

A corbelled bronze-age burial chamber and beaker evidence from the Rosinish machair, Benbecula

by Iain A Crawford

The pattern of machair movement and deposition in post-Glacial times, terminating in the low (2–3 m OD) plain currently established over most of the West littoral of the Western Isles, has important archaeological implications which have been commented upon in detail elsewhere (Crawford and Switsur 1977), and can only be summarised here. The imperfectly known time scale of this movement suggests that the deflation of the old ‘high’ machair of 10–15 m OD (*itself* deposited after the cessation of ocean transgression in the late 4th – early 3rd millennium BC as currently dated) into the low ‘mature’ condition was generally complete by the 17th century AD. Locally, and exceptionally, such secondary movement was incomplete in the 19th century, and is still. In such circumstances the old remanent machair lingering *in situ* has conserved former land horizons, and thus archaeological deposits where present. The most notable of these conservation locations are the inter-island straits, where machair deposits laid at the head and sides of tidal channels (where they have not been driven completely through to the E and lost in the deep waters of the Minch) gain some measure of shelter, erosion effects are delayed, and patches of ‘fossil’ machair landscape may remain (e.g. at Northton, Harris and the Udal, N Uist). Sithean Rosinish is one of the most easterly of such deposits, lying on the NE tip of Benbecula, covering an area of c 400 m square and rising to a height of 17 m OD (fig 1).

Sithean (‘fairy knoll’) is one of the many site location indicators in Gaelic place names, reflecting a memory of former occupation or observation of alien objects or structures. Sithean Rosinish was traditionally regarded as a place of ritual consequence, milk libation being recorded in the late 18th century. So it was not surprising that, when disturbance of the Rosinish shore face took place (digging of sand for cement), the ensuing erosion cutting, which developed massive proportions (pl 5a), should reveal occupation deposits (*DES* (1964), 33). In particular, the apex of a small stone dome appeared in a circular stone setting (NGR NF 872537). Two residents of the adjacent island of Grimsay (Mr Peter Morrison and Mr Neil Macaskill) made a brief investigation which involved opening the apex of the ‘dome’, and the removal of most of the contents (including the burials which therefore are undescribed). They reported the matter to the present writer, and gave him generous help and assistance in making a reconnaissance of the site (June 1964).

This visit showed that a salvage operation was required urgently on the funerary site itself, and that there was a need to confirm indications that substantial occupation deposits of other periods also existed in the immediate vicinity. A report was submitted to the National Museum of Antiquities, and with the encouragement of Mr R B K Stevenson a strictly limited excavation was carried out. During an excellent spell of weather, 4–14 August, a 6.1 m square was laid out centring approximately on the dome feature, and excavated systematically by levels, using, appropriately enough as it turned out, standard barrow treatment of off-set baulks quartering the

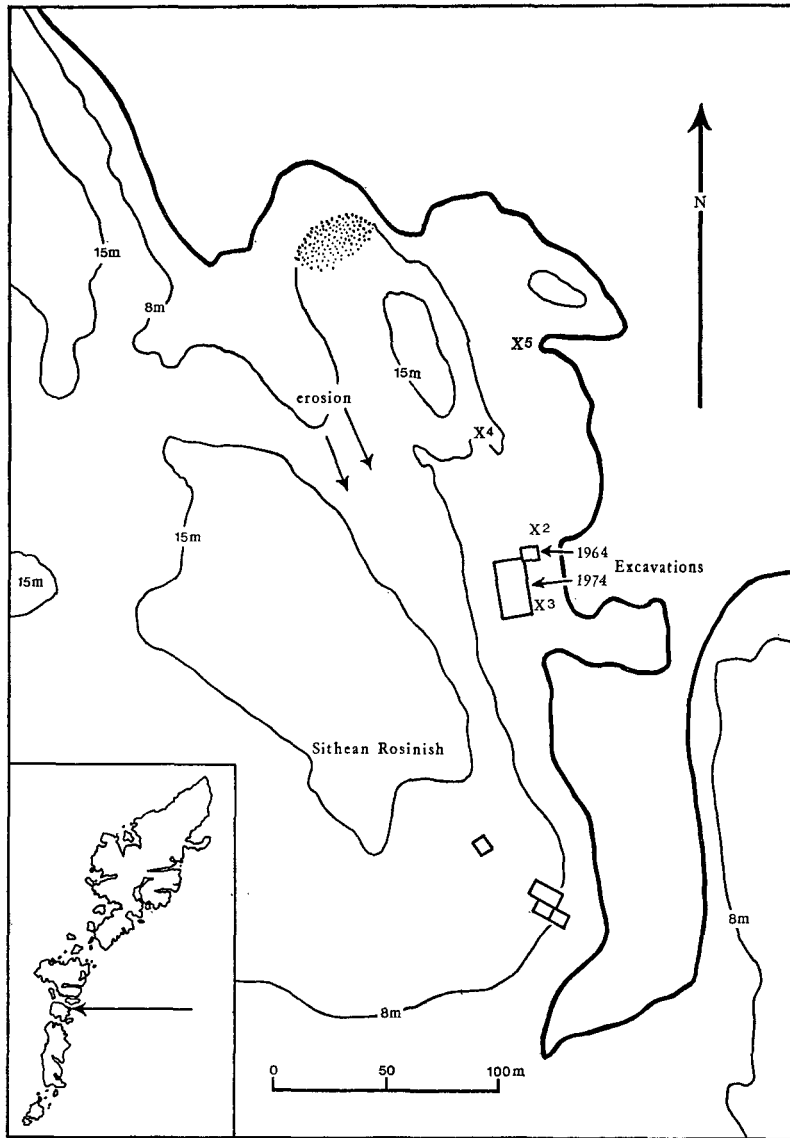


FIG 1 Sithean Rosinish, Benbecula: location map and site plan, showing areas excavated in 1964 and 1974.

square. A remarkable beehive-shaped tomb (pl 15b, figs 2, 3) was revealed, inserted into pre-existing beaker and sub-beaker deposits. This tholos-like structure had remained sealed, and with its cavity unsilted, and it contained the remains of one adult male (*c* 40 years old), and two females (*c* 20 years old), with accessory pottery (fig 4) and a possible pendant (fig 5, 54). The grave appears to have been capped by a slight mound, and later ringed eccentrically by a circle of small stones laid flat. Two miniature cists lay outside the ring and were without human remains – one (W) contained an intact pot (fig 4). The absence of closely datable finds, precludes for the time being any accurate dating (though TL samples are awaiting determination). Nevertheless,

the nature of this monument and of the accessory vessels is strongly indicative of a late-early bronze-age dating. (The dark occupation level eroding out in the immediate foreground in pl 15a contained iron age and later deposits.)

