# A DWELLING SITE OF THE EARLIER IRON AGE AT BALEVULLIN, TIREE, EXCAVATED IN 1912 BY A. HENDERSON BISHOP<sup>1</sup>

by EUAN W. MACKIE, B.A., F.S.A.SCOT.

## Introduction

In 1914 and 1951 the Hunterian Museum of the University of Glasgow received a large collection of archaeological material from A. Henderson Bishop, most of it unpublished. This material includes several groups of pottery and other artefacts obtained from sand-dune sites on the west coast of the isle of Tiree, Argyllshire, which appeared, at first sight, to differ markedly from the material culture associated with the circular stone forts and dwellings of the Hebridean Iron Age. The largest and most interesting collection of pottery comes from a sand-dune site at Balevullin, on the NW. coast, and it appears to be the material recovered by Bishop in an excavation there in 1912, the pencilled and typewritten notes on which are preserved in the museum. This excavation was never published and the notes are clearly only a rough draft. Nevertheless the description of the discoveries is quite clear and the unusual nature of both site and artefacts makes publication advisable.

### SUMMARY

This account is in three parts. First comes a description of the Balevullin 'hut site' and its excavation, based on Bishop's notes and an accompanying sketch plan made at the time by Mungo Buchanan. The site seems to have been a wooden structure with traces of post-holes, a hearth, an anvil stone, rubbish pits, a possible floor-tank and much occupation debris.

This is followed by a description of the collections of pottery from Tiree in the Hunterian Museum and the Glasgow Museum and Art Gallery. It appears that the largest collection of sherds and artefacts from Balevullin were actually excavated from the hut site, together with some flints, bones, three bone combs, pebble hammerstones, shells and charcoal. Some fragments of iron may also be associated with the site. Material of a similar nature from the Kilkenneth sand dunes and from a similar hut site excavated by L. M. Mann near Loch Bhasapoll is also described.

The third section is a discussion of the material and the site and an attempt to place both in their cultural context. Various lines of evidence, in particular analogies with Early Iron Age English sites and with sites in Scotland which have yielded flat-rimmed pottery, combine to suggest that the Balevullin site belongs to the early part of the Iron Age, before the broch and wheelhouse horizon.

#### ACKNOWLEDGMENTS

I have to thank Mr J. G. Scott and Dr Stuart M. K. Henderson, of the Glasgow

1 Chalmers-Jervise Prize Essay 1964. For references quoted in this paper see list pp. 176-7 infra.

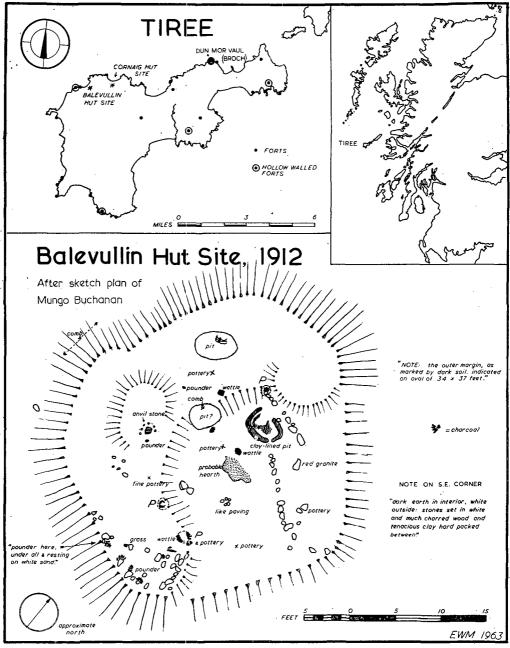


Fig. 1. Maps and site plan

Museum and Art Gallery, for making their collections of Tiree material available to me and for permission to publish some of it. My particular gratitude is due to Dr Joseph Raftery, of the National Museum of Antiquities in Dublin, for his kindness in giving me information about his excavation of Crannog 61, Lough Gara, in advance of publication and also to Dr G. A. Watts, of the School of Botany, Trinity College, Dublin, for information about the C-14 measurements from Lough Gara. I am indebted to Mr S. E. Durno, of the Macaulay Institute for Soil Research, Aberdeen, and to Mr Donald W. Brett, of the Department of Botany, University of Glasgow, for examining peat samples from Balevullin for pollen and again to Mr Brett for his most useful observations on the charcoal from the hut site (Appendix C).

Other members of the University gave up their valuable time to assist me in various aspects of the work – Dr J. C. Speakman of the Department of Chemistry helped with the iron fragments, Dr John Bowden, of the Department of Zoology, identified the shells and Dr Archibald Young, of the Department of Anatomy, identified the animal bones – and to all of them I am most grateful. I had the benefit of advice, criticism and several suggestions from Dr John Coles of the Department of Archaeology at Cambridge.

The photographs are by Mr Hugh Forbes of the Hunterian Museum.

#### THE BALEVULLIN HUT SITE

## I. THE 1912 EXCAVATIONS

This description of Bishop's work at Balevullin in 1912 is based on two typescripts which were made at his direction from his own pencilled notes. Both describe the same project, which seems to have taken place in two phases separated by a month or two. The first set of notes was probably written after the first examination and the second after the completion of the work. There is some duplication of the description but the general sense is quite clear.

In April 1912 Bishop was walking over the area of sand-dunes between the rocky points Rubha Boraige Moire and Rubha na Bo Maoile near Balevullin when he 'was attracted by the amount of pottery shards among the surface stones' on a small ridge or island showing above the sand and strewn with stones. This 'ridge' was about ½ mile inland from the sea and about 30 to 35 ft. above sea level (it probably lay in the National Grid 1 kilometre square NL 95 47). Crescent-shaped with blunted ends it measured about 30 ft. from tip to tip and about 18 ft. across its widest part (fig. 1). The whole of its surface was strewn with sand and stones, some of the latter being quite large, up to 40 lb. in weight, and many of them were fire-fractured. An experimental excavation on the western side revealed a 12-in. deep layer of black soil containing thin-walled decorated potsherds, fragments of charcoal, pieces of 'tree branches', some an inch thick, fire-fractured stones and food refuse, presumably animal bones. Underneath the black layer was discovered a layer of beach stones resting on the white underlying sand which was interpreted

<sup>1</sup> Letter of 30/12/1952.

by the excavators as the cobbled floor of a dwelling site. A rectangular block of stone, about 12 in. across, was discovered in the black layer set in an unpaved area so that there was an 8 or q in. wide 'gutter' around it, between this 'anvil stone' and the cobbled 'floor'. Three hammerstones were found in the gutter. Near the anyil were also found quantities of oval polishing pebbles embedded in, and covered by, the black carbonaceous layer which was 6 in. thick at this point. On top of the layer of pebble 'paving', and therefore presumably under the black layer, was found a layer of carbonised rushes and grass an inch thick. This was interpreted as an artificial floor covering similar to that supposed to have been discovered near Loch Bhasapoll in 1906<sup>1</sup> (p. 168). However, the published account of this site makes no mention of any such floor covering. Bishop also describes another hut excavated by Mann and himself in 1910 in which a similar 'floor' covering was found but this does not seem to have been published. At the Balevullin site the pith core of the rushes in the floor covering was distinguishable from the outer covering of the plants. Some coarse pottery was found close to the 'anvil stone' and three pointed bone objects a few feet south of it (probably fig. 5, Nos. 119 and 120).

The excavation was abandoned after this initial trial trenching and Mungo Buchanan visited the site a few days later to plan it. On 30th April a crouched human burial was found in the sand in the same general area and was photographed and described (p. 170).

Bishop returned to Balevullin for three weeks in the following summer and continued with the investigations, being assisted in the later stages by L. M. Mann. They determined the extent of what they regarded as the inhabited area by digging trenches in from the outside, stopping whenever the black 'occupation layer' was encountered. In this way a roughly oval occupation area was encountered, measuring about 37 by 34 ft., and the black layer which defined it varied in thickness from a mere trace to 12 in. It contained fire-fractured pebbles, shells, broken bones, charcoal and potsherds and there seemed to be little doubt as to its nature.

Many 'sandy concretions' of charred wood were discovered over the floor area and one of these, lifted intact with the aid of hot paraffin wax, gave the excavators the impression that it was the remains of wooden wattling; an upright post or stick appeared with others lying horizontally to it (see p. 160). This mass was described as being 'supported and surrounded by three stones'. The points at which the charred wood most resembled wattling were marked on the plan and were found to form a rough circle, about 7 ft. in diameter, on the SE. side of the occupied area. Another such circle was observed a little to the N. (fig. 1). In the first circle the wattling showed clearly, 'lying as if overthrown', and 'at places small pieces of clay lay intermingled with the carbonised wood'. The sketch plan (fig. 1) shows some of these deposits of charcoal 'wattling' marked as post-holes (marked P on the figure) and the text describes 'a large number of post-holes in the foundation wall...'. This last was 'a single stone deep' and 'in every case these holes were located by the charced wood in them'. 'We invariably found pottery against these posts, possibly broken vessels thrown to the walls of the hut or huts...' The charcoal deposits

are described as 'buried in the black layer, and the potsherds were found both above and beneath it'. A note on the sketch plan describes the presumed circle of post-holes in the SE. corner as having 'dark sand in the interior, white outside. Stones set in white and much charred wood and tenacious clay hard pressed between.' Another note on the plan says that Buchanan obtained a stone pounder nearby, lying on the white sand underneath everything else.

