

Whiteadder



Historic Heart of the Lammermuirs

Whiteadder Reservoir Cairn Excavation Report

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with contributions by Rob Engl, Andrew Morrison
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Abstract

In March 2020, AOC Archaeology Group undertook a programme of excavation at the site of a possible cairn identified in LiDAR data. Two trenches were excavated, one in the centre of the site and the second running across the edge.

These excavations aimed to determine whether or not the anomaly was of archaeological origin, and if so, whether it did in fact represent a cairn. Furthermore, we aimed to examine the condition, nature and date of the archaeological remains there.

This Data Structure Report represents the interpretation of the fieldwork results.

Introduction and Background

AOC Archaeology Group undertook a programme of archaeological excavations on a promontory in Whiteadder Reservoir (NT 64794 63866) (figure 1). It forms part of the wider community landscape archaeology project Whiteadder: Historic Heart of the Lammermuirs.

The target for the excavations was an anomaly identified in LiDAR data (figure 2) represented by a broadly circular mound, perhaps 20m in diameter, that was interpreted as a possible cairn. A site visit confirmed that the anomaly was possibly archaeological in nature.

The underlying geology of the promontory is granitic/granodioritic. The promontory is situated within the Priestlaw intrusion, an irregularly shaped pluton with an outcrop area of about 3.5 km², which is mainly composed of a variably porphyritic biotite- or hornblende-biotite-granodiorite. The granodiorite is enclosed within a marginal phase of slightly porphyritic quartz-augite-biotite-diorite or microdiorite (Stone et al 2012).

The cairn is situated on a promontory which extends into the northern end of Whiteadder Reservoir. The reservoir was created by flooding the valley in 1968. Prior to that, the site would have been in an elevated position (a little over 800m above sea level) within the valley which, although lower than the hills around, afforded good views of good the surrounding landscape.

The promontory is now forested. This must have taken place sometime after the mid twentieth century since the forestry is not marked on the OS One Inch 7th series map (1955-1961). The OS Six-inch Scotland map (1888-1913) shows that the land immediately to the east of the cairn included “furze or whins” (gorse).

The possible cairn is not marked on any maps and was unknown prior to its identification in the LiDAR data.

Archaeological landscape

The landscape around Whiteadder Reservoir is rich in archaeological remains of all time periods, from prehistory to the post-medieval period.

Numerous other cairns are known nearby, including those on the summits of Spartleton Hill to the south and Spartleton Hill to the north, and on the shoulder of Pensheil Hill to the south-west. Further possible cairns are known to the north-west at Tavers Cleugh, to the south-east at Berrybank Wood. Funerary cairns typically date to either the Neolithic period or the Bronze Age, but a lack of excavated examples in SE Scotland means that that date of the Whiteadder cairns is not confirmed. Over the many centuries since their construction they are often reduced to low stony mounds, either through erosive deterioration or due to stone being removed for use in field boundaries, for example. The abundance of cairns in the area suggests that the landscape held a special significance in the past, and our cairn sits in the centre of it, lower but surrounded by various other funerary and ritual monuments and overlooked by Table Rings cairn, 800m to the WSW.

Some 500m the NNW of the site on the ridge between the Whiteadder Water and the Kell Burn is a stone setting or possible alignment, perhaps aligned with a lunar 'solstice' or the summer solstice sunset (Mackie 1975, 94). More generally, the site's location in the upper Whiteadder/Spartleton area places it within a landscape scattered with Neolithic/Bronze Age sites representing a concentration of activity of this period. The prevalence of early prehistoric monuments in the area renders it unusually densely populated with sites of this type compared to the rest of East Lothian and the Scottish Borders.

Conversely, there is less evidence for domestic activity in the form of roundhouses or field systems, perhaps because much of this was subsumed into the Iron Age and later landscape, or because the low traces of roundhouses and field boundaries have been obscured by peat growth in the intervening centuries.

The valley is overlooked from the southern end by a hillfort: Friar's Nose sits on a spur projecting from the foot of the NE flank of Priestlaw Hill. Not far to the south-west are the remains of Pensheil Grange, a medieval vaulted grange. Pensheil is mentioned in a charter granted by the Earl of Dunbar to the monks of the Isle of May in AD 1200, and it is known to have later been attached to Melrose Abbey. The grange still visible in ruinous form today is thought to have been constructed in the 15th century.

