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ARO8: A Highland Funeral: Portrait of an Early Bronze Age Beaker Burial at West Torbreck, south-west Inverness

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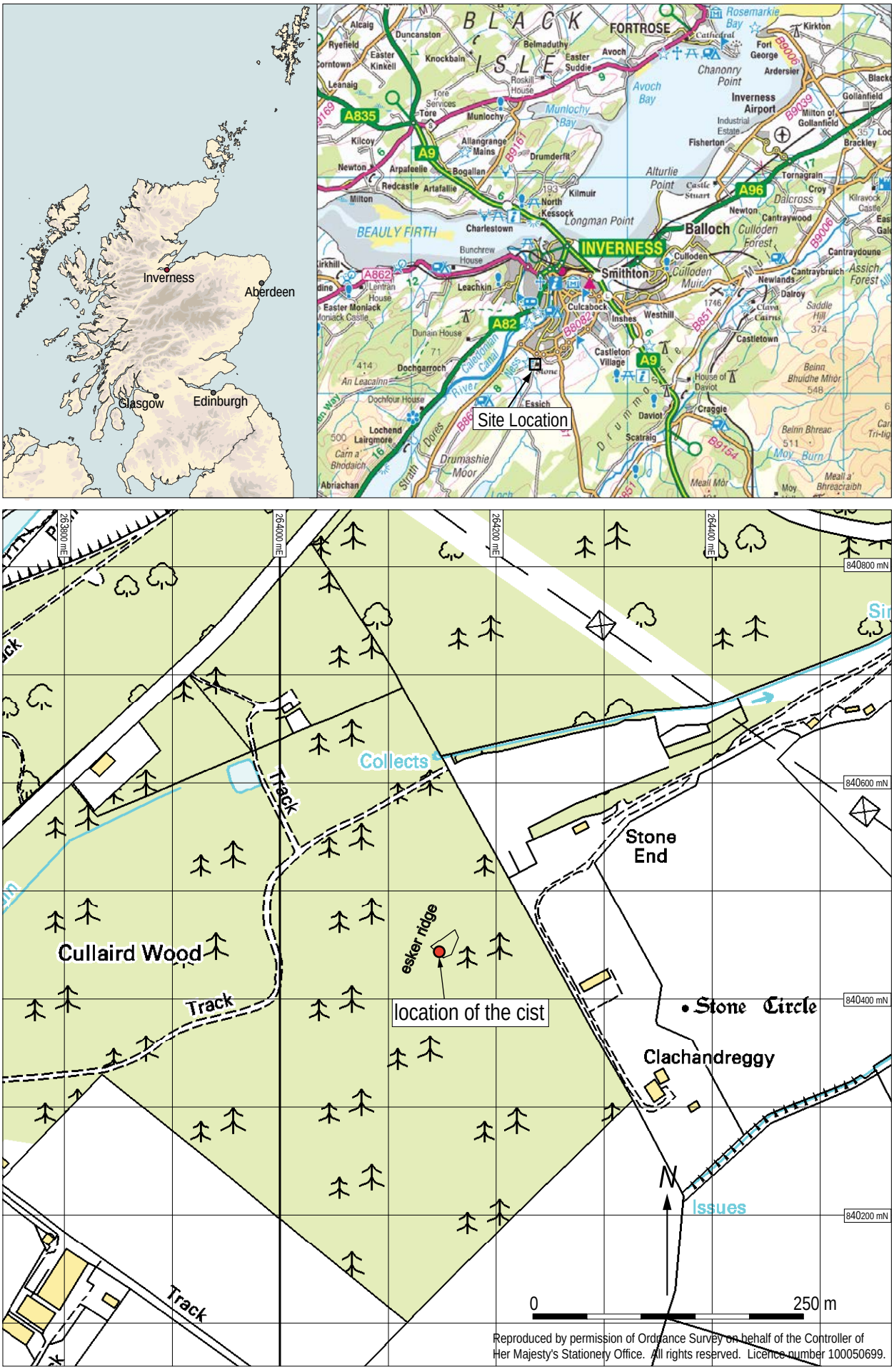

Figure 1: Location of the cist.