An area of red clay, covering about a square yard and apparently fired, was discovered near the centre of the site and a mass of supposed wattling lay just to the N. of it (F on plan). The clay area is described as a floor on the sketch plan. A little further N. appeared a 'clay lined trough or pit, the wall and floor being fully eight inches thick, and below the clay bottom we found food refuse, principally bones of the pig, etc.' (this is marked PIT on the plan; fig. 1). On the original sketch plan this feature is marked as 'kiln or furnace' but the text makes no mention of any evidence of heat. Another pit was discovered to the W. of the last, 'a saucer shaped depression, marked on the plan as "Mann's pit", in which lay the ribs and vertebrae of a large animal lying on its back . . . a large stone lying on what would correspond of (i.e. "in") a human to the pit of the stomach....' Parts of a thickwalled clay vessel were found above the bones and also a fired clay ball. Below the skeleton and 'confined to an oval area 4 ft. by 2 ft. 6 in., food refuse was got, 3 ft. down and within a few inches of the underlying clay strata'. A similar pit, containing the calcined ribs and vertebrae of a small animal, lay a short distance to the SE. of the last.

## 2. DISCUSSION OF BISHOP'S NOTES

There seems no reason to doubt the basic accuracy of the observations which Bishop and Buchanan recorded as they excavated the site. They do seem to have been examining the remains of some form of dwelling among the sand dunes but it is difficult to reconstruct the exact nature of the structure which once stood there. The excavators, while they record many details about the objects and features uncovered, do not seem to have directed their work with any clearly formulated problems in mind, except that of tracing the limits of the occupied area. Their description resembles a series of random snapshot photographs without an explanatory account to integrate them into a coherent record. Of their interpretation of the site as a whole we are told little more than that it seemed to be one or more 'huts' and that the living area was fairly clearly defined by a black layer containing refuse, which was prominent among the light-coloured sand. There is no attempt recorded to try to discover how the various features found might fit into the total picture of the site and it is this task, together with that of interpreting the various features themselves, to which the rest of this section is devoted.

In one sense it may be useful that the excavators expressed so few ideas about the nature and cultural context of the site for this very absence of preconceived, and indeed postconceived, ideas makes it more probable that they recorded objectively exactly what they saw.

# (i) The Occupation Layer

The nature and appearance of this layer seems clear from Bishop's descriptions but was complicated at first to some extent by certain observations made by the present writer during two visits to the Balevullin sand-dunes during 1962. Bishop described his layer as being limited in area, measuring about 37 by 34 ft. and varying in thickness from 12 in. to a mere trace. On and in it were potsherds and other artefacts, burnt stones and animal bones – normal occupation refuse in fact. A layer of pebbles lay under the black layer on white sand and on top of this seems to have been a carbonised carpet of grass and rushes.

A small stream winds its way through the 'sahara', the sand-dunes at Balevullin, and empties on to the beach (Nat. Grid Ref. NL 954 475). It appears to have gradually worked its way northwards since its N. bank (of sand overlying gravel and pebbles) is 4 to 5 ft. high while the S. bank is only about 2 ft. Presumably the overlying sand on the S. side has been washed away. In the section through the sand dunes on the N. side of the stream there is visible for a considerable distance a layer of black sticky peat, about 6 in. thick and from 2 to 3 ft. below the present surface of the dunes. It represents an old marshy ground surface which must have formed while there was a relative absence of sand blow in the area; subsequently the sand blow increased and the peat was buried. In this sticky black layer are numerous leaves and other fragments of vegetation perfectly preserved and noncarbonised: the pithy cores of rush stems are very clear. No attempt has been made to discover how far under the dunes to the north of the stream the peat layer extends but it may be significant that it occurs not far from where Bishop must have discovered his hut site and that several of its features correspond quite closely to his description of his 'occupation layer'. However an intensive search along the stream failed to reveal any sherds or other artefacts associated with the exposed edge of the peat, or in the fallen debris below, so it must remain an open question as to whether Bishop's site was associated with this old land surface.

Samples of the peat were examined for pollen content by Mr S. E. Durno, of the Macaulay Institute for Soil Research, Aberdeen, and Mr Donald Brett of the Department of Botany of the University of Glasgow, but results were negative. The absence of tree pollen in measureable quantities might mean that the peat is relatively recent.

On the whole it seems likely that the occupation layer of Bishop's hut was what he thought it to be, in spite of the superficial similarities with the nearby peat layer, and that there is no connection between the two deposits.

# (ii) The Nature of the Dwelling

There can be no doubt that the site was a domestic one: the quantities of occupation refuse indicate this clearly. The structure was probably of wood and may have had walls of wattle and daub. However a sample of this supposed 'wattling', soaked in wax and stuck to a piece of glass, is preserved in the Hunterian Museum. It was examined by Mr Brett who could only see carbonised grass and small twigs in it. To neither of us did this particular specimen appear to be a genuine example

of interwoven wattling. Nevertheless the numerous charcoal fragments recorded by Bishop probably mean that a wooden framework once stood on the site. There seems to be some evidence that the walls had a stone foundation: many stones were strewn over the site and some were found along the probable line of the wall. Perhaps some of the other stones, particularly the heavy ones, were used for weighing down a roof of skins or thatch: Tiree is an exceptionally windy island. The description of the post-holes, in which the posts seem to have been wedged with stones, is fairly clear although the ones marked on the plan do not form a regular outline. The fact that all the wood found on the site seems to have been carbonised might suggest that the hut was burnt down.

Bishop thought that the post-holes he discovered indicated that one, and probably two, huts stood on the site and that they were about 7 or 8 ft. in diameter. Such minute dwellings seem rather improbable especially as, with this interpretation, some of the other features – notably the hearth – would have been in the open air. It is probably better to regard the entire spread of the black occupation layer as the internal floor of one large approximately circular hut or tent about 35 ft. in diameter. If this was the case then some of the 'post-holes' indicated on the plan would fall well inside the circumference of the hut and might be the sockets for internal roof-supporting posts. But in the absence of either positive or negative indications that there were signs of post-holes around the entire circumference of the site it is impossible to reconstruct its exact plan.

# (iii) Internal Features

If the site was that of one large hut it would have contained the following features on and in its floor, which was apparently of pebbles underneath the occupation debris: the cobbled floor, already mentioned; a hearth near the centre – the area of hard burnt clay 'floor' marked on the sketch plan should probably be so interpreted; three rubbish pits dug into the floor and containing food refuse, animal bones, etc. – only two of these are indicated on the plan and the westerly of these two was at least 3 ft. deep; the other one seems to have been converted into a floor basin or tank by lining the base and sides with a thick layer of clay – refuse was found below the clay base; on the plan this feature is marked as 'kiln or furnace' but in the absence in the notes of any indication of burning or of air ducts it is probably better to regard it as a floor tank. Finally a large stone anvil, surrounded by hammerstones, was set in the cobbled floor away from the centre.

# (iv) Associated Artefacts

Bishop's notes on his excavations make it clear that a quantity of pottery and other artefacts of stone and bone were found associated with the dwelling site. The Bishop collections from Balevullin in the Hunterian Museum do not bear clear indications of their exact provenance and the results of several different collecting visits to the area are apparent. The following section is devoted to describing the material from Tiree in the museum and to indicating which of it can, with reasonable certainty, be said to come from the hut site.

## THE TIREE COLLECTIONS

The Hunterian Museum has several collections of prehistoric material obtained by Bishop from various places in Tiree and this includes a large quantity of pottery, some hammerstones and four fragments of bone combs which were found during the excavations described in the last section. There is some analogous material in the Glasgow Museum and Art Gallery, collected in Tiree by L. M. Mann, and this includes a few objects from a similar hut excavated by Mann in 1905 near Cornaig, on the N. coast. The labelling on the Hunterian material is not detailed enough for more than a few of the sherds and artefacts to be assigned with complete confidence to the excavated dwelling site but there are a number of indications that the majority of the Balevullin pottery came from the same place. The collections from each museum will be described in categories dictated by their labels and, unless otherwise indicated, the objects described can be assumed to be in the Hunterian Museum.

## I. MATERIAL PROBABLY FROM THE BALEVULLIN HUT SITE

Most of the sherds and artefacts are simply labelled 'Balevullin', hereafter referred to as 'Balevullin general', but a smaller number are labelled as coming from more specific, though largely unidentifiable, contexts such as 'No. 1 hut', 'No. 2 hut', 'Croch hut' and so on. The material from Balevullin (general) includes objects of widely diverse ages such as probable Mesolithic flints and the iron lock and flint of a musket and they clearly represent the results of Bishop's activities in the area over a number of years. The pottery, however, seems to form a homogeneous group and many of the decorated sherds are almost identical with those labelled as coming from the hut sites; it therefore seems probable that most of it came from the 1912 excavations. In fact a letter from Bishop, dated 1952 and in answer to a query about the provenance of this pottery, states that 'the Tiree pottery was all from a kitchen midden site on a sandy area' between the two rocky points at Balevullin and the rest of his description of the site tallies well with that of the 1912 excavation in the typescript.

The sherds, fragments of bone combs and hammerstones labelled as coming from various huts are certainly from these excavations. It will be recalled that Bishop thought he had identified the foundations of two small circular huts on his site (p. 158) and these are very probably 'No. 1 hut' and 'No. 2 hut'. The sketch plan of the site (fig. 1) also has two points marked on it with 'comb' written next to them, a further proof that the typescript and sketch plan refer to the site of the Balevullin pottery.

