XII
MUSEUM NOTES, 2005

1. A POLISHED STONE AXE HEAD FROM DODDINGTON, NORTHUMBERLAND

Clive Waddington

A ground and polished stone axe head was discovered during ground preparation works west of Doddington village, Northumberland, in June 2004 (fig. 1.1). The pristine specimen has been donated to the Museum of Antiquities (Accession number 2004.14) by the finder, Keith Purvis, who was operating a mechanical digger at the time. The axe head was picked up from the field surface, after it had been rotavated, at a distance of about 100 m from the river Till at NT 9925 3145. The axe head is small, though not a 'miniature', having maximum length, width and depth measurements of 78 mm, 48 mm and 26 mm respectively. It is made from a very fine-grained igneous rock and has a grey-green patina. It is undoubtedly made from the distinctive Langdale Tuff of the Lake District and has the flattened sides characteristic of a number of Langdale axe heads.

Apart from some imperfections that have not been entirely smoothed out at the butt end, and a recent small chip from the blade, the axe head is in exquisite condition and shows no sign of wear. This suggests that it was deposited as a finished artefact and not as a functional article lost during use. This is significant as the part of the field where the axe head was found is an area of very wet peat, and it was as part of a drainage scheme that the axe head was found. A second area of peat, located in the north part of the same field, has been cored (Passmore *et al.* 2001, 82) and provided a radiocarbon date of 2460–2025 cal BC (3810±70 BP Beta-119826) from the basal layers.

At least two ring ditches are known from the adjacent field, which slopes up to a raised gravel terrace overlooking the peat where the axe head was located. Flints have been found in the ring ditch field as part of a fieldwalking programme by the author; they include a barbed and tanged arrowhead, found close to one of the ring ditches, that could be contemporary with the axe head. The Late Neolithic-Early Bronze Age determination from the peat sediments fits chronologically with the ring ditches, the barbed and tanged arrowhead and the stone axe head, suggesting broad contemporaneity for the activity represented by these finds in the centuries before 2000 BC. This evidence implies that the terrace and wetland next to the river Till were locally important during the late Neolithic-Early Bronze Age as areas of ritual, where the dead were buried and offerings/deposition of special artefacts appear to have taken place. This apparently ritualised area on the east side of the Till provides a contrast with the contemporary complex of henge monuments and related sites that are in most cases strung out along the west side of the Till.

The axe head could have moved downslope from the area of the ring ditches to the level ground where it was found but there is no evidence for slopewash material this far onto the flood plain surface. The more likely possibility is that the axe head was deposited in an area of wetland that now forms the modern peat bed, as some kind of offering. Such votive deposits are well known throughout Britain during Neolithic and Bronze Age times and include discoveries such as the stone axe heads found in peat next to the Sweet Track on the Somerset Levels (Coles and Coles 1986) and the sandstone axe head found in Kimmerston Bog (Waddington 1999, 123) 5.5 km north-west of the Doddington site.