Abstract

In March 2012 GUARD Archaeology Ltd conducted a rescue excavation, under the terms of Historic Scotland's Human Remains Call-Off Contract, when a cist was discovered during landscaping works in West Torbreck, south-west Inverness. A crouched inhumation burial of a female adult individual was recovered from the cist, along with a plain Beaker vessel and seven fragments of flint. Radiocarbon dating of the individual provided an early Bronze Age date of 1982-1889 cal BC (3592+/-22) consistent with the dating of the Beaker and lithic artefacts.

Introduction

In March 2012 GUARD Archaeology Ltd undertook a rescue excavation when a cist was inadvertently disturbed during landscaping works following the construction of an access track through Cullaird Wood in West Torbreck, south-west of Inverness (Kilpatrick 2012). The cist, which was capped with a small cairn, contained the remains of a crouched inhumation burial, whose grave goods included seven fragments of flint and a plain Beaker vessel. The burial was consistent with a period of use in the early Bronze Age as was confirmed by radiocarbon dating. The results of the excavation and analysis, which was funded by Historic Scotland under the terms of their Human Remains Call-Off Contract (HRCC), are presented here.

The Site

The cist was located on the eastern side of the River Ness on relatively low-lying ground within the coniferous plantation of Cullaird Wood (NGR: NH 6414 4044). It was found within a small clearing immediately to the north of a recently constructed access track. The cist was situated at 60 m OD on the top of an esker ridge: a prominent linear topographical feature comprising glacial sand and gravel (Briggs and Smithson 1993) (Figure 1).

Archaeological Background

The cist at West Torbreck is located within an area rich in prehistoric remains, many of which have only been discovered within the last few years, primarily due to development associated with the expansion of Inverness City. This has included new housing estates, industrial complexes and associated services, and road construction. Radiocarbon dates have been obtained from sites within south-west Inverness and have ranged from the late Mesolithic period (Kilpatrick *in press*) through to the Iron Age (MHG 52996*). These sites have encompassed both settlement and industry, such as the high status site of Culduthel Farm (MHG 51630), and funerary, for example the early Bronze Age Clava-type ring cairn, also at Culduthel (MHG 3787).

The area immediately around West Torbreck cist remains relatively rural with the nearest known archaeological site being the scheduled monument of Torbreck stone circle (MHG 3756), which lies approximately 200 m to the east in an area of agricultural land. This small stone circle consists of nine upright stones and two outliers, which are thought to be the remains of an outer circle. An archaeological evaluation in 2003 (MHG Event 1027 and MHG 47842) to the immediate south-west of the stone circle revealed several small pits with one containing a fragment of late Neolithic pottery and a flint scraper. Several undated enclosures have also been located to the south-west of the present site such as Cullaird (MHG 3218), Scaniport Wood (palisaded enclosure) (MHG 36081) and Scaniport Wood (circular enclosure) (MHG 3239). To the west lies another enclosure site, known as Laggan (MHG 29970) and the find spot of a possible inscribed Pictish stone (MHG 3752). Several cist burials have also been found within the surrounding area, although these are located slightly further to the north at Slacknamarnock (Murray 2009), Holm Mains (MHG 32414 and 4784), Knocknagael (MHG3779) and Culduthel (Low 1929, MHG 3776).

*Highland Historic Environment Record ID.

The Excavation Results

Plate 1: Esker ridge.

The sides of the cist pit were fairly steep and were completely covered with fallen branches, tree stumps and moss (Plate 1). The pit (012) for the cist construction was sub-oval in shape and was dug into the subsoil, which consisted of beige sand and gravel. It measured 1.26 m in length, with a width of 0.94 m and a depth which ranged from 0.5 m at the south-west side to 0.8 m at the north-east (Figure 2). Following its excavation the pit was lined with single, vertical sub-rectangular slabs of reddish/grey sandstone, positioned with their longest sides resting on the subsoil and forming a rectangular shape. These slabs were placed to the north-west, north-east and south-east and formed three sides of the cist. They ranged in length between 0.8-0.9 m, with a height of 0.5 m and a width of 60-70 mm. However, only three irregularly shaped pieces and one rectangular fragment of sandstone survived of the south-west side of the cist (Figure 3). Originally, they may have been a single stone positioned vertically at this end of the cist. At the south-west end of the feature a small, flat stone was placed on end in an upright position, and was identified as a chock stone or wedge. Other wedges were positioned slightly to the rear of the larger slabs as supports, and cobbles packed each corner of the cist. Once the side slabs had been positioned the pit was backfilled with a very loose yellow/beige sandy-silt with gravel and pebble inclusions (008) (Figures 4 and 5). The internal dimensions of the cist measured 1.13 m in length, 0.60 m in width and with a depth of 0.51 m.