All objects labelled 'No. 1' and 'No. 2 hut' or 'hut site' are assumed to have come from the 1912 excavation. For the reasons given the pottery labelled 'Balevullin' is assumed to come from the same context and all the material here discussed is treated as belonging to a single cultural assemblage, with the probable exception of the six flints. The illustrated examples are, however, segregated into their labelled categories.

## (i) Flint

Six flints, all exhibiting signs of human workmanship, are labelled 'No. I hut' (Museum No. B.1951.2015: not illustrated). They are fragments of small flint pebbles with thick cortices and appear originally to have been light grey in colour. The surfaces exposed by flaking vary markedly in their degree of patination and in no case is any worked surface or edge entirely fresh looking: this is in spite of the fact that one flint is specifically labelled as coming from the black occupation layer. It therefore seems improbable that the six flints belong to the same cultural context as the rest of the finds here described; their appearance, and the presence of evidence for the use of iron on the site, suggests that they are older. The museum possesses collections of Mesolithic flints from Balevullin.

# (ii) Stone

Eighteen hammerstones of various sizes and shapes are labelled 'No. 1 hut'. They are all made from rounded beach pebbles (fig. 2, Nos. 13–17: Museum No. B.1951.2067).

Two stone discs are similarly labelled and may be pot lids (Museum No. B.1951. 2044: not illustrated). One is 4.4 in. in diameter and varies in thickness from 0.6 to 1.0 in.; the other, which has more clearly been chipped into shape, is from 3.8 to 4.0 in. in diameter and 0.6 in. thick.

# (iii) Iron

Several fragments of iron, and a piece of what appears to be iron slag, were in a box of bones and shells marked 'No. 1 hut' (Museum No. B.1951.2017). The box containing the iron was not itself labelled and they were not mentioned in Bishop's notes (neither, however, were the combs). They are very little corroded and there is no proof that they are as old as the rest of the material and yet the occurrence of iron fragments on this site is consistent with the marked absence of heavy stone cutting tools and the presence of many large pebble-hammerstones, two traits which recur at the Iron Age broch of Dun Mor Vaul.<sup>2</sup> The problem of whether the Balevullin site was occupied by an iron-using group is further discussed on p. 174 ff.

# (iv) Bone Artefacts

Among the bone refuse labelled 'No. 1 hut' were several fragments of bone splinters, suggesting that bone was worked on the site. There were also two bone awls or piercers (fig. 5, Nos. 119 and 120).

Four fragments of three small bone combs were also found in 'No. 1 hut' (fig. 2, Nos. 9–11; Pl. XVI, 1: Museum No. B.1914.493); the find spots of two of them are marked on the sketch plan (fig. 1). Detailed descriptions of these combs, two decorated and one plain, are given in Appendix A. There are no reasons for doubting

<sup>&</sup>lt;sup>1</sup> The occurrence of a fragment of a clay pipe with the 'Croch hut' sherds is a salutary warning against assuming too much from collections from sand dune sites!

<sup>&</sup>lt;sup>2</sup> Report in preparation: Discovery and Excavation Scotland (1962), 21: (1963), 20: (1964), 16-17: Antiquity (1965, Dec.).

that these combs were associated with the rest of the pottery and artefacts although parallels for these striking little objects have been difficult to trace. Nothing comparable is possessed by the British Museum or the National Museum in Edinburgh.<sup>1</sup> Although the National Museum of Ireland has nothing similar in its collections Dr Joseph Raftery, Keeper of Irish Antiquities there, has kindly sent me a drawing of a bone comb of comparable size, although with shorter teeth: he tells me that it is not clear whether the teeth have always been short or whether they have been broken off. This comb is made from a section of naturally curved bone, in the manner of the plain one from Balevullin (fig. 2, No. 10), and it comes from Crannog 61, Lough Gara, Co. Sligo. Dr Raftery informs me that the comb was well stratified in Late Bronze Age levels which also yielded pottery similar to that from the Ballinderry Crannog No. 2.<sup>2</sup> These levels yielded four C-14 dates which suggested a date in the second or third century B.C. for this cultural horizon<sup>3</sup> (p. 175).

The Balevullin combs have nothing in common with the long-handled 'weaving combs', which have been found in wheelhouse contexts in the Western Isles and in brochs in the north, or with the single- and double-edged iron-riveted composite combs which have been found in the same area, though probably from a later cultural horizon.<sup>4</sup> The decoration on two of the Balevullin combs, a simple geometrical criss-cross motif on No. 9 and straight lines and a simple 'fern' or 'feather' pattern on No. 11, is similar to that which sometimes occurs on the long-handled combs (for example in the Foshigarry wheelhouse, N. Uist<sup>5</sup>) but contrasts with the incised dot-and-circle decoration which occurs frequently on the composite combs. However one of the latter, from the wheelhouse of A Cheardach Mhor. S. Uist. has a criss-cross design.6 The Kilpheder wheelhouse, S. Uist, gave a flat bone implement decorated with a single zigzag of incised lines along its length7 and the fern or feather pattern, consisting of one or two lines with a row of short diagonal strokes along one or both sides, is common on Hebridean pottery. Examples from Tiree include a sherd from Dunan Nighean8 and a number from the postbroch occupation of Dun Mor Vaul, and they appeared in the Allasdale wheelhouse, Barra.9 While the forms of the Balevullin combs are quite distinct from those of the broch/wheelhouse and later horizons, and suggest that the former site belongs to a different period, the similarities in decorative motifs probably indicate some continuity of tradition. The incised ornament on some of the Balevullin pottery bears out this conclusion (p. 172 ff.). The close continuity of ceramic traditions in the Western Isles from the earliest times down to the wheelhouse Iron Age has been emphasised by other workers.10

## (v) Bone, Shell and Charcoal

Samples of these materials were excavated from the Balevullin site and preserved by Bishop. They are described in Appendices C, D and E.

```
<sup>1</sup> Information by letters. 
<sup>2</sup> Hencken (1942), fig. 1. 
<sup>3</sup> Macaulay and Watts (1961), 34–35. 
<sup>4</sup> Stevenson (1955), 287. 
<sup>5</sup> Beveridge and Callander (1931), fig. 1. 
<sup>7</sup> Lethbridge (1952), fig. 4, No. 6. 
<sup>8</sup> P.S.A.S., LXXXVI (1951–2), 197, fig. 9, No. 7. 
<sup>9</sup> Young (1953), fig. 7. 
<sup>10</sup> Mrs A. Young, quoted in Rivet (1962), 27; also Megaw and Simpson (1961), 66 ff.
```

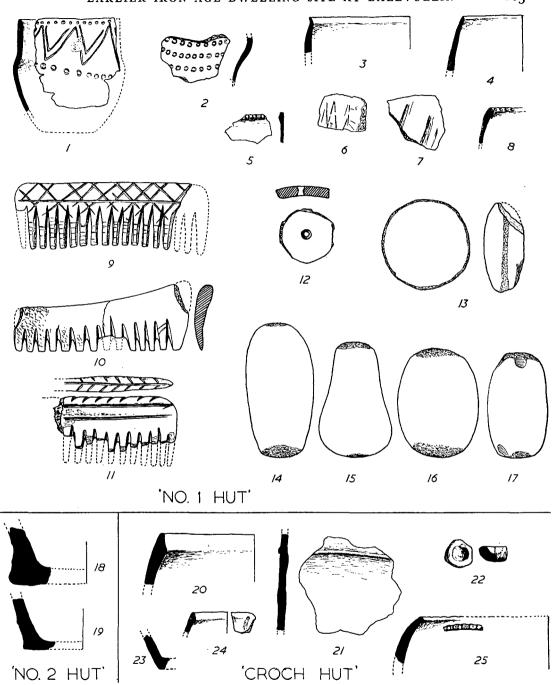


Fig. 2. Miscellaneous small finds from Balevullin including combs (1/1), stone objects and pottery (1/2)

# (vi) Pottery (Appendix A)

The Balevullin pottery which is thought to be from the 1912 excavations is here described (figs. 2, 3 and 4). The illustrated sherds are described in the Appendix and segregated into their labelled contexts in the drawings. The sherds labelled 'No. 1 hut', 'No. 2 hut', 'hut site' and 'Balevullin' are treated as a single assemblage.

Two observations are easily made as soon as the sherds are examined. The first is that the sherds are all hard and well-fired, even those which are exceptionally gritty, and many of the finer sherds are baked to a characteristic reddish colour. The second observation is that there is a marked absence of many of the formal and decorative traits which are typical of the Hebridean wheelhouse sites. Such traits include the sharply everted rim and its associated decorative motifs—like the zigzag cordon, the semicircular channelled lines and fluting along the rim bevel—and the elaborate incised hatched triangles, zigzags and fern-leaf patterns which together form probably the most characteristic body of decoration of wheelhouse pottery. Instead the Balevullin site has large quantities of coarse, gritty sherds, presumably from large barrel- and bucket-shaped vessels, some of which are sparsely decorated with incised lines and finger-tip marks, and a relatively small number of small, beaker-like pots a few of which are finely ornamented with applied cordons and incised and punctuated designs.

