the decrease in tree pollen, and the corresponding increase in pollen from herbs associated with open, occupied land such as *Plantago lanceolata* (ribwort plantain) and other taxa probably representing weeds of cultivated land (Chenopodiaceae, Caryophyllaceae) and grassland plants (*Centaurea nigra*, Lactuceae).

H3\The regional setting of the Cossington results

There is now an increasing number of results from environmental studies of buried organic sediments in river valleys, in contrast to a previous almost complete absence of such data from the East Midlands, and scarcity elsewhere (Greig 1996). The sedimentary history of such sites, including Cossington, is also attracting attention (Brown and Keough 1992).

Similar results have been obtained from Kirby Muxloe, dated from around 3000–2000 cal BC and thus probably broadly contemporary with Cossington; these show signs of local alder carr with mixed lime woodland not far away (A.G. Brown 1995), for there is lime in the macrofossils (Greig 1995) and possibly the lime-feeding beetle *Ernoporus caucasicus* (Smith 1995). Together with these signs of wildwood are signs

of human activity in the presence of charcoal and a number of weeds. These results add to the evidence from Cossington that during the Neolithic period, human activity was generally on a fairly small scale in openings in the wildwood at most sites in the East Midlands.

In contrast, the 4th millennium cal BC site at Lismore Fields, near Buxton (Wiltshire and Edwards 1993) – where pollen results were similar to those from Cossington showing a woodland setting with signs of disturbance – also held a consistent record of cereal pollen, and considerable amounts of charred wheat and flax were found at the associated Neolithic building. This shows that, at some Neolithic sites at least, crop growing may already have been important at this stage. At many other Neolithic and Beaker sites, finds of gathered plants such as wild apples, sloes, and hazelnuts as well as cereals has led to the idea that crops supplied only a part of the food at this time, and that the sites with large amounts of cereals in this period were exceptional, unless unusual circumstances such as a granary fire were the origins of such finds (Robinson 2000).

Other sites provide glimpses of the East Midlands landscape in later prehistory. The persistence of at least some wildwood into the Bronze Age is shown by results from the Trent valley at Shardlow (Greig 2006), in a palaeochannel section starting in the mid second millennium cal BC, according to dates made on a logboat at the base of the deposit, with around 60–70% tree pollen (excluding *Corylus* and *Alnus*) which includes 15–20% *Tilia* (lime) indicating some wildwood. Further up the section there are signs that the remaining woodland was decreasing, and especially the wildwood, which may have grown on the best land and have been cleared preferentially. There are correspondingly more signs of open land, grassland and heathland, and traces of cereal pollen in this later part. These results seem to show the progressive clearance of the wildwood with time.

Another Trent valley gravel quarry site with palaeochannels, Willington in Derbyshire (Greig forthcoming a) gave a very similar seed flora from one profile, with 30 taxa also found at Cossington Area D, and only 8 not found there. The profile dates to a thousand or so years later, at 1200/1000 to 1100/900 cal BC and the pollen results show the continuing loss of wildwood by this stage, with tree pollen down to 22–40% and *Tilia* present only as a trace.

These East Midlands sites seem to show a consistent pattern of small-scale occupation in the Neolithic having at first a small and rather local effect on the woodlands, but increasing in the Bronze Age and later to cause a gradual decline in the amount of woodland and a corresponding increase in the extent of cleared land, whether grassland, arable, heathland or scrub. This pattern would probably then apply to the later parts of Cossington, such as the Bronze Age barrows, which can be expected to have been set in an increasingly open landscape.

Some sites in other areas also seem to show such a gradual onset of woodland clearance, occasionally at earlier dates to the East Midlands sites, as at Runnymede, a 4th millennium cal BC site in the lower Thames valley (Needham 1991). Here, prehistoric occupation on river gravel sites was probably making use of the light soils there, while a substantial amount of wildwood still remained in the surroundings during the Neolithic, although this decreased by the Bronze Age. At Wellington, Herefordshire (Greig forthcoming b) human activity was quite slight in the Neolithic, but the lime woods were extensively cleared in the Late Neolithic and Early Bronze Age.

River valleys, with their shallow braided streams, may have been the most favourable areas for settlement in the prehistoric period, with light easily tilled soils and a range of useful resources, compared with relatively impenetrable wildwood covering the rest of the land. After extensive woodland clearance somewhat later in the prehistoric period when the Bronze Age was well under way, alluvium started to fill valleys, which changed their nature, with rivers cut into deep sediment deposits which have buried (and thus preserved) traces of earlier settlement as well as environmental evidence, and wetter less hospitable valleys. Sites such as Cossington help show how stages of this transition of our landscape took place.

In some areas the wildwood seems to have disappeared much more rapidly than it did in the East Midlands: at Yarnton, in the Thames valley, which has a long history of occupation from the Neolithic onwards, the only remaining signs of trees are the irregular pits or 'tree throws' left by the tree roots when the trees were removed (Robinson 2000), and pollen showed a very open landscape. The Avon valley also seems to have become an open rather treeless landscape early on, according to results from Bronze Age Beckford and Bidford on Avon (Greig and Colledge forthcoming).

There has been some discussion about the process of spreading of Neolithic culture, and the evidence for this. Recent work in The Netherlands (Out, in press) shows that farming and agriculture seem to have spread

rather gradually, at least in some regions, and that this evidence of Neolithic human activity around sites is very local.

Table 18: The pollen and plant macrofossils from the Area D palaeochannel.

H2\Insect remains *– David Smith*

H3\Sample location and selection

The twelve samples selected for this analysis come from the Area D palaeochannel. It was hoped that an examination of the insect remains from this palaeochannel would establish the nature of the local environment and land use during this period.

The basal fill of the palaeochannel was sandy, grading into an organic peat towards the top of the section. Twelve bulk samples were taken as a continuous set from an open section cut through the palaeochannel. The archaeoentomological potential of this material was assessed by Prof. Mark Robinson (2005) who recommended that all 12 samples needed a fuller analysis. This report presents the results of this fuller analysis.

