

Three cists and a possible Roman road at Barbush Quarry, Dunblane, Perthshire

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with a contribution by Mary Davis

ABSTRACT

Over the past 50 years a number of archaeological discoveries have been made at Barbush Quarry, Dunblane including a coin hoard, Neolithic pottery and several prehistoric funerary features. During the supervised removal of spoil heaps at the quarry a concentration of archaeological features was identified and later excavated. The features included three short cists that were fully excavated. One contained a cannel coal and jet disc-bead necklace and another a poorly-preserved skeleton and a Food Vessel. On the basis of the finds an Early Bronze Age date is likely but a radiocarbon determination on poorly preserved skeletal material has provided an unexpectedly late date of 2845 ± 50 BP. Other features included two substantial, broadly parallel ditches that are associated with an area of packed gravel and cobbles in the northern part of the site. These could potentially represent a degraded section of the Roman road that is known to run close to the site.

INTRODUCTION

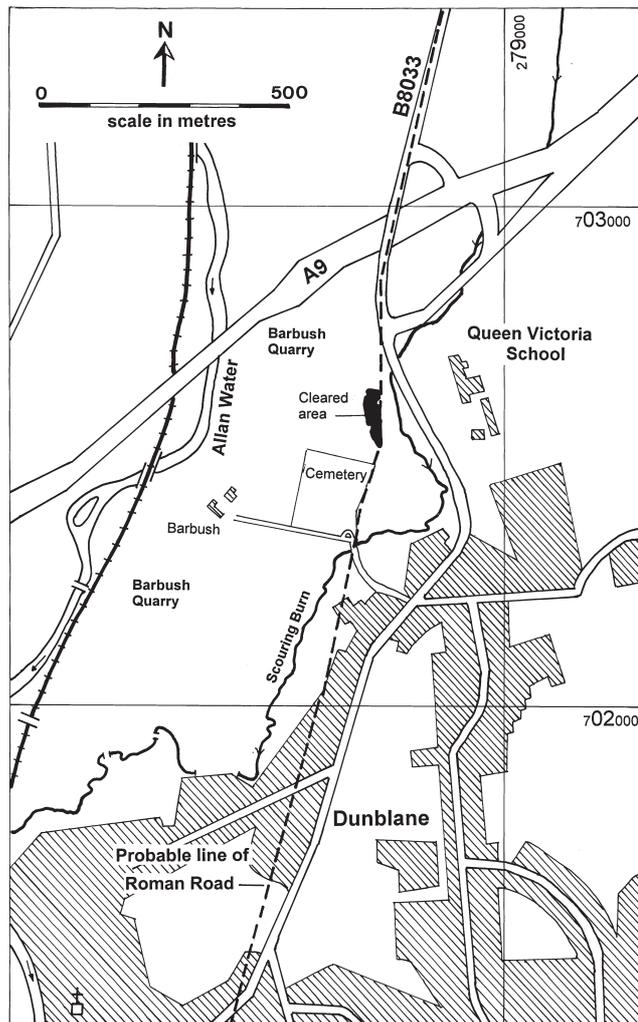
T Holden

An archaeological watching brief was undertaken by Headland Archaeology Ltd at the request of CALA Homes (Scotland) Ltd during the removal of spoil heaps at the former quarry at Barbush, Dunblane, during August and September 1999 (illus 1). An area measuring roughly 100 m by 30 m was monitored and a number of features of archaeological interest were identified. As a result of this, further controlled excavation was required by Stirling Council.

The site is located in the eastern part of Barbush Quarry in an area directly to the north of Dunblane Cemetery and some 50 m from the steep eastern banks of Scouring Burn (NGR: NN 7875 0255 site centre: illus 1). Prior to quarrying of the fluvio-glacial sands and gravels the site lay at the foot of the east-facing slope of a substantial knoll. Throughout the latter part of the 20th century quarrying has reduced the knoll so that the site presently lies in a strip of undisturbed ground within a gently undulating terrain. To the knowledge of the previous owner, Mr K Fleming, this strip has never been ploughed by machine although it had been the site of machine-threshing and stack yards within living memory.

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ILLUS 1 Location of the site showing possible line of the Roman road linking Stirling–Camelon–Strageath as it passes through Dunblane. (Based on the Ordnance Survey map © Crown copyright)

PREVIOUS ARCHAEOLOGICAL WORK

There have been a number of previous recorded archaeological finds at the quarry, such as a silver coin hoard (NMRS NN70SE 8), a corn drier (Barclay *et al* 1982) and several of prehistoric artefacts including pottery, a jet-like armlet, a cremation burial and flints (NMRS NN70SE 7; Cowie 1992). From conversations with Mr Fleming it would appear that other cists, linear features and middens, similar to those excavated as part of this fieldwork, have been destroyed without record over the last 50 years. One example for which we do have records was a cist excavated by Main (1985) and, although no finds were encountered, the description indicates a structure similar to those reported here. Mr Fleming also reports the presence of a prehistoric or early historic settlement located close to the summit of the knoll that was visited by Stuart Piggott in the 1960s. This has since been destroyed without record.