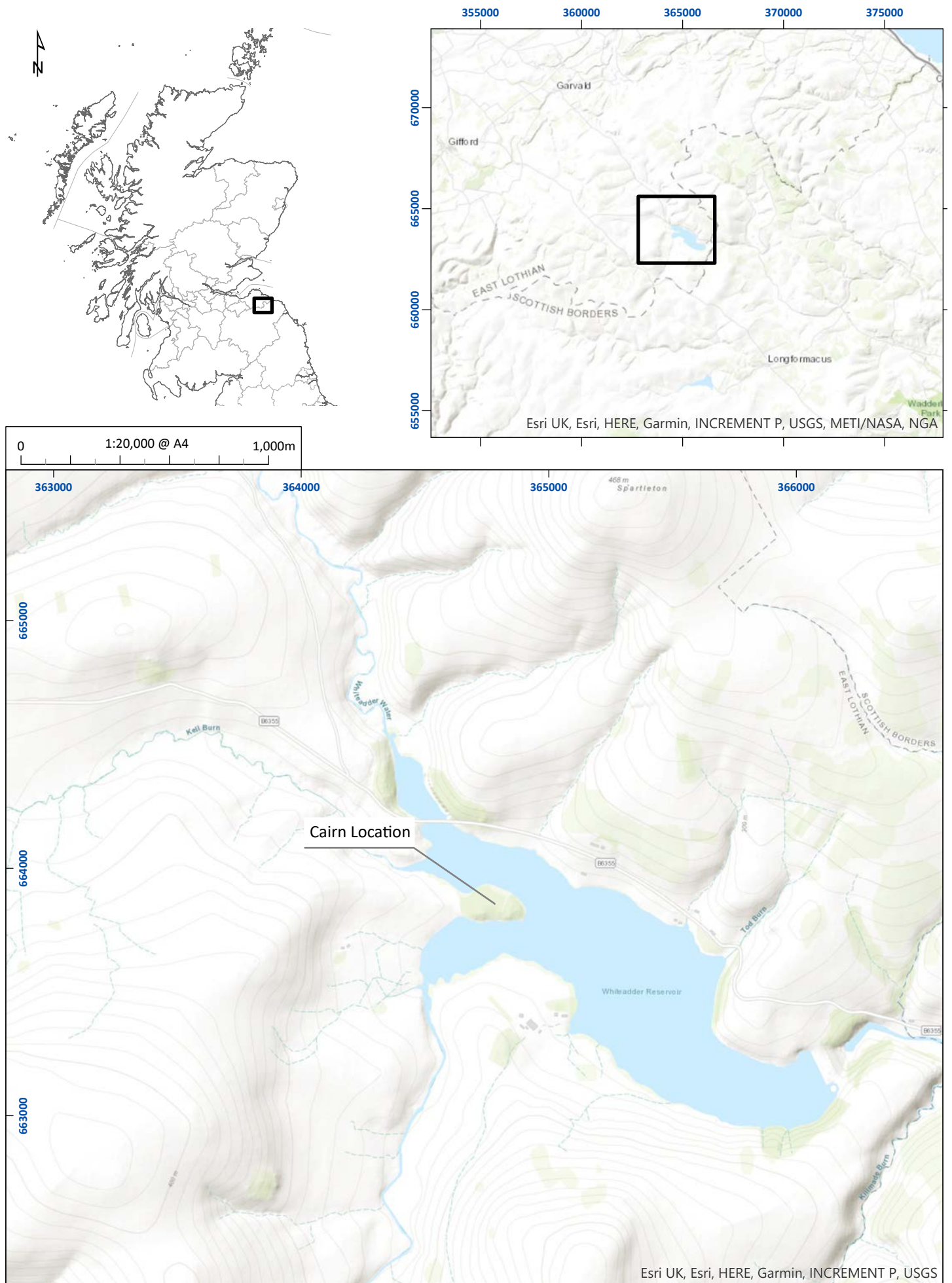


Figure 1: Site location plan

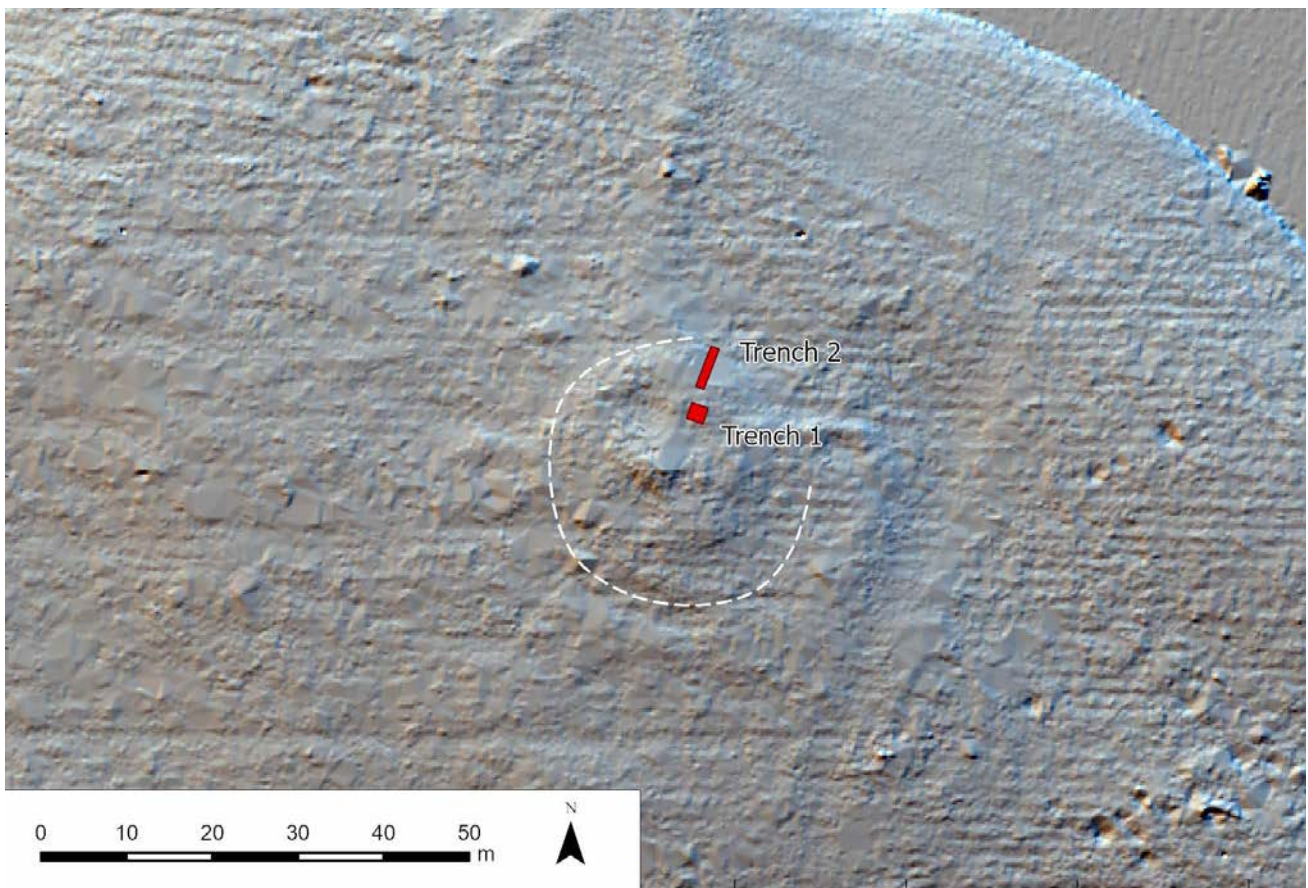


Figure 2: Trench location plan on LiDAR scan

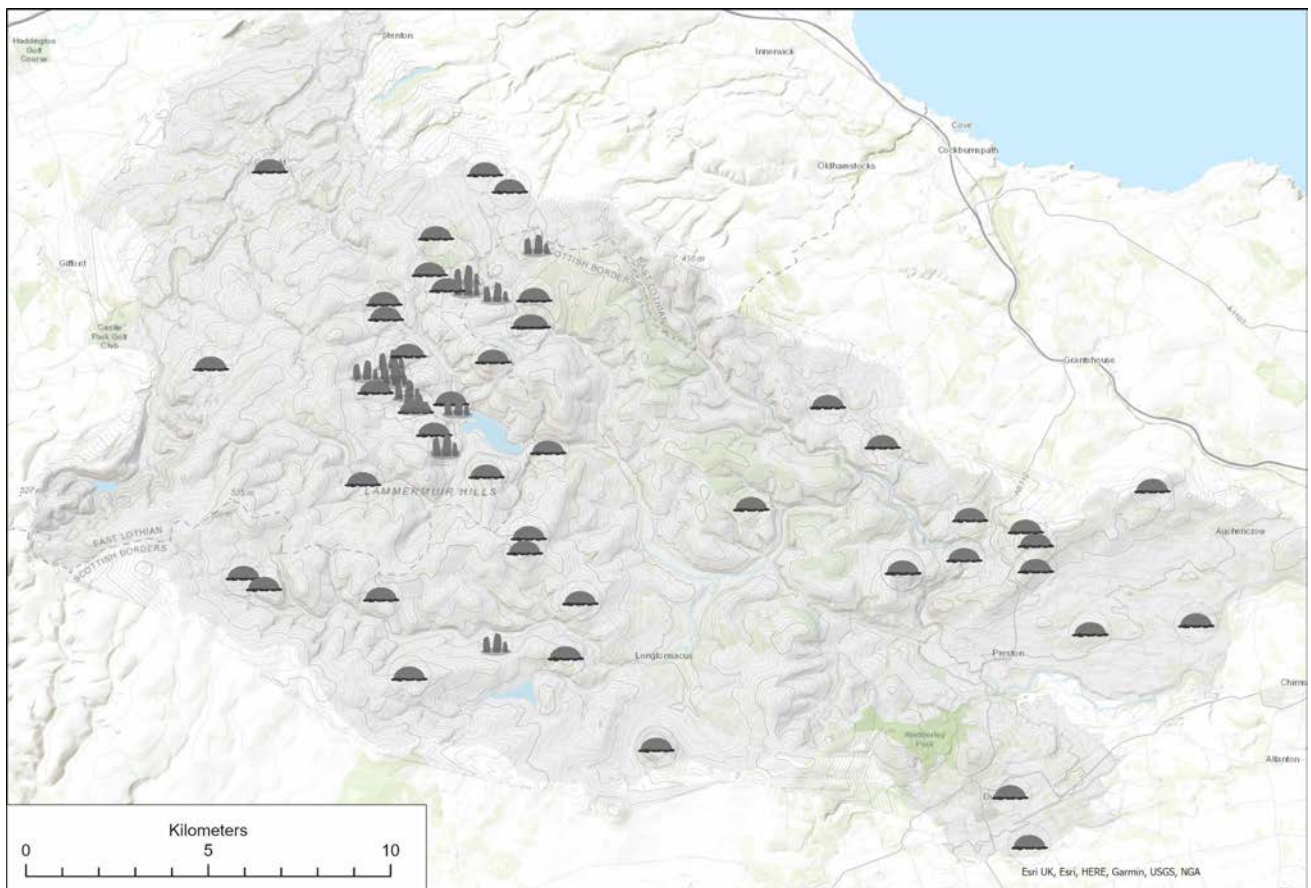


Figure 3: Cairns and standing stones in the vicinity of Whiteadder Cairn

Objectives of the 2020 works

The aims of our excavations were to determine whether the anomaly was of archaeological origin, and if so, to explore the form, condition and nature of the site, with the intention of determining its date and function.

Overview of the Site

The site sits on a promontory which extends into Whiteadder Reservoir at its northern end. The Whiteadder water runs into the reservoir to the north of the site, and the Kell Burn to the west of this.

The anomaly visible on the LiDAR data is visible on the ground as a low mound in forestry, with trees growing from it. Much stone is visible protruding from the mound, although stones are visible within the forestry more generally, likely the result of forestry ploughing, tree planting and felling operations.