H3\Sample processing and analysis

Samples of unprocessed sediment were used in this study, rather than returning to the material from Robinson's assessment. The samples were processed using the standard method of paraffin flotation as outlined in Kenward *et al.* (1980). The weights and volumes of the samples processed are shown in Table 18. The insect remains present were sorted from the flots and stored in ethanol. The Coleoptera (beetles) were identified by direct comparison to the Gorham and Girling Collections of British Coleoptera. The various taxa of insects recovered are presented in Table 19. The taxonomy for the Coleoptera (beetles) follows that of Lucht (1987).

Where applicable each species of Coleoptera has been assigned to one, or more, ecological grouping(s) and these are indicated in the second column of Table 19. These groupings are derived from the preliminary classifications outlined by Robinson (1981; 1983). The groupings themselves are described at the end of Table 19. The various proportions of these groups, expressed as percentages of the total Coleoptera present in the faunas, are shown in Table 20 and Figure 89. The dung/foul, tree, grassland, and moorland groupings are calculated as a proportion of the terrestrial taxa recovered rather than as a proportion of the minimum number of individuals for the whole fauna (effectively excluding the dominant water beetles from this statistic).

Column 14 in Table 19 indicates the comparative modern rarity of each taxon recovered. The scheme used follows the Red Data Book (RDB) classifications of Hyman and Parsons (1992; 1994). Column 15 lists the host plants used by the various species of phytophage (plant feeding) beetles recovered. The information included is primarily taken from Koch (1992). The plant taxonomy used is that of Stace (1997).

H3\The insect faunas recovered

With the exception of the sample from the top of the profile (14–21cm) all of the samples examined produced an insect fauna. However, the number of individuals recovered from each is often comparatively small (below 30 individuals). Many of the insect remains were also fragmented and eroded, particularly towards the top of the section. Unfortunately, these two factors mean that the insect faunas recovered may have a limited value and their interpretation may be problematic. This is especially true of the proportion of the ecological groups present, since these are often based on a very limited number of individuals. The insect faunas should, therefore, be primarily used to support the evidence from the pollen and plant macrofossils from the palaeochannel.

There also seems to be little variation in either individual taxa or the ecological groups present within the profile (see Tables 19–20 and Fig. 89). A similar picture of relative uniformity and consistency is also seen in both the plant macrofossils and pollen from this profile (Greig 2005), suggesting that the deposition of this material occurred under similar environmental conditions throughout, or occurred over a relatively short

period of time. As a result of this, the nature of the faunas recovered will be described as though the material represents a single deposit.

The insect fauna is dominated by aquatic and waterside taxa (groups 'a', 'aff' and 'ws' in Table 19 and Fig. 89). The ecology of these taxa clearly indicates the nature of the body of water in which the organic material formed. Taxa that are associated with fast flowing waters, in particular the elmids or 'riffle beetles' form a relatively dominant group. Species such as *Elmis aenea, Esolus parellelepipedus, Limnius volckmari* and the *Oulimnius* and *Riolus* genera are all usually associated with well oxygenated and clear water, running over open sand and gravel (Holland 1972; Smith 2000). In the assessment of this material Robinson recovered a single specimen of *Macronychus quadrituberculatus* Müll. from the bottom of the profile at 95–104cm. This species is now rare in the British Isles (RDB 3) and seems to be associated with larger and unalluviated river systems in the past (Hyman and Parsons 1992; Osborne 1988; Smith 2000). A similar fluvial environment is also indicated by the 'diving water beetle', *Potamonectes depressus,* and the hydraeniid, *Hydreana minutissima* (Nilsson and Holmen 1995).

However, an equal proportion of the water beetles recovered are associated with slower flowing waters and still waters choked by stands of waterside vegetation. The vast majority of this group are species such as the Dytiscid 'diving water beetles', *Agabus, Illybus,* and *Hydroporus* genera, and the hydraenids, *Octhebius bicolon* and *O. minimus* (Hansen 1987; Nilsson and Holmen 1995).

The insect fauna recovered also suggest the nature of the vegetation growing in the body of water and its immediate surroundings. The 'reed beetle' *Donacia clavipes,* is associated with water reed (*Phragmites australis* (Cav.) Trin. ex Steud), *Doncia impressus* with common club rush (*Scheonoplectus lacustris* (L.) Palla), and *Donacia marginata* with burr reeds (*Sparganium* spp.) (Koch 1992). Similarly the weevil *Notaris acridulus* is associated with reed sweet grass (*Glyceria maxima* (Hartm.) Holmb.) (*ibid.*). More open areas of water may have been covered with pondweed (*Potomageton* spp.) or water milfoil (*Myriophyllum* sp.), the host plants of *Macroplea*. The presence of dense stands of waterside vegetation growing in soft silt and mud are also suggested by the ecology of a range of the Caradidae 'ground beetles' recovered. This includes *Pterostichus diligens, P. nigrita, Agonum fuliginosum* and *Oodes gracilis* (Lindroth 1974). Similar conditions are often favoured by several of the species of staphyliniid 'rove beetles' recovered such as the *Lesteva* species and *Lathrimaeum unicolor* (Tottenham 1954).

There is slight evidence for the presence of woodland in the area. Although it would seem from the proportions of woodland species in Table 20 and Figure 89 that this is an important aspect of the fauna in some of the samples, in fact this often represents only one or two individuals per sample. It is therefore difficult to establish from the beetles alone how important woodland may have been in the landscape. However, both the pollen and the plant macrofossils from these deposits suggest that woodland remained a dominant aspect of the landscape at this time (Grieg 2005). There is also limited evidence in the beetles that fen woodland surrounded the area. This is primarily due to the presence of the bright purple beetle, *Agelastica alni,* which is only associated with alder (*Alnus glutinosa* (L.) Gaertn.) (Koch 1992). *Ernoporus caucasicus* suggests that lime (Tilia sp.) (*ibid.*) must have been present in drier woodland, probably on the valley slopes. Other species, such as *Dyocoestes villosus*, and the *Curclio, Haltica*, and *Rhychaenus* genera are also associated with trees and woodland. In Robinson's (2005) assessment of this material, he also recorded *Melasis buprestoides* (L.), a species of 'false click beetle', and *Anobium punctatum* ('the common woodworm') both of which are associated with dead wood.