A Roman road running northwards from Dunblane towards the Roman fort at Ardoch is thought likely to pass through this narrow strip of undisturbed ground, between what used to be

the knoll and the burn (RCAHMS 1958; illus 1). This was possibly identified by a local amateur group of archaeologists close to the cemetery wall to the south of the site (Mr K Fleming, pers comm) while the likely course of the road some 2 km to the north east at Drumallan farm appears to be indicated on air photographs (RCAHMS 1982: PT/12108).

METHOD

During the initial watching brief phase of this project the topsoil was removed by a 360° tracked excavator with a 1.8 m wide toothless bucket under archaeological supervision. A number of archaeological features were noted during this operation and their locations were marked. Following this, an area of approximately 1325 sq m incorporating the known features was cleaned by hand (illus 2). All structural remains were fully excavated. A 10% sample of ditches and gullies was excavated and pits and post-holes were sectioned as appropriate. Bulk samples (up to 30 litres) were collected from secure sediment contexts for the recovery of palaeoenvironmental materials and charcoal for radiocarbon dating. These samples, however, revealed low levels of charcoal and hazel shell and only a few are specifically mentioned in the text.

The only constraints on excavation were the close proximity of the site to local housing and a public right of way. For reasons of security, therefore, once the cists had become obvious to passers-by full excavation down to natural had to be completed by the end of the working day. This imposed an urgency to the excavation that was not ideal for controlled recovery of the more delicate remains.

EXCAVATED FEATURES

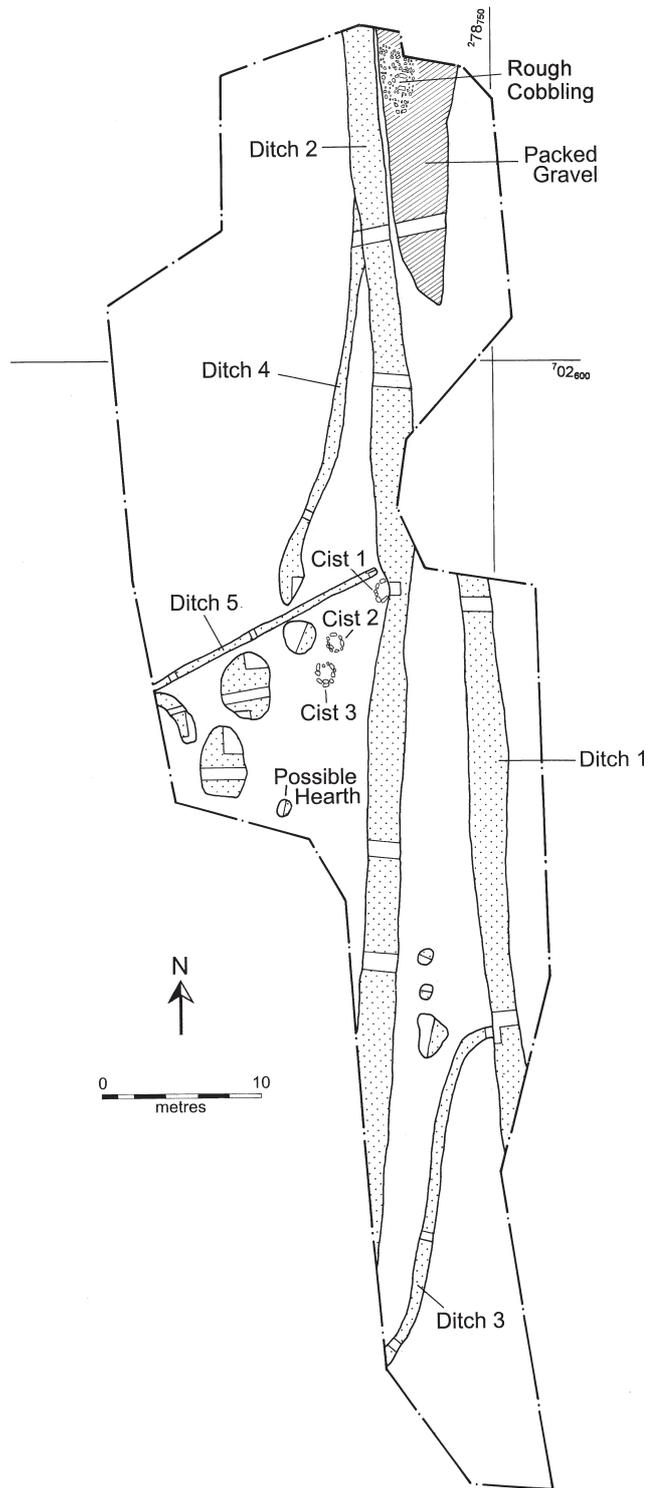
LINEAR FEATURES AND POSSIBLE ROAD

Two of the most prominent features on the site were the two, rounded V-shaped, ditches approximately 1.8 m wide and 0.5 m deep, running N/S through the site (illus 2: ditches 1 & 2). In the central part of the site these were approximately 4 m apart but they diverged to approximately 7.5 m to the south. In the northern part of the site, the eastern ditch could not be identified beyond the un-excavated baulk. At this point, close to the field perimeter, disturbance by tree and hedge roots and animal burrowing had blurred the otherwise clear boundaries between contexts.