The extents of the mound are not clearly definable on the ground due to the unevenness of the topography and the effects of forestry operations. Extending to the east from the site is a clearly defined bank which runs for around 16m W-E before turning to run N-S for a further c.15m. Further banks, similar in character, are visible running N-S from the northern edge of the forestry towards the water. These are interpreted as being post-medieval in date, probably forming field boundaries or enclosures.

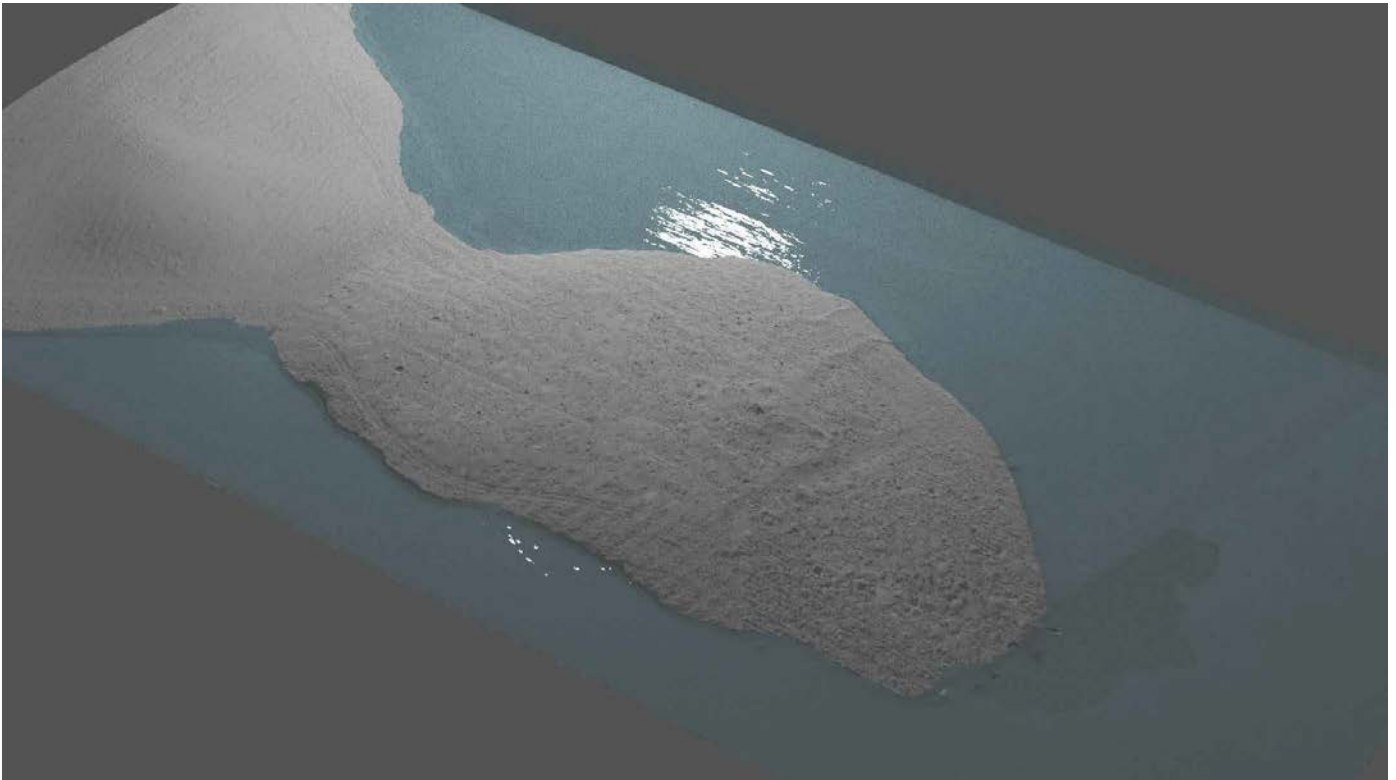


Figure 4: Oblique view of the LiDAR scan, looking from the southeast

Archaeological Investigations

The 2020 excavations comprised two trenches: a 2m x 2m trench (Trench 1) was located in roughly the centre of the possible cairn site; a longer, 1m x 5m trench (Trench 2) was placed to run over the side of the cairn with the intention of catching the edge. Trench 2 was extended by a further 1m at its northern end, making it 1m x 6m. The ground cover was a dense carpet of needles from the pine trees which cover the promontory. This soft, organic-rich layer was removed with kraits prior to the beginning of excavations.

