

A reconsideration of the 'Ardiffery' finds, Cruden, Aberdeenshire

by J B Kenworthy

with a report on the bones by M Harman

'It is not imaginable to such as have not tried, what labour an historian (that would be exact) is condemned to. He must read all, good and bad, and remove a world of rubbish before he can lay the foundation'.

John Evelyn to Samuel Pepys, 28th April 1682.

SUMMARY

Two 19th-century discoveries which have been consistently confused are evaluated on the basis of the original sources. At Uppermill, Cruden, a short cist was found in 1821; it contained parts of the skeletons of a man and a child, some pig bones, a bracer, seven barbed-and-tanged arrowheads, two flint knives and two Developed Northern beakers. At least one more cist was later found near by. At nearby Greenbrae, in 1812, a group of later neolithic jet and amber beads was found, apparently associated with an edge-polished flint axe, and possibly in an artificial mound.

The general point is made that the archaeologist should pay the same attention to his source documents as does the historian.

1. Introduction

With the emergence in recent years of the 'New Archaeology', we have been rallied to the standards of scientific procedure not only in excavation, but also in the formulation and assessment of archaeological hypotheses. One aspect of archaeological procedure has, however, received little attention: this is the use of basic documentary sources, where there is a need for an equally rigorous approach. In assessing the reliability of such sources, and their value as independent evidence, the basic skills of the historian are required. In the example given here, failure to consult primary references, supplemented by repeated conjecture, has led to the confusion of two separate and important find-groups. These are now preserved in the Arbuthnot Museum, Peterhead, and figure in the literature as being from 'Ardiffery, Cruden'.

2. The problem

If we compare the accounts of the Ardiffery find in the two major studies of Scottish beaker pottery since that of Abercromby, a degree of inconsistency appears. According to Crichton-Mitchell (1934, 174) the find comprised two beakers (nos 8, 9)

'beneath tumulus in cist with skeleton of adult male, boy aged 12, and dog; also necklace of jet and amber, flint axe, bracer, 7 barbed and stemmed arrowheads, knife and flake of flint'.

On the other hand, Clarke (1970, 174) describes the find thus:

'A stone cist in a small barrow at Ardiffery, Cruden, Aberdeen., nos 1423-4, contained two Developed Northern beakers, the skeletons of an adult male, a youth and a dog, together with a fine four-hole, type C1, grey felstone bracer, seven barbed and tanged arrowheads and two flint flake knives. . . . From the mound came an elaborate necklace of giant jet bugle beads and amber lumps, almost certainly from a later secondary burial of the full Bronze Age'.

Since this is the only Scottish grave among the six which Clarke calls 'the nucleus of the Developed Northern beaker associations' (1970, 169), it is important to clarify the discrepancies. Clarke has relegated the necklace to the mound, and omits mention of the axe. This is surprising, since the possible importance of the association was appreciated by Piggott (1963, 72-3). Evidently the relationship of the necklace and the axe, and of these with the beaker burial, is important, especially since the discovery of a jet 'bugle bead' in an indubitably neolithic context at Fengate (Smith 1974). Different sources are not involved since Clarke follows Crichton-Mitchell in citing Anderson and Black (1888, 366), Wilson (1863, 75), *Cat Ant Edin* (1859, 11) and Abercromby (1912, 40, nos 228 and 229). Examination of these, along with other relevant information, will allow us to clear up the confusion and determine the actual circumstances of the finds.

3. *The sources and the solution*

There are 11 main sources, as well as a few later notices. Secondary information only is found in Wilson (1851, 51, 295; 1863, 75, 434), Smith (1875, 450-1), *Proc Soc Antiq Scot* 13 (1878-9, 126-7), Anderson (1886, 17), and Anderson and Black (1888, 366-7). The paper by 'W' (1848, 371-2) is mainly secondary, but contains some independent information. Sources of evidence more likely to be reliable are: the MS Catalogue of the Arbuthnot Museum, Peterhead (*Cat Arbuthnot Mus*, no date but pre-1850, xxix; the published *Catalogue* (1852, 9) is too abbreviated to be of use), Gray's notice in the *New Statistical Account (NSA)*, 1845, 355), Pratt (1858, 33), the *Catalogue of Antiquities . . . exhibited in the Museum of the Archaeological Institute of Great Britain and Ireland . . . , held in Edinburgh, July, 1856 (Cat Ant Edin 1859, 10-11)*, the MS original *Object Name Book*, Aberdeenshire No. 22 (*ONB* 1868, 2, 67, 163-4) compiled by the Ordnance Survey for the Parish of Cruden during the preparation of the first edition of the Six-Inch maps, along with the relevant sheets of this series.

Clarke follows Crichton-Mitchell in relying upon Anderson and Black (1888) as the main source, but he has realised that there is something amiss in the tradition (followed, for example, by Abercromby (1904, 344-5; 1912, 40, 62) and Callander (1916, 239)) which includes all the finds in one association. This starts with Anderson and Black, as does the mis-spelling 'Ardiffney' - a mis-reading of 'Ardiffery' in *Cat Arbuthnot Mus* (n.d., xxix). All earlier sources make it plain that there were two separate finds, which have in common only that they were found in the same parish, in roughly the same area, at about the same time, and were preserved in the same museum, that formed by Adam Arbuthnot at Peterhead. It is to these accounts that we must turn for details, attempting to resolve differences by assessing the reliability of their authors.