There are also indications that clearings occurred in the surrounding woodlands, or alternatively that pasture and farmland may have started to encroach on the valley floor. The evidence for this mainly consists of a comparatively small number of *Onthophagus*, *Geotrupes*, and *Aphodius* 'dung beetles' that normally indicate pasture and grazing (Jessop 1986). Similarly the 'chaffers' *Serica brunnea* and *Phyllopertha horticola* live, as larvae, in the roots of grass in old pasture (*ibid.*) as do the 'click beetles' *Athous haemorrhoidalis* and *Agroties* spp. Several of the plant-feeding species recovered are associated with plants typical of rough grassland or disturbed ground. Examples of these are the vivid green 'leaf beetle' *Gastroidea viridula* that is associated with docks (*Rumex* spp.), the *Sitona* and *Hypera* weevils that are associated with clover (*Trifolium* spp.), and *Ceutorhynchus erysimi* which is associated with Shepherd's purse (*Capsella bursa-pastoris* (L.) Medik) (Koch 1992). Equally there is evidence that stinging nettle (*Urtica dioica* L.) was present in the area since this is the food plant of *Cidnorhinus quadrimaculatus* (*ibid.*).

H3\Discussion

The insect faunas from the palaeochannel clearly suggest that it was most likely a 'back water' associated with a relatively fast flowing channel, and probably part of an anastomosing river system. It has been suggested that this is typical of this section of the Trent's watershed at this time (Greenwood and Smith 1999; Knight and Howard 2004). The evidence from the insect analysis supports the similar evidence from the pollen, indicating that the surrounding woodlands were beginning to be cleared for agriculture, or that small clearances used for grazing, were present. This aspect is also seen in a number of other insect faunas from the catchment of the Soar such as Kirby Muxloe (Smith 1995) and Croft (Smith *et al.* 2005) and similarly dated deposits from the Trent itself (Brayshay and Dinnin 1999; Greenwood and Smith 2005; Howard *et al.* 1999).

H3\Notable species

Ernoporus caucasicus. This species of bark beetle (Scolytidae) is very rare in Britain today. It is listed in Hyman and Parsons (1992) as endangered (Red Data Book Status 1). Today, the species is limited to a few trees at Moccas Park, Herefordshire, and isolated records from a few other locations in the Midlands. However, there are now a relatively large number of archaeological records for this species from contexts dating to before 3000 cal BC (Buckland 1979; Girling 1984; Howard *et al.* 1999, Robinson 1993; Smith 1995; Smith *et al*. 2005) in the British Lowlands. Robinson (1993) has suggested that the species is a 'relict' left from the former dominance of lime (*Tilia* sp.) woods over much of southern England and the Midlands.

Oodes gracilis. This species is now thought to be extinct in the British Isles (Hyman and Parsons 1992). Today it is found in the warmer parts of central and southern Europe and it is thought to be particularly temperature sensitive (Lindroth 1986). Its occurrence in deposits associated with the Bronze Age Somerset Levels trackways has been used to suggest higher temperatures during this period (Girling 1979, 1984) although its decline may also be due to habitat loss (Buckland and Dinnin 1993).

Agelastica alni. This bright purple species feeds only on alder leaf. Its status in Britain is somewhat unclear. Harde (1984) suggests that it is extinct as a species in Britain, but Hyman and Parsons (1992) think that it may still be present in one or two isolated areas. It has not been taken since 1946. However, it seems to have been more common in the past with a number of Neolithic and Bronze Age finds (Girling 1979; 1980; Robinson 1993; Smith and Whitehouse 2005) and some sites in the Trent catchment (Smith *et al.* 2005).

Table 19: The insect remains.

Table 20: Sample statistics and relative proportions of the ecological groups of insects recovered.

Figure 89: Proportions of the ecological groups of insects recovered from the palaeochannel.

H2\Charcoal – *Graham Morgan*

The following species were present: oak (*Quercus* sp.), field maple (*Acer campestre*), hazel (*Corylus avellana*) or possibly alder (*Alnus* sp.) and blackthorn (*Prunus spinosa*).

Table 21: The charcoal remains from Barrow 3.

H1\Discussion – *John Thomas*

In contrast to the excavations of Barrows 1 and 2, which centred closely on each monument, the work undertaken in 1999–2001 offered a broader view and enables a wider 'landscape' perspective on Barrow 3. The fact that this barrow was so well preserved had also given rise to a pattern of re-use over several centuries offering an interesting insight into attitudes towards ancient monuments in the later prehistoric and early historic periods.

H2\Pre-barrow activity

Some of the earliest evidence of activity is represented in the lithics assemblage, notably a Lower Palaeolithic side scraper and a backed blade characteristic of the Upper Palaeolithic. Several microliths and a scatter of blade and bladelet debitage across areas B and C offers further evidence of transient hunter-gatherer activity on the site during the Early Mesolithic. Significantly, the microliths are characteristic of Deepcar type assemblages, which are extremely rare in a Midlands context (see Cooper above) and thus represent an important addition to the regional Mesolithic resource. A possible laurel leaf point was the only artefactual evidence for Neolithic activity in the area.

H2\Late Neolithic/Early Bronze Age

In spite of the low artefact representation, the existence of the pit circle and associated features suggests that the area in which Barrow 3 was constructed had become an important focal point in the landscape by the Late Neolithic period. Pit circles are relatively scarce in the region in the Late Neolithic, although there appears to be a relationship between their locations and later monuments, perhaps denoting their importance as earlier foci of ceremonial activities (Clay 1998, 327). A large pit circle is apparently represented by a cropmark at Queniborough, to the east of Cossington (see Fig. 6 above), although this has not been verified by excavation (Pickering and Hartley 1985, 41, fig. 9). Several phases of pit circle at Burley Road, Oakham, represent the only excavated examples close to Cossington, the earliest of which described an oval area similar to that at Cossington (Clay 1998). As at Burley Road, these early features at Cossington appear to represent several phases of activity in the same location.