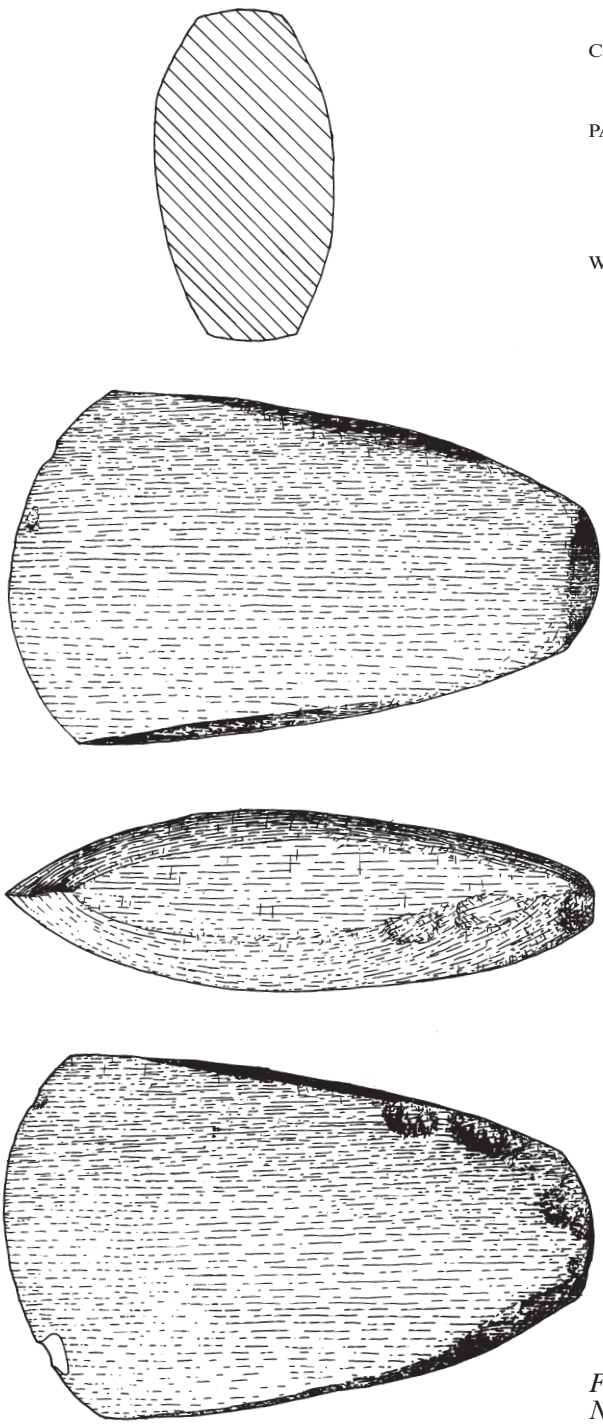

Fig. 1.1 Stone Axe Head from Doddington, Northumberland (1:1).

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2. A SINGLE CUP-MARKED STONE FROM SEATON DELAVAL

Graeme Stobbs and Steve Speak

A single cup-marked stone was recovered in January 2002 during the archaeological evaluation of a rectilinear enclosure at Seaton Delaval (NGR NZ 3034 7485). The stone has been donated to the Joint Museum of Antiquities at Newcastle University, accession number 2005.1.

The evaluation at Seaton Delaval was undertaken by Tyne and Wear Museums prior to development. The site consisted of a single ditched enclosure known from an aerial photograph taken in 1947, but it was considered that an existing factory, built before the advent of PPG16, completely overlay and had destroyed the site. However, an initial watching brief revealed the presence of part of the southeast side of the enclosure within the footprint of the new development, including a 27 m-long stretch of enclosure ditch and part of the entranceway. During the subsequent evaluation the northern ditch terminal was examined and the cup-marked stone was found within the lower ditch fill.

The stone (fig. 2.1) is roughly triangular, measuring 217 mm by 226 mm by 110 mm, and of local yellow sandstone. A single cup sits in an approximately central position, 70 mm in diameter by 25 mm deep. In addition to the cup-mark itself there is evidence of an abandoned attempt to create a surrounding ring.

No datable material was recovered during the small-scale excavation, nor was any other archaeological feature noted within the available area. However, it was clear that this enclosure was another example of a type common on the coastal plain between the Rivers Tyne and Wansbeck (Haselgrove, 1982). Such enclosures have traditionally been assigned to the Romano-British period, based upon a few partially excavated examples that have produced Roman material alongside pottery of Iron Age date. It is, however, thought equally possible that some of these settlements date from the mid-Iron Age onwards.

The presence of this cup-marked stone within a ditch terminal provides another example of ritual deposition, within a significant location and presumably made by a notable individual, of an item of strong fiscal or spiritual value to a community. The parallels for this type of ritual deposition, where a valuable item is publicly removed from circulation,

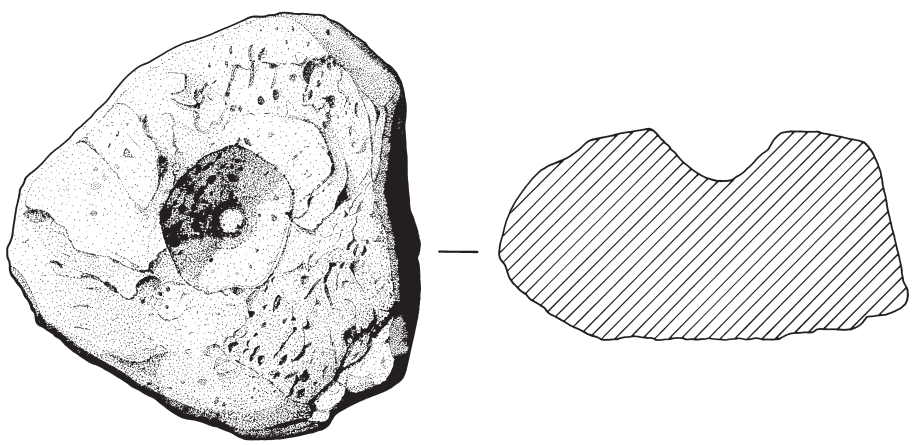

Fig. 2.1 Cup-marked stone from Seaton Delaval (1:4).

range from polished stone axes to so-called weapons and even people – and are mostly associated with contexts involving a degree of waterlogging.

It is becoming increasingly clear that belonging to this same tradition is the deposition of circular objects within ditches (normally adjacent to entranceways), from sites of all dates (for an example from *Arbeia* Roman Fort at South Shields, see Snape in Bidwell and Speak 1994,137). There have been examples of misinterpretation of this tradition in the past where the artefacts themselves (e.g. coins and pottery 'gaming pieces') have been considered as individual objects rather than the ritual deposition of round objects. Querns have also been regarded as domestic refuse rather than evidence of this ritual.