EXCAVATION (figs 2, 3)

Considerations of time, the tightly keyed build, and the deeply set nature of the main chamber dictated the excavation of most of the square to sterile before dismantling of the main feature could commence. This remained intact within the baulk system until the final stages of the excavation, and the stone ring was also left on a berm (pl 5b). It should be mentioned that, except for a 0.9 m trench along the baulk faces, the quarter-square 5-0-12 (see general plan fig 2) was not excavated.

Level III This consisted of dense black and orange ash 50-80 mm thick (colour suggests peat ash) appearing throughout the excavated area. The recorded features were the remains of a hearth focus, most of which had been removed by the insertion of the bottom courses of the main tomb, and two post-holes *c* 150 mm in diameter. Artefacts included three diagnostic sherds: no. 26, a rim and neck with heavy grooving, incised rim chevrons, and incised criss-cross motif within the lip of the vessel (fig 5). This is considered to be beaker-type pottery in very general terms, more specifically it suggests a beaker-influenced cum late neolithic local hybrid. Sherd 34.1 is of beaker *type* if not narrowly classifiable, while no. 34.2, though weathered, is clearly within Clarke's North British Beaker series (Clarke 1970, 153-96). Other retrievals are listed in the catalogue. This evidence, though limited, is from well sealed contexts and is convincing of an early beaker horizon; no. 26 is in the grooved ware style which is generally contemporary and is perhaps its domestic counterpart, while the other two are more orthodox. A radiocarbon determination from Northton, Harris (some 30 miles to the N) for North British Beaker is 1654 bc \pm 70 BM-706 (Simpson 1973, 61-3); current thought on recalibration (Switsur 1973) would re-date this at *c* 2000 BC in calendar years.

Level II.3 This light brown sand, impregnated with organic materials, and 0.3 m thick, contained no features or small finds, although it must relate to settlement activity elsewhere in the area.

Level II.2 A dark brown sand varying from 25-75 mm thick, and probably fanning out from some nearby midden, gave two sherds forming one unit (broken in antiquity), no. 41, bright vermilion in colour and grooved (fig 5). Clarke would see this as in the Urn/Rinyo grooved tradition. These occurred in the only approach to a feature - an extensive clean sand sill (see section 6-13). The level was cut and disturbed by each of the three insertion pits cut for the 'tholos' and side cists (as are all the succeeding levels until I.1).

Level II.1 A light brown sand, *c* 0.3 m thick similar to II.3 which was without features but contained nine sherds. Nos 18.1 and 18.2 are regarded by Clarke as of neolithic tradition heavily influenced by Developed Northern Beaker. No. 18.3 is a beaker rim showing incised linear decoration; 18.6 is grooved ware, the grooves being particularly straight and with some question of interior decoration (see fig 5). No. 25 has broad 'strokes' rather than grooves (fig 5) and no. 49 is a heavy sherd of urn type and is probably part, *in situ*, of a single pot distributed through the barrow levels (nos 16, 22, 31 and 57). The other sherds are small and undiagnostic in themselves.

These are the beaker levels. The material is not outstanding in quality or quantity, but it is well stratified, and represents a number of successive periods covering a substantial length of time. (Rate of deposition in a sandy terrain is a very variable factor, but, given reasonable stability as in the 1st millennium AD deposits at the Udal, 0.9-1.2 m of deposits might be con-

sidered to cover a period of 400–500 years.) The material seems consistently to show apparently indigenous Hebridean ceramic styles of neolithic tradition strongly influenced by beaker motifs. However, the shore scatter collected (see below p 105) comes in some instances from much finer beaker vessels suggesting that perhaps the stratified material represents the ‘domestic’ sector contemporaneous with classic beakers of more formal usage. The whole corpus taken together indicated the presence within the vicinity of an important beaker settlement, and this has been confirmed by recent excavations (Shepherd 1976; Shepherd and Tuckwell 1977).

Level II Another thin black midden level unfortunately provided no artefacts and could belong to either beaker or later phases, though the latter will be argued below.

Level I.1 Probably a barrow mound: a light brown sand level varying markedly in depth from some 0.46 m in the centre of the excavated area, defined at its upper surface by Level I (where uneroded), and tapering off and disappearing altogether as I amalgamates with the underlying horizon II (this was clearly visible in the back sections 2–4 and 4–3). At the interface of Levels II/I.1, a large pit was cut down through the lower strata into Level III disturbing a hearth focus there (see sections 6–13, 8–0 and perimeter section 9–0 on left in pl 15b). This pit, 0.9 m deep and 2.3 m wide, shelved gradually on its W side and was vertical on the E; section 8–0–12 shows the contrast. A foundation was laid of ‘pile’ slabs – upright beach slabs – demarcating a pear-shaped area 2.3 m long by 1.5 m wide oriented with long axis lying E-W. This pile slabbing technique occurs at the Udal site, N Uist, at all levels from beaker to 18th century AD and seems to be a stock response to foundation requirements in sand. (The Udal site 2, though badly eroded, provides an almost identical ground plan, and may well be the second example of this type of grave.) Thereupon courses of drystone walling were laid in a double skin in an exceptionally competent technique with many small chocks and wedges. The inner skin, counterpoised by the outer stones, was made to oversail, and produced a corbelled capping forming a chamber 1.2 m deep, that appears to have remained ‘sand tight’ for something approaching 4,000 years. At some stage before final capping, the inhumations and accessory pottery were all inserted – the evidence is, on balance, against re-utilisation. Mr Morrison’s evidence is that the interior was virtually unsilted by percolated sand and this evidence was confirmed by the excavation especially as regards a small area of undisturbed deposits. It seems very unlikely that the dome could have been satisfactorily reopened.

The material excavated from the construction pit is clearly in the region of 3 cubic m. And here a number of assumptions are made. Firstly, the sloping sides of the original pit were clearly, as both sections and photographs show, back filled behind the walling where necessary. The tomb would then be standing some 0.46 m or more above the level of the original ground surface – Level II (fig 3). It seems clear that the back filling continued and went on to produce a low mound of material which covered the top of the corbelling. *This is Level I.* Owing to erosion only half of this low mound still existed: the S half. Assuming the eroded N half of the mound to have been roughly uniform with the S half, it can be estimated that the material involved in creating this low mound, and in back filling, is approximately equal to that extracted from the foundation pit. The assumption is therefore made that the mound is created from the spoil obtained from that pit. This rather obvious point is laboured because of the question of the artefactual content of this Level. Accepting the working assumption that it consists of material excavated for the foundation pit, the artefacts found therein can be regarded as belonging to Levels III–I. (The distribution of sherds 16, 22, 31, 37 and 49 probably from the same pot confirms this assumption.) The evidence on section 5-0-9, particularly between 5 and 0, is that as back filling took place, and passed the level of the original ground surface (Level II), a substantial fire was built (hearth on plan) and this deposit lies on top of the back filling, sealing both back filling and the vault in this area. This

hearth, which suggests a ritual, was sealed by a large sill of white sand. The mound was then completed covering a circular area approximately 7.6 m in diameter.