The features immediately west of the pit circle seem to curve round, respecting its outer edge, implying slightly later or near contemporary activity at a time when the original location of the circle was still evident. The scatter of post holes was clearly created after the pit circle had gone into disuse, but may have been intended to provide a more permanent marker of the location, suggesting that the significance of events connected with the site was more long lasting than the original monument itself.

The focus of the pit cluster to the east may represent a different phase of activity altogether, but again makes specific use of this particular portion of the landscape, reinforcing the notion of its significance. Repeated use of the same location for apparent ceremonial activities at Burley Road indicates that the importance of the area was sustained over a long period of time, eventually resulting in the siting of an Early Bronze Age round barrow and inhumation close to the focus of the pit circles (Clay 1998, 302 and fig. 15). Although some time may have passed between the end of the pit circle's use and the construction of Barrow 3, it is possible that the later monument at Cossington was sited in reference to the earlier one, particularly if the location was marked by posts, as the archaeological evidence suggests.

H2\Early Bronze Age

H3\The round barrow

It is unclear when Barrow 3 was constructed, although a general Early Bronze Age date seems appropriate. Dating of the later ditch deposits suggest that the barrow ditch had become largely filled by the early second millennium cal BC (Marshall *et al*. above). The character of Barrow 3 combines elements particular to both Barrows 1 and 2. In form it is relatively simple, a ditch and mound similar to Barrow 1, but it is built on a more monumental scale, similar to Barrow 2. In size and shape Barrow 3 has much in common with Lockington Barrow VI, a monument that also retained a denuded mound (Hughes 2000). As at the other nearby barrows, its ditch reflects a complex history of infilling and recutting over time. The fills of the earliest phase suggest that the ditch infilled gradually over a period of time, after which it became necessary to redefine the monument. The siltier fills of the second phase of barrow use perhaps indicate a more deliberate policy of infilling of the ditches or that the steadily collapsing mound was gradually filling the ditch.

Unfortunately little can be deduced about construction methods due to the homogeneity of the mound soils. At similar sites such as Lockington Barrow VI, evidence for a central mound 'core', elaborated with overlying deposits, was recovered (Hughes 2000, 10) and at Deeping St Nicholas, Lincolnshire, evidence for the use of turf and topsoil in the mound construction was revealed (French 1994). In other cases, turf was stacked to provide a 'core' for the mound, as at Maxey, Cambridgeshire (French 1985, 209–14) or

Swarkestone, Derbyshire (Posnansky 1955b, 126). At Deeping St Nicholas the excavators also suggested that the brightly coloured natural gravel might have provided a 'capping' for the mound, effectively enhancing the visual presence of the monument in the surrounding landscape (French 1994, 103). This aspect of the barrow's construction is also likely to have been the case at Cossington, especially given the bright natural sands it was situated upon.

No obvious 'primary' burial was revealed during the excavation of Barrow 3, although a rectangular intrusion near the centre of the mound may have destroyed any evidence for one. This intrusion contained modern pottery and other material and was considered to be a relatively recent feature. It is, of course, possible that a primary interment was never intended for Barrow 3. Several other recently excavated barrows have no direct evidence for a primary/central burial (e.g. Lockington Barrow VI: Hughes 2000; Buckskin Barrow: Allen *et al.* 1995) and it has been suggested that such monuments fulfilled a cenotaph function, serving to commemorate only the memory of the deceased. In such cases the central area of the monument may, over time, have acquired a sacrosanct mythology, not available to later burials (Woodward 2000, 25).

H3\The Bronze Age inhumation

The only evidence for contemporary burial associated with Barrow 3 lay on the very edge of the monument, close to the the inner edge of the ditch on the south-eastern side. This comprised the crouched inhumation of a possible female, buried with a rare composite bead necklace of amber, faience, jet, and shale components. Composite necklaces are commonly found with cremated remains and where sufficient evidence is available, they usually accompanied female burials, hinting strongly in favour of a female burial here. The body was also accompanied by a finely worked flint blade. Unfortunately no traces of the body remained within the grave, so no radiocarbon dates are available. However the composite necklace tradition to which the Cossington example belongs can be broadly dated to the first half of the second millennium cal BC (*c.*1750–1450 cal BC; Sheridan above). Thus this burial is broadly contemporary with the secondary cremation activity witnessed at Barrow 1.

Given the location of this burial, it is a possibility that it was a secondary interment, although the uncertaintly over the presence/absence of any primary burial restricts discussion of whether this was the only burial at this monument. The precise stratigraphic position of this grave was difficult to prove, but given the suggested date range for the necklace and the indications that the ditch of Barrow 3 had almost filled up by the early second millennium cal BC, it seems likely that the grave was associated with the second phase of the barrow's use.

The distribution of this type of composite necklace is heavily biased towards Wessex and is a rare find in the East Midlands, with the only other recorded example coming from Abney Moor, Derbyshire (Pennington 1877). The use of these high-status items in other parts of the country can be seen as a form of emulation of a Wessex-based fashion (Sheridan above), in which components of the necklaces were probably imported by leaders of local communities. In some cases elements of the necklaces are clearly 'recycled' and have evidently been in circulation for a considerable period of time. In the case of the Cossington necklace, the consistency of the amber beads suggests that they may have been acquired as a set, while the other beads may have been added to make up the composite necklace.

The geographical area represented by the raw materials used for the beads covers an extremely wide area, as discussed by Sheridan above, and it seems likely that the wearer also wished to communicate links with these areas or wider trading networks. The particular components of the necklace may also have been deliberately selected due to their perceived ancestral, magical, or mystical powers – and as such would have protected the wearer on her journey into the afterlife.