Regrettably no dating evidence was recovered associated with the cup-marked stone. Traditionally, the cup-marking itself should belong to the late Neolithic whilst the rectilinear enclosure should be of Iron Age date; even extending the chronologies of both periods would still not produce an overlap. The problem remains as to the circumstances leading to a cup-marked stone being retained by a community for eventual deposition in such a significant location in the entranceway of a common farmyard.

The authors are grateful to Procter and Gamble Product Supply (UK) for funding this publication.

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3. AN EARLY HISTORIC STEATITE URN FROM ORKNEY: NEW INFORMATION ON AN OLD FIND

Alison Sheridan
with contributions by Kathleen McSweeney and Penelope Walton Rogers

INTRODUCTION

This note[1] presents the results of some recent research carried out on the contents, and wrapping material, of a small steatite[2] cinerary urn from Orkney. This had been in the possession of the antiquarian and numismatist Adam de Cardonnel (d. 1820), and was donated to the Society of Antiquaries of Newcastle upon Tyne on 1st July, 1829. The Urn is still in the Society's museum (MoA[3]), where its accession number is 1829.6. Much of the information has previously been published in electronic form (Sheridan 2004a), but this paper incorporates new information obtained since then.

The urn had been found between 1773 and 1779 in a cist near Stromness (National Monuments Record of Scotland reference number HY20NE 22). It contained cremated human remains and had been wrapped in an animal hide; a piece of slate had covered its top. It came to be donated to the Society because de Cardonnel (also known as Adam Mansfeldt [Mansfield] de Cardonnel-Lawson) – who had been a founding member of the Society of Antiquaries of Scotland (SAS), and had curated that Society's newly-established collection between 1782 and 1784 – lived for part of his life at Chirton House in Newcastle upon Tyne. (Further details about de Cardonnel can be found in the *Oxford Dictionary of National Biography* ('Lawson' 2004).)

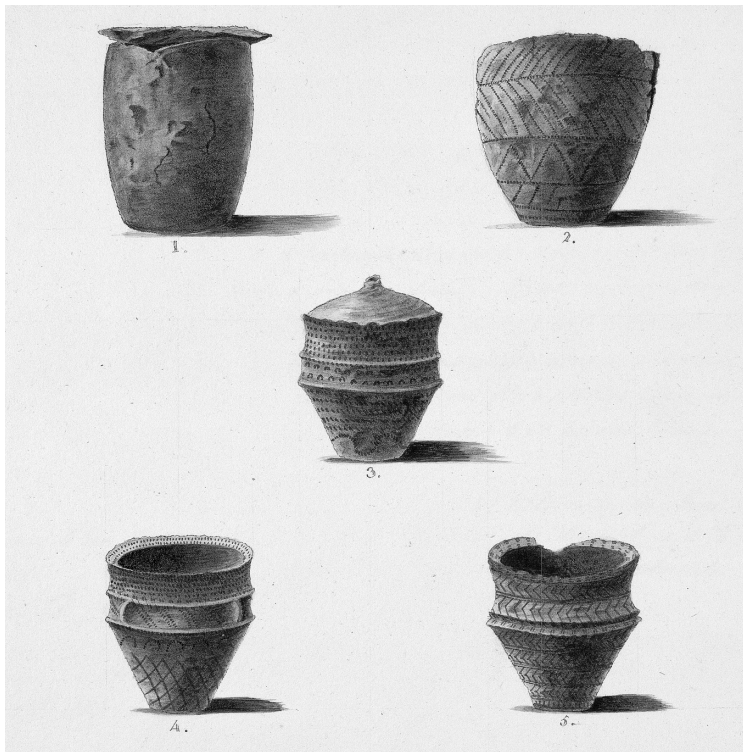

Fig. 3.1 Watercolour from de Cardonnel's Relicta Antiqua*, showing steatite urn from Orkney (no. 1).*

The circumstances in which the recent research on this object took place constitute a catalogue of happy coincidences. In the summer of 2003 Andrew Martin, Depute Librarian of the NMS Library, rang me about some watercolour images of archaeological sites and artefacts that de Cardonnel had painted for his hand-written publication, *Relicta Antiqua* (*c.* 1790–1800). Some of the images – including one of this urn, as it turned out (fig 3.1, no. 1) – were being scanned in for an online Internet project (*Resources for Learning in Scotland* 2003), and Andrew needed someone to check the accompanying text. Two days later, my colleague Fraser Hunter, who had recently been on a study visit to the MoA to investigate the de Cardonnel link with Scotland and knew that I was interested in specimens of Scottish human remains for a current radiocarbon dating project, drew my attention to an note by J. D. Cowen in Volume 45 of this journal (Cowen 1967) about 'A steatite vessel from Orkney'. To my amazement, this was the very same urn! Through the kindness of Lindsay Allason-Jones, Director of Archaeological Museums, and with funding from the SAS, I was then able to arrange for various kinds of research to be undertaken into the urn's contents and cover.