Over most of the site these ditches had been truncated and there was no evidence for any structure between them. However, in the extreme north of the site, close to the corner of the present field boundary and therefore somewhat protected from deep ploughing, lay an area of rough cobbles set within an area of packed gravel 0.15–0.2 m deep, extending to the south and overlying the largely stone-free natural subsoil. This feature is interpreted as the surviving traces of a road or trackway which was progressively better preserved as it approached the less disturbed area near to the field boundary. The only find of relevance was a single piece of roof tile, possibly Roman, from the western of the two ditches, and five sherds of East Coast redware from a green glazed jug (13th–15th century: Derek Hall, pers comm) recovered from the very top of the ditches during cleaning. The western ditch cut Cist 1 indicating that it must post-date it. It is known that the Roman road from Camelton to Strageath runs somewhere close to the site and it is suggested that this feature is a possible candidate.

OTHER LINEAR FEATURES

There were a number of smaller linear or curvilinear ditches across the site. Two of these (illus 2: ditches 3 & 4) were approximately 0.7 m wide and up to 0.4 m deep; they intersected the larger ditches, 1 and 2,



ILLUS 2 A plan of the excavated area showing the principal features

respectively. Their fills were indistinguishable from those of the larger ditches and it is possible that they are contemporary, but their function is unknown.

A further ditch (Ditch 5), measuring 0.5 m wide and 0.25 m deep, runs for 15 m approximately SW/NE. It was undated and stratigraphically unconnected to any other features on the site. It appeared to run up to Ditch 2 and may therefore represent a boundary ditch abutting what may have been a prominent landscape feature such as a Roman road. Unfortunately, however, no dateable material was obtained from this ditch.

PITS

In the western part of the cleared area were six pits varying in size and character. Three were between 2.2 m and 5 m across, sub-circular in plan, varying between 0.3 m and 0.5 m deep and with a dark loamy fill. No finds were encountered but the darkness of the fill compared to surrounding features with more leached fills suggest that they were of relatively recent date. It would seem likely that they represent quarry-pits of some type. Only one of the remaining pits in this group, measuring 0.5 m in diameter and 0.12 m deep, showed any evidence for *in situ* burning and was interpreted as a possible hearth.

CISTS

A group of three cists was found in the central part of the cleared area (illus 2 & 3). There were no traces of any covering mound. All three cists had been constructed using multiple slabs capped with slightly rounder stones, and were oval or polygonal. All were full of a sandy silt with few inclusions, which had entered through gaps in the capstones or following the collapse of the cover stone.