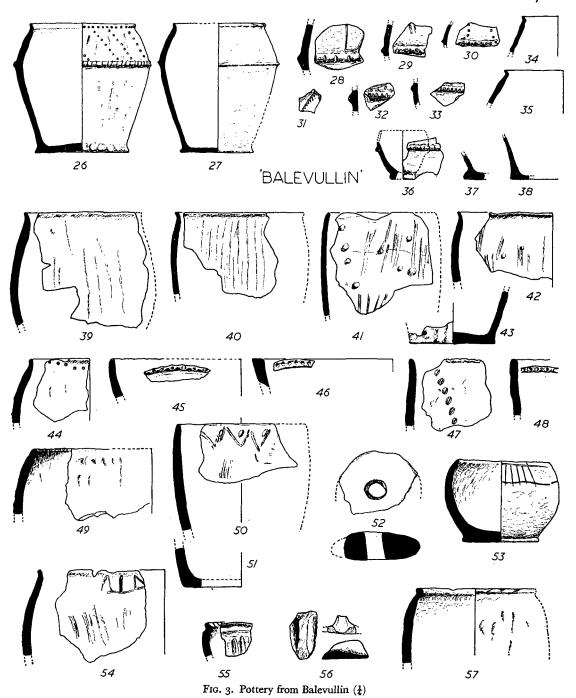
Three main categories of sherds can be distinguished, termed Classes A, B and C, of which A can be divided into two, and C into three, sub-types.

Class A sherds are of small, thin-walled beakers or urns, usually from 5 to 6 in. in height, and are made of hard-fired grey or reddish clay with smooth surfaces. The thickness of the body sherds tends to be of the order of 6 to 8 mm. The grits in the clay tend to be small although an occasional large one may protrude slightly from the surface. A frequently occurring feature is a series of very shallow vertical grooved lines on the outer surface, each line exhibiting many striations and seemingly made with a bunch of grass or something similar. Two distinct sub-types of this class of vessel occur.

Sub-type A-1 are the small urns with an S-shaped profile, a slightly everted lip and a body tapering to a relatively narrow footed base (fig. 2, Nos. 1 and 2; fig. 3, Nos. 26–38). These sherds are decorated with an applied cordon, sometimes slashed or punctuated, around the greatest girth and, above this, incised lines or punctuated marks in simple geometric patterns. The everted foot of the base is sometimes slightly finger-indented.

Sub-type A-2 consists of small unornamented barrel-shaped pots of grey clay with broader bases, plain or slightly out-turned lips and frequently exhibiting the vertical 'brushing' on the exterior (fig. 3, Nos. 39-43).

Class B sherds are somewhat coarser and thicker than those of Class A and are made of hard-fired reddish clay, many forming parts of barrel-shaped vessels with a simple incurving or a very slightly everted rim (fig. 3, Nos. 44-57). The rim is sometimes ornamented along its bevelled top with fingernail impressions and decoration occasionally occurs on the outer surface – a row of shallow finger-tip marks



(No. 47), faintly incised zigzag lines (Nos. 50 and 54) and an incised ladder pattern (No. 53). The body sherds of this class tend to be of the order of 8 to 11 mm. in thickness.

Class C includes a great variety of coarse, hard-fired, thick, gritty sherds, often with very large grits which project from their surfaces, which seem to belong to larger and heavier pots, presumably storage jars and the like. These can be divided into three sub-types.

Sub-type C-1 includes the decorated pottery. There are several sherds with deep finger-tip impressions on large raised cordons (fig. 4, Nos. 58 and 59) and two with such impressions pushed into the side of the pot (No. 60). No. 61 is a similarly cordoned sherd but weathered and less clearly marked.

Sub-type C-2 includes most of the rest of the plain coarse vessels which have lips of varying shapes. Nos. 62 and 66 have slightly everted rims, those of 63 and 64 are flat and simple tapering rims are possessed by 65 and 68 (fig. 4). There are a number of exceptionally thick body and base sherds, such as a collection from No. 2 hut (fig. 2, Nos. 18 and 19), which might be regarded as a distinct, even coarser, type but it is quite likely that such sherds belong to rims like No. 65 which is very similar in texture. Doubtless the thickness of the wall of a large vessel can vary considerably from rim to base.

Sub-type C-3: there is probably some justification for separating out some of the sherds of Class C, such as rim No. 67 and base No. 76, by virtue of their exceptionally hard-fired clay, lack of large grits and carefully smoothed surfaces.

The thickness of the body sherds of Class C vessels tends to be of the order of from 10 to 15 mm.: one or two are thicker but one 23 mm. thick sherd is exceptional.

### 2. FROM KILKENNETH

Some sherds from Kilkenneth in the Bishop collections seem to be similar to the Balevullin material (fig. 4, Nos. 78–97: Museum No. B.1951.2079). Although some of this material is labelled 'hut site' there is no other indication of its context except that it was recovered from the Kilkenneth sand hills, now grassed over. Incised decoration appears to be commoner on this selection of sherds but the everted rim wheelhouse pots and their associated decorative motifs are again absent.

## 3. FROM A SUPPOSED HUT-SITE AT LOCH BHASAPOLL, CORNAIG

There is among the collections in the Glasgow Museum and Art Gallery some pottery from Tiree which was found by Ludovic M. Mann. The sherds come from a supposedly domestic site between the sea and Loch Bhasapoll (probably about a mile east of the Balevullin site) which Mann found and excavated in July 1905.<sup>1</sup> A black layer about 9 in. in depth was discovered, covering an area 8 or 9 ft. in diameter and resting on white sand which also surrounded the site. From this dark layer were recovered some potsherds, one of which was illustrated,<sup>2</sup> and a number of stone objects. The latter include the two spindle whorls illustrated here (fig. 5, Nos. 101 and 102), four flint fragments, four hammerstones, an 'anvil stone'

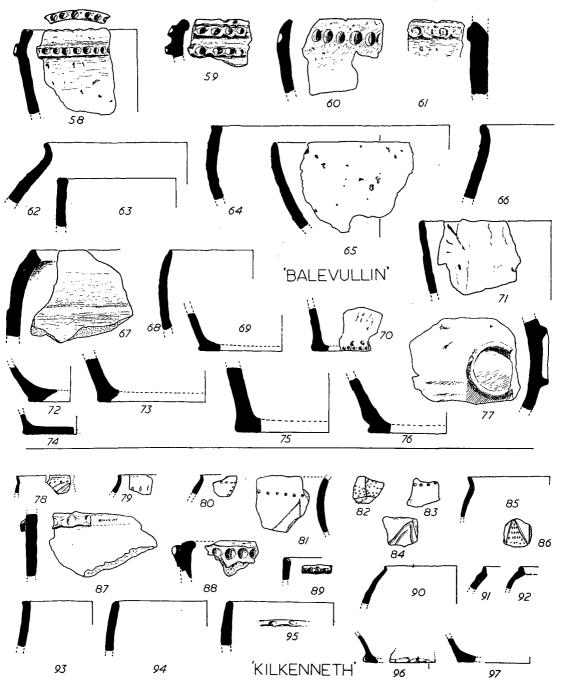


Fig. 4. Pottery from Balevullin and Kilkenneth (1)

and two stone 'polishers'. The pottery comprised sherds of 'at least five vessels'. In the Glasgow Museum are three plaster reconstructions of vessels from this site, one of which (fig. 5, No. 98) has set in it a large rim-sherd of a bucket-shaped vessel ornamented with an impressed cordon. The two others (Nos. 99 and 100) have had the original sherds sawn out of them at some time.

From Mann's description the site seems to be similar to Bishop's Balevullin site. The cordoned urn is similar to, though more neatly finished than, the Class C-1 pots from Balevullin and the plaster copy of the missing sherd No. 100, with a simple tapering rim decorated with incised slashes along its top, has parallels in the Class B vessels at the other site. No. 99 might be a plain version of the Balevullin Class A-1 small decorated vessels.

# 4. COLLECTIONS FROM BALEVULLIN IN 1905 AND 1907

A complete cordoned urn, some rim-sherds and a number of fragments of worked bone associated with the urn were collected by Mann from Balevullin in 1905 and 1907 and presented by him to the Glasgow Museum and Art Gallery¹ (unnumbered). They are included here to complete the record of finds of non-wheelhouse prehistoric pottery from Tiree. No detailed information about their context is available: there is no record of burnt bones having been found with the urn which looks from its form and size, as if it might have been a cinerary vessel (fig. 5, Nos. 103–115)

## 5. TWO CROUCHED BURIALS FROM BALEVULLIN

In 1912 M. Buchanan found and excavated two crouched human inhumation burials in the sands at Balevullin; photographs and notes are preserved in the Hunterian Museum. No grave furniture was found and there is no clue to the age of the skeletons. Single crouched inhumations are usually assumed to belong to the Early Bronze Age in northern Europe but in Scotland the practice continued until, or was revived in, the Iron Age. The Moredun cist grave near Edinburgh had a crouched burial with a La Tène III iron fibula and an iron ring-headed pin<sup>2</sup>. It is therefore not impossible that the Balevullin crouched burials belong to a similar cultural horizon as the hut site but it is quite unprovable.

## 6. SOME SHERDS FROM COLL

These sherds, in the Glasgow Museum and Art Gallery, are included for their own interest (fig. 5, Nos. 116–118). No. 116 appears to be part of a flat-rimmed vessel with a concave neck which probably ran down to a sharp shoulder in the manner of the early Iron Age pottery from the 'Late Bronze Age' village II at Jarlshof, Shetland,<sup>3</sup> while No. 117 is a 'hammerhead' flat-rimmed sherd which is at home in the same context.<sup>4</sup>

#### DISCUSSION

The search for a cultural context for the Balevullin site is hampered by the total absence of known similar domestic sites in the west of Scotland and the Western

<sup>&</sup>lt;sup>1</sup> Mann (1908), fig. 3. <sup>3</sup> Hamilton (1956), fig. 18.