4. *Reliability of the early accounts*

We may assume that the Arbuthnot Museum Catalogue, if not contemporaneous with the discoveries, is at least based on first-hand information. The *NSA* account was not written by the parish minister, as was usual, but by Roderick Gray, a Peterhead lawyer with an interest in antiquities, who had been prominent in local politics since 1811. He was thus of an age to

remember the first find, made in 1812. As Provost of Peterhead from 1843 to 1857 he was one of the executors of Adam Arbuthnot, when the Museum was bequeathed to the town in 1850 (Findlay 1933, 254-5, 279). He was responsible for the loan of the two find-groups to the Edinburgh exhibition in 1856, and the account given (*Cat Ant Edin* 1859, 10-11) will have been supplied by him. This is the most circumstantial account for the second find (1821), and must be based on an unpreserved source. The originator of this source, apparently used by Wilson (1851, 51) also, is suggested below. It differs from *NSA*, also associated with Gray, but may be considered to be more reliable.

The account of the 1812 find in Pratt's *Buchan* (1858, 33) is at second-hand, derived (with a mis-reading of the date) from *Cat Arbuthnot Mus*, for Pratt was only 14 years old when the discovery was made. He did, however, enquire locally about the find-spot. On the other hand, his account of the 1821 find may be more reliable, since in that year, newly graduated from King's College, Aberdeen, Pratt took up the living at Stuartfield; from 1825 until his death in 1869 he was incumbent of St James' Episcopal Church, Cruden (Pratt 1901, xv-xvi). He was in the area at the right time, and had the right interests.

The information given by the anonymous 'W' is mainly secondary to *NSA*, but a duplicate account of the beaker grave is included which seems to be independent of any other published account.

The OS Object Name Book, along with sheets 31 and 39 of the First Edition Six-Inch maps, is very important. Together, these allow us to give the exact location of the finds. Much of the other information in *ONB* is secondary, either to Pratt or *NSA*, but an eye-witness account of the discovery of the beaker grave is included. The location of the earlier find came from local enquiry, and probably from verbal information given by Pratt. It is interesting to note that, despite the entries in *ONB*, the Examiner for the Six-Inch map made the same error as Anderson and Black - both sites occur correctly on the map, but the Upper mill cist has all the finds attributed to it.

5. *Beaker burials at Upper mill, Cruden* (NGR NK 05363701. Fig 1.3, no. 2)

Mr Grant of Merrytop told the OS surveyors that in taking sand from the sandpit here in 1818 he found a cist, 'and on removing the covering stone he found two urns, two flint knives, seven flint arrowheads and the most part of two skeletons'. The last-named were taken away by the parish doctor, and the rest of the objects were given to the Peterhead museum (*ONB* 1868, 67). It is possibly due to the doctor that we have the details recorded in *Cat Ant Edin*, and certainly the details of the skeletal material must be due to him.

Date The date of the find, given by *ONB* and Smith (1875, 451) as 1818, is quoted in all other sources as 1821. Anderson and Black (1888, 366) correctly follow *Cat Arbuthnot Mus* in giving the date as 21st August, 1821.

Site The sandpit lay beside the road leading to Mill of Hatton (Pratt, cf fig 1.3, site 2), in a small hill of sandy marl (*Cat Ant Edin*). Near the top of this hillock, a cist was found, at a depth variously reported as 'about 4 feet' (*NSA*), 'about 6 feet' (Pratt) and 'about 8 feet' (*Cat Ant Edin*). Since Gray allowed the figure he gave in *NSA* to be contradicted in the last-named source, we may accept a depth of 6 to 8 feet (c 2-2½ m) as likely.

Cist This is well described in *Cat Ant Edin*. The measurements (presumably internal) were '4 feet 3 inches by 2 feet 2 inches, and 2 feet 2 inches deep' (c 1.3 × 0.66 × 0.66 m). The sides and ends were 'slabs of gneiss, covered over with a slab of "monkey-slate"¹, and a flatted block of decomposed granite'. The fill of the grave-pit was seen: 'many small stones were mixed with the earth and sand above the covering stones of the cist'. 'The bottom was formed with clay, perfectly smooth and level, but considered to be natural, as many similar strata of clay ran through the

sand at various distances, measuring from $\frac{1}{2}$ inch to 2 inches in thickness. There was a small quantity of sand in the cist, amongst the bones, possibly about two inches in depth; this had penetrated, doubtless, between the slabs of which the cist was constructed' (*Cat Ant Edin* 1859, 11). Pratt and 'W' add that the cist was composed of four stones, and the latter confirms the internal depth of the cist as about 2 feet. Nowhere is the orientation of the cist mentioned.

Contents of cist There is no evidence for the positions of the objects and skeletons within the cist. According to *Cat Ant Edin* the skeletal material comprised an adult (sex not stated) about 5 ft 7 in or 5 ft 8 in tall, a child (sex not stated) of 12 to 14 years of age, and parts of a dog. The local doctor will have identified the bones (cf *ONB*, above). Most sources comment on the fact that all three skeletons were incomplete, and although *ONB* refers to there having been 'the most part' present, it must remain unclear exactly how incomplete they were. Pratt and Anderson and Black mention skulls and leg bones, but do not mention their state of preservation. The surviving material, which may well be less than what was originally recovered, has been re-examined by Miss Harman (Appendix A). She identifies the remains as those of an adult male, c 20–25 years old, a child (sex unknown), perhaps 8–10 years old, and the left humerus and radius of a fully-grown pig. It is uncertain whether the pig is wild or domestic, but the latter is more probable. Its bones showed no signs of butchery.

There is substantial agreement about the grave-goods. They are not figured here as they have been adequately illustrated by Clarke (1970, 442, 510, and figs 551–2). They consist of two Developed Northern beakers, a stone bracer, seven barbed-and-tanged flint arrowheads and two flint flake knives. We do not know the positions of the beakers relative to the bodies, whether the smaller one was with the child, or whether the arrowheads (a token quiverful?) and the bracer were beside the adult.