Cist 1

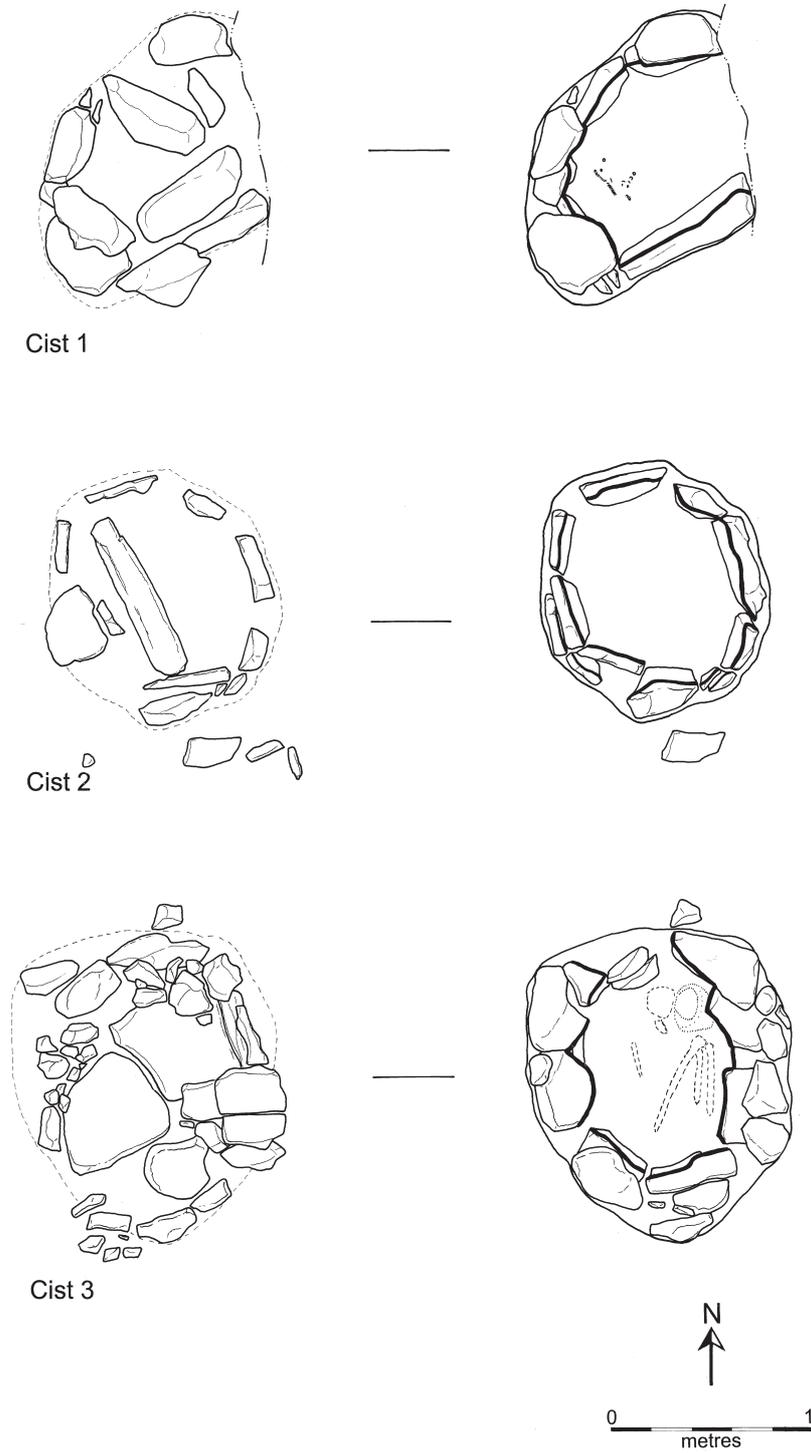
The most northern of the three cists was constructed inside a sub-circular pit up to 1.2 m across and 0.5 m deep with steep sides and a flat bottom. The floor was not lined but the sides were formed of four large, irregularly-shaped flagstones set on end. Resting on their upper edge were several more-rounded stones that had partially collapsed into the cist. No capstone was identified but this, together with some of the lining stones, may have been lost when the cist was disturbed during the cutting of Ditch 2 through its east side. The fill consisted of a sandy silt with few inclusions, but close to the bottom a cannel coal disc-bead necklace with a jet fastener was encountered (illus 4). Few of the beads appeared to have been disturbed, as runs of beads lay intact where the thread had broken. Judging from their position it is likely that the body had been placed lying on its right side, head facing SE. A small flake of undiagnostic worked flint with a faceted platform (Wickham-Jones, pers comm) was also found in the fill but no traces of a skeleton were encountered.

Cist 2

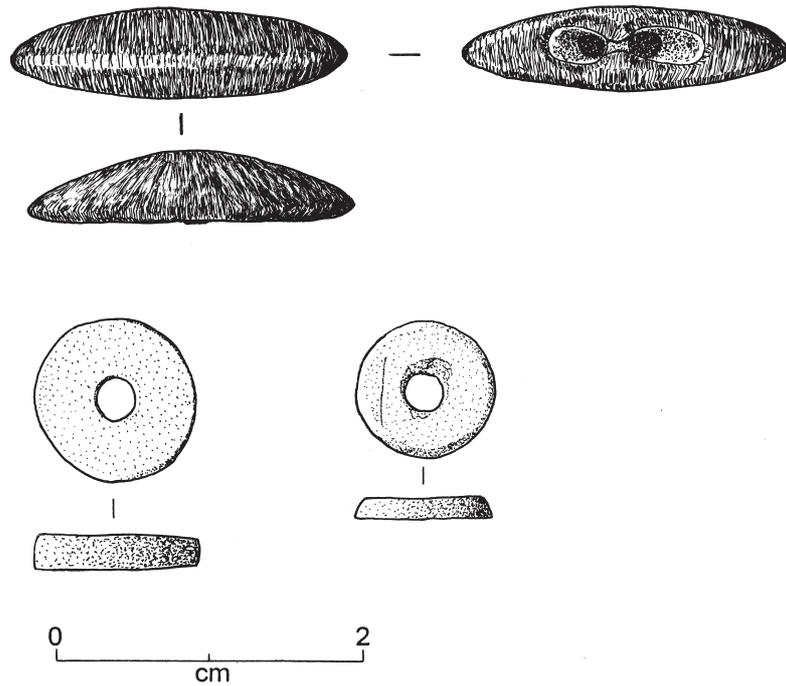
The central cist comprised a pit, sub-circular in plan, measuring 1.3 m long, 1.1 m wide and 0.58 m deep with steep sides and a flat bottom. The floor was unlined but eight relatively thin flagstones had been set around its edge and a large capstone had collapsed into the base, suggesting early disturbance or collapse of the cist. This capstone was not large enough to have covered the whole of the cist and a second stone may therefore have been removed in antiquity. The fill was fully excavated but the only finds encountered were worked stone fragments; one a volcanic rock core fragment and the other a quartzite primary flake, broken at both ends (Wickham-Jones, pers comm). Neither piece was considered culturally or chronologically diagnostic.