Trench 1

Immediately beneath the layer of pine needles, covering the entire trench, the topsoil (100) was a very dark blackish brown sandy silt, fine in texture and loosely compacted. This extended across T1 for a depth of around 0.2m. The topsoil was disturbed by roots throughout.

Context (101) was immediately beneath and very similar in character to (100): a dark blackish brown sandy silt, fine textured and loosely compacted, with rich organic content. This extended across the trench to a maximum depth of 0.5m. This (100). This context was also very disturbed by roots.

Context (101) formed the matrix of context (102), formed of stones up to 0.6m in diameter but mostly closer to 0.4m in diameter, subangular in shape. Most of these were granitic but a minority (perhaps around 15%) were smaller sub-angular mudstone/siltstone. Context (102) is interpreted as cairn material. At the upper level the stones were loosely jumbled together among (101) but the cairn material became more densely compacted, and the stones became larger, at the lower levels. There was no clear transition between the upper and lower material, however, so all cairn material was treated as one context. The depth of cairn material was around 0.6m.



Plate 1: Upper level of cairn material (102), after removal of

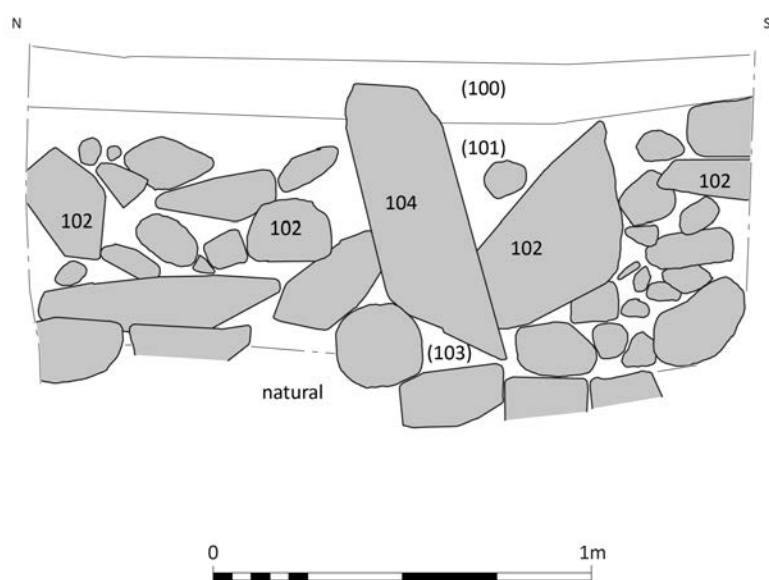


Figure 5: West-facing elevation of T1 (101)

Within context (102) were two oblong stone blocks, [104] and [105], tentatively identified as orthostats within the cairn material. [104] was situated close to the eastern baulk of Trench 1 and was 0.2m x 0.15m x 0.7m in size. [105] was situated close to the north-western corner of Trench 1 and 0.2m x 0.2m x 0.7m in size. Their dimensions were longer and more slender than the majority of the cairn material, which was mostly sub-rounded towards the lowest levels. Sitting against the southern side of [105] were three stones up to 0.25m in diameter and up to 0.4m in length, lying stacked on top of one another as though coursed. Taken together with [105], this feature was tentatively identified as a trace of a built structure within the cairn material. However, on excavation, this seemed less probable since the 'coursed' stones did not in fact appear securely laid together. It is possible that [104] and [105] were intentionally placed upright during the construction of the cairn but it seems entirely likely that they were upended by chance.



Plate 2: Possible orthostat [104],
viewed from the west

Plate 3: Possible orthostat [105]
with possible slipped coursed stones
adjacent,



Context (103) was a mid yellowish brown, fine silty sand with gritty content and occasional sub rounded pebbles up to 0.04m in diameter. Small charcoal flecks were present within (103). This deposit was evident across Trench 1 to a maximum depth of around 0.15m. (103) was disturbed by tree roots. This deposit is interpreted as a possible old ground surface, and the surface onto which the cairn was constructed.

Context (103) overlay the natural glacial till, which contained large granitic boulders. The British geological Survey extract notes that there are superficial diamicton (mixed) till deposits recorded in close proximity. These are deposits from the end of the last glacial (Devensian) and comprise a mix of clay and large stones which have been scoured from the underlying bedrock by glaciers and then redeposited. Glacial deposits such as this can be locally quite deep; given the size of the trench, and the size/weight of the stones within, we did not attempt to reach to bedrock.



Plate 4: Context (103) visible in the base of T1, among the lowest level of the cairn material, viewed from the east

Plate 5: Glacial till visible in the base of T1



Trench 2

Immediately beneath the layer of pine needles, covering the entire trench, the topsoil (200) was a very dark blackish brown sandy silt, fine in texture and loosely compacted. This extended across T2 for a depth of around 0.15m. The topsoil was disturbed by roots throughout.

Underlying the topsoil was context (201), a dark blackish brown sandy silt, fine in texture and slightly more densely compacted than (200). It had high organic content. (201) was maximum 0.5m in depth and at its lower levels in and around the cairn material [202], it became looser and dryer.

Context (201) formed the matrix of context [202], stones up to around 0.3m diameter but mostly averaging around 0.2m diameter, subangular in shape. The stones were predominantly granitic but some were smoother, perhaps a mudstone/siltstone. The upper stones were loosely compacted within (201) but the lowest stones were more fixed within (206), and these most likely represent in situ cairn material.

Context (203) was a mid orange-brown silty sand, mottled with some darker patches, moderately compact with charcoal flecks and stones throughout, consisting of degrading granite stones up to 0.35m x 0.2m, and mud/siltstones up to 0.2m x 0.15m which were laid flat. (203) extended from the northern end of the trench around 3m south, to the edge of the cairn material, running under the slumped kerb stones [204]. (203) was found across the full 1m width of the trench, up to a depth of around 0.12m. This deposit was interpreted as a possible trampled surface/old ground surface around the exterior of the cairn. The flat stones throughout formed a rough paved surface, while secondary layers of flat stones suggest maintenance/upkeep of the area around the cairn.