Comments There is no good reason to regard the 'small hill' as being other than natural. Wilson (1851, 51) was the first to state that the cist was in 'a small tumulus', and this is repeated by other authors. Anderson and Black increased the confusion, as we have seen, although Anderson had previously given a reasonable account of the cist (1886, 17), mainly following *Cat Ant Edin*, but with a few inaccuracies. Later sources add their budget of supposition, culminating with the description by Clarke, quoted above.

Discussion The site, then, was a flat grave with multiple inhumation, archer's equipment, and part of a pig. The depth of the cist below the surface shows that it is related to the 'shaft-graves' found with Developed Northern beaker burials (Clarke 1970, 169); the occurrence of more than one beaker is also characteristic of some graves in this group.

The account of the cist given in *Cat Ant Edin* (see above) suggests that the burials were made at one time, and that it had not been disturbed since. The incompleteness of the skeletons, which is not warranted by the state of preservation of the surviving bones, may be important. Petersen, Shepherd and Tuckwell (1974) have recently discussed a short cist at Horsburgh Castle Farm, Peeblesshire. They suggest that inhumation had taken place after the corpse had become at least substantially defleshed (Petersen *et al* 1974, 46), and enumerate other instances of the practice. It is possible that such a practice is represented at Uppermill, and this might not be surprising in the case of simultaneous multiple inhumation. In the absence of any comment to the effect that the bones were in disorder, it is possible that the bones may have had some semblance of articulation.

Other burials At least one more cist was found in the same sand-pit as the one discussed above. 'W' (1848, 372) says 'In 1838, several other graves were found in the same eminence'; Pratt, following 'W' or his source, repeats this. *ONB* (1868, 67) gives further information: 'Mr Cantlay of Peelharry informs me that while he was casting sand from this pit, he came upon a

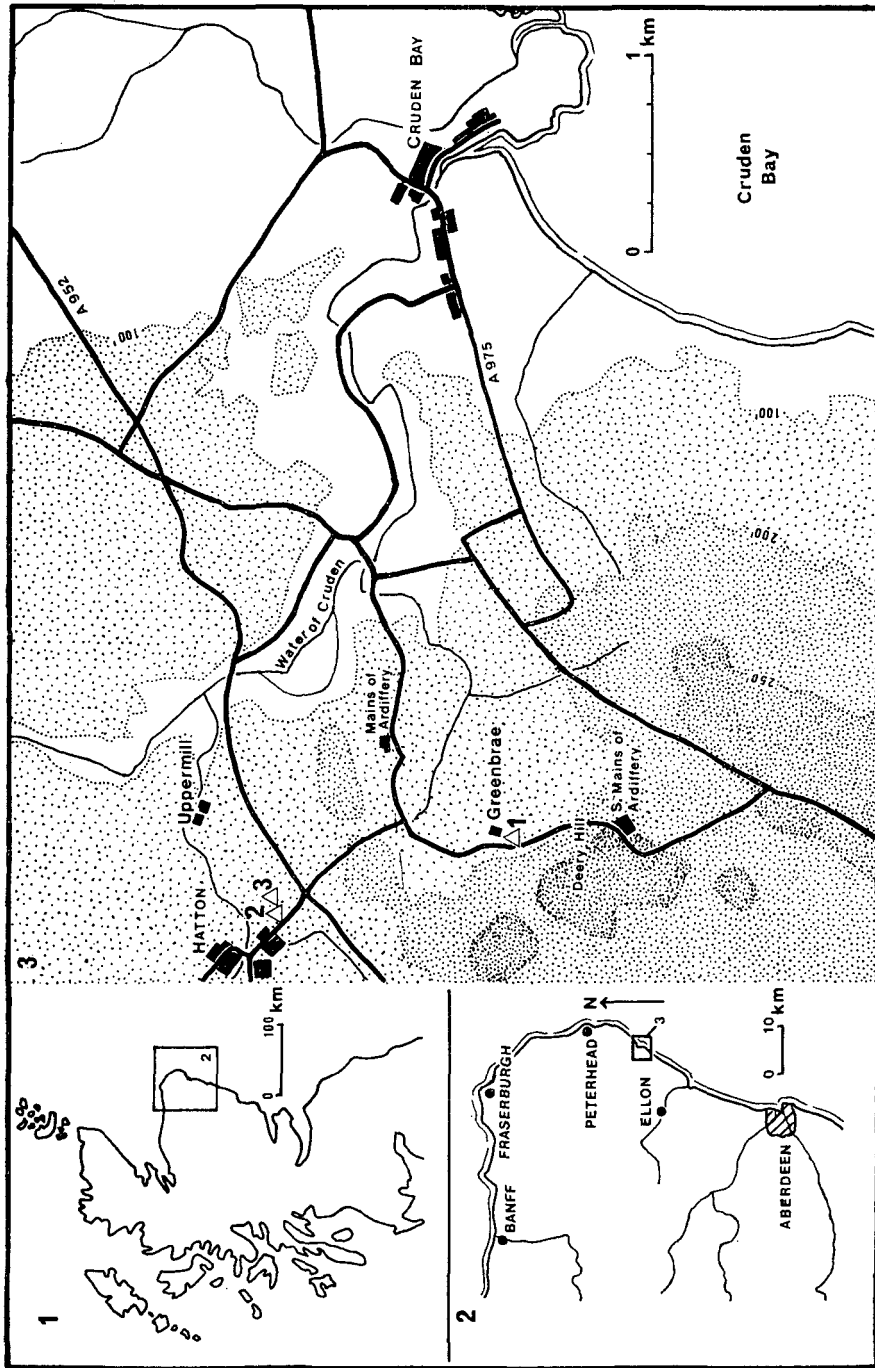


FIG 1 Location maps

stone cist, which contained the following articles, viz. One Urn, Human bones, a Stone Axe, and a lot of Flint Arrowheads. He is not quite sure of the year in which they were found, but he thinks it was 1841.' This is the find sited at NK 05423702 (fig 1.3, no. 3). None of these finds has been preserved, and there are no definite records of more than this one extra burial being found. The 'Stone Axe' may well have been a bracer, since this grave too contained arrowheads.