DISCOVERY AND THE INITIAL ACCOUNTS OF THE URN

According to Cowen's research, the original account of the discovery of this urn was a manuscript written by the antiquarian George Low (1747–95), minister of Birsay and Harray.

The manuscript in question is now missing, but it was cited by another antiquarian, Richard Gough, who in 1789, in his updated version of William Camden's *Britannia* (1st ed., vol. 3, p. 724), wrote

> In another hillock [close by Stromness] opened at a small distance [from other tumuli] was a small stone chest about a foot square, containing a small quantity of the inclosed earth. Near the centre was a large coffin, in which was an urn wrapped up in leather with a small stone cover, and containing ashes and bones.

Cowen was able to link this account to de Cardonnel because a note, written by de Cardonnel on a packet containing fragments of the animal hide, referred to the Gough account. From considering Low's known movements and activities, Cowen deduced that the urn must have been found between 1773 and 1779.

What Cowen did not know was that the NMS library contains, in the archives passed to it by the SAS, a copy of de Cardonnel's *Relicta Antiqua*. The urn is featured in Plate 10 of Volume 1. The caption for this illustration reads:

> Fig. 1 is an Urn found in Orkney, in a Tumulus opened close by Stromness, it was inclosed in a large stone Coffin and was wrapt up in the Hide of some Animal, the hair short and very soft, of a dark chestnut Colour, the Urn was filled with Ashes & bits of burnt bones. It is made of gritty Clay much discoloured and had a Cover of Slate, its height is 8 inches & 6½ In. wide at top.

At the end of the caption for the next urn (which does not make it clear whether the latter had also been found in Orkney), he adds, in typical antiquarian manner of the time, 'These two are Danish'. This account tallies with Gough's. *Relicta Antiqua* was compiled between *c.* 1790 and 1800, and it is likely that the urn was already in de Cardonnel's possession when he drew and described it. (Some of the other items featured in his publication had simply been borrowed.) We can say that because we know that de Cardonnel was already residing in Newcastle by 1793, when he was an Honorary Member of the Newcastle Literary & Philosophical Society, his address being given as Chirton [House]. On what must be a second wrapper containing remains of the animal hide, he had written: 'Remains of the Hide supposed to be of the deer in which the stone Urn was wrapped which was found in Orkney and which I now have' (fig 3.2). It is, arguably, unlikely that the urn returned to Orkney (or elsewhere) in the interval between

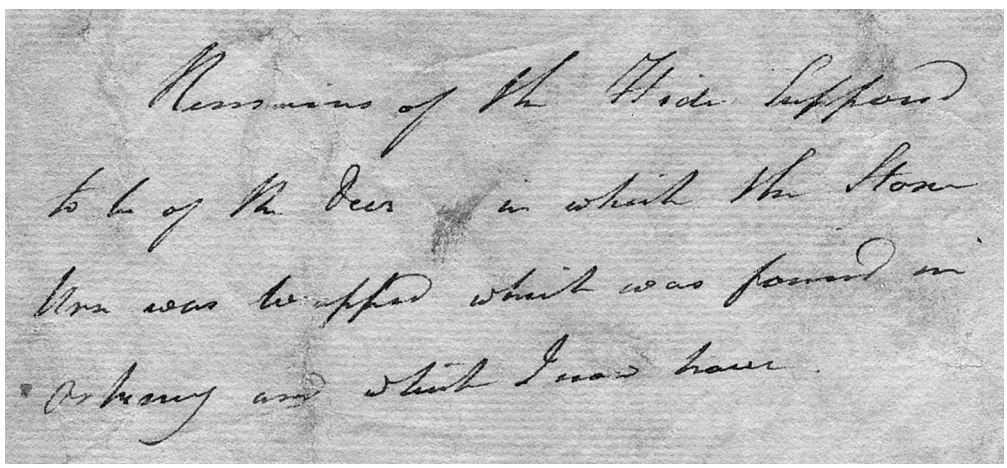

Fig. 3.2 Label on a wrapper of steatite urn from Orkney, containing fragments of the animal hide.