It is possible that this circular mound originally had a shallow perimeter ditch into which it eventually silted. This does show as a possibility in some sections; it was not, however, excavated as such and must remain a speculation. After the mound or barrow was raised – no appreciable time-span if any need be involved – a ring of relatively small stones was laid flat in a roughly horizontal circle in what must clearly be an attempt to define the general area of the corbelled chamber. This ring is almost a circle; its diameter varies between 3.2 m and 3.5 m. As can be seen from pl 15b the stones were generally laid flat, and contiguous; in a number of cases (six) a few extra stones are laid side by side in pairs. There were in fact 41 single stones, or 47 with the addition of the six extra. The ring is clearly off-centre; if it was intended to be symmetrically sited in

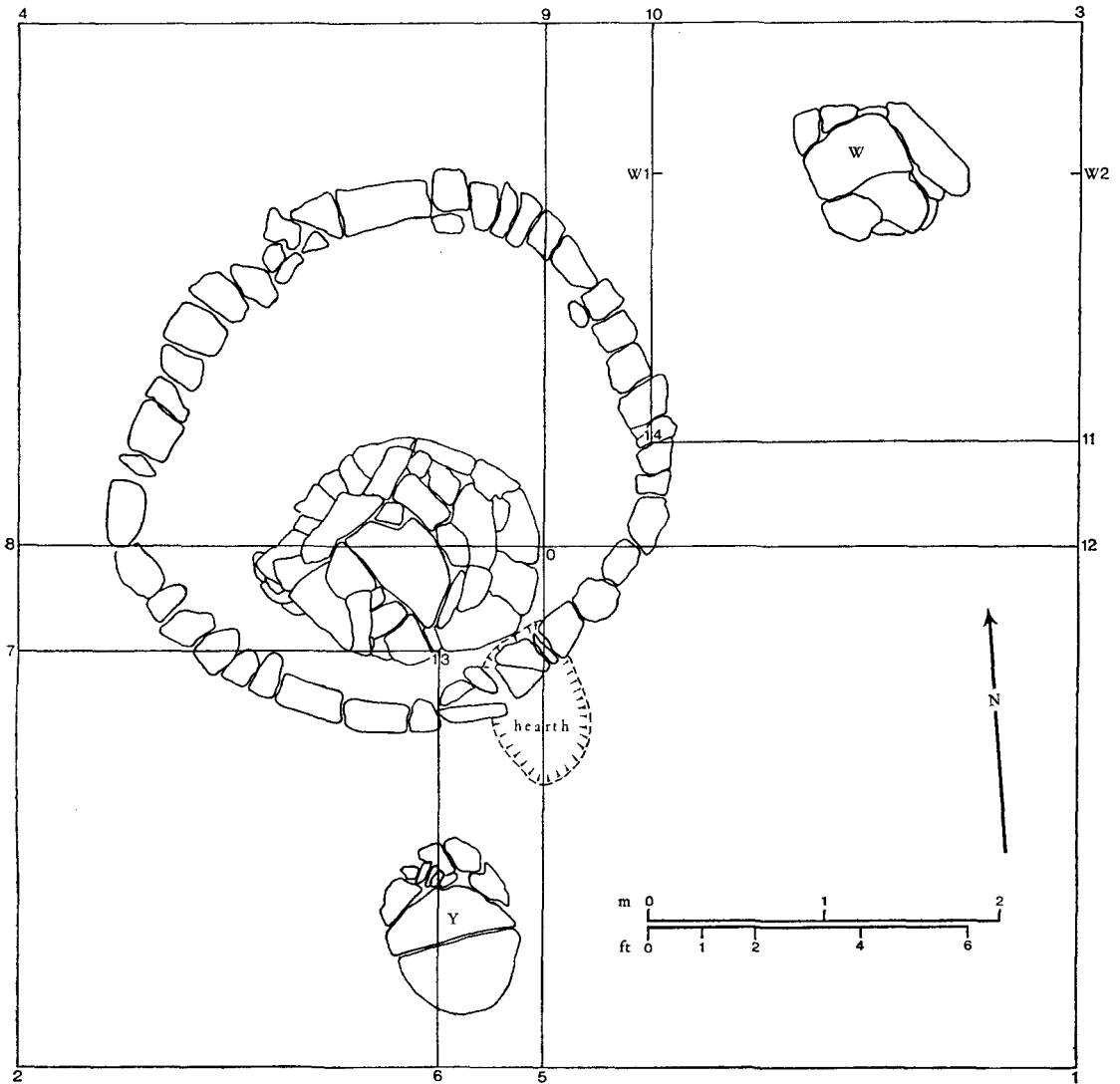


FIG 2 Plan of Site 1, excavated 1964 (scale 1 : 30)

relation to the cist capping, it is some 0.9 m to 1.3 m out. This may indicate that with the passage of time the apex of the tomb became obscured, though its general location was known, and its continuing consequence was such as to have motivated this further embellishment. This asymmetry and the hint of an earlier perimeter ditch are the only arguments for dating the ring later than the tomb. There may have been sufficient ritual reasons for a contemporaneous off-centre setting. A further ritual addition to the picture is the satellite or 'offertory' cist W built of small upright slabs with a capstone. The erosion of Level I in this area prevents a precise location of this feature in the sequence; it ought to belong to the mound period or its immediate aftermath – though there