6. *The later neolithic find from Greenbrae, Cruden* (NGR NK 05713588. Fig 1.3, no. 1; fig 2)

The sources for this find are less satisfactory than those for Uppermill. All derive from *Cat Arbuthnot Mus* (n.d., xxix), some with minor additions probably from local enquiry. Additional information is contained in 'W' (1848, 372), Pratt (1858, 33), *Cat Ant Edin* (1859, 10) and *ONB* (1868, 2, 163-4).

Date *Cat Arbuthnot Mus*, *Cat Ant Edin* and *Proc Soc Antiq Scot* 13 (1878-9, 127) give the date of discovery as 1812. Pratt, followed by *ONB*, says 1817. Dates are easily mis-remembered, and Pratt could have had no first-hand knowledge of the discovery, so we may accept the earlier date as being correct. 1817 may well be a misreading of 1812 in *Cat Arbuthnot Mus*.

Site The First Edition of the Six-Inch map, confirmed by 'W' and Pratt, places this find about 1 km S of the Uppermill sand-pit, on the eastern slope of Deery Hill, SW of the farm of Greenbrae. The site is variously described as 'a small mound' (*ONB* 1868, 2), 'a tumulus or low-lying hillock' (*ONB* 1868, 164), or 'a tumulus' (*NSA*, Pratt, *Cat Arbuthnot Mus* and 'W'). Only *Cat Ant Edin* disagrees, saying that the objects were found 'about two feet deep in wasteland'. Even if we accept that the find was in some sort of artificial mound, we know nothing of its size, height, composition or shape.²

It is also impossible to determine the relationship of the finds to the mound, if the latter existed. They might have been primary, secondary, or in the old ground surface beneath. We have to take on trust the association of the beads with the axe, and only the possible mound suggests that they might have accompanied a burial. If there had been an inhumation, which had not decayed totally, it would have been mentioned; a cremation would have been missed more easily.

Finds (fig 2; Appendix B) These consist of an edge-polished flint axe, 12 beads of jet or a similar material, and four beads of amber. We cannot tell whether the beads lay in the earth as if in a necklace, or had been unstrung before deposition.

The only published illustration is small and stylised (*Cat Ant Edin*, 1859, plate facing p 10), so the finds will be described in detail in Appendix B, and are illustrated in fig 2.

Discussion This has no claims to be exhaustive, and will serve only to set the finds from Greenbrae in context, and to point out some general aspects of the find.

The axe/adze, as Piggott has noted (1963, 73), has its closest affinities with the edge-polished flint axes and adzes of the later neolithic in northern England, including the Seamer axes and Duggleby adzes defined by Manby (1974, 95). The high quality flint is quite unlike that from Buchan, and the Greenbrae axe/adze clearly belongs to a group of flint axes imported from England. These include one of related form from Fordoun, Kincardineshire (NMAF AF 134; *Proc Soc Antiq Scot*, 9 (1870-2), 461; Brodie 1872, 500 - this is apparently the 'hatchet of blue flint' found in the neighbourhood of the farm of Pettie). This is of dark grey flint and has an asymmetrical lozenge cross-section, a thin pointed butt, and a blade less curved than that from Greenbrae. Another axe, of mottled grey flint, from 'near Dundee' (NMAF AF 378; *Cat NMAF* 1892, 35) lacks the triangular section of the Greenbrae specimen, but is similar in blade form and in the treatment of the edges. Among other edge-polished axes in the eastern Scottish area, we may mention those from near Beaully, Ross (NMAF AF 255; *Proc Soc Antiq Scot*, 19 (1884-5), 9)