H2\Evidence for later activity

H3\Iron Age and Roman settlement and use of Barrow 3

In the mid–late Iron Age a settlement grew up around Barrow 3 (Fig. 90): a roundhouse was constructed to the west of the barrow and enclosures existed to the north. The character and extent of this settlement is unfortunately unknown due to the circumstances of discovery, althought the fragmentary remains recovered to the north of Barrow 3 are important as they show that the roundhouse did not exist in isolation but was part of a wider occupied area. The remains of Barrow 3 must still have been evident to the Iron Age

occupants, however, and some respect for the monument is indicated in what can be seen of the settlement layout, fragmentary though it is.

Organisation of Iron Age settlement around earlier monuments is a widespread phenomenon that has been highlighted on a number of sites in central Britain. At Plantation Quarry, Willington (Bedfordshire), the upstanding remains of a round barrow were referenced explicitly by their deliberate incorporation into one end of an Iron Age enclosure (Dawson 1996) and at Maxey, Cambridgeshire, a series of square enclosures was constructed in alignment with an earlier oval barrow (Pryor *et al.* 1985). More locally, the earlier stages of occupation at Elms Farm, Humberstone, were located within the earthworks of a Late Bronze Age enclosure, providing a direct reference to the past (Charles *et al.* 2000). A similar situation was revealed at Grendon, Northamptonshire, where a Bronze Age mound was incorporated into an Iron Age enclosure (Jackson 1995), although in the wider surrounding landscape, the area of earlier monuments was clearly distinct from the main focus of Iron Age land allotment and settlement (J. Taylor *pers. comm.*), suggesting less immediate emphasis on referencing the past. Similarly, round barrow remains at Ferrybridge, Yorkshire, were carefully negotiated by the Iron Age inhabitants of a nearby farm, again apparently showing a more indirect form of referencing (Roberts 2006).

It is clear from these examples that relict monuments from the past *were* important to people in the Iron Age and that they were negotiated in varied and complex ways. At Cossington the architecture of the Iron Age settlement, although existing relatively close to the monument, appears not to have involved direct interaction. The deliberate burial of pottery vessels in the remains of the mound and in pits close to the monument, however, suggests that Barrow 3 held particular significance, and that it was seen as acceptable and necessary for such acts to take place. This tradition continued into the Romano-British period with the deliberate insertion of three pots into the mound and ditch remains. Such events would not seem out of place in the light of recent research on Iron Age and Roman settlement deposits (e.g. Hill 1995; Willis 1997; 1999). However, in the case of Cossington, the presence of the barrow may have added extra significance to acts of deliberate burial and may have been linked to perceptions of ancestry, ownership, and land rights. The deposition of Iron Age and Roman artefacts within ancient monuments has now been widely recognised and recently discussed by Williams (1998a). Due to the ploughed out nature of many British barrows, however, such evidence is not always evident and the available information has largely come from areas situated away from major agricultural disturbance, with better earthwork survival. In the Peak District, for example, there are several examples of Roman coins and pottery found at earlier monuments (Barnatt and Collis 1996, 56–7).

H3\The Anglo-Saxon cemetery and settlement – Peter Liddle and Richard Knox

Although the acidic, sandy soil conditions precluded the survival of bone and made the definition of features very difficult, the evidence appears to represent a cemetery comprising three male burials, two possible female burials, and possibly three further burials of uncertain sex (Fig. 91). The high ratio of iron finds to copper alloy objects is unusual on an Anglian cemetery site and may indicate either that the two possibly female burials (where copper alloy objects might be expected) were poorly furnished, or that the site has been metal-detected in the past, and the copper alloy removed, although there is no other evidence for this. It is likely that several further burials set in the centre of the mound have been completely destroyed by ploughing, which may explain the objects found just outside the ring ditch.

Dating of the cemetery is hampered by the poor condition of the artefacts and the potential incompleteness of the assemblage. The dating of Anglo-Saxon metalwork, particularly ironwork, is also notoriously difficult. The standard typology for spearheads (Swanton 1973) is of some help in grouping the weapons from this cemetery, but the dates assigned by this typology are not particularly secure. The knife typology in the Buckland cemetery report (Evison 1987) is equally useful but equally insecure as a general guide to dates. The indications are that we may be looking at a date late in the pagan period, perhaps late 6th to early 7th centuries AD.

The area to the north of the barrow, recorded during the watching brief (Area E; Fig. 91) appears to contain evidence of early Anglo-Saxon occupation. There is a series of large pits, at least one of which is likely to be a sunken-featured building, and a complete Anglo-Saxon pottery vessel was recovered from a small feature. Cossington would therefore fit into the pattern of a growing number of sites in the region where settlement has been found adjacent to a cemetery, including Empingham I (Liddle *et al.* 2000), Wigston Magna (Liddle and Middleton 1994), and Wanlip (Liddle 1980).

The Cossington cemetery lies in an area rich in Anglo-Saxon burials. The Soar valley and the valleys of its tributaries, especially the Wreake, have produced one of the highest densities of cemetery sites in Leicestershire (Knox 2004, fig. 1c). These include the cemeteries at Rothley, Wanlip, Barrow-upon-Soar, Loughborough, Thurmaston, Queniborough, Sysonby, Saxby, and Melton Mowbray (Clough *et al*. 1975). Little systematic field survey has yet been undertaken in the area, except in Brooksby parish (Liddle and Knox 1991), where two definite, and one possible, settlement sites were found, and in Barkby Thorpe parish where two sites were located (Cooper 2004, 91). Judging by the numbers of settlement sites that have been detected elsewhere in the county, where detailed survey has taken place, such as the Medbourne area and the Langtons (Knox 2004, fig.2), and coupled with chance finds, metal detecting, and some development-led projects, it is likely that many more settlement sites remain to be found in these valleys.