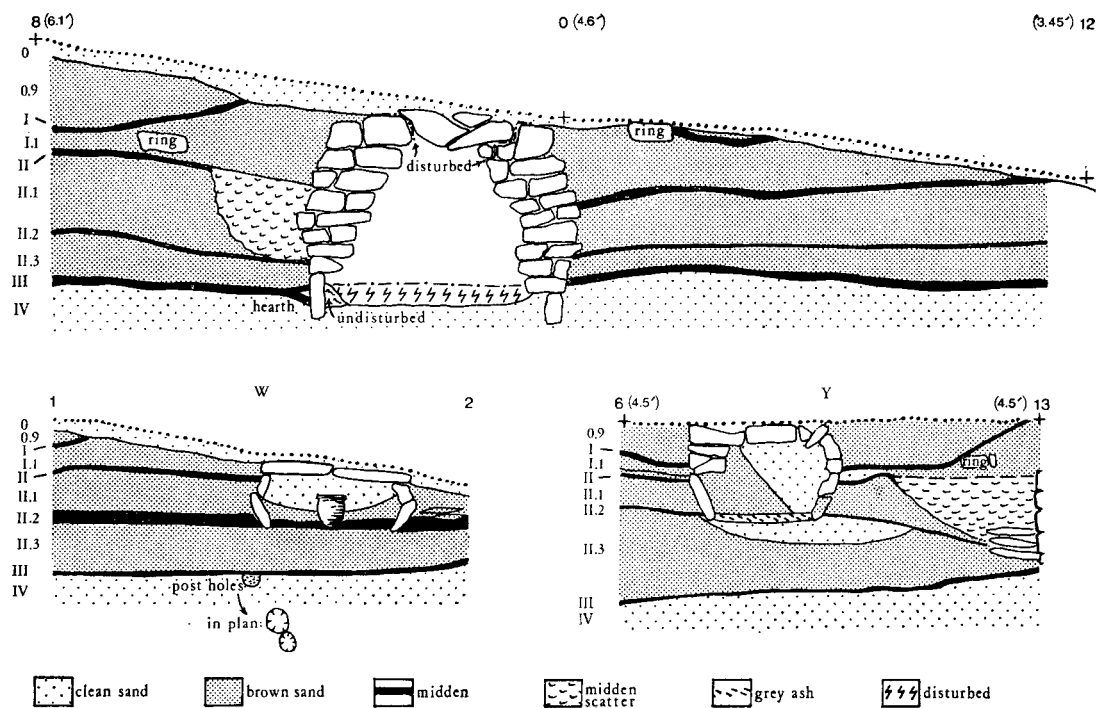


FIG 3 Sections 8-0-12, W1-2, 6-13 (scale 1 : 43.5)

is the possibility that it could have been inserted after Level I was laid down, fig 3, section W1-2. This miniature cist, 0.91 m long by 0.76 m wide held: a shallow deposit of brown sand, pot 27 (fig 4) – almost identical with the funerary pot 50, and was otherwise brim full of clean sand (the depth of the chamber was 0.45 m).

The black midden-type deposit I then formed, or was laid, over the main burial chamber and ring alike and probably cist W.

Level I.1 finds are considered in two groups: (a) those which are in the closed context of the tomb complex: in practice only the contents of the central chamber and probably of cist W; and (b) general I.i mound contents which as commented above are of relatively wide context.

(a) The central grave contained the three individuals described in Appendix B; circumstances of collective burial are suggested, and sex and age must raise the usually unresolvable question of sacrifice. The principal find was the decorated biconical urn no. 51 broken in antiquity but almost completely restorable (fig 4). This accessory vessel bears some general resemblance in shape and decorative motifs to the typical English bronze-age cinerary urn as defined by

Longworth (1961). (Due to the disturbance associated with the recent discovery, it is impossible to conclude that no cremations were involved.) No. 50, the other accessory whose only significant trait is a pinched-out neck forming a pseudo-collar, seems something of a diminished facsimile of its larger associate. It was intact when recovered. The finder (Mr Morrison) assures me that the perforated object, no. 54, lay with the inhumations, and this may have been a pendant. Cist

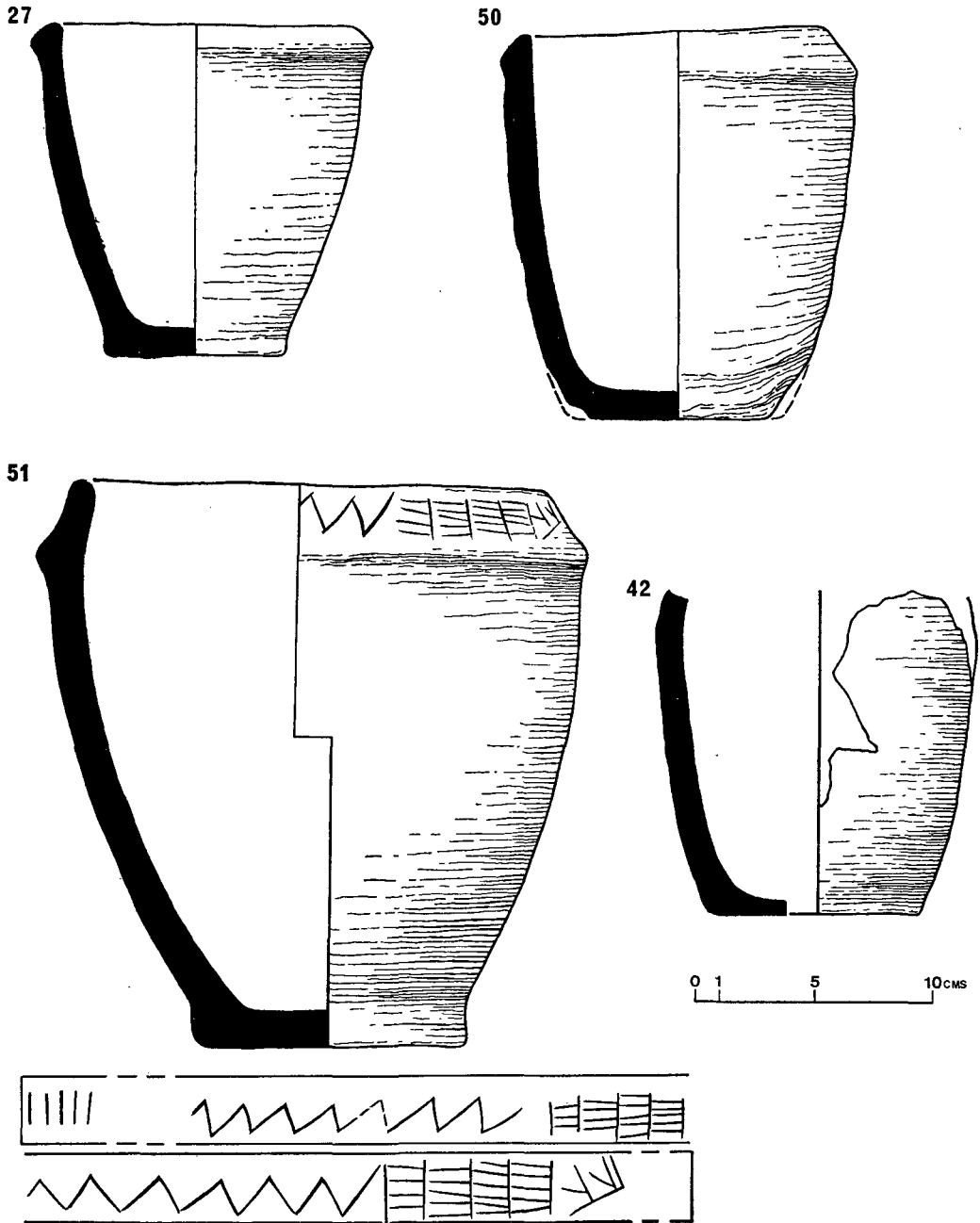


FIG 4 Pottery

W contained pot 27 which was fire blackened but otherwise closely resembled no. 54, reproducing the same footed urn profile.