Cist 3

The southern cist was potentially the most intact as its large cracked capstone remained in its original position. Eight irregularly-shaped flagstones were set on end into a steep-sided pit measuring 1.6 m long, 1.2 m wide and 0.75 m deep. The floor was unlined. Up to three courses of smaller flat stones had been



ILLUS 3 Plans of the three cists, pre-and post excavation



ILLUS 4 A selection of cannel coal and disc-beads, and the jet fastener

bedded onto the uprights as a crude corbelling onto which the capstone had been placed. This in turn was covered by a series of smaller flat stones over which was a highly compacted iron-rich layer, thought to be a natural deposit. There was no significant void beneath the capstone. Towards the base a substantially complete Food Vessel was encountered (illus 3 & 6; see below). This was upright, tilting to the NNW. Also visible were the extremely fragile remains of an articulated human skeleton. This was in a flexed position lying on its left-hand side with the head pointing approximately north and resting against the pot. It was impossible to remove individual bones because of their poor condition; therefore the whole mass was lifted as a soil block and sieved in the laboratory. Fragments of teeth recovered showed no sign of attrition on surviving occlusal surfaces. Together with the measurements of the femur taken *in situ* this would suggest a tentative age at death of between 9 and 12 years (Julie Roberts, pers comm).

After sieving, sufficient bone was present to allow for an accelerator date and this provided a determination of 2845 ± 50 BP (1049–922 cal BC (AA-36507)); see below for discussion). A single piece of worked flint was found in the compacted layer over the cist. This comprised a flaked core of volcanic rock with a flat platform with flakes removed from one side (Wickham-Jones, pers comm). This piece was neither culturally or chronologically diagnostic.

FINDS

Note: the flint and stone finds from the cists, and the ceramic finds from the linear features, have been mentioned in the preceding text and do not warrant further treatment here.

THE DISC-BEAD NECKLACE FROM CIST 1

A Sheridan & M Davis

This comprises 124 disc-beads plus a boat-shaped, V-perforated fastener (illus 4 & 5). It would originally have been strung with an organic thread, no trace of which survives. The fastener and beads were examined



ILLUS 5 The disc-bead necklace, as reconstructed. (Photo: Trustees of the National Museums of Scotland)

using a Wild Heerbrugg microscope at magnifications from x6 to c x20. The beads, dark grey and blackish in colour, are subtly graded in external diameter from 9.0 to 11.3 mm, increasing in size from the back to the front of the necklace. Their thickness ranges from 1.3 to 3.2 mm, and their neatly drilled, parallel-sided central perforation is (with but three exceptions) 2.25 ± 0.25 mm in diameter. Their material (see below) has been identified analytically as a slightly shaley cannel coal. The fastener is of a different material — Whitby jet — and is very finely made. It is 22.2 mm long, 6.1 mm wide and 5.7 mm high, with diagonal V-shaped perforations extending from its flat underside. It is black, but under strong light areas of dark brown are visible. Its surface has been polished to a brilliant sheen.

The overall length of the necklace, excluding the fastener, is 295 mm; when reconstructed with modern thread and looped around (illus 5), its external diameter is c 125 mm. That the necklace is complete is suggested by the absence of fragments of additional cannel coal beads from the cist; the lack of discontinuity in bead size (which might have indicated the former presence of organic beads); and the wear on the end beads, described below. In turn, this evidence suggests that: i) the necklace had been worn tight around the neck, as a choker; ii) its wearer had a slender neck. It could just have fitted an adult female neck — by comparison, the neck circumference of one of the authors (AS) is 330 mm — but it is equally, or perhaps more likely, that it had been worn by a child or juvenile (cf the age of the individual in Cist 3).

Various features of the beads reveal details of their manufacture. It appears that blocks of raw material had first been shaped into gently tapering rods, their outer surface being carefully smoothed and polished to a low sheen. Next, the edge of each bead was repeatedly struck with roughly perpendicular blows, to detach individual beads. This could arguably have produced the minor edge chipping noted on around half (65) of the beads. Although the intention had evidently been to produce parallel-sided beads, most are very slightly wedge-shaped. That the beads had been individually perforated *after* detachment from the rod — rather than by drilling through the rod, which would have been less labour-intensive, but would have necessitated using rods short enough for the drill to penetrate — is indicated by the consistent presence of chipping around the borehole on one side. Such chips would have become detached from the bead's underside as a result of pressure from the advancing drill. The perforation's cylindrical shape suggests the use of a straight-sided, perhaps hollow drill, and the presence of very shallow dishing around the borehole on the unchipped surface of some beads would be consistent with wet-drilling using an abrasive agent such as sand. Similarly cylindrical boreholes have been observed on disc-bead necklaces from Balfarg Riding School, Fife (Shepherd 1993) and Cloburn Quarry, Lanarkshire (Shepherd 1998), and Ian Shepherd has suggested that a tubular sheet metal drill may have been employed. By contrast, the V-perforation of the jet fastener may well have been done using a solid bit (Shepherd 1981).