Feature [204] was formed of a pair of large boulders sitting at the edges of T2, aligned E-W. Both boulders were subangular in shape and up to 0.4m in diameter, slumped slightly forwards. They were interpreted as kerb/edging stones for the cairn body which had slipped forwards, either in antiquity or as a result of more recent forestry activities.



Plate 6: Trench 2 after the removal of (201), viewed from the north-west

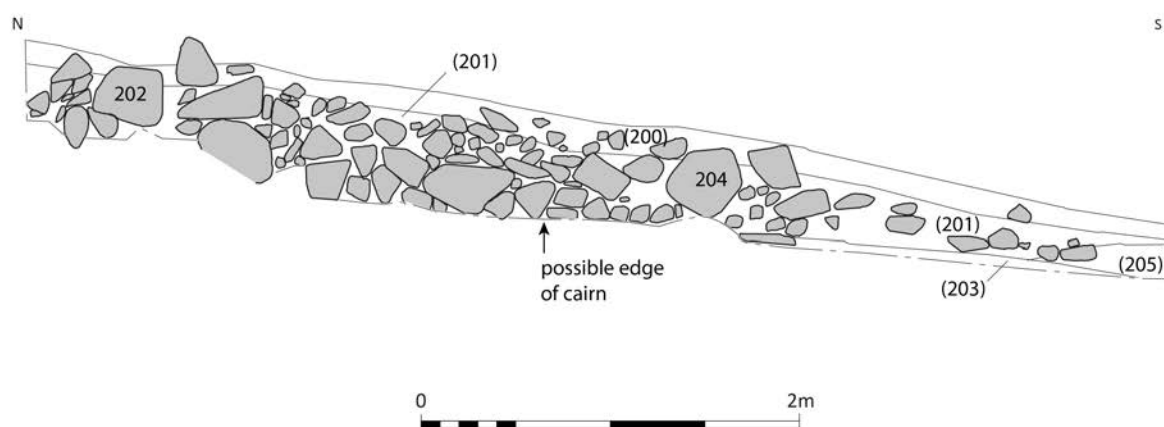
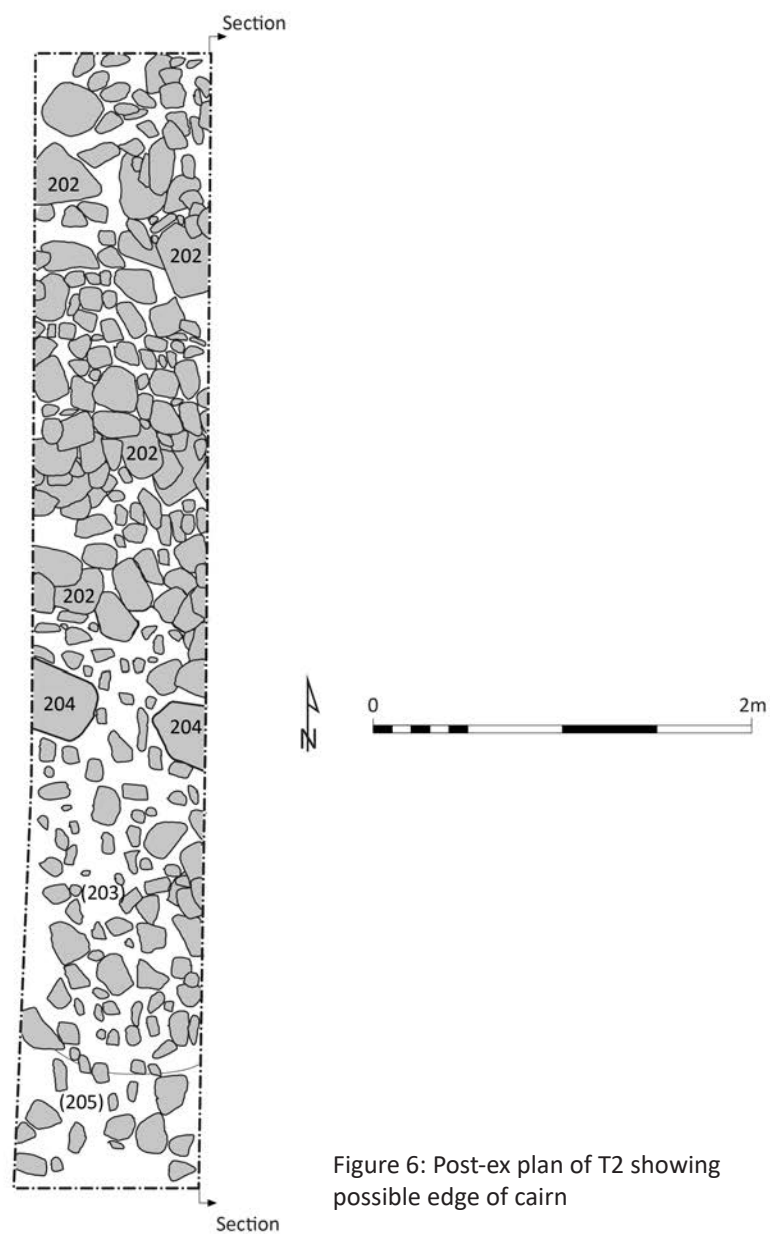




Plate 7: Northern end of T2 showing possible edge of cairn with (203) in foreground, viewed from the north



Plate 8: Context (208) visible in the centre of the trench, with natural exposed to its right, viewed from the north



Plate 9: Southern end of Trench 2 with (206) visible in the base, viewed from the north-east

Context (205) was a dark brown sandy silt, medium compaction, with charcoal flecks throughout and stones up to 0.35m x 0.2 in diameter. Context (205) was found only in the northernmost metre in the north end of T2, and was disturbed by tree roots throughout. It is perhaps the same material as (201) but compacted by forestry operations.

Context (206) was a dark brown silty sand, medium compaction, around and under the basal stones of the cairn. It was present in the northern end of T2, up to 0.1m in depth, but was not visible in section. This was interpreted as a possible early deposit from the construction of the cairn, or perhaps an interface with the old ground surface (208).

Context (207) was a dark orange-brown silty sand, densely compacted, found in a discrete band around 0.3m wide extending across the full 1m width of T2 beneath the probable in situ edge stones [210]. This deposit survives to a depth of around 0.05m. It is interpreted as a possible old ground surface onto which stones were deposited during construction of the cairn.

Context (208) was a discrete deposit encountered under (206) and basal cairn stones [202]. It was a mottled orange-brown sand with some silt content, moderately compact, very crumbly with organic content. It was similar in character to (206) but clearly identifiable during excavation due to differences in texture/compaction. It was only around 0.01m in depth and was indistinct in section. It is interpreted as an old ground surface predating the cairn's construction.