Plate 2: Inhumation and vessel in the cist.

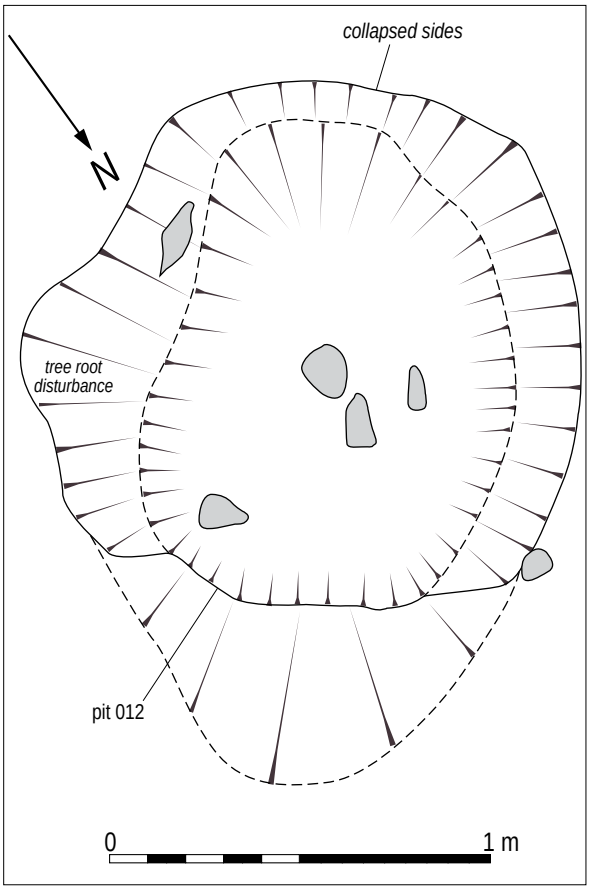

Figure 2: Plan of cist pit (012).

Following its construction, an inhumation was placed in a crouched position within the chamber, and in direct contact with the subsoil. No formal floor preparation was observed. The adult female was placed on her right side facing towards the east (Plate 2). Her arms were tightly flexed towards her body with the lower arms positioned towards her head. Her legs were flexed at slightly less than 90° to the pelvis with the lower legs also flexed. Most of her hand and foot bones were missing as were both tibia. During excavation it was observed that much of the right side of the skull was missing as were the right ribs. This absence is probably due to water percolation resulting in bone degradation.

A plain Beaker vessel (see Ballin Smith, below), was found in front of her head in the south-west area of the cist (Figure 6 and Plate 2). It was lying on its side with its mouth towards the individual. Its several fresh breaks were probably a result of the recent discovery of the cist during construction and landscaping works. The vessel was filled with pink/beige coarse sand/gravel (018), probably from intrusive material leaking into the cist following its closure. Three fragments of flint including two flakes and one short-end

scraper (SFs 009 - 011) (see Ballin, below), were found in the north-east area of the cist around the position of the lower legs, while a further flint flake (SF 008) was located next to the vessel in deposit 018 (Figure 6).