Evidence for use-wear is clearest on the fastener and on the two end beads, indicating that the necklace had indeed been worn for some time before burial. The fastener wear is most marked on the bridge between the boreholes (where its surface has been channelled through thread wear) and around the inner edges of the boreholes. Such wear could have occurred if the thread had been knotted at this point before passing through the rest of the necklace. The bridge wear might indicate that some or all of the thread had been wrapped around it, for greater security. The wear on the adjacent end bead would be consistent with rubbing by this knotting and by the loop that must have existed at the opposite end of the necklace. At this far end, the end bead has marked, regular dishing around its borehole, consistent with rubbing from the knot used to secure the thread loop. Thus, even if the fastener had previously been used with another necklace, the evidence from the Barbush beads demonstrates that this necklace had indeed been worn, and had been tightly strung. Other evidence for wear is limited. Six beads show shallow concentric grooving on one of their flat sides, which could have occurred if a grit had become trapped, and rotated as the beads rubbed against the wearer's neck. Some beads have a low sheen on their sides, which again could have resulted from wear; and six beads have a slight irregularity in their borehole shape, which might have resulted from thread wear.

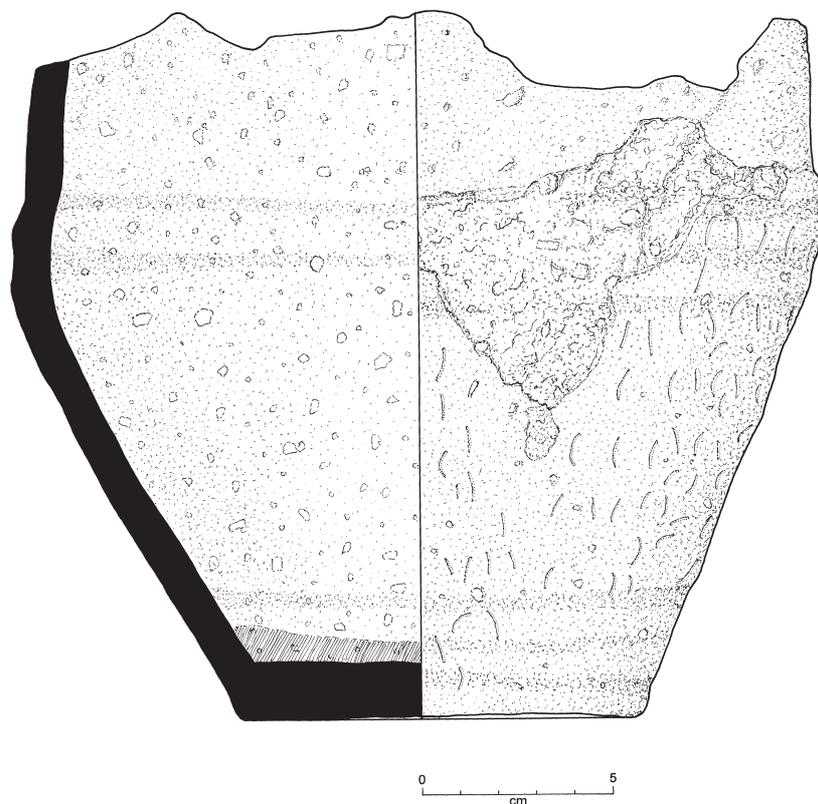
The beads' raw material was identified through microstructural and compositional analysis, using the NMGW/Cardiff University CamScan MaXim 2040 analytical scanning electron microscope with a low vacuum chamber, plus an Oxford Instruments Link Isis energy-dispersive X-ray spectrometer. It is a slightly shaley cannel coal, compact but brittle (as reflected in the borehole chipping). One bead displays extensive laminar cracking. Several beads have traces of a creamy to yellowish crystalline impurity, as is sometimes found in cannel coals and shales. As for the fastener, its colour, texture, structure and surface finish reveal it to be of jet, and its most likely source is Whitby in Yorkshire, some 275 km to the SE (for other Scottish Bronze Age jet objects, see Davis 1993; Sheridan & Davis 1995; 1998).

A note on conservation: as with many such finds, the pieces were slightly damp on excavation, and the beads showed a tendency to crack on drying. Immediate remedial consolidation by NMS conservator Belén Cobo del Arco arrested the process and prevented catastrophic cracking, although the beads remain extremely fragile. This underlines the importance of obtaining professional conservation attention for this kind of material as soon as possible after discovery.