(b) The general I.1 mound contained 20 sherds. Notable amongst these was 42 (fig 4), most of the profile of a vessel broken amongst the stone-work of the 'tholos'. In profile and fabric it seems akin to nos 27 and 50 above. There was also no. 16, very similar to nos 22, 37 and 31 which are from the level above (I). No. 20 comprises seven sherds of well fired buff ware, no. 23 is three sherds of pale brown fabric with slight grooved decoration and no. 32 a red buff material. There was also a mussel shell with a neat V-perforation near the root which had possibly been an element in a pendant or necklace. Despite the reservations expressed about the derivation of the mound content, little of this material seems to be from the lower levels: it seems consistent with the sealed elements described above (a) and with Level I.

Level I This covers mound and ring and must, from the stratigraphic evidence of the perimeter sections mentioned above, be an upper facies of Level II. It contained sherds 22 and 37 which formed a single unit and were akin to no. 16 above, and no. 38 much in the style of no. 20 above.

The small find evidence then gives a general impression of contemporaneity of the barrow basal level, the barrow content, and the sealing level.

Level 0.I This level, up to 0.46 m of brown sand, has only survived erosion to any extent along the W side of the excavation. It seems likely from section 6-13 that the side cist Y was inserted from this level (the alternatives that it was partly free standing or inserted purely coincidentally from a much higher level are equally unattractive). Y like W was built of little upright slabs but had two small capstones. Y had 50 mm of fine grey ash lying on its floor, a brown sand sill rising steeply to the capstone at one end and the remainder of the interior was filled with clean (? drifted) sand. This fill contained one giant oyster shell and two small sherds (no. 46). One capping stone had crumbled and sagged but there were no signs of major disturbance and like W the only obvious function is ritual offering. Otherwise the level held 10 sherds of buff and creamy orange wares (nos 21, 31, 33 and 48) similar to the underlying level. A fair amount of ox and sheep bone suggest settlement in the near vicinity.

Miscellaneous

Other features and unstratified finds occurred, and these seem worth summarising as some indication of the scope of the site although they were not recorded in detail, and are out of any context. A number of structures were visible according to blow conditions at various periods in 1964. 6 m to the N of the 'tholos' was a tiny stone-lined pit (2) on plan, fig 1, 0.46 m in diameter (original depth unknown due to erosion) and containing human cremated material (identified *in situ* by Dr Maclean). At 37 m to the N was another (4) in the lee of a large beach boulder or erratic and there were superficial indications of others. 18 m to the S of the excavation another stone ring occasionally showed (3) and Mr Morrison asserts that two further rings had been visible still farther to the south. At point (5), 100 m N of the 'tholos' an ovoid stone setting was suggestive of a house structure. Level O, the 'living sand' horizon, was enriched by a scatter of artefacts potentially of any period from II (the earliest eroded level above HWM) up to iron age or medieval. However, most of the material does seem to relate to prehistory; the salient items being beaker sherds 13.1, 13.2 and 28, a massive dark ware decorated with shell impressions, 7 (Clarke sees this as a characteristic feature of sub beaker-urn type assemblages in Scotland) and also a few tiny elements of the biconical urn 51 (see Appendix A). Most of this material relates probably to the erosion of the mound (itself, of course, a possible source of secondary material) and to the 1964 discovery disturbance.

The adjacent shore line was densely scattered with bones; human and animal, and artefacts. This was sampled (approx. 20 minutes collection); for details see unstratified material (Appendix A). The pottery included primary classic beaker examples – a Bell Beaker rim and a Northern I rim. It would seem plausible that the beaker pottery was washed out following the tidal erosion of Levels III, II and I which had been taking place as near as 15 m to point 12 along an extension of the 8-0-12 line.

DISCUSSION

As this was essentially a salvage operation within most critical time limits (only an exceptional spell of weather permitted so much work to be accomplished), and, as some vital pieces of evidence were absent or disturbed, little detailed comparative study seems appropriate. For these reasons and by virtue of its very limited quantity, the ecological data is merely referred to amongst the small finds. The absence of comparative data to the main feature and its contents, especially within any reasonable radius of the Outer Hebrides, reinforces the above intentions. However, some appropriate comment may be ventured in addition to the evidence as stated.

It is difficult to establish a convincing archaeological context, in general British terms, for any of the funerary material, structural and artefactual alike. In structural terms, within the Western Isles, a comparable monument appears to have been present, though severely eroded, at the Udal complex of sites (Udal 2) some 15 km to the N. So substantial has been the erosion of former land surfaces in the machair that it is impossible to assess how common this (or any other monument) may have been in the Isles. Outwith the region some similarity might be pointed to, in terms of general layout, in the ring cairns of N England. As regards the pebble ring feature, however, the closest parallel is the arrangement at Sheeplays 279 in Glamorgan (Fox 1959, 144).

As regards individual artefacts, especially the pottery, the absence of any comparable vessels for some hundreds of miles (most of them admittedly sea miles) has led to some interpretational controversy – some of which may be purely semantic. As vessel 51 is a critical piece of dating evidence (six sherds have been submitted for TL dating), it is worth considering its character, possible associations, and affinities in some detail. Longworth sees the only grounds for positive comparison as lying with certain N English and S Scottish urns which do not themselves fit into any established sequence, e.g. vessels from Ravenglass (Cumberland) – Abercrombie no. 164 (vol II) (Abercrombie 1912, 117); Scunthorpe – Abercrombie nos 124, 116b (vol II) (Phillips 1934, 133); Little Ryton (Salop) (Chitty 1926, XXXIV) – this Longworth considers the nearest parallel; Doll Tor, Derby (Heathcot 1940, 118, pot F, fig 3); Stevenston, Ayrshire (Mann 1906).