The phenomenon of early Anglo-Saxon re-use of prehistoric monuments is well documented throughout England and in certain parts of the region where barrow mounds are in a better state of preservation (Williams 1998b; Vince 2006, 170). The best Leicestershire parallel for Anglo-Saxon re-use of late prehistoric monuments for burial is the Thurmaston cremation cemetery excavated by David Clark in 1954 (although the evidence for a barrow here is not totally conclusive; Williams 1983). Other possible Leicestershire candidates for barrows producing Anglo-Saxon material are at Stoke Golding in 1932, Baggrave in 1784 and Ingarsby in *c*.1830 (Clough *et al*., 1975). At Stoke Golding a 6th–7th century hanging bowl escutcheon was recovered from a denuded barrow, but the excavation did not determine the origins of the barrow (Pickering 1932).

In areas where Bronze Age barrows are better preserved than in Leicestershire, Anglo-Saxon burials are quite commonly associated with them. Within the broader region, this is best exemplified in the Peak District, where 19th century barrow investigations regularly yielded Anglo-Saxon remains. We can, of course, only speculate on the reasons for the re-use of Bronze Age barrows. It is clear that their original function was well understood and re-use may simply have been convenient. There is, on the other hand, a growing feeling that this is often a statement of taking control of a landscape by appropriating perceived ancestral graves (Semple 1998; Williams 1997).

H2\Areas B and C

Due to the lack of datable material recovered from features in Areas B and C, it is difficult to discuss their contribution to the development of the site in any great detail. Environmental evidence from the pollen profile in Area C suggests that the area of marshy ground in the northern part of the site existed in open, cultivated ground with areas of grassland and possible heathland nearby. This contrasts with the evidence from the Area D pollen profile, dated to the Late Neolithic, which suggested a more wooded landscape. Unfortunately there were insufficient suitable samples of organic remains to date the Area C profile, although the suggestion of a more open landscape does hint at a later date. Palynological evidence from other sites in Leicestershire and Rutland reveals a pattern of increased clearance of the landscape linked to larger areas of grassland from the Late Bronze Age onwards (Clay 2000). This suggestion is perhaps supported by the predominance of landscape boundaries in the Areas B and C, which do not generally make an appearance in the region's archaeological record until this time (Willis 2006, 121).

H3\The small oval enclosure/structure

Distinct from the linear boundary features, the small oval enclosure or structure (F275) at the northern end of Area B stands out as being unusual and is apparently one of the earlier features in this part of the site. Unfortuately this enclosure was undated, although given its context in the vicinity of Barrow 3 and its later re-use, a number of parallels are worthy of consideration here. Similarly shaped features have been found among a group of at least twelve geometrically shaped 'mini-enclosures' identified at Sutton Common, South Yorkshire (Van de Noort 2004; 2007, 151–65). Many of these were empty, similar to the Cossington example, but some of them contained fragmentary traces of burnt bone in their deep and narrow ditches and, suggesting they were linked to mortuary activity (Van de Noort 2004, 12; 2007). It is suggested that the 'mortuary enclosures' at Sutton Common may have had a relatively short-lived usage, possibly acting as a sacred area or *temenos* within which ceremonial activities took place. On the basis of the evidence, this could have involved the scattering of cremation pyre debris within the enclosure (Van de Noort 2007, 156 and fig. 8.7). The dating of these features, based on glass finds from one of the ditches, appears to indicate a 4th to

2nd century BC usage (R. van de Noort pers. comm.; 2007). In the broader context of re-use the Sutton Common enclosures are interesting in that they were constructed within the remains of an earlier enclosure (the Sutton Common 'marsh-fort'), a policy that may have entailed deliberate reference to the ancestral past (Van de Noort 2007, 164).

Another similar example from Ling Hall Quarry, Church Lawford (Warwickshire) was represented by a two-phased structure, the earliest of which was very similar to the Cossington feature (Palmer 2002, 79, fig. 43). This structure was also defined by a continuous circuit of narrow, steep sided gully, suggestive of footings for timber walling. Like Cossington, no specific dating evidence was obtained from the Church Lawford structure, although it has been interpreted as an early Roman shrine on morphological grounds (S. Palmer pers. comm.).

Enclosures of similar dimensions and shape also formed part of the cemetery complex at Westhampnett, West Sussex (Fitzpatrick 1997). Here the enclosures were dated to the Iron Age and Anglo-Saxon periods although, in contrast to the Cossington example, many of the Westhampnett enclosures contained burials, and the Anglo-Saxon examples had entrances. Evidently structures or enclosures of this type were constructed in various periods and served a variety of functions. The enclosure at Cossington might just as easily represent Neolithic or Bronze Age activity, although its remarkable similarity in form to the Sutton Common and Church Lawford examples implies a later date for its construction, and that it may be related to the Iron Age and Roman re-use of Barrow 3.

H3\Landscape boundary features

The concentration of landscape boundaries on various alignments in this part of the site indicates prolonged use of the area, with changing periods of emphasis in the structure of the landscape. It is evident that the marshy ground played an important role in determining the orientation of most of the boundary features and it is also likely that Barrow 3 was respected during the laying out of at least some of these boundary systems.

The post alignment stands out among the predominantly ditched boundaries in this area. The evidence suggests that the post alignment was not complete, but had been truncated towards its southern end. Much longer post alignments have been excavated on the floodplains of the River Great Ouse at Barleycroft, Cambridgeshire (Evans and Knight 2001), although shorter alignments – similar to that at Cossington – are also known, for example at Plantation Quarry, Willington, Bedfordshire (Dawson 1996) and Ling Hall Quarry, Church Lawford, Warwickshire (Palmer 2002). The Barleycroft alignments post-date Middle Bronze Age field systems and could therefore relate to Middle or Late Bronze Age activity. Perhaps more contemporary examples are those from Church Lawford, which appear to have been constructed in the Late Bronze Age or Early Iron Age. It seems likely that the Cossington post alignment functioned as some sort of boundary, although quite how this relates to the overall chronology of the site is not understood.