Context (209) was a compact orange sand with some silt content and frequent degraded granite stones throughout, revealed in a small slot under (203) in the northern end of the trench. (209) comprised an upper interface with (203) leading to areas containing charcoal flecking and burnt roots. It was interpreted as natural subsoil with evidence of a burning event/possible clearance activity.

The stones forming the edge of the cairn were assigned context number [210]. These stones were similar in character to the remainder of the cairn material in terms of size and shape, but were firmly bedded in context (207).

Radiocarbon Dating

Radiocarbon dates were obtained for samples from two contexts. A fragment of charcoal (birch) from context (103) returned a date of 927 ± 26 BP (SUERC-93858), within the early 11th century AD. A fragment of nut shell (hazel) from context (206) returned a date of 2841 ± 26 BP (SUERC-93859), in the early 10th/late 9th century BC, within the late Bronze Age.

Artefacts

Eight artefacts or possible artefacts were recovered and retained under seven small finds numbers.

SF 001, a sherd of prehistoric pottery, was recovered from the lower portion of (101). A modest assemblage of lithics was discovered. A flint, SF 002, was recovered from context (201). Two quartz finds were recovered: SF 005 was a possibly knapped fragment from (201), and SF 004 was a smaller quartz block retrieved from (102). One flint, perhaps debitage, was recovered from (203), and two more were found in close proximity at the lowest level of (103), at the interface with the natural beneath; these two were recorded together as SF 007.

A fractured spall detached from the surface of a possible sandstone cobble hammerstone, SF 003, was also recovered from context (201), at the edge of the cairn material.

A sherd of post-medieval/modern glazed pottery and a fragment of plastic sheeting were recovered from the upper part of (101); neither of these was retained. Their presence is an indication of the mixed nature of this context and of the effects of bioturbation within it.

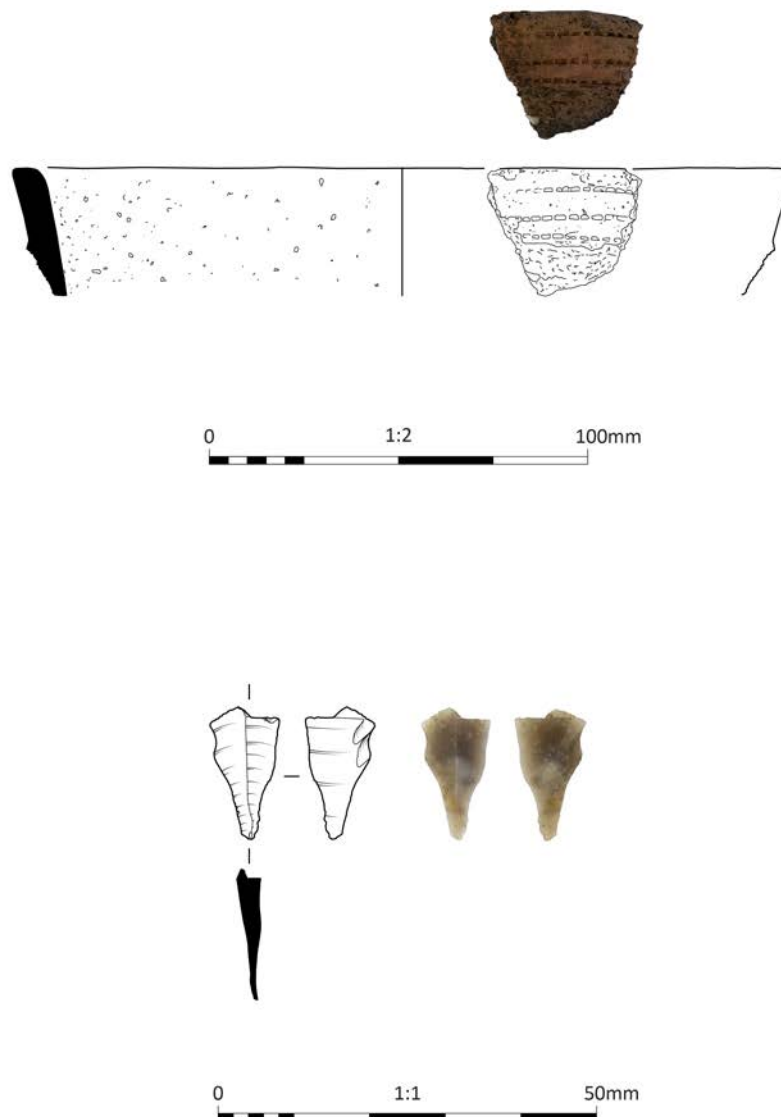


Figure 8: SF 001 sherd of prehistoric pottery, and SF 002 flint, flint blade tip

Chipped Stone

Rob Engl

The excavation of the cairn at Whiteadder produced a small chipped stone assemblage consisting of two pieces of vein quartz (SF04 & 05) one of which was natural shatter (SF 04), two pieces of east coast flint (SF02 & SF06) and two pieces of grey/blue southern uplands chert (SF07). All of the material can be characterized as being of local derivation.

The assemblage is composed of debitage with no secondary modified pieces. All of the material is in fresh condition with no signs of patination, burning or abrasion. A single proximal bladelet fragment (SF02) was identified. This artefact is most likely of Mesolithic date. The remainder of the material consists of shatter with the exception of the large irregular quartz flake (SF05).

It is probable that the material represents background early prehistoric activity within the area, which has been incorporated within the material of the cairn.

Coarse Stone

Andrew Morrison

A fractured spall detached from the surface of a possible sandstone cobble hammerstone was retrieved from the organic soil matrix (201) immediately underlying the topsoil. The roughly leaf-shaped fragment has few original surfaces surviving. Multiple fractured facets are observed indicating that the cobble this spall derives from has been struck from multiple angles. There is a small faceted area of possible wear, approximately 20 mm in length, at one end of the spall that may indicate use as a pounder prior to more vigorous use as a hammerstone. The fractured surfaces suggest multi-directional percussive use.

Sandstone is not the ideal material for use as a hammerstone as it is prone to shattering under impact, suggesting an element of expedient selection of a locally available cobble for immediate use and subsequent discard. At Cloburn Quarry, in Lanarkshire, a similar sandstone hammerstone was found in association with a Bronze Age ring cairn (Lelong & Pollard 1998, 134). Like the example from Cloburn Quarry, the hammerstone fragment considered here could be an artefact relating to an earlier episode of activity on the site and incidentally incorporated within the make-up of the cairn or it could have been a tool used during the cairn's construction and was subsequently added to the stones of the monument after it had broken.