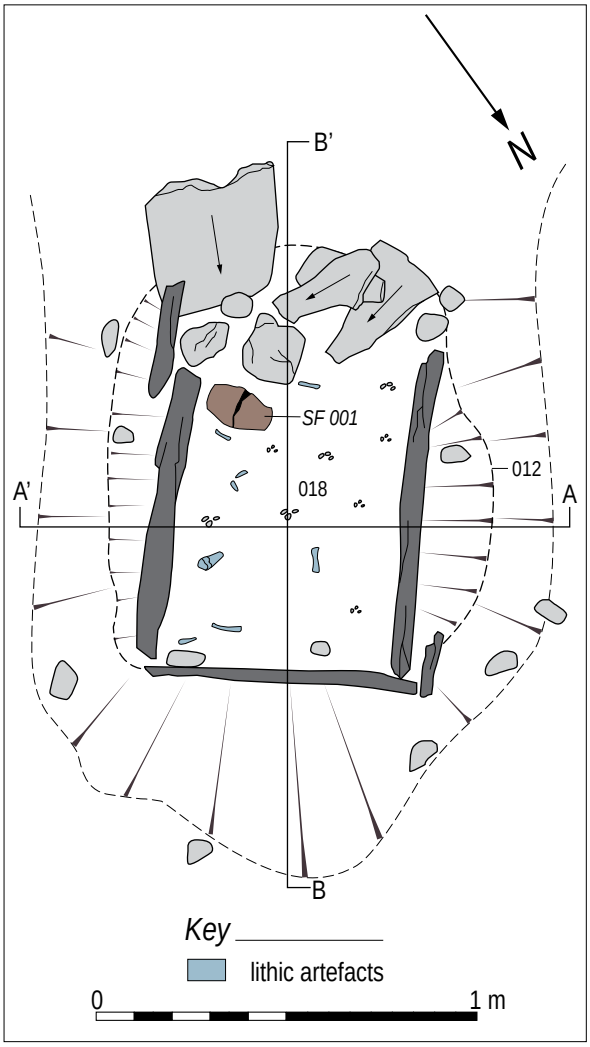

Figure 3: Plan of the upper level of fill 018, within the cist.

The upper surface of deposit 018, which measured 0.10 m in depth and completely covered the inhumation, was partially coated in a white deposit. This substance adhered to the surface of many of the pebbles (015) (Figure 4), which prior to excavation was thought to be the floor of the cist. However, excavation revealed that the deposit, which also adhered to several of the cist slabs, was the result of natural mineral leaching and water percolation through the cist deposits. One fragment of flint (SF 007) was found on the surface of this context, while two hand phalanges (SFs 003 and 004), two small fragments of cortical bone (SF 006) and a fragment of left rib (SF 002) were also found (Figure 3). The positions of the left rib and hand phalange (SF 003) are possibly the result of water percolation and bioturbation.

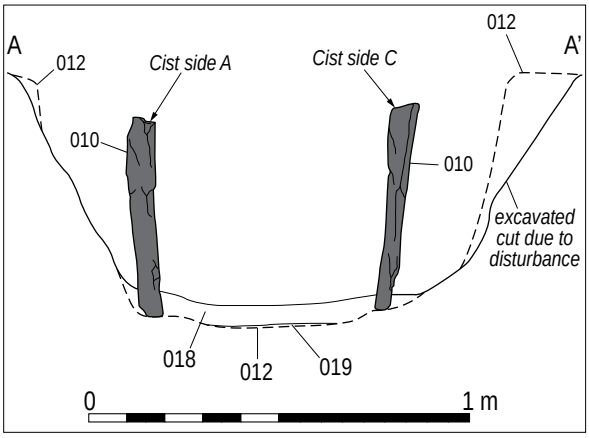

Figure 4: South-west facing profile of the cist and its pit (012).

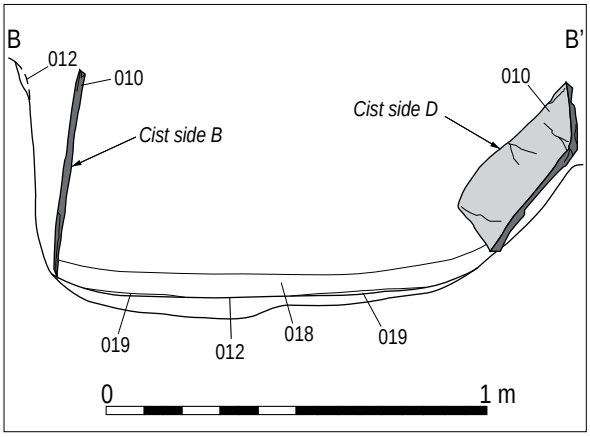

Figure 5: North-west facing profile of the cist and its pit (012).