The series of long straight boundary ditches, some of which are visible as cropmarks, appear to relate to separate phases of landscape definition. They are generally on very different alignments to the post alignment and all seem at odds with one another. No dating was obtained from any of these features, implying that they were located away from the main areas of contemporary settlement.

Ditch F197=252 is the most prominent of the straight boundaries on the site and can be seen in the aerial photographs to form a right-angled system with another similar ditch, not encountered in the excavations (see Fig. 6 above). Interestingly, Barrow 3 is located within the northern right-angle formed by the two ditches, raising the possibility that, as a prominent existing landscape feature, it was used to align these boundaries.

A significant readjustment of orientation is indicated by the swathe of intercutting, sinuous gullies that traversed Area B, truncating the remains of the various linear ditches. These are again undated, but the constant redefinition of the boundary at this point, maintaining the same general alignment, suggests that these were important features of the landscape to those who built them. The distinct curvature of the gullies at the northern end of Area B appears to respect the edge of the marshy area. The wavering nature of the gullies and their repeated definition bears similarities to recently excavated Iron Age boundary systems, located close to settlements at Manor Farm, Humberstone and Beaumont Leys Lane, both on the edge of Leicester (Thomas 2002; forthcoming). Assessing these boundaries with so little dating evidence is difficult and it is likely that at least some of them are much later than has been postulated above. Examination of the medieval ridge and furrow patterns for the area suggests the possible location of a headland here (Hartley

1989), with which the curving gullies coincide. It is therefore possible that the curving boundary system relates to medieval fields on the edge of Cossington village.

Part Four

Conclusion – Monument, Memory, and Myth

John Thomas

The excavations at Cossington quarry have provided a rare opportunity to consider the context and histories of three near-contemporary Bronze Age funerary monuments. Barrow 3 has also offered a rare opportunity, in the Leicestershire context, to examine a barrow that survived as an upstanding earthwork. The quarry setting of the excavations has importantly allowed a wider landscape context for the monuments to be explored, permittting a more in-depth understanding of how the monuments – in particular Barrow 3 – were involved in changes over time. The evidence for prolonged use and re-use of the monuments, both in the Bronze Age and beyond, has highlighted the role of ancient monuments in the social and political negotiations played out by the inhabitants of Cossington as settlement of the area developed.

H1\Before the Barrows

Palaeoenvironmental information from the site has added to the emerging picture of the early landscape and settlement of river valleys in the East Midlands. The evidence for human activity in the Cossington area prior to the creation of the three burial monuments is patchy, although slight traces of episodic visits during the Palaeolithic and Mesolithic periods are attested in the lithics recovered. More evidence is forthcoming for occupation of the area in the Late Neolithic, apparently characterised by small-scale activities in localised woodland clearings and perhaps larger areas of pasture. Surprisingly, little Neolithic flintwork was apparent in the material assemblages from the three monuments although some evidence of Late Neolithic funerary activity was indicated in the residual assemblage of burnt human bone from Barrow 1. The origins of the cremated Neolithic bone are open to question, although the fact that they apparently retained significance in the Early Bronze Age highlights the possibility that Barrow 1 was created on a site of earlier importance. A pit circle and pit cluster pre-dating Barrow 3 potentially represent a similar focus of Late Neolithic activity at that location. The majority of these pre-barrow features were devoid of finds and elsewhere within the excavations, material of earlier date was scarce, perhaps indicating that the site was frequented only intermittently over a long period of time.

H1\Monument and Memory: The Creation and Use of the Barrows

The three barrows were created in a low-lying floodplain landscape at the confluence of the Rivers Soar and Wreake. The relationship between clusters of barrows and rivers has been identified in other parts of the country, particularly as evidence has been increased by aerial photography (Field 1998, 321). In the regional context, Clay (1999) has identified the importance of river valleys as locational foci for settlement and ceremonial monuments and the results of the work at Cossington support this view.

The dating for the establishment of the three monuments is sadly not closely defined, although together they highlight the range of monumental architecture practised during the Early Bronze Age. Barrows 1 and 3 appear to represent examples of simple barrows, characterised by a central mound surrounded by a ditch. In contrast, Barrow 2 may never have incorporated a central mound, and was perhaps intended to be more of a defined ceremonial space, at least in its earliest phase. The architecture of Barrow 2 displays a pronounced ‘angularity’ in the construction of the ditches suggesting that the monument was originally created as a series of conjoined segments. If this is the case it might be suggested that separate segments were dug by particular individuals, families, or groups, with the eventual outcome representing a community creation and statement within the landscape.

The role of memory in the construction, use, and maintenance of Early Bronze Age monuments has been the subject of recent theoretical discussion (Bradley 2002; Williams 2003). Given the lifespan of all three monuments at Cossington, the potential role that memory played in their continued relevance over time cannot be underestimated and is worth considering further here. Despite the architectural variation displayed in the construction of the monuments, it is clear that all three had long and complex histories. This is evident not only in the range of burial traditions displayed but is also apparent in the attention paid to the surrounding ditches. Regular use and maintenance would have served to preserve the sense of communality generated by the monument's creation, whilst remembrance of the dead, and past ceremonies associated with their burial, will also have been integral to the formation of each barrow's biography.

A striking observation concerning the ditches of the three Cossington monuments is their complexity, as evidenced by their numerous episodes of remodelling. Traditionally, barrow ditches have tended to occupy a somewhat peripheral role in explanations of individual monuments compared to the attention given to the areas that they enclose. As the Cossington ditches illustrate, however, they clearly formed an integral part of the monument and would have been prominent in the thoughts and memories of those involved in their construction and maintenance. Involvement in ditch digging and remodelling, and in activities and events where the ditch formed the focus of acts of deliberate deposition would have promoted the active nature of the barrow boundary and helped place it firmly in the life story of the barrow (Nowakowski 2007, 92–3). As well as commemorating the individual deceased at the time of the barrow's creation, subsequent acts of ditch renewal may have contributed to creating a more abstract ancestral memory, embodied in the monumentality of the barrow (Mizoguchi 1992, 45).