CATALOGUE

Spall from Hammerstone. Fractured surface from a sandstone cobble hammerstone. Roughly leaf-shaped with a biconvex section. Multiple fracture surfaces indicating the hammerstone was used on multiple sides in different directions. One small faceted edge along the wide rounded end that may indicate an area of possible working. L 139.6 W 86.8 T 31.9 mm. Mass: 389.72g. Context (201).

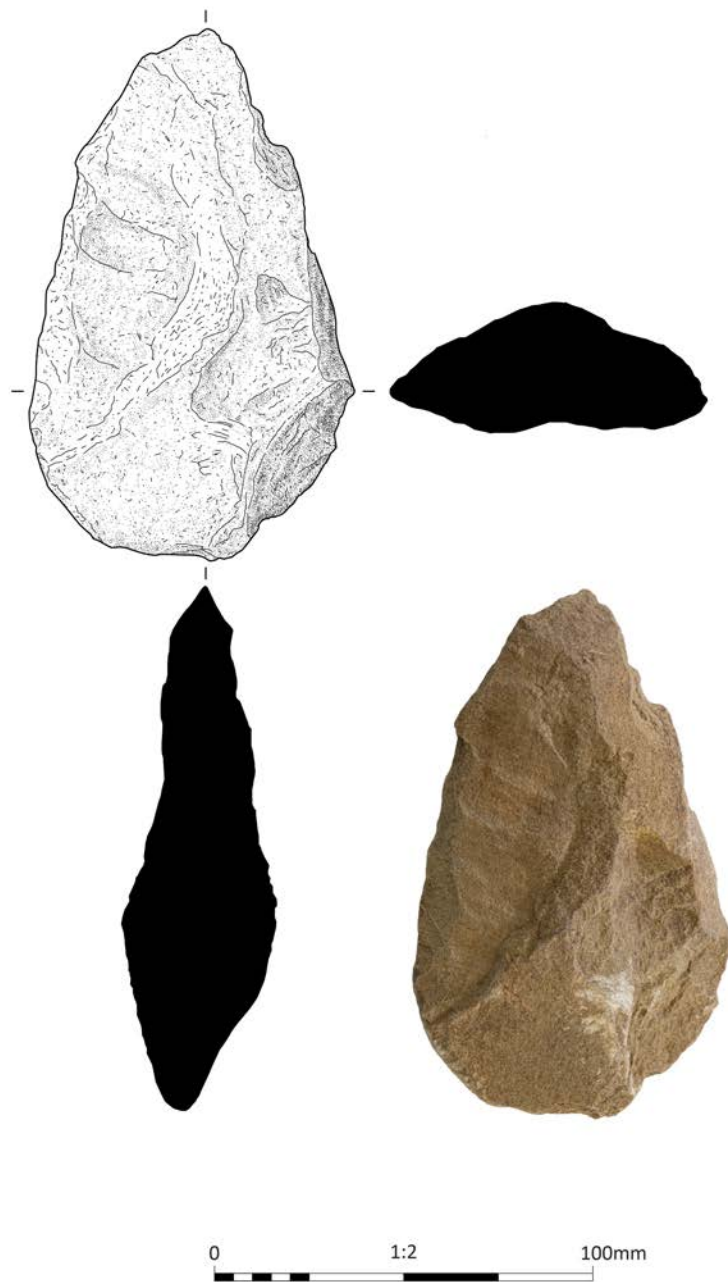


Figure 9: SF 003 coarse stone tool

The Prehistoric Ceramic

Dawn McLaren

A single rim sherd of low-fired handmade pottery (SF 01, Figure X) was recovered from subsoil (context 101) overlying the stones of a prehistoric cairn in Trench 1 at the excavations of Whiteadder Reservoir Cairn, East Lothian. Although only one sherd of this vessel survives, it displays sufficient characteristics to allow it to be identified as the rim sherd of an Early Bronze Age Beaker, decorated on the exterior surface with transverse rows of comb-impressions. The recovery of the sherd from soils above the cairn itself necessarily means that it is not possible to determine whether this represents the vestiges of a disturbed formal inhumation burial or a secondary rite associated with the cairn.

The sherd survives only to a height of 34.7 mm, weighing 11.9g. It ranges in thickness from 6.9mm at the plain, narrow, slightly flattened rim which slopes towards the interior, to 7.5 mm towards the neck, expanding further on the exterior face to 9.6 mm in thickness where the sherd has broken transversely across a coil junction. This sherd represents less than 5% of the circumference of the rim of a pot with an external rim diameter of at least 210 mm and from the profile that survives, a fairly short necked pot is implied. The external surface has been slipped and burnished to create a smooth background into which three closely and evenly spaced rows of transverse comb impressions have been added before firing, the teeth of the comb being rectangular (ave. W 2 mm; H 0.5 – 1 mm) and crisp in appearance. As so little of the pot is represented by this sherd, it is not possible to determine if the original decorative scheme was all-over-comb-impressions or a more complex design. Nor is it possible to say with certainty whether the expansion noted below the rim on the exterior surface marks the beginning of a set of neck grooves similar to the Beakers from Abbey Mains Farm (Sheridan 2002, illus 3) and Rushlaw Mains Farm, East Lothian (Ashmore et al 1982, 546-7, fig 3), and Doon's Law, Berwickshire (Sheridan 1999, illus 4) or rounded cordons in relief like that from Cairnpapple, West Lothian (Clarke 1970, 350, fig 569); the former hypothesis is more likely based on local distributions of Beakers with this ornament in East Lothian and the Borders.

Over 50 Beakers are known from East Lothian and the (former) Berwickshire region, and over 60% of these derive from formal burials (Lawson et al 2002, 198). This style of pottery is known to have been introduced from Scotland from the Continent around 2450 BC and enjoyed a long currency of use up to and beyond 1950 BC (Downes 2012, 14, table 2). The final period of Beaker use (c.1950-1700-1600 BC) has been defined by Needham (2005) as 'Beaker as past reference' where this form of pottery is still made and used but alongside a complex cultural mix of other vessel styles and functions (Sheridan 2007). Because so little of the pot from Whiteadder Reservoir Cairn now survives, it is not possible to determine with confidence its form and style and, therefore, no attempt has been made to identify this in line with existing typochronological schemes (e.g. Clarke 1970; Lanting and van der Waals 1972; Needham 2005).

Despite the limitations that are placed on the conclusions that can be drawn from this single Beaker sherd it represents a valuable addition to the known corpus of Beaker finds from East Lothian and provides tantalising hints at possible funerary or ceremonial activity at the site during the Early Bronze Age.