<sup>&</sup>lt;sup>2</sup> Coles (1904), fig. 2. <sup>4</sup> op. cit., fig. 18, No. 8.

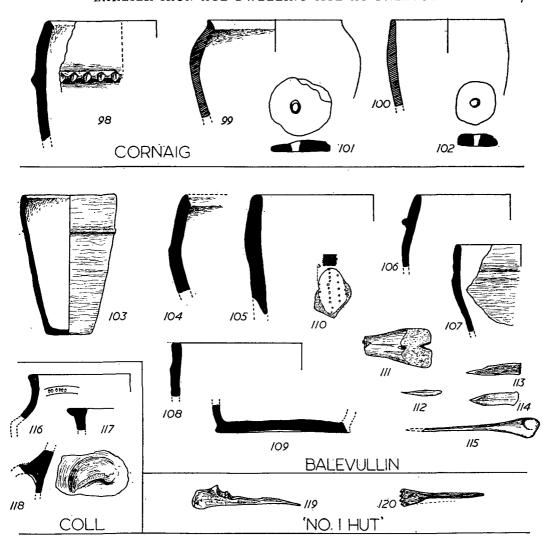


Fig. 5. Miscellaneous finds from Cornaig, Coll and Balevullin including pottery, stone spindle whorls and bone objects (No. 103 1/12; rest 1/4)

Isles (with the possible exception of the ill-described one a mile away at Loch Bhasapoll). In addition the coarse and undistinguished nature of much of the pottery and artefacts inevitably results in emphasis being placed on those relatively few finds which do exhibit striking traits. Ideally the definition of culture complexes, their origins, relationships and territorial movements should be done only on the basis of comparing the total patterns formed by all the individual cultural traits from numerous excavated sites but there is just not enough information to do this reliably for the period of the Scottish Late Bronze Age and that part of the Iron Age which antedates the broch-wheelhouse horizon. The following discussion is there-

fore confined to estimating the technological status of the Balevullin site and noting a few parallels with other sites which may be significant. It is hoped that the record of the rest of the data will prove useful when a comprehensive study of the domestic cultures of the Scottish Late Bronze and Early Iron Ages is made.

## (i) Pottery

It seems that the Class A-1 vessels from Balevullin, which have gently curving, S-shaped profiles, footed bases and are decorated with an applied cordon – slashed obliquely in one case - and some punctuated and incised ornament, represent a very old ceramic tradition in the Hebrides and further afield. Similar vessels are known from sites which vary widely in their date and cultural context. A recent discussion of Hebridean pottery mentioned two pots from Trecklet, N. Uist, one of which was ornamented with two cordons slashed obliquely. The authors suggest that these were not fundamentally different from the plain barrel-shaped pot from the Port na Long short cist burial in N. Uist and that they might indeed take the place of the Bronze Age collared cinerary urns, absent from the west highlands and the Northern Isles. The existence of some of these ceramic traits at an even earlier date is shown by the vessel from Colleonard, Banff, which contained seven flat bronze axes and probably dated from the early second millennium B.C.<sup>2</sup> It exhibited a base with a slight foot, an applied cordon obliquely slashed about half way down the pot and a crudely scratched and incomplete zigzag above this and a line of irregular impressions below the rim. The links between these highland cordoned urns and some Late Neolithic cultures (Lough Gur, Rinyo Clacton and Ronaldsway) have been emphasised.3 A cordoned vessel from the Secondary Neolithic Rinyo Clacton assemblage from Woodhenge, Wilts., demonstrates the long history behind the Balevullin Class A-1 urns.4

On the other hand such vessels last into the later Iron Age in the Hebrides. From the Kilpheder wheelhouse, S. Uist, came several vessels strikingly similar in form and decoration to some of the Balevullin material.<sup>5</sup> Two sherds show a barrel-shaped profile, slightly everted lip, a horizontal cordon slashed obliquely and a row of punctuations under the rim. The other illustrated rim sherds from this site are similar in shape but some possess the more elaborate incised decoration of wheelhouse pottery and two have the horizontal zigzag cordon. This last feature does not seem to be earlier than the broch-wheelhouse horizon and is conspicuously absent from the Balevullin assemblage. The occupation of the Kilpheder wheelhouse was securely dated to the second or third centuries A.D. or later by a Romano-British fibula. Sherds of similar pottery occurred in the lowest levels of the wheelhouse of A Cheardach Mhor in S. Uist.<sup>6</sup>

Thus it is difficult to assess even the approximate date of the Balevullin material

```
    Megaw and Simpson (1961), fig. 3, B and C.
    ibid., 8 and Inv. Arch. G.B., 5th set (1958), G.B. 29.
    Piggott (1955) and Butler and Smith (1956), 46-47.
    Piggott (1954), fig. 58, No. 1.
    Lethbridge (1952), fig. 7.
    Young (1960), figs. 5 and 6.
```

from the Class A-1 pottery alone. The type evidently had a very long existence in the Hebrides.

However the shouldered vessel in the A-1 group (fig. 2, No. 1) is of a distinct type, the only example of its kind from the site unless No. 2 is part of another. Its profile is not dissimilar to those of some 'devolved Hallstatt' sherds from such English Iron Age A sites as Scarborough and Staple Howe, Yorks, West Harling, Norfolk,<sup>2</sup> Fengate, Peterborough,<sup>3</sup> and All Cannings Cross, Wilts.<sup>4</sup> Vessels with near vertical necks and a slightly projecting, rounded shoulder below this occurred at all four sites mentioned and the decoration on the Balevullin vessel of a row of punctuations along the rim and another along the shoulder is found frequently at the English sites.<sup>5</sup> Patterns of incised lines in a horizontal zigzag along the upper part of the vessels, above the shoulder, also occur.6

Thus of the three traits - one formal and two decorative - which were identified on the Balevullin vessel, all recur singly at the English sites, two (the profile and the two horizontal lines of punctuations) occur frequently in the same combination and all three occur once in the same combination.<sup>7</sup> This suggests that the similarities are valid cultural parallels and that the Balevullin vessel should provide a useful clue to the relationships of the site.

Similarities with English Iron Age sites like Scarborough and Staple Howe are increased with the occurrence at Balevullin of a few thick sherds ornamented with applied finger-printed cordons (Class C-1) which may be analogous to similarly decorated vessels at the Yorkshire sites.8 Such vessels do, however, have a Bronze Age ancestry.9 The remainder of the Class C sherds are difficult to draw parallels with since they are nearly all plain, coarse gritty sherds with few diagnostic features except their great hardness (fig. 4, Nos. 62-77). They would not be out of place in sites such as the Sculptor's Cave, Covesea, Morayshire, which produced flatrimmed pottery and is usually thought to belong to the Late Bronze Age, about 700 B.C.<sup>10</sup> It was noticed that the 'flat-rimmed' pots from Covesea were distinctly harder fired than Bronze Age cinerary urns.11

The two sherds grouped into Class C-3 (fig. 4, Nos. 67 and 76) may give a further clue in that the incurving rim of 67 resembles pottery recovered from the south Scottish hillfort of Hownam Rings, Roxburgh, in phase III of the site. 12 The first three phases of this fort, all of which yielded similar pottery, were tentatively placed by the excavator in the first two centuries B.C. and the first A.D. and, more recently, in the first three centuries B.C.<sup>13</sup> This extremely tentative parallel hints

```
<sup>2</sup> Apling (1932) and Clark and Fell (1953).

<sup>4</sup> Cunnington (1923).
             <sup>1</sup> Smith (1927); Brewster (1963).
             3 Hawkes (1943).
* Hawkes (1943).

5 Smith (1927), fig. 23: many at West Harling – Apling (1932), figs. 1–25 and Clark and Fell (1953), figs. 11 and 12: many at Fengate – Hawkes (1943), figs. 3, 4 and 8: some at All Cannings Cross – Cunnington (1923), Pl. 29, Nos. 5–7; Pl. 32, Nos. 2 and 4: many at Staple Howe – Brewster (1963), figs. 33ff.

6 Particularly Cunnington (1923), Pl. 32, No. 4; Hawkes (1943), Pl. 1, fig. 2, D. 1; fig. 7, R. 7; Smith (1927), fig. 57; Apling (1932), fig. 41 and Clark and Fell (1953), fig. 15, No. 74.

7 All Cannings Cross, note 6 above.

8 Smith (1927) figs. 14-10 and 22 Brewster (1962) figs. 28, 20 and 41.
             8 Smith (1927), figs. 14–19 and 22: Brewster (1963), figs. 38, 39 and 41.
9 Butler and Smith (1956).
           <sup>10</sup> Benton (1931); Childe (1935), 170 ff.; J. M. Coles (1960), 39 ff.
<sup>11</sup> Childe (1935), 171.

<sup>12</sup> C. M. Piggott, (1948), 213, fig. 10, III.1 and III.3.
```

<sup>11</sup> Childe (1935), 171.
18 By Professor Piggott in Rivet (1962), fig. 1.

that the Balevullin site may include some part of the first three centuries B.C. in its period of occupation.

On the other hand a sherd with an inturned rim occurred with other 'flatrimmed' pottery, one sherd of which had a markedly carinated shoulder, in the Heathery Burn cave, Co. Durham, and has there been securely dated to the seventh century B.C. by the associated bronzes. It is worth noting that the flat rim and the carinated profile occur at such an early date.