The potential role of perceived ancestral remains in legitimising rights to land is raised by the recovery of Late Neolithic cremated human remains from Barrow 1. This suggests either the re-use of an earlier monument or, perhaps more likely, disturbance of an isolated cremation, possibly during the creation or redefinition of the barrow. The apparently deliberate re-burial of the remains at a time when the first phase of the barrow was ending suggests a 'closure' deposit and highlights the potential significance bestowed upon the earlier remains by the users of the barrow. A similar situation is perhaps seen at Barrow 3 where the monument appears to have been sited in close proximity to the remains of an earlier pit circle. Evidence of prolonged activity on this part of the site suggests that it had become a significant locus-over time and the construction of Barrow 3 might be seen as perpetuating this. It may be implausible to state that this re-use is wholly attributable to specific memories of past events, but if the site of the pit circle was marked by posts, it may have been exploited in a similar way to the Neolithic human remains from Barrow 1 to create a genealogical past and links to past activities.

The range and variety of burials associated with Barrow 2 not only illustrate the longevity of the monument's use but might also reflect a persistence of memory surrounding events associated with the barrow. The burials within Barrow 2 are spatially close but represent activity over two chronologically distinct periods in the Early Bronze Age. Evidence suggests that burials within Barrow 2 may have been intentionally marked to avoid later disturbance, but it is also clear that the inhumation near the centre of the monument attracted a later burial. It is possible that a small mound served to locate the original inhumation during this later phase of the barrow's use which then formed the focus for subsequent burial. Moreover, markers such as this would have contributed to memories and stories of particular individuals and previous ceremonies at the site (Last 1998).

Artefacts accompanying the dead at Cossington may also have been chosen specifically for their ancestral connotations. The primary burial in Barrow 1, which contained partly broken Beaker pots, perhaps treated as heirlooms, is a good example. Other deposits, however, may have been intended to illustrate connections between people – the dead or the living community – and particular places, perhaps providing reaffirmation of rights to land (cf. Brück 2004, 321) or wider social connections. This may be illustrated by the group of finds associated with the Barrow 2 inhumation. Furthermore the bead necklace from the Barrow 3 inhumation would not only have displayed connections with Wessex but also a wider area represented by the different raw materials. In life the wearer of this necklace would have communicated its life story, and all the history of status, contact, and exchange that it signified. By placing the necklace in the burial at Cossington the mourners may have been making a metaphorical link between the dead and the living, thereby creating a context in which their lineage could be understood (Barrett 1994, 122).

Re-use of Barrow 2 as the location for a cremation cemetery towards the end of the Early Bronze Age highlights the continued importance of the monument and provides a relatively early example of this type of phenomenon. The deliberate association between burial and the monument also indicates that its mortuary

role had not been forgotten. Indeed the placement of the later cremation burials shows a marked degree of respect for the monument's history and a desire to be associated, but not to encroach upon it. By making a public connection with the past in this way, the family or local lineage group associated with the cremation cemetery was perhaps underlining real or manipulated ancestral connections and defining its place in the landscape.

Memory must also have played a part in the gradual formation of the cremation cemetery, as there is very little evidence for disturbance of individual burials, despite the restricted locale that they occupied. Like the earlier burials from Barrow 2, some form of marker may have been used to define the area of each burial – as at Deeping St Nicholas, Lincolnshire, where remains of wooden post markers were found (French 1994).

H1\The Creation of Myths: Later Use of Barrow 3

If the role of memory and repeated activities were important in the maintenance of the monuments during the Early Bronze Age, common sense dictates this could not have been the case for communities living nearby in much later periods, and the persistent re-use of Barrow 3 must have involved other attitudes. The extent to which Barrows 1 and 2 were subject to re-use in later periods is uncertain, although Roman and Saxon pottery recovered at both sites suggests they continued to receive some attention. The retained significance of the monuments must to some degree have been due to their prominence in an otherwise fairly flat landscape, but it is also apparent that some understanding of their original use played a part in the later activities.

Barrow 3 appears to have formed the focus for Iron Age settlement and was clearly referenced in the laying out of several later prehistoric land boundaries, highlighting its role as a prominent landmark. It was also, however, apparently referenced on a spiritual level, forming the focus for a series of deliberate deposits in pots, a tradition that persisted into the Roman period. Whether it was the burial of the pots that was significant, or what was contained within them, these acts clearly represented carefully negotiated interactions with the barrow, either in deference to its association with the supernatural or as a way of manipulating the past to mark associations with the 'ancestors'.

Associations with the supernatural and the significance of ancestral powers may also have drawn the attention of the Anglo-Saxon occupiers of the site (Williams 1998b). As in the Iron Age, settlement activity was clearly focussed on the remains of Barrow 3, but now the monument was also resurrected as a burial ground. Whilst this may indicate opportunistic re-use of an existing monument, several studies have shown a degree of selectivity in the barrows that were chosen (Lucy 2000; Semple 1998; Williams 1999), although this is difficult to prove at Cossington given the differential survival of the three barrows. Whatever the original situation, Barrow 3 was evidently still regarded as an important part of the landscape and it is likely that its re-use as a burial ground involved a desire to be associated with a mythical past to create a sense of place in the landscape (Bradley 1987), or to invent specific histories for local communities (Williams 2006, 183).

To sum up, the excavations have added a significant amount of information to the regional understanding of the complex lives of Early Bronze Age monuments. The three barrows have contributed much to our understanding of the nature of local and regional funerary architecture of the period and have highlighted the complexities involved in the continual evolution and elaboration of such monuments. As prominent features in the landscape, the memories and mythologies involved in the life stories of the monuments provides a reflection of changing attitudes as occupation of the landscape increased. It is clear that the monuments held high importance to their creators and rather than becoming static landmarks of past occupation, their significance was retained, remembered, and redefined by later groups wishing to stake a claim on the Cossington landscape.