CATALOGUE

SF 01 Beaker sherd. Plain rim sherd, slipped and decorated on exterior surface with three transverse rows (H 0.5 – 1 mm) of comb impressions with even rectangular teeth (ave. W 2 mm). The sherd has broken across the base of a short collar or cordon. The fabric is a fine clay with frequent small black glassy grits and angular quartzite (ave. D 0.5 mm, largest D 4 mm) which has fired hard and is incompletely oxidised with a pinky-buff exterior surface, dark brown core and a pale buff-beige interior surface. Surviving L 41.5 mm, H 34.7 mm, T 6.9-9.6 mm. Wgt 11.9g. Context 101. Tr. 1.

Discussions and Conclusions

The anomaly identified on the LiDAR data can be confidently identified as the remains of a cairn, though much denuded, with stone possibly having been removed for the creation of banks/field boundaries and other features in the vicinity. It is probable that forestry activities have also caused damage and loss of stone, evidenced in T2 by linear truncation of the cairn material, on alignment with the planting layout of the trees.

The lack of any clearly defined structure within the excavated areas of the cairn material suggests that the cairn is more likely to be Bronze Age than Neolithic in date. Our excavations did not reveal any evidence of human remains, whether inhumation or cremation burials, but this is not surprising given the limited size of our trenches in relation to the size of the cairn.

The variation in the radiocarbon dating results indicates some influence of bioturbation or other disturbance to deposits on the site: both contexts were interpreted on excavation as being stratigraphically and chronologically secure. Context (103) was beneath the cairn material, overlying the glacial till, and contained multiple fragments of flint debitage, interpreted as of Mesolithic date. Context (206) was interpreted as a possible early deposit from the construction of the cairn, or perhaps an interface with the old ground surface. There are two possible reasons for the discrepancy in dates. Firstly, that the cairn is not in fact of prehistoric origin but represents much later activity, perhaps movement of stones for field clearance, with mixed residual material of prehistoric date being included within the cairn. Secondly, sample (103) may have been contaminated, either through the effects of bioturbation or because material from an overlying (later) context was accidentally included within the sample e.g. having become dislodged from the section edge and fallen into the base of the trench during collection of the sample. On balance, the first option seems less likely. The inclusion of material of medieval date in a context overlying the natural suggests that at some point in the medieval or post-medieval period, the turf was stripped back to reveal the natural beneath. This would not have been necessary during construction of a cairn of stones resulting from field clearance since these would most likely have been placed directly onto the turf. Furthermore, the hillock on which the cairn sits clearly saw activity during the medieval and later period, evidenced by field banks/boundaries crossing the area, visible both on the ground and in the LiDAR data. One of these field boundaries appears to encroach on the eastern edge of the cairn, lying over the cairn material and so post-dating it. The effect of modern forestry ploughing can also be expected to have disturbed and intermixed deposits overlying and within the cairn.

The pot sherd supports a Bronze Age origin for the cairn, and suggests the cairn was in use over a long period. The sherd's recovery from deposit (101), immediately beneath the topsoil and not stratigraphically secure, highlights the disturbed nature of the upper cairn material, whether during recent centuries or during the cairn's active use in prehistory. Typically, Bronze Age cairns were not constructed and left untouched; rather they were often added to over time. Later cist burials were also sometimes inserted into Neolithic cairns, as at Cairnpapple Hill, West Lothian (Barclay 1999).

Few similar sites have been excavated in the area, but one example is found around 26km to the SE near Foulden, in the Scottish Borders, was . Here, work by J. Hewat Craw (1914) saw removal of the cairn material to expose three cists placed in the ground beneath the cairn. Multiple phases of construction are suggested by two concentric rings in the ground beneath the cairn material, and further addition on the western side of the monument. The cists are interpreted as having been inserted at different times (Craw 1914), highlighting the way in which cairns might be subject to additions and alterations throughout their life cycles.

The cairn's location, on an elevated spot which would have provided an open location with good views down the Whiteadder valley to the SE, is typical of a Bronze Age cairn. Similar locations with impressive views were often favoured for prehistoric cairns, such as numerous nearby sites including Priestlaw Hill, Spartleton, and Penshiel Hill.

Our excavations have confirmed the presence of a newly identified Bronze Age cairn on the shores of the Whiteadder Reservoir, and offer an insight into the earlier prehistoric period, one that remains rather elusive in the Lammermuirs.

Bibliography

Ashmore, P J, Brooks, M, Mate', I & Strong, P 1982 'A cist at Ruchlaw Mains, East Lothian (NT 616742)', PSAS 112, 542–548.

Barclay, G. J 1999 'Cairnpapple Revisited: 1948-1999', Proceedings of the Prehistoric Society 65, 17-46.

Clarke, C M and Hamilton, J 1999 'Excavation of a cist burial on Doons Law, Leetside Farm, Whitsome, Berwickshire', PSAS 129, 189–201.

Clarke, D L 1970 Beaker Pottery of Great Britain and Ireland. Cambridge: Cambridge University Press.

Craw, J H, (1914) Account of the Excavation of Two Bronze-Age Cairns in the Parish of Foulden; and of the discovery of a Cist containing a Food-Vessel Urn, and Fragments of a Beaker, at Edington Mill, Chirnside, both in the County of Berwick. PSAS 48, 316-33.

Downes, J (ed) 2012 'Chalcolithic and Bronze Age Scotland: ScARF Panel Report', Scottish Archaeological Research Framework. Edinburgh: Society of Antiquaries of Scotland. On-line digital resource: <https://scarf.scot/wpcontent/uploads/sites/15/2015/12/ScARF%20Bronze%20Age%20Sept%202012.pdf> (accessed 19/08/2020).

Lanting, J N & van der Waals, J D 1972 'British Beakers as seen from the continent', Helinium 12, 20-46.

Lawson, J, Henderson, D and Sheridan A 2002 'An Early Bronze Age short-cist burial at Abbey Mains Farm, Haddington, East Lothian', Proc Soc Antiq Scot 132, 193-204.

Lelong, O and Pollard, T (1998) 'Excavation of a Bronze Age ring cairn at Cloburn Quarry, Cairngryffe Hill, Lanarkshire'. PSAS 128, 105-142.

Mackie, E W 1975. Scotland: an archaeological guide: from the earliest times to the 12th century AD. London: Faber & Faber.

Needham, S 2005 'Transforming Beaker culture in north-west Europe; processes of fusion and fission' Proceedings of the Prehistoric Society 71, 171-217

Sheridan, A 1999 'Beaker', In Clarke & Hamilton, 195-6.

Sheridan, A 2002 'The Beaker', in J Lawson, D Henderson and A Sheridan, 197-8.

Sheridan, J.A. 2007 Scottish beaker dates: the good, the bad and the ugly, in M. Larson and M. Parker Pearson (eds) From Stonehenge to the Baltic: Living with Cultural Diversity in the Third Millennium BC, 91-123. Oxford: British Archaeology Report S1692