Following the placing of the inhumation into the cist and prior to its infilling with deposit 018, the cist was closed with two large, roughly sub-rectangular sandstone slabs and one smaller one (005). The north-east stone measured 0.74 by 0.63 by 0.11 m, while the south-west one (recently disturbed during the machining of the ridge) had split horizontally into two fragments but measured 0.85 by 0.76 by 0.13 m (Plate 4). A smaller, rectangular-shaped slab was positioned to the south-east of the others. Above these, three courses of flat, thin sandstone slabs (004) were constructed to completely cover the underlying cap stones but some were missing from the south-west corner of the cist due to disturbance. They may have represented a small cairn positioned over the cist following its closure and to seal the deposits below (Plate 4).

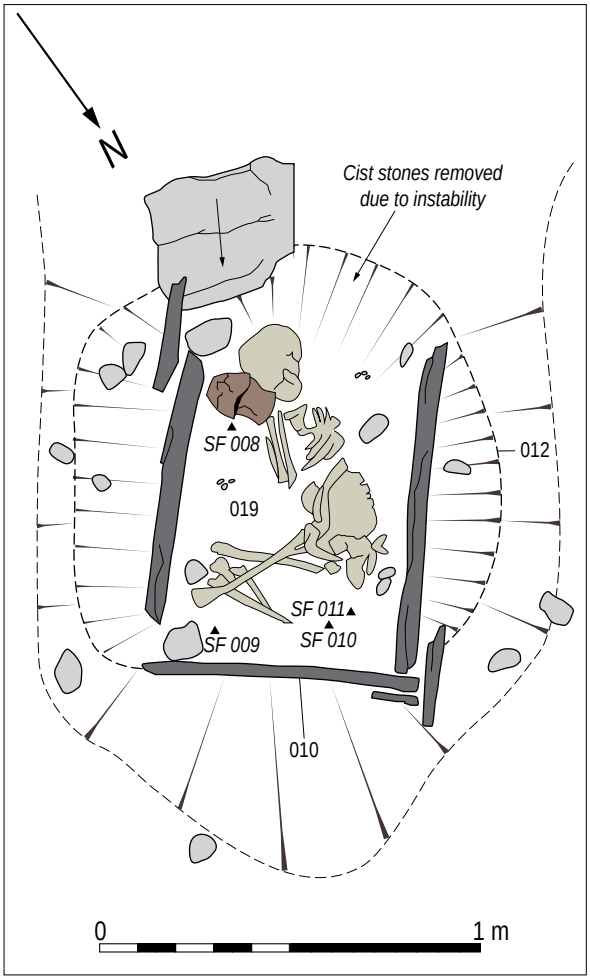

Figure 6: Inhumation and associated finds.

Plate 3: Beaker Vessel.

Plate 4: Cist slabs.

The Human Bone

by Maureen C. Kilpatrick

The macroscopic analysis was conducted using standards outlined by Buikstra and Ubelaker (1994) and Brickley and McKinlay (2004). Preservation of the skeleton was fair with only 50% available for study. Much of the right side, which had been in direct contact with the subsoil, had not survived and those that had were affected by surface erosion. A single individual was present and was deemed to be of probable female sex based on pelvic and skull morphology. On the evidence it is suggested that this individual had achieved middle adulthood with an age of 40 - 44 years at death (Scheuer and Black 2004, Lovejoy *et al* 1985). Unfortunately, height could not be established due to the incomplete state of the surviving long bones. Both femurs looked relatively robust with fairly prominent muscle attachments and a 3rd trochanter was present on the left femur. Bone morphology measurements could only be obtained from the right femur due to the fragmentary state of both tibia and erosion to the left femur. The platymeric index measures the degree of anterior-posterior flattening to the proximal femur and is related to mechanical loading and the stresses it places on the bone. A result of 78.6 was obtained, suggesting that the femur was platymeric, which is consistent with other prehistoric population groups (Bass 1995).

Skeletal Pathology

Dental attrition (wear) was present on most teeth with the 1st and 2nd molars most affected. Attrition appeared to be greatest on the left side, which could suggest that this side was favoured when eating. Periodontal disease was also present with slight recession of the jaw bone on the left side. A

peri-apical cavity was also noted in the left lower jaw between the 1st and 2nd incisors and was probably caused by a dental pulp infection which had left both tooth roots completely exposed. However, its effects would probably have been relatively minor with only mild pain suffered by the individual (Waldron 2009).