The Balevullin Class B pottery, with simple incurving rims, apparently of globular vessels, which thin towards the rim and are frequently decorated along it with fingernail marks, is not easy to trace further afield except in very general terms. If the group of sherds labelled 'Croch hut' from Balevullin is in fact a collection of culturally contemporary material (always a doubtful assumption with collector's finds gathered fifty years ago) then the occurrence of a Class B sherd in this group (fig. 2) with sherds of a cordoned vessel with a bevelled rim may be significant. The latter sherds (Nos. 20, 21 and 23) belong to a type which can be traced back into the Bronze Age, if not earlier.2 The Hunterian Museum possesses a collection of sherds from Stevenston, Ayrshire (Museum No. B.1951.347 and 348) which includes both rims of the bevelled type and flat and 'hammerhead' rims. Several sherds, including at least one of the bevelled rims, are ornamented with lines impressed with a twisted cord in the same style as occurs on the cordoned urns of the Late Neolithic and Bronze Ages. Thus the Class B sherds may also belong to an older tradition and it may be significant that sherds with bevelled rims like No. 20 do not appear among the material from the Balevullin hut site. Such bevelled rims are known from Late Bronze Age horizons such as the Covesea cave,3 Loanhead of Daviot, Aberdeenshire<sup>4</sup> and Traprain Law, E. Lothian (Early Iron Age),<sup>5</sup> so their absence from the Balevullin hut site might mean that the latter belongs to a slightly later horizon. However the tentative nature of these deductions must again be emphasised; there are so many reservations which have to be made about the validity of the associations of the various groups of material from Balevullin that nothing really conclusive can be said.

# (ii) Cultural Context and Dating

Thus, while some aspects of the ceramic assemblage from the Balevullin site seem to reflect traditions which were very long lived in the highlands and islands, others, like the small shouldered decorated pot, the flat-rimmed vessels and, perhaps, the finger-printed cordoned sherds, seem to favour a Late Bronze Age or Early Iron Age context for the site, whatever that may mean in terms of absolute chronology for the Hebrides. This impression is reinforced by the feeling that the whole assemblage of artefacts is appropriate to an iron-using social group. The few bone implements, the doubtful association of the six flints, and the absence of heavy bone and stone cutting tools suggests that iron tools, of which the iron fragments may be

Hawkes and Smith (1957), 159-60 and fig. 6.

However are the secondary Neolithic Rinyo-Clacton pottery; Piggott (1954), figs. 57 and 58, No. 1.

Kilbride Jones (1937), fig. 11.

<sup>&</sup>lt;sup>3</sup> Benton (1931), fig. 11. <sup>6</sup> Childe (1935), fig. 79.

remains, were used. As noted earlier the presence of many large pebble hammerstones and the lack of stone tools are two traits which recur prominently in the post-broch levels of Dun Mor Vaul where there was also much iron slag. It may also be a valid point that the three little bone combs exhibit a degree of fineness in their workmanship which argues for the use of metal tools. The very general similarity between these combs and the fragment from the Late Bronze Age levels of Crannog 61, Lough Gara in Co. Sligo has already been noted as has the fact that these levels gave 'flat-rimmed' pottery similar to some of the sherds from Balevullin. It may nevertheless be significant that the Lough Gara crannog's Late Bronze Age levels (which contained pottery similar to that from Ballinderry Crannog No. 21) gave four C-14 dates which form a fairly consistent group falling in the second and third centuries B.C.<sup>2</sup> The dates are (converted to B.C. by subtracting 1950): D.53  $120 \pm 130$  B.C.; D.54  $190 \pm 130$  B.C.; D.55  $200 \pm 130$  B.C.: and D.60  $210 \pm 130$  B.C. These dates may favour an approximately similar period for the Balevullin site as also may the tentative parallels with Hownam Rings mentioned earlier (p. 173). On the other hand the Staple Howe settlement site has been given, through its Continental Hallstatt C bronze razors, an initial date of late in the sixth century B.C. and a terminal date, from other types of pottery, perhaps just inside the fourth century.3 If the 'devolved Hallstatt' vessel from Balevullin is a cultural link with the Iron Age A settlement of east England it might suggest a slightly earlier date for the Tiree site, perhaps in the fifth or fourth centuries. But estimates of dating based on a single pot can be little more than guesses. It is hoped that some of the large lumps of charcoal collected by Bishop from the Balevullin site may be suitable for C-14 dating.

That the site belongs to an earlier period than that of the brochs and wheelhouses is suggested by the absence of several of the ceramic traits typical of this well-known later Iron Age horizon (p. 166) and by the fact that the Balevullin site seems to have been of wooden construction and not of drystone masonry.4 In addition the 1963 excavations at Dun Mor Vaul revealed that a midden lay underneath the core of the outer stone rampart which surrounds the broch. From this midden sherds were recovered which are strikingly similar to some among the Balevullin assemblage but which have few precise parallels in the post-broch material. These sherds include many fragments of a large, coarse, gritty, plain, bucket-shaped vessel, several fragments of a smoother, plain, barrel-shaped pot and some rim fragments which resemble, in form and decoration, the fine Class A-1 vessels from Balevullin (fig. 3). This pre-rampart midden seems to confirm the early date of the Balevullin site in relation to the broch-wheelhouse horizon.

The identification of the charcoal fragments from the Balevullin site seems to

<sup>&</sup>lt;sup>1</sup> Hencken (1942), fig. 2.

<sup>&</sup>lt;sup>2</sup> Macaulay and Watts (1961), 34-35.

<sup>&</sup>lt;sup>3</sup> Brewster (1963), Foreword. <sup>4</sup> That the classic wheelhouses were later than the brochs in the N. was shown at Jarlshof (Hamilton, 1956) and several other Shetland sites; the evidence from Dun Mor Vaul, Tiree, strongly suggests that this was the case in the W. too. If this is so it may be that these architecturally sophisticated structures were, in their final form, mainly the result of the experience and skill in drystone masonry techniques which was accumulated during the broch building phase. Thus the Balevullin site might be regarded as belonging to an earlier horizon simply because of its lack of drystone building.

conflict with its allocation to a phase of the Early Iron Age, perhaps between 400 and 100 B.C., and therefore well inside Zone VIII (Sub-atlantic) of the climatic sequence (Appendix C, p. 182). Oak and hazel were present in some quantity, together with a few pieces of elm, alder and willow, and they suggest that Tiree supported a flora more appropriate to the preceding Sub-boreal period (Zone VIIb) at the time the Balevullin hut site was occupied. In my opinion the archaeological evidence will not permit the site to be placed earlier than the Iron Age (Zone VIII) so the question arises of whether Tiree supported a Sub-boreal type of flora much later than other parts of Scotland. The post-broch levels of Dun Mor Vaul, Tiree, dated to the second century A.D. and perhaps later, yielded large amounts of charcoal which will certainly solve this problem when they have all been identified. Up to the moment of writing oak and alder have been isolated and this may afford some grounds for supposing that flora among which the Balevullin site was occupied also existed in post-broch times. However firm conclusions on this subject will have to await detailed study of the Dun Mor Vaul material.

October 1963

Postscript: The final two weeks of excavation on the broch of Dun Mor Vaul took place in March-April 1964 and some further information relevant to the problem of the cultural and chronological status of the Balevullin site was recovered. The presumably pre-broch midden found below the outer wall in 1963 was identified inside the broch itself, below the primary floor of the structure and in a natural hollow in the underlying rock. Underneath the midden was a living floor with a large broken pot, bone and wooden implements and a lump of yellow clay lying on it. The midden contained coarse, gritty pottery and some fine rim sherds analogous to, respectively, the Class C and A vessels from Balevullin.

Several sherds of a small vessel were found inside the broch which, although not directly associated with the presumably pre-broch midden, seem likely to belong to that phase and to support the east English, Iron Age 'A' origins of at least part of the material from the Balevullin site. This vessel is a small vase or beaker, similar in size to the Class A pots from Balevullin, and has a fine, red-slipped exterior surface. A carinated, though rounded, profile is combined with a sharply everted, straight rim to give a striking similarity to some of the devolved Hallstatt vessels of east English Iron 'A' sites like Micklemoor Hill, West Harling and Staple Howe.¹ A single similar sherd was found in the Allasdale wheelhouse, Barra and was 'unique at the site'.²

## REFERENCES

Apling, H. 1932. A Hallstatt settlement near West Harling, Norfolk, P.P.S.E.A., 11, pt. 1, 111-22. Benton, Sylvia. 1931. The excavation of the Sculptor's Cave, Covesea, Morayshire, P.S.A.S., Lxv (1930-1), 177-216.

Beveridge, Erskine and Callander, J. Graham. 1931. Excavation of an earthhouse at Foshigarry, and a fort, Dun Thomaidh, in North Uist, P.S.A.S., LXV (1930-1), 299-322.

<sup>1</sup> Clark and Fell (1953): Brewster (1963) – fig. 40, No. 1 is very similar in size and profile, but has a shorter lip.

<sup>2</sup> Young (1953), 96 and fig. 8, No. 93.

Brewster, T. C. M. 1963. The excavation of Staple Howe, East Riding Arch. Research Committee, Scarborough.

Butler, J. J. and Smith, I. F. 1956. Razors, urns and the British Middle Bronze Age, Lond. Univ. Inst. Arch. Annual Rep., 12th, 20-52.