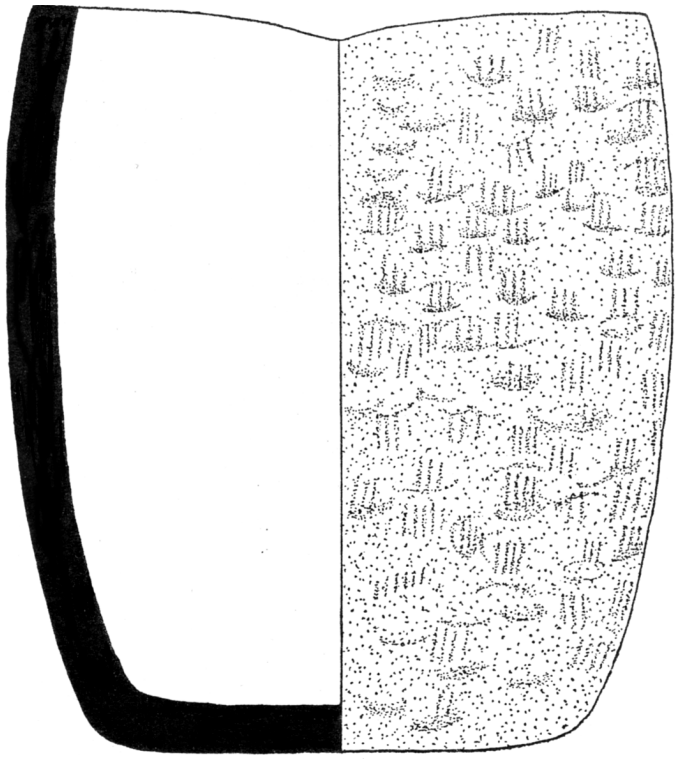

Fig. 3.3 Illustration of steatite urn from Orkney, by Miss Hurrell; from Archaeologia Aeliana, 4th series, vol. 45 (1967), p. 190 (1:2). Reproduced by courtesy of the Society of Antiquaries of Newcastle upon Tyne.

the publication of *Relicta Antiqua* and its donation to the Society of Antiquaries of Newcastle upon Tyne in 1829.

THE URN

According to Cowen's description, the urn is 190.5 mm (7½″) high, with a rim diameter of 165 mm (6½″) and a base diameter of *c.* 127 mm (5″). The wall thickness is *c.* 13 mm (½″) at the rim, increasing substantially towards the base (although this is not reflected in the accompanying illustration, fig 3.3). The material is steatite – which must have been imported to Orkney from Shetland, as steatite does not outcrop in Orkney – and, as Cowen notes, the exterior is covered with faint toolmarks in 'an irregular, all-over scale pattern'. Although de Cardonnel had described the material as 'gritty clay' in *Relicta Antiqua*, it is clear from his inscription on the wrapper that he realised it was actually of stone.

It appears that some of the urn's contents may have gone astray, since Cowen refers only to 'a handful of calcined bones', whereas de Cardonnel had implied that it had been full. As for the 'deer' hide cover, it seems that only part of this was ever in de Cardonnel's possession. And as for the position of the urn when found, to judge from Low's account and de Cardonnel's description and illustration of the urn, it seems likely that it had been found upright, with the slate cover on top of it.

RESEARCH ON THE URN, 2003–2005

The new research carried out on this urn has focused on: (1) identification of the human remains; (2) obtaining a radiocarbon date from them; (3) identifying the hide cover, to check whether de Cardonnel's claim of it being deerskin was correct; and (4) the analysis of fragments of a metal object, found among the contents of the urn.

1. Human bone identification (*Kathleen McSweeney*)

The following account represents a summary of a detailed osteological report, a copy of which is lodged in MoA.

The total weight of the material presented for identification was 460 g, of which 366 g consisted of cremated bone; the rest comprised charcoal dust, along with probable pyre residue (clinker and slag-like material and two unburnt, natural stone fragments); two nut or fruit kernels, apparently unburnt (and probably extraneous and relatively recent); and six fragments of a metal object (for whose identification see below).

In general, the bone fragments were an overall grey colour; one was bluish-grey. This suggests that a temperature of at least 645°C had been reached during the cremation process. However, the presence of several fragments that were simply blackened, and of one piece of cancellous bone, possibly from a pelvis, which was a light reddish-brown colour, suggested that burning was not even throughout. Indeed, the latter was so different from the others that it could have come from a different individual.

Leaving aside this last mysterious (and extraneous?) fragment, the bones represent the highly incomplete remains of a single individual, adult, at least 20 years old, and probably male. Some 32% of the bones were unidentifiable; 179 fragments were identified and these came from the cranium, mandible, spine, ribs, scapula, upper and lower limbs and hands and feet, with some anatomical areas represented by only a few pieces. No teeth were present. The identification of the individual's sex is based on a fragment of the mastoid process of the skull, which appeared very large and is more likely to belong to a male than to a female. Two pathological lesions were noted on two small bone fragments: one, probably from a rib, had irregular growth and thickening over the external surface. The other, on an unidentifiable bone fragment, consisted of pitting on the external surface of the bone. The causes of these lesions are unclear.

2. Radiocarbon dating of the remains

Thanks to a recent development in radiocarbon dating, refined in Groningen University by Jan Lanting and Dr Johannes van der Plicht, it is now possible to obtain accurate and fairly precise Accelerator-Mass Spectrometry radiocarbon dates from cremated human bone. This method focuses on the structural carbonate of bone (bio-apatite: Lanting et al 2001), and is far more reliable than previous attempts to date charred and burnt bone, which had focused on organic carbonate (Aerts *et al* 2001). One fragment of bone from the Orkney urn – a skull fragment – was therefore submitted for dating, as part of the NMS' broader *Dating Cremated Bones Project*, which is co-funded by the SAS (with additional assistance from Historic Scotland, Aberdeenshire Archaeology and the University of Groningen). This project has been examining various kinds of Bronze Age and Neolithic funerary material, and one of its main aims has been to establish a reliable typochronology of the various urn types in use in Scotland. Many of the results have already been published (e.g. Sheridan 2003a, 2003b, 2004b), and more are about to appear (Sheridan in press).