Discussion

The human remains recovered from the cist at West Torbreck were the remains of an adult female individual who had attained the age of 40 - 44 years at death. No obvious pathology was present although much of the bone had suffered post-mortem erosion, which may have obscured any pathological conditions. Dental disease in the form of periodontal disease and a peri-apical cyst were present and are probably symptomatic of poor oral hygiene and are probably secondary to the moderate dental wear observed on most of the teeth. Both the right and left femurs appeared quite robust with fairly prominent muscle attachments suggesting that the individual may have led a physically active lifestyle.

The Lithic Material

by Torben Ballin

The assemblage from the West Torbreck cist includes seven flint artefacts: three flakes, two short end-scrapers, and two flakes with sporadic edge-retouch. Most of the pieces appear to have been used. Apart from retouched flake SF 008, which was detached by the application of hard percussion, all flakes and tool blanks were manufactured in bipolar technique.

The raw material is generally fine- to medium-grained flint, with some pieces being characterized by chalk inclusions or other impurities. The colours are brown or orange, and the cortex is abraded, defining the flint as deriving from secondary deposits. Most likely, the flint was procured from beaches along the local North Sea shores, having washed in from deposits of chalk and flint in the Moray Firth (e.g. Saville 1994, 58; Harker 2002).

The assemblage includes no strictly diagnostic forms, but small regular thumbnail scrapers like SF 009 are usually associated with the Early Bronze Age period (e.g. Saville 2005, 110). The applied technological approaches also indicate a date in the latter part of Scottish prehistory: in Scotland, the Mesolithic/Early Neolithic periods are generally associated with soft percussion blade and microblade industries (e.g. Saville 2004; Ballin forthcoming a); the Middle/Late Neolithic periods are associated with the distinct Levallois-like hard percussion technique and production of robust macroblades (e.g. Ballin 2011; forthcoming b); whereas the Early Bronze Age is associated with the notable dominance of bipolar technique over hard percussion, and production of simple flakes (Ballin 2008; Suddaby and Ballin 2010). The fact that almost all unmodified and modified blanks from Torbreck are bipolar flakes indicates an early Bronze Age date.

The Bronze Age cremation cemetery from Skilmafilly (Ballin forthcoming c) gives an indication of the range of grave goods buried with the dead during that period: it ranges from exceptional pieces like the foliate knife in Feature 034 to combinations of simpler tools and unmodified flakes.

The Beaker Vessel

by Beverley Ballin Smith

Vessel Description *(Figure 7)*

The pot is an almost complete Beaker with an angular 'S' shaped profile, comprising nine pieces. The upper part of the vessel broke at the shoulder join between the neck and the body. The base of the vessel is more fragmented and small slivers of pottery are missing. The pot is built of coils or slabs c. 50 mm thick where noted, and the rim is slightly everted and flattened along its top. Although the base is flat it has a slight but partial foot-ring. This slightly unsymmetrical vessel weighs 1580 g and its complete height attained 205 mm.

The clay matrix contains grits of coarse sand with ground rock: the latter is possibly a natural inclusion in the clay, and the vessel was also probably grass-tempered. Impressions on the base and body of the pot are of grass or straw. After forming, the vessel was probably slipped to mask its grits, but some of the larger ones are missing or have fallen out of the body, suggesting that the pot was fired at the lower temperature ranges for earthenware i.e. between 700-800°C or less (Leach 1945, 179; Gibson 2002,11). In spite of the external slip the pot has a rough

texture and areas of finger moulding can clearly be seen and felt. The interior of the vessel has both rough and smooth patches. Although the vessel is pale in colour there are areas which are redder and mottled, probably from the firing process. The conditions in the kiln were oxidising, but the vessel retains a reduced core. This urn is plain and carries no external decoration.