Childe, V. Gordon. 1935. The Prehistory of Scotland, Kegan Paul, London.

Clark, J. G. D. and Fell, C. J. 1953. The Early Iron Age site at Micklemoor Hill, West Harling, Norfolk, and its pottery, P.P.S., xix, 1-40.

Coles, Fred. R. 1904. Notice of the discovery of a Cist of the Early Iron Age, on the estate of Moredun, near Gilmerton, P.S.A.S., xxxvIII (1903-4), 427-45.

Coles, John M. 1960. Scottish Late Bronze Age Metalwork: typology, distribution and chronology, *P.S.A.S.*, xcIII (1959-60), 16-134.

Cunnington, M. E. 1923. The Early Iron Age inhabited site at All Cannings Cross Farm, Devizes.

Hamilton, J. R. C. 1956. Excavations at Jarlshof, Shetland, Min. of Works Arch. Reports, No. 1, H.M.S.O. Edinburgh.

Hawkes, C. F. C. and Fell, C. J. 1943. The Early Iron Age settlement at Fengate, Peterborough, Arch. Journ., c, 188-223.

Hawkes, C. F. C. and Smith, M. A. 1957. On some buckets and cauldrons of the Bronze and Early Iron Ages: . . . Ant. Journ., xxxvii, 131-98.

Hencken, H. O'Neill. 1942. Ballinderry Crannog No. 2, P.R.I.A., XLVII, sec. C (1941-2), 1-76.

Kilbride Jones, H. E. 1935. An account of the Excavation of the Stone Circle at Loanhead of Daviot... Aberdeenshire, P.S.A.S., LXIX (1934-5), 168-223.

Lethbridge, T. C. 1952. Excavations at Kilpheder, South Uist, and the problem of Brochs and Wheelhouses, P.P.S., xviii, 176-93.

McAulay, I. R. and Watts, W. A. 1961. Dublin Radiocarbon dates I, Radiocarbon, III (1961), 26–38. Mann, Ludovic M. 1906. Notes on the exploration of the floor of a prehistoric hut in Tiree, P.S.A.S., xL (1905–6), 372–8.

—— 1908. Notice of a pottery churn from the Island of Coll with remarks on Hebridean pottery, P.S.A.S., XLII, (1907-8), 326-9.

Megaw, J. V. S. and Simpson, D. D. A. 1961. A short cist burial on North Uist and some notes on the prehistory of the Outer Isles in the second millennium B.C., P.S.A.S., XCIV (1960-1), 62-78.

Piggott, C. M., 1948. The excavations at Hownam Rings, Roxburghshire, 1948, P.S.A.S., LXXXII (1947-8), 193-225.

Piggott, S. 1955. Review of W. Glasbergen's 'Barrow excavations in the eight Beatitudes: ...' (1954-5), in Ant. Journ., xxxv (1955), 235-7.

---- 1954. Neolithic Cultures of the British Isles, Cambridge.

Rivet, A. L. F. 1962. The Iron Age in Northern Britain, Antiquity, XXXVI, No. 141 (March), 24-31. Smith, Reginald A. 1927. Pre-Roman remains at Scarborough, Archaeologia, LXXVII, 179-200.

Stevenson, Robert B. K. 1955. Pins and the chronology of brochs, P.P.S., xxi, 282-94.

Young, Alison. 1953. An Aisled Farmhouse at the Allasdale, Isle of Barra, P.S.A.S., LXXXVII (1952–3), 80–105.

Young, Alison and Richardson, K. M. 1960. A Cheardach Mhor, Drimore, South Uist, P.S.A.S., xciii (1959-60), 135-73.

### APPENDIX A

# Description of Illustrated Artefacts

Balevullin No. 1 hut (fig. 2 and Pl. XV, 1)

(1) Sherds of a small pot or beaker, of thin-walled, hard-fired dark grey clay with reddish brown surfaces; diam. c.  $5\frac{1}{4}$  in.: body bulges outwards slightly below a vertical neck. Decoration of a row of impressed pits under the rim and, below this, incised or channelled double lines in a zigzag pattern with a horizontal row of circular impressions under this and along the maximum girth

of the vessel. These last may have been made with a hollow tube, perhaps bone. Class A (Museum No. B.1914.2026).

- (2) Sherd of a very similar vessel with impressed decoration made with a hollow tube. Class A (B.1951.2016) (Pl. XV, 1).
- (3) Plain rim sherd similar to Nos. 39 and 40: hard, well-fired clay with small grits and a grey core with light brown surfaces. Class A (B.1951.2016).
- (4) Plain sherd of small barrel-shaped vessel of hard-fired, black clay with small grits. Probably Class A (B.1951.2016).
- (5) Thin walled sherd with pinched-up cordon decorated with vertical cuts: similar to 26. Class A (B.1951.2016).
  - (6) Sherd with faintly incised lines. Probably Class A (2016).
- (7) Black sherd with faintly channelled broad lines, perhaps done with a bunch of grass. Probably Class A-2 (2016).
- (8) Rim sherd of a barrel-shaped vessel, rim bevel decorated with a row of shallow finger imprints; a hard, gritty, grey clay with a light brown outer surface. Probably Class B (2016).
- (9) Comb made from a flat plate of bone, the decoration and profile being identical on each side: fourteen teeth preserved out of a probable original total of eighteen: max. present length (along top) 46 mm. or  $1\frac{1}{3}$  in.; max. width at right end 18 mm. or  $1\frac{1}{16}$  in.; thickness of comb at top of teeth, 4 mm. or  $3\frac{5}{2}$  in.; the smooth profile of the bases of the teeth, and their polished ends, suggests long use or smoothing after cutting; it is not so clear why there are faint horizontal scratches along the sides of the teeth. (B.1914.493) (Pl. XVI, 1).
- (10) An almost complete bone comb in two fragments, undecorated and made from a sliver probably taken from the side of a long bone the concave face exhibits a rough surface similar to the interiors of hollow long bones. The teeth are shorter than those of No. 9 and end in a chisel-like edge in profile they are pointed. The present max. length is 47 mm. or  $1\frac{7}{8}$  in., the greatest width is 17 mm. or  $\frac{2}{3}\frac{1}{2}$  in. and the max. thickness 4.5 mm. or  $\frac{5}{3}\frac{1}{8}$  in.; fourteen teeth. (B.1914.493) (Pl. XVI, 1)
- (11) Half of a bone comb with all teeth broken off; made of a flat plate with similar profile and decoration on both faces; decoration consists of horizontal grooves and a 'fern' pattern along the top edge; max. thickness is 4 mm. or  $\frac{5}{2}$  in. (B.1914.493) (Pl. XVI, 1).
- (12) Spindle whorl made from a potsherd of hard, light grey, gritty clay and perforated in the hourglass fashion. (B.1914.2066.)
- (13)-(17) Five (out of a total of eighteen) beach-pebble hammerstones; all have had both ends abraded from pounding and No. 13, disc-shaped, has been used all round the edge. (B.1951. 2067.)

(See also Nos. 119 and 120.)

Balevullin 'No. 2 hut' (B.1951.2020)

(18)-(19) Two base sherds of hard, coarse clay, black with a reddish outer layer and with many large grits. Class C.

Balevullin 'Croch hut' (B.1951.2023)

- (20)-(21) A rim and a body sherd from a collection apparently belonging to the same vessel; hard, dark grey clay with dull brown surfaces and medium sized grits. The rim thickens and is then pulled upwards into a characteristic bevelled form. The body sherds are decorated with a low, pinched-up cordon. All these sherds have traces of brown earth on them, suggesting that they come from a different site than the rest of the Balevullin material.
- (22) Minute vessel made by pressing thumb or finger into a ball of clay; hard-fired but no traces of metal slag. (B.1951.2024.)
- (23) Base sherd, lacking the more usual everted foot, of hard-fired, dark grey clay with light brown surfaces.
- (24) Small rim sherd of black clay, similar in form to No. 20, traces of impressions under the rim with broad, faint, brushed vertical lines running down from them.