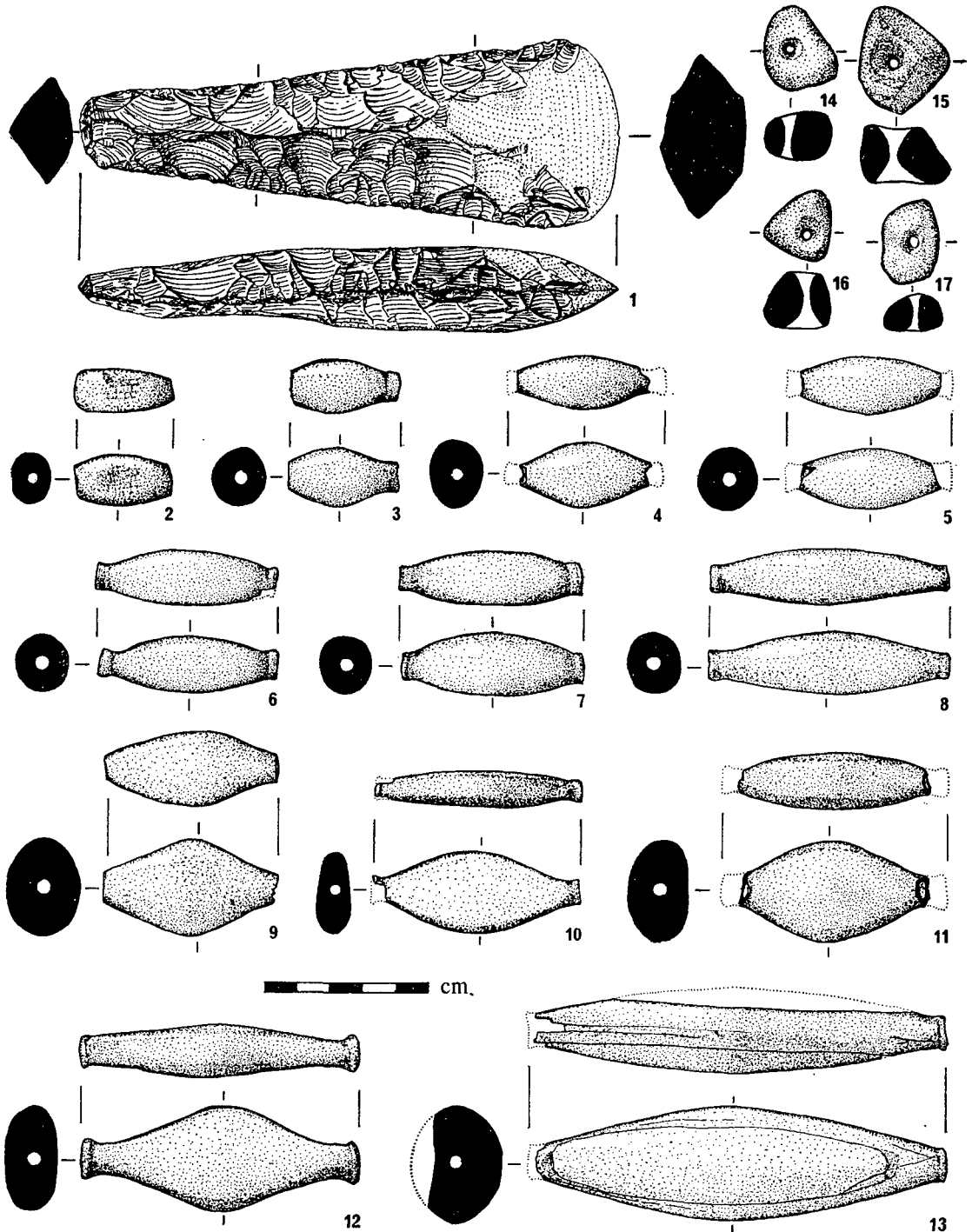


FIG 2 Greenbrae, Cruden: 1. flint, 2-13. jet, 14-17. amber (scale 1 : 2)

and from Smiddyfield, New Keig, Aberdeenshire (NMAS AF 272; *Proc Soc Antiq Scot*, 20 (1885-6), 319). Apart from the eastern group, these axes also occur in western Scotland. These include a Duggleby adze from Lochgoin, Fenwick, Ayrshire, probably associated with a leaf-shaped flint projectile point (Paton 1890, 3-4), another of fine light grey flint from Dalgarnen, Kilwinning, Ayrshire (Glasgow Art Gallery and Museum, LA 6436b), and one from a cist about 12 m NE of a food vessel cemetery at Knappers, Kilbowie, Dunbartonshire (Davidson 1935, 353). The cist, apparently of rounded boulders, lay N-S and, the adze lay across the N end. Unfortunately there was no other associated material, though a sandstone slab, said to be one of the end-stones, bears some pecked markings which are not of the normal cup-and-ring type (Davidson 1935, 354). The axe is now in Glasgow Art Gallery and Museum, Kelvingrove ('55-96).

Some of the examples mentioned above are very close to northern English specimens: that from 'near Dundee' is paralleled by the axe from Liff's Low, Biggin, Derbyshire (Piggott 1954, 357, fig 62, no 11) in both size and form, while the Greenbrae axe has great similarities to those from the Seamer Moor hoard, Yorkshire (BM 1926, 104, fig 100). Apart from the W Scottish examples, there is a true Duggleby adze from Ferniebrae, Slains, Aberdeenshire, not far from Greenbrae (NMAS AF 63; *Proc Soc Antiq Scot*, 10 (1872-4), 509).

The Liff's Low axe is one of two among the grave-goods of a later neolithic burial under a round barrow, while the Seamer Moor axes and the adze from Duggleby Howe are also from later neolithic funerary contexts (Piggott 1954, 355-6). This should serve to place the Greenbrae find and its parallels in chronological context.

Manby (1974, 98) has pointed out that the carefully selected raw materials and the high standard of workmanship of these implements indicate that they were the products of a group of specialised workers, while S J Pierpoint (*in litt.*) has contrasted the normally 'ritual' contexts of these fine axes with the generally domestic contexts of those made from poorer flint and of inferior workmanship. The 'export' of such prestige objects to Scotland should therefore have important implications for the nature of culture contact between the two areas.

Little can be added to the discussion of neolithic jet beads by Smith (1974). Four varieties may be distinguished at Greenbrae:

(a) A simple flattened elliptical bead (no. 1), which would not be out of place in a middle to later neolithic context. It is similar to the jet bead from Windmill Hill (Smith 1965, 135, fig 58); examples from dated contexts show that the type is present from the earlier neolithic in England (Smith 1974, 40).

(b) A simple 'biconical' bead (no. 8), for which there is no exact parallel. The jet bead from Painsthorpe Wold Barrow 4, Yorks (Mortimer 1905, 116 and pl XXXIV, fig 275), is from an uncertain context, and offers only a general parallel.