The result obtained for the cremated bone sample from the Orkney steatite was intriguing:

> GrA–24015:1585±40 BP, cal AD 420–540 at 1σ, cal AD 390–600 at 2σ.

This represents by far the latest radiocarbon-dated example of a steatite urn from the Northern Isles (see below, *Discussion*). In order to double-check whether this result was a freak, and through the kindness of Jan Lanting and Dr Johannes van der Plicht at the Groningen laboratory, this sample was re-dated, with the following result:

> GrA–24198:1620±40 BP, cal AD 390–540 at 1σ, cal AD 340–540 at 2σ.

This falls within one standard deviation of the first result; the mean of these two dates is:

> Average of GrA–24015 & 24198: 1600±30 BP, cal AD 420-540 at 1σ, cal AD 400–540 at 2σ.

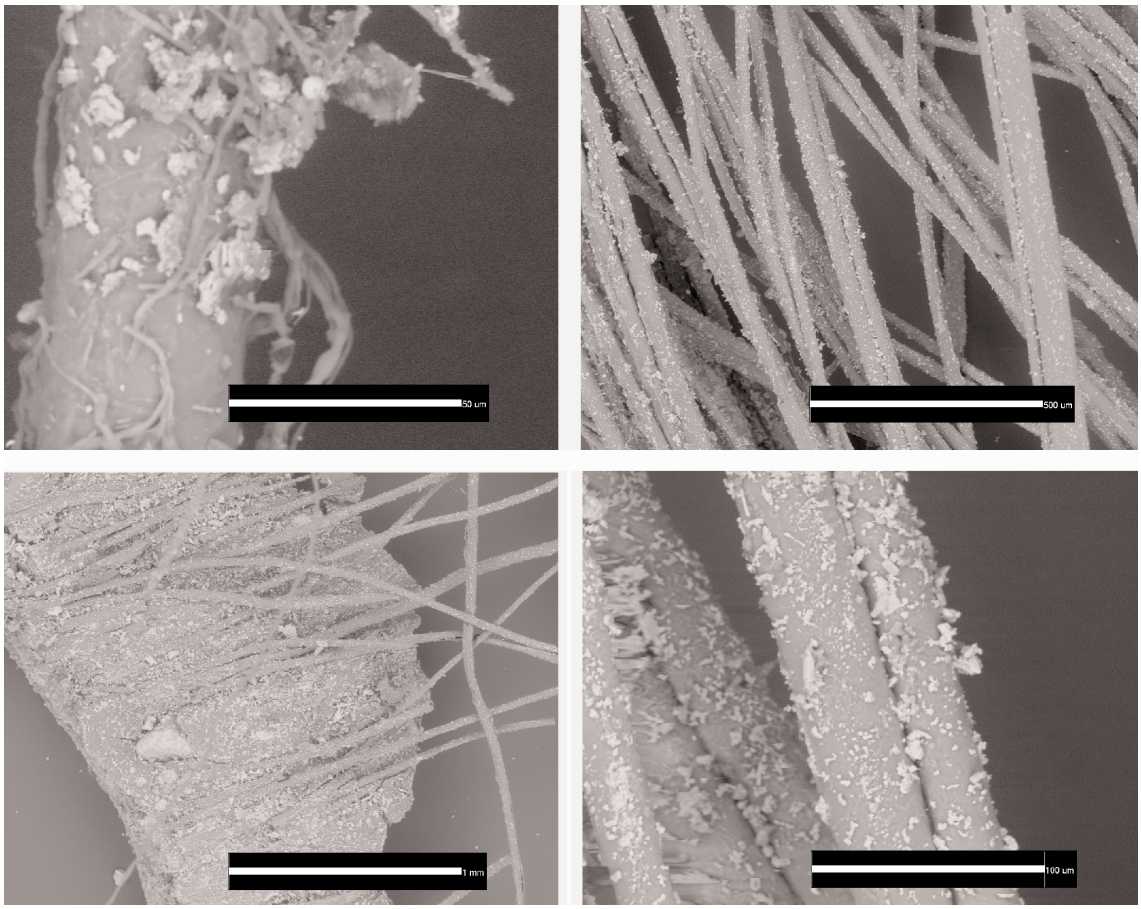

Fig. 3.4 SEM images of fibres and skin from the hide cover of steatite urn from Orkney. Scale bars: top L, 50 µm; top R, 500 µm; bottom L, 1 mm, bottom R, 100 µm. (1 µm = 0.001 mm). Images: NMS.