In considering the combination of traits present and their recurrence elsewhere, it should be remarked that decorated panels on urns are rare; that there are no bipartite vessels in Scotland; that aspects of the decoration – laddering for example – are beaker in tradition; that ritual side cists are unusual; and that there is no corbelling associated with collared urns. Also it should be emphasised that the Rosinish pots are not apparently cinerary containers but accessory to inhumations. The feeling, perhaps *faute de mieux*, is that the features considered add up to *sui generis* – local development out of local beaker, making this ceramically an immediately post-beaker horizon. This of course coincides with the purely stratigraphic evidence.

Clarke would agree to evolution from indigenous neolithic/beaker traditions but would admit some cinerary urn influence. Both Longworth and Clarke would place the dating of no. 51 about the mid-2nd millennium BC – perhaps appreciably earlier, in accord with recent recalibration of beaker dating. A fair summary of all this discussion would be that the localised beaker

traditions of Level II.1 had evolved into this precise type of funerary vessel in conjunction with a monument of largely local inspiration, but that there still remains a case for association with the English cinerary urn province.

SUMMARY

Such parallels as are advanced, except in the cases of beaker pottery and site Udal 2, are tentative and likely to be of illustrative rather than any other significance. The investigation itself, taken as a unit, has given convincing evidence of the presence of a major prehistoric settlement of at least regional importance. Four beaker levels and a substantial early-middle bronze-age horizon are present and apparently extensively distributed. Iron-age and medieval strata exist, but, as visible in 1964, seemed trivial in extent and content.

ACKNOWLEDGMENTS

The 1964 season would not have been carried out without the enthusiastic efforts of Dr Alasdair Maclean, Lochboisdale, and his family, especially Coinneach Maclean, and of my friends Ruairi Fergusson and D R MacDonald, Tigharry, N Uist. The ready co-operation of the South Uist Estates through their factor Mr MacIntyre, Askernish, is gratefully acknowledged. The Macrae family (per Raomhnall Macrae), tenants of Rosinish, most generously gave the use of their former family home. Finally I am very grateful to Mr Bernard Denston of the Duckworth Laboratory of Physical Anthropology for his most thorough report on the human skeletons. The writer is most grateful to Dr J Charles of the Department of Metallurgy and Materials Science (University of Cambridge) for sampling and analysing the pendant no. 54, and to Dr Forbes of the Department of Geology (University of Cambridge) for further comment on the same object. Dr Whybrow of the British Museum of Natural History most kindly identified the shells and Dr Clarke of the Royal Scottish Museum, the animal bones. Dr John Coles of the Department of Archaeology and Anthropology, University of Cambridge, examined the flat-rim pottery.

Comment on the pottery throughout is influenced by the views of my colleagues Drs D D A Simpson, David Clarke (especially on beakers) and I Longworth (particularly for the 'urn' and contemporary pottery), all of whom kindly examined the material.

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The finds have been deposited in the National Museum of Antiquities of Scotland (GR 32-63).

APPENDIX A

Small Finds – Pottery (unless otherwise stated, all dimensions refer to thickness; the diameters of rims and bases are given).

Level III

- 26 Rim of brown fabric, 11 mm, decorated with stippled chevrons emphasising a fine horizontal ridge at the lip, 1 mm wide parallel horizontal grooving on the neck, and incised criss-cross on the inside of the lip. Fine quartzite grits (fig 5).
- 34.1 Dark brown, 9 mm, fine incised horizontal and vertical lines, large quartzite grits (fig 5).
- 34.2 Yellow buff, horizontal incised lines band of rouletting, heavily weathered (fig 5).

Level II.2

- 41 Wall: massive, black interior, pale buff exterior with rose pink slip. Broad shallow grooving. Quartzite grits 15 mm.

Level II.1

- 18.1 and 18.2: Wall, pale brown fine quartzite grits. Decoration: panels of chevrons (18.1 incised, 18.2 stab and drag) defined by grooving, 9 mm (fig 5).
 18.3 Rim, pale brown fine quartzite grit, incised diagonal lines, 8-11 mm (fig 5).
 18.4 Wall, fine pale buff, badly flaked, 7 mm.
 18.5 Wall, buff, 10 mm.
 18.6 Wall, grey brown large quartzite grits, shallow grooving, 12 mm (fig 5).
 25 Wall, buff, broad very shallow strokes, 12 mm.
 29 Wall, buff surface, grey black interior, 9 mm.
 49 Shoulder, buff-black encrustation above shoulder, identical to nos 16, 22, 31 and 37, 15 mm.

Level II.1 (W cist)

- 27 Whole, buff, footed base, pinched up rim collar, blackened; ht: 138 mm; rim diameter: 117 mm, base diameter: 80 mm thick; 12 mm (fig 4).
 (main chamber)
 50 Whole, buff, slight base foot, collared neck, quartzite grits, surface flaking (local patch of white encrustation as 54); ht: 168 mm; rim: 127 mm; base: 91 mm; thick: 15 mm. (fig 4).
 51 Whole (reconstructed) orange buff, biconical, neck cordon, base foot, large quartzite and gneiss grits. Band of neck incisions: zig-zag, laddering, and verticals. ht: 228 mm; rim: 185 mm; base: 115 mm; thick: 16 mm (fig 4).

Barrow Level (I.1-III)

- 16 Shoulder, identical to no. 49.
 20.2 Wall, well fired orange buff, medium stone grits, 15 mm.
 23.1 Wall, identical to no. 42.
 23.2 Wall, orange buff, slight incised lines, 10 mm.
 23.3 Wall as no. 49, 10 mm and base 16 mm.
 32 Wall, red buff, medium stone grits, 15 mm.
 42 Base and wall: buff, most of small vessel as no. 27, base foot, large stone grits (incl. unstrat. nos 6 and 8), 12 mm (fig 4).