(c) Six collared beads (nos 2-7), best described as prolate spheroids. These are similar to the 'cannel coal' bead from Watch Hill, Moffatdale (NMAS FN 16; *Proc Soc Antiq Scot*, 13 (1878-9), 126), though this is larger, and to the example from Ireland figured by Wilde (1857, 241, fig 157). Less close are the jet beads from Bentry Hill, Henbury, Glos and Isleham Fen, Cambs (Lethbridge and O'Reilly 1937, 165, pl ii, a, b). They are also paralleled by a schist bead from an aberrant Portal Dolmen at Ballyrennan, Co. Tyrone (Davies 1937, 95, 99 (BM 1)). This may have been associated with pottery of the Lyles Hill tradition.

Bead no. 12, the largest from Greenbrae, is probably related to group (c).

(d) Three beads of flattened elliptical form, all with some degree of elongation at the ends, and all with collars (nos 9-11). These may be paralleled by the Fengate bead (Smith 1974), which was associated with a neolithic house and pottery of the Grimston/Lyles Hill series. The house

has radiocarbon dates of $3010 \text{ bc} \pm 64$ (GaK-4196) and $2445 \text{ bc} \pm 50$ (GaK-4197), indicating a possible date in the middle of the fourth millennium BC.

The unassociated shale bead found near Pencaitland, E Lothian (NMAS FN 17; *Proc Soc Antiq Scot*, 13 (1878-9), 127) is of this form, though it is larger than any of the Greenbrae beads. The same is true of the example from near Bridlington, Yorks (BM 1920, 86, fig 82) which may possibly come from a long barrow (Smith 1974, 42). The jet beads from Main Bog, near Cullohill, Co. Leix (*Trans Kilkenny Archaeol Soc*, 1 (1849), 32) seem to have included some of this form, while those from near Fertagh, Co. Leix and Church Island, Loch Curraun (i.e. Loch Currane, Co. Kerry) (Frazer 1892, 221) were similar to nos 9 and 10 in length, but were wider and thinner. The worn stone bead from the Court Cairn at Bavan, Co. Donegal (Flanagan 1966, 30, fig 11, C) is related, as is bead BM2 from Ballyrennan (Davies 1937, 99).

These beads, then, may be seen clearly as belonging to the neolithic,³ though they seem to have a greater chronological spread (as far as we can tell, given the lack of associations) than do the edge-polished flint axes. They occur singly, in pairs (e.g. those from Fertagh), and in larger groups. The largest group is probably that from beneath 6 feet of peat in Main Bog, Cullohill (*supra*), where some 20 beads were found. These varied in shape, as at Greenbrae, although here the flattened oval form d predominated, and only two had collars. They were between 6 in (152 mm) and $1\frac{3}{4}$ in (44 mm) in length, and did not lie as in a necklace when found.

Find-spots vary from stray finds like Watch Hill to occupation sites such as Fengate, as well as ritual or funerary contexts both in Ireland and England. It would be appropriate to see the Greenbrae find in the last type of context. The necklace would be a prestige object, the raw materials for which would have to be imported (not necessarily from England), even if the objects themselves were not. The Greenbrae find is the only group of such beads to contain amber beads as well. It is difficult to find parallels for the amber beads in dated contexts. The discoid stone beads from Ballyrennan (Davies 1937, 99-100) and from Bavan (Flanagan 1966, 30, fig 11, A, B), associated with stone beads of type d provide only the most general of parallels. The amber was most likely an import, whether as raw material or finished beads, but it may well have been from British beach sources, rather than being derived from a trade network with the Baltic.

The necklace and axe from Greenbrae may thus be dated to the later neolithic, and most likely come from a funerary or ritual context. Between them they give evidence, supported by other examples, that the local community (and indeed much of E and NE Scotland) at this time formed part of a redistribution network, including N England. An aspect of this may be seen in the distribution of ripple-flaked PTD arrowheads of Clark's Forms H and I. These occur quite frequently in Scotland, but the characteristic brown flint of which they are made has been recognised as being exotic by Stevenson (1947, 181), and the mainly NE English distribution has recently been discussed by Manby (1974, 84-6). There is evidence for the movement of ideas or objects in the opposite direction also: carved stone balls have their heaviest concentration in E Scotland (see the map in Stevenson 1966, 36, fig 7), but examples have come from two sites in Yorkshire and one in Cumberland (Manby 1974, 99-100). A stone axe from the factory at Creag na Cailleach, Killin, Perthshire, a type common in NE Scotland, has been found in Nottinghamshire (Cummins and Moore 1973, 239).

It is probable, too, that Ireland formed part of this network, which may be seen against the background of the distribution of pottery of the Grimston/Lyles Hill series (Smith 1974a, 108, 109, fig 14) which links a wider eastern English province with N England, E and NE Scotland, SW Scotland and Ireland, especially NE Ireland. This hypothesis is reinforced by the (admittedly S Irish) distribution of Greenbrae type beads, by the occurrence of axes of Group IX Tievebulliagh porcellanite in NE and E Scotland (Ritchie 1968), and of a few carved stone balls in N Ireland.

All of these items may have had prestige value, and in some cases ritual value, and this should also affect the model we use for this redistribution network during the later neolithic.