This confirms that this funerary assemblage definitely dates to the mid-first millennium AD and is therefore of Early Historic date.

3. Identification of the hide cover

In order to check de Cardonnel's intriguing claim that the hide that had covered the urn was of deerskin, a tiny sample of the surviving fragments of the hide was placed in the NMS' scanning electron microscope (SEM), and the resulting high-magnification images (fig 3.4) were sent to Dr Esther Cameron, a specialist in archaeological leather based in Oxford.

Unfortunately, Dr Cameron reported, the hair in question had lost its outer layer, and was therefore of low diagnostic value as far as ascertaining the species using this particular technique was concerned. On Dr Cameron's advice, the sample was then sent to Penelope Walton Rogers of The Anglo-Saxon Laboratory, for examination using optical microscopy. This proved to be significantly more successful, and the following report was received:

Report on the animal hide (*Penelope Walton Rogers*)

All work was carried out with an optical microscope which allows the fibre to be viewed by both incident light, for the surface of the fibre, and transmitted light, for the internal structure. The hide sample was first examined at x64–x160 magnification and then fibres were extracted and viewed at magnifications up to x640, as whole-mount preparations (lengthways view) and cross-sections.

The hide has survived as a thin surface layer of skin, pierced by hairs. The full length of the fibre is present, from roots protruding at the back to intact tips at the front. The length of the roots indicates that the hide originally would have been several millimetres thick, while the 10–15 mm length of the fibres on the front shows that this was a very short-coated animal (as de Cardonnel observed). The hairs are 25–55 microns diameter, with a poorly-preserved cuticular scale pattern which, where visible, is irregular mosaic. Approximately 30% of the fibres have a medulla (a central channel) which is narrow and continuous or fragmented. The fibres have a robust circular cross-section with the medullae concentric. Pigmentation granules of moderate density are evenly distributed through all fibres and indicate a light brown (dun) beast.

This may be confidently identified as cattle hide from an adult animal. Calf hair has different diagnostic features (Wildman 1954, Appleyard 1978) and the length of fibre, combined with adult characteristics, indicates that the coat must have been naturally short. The narrow range of diameters is more typical of primitive domesticated cattle than of the wild ox (Ryder 1969). The use of animal pelts, particularly cattle hides, to cover and wrap bodies in prehistoric inhumations in northern Europe is well established, but they have been less frequently recorded in cremation burials. There is a distant comparison for the Orkney urn in a fragment of pelt, possibly cattle hide, on the outside face of a bucket in an Iron Age grave at Westhampnett, Sussex, where the cremation had been placed, unurned, in the grave (Walton Rogers 1997); and the fur of a small mammal was also found with a La Tène III cremation at Welwyn Garden City, Hertfordshire (Ryder in Stead 1967, 34).

4. Analysis of the fragments of a metal object

The six small fragments of a thin metal object that had been found among the urn contents were analysed using X-ray fluorescence spectroscopy in the NMS Department of Conservation & Analytical Research, by Dr Jim Tate. The metal was found to be brass, and inspection of the fragments by NMS curator George Dalgleish confirmed that the object had been machine-worked. These features demonstrated beyond doubt that the fragments are of relatively recent date, and thus are unconnected with the urn's original contents.

DISCUSSION AND CONCLUSIONS

The recent 'appliance of science' to this old find has substantially enhanced our understanding of it. We can now say that the urn had contained the remains of an adult, probably male, who had died around AD 500; and that it had been wrapped in a cattle hide – not a deerskin, as de Cardonnel had suggested – from a primitive domesticated variety of cattle, the hide coming from an adult which was light brown in colour.

The radiocarbon date provides important confirmation that steatite urns were indeed used during the first millennium AD, as the evidence from Oxtro (Orkney) and Uyea (Shetland), reviewed below, had previously suggested. Thanks to the NMS *Dating Cremated Bones Project*, we are now able to present a broader chronological view of the use of steatite urns in general.

The use of steatite vessels as cinerary urns is known only from the Northern Isles and from Eigg (Wilson 1863, 206–7; Henshall 1963, 150), although a sandstone version of a large Orcadian steatite urn form (complete with sandstone 'accessory vessel') is known from Aucorn in Caithness, and is on display in the Museum of Scotland in Edinburgh. In Orkney, steatite urns fall into two broad size categories:

large (up to 600 x 600 mm) and small (the 'de Cardonnel' urn being among the smallest). Some steatite urns, both large and small, have one or more grooves just below their rim on the exterior; others, like the de Cardonnel urn, have not. Many have toolmarks, and, as Audrey Henshall has noted (1963, 150), many have sooting on their exterior. This sooting was interpreted by Henshall as evidence suggesting that the vessels had previously been used in a domestic context, for cooking, but Paul Sharman proposes (*pers comm*) that in some cases, urns may have been placed on the funerary pyre.