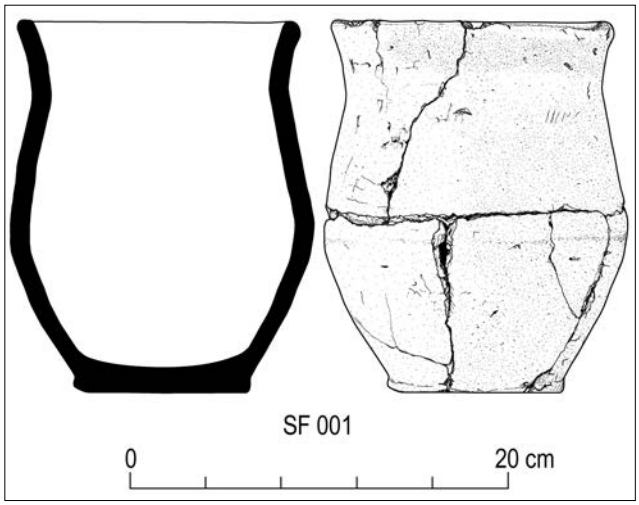

Figure 7: Plain beaker vessel.

Discussion

The survival of an almost complete but undecorated Beaker and lithic artefacts (see Ballin above) accompanying a burial within a cist is not unusual in the area around Inverness. The region is rich in prehistoric remains and other cist burials have been found (see above). The preference for sand and gravel areas for burial in this region (Sheridan 2006, 83), is matched also by the north-east/south-west orientation of the cist (Kilpatrick 2012, 12). Pottery vessels are not always included in cists but in this case the Beaker was part of the burial rites and its function was to accompany the individual to the afterlife.

The unusual aspect of the Beaker is that it is undecorated. Although a few others have been found in north-east Scotland they are generally rare in Scotland and rare across Britain as a whole (Sheridan 2006, 83), with only about 30 examples located. However, it is not the only plain vessel to be found in the Inverness area, as an undecorated but complete vessel was found in a pit with a flint knife at Beechwood Park, Raigmore in 2004 (Suddaby and Sheridan 2006, 77-87). Although, the circumstances of its discovery and burial were different from that of the West Torbreck vessel, the Beechwood Park Beaker is much smaller. Sheridan (ibid) mentions two others in north-east Scotland: one at Slap, Turriff, Aberdeenshire, which was small like that at Beechwood Park, the other was found at Boghead, Fochabers in a pit with fragments of an All Over Corded Beaker and an All Over Ornamented example. The latter was taller than the West Torbreck Beaker.

This short review of evidence suggests that there was not only variety in burial practice (cist or pit) but also in the size of Beakers with a similar form. The West Torbreck Beaker because of its height indicates it is not the earliest of Beaker vessels, but its gently curved form and almost absent waist suggest it is one of the earliest derivations, most likely a Clarke British Beaker shape variation II (Clarke 1970, 423). According to Needham it is a low-carinated Beaker, which he argued was the 'prime choice for funerary usage in the beginning' (2005, 183).

The radiocarbon dating of the human bone from the cist produced a date of 1982-1889 cal BC at 2-sigma (SUERC-41922 (GU28053) 3592 ± 22). Unlike the plain Beaker from Beechwood Park, which it is argued is early and is likely to date between 2500 and 2000 BC (Suddaby and Sheridan 2006, 84), the West Torbreck Beaker is slightly later but still within the second half of the third millennium BC. A Beaker found in a cist with a crouched inhumation at Slap, Turriff, Aberdeenshire in the nineteenth century has been dated by association with the human remains to 2400-2130 cal BC at 2-sigma (ibid, 85). The dating evidence combined with the larger size of the West Torbreck Beaker indicate that it is a later example of a funerary vessel type that was in currency from c. 2500 BC in the Inverness area. This find is a relatively rare type of vessel, and gives weight to the importance of the region and its close links with the River Ness, and possibly the North Sea region beyond.

Archaeobotanical Remains

by Susan Ramsay

In total, eight samples, representing five contexts, were analysed for the presence of botanical remains. Only three of the cist-fill samples contained any evidence for charcoal. However, even these samples produced only extremely small charcoal traces. A single tiny fragment of oak charcoal was recovered, whilst traces of heather type, cherry type and oak charcoal were identified from the upper fill (015) of the cist. The

traces of charcoal recovered from this site make it impossible to draw any firm conclusions about its origins. However, the fact that charcoal was only found within the upper fills might indicate that this is contamination from later material infilling the cist.

Radiocarbon Date

A fragment of left tibia shaft from the inhumation was submitted to the Scottish Universities Environmental Research Centre (SUERC) for AMS radiocarbon dating. The sample produced a date of 1982-1889 cal BC at the 2-sigma range (3592+/-22 uncal), placing the burial at West Torbreck in the early Bronze Age period.