THE FOOD VESSEL FROM CIST 3

A Sheridan

This is a coarse, vase-shaped, basically bipartite Food Vessel, complete but for its rim (illus 6 & 7a). In plan it is oval, possibly due to mis-shaping during manufacture. It has a roughly vertical neck, a tapering belly,



ILLUS 6 The Food Vessel from Cist 3

ridged just above the base where coil joints had been imperfectly smoothed, and a flat base. At around two-thirds of the pot's height there is an uneven shoulder groove, which looks as though it has been defined by running a finger around the pot at this point, and above and below it. The surviving height of the pot is 192 mm; at the shoulder it is 190–205 mm wide; the base diameter is 105 mm; and the wall thickness is around 13 mm.

The uneven exterior and inner surfaces had been coated with a self-slip prior to decoration, and in places fingertips had been used to smooth the slipped surface. The neck has a slightly corrugated appearance, due to the uneven vertical smoothing of its surface. Decoration consists of an irregular mass of nail (probably thumbnail) impressions, covering most of the exterior surface. Some of these had been done with the nail facing to the right, others to the left.

The exterior and interior are a buff to orange-buff colour, and the core is blackish, indicating rapid firing. One large area of the exterior surface is missing. There are patches of a thin, blackish, discontinuous encrustation on the interior, extending over much of the base and up to the neck on one side—the side onto which the pot had tilted in the cist (illus 7b). There are also traces of this on the exterior, including a patch on the neck. This encrustation may well represent the residue from the pot's evaporated former contents; and its distribution may indicate that the pot had tilted early in its post-depositional history. The drip-like patch on the neck could conceivably relate to spillage during deposition.

The fabric is heavily gritted, almost exclusively with angular crushed fragments of a hard blackish rock, up to 11 mm by 6 mm in size. Their density in the fabric is around 15–20%. They protrude through both surfaces, despite attempts to conceal them on the exterior.



ILLUS 7 The Food Vessel from Cist 3: a. exterior; b. interior, showing location of residues. (Photos: Trustees of the National Museums of Scotland)

DISCUSSION

T Holden & A Sheridan

Previous finds in Barbush Quarry such as the Neolithic pottery reported upon by Cowie (1992) indicate a Neolithic presence in the area but the earliest dated features on this site are the cists. Each was constructed in a similar style in a rounded stone-lined pit, and their close proximity would suggest broad contemporaneity. The disposition of the cists, and the absence of a covering mound, suggest that this was a flat cemetery. Whether it was originally more extensive is unclear but Mr Fleming, the former land-owner, reports that other cists had been destroyed without record over the past 50 years, but their location is unknown. Another potentially similar example was also excavated some 700 m away by Main (1985). A cremation with a calcined flint knife found nearby (NN 785 026) around 1951 is likely to post-date the cists, but not necessarily by a long interval (*Proc Soc Antiq Scot*, 86, 1951–2, 210).

The cists' location, on a sand and gravel plateau, is echoed in numerous other Early Bronze Age flat cemeteries such as Almondbank and Westhaugh of Tulliemet in Perthshire (Stewart & Barclay 1997) and Aberdour Road, Dunfermline, Fife (Close-Brooks *et al* 1972). The cists' irregular shape can also be paralleled elsewhere (eg in cists X and XI at Almondbank) and relates to the nature of the locally-available stone. The youth of the occupant of Cist 3 — and possibly also Cist 1 — can be paralleled at the cemetery at West Water Reservoir (Hunter 2000). Here, in the seven cases where identifiable remains survived, no individual was older than 25; where more precise estimations could be made, the ages ranged from 3–5 to 18–25 years.

The presence of a disc-bead necklace in Cist 1 suggests that the deceased had been accorded high status. In Scotland, there have been around 30 finds of complete or fragmentary disc-bead necklaces (including several finds of just a single or a few disc-beads), plus a further eight necklaces — and one belt — comprising both disc and fusiform (barrel-shaped) beads. Both types of necklace are mostly found in southern Scotland, with a scatter along the north-east coast from Moray to Orkney. The Barbush example lies well within the southern Scottish distribution. The

TABLE 1

Numbers and dimensions of beads in complete and near-complete disc-bead necklaces (based on Shepherd 1993, with additions). Dimensions in mm; overall length excludes any fastener that may be present.

Findspot	No of beads	External diameter		Thickness		Overall length	References
		Range	Mean	Range	Mean		
Barbush Quarry	124	9.00–11.30	10.44	1.30–3.20	2.40	295.0	This paper
Harehope, Peeblesshire	127	7.00–11.50		1.50–2.00		283.0	Jobey 1980
West Water Reservoir, Peeblesshire	181	4.00–10.00	8.38	0.75–2.25	1.73	314.0	Hunter and Davis 1994; Hunter in press
Stoneykirk Wigtownshire,	187	5.95–9.70			c 2.00	c 365.0	Mann 1902
Barns Farm, Fife	211	6.00–11.50	9.63	1.00–3.50	2.47	488.0	Shepherd 1982
Balfarg Riding School, Fife	259	5.25–8.50	7.32	1.00–1.25	1.06	276.5	Shepherd 1993

overall distribution pattern is more like that of circular V-perforated buttons than to that of the more complex spacer-plate necklaces.