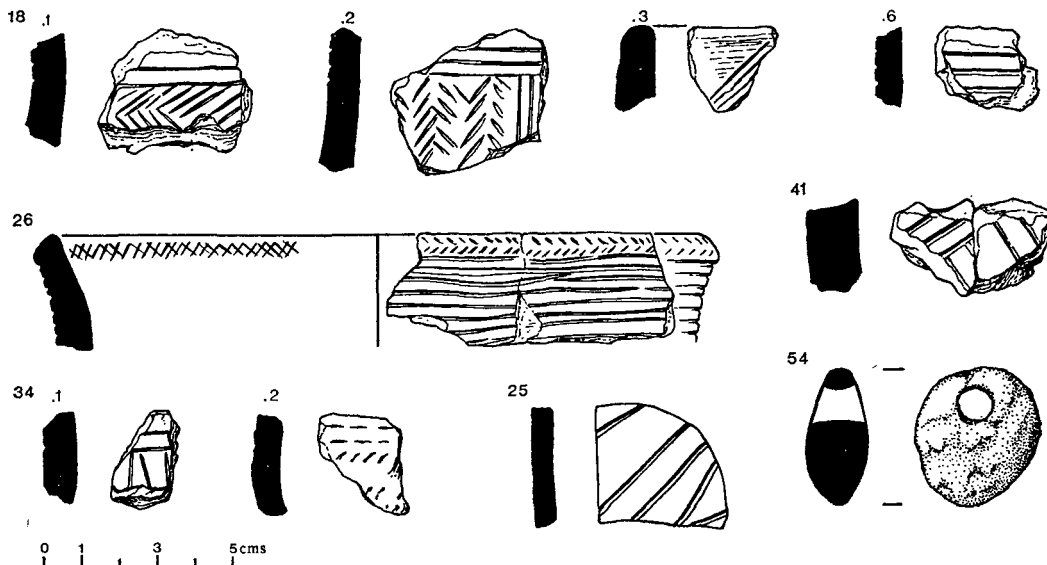


Fig 5 Pottery and limestone pendant no. 54

Level I

- 22 Shoulder as no. 49, 12–18 mm.
- 37 Shoulder as no. 49, 12–18 mm.
- 38 Wall, orange buff, as no. 20.2, 15 mm.

Level 0.9 (Y cist)

- 46 Wall, buff, medium stone grits, 11 mm.

Miscellaneous

54 *Level I.1* (central chamber): possible pendant, limestone, pear-shaped, 38 mm by 33 mm, 17 mm thick, offcentre perforation of uniform bore 9 mm diameter – contains white encrustation as no. 50. Blue grey with patches of darker surface deposit. The material is limestone (possibly of Durness type) and its surface resembles that of a residual pebble from a lime kiln – suggesting contact with fire. Perforation is by a marine organism and is either ‘fossil’ or contemporaneous (bronze age).

Barrow level I.1–III

20.1 Mussel (*Mytilus Edulis*) with V-perforation at root.

Cattle and sheep bones occurred in small quantities throughout the levels. Edible shell fish, especially massive oysters (*Ostrea Edulis*) with fire crackled shells, and scallop (*Pecten Maximus*), had been exploited. One oyster shell was the principal content of cist Y.

Unstratified

A surface and sub-surface scatter lay unstratified over the excavated area; this could derive from eroded-out deposits from higher levels, from the eroded portion of the barrow, or be material dropped at the time of discovery. The diagnostic sherds in this collection confirm this: 3.1, 14.1 are flat-rim ware with internal bevel, generally considered as having two occurrences: one neolithic, and one early 1st millennium BC (the circumstances here suggest the latter). This has recently been discussed by Coles and Taylor (1969, 96). No. 5 is a rim from the main urn no. 51. Nos 6.3 and 8.3 are part of 42, and 6.1 and 6.2 are probably so. No. 7 wall sherd is massive, 16 mm, dark grey with overall shell-edge impression (cardium) discussed above in text. Nos. 13.1 and 13.2 are wall sherds of reddish buff beaker with horizontal grooving and chevrons. No. 28 is identical to 18.2. No. 31 is identical to 49. There were also numerous very large oyster shells and sheep, cattle, and human bones.

The shoreline scatter collected included 25 red and red buff beaker sherds, all decorated with chevrons, cross hatching or grooving. This includes six rims, one of which is classic Bell Beaker, and one is of Clarke’s Northern 1 style. There was also a possible pendant of pumice, 26 mm by 37 mm, with a fine perforation and a flint flake.

Elsewhere in the eroded areas, sherds of 17th-century AD local pottery (dated by comparison with the Udal material), more flat-rim ware and an iron fibula were retrieved.

APPENDIX B

The human remains

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The remains arrived in two separate boxes and labelled R44 and R45. It was suggested at the time that there was the possibility of the two lots having come from the same grave; those bones labelled R45 were found *in situ* and those labelled R44 had been disturbed. The bones of both lots were rather fragmentary and repair work was carried out wherever possible, but this did not produce many complete bones. None of the bone fragments of R44 joined up with those of R45 and apart from a similar amount of erosion displayed on some of the bones, and criteria indicative of sex, the only direct evidence that the two lots were from the same grave was that a portion of a sacrum from R44, displaying the right auricular area, articulated perfectly with the right auricular surface of a right innominate bone from R45. Assuming all the remains came from the same grave, the possible number of individuals they represent is therefore three. Long bones were in the ascendancy, there being remains of three right and three left tibiae, and

three right and three left femora. From the varying amounts of erosion, and the differences of colouring of the long bones, and also taking account of the sexual criteria, these right and left bones of the legs could be matched up with a fair degree of certainty and attributed to three separate individuals. Giving weight to the suggestion of three individuals was the fact that cranial remains had been preserved, and apart from a right half of a calotte, and a left half of a calotte, from two separate individuals, there were five petrous portions of temporal bones, suggesting the presence of parts of three crania. From the evidence of the postcranial bones there was an indication of three individuals, the cranial remains also indicated three individuals, and it is feasible to suggest that the three individuals represented by the postcranial remains therefore were the same as those represented by the cranial remains. Other bones were a complete humerus, the fragments of a humerus, radii, fibulae, an ulna, two innominate bones, a sacrum, and various bones of the foot and again it is feasible to suggest they belonged to one or other of the three individuals. Some of the foot bones were complete. The possible sexes of the individuals as gauged from the appearance of the long bones were one male and two females, and the sex of at least one male and one female was substantiated by the fact that preserved portions of two innominate bones were characteristic of a male and a female respectively. Also substantiating that at least one male and one female individual were represented by the remains was the observation that the two halves of calottes were probably from a male and a female. The basal portions of an occipital bone along with parts of the sphenoid bone, and a fragmentary light half of a maxilla with three molar teeth, two premolars, and a canine *in situ* were preserved among the remains, but there was no direct evidence that this basal portion of a cranium belonged to either of the individuals as represented by the fragmentary calottes. An approximate age at death could be estimated from the teeth *in situ* in the maxilla, and this would seem to rule out the possibility of the male calotte being from the same individual, but it is possible it could belong to the female, as the individuals represented by the calotte and maxilla appeared to be of a similar age. There is also the possibility that the basal portion could represent a third cranium. Other fragments of crania were also preserved, mainly portions of temporal bones, but also a part of a sphenoid bone with the basilar portion of the occipital bone fused to it, suggesting they belonged to an adult individual. An upper first left, and an upper second left molar were among the cranial fragments, and though of a very similar age as the teeth of the maxilla, and from the opposite side of the dentition, it is very doubtful if they were of the same dentition, as they were slightly smaller and had slightly different cusp patterns. From this evidence then it seems that the two individuals were of a similar age, and the other individual possibly of an older age at death. An approximate age at death could be estimated for the two individuals represented by teeth, and the criteria used were the state of eruption and degree of attrition. The two ages so determined were very similar, possibly 18 to 20 years of age at death. These ages agreed with the age of the fragmentary female calotte, which, from the degree of closure, or lack of closure, of the sagittal and coronal sutures, would appear to have been no more than 20 years of age at death. From the evidence of age then, either of the lots of teeth could have belonged to the individual represented by the fragmentary female calotte.