The 'tumulus' from Greenbrae, if it be accepted, may then be added to the small number of later neolithic sites from NE Scotland, bearing in mind the proviso that we cannot know the exact relationship between the objects and the mound. These include the round cairn at Easter Finnelly, Aberdeenshire, where AOC beaker sherds were found associated with Grimston/Lyles Hill ware (Atkinson 1962, 18), and another round cairn, the Powsod of Atherb in Buchan, which was destroyed in the last century (Milne 1892, 103–5), seems to have produced the same association. Less well-known than the latter site are two other cairns at Atherb, destroyed at about the same time. From the description given, these seem to have been related to the crematorium round barrows of N England (Milne 1892, 101–2, 105).

The links between these areas are important, since they are all that survives of what must have been a complex social and economic interaction. It is against this background that we must see the spread of stone circles, henges and other ritual monuments towards the end of the neolithic, and it is on such a system that beaker-using incomers must have intruded. It is fruitless to speculate about the inter-relationships and origins of the former, or the effects of the latter, until we have made a greater effort to understand the economic basis for cultural interaction between different parts of the British Isles at this time, and have formulated more clearly a model for such interaction.

7. Conclusion

A re-examination of the sources for the Ardiffery finds has shown that the failure of successive authors to consult and evaluate the primary sources has led to confusion over the nature and circumstances of two separate finds, both of some importance. Such confusion has led to some remarkable inferences, but it is hoped that the record has now been set straight. There remain many other finds from the 19th century which will only become archaeologically useful when they have been subjected to the same scrutiny.

APPENDIX A

The Bones from Uppermill

by *Mary Harman*

The extant remains from the cist at Uppermill consist of parts of two humans, one adult male and one child, and a pig.

The condition of all the bones is quite good, the surfaces of some of them being slightly eroded, though they are now covered by a thick coating of varnish. Although bones from the same skeleton may vary in their degree of preservation according to local differences within the grave, if these bodies were complete when they were interred, it is surprising that no more survived than the parts listed below, which are not in such a state as to suggest that the adjacent areas were poorly preserved. If the skeletons were relatively complete on discovery, the distribution of the parts retained seems odd, though it is fortunate that any pieces are available for study, as it is only rarely that human remains from such early discoveries have been kept. Some of the pieces appear to have been chopped or hacked, but this may well have occurred during or since the excavation, and no significance can be attributed to those marks.

The adult is represented by the cranium, mandible, two lumbar vertebrae, most of the left humerus, the distal end of the right humerus shaft, the proximal part of the left radius and ulna, both knee joint and tibiae, part of the right fibula, and the left calcaneum, talus and metatarsals. The postcranial bones are fairly large and robust, suggesting that the skeleton was that of a male: slight brow ridges on the skull support this, though there are no strongly marked areas of muscle attachment on the occipital, and the mastoid processes are broken. The absence of the pelvic girdle does not permit a more positive assertion

as to the sex of the individual. The total length of the tibia is between 350 mm and 380 mm, giving a height of between 5 ft 5½ in (166.6 cm) and 5 ft 8½ in (173.9 cm), calculated from the regression formulae of Trotter and Gleser, as published in Brothwell (1965, 102). All the teeth were present in the mandible at the time of burial, but all except the lower left first molar have fallen out and been lost; most of the enamel has chipped off the tooth but it is plain that wear on the occlusal surface was slight, and if the wear pattern was normal this would indicate an age of between 20 and 25 years. There are two small caries in this tooth, and evidence in the jaw of an abscess at the root of the lower second molar. The absence of any unfused epiphyses confirms that this is the skeleton of an adult. There is no evidence of disease or injury to be seen on the bones.

The child is represented by the lower right second deciduous molar, parts of two ribs, the left clavicle, parts of both humeri and the left ulna, most of the left femur, the distal end of the right femur, the proximal ends of both tibiae and part of a fibula. None of the epiphyses is fused. The size of the bones, compared with the diaphysis length measurements of children of known age, from a chart made by Miss Powers (pers comm) suggests that this was a child of 8 to 12 years; the molar, which has its roots intact, suggests an age of 7 to 9 years: 8 to 10 years seems a reasonable compromise. There is no evidence of injury or disease to be seen on the bones.

Two further bones remain from this cist: the left humerus and radius of a pig. The proximal epiphysis of the humerus, and the distal epiphysis of the radius are not fused or fusing; Silver's (1963, 252-3) table of fusion ages shows that the animal was aged about 3 to 3½ years, and was therefore a fully-grown pig. There is nothing to show whether these bones represent a joint of pork or a whole animal.

APPENDIX B

The objects from Greenbrae (fig 2)

For convenience, both the catalogue numbers for the originals in the Arbuthnot Museum, Peterhead, and of the copies presented to the NMAS in 1880 will be given below. Comparison of the casts with the originals shows that the latter have sustained very little damage over the last century. If we may believe the 1859 illustration (*Cat Ant Edin* 1859, pl facing p 10), however, they were then much more complete than they are now. Although the finds are illustrated in a stylised manner, individual beads are recognisable, so this conclusion is probably justified.

The axe/adze (Arbuthnot Mus 71.5.17; NMAS AF 135; fig 2, 1) This is of a variegated light to dark grey flint, and is 163 mm long, 55 mm wide at the blade; it has a maximum thickness of 26 mm. It is polished toward the blade only, on both faces. The faces meet at the butt and sides in an acute angle, and the upper face is ridged. The sides are slightly concave in plan and bear on the edges apparent traces of 'scrubbing' to provide microplatforms for working the faces. The blade is curved but not expanded, nor is the narrow butt. The blade is still fairly sharp. The triangular cross-section, in conjunction with the asymmetrical side-view, suggests that this was an adze, or more likely axe/adze, rather than an axe. No examination has been made for microscopic wear traces to check this.

The jet and amber beads (Arbuthnot Mus 71.5.1) These consist of 12 jet and 4 amber beads.