Lab. No	Descrip-tion	Sample	Depo-sitional Context	∂13C‰	Dates BP	Calibrated dates at 2-sigma
SUERC-41922 (GU28053)	Human Bone, SK 1	Left tibia shaft fragment	Primary, within cist	-20.0	3592 +/-22	1982-1889 BC

Table 1: Radiocarbon dates

Discussion

The recent discovery of a cist at West Torbreck is certainly not an uncommon occurrence within the south-west Inverness area. As Ballin Smith has mentioned above, there appears to be a wide variety of burial tradition within this locale, (see also Murray 2009, who postulates local funerary customs), which encompasses not only the mode of burial incorporating pit, cist and cremation, but also the burial contents. However, as she also states there are also burial similarities that include factors such as grave orientation (predominantly NE/SW) and grave location. Indeed, burial on prominent natural sand and gravel ridges has been a common occurrence. Many of the known cist burials in the area are described as being located on or within natural knolls, such Slacknamarnock Quarry (Murray ibid) and also conforming to a NE/SW orientation: Culduthel Mains, Lochend, Slacknamarnock Quarry, the now lost Knocknagael and West Torbreck.

However, these comparisons also extend to structural similarities particularly between the West Torbreck cist and that found at Slackmarnock Quarry in 2008 (Murray 2009). The latter burial feature contained only two courses of stone above the capping slabs, which was slightly less than that at West Torbreck. It is assumed that the West Torbreck cairn material would have been visible above the ground level when first constructed indicating that the burial was built to be a prominent landscape feature.

Despite these similarities, the contents of the local cists vary (see Table 2) with earlier (and possibly earlier) cists including richer goods, and later ones only Beaker vessels.

Cist site	Radiocarbon date to 2-sigma	Grave goods
Culduthel Mains	2200-1970 cal BC (female burial)	Jet beads
Culduthel	(male burial) (undated see Sheridan, Parker-Pearson et al (2006)	eight barbed and tanged arrowheads, an arm bracer with gold caps, a bead of amber and a Beaker vessel
Holm Mains Farm	2280-2030 cal BC and 2290-2030 cal BC (Sheridan, A, Parker-Pearson, M et al, 2006:99-201). (male burials)	decorated Beaker vessel, two barbed and tanged arrowheads and 10 other lithic artefacts
Lochend	1950-1750 cal BC	Beaker vessel
West Torbreck	1982-1889 cal BC (female burial)	Beaker vessel

Table 2: Radiocarbon dates and contents of cists in south-west Inverness

Both cists at West Torbreck and Slacknamarnock Quarry (Murray 2009) contained female individuals of similar ages, who were placed in a crouched position on their right sides, with their heads placed at the southern end of the chamber. It is tempting to consider that both burials are contemporary in date due to their similarities, although the contents of the Slacknamarnock cist have not been radiocarbon dated.

Beaker pottery is commonly found in both burial and domestic situations, but the West Torbreck plain Beaker is uncommon (Ballin Smith, above). Another plain vessel was discovered at Beechwood, Inverness from a pit, with a flint plano-convex knife (Suddaby and Sheridan 2006). At Slap, near Turriff, Aberdeenshire, a plain beaker and a flint fragment were recovered from a cist situated on a natural hillock (Ledingham 1872-74) in 1874. This cist also contained a crouched inhumation positioned on its right side with the Beaker placed to the back of the head. Although this burial has some similarities with the West Torbreck cist it has been dated to 2400-2130cal BC (2-sigma) (Sheridan et al 2006, 198).

Conclusion

The cist at West Torbreck is a type of burial common in the Early Bronze Age and several examples exist within the area of south-west Inverness which due to the high level of prehistoric remains, appears to have been an important area for prehistoric groups from early times. Despite the use of cists spanning a period of at least 300 years, many similarities exist such as location, orientation of burial and material used, suggesting that local traditions may have existed which continued over many decades. Although this research is limited to the immediate locale around West Torbreck, the large analyse and dating projects of the AHRC funded *Beaker People Project* (Sheridan et al 2006) and the Leverhulme Trust funded *Beaker and Bodies Project* will aid further comparison over larger geographical areas and time frames.

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