The results of the NMS *Dating Cremated Bones Project* have established that steatite urns were in use in Orkney from as early as 2100/2000 BC (at Quandale mound 8), with examples ranging in date down to *c.* 1500 BC ('Orkney', findspot unspecified; Sheridan 2003a, figs. 13.13, 13.14). These findings are consistent with the results obtained for Jane Downes (of Orkney College) from the large urn found in 1994 in a barrow at Linga F[i]old (Downes 1995): alder charcoal from that urn produced a date in the second quarter of the second millennium BC (Ashmore 2003, 44). They are also consistent with the findings from Loth Road, Sanday, where a general date bracket of 1700–1300 BC was obtained (from non-associated organic material) for a steatite urn containing cremated remains (Sharman *pers comm*).

The NMS project has also produced a date in the first millennium BC for a steatite urn from Uyea in Shetland: cremated bone from this urn produced a date of 2480±60 BP (GrA–21621, 790–410 cal BC at 2σ: Sheridan 2003, figs. 13.13, 13.14).

The radiocarbon dates obtained for the 'de Cardonnel' urn therefore extend the currency of steatite urn use yet further, into the first millennium AD. There have been at least two other finds of steatite urns where a date in the first millennium AD has seemed likely. These are:

1. Oxtro in Orkney where, as Petrie pointed out (1890, 76), a cemetery of short cists overlay the remains of a broch. One of these cists contained a 'stone urn containing ashes and fragments of bones'; another had a re-used fragment of a Pictish stone as its cover slab; and
2. Uyea in Shetland, where another re-used fragment of a Pictish stone had been used as the cover of a steatite urn (*Catalogue of the National Museum of Antiquities of Scotland*, 1892, 260, IB 18).

The fact that steatite urns have now been demonstrated to have been used in the Northern Isles at various times over a 2500-year long period need not imply a continuous funerary tradition. Very little is known about funerary practices in general in the Northern Isles between around 1500 BC and *c.* AD 500, although Patrick Ashmore's recent review of the evidence for first-millennium AD burials in Orkney (Ashmore 2003) has concluded that inhumation predominated and that cremation was only occasionally practised. Since that publication, Moore & Wilson's work at Berst Ness (Knowe of Skea) on Westray has produced evidence for cremation as well as inhumation in an early-to-mid-first millennium AD context (Moore & Wilson 2002; 2003). The continuing application of AMS radiocarbon dating to cremated bone, as well as to unburnt bone and to other organic material, will no doubt help to clarify the picture in due course.

Finally, this exercise in revisiting an old find has demonstrated the value of serendipity (and of curation!) in archaeological research. Thanks to its careful recording by 18th century antiquarians, careful curation by MoA and careful investigation now, we are able to recognise the de Cardonnel urn as an exceptionally important item, providing invaluable evidence for the first millennium AD use of steatite vessels as urns in the Northern Isles.

POSTSCRIPT

After the text (above) was completed, my NMS colleague Trevor Cowie kindly drew my attention to a reference to the possible presence of cattle hide in another Orcadian steatite urn find, from Sebay (Orkney Museum Reg. Nos. 1985.4–6; NMRS No. HY50 SW 4). Here the

urn, found in 1963, is likely (on typological grounds) to date to the first half of the second millennium B.C. It is considerably larger than the de Cardonnel example, being 419 mm high and with a rim diameter of 432 mm. Its mouth had been covered by a stone slab. The alleged hide material was found on top of the bones inside the urn, and it survives as a mass of hairy fibres. These have now been examined by Penelope Walton Rogers, on behalf of NMS and Orkney Museums. She concludes that these do indeed belong to an animal hide, identified as 'bovid, possibly calf', from a mid-brown animal. It therefore appears that the bones may have been deposited in the urn inside a (?) calfskin bag. Unfortunately the cremated bones themselves do not appear to have been passed to the Orkney Museum.

ACKNOWLEDGEMENTS

Lindsay Allason-Jones is thanked for facilitating access to the urn's contents, and for useful information and advice; Trevor Cowie, for information on Adam de Cardonnel and on the Sebay find; and Paul Sharman, for permission to cite an unpublished date, for useful comments on the text and about Orkney funerary rites, and for sharing the results of his work on steatite vessels.

NOTES

[1] This note was written by Alison Sheridan (NMS), with contributions from Kathleen McSweeney (University of Edinburgh), and Penelope Walton Rogers (The Anglo-Saxon Laboratory), and with advice from Esther Cameron (freelance).

[2] Steatite, commonly known as soapstone, is a massive variety of talc which, in Scotland, outcrops on Shetland and at a few locations in western and north-east Scotland. In Orkney, steatite imported from Shetland is known to have been used at various periods from as early as *c.* 2000 BC; Viking settlers, familiar with the material from Norway, used it in preference to pottery.

[3] Abbreviations of names of organisations:

MoA: Joint Museum of Antiquities of the Society of Antiquaries and University of Newcastle upon Tyne.

NMS: National Museums of Scotland.

SAS: Society of Antiquaries of Scotland.

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