A tibia which was nearly intact displayed evidence at the proximal extremity of being that of a young adult individual also. This evidence was in the form of a thin line of demarcation which suggested that the epiphysis and metaphysis had not long been fused and would put its possessor in the region of 20 years of age at death. Other bones which were possibly representative of the same individual as the tibia were the opposite tibia, right and left femora, right and left humeri, a left radius and a left ulna, and a talus. Only one tibia, one humerus and the talus were complete, and parts of shafts or the extremities either missing or eroded of the others. From the evidence of the tibia it seems highly probable that it, and the bones assigned with it, belonged to the same individual as represented by the female calotte, and also some of the other cranial portions including teeth were also of the same individual. All these bones had the same amount of *post mortem* erosion, and the same colouring (though this cannot be conclusive evidence) and also show from the various diagnostic features that the individuals were of a similar age at death. The age of the third individual, from the evidence gained from the fragmentary male calotte, would appear to have been more advanced. A greater degree of *post mortem* erosion had taken place on the male calotte than was the case of the female, and this made the task of ageing more difficult. Ecto-cranially the coronal and sagittal sutures were eroded away, and endo-cranially no evidence could be obtained from the sagittal suture, but from the degree of obliteration of the coronal suture the minimum age that the individual could possibly have been at death would be 30 years. The lambdoid suture, though, showed up perfectly ecto-cranially and endo-cranially and as there were no signs of fusion, the maximum age would not reach 50 years. A possible age would appear to be midway between the minimum and the maximum

estimates. Using the multiple regression formulae of Trotter and Gleser (1952) for Whites, an approximate stature was reconstructed from the maximum length measurements of the two tibiae, and a humerus of the female which was possibly represented by the long bones and the calotte, this coming to 158.1 cm. The approximate stature for the tibia alone would have been just three-quarters of an inch more than the stature obtained from the humerus, this then giving some weight to the suggestion that these bones were from the same individual. No other long bones were well enough preserved to enable approximate statures to be obtained. An examination of the teeth *in situ* in the half of maxilla preserved, and of the two loose molars, revealed no indications of caries, nor of any periodontal disease along the alveolar border of the maxilla. The position of the canine was anomalous; instead of the lingual and labial surfaces facing in the normal directions, the lingual surface faced in a distal direction, and the labial surface in a mesial direction. One non-metrical feature was present where the male calotte was concerned. This in the form of a small Wormian bone in the lambdoid suture.

Summing up, in all probability, it would appear that the remains were of

- (1) a male individual represented by a fragmentary calotte and a few postcranial bones, and whose age at death was possibly in the region of 40 years;
- (2) a female, represented by another fragmentary calotte with other portions of crania including either a fragmentary maxilla with teeth *in situ*, or just two loose molar teeth, postcranial bones better preserved, and from which a stature was reconstructed of 158.1 cm and whose age was possibly in the region of 18 to 20 years at time of death;
- (3) a second female, represented by postcranial bones, and either a fragmentary maxilla with teeth *in situ* or the loose molar teeth, and possibly a few cranial fragments whose possible age was again in the region of 18 to 20 years at the time of death.

REFERENCES

- Abercrombie, Hon J 1912 *A Study of the Bronze Age pottery of Britain and Ireland and its associated grave goods*. Vol II, Oxford.
- Burleigh, R, Evans, J G and Simpson, D D A 1973 'Radio-Carbon dates for Northton, Outer Hebrides,' *Antiquity*, 47 (1973), 61-3.
- Chitty, L F 1926 'Two cinerary urns of the Bronze Age from Little Ryton near Conover', *Trans Shropshire Archaeol Nat Hist Soc*, X (1925-6), Miscell. XVII (XXXIII-XXXV).
- Clarke, D L 1970 *Beaker Pottery of Great Britain and Ireland*. Cambridge.
- Coles, J M and Taylor, J J 1970 'The Excavation of a Midden in the Culbin Sands, Morayshire', *Proc Soc Antiq Scot*, 102 (1969-70), 87-100.
- Crawford, I A and Switsur, V R 1977 'Sandscaping and C14, The Udal, N. Uist, *Antiquity*, 51 (1977), 124-36.
- Fox, Sir C 1959 *Life and Death in the Bronze Age*. London.
- Heathcote, J P 1940 'Excavation at Doll Tor', *J Derbyshire Archaeol Nat Hist Soc*, 60 (1939), 116-25.
- Longworth, I H 1961 'The Origins and developments of the Primary series in the Collared Urn Tradition in England and Wales', *Proc Prehist Soc*, 27 (1961), 263-306.
- Mann, L M 1906 'Notes on . . . a cairn containing sixteen cinerary urns, with objects of vitreous paste and of gold, at Stevenston, Ayrshire . . .', *Proc Soc Antiq Scot*, 40 (1905-6), 369-402.
- Phillips, C W 1934 'The present state of Archaeology in Lincolnshire, Pt 1', *Archaeol J*, 90 (1933), 106-49.
- Ritchie, W 1967 'The Machair of South Uist', *Sc Geog Mag*, 83, 3 (1967), 161-73.
- Shepherd, I A G 1976 'Preliminary results from the beaker settlement at Rosinish, Benbecula', in Burgess, C and Miket, R (eds), *Economy and settlement in the third and second millennia BC*, *Brit Archaeol Rep*, 33 (1976), 209-19.
- Shepherd, I A G and Tuckwell, A N 1977 'Traces of beaker-period cultivation at Rosinish, Benbecula, Western Isles', *Proc Soc Antiq Scot*, 108 (1976-7), 108-13.
- Switsur, V R 1973 'The Radio-Carbon Calendar Recalibrated', *Antiquity*, 47 (1973), 131-7.
- Trotter, M and Gleser, G C 1952 'Estimation of Stature from long bones of American Whites and Negroes', *Amer Jour Phys Anthropol*, NS 10 (1952), 463-514.



a Shoreline erosion and 1964 excavations, from SW



b Burial chamber and stone setting