Complete and virtually complete disc-bead necklaces from Scotland vary in their number of beads, bead size, overall length and quality of manufacture (see Table 1). The 259-bead necklace from Balfarg Riding School, for example, consists of unusually thin beads, and shows a high degree of control in their manufacture.

The raw material used for disc-beads also varies, although cannel coal appears to be the commonest. An incomplete necklace from Cloburn Quarry, Lanarkshire, is unusual insofar as most of the beads are of Whitby jet (Shepherd 1998; identified analytically by Mary Davis). Sourcing cannel coal is problematic, as it requires destructive analysis, but the use of locally-available material has been demonstrated with the Barns Farm necklace, where material from either the Fife or Lothian coal measures had been used (D Jones, pers comm). That other cannel coal necklaces had probably been made locally is suggested in the variation in the quality of material used from necklace to necklace. The Barbush cannel coal, with its impurities and brittleness, is significantly inferior to the dense, black, highly polished cannel coal used for the Harehope necklace, for example.

Disc- and disc-and-fusiform bead necklaces are associated with both Food Vessel and Beaker pottery (especially the kind of Beaker with Food Vessel-influenced features), and dated Scottish finds range between around 2200–1700 cal BC. Where the gender of the skeleton has been determinable, in all but one questionable case, it has been found to be female; and, where the age has been determinable, it has almost invariably been adult. However, the aforementioned necklace from West Water Reservoir, with its unique second strand of lead beads, was associated with an infant aged 3–5; and, as mentioned above, the Barbush necklace may have been worn by a young person.

Boat-shaped V-perforated fasteners of jet have been found elsewhere in Scotland associated with a disc-and-fusiform belt from Culduthel, Inverness-shire (Low 1929) and with 32 circular V-perforated buttons and a pulley belt ring at Harehope, Peeblesshire (inhumation A; Jobey 1980); at the latter site, carbonized wood produced a *terminus post quem* date of 3825 ± 95 BP (2554–1972 cal BC, GU-1215). In England, in a find reminiscent of Harehope, an example was found with 20 small circular V-perforated buttons at Street House, Cleveland (Vyner 1984).

The Food Vessel from Cist 3 is of a fairly common and widespread form, seen elsewhere for example at Muirkirk, Ayrshire (*Proc Soc Antiq Scot*, 60 (1925–6), 150–1, illus 5) and Kilspindie, East Lothian (Callander 1930, fig 1). These vases, and many bipartite vases without the shoulder-groove, tend to be coarse in both fabric and decoration. Some — especially the ones with a well-defined stopridge, or a pseudo-basketry design — fall within the ‘Yorkshire Vase’ category of

Food Vessels, whose dates are discussed in Sheridan 1997. The date of 2845 ± 50 BP obtained for the Barbush Quarry vase is up to a thousand years later than these and most other dated Food Vessels (Sheridan 1997, Table 2): compare, for example, the similarly coarse (though not identically-shaped) bipartite vase from Almondbank cist II, which produced a date of 3556 ± 80 BP (2136–1694 cal BC, SRR-590).

Three other Food Vessel-associated dates have been anomalously late — namely two from human bone at Mount Stuart, Bute (Sheridan 1997) and one from charcoal at Beech Hill House, Perthshire (Stevenson 1995). These dates do not form a coherent group, nor do they make sense in terms of the other dating evidence relating to Food Vessels and their associated artefacts. Their reliability, and that of the Barbush date, must therefore be suspect.

Most of the other features on the site remain undated. Several of the pits and smaller linear features could easily have been associated with prehistoric activity but some of the large pits are considered to have been possibly medieval or later. The most extensive feature, however, comprises two regular but slightly diverging ditches, each with a rounded ‘V’ shape profile. These appear to respect a small area of packed gravel and cobbles lying directly onto the natural subsoil between the ditches. It has been badly truncated except in the northern part of the site and is interpreted as a fragment of a well-prepared, metalled trackway or road running parallel to, and a few metres from, the present field boundary.

A Roman road is known to run from Camelon to the north of the Antonine Wall near Falkirk, at least as far as the fort of Bertha on the Tay. The ditched feature may provide evidence of its course in these parts. Most authorities accept that it ran through Dunblane and continued along the south side of the Allan Water on its way to the fort at Ardoch some 9 km to the north-east. On the basis of field observation to the north and south of Dunblane and information from previous authors (Crawford 1949; Margary 1957; RCAHMS 1958) it would be reasonable to assume that a part of this road ran very close to the present site. However, the distance between the ditches observed at Barbush is no more than 4 m wide in places. This is small, even in comparison with the recently exposed example from Parkneuk Wood Road, east of the Roman crossing of the River Earn at Strageath which was 5.6 m wide (Woolliscroft & Davies 1997). If it is a Roman road the small width and apparently diverging ditches might indicate a degree of modification to the original structure. Unfortunately, the plough has destroyed much of the evidence and any surviving remains are therefore likely to be extremely fragmentary. This could explain why the exact line of the road in the Dunblane area to Ardoch remains elusive.

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