Jet beads

1. (NMAF FN 30; fig 2, 2.) Length 29 mm, width 16 mm, max. thickness 13 mm. Irregular elliptical bead with oval cross-section. One end wider than the other. Both ends, especially the wider one, bear wear-marks. The material seems to differ from that of the other beads, as is shown by the crazing of the surface. Perforation cylindrical, at a slight angle, diam. *c* 3 mm.

2. (NMAF FN 29; fig 2, 3.) L. 32.5 mm, W. 18 mm, Th. 16.5 mm. Elliptical, with sub-circular section. Collar, defined by slight groove running part way round only, at one end. The other end seems to have been broken and reworked in antiquity; it may well have been collared originally. Perforation cylindrical, diam. *c* 4 mm.

3. (NMAF FN 36; fig 2, 4.) L. 39.5 mm, W. 19.5 mm, Th. 18.5 mm. Elliptical, with oval section. Both ends broken off, but it is clear that there were originally cylindrical elongations at each end, probably with collars (cf illustration in *Cat Ant Edin*). Perforation cylindrical, diam. *c* 4.5 mm.

4. (NMAF FN 38; fig 2, 5.) L. 43.5 mm, W. 19.5 mm, Th. 18.5 mm. Elliptical, with almost circular section. Both ends broken (some damage since NMAF casts made), but indications of cylindrical elonga-

tions at each end. Illustration in *Cat Ant Edin* suggests that there were collars. Perforation widens from *c* 4 mm diameter at centre to nearly 6 mm at the ends.

5. (NMAS FN 32; fig 2, 6.) L. 55 mm, W. 18.5 mm, Th. 17 mm. Elliptical, with almost circular section. Collar at each end defined by shallow groove. Perforation cylindrical, diam. *c* 4.5 mm. Very like no. 6.

6. (NMAS FN 33; fig 2, 7.) L. 54 mm, W. 18.5 mm, Th. 16.5 mm. Elliptical, with almost circular section. Collar at each end defined by shallow groove. Perforation cylindrical, diam *c* 4.5 mm.

7. (NMAS FN 31; fig 2, 8.) L. 72.5 mm, W. 20 mm, Th. 17 mm. Elliptical, elongated, with almost circular section. Collar at each end, partly defined by a shallow groove. Perforation widens from 3 mm diam. at centre to 4.5 mm at ends.

8. (NMAS FN 34; fig 2, 9.) L. 52.5 mm, W. 29.5 mm, Th. 23.5 mm. Biconical, with oval section. One half has slightly concave sides and broken end. No collars. Perforation cylindrical, diameter *c* 4 mm, with expansion to *c* 5 mm at ends.

9. (NMAS FN 37; fig 2, 10.) L. 64 mm, W. 25 mm, Th. 11 mm. Elliptical with flattened oval section. Elongated at each end, with collars. Perforation cylindrical, diam. 4 mm.

10. (NMAS FN 35; fig 2, 11.) L. 57 mm, W. 31 mm, Th. 18 mm. Elliptical with flattened oval section, ends broken, but trace of elongation, probably originally collared. Perforation widens from *c* 3 mm diam. at centre to *c* 5 mm at ends.

11. (NMAS FN 28; fig 2, 12.) L. 82.5 mm, W. 32 mm, Th. 22 mm. Elliptical, with flattened oval section. Elongated at each end, with collars. Perforation cylindrical, diam. *c* 4 mm.

12. (NMAS FN 27; fig 2, 13.) L. 124 mm, W. 35 mm, Th. 21 mm (? originally *c* 26 mm). Fusiform/elliptical, with pointed-oval section. Collar at one end, marked by groove; other end broken, but probably originally similar. It has laminated badly, and part of one face has flaked away. Drawing in *Cat Ant Edin* suggests it may have been complete when discovered. Perforation widens from *c* 4.5 mm at centre to *c* 6.5 mm at preserved end.

All the beads retain a fair degree of polish. They would seem to have been bored from each end, as in some cases the holes meet slightly out of true at the centre.

Amber beads

1. (NMAS FN 39; fig 2, 14.) 25 mm by 21 mm, Th. 19 mm. Sub-triangular, with approximately ovoid section. Perforation biconical, minimum diam. *c* 2.5 mm.

2. (NMAS FN 40; fig 2, 15.) 32 mm by 27 mm, Th. 16 mm. Sub-triangular, with more angular section than 1. Perforation markedly biconical, minimum diam. *c* 2.5 mm.

3. (NMAS FN 42; fig 2, 16.) 21 mm by 21.5 mm, Th. 16.5 mm. Sub-triangular, with beehive section. Perforation biconical, minimum diam. *c* 2.5 mm.

4. (NMAS FN 41; fig 2, 17.) 26 mm by 16.5 mm, Th. 13 mm. Sub-rectangular, with asymmetrical oval section. Perforation biconical, minimum diam. *c* 2.5 mm.

All four beads are of a yellowish-brown amber, and all show a certain degree of deterioration of the material at the corners.

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NOTES

- 1 I have been unable to ascertain the meaning of this term.
- 2 It might be inferred from the use of the term 'hill' or 'hillock' by *ONB* that the mound was of earth, and most likely circular, since a more unusual shape might attract comment, but this is speculation.
- 3 It is, of course, no longer appropriate to compare these beads with the collared bone toggles sometimes associated with cinerary urns (Piggott 1958, 228), although there could be some very distant relationship. It can be said, however, that a background has now been demonstrated for the development of great skill in working jet in the neolithic, which may have borne fruit in the high-quality space-plate necklaces of the early bronze age.

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