- (25) Rim sherd of a barrel-shaped vessel of grey clay with brown surfaces; hard-fired and smooth-surfaced but with a few large grits; decoration of fingernail marks along rim. Class B.
- Fig. 3: Balevullin general (B.1951.2042)
- (26) Sherds forming a large part of a small, decorated, flat-based beaker or urn of hard-fired, dark grey clay, smooth, bright brownish-red exterior surface and some grits; the decoration is confined to the upper third of the vessel and consists of a pattern of impressed dots, made with a small hollow tube, and an applied cordon round the maximum girth of the vessel cut with deep vertical slashes; fingertip marks along the footed base may be decorative or, perhaps more likely, the result of the technique of manufacture. Class A-1 (Pl. XV, 2).
- (27) Sherds of a very similar vessel to No. 26 but decorated only with an applied cordon and a row of small fingernail nicks just under the rim. Class A-1 (Pl. XV, 2).
- (28)–(33) Decorated sherds, probably of Class A vessels, ornamented with pinched up, or applied and moulded, cordons subsequently slashed or impressed with hollow tubes or a stick, and with incised lines: all fine, hard, dark grey clay.
  - (34)-(35) Two rim sherds of hard-fired, dark grey clay. Probably of Class A vessels.
- (36) Sherd of a miniature version of the Class A-1 decorated beaker, decorated with a vertically slashed cordon; diam. measured around the cordon and approx.  $2\frac{1}{4}$  in.
- (37)-(38) Two base sherds of hard, well fired, dark grey clay probably of Class A vessels: No. 37 exhibits the technique of manufacture the base was made separately and moulded onto the wall.
- (39)-(43) Rim and base sherds of at least four small, undecorated, flat-based barrel-shaped vessels, made of hard-fired grey clay, ring or coil built with fairly smooth surfaces occasionally interrupted by lumps of grit; exterior surfaces frequently exhibit vertical 'brush marks'. Class A-2.
- (44) Rim sherd of hard-fired, dark grey clay with light brown surfaces, decorated with a row of impressed dots under the rim made with a hollow tube, perhaps a bird bone. Class B.
- (45) Rim sherd of a bowl of grey clay with light orange-brown surfaces, hard-fired with many small grits; a ring- or coil-building fracture is apparent; decorated with fingernail impressions along the rim. Class B.
- (46) Sherd of a vessel with a flat rim of hard-fired grey clay with light brown surfaces and some large grits: top of the rim is decorated with a blunt stick or bone. Class B or C.
- (47) Rim sherd, angle uncertain, of hard-fired grey clay with orange surfaces and containing some large grits; decorated with a diagonal row of fingernail impressions along the outer surface and similar impressions along the rim. Class B.
- (48) Rim sherd of black clay, angle uncertain, with 'brush marks' on the exterior surface and fingernail impressions along the rim. Class B.
- (49) Rim sherd of a barrel-shaped vessel with inturning lip of hard-fired grey clay with light brown surfaces and fairly small grits: decorated with fingernail impressions along the rim. Class B.
- (50)-(51) Rim sherd and base of the same vessel, a barrel-shaped, flat-based pot of extremely hard-fired black clay with black or dark brown-red surfaces; decoration of crudely executed shallow grooves in a zigzag pattern under the rim; many vertical 'brush marks' on the outer surface. The rim and base sherds undoubtedly belong to the same vessel although they do not align when orientated separately; presumably some irregularity in the missing portions accounts for this. Class B.
- (52) Hard-fired fragment of light grey clay with mottled reddish surfaces; perhaps a loom weight. One surface is markedly weathered in contrast to the rest of the Balevullin pottery.
- (53) Base and two-thirds of the entire side of a small vessel of hard-fired clay with light orange and light grey surfaces; decorated with an unusual pattern of a crudely incised horizontal ladder design below the rim. Class B.
- (54) Rim sherd of a vessel of hard-fired, grey clay with light brown surfaces and containing some large grits: decorated with a crude incised pattern under the rim and faint vertical 'brush marks' down the side. Class B.
- (55) Small rim sherd, angle uncertain, of dark grey clay with a distinct groove or hollow under the rim on the outer surface and decorated with shallow vertical channelling on the exterior and faint incised lines on the rim bevel. Class B.

- (56) Solid lug or handle of hard-fired grey clay with brown surfaces.
- (57) Rim sherd of hard-fired black clay with the rim pinched slightly into a roll or bead: coarser texture than most Class B vessels so included in Class C.

## Fig. 4

- (58) Rim sherd of a cordoned, bucket-shaped urn of hard-fired, dark grey, gritty clay with surfaces mottled dark reddish brown and black; decorated with a thick applied cordon, finger impressed, and with finger impressions along the top of the flat rim. Class C-1 (Pl. XVII, 1).
- (59) A similar vessel to No. 58, hard-fired, light grey clay with light brown-pink surfaces and huge lumps of black grit; decorated with two pinched-up cordons under the rim, each impressed with fingertips (diameter uncertain). Class C-1 (Pl. XVII, 1).
- (60) Rim sherd of hard-fired, black, gritty clay decorated with thumb impressions into the side of the vessel: diameter and angle of rim uncertain. Class C-1 (Pl. XVII, 1).
- (61) Sherd of light grey, gritty clay with light brown surfaces, decorated with a low cordon with shallow impressions on it; somewhat weathered. Class C-1.
- (62) Rim sherd of hard-fired, coarse, gritty clay, grey with a light brown-red interior half; from a large plain storage vessel with slightly everted lip. Class C-2.
- (63) Sherd of a plain, flat-rimmed, bucket-shaped vessel of hard-fired, gritty, dark grey clay with a light brown inner surface. Class C-2.
- (64) Rim sherd of hard-fired, grey clay with light brown-grey surfaces and containing large grits; part of a large, flat-rimmed, bowl-shaped vessel. Class C-2.
- (65) Rim sherd of hard-fired, dark grey clay with light brown outer surface and containing large black grits; part of a large bowl-shaped vessel. Class C-2.
- (66) Rim sherd of coarse, hard-fired, light grey very gritty clay with light brown surfaces, part of a large vessel with a slightly everted lip. Class  $C_{-2}$ , diameter  $c_{-14}$  in.
- (67) Rim sherd of very hard-fired, coarse, light grey clay with many grits and a pale brown interior with a dark grey exterior surface: part of a large vessel of unusual shape with an inturning, bevelled rim and a horizontal ridge on the outer surface, formed by the slight pinching in of the pot wall above the ridge; diameter at the ridge c. 11½ in. Class C-3.
  - (68) Rim sherd of dark clay with fairly smooth surfaces and small flecks of shiny grits. Class C-2.
- (69) Sherd of a slightly footed base of hard-fired, light grey, gritty clay with a light brown outer surface. Probably Class B.
- (70) Base sherd of hard-fired, grey clay with pale brown outer surface and slight fingernail nicks along the edge of the base which may be decorative. Possibly Class A-1.
- (71) Rim sherd of hard-fired, light grey clay with pale brown surfaces and containing some large grits. Class C-2.
  - (72) Base sherd of hard-fired, light grey clay with light brown inner surface. Probably Class B.
- (73) Base sherd of hard-fired, dark, gritty black clay with dark, red-brown exterior. Probably Class C.
- (74) Weathered base sherd of light grey clay with a light brown exterior and containing many medium-sized black grits. Probably Class A or B.
  - (75) Base sherds of coarse, hard-fired, dark grey clay with large grits. Class C.
- (76) Base sherd of exceptionally hard-fired, grey clay: although it contains large grits the surfaces have been smoothed; finger striations are clear on the interior. Class C-3.
- (77) Coarse sherd of hard-fired, dark grey clay with some large grits and a dull reddish brown area on the outer surface: a lug or ornament in the form of a clay ring is applied to the outer surface. This extra piece has been applied as a disc of clay and then moulded into a ring form the ring is continuous across its interior area as a thin clay floor. Class C.

## Kilkenneth, Tiree (fig. 4: Museum No. B.1951.2079)

(78) A rim sherd of a small, hard-fired, thin-walled vessel of grey clay with dull, brown-red exterior: ornamented with a row of impressed dots along the neck and shallow lines channelled diagonally down under these.

- (79)-(86) Decorated rim and body sherds of small, thin-walled vessels, mostly hard-fired, grey clay with small grits: decoration of punctuated dots and incised lines. All probably Class A.
- (87), (88) Two sherds with applied, impressed cordons: of hard-fired, gritty grey clay with brown-red surfaces: decoration done with fingertips, much deeper in 88. Similar to Class C-1.
- (89) Rim sherd of hard-fired, dark grey clay with light reddish surfaces; decorated with finger impressions along the rim: diameter approx. 11 in. Class B.
- (90)–(92) Rim sherds of hard-fired, thin-walled vessels; 90 is dark grey with dull brown surfaces and smooth texture; 91 light grey and similar; 92 light grey and gritty; 90 and 91 probably Class A.
- (93)-(95) Rim sherds of grey clay with grits (latter two having large grits); 95 decorated with finger impressions along the rim. Class C.
- (96), (97) Base sherds of hard-fired, light grey, gritty clay; 97 with light brown surfaces; 98 slightly indented along the foot. Possibly Class A.

Loch Bhasapoll, Cornaig, Tiree (fig. 5: in Glasgow Museum and Art Gallery)

- (98) Large rim of a bucket-shaped urn, exterior surface mottled brown and dark grey (sherd set in plaster reconstruction), decorated with a cordon around the maximum girth, impressed with large finger-tip and -nail marks: diameter of reconstructed vessel 9½ in., height 10½ in. (see Mann (1906), fig. 2).
- (99) Plaster reconstruction only (sherd sawn out): apparently a plain version of the Balevullin Class A-1 vessels.
- (100) Plaster reconstruction only (sherd sawn out); decorated with small diagonal incisions along the rim.
  - (101), (102) Two stone spindle whorls.

## Balevullin, Tiree; 1907

- (103) Large cordoned urn, complete, of coarse brown clay with large black grits; diameters 11 and 12½ in., height 17½ in. (drawn to one-third of the scale of the other sherds): a fragment of a lower jaw, probably sheep, and a piece of a large bone were associated (Mann (1906), fig. 3 and p. 328); there is no record of any human remains associated with this urn.
  - (104) Rim sherd of grey, gritty clay; angle of rim uncertain and diameter unmeasureable.
- (105) Rim sherd of thick, hard-fired, gritty clay, dull grey-brown with a black area along the rim on the exterior: 'Tiree 7/05': 'several animals' teeth and bones are preserved? with this urn' (label).
- (106) Rim sherd of dark grey, gritty clay, mottled light brown on the exterior and decorated with an applied cordon.
- (107) Rim sherd of hard, grey and grey-brown, gritty clay with a slight groove or shoulder a short way below the rim on the exterior.
  - (108) Flat-rimmed sherd of hard, light brown and grey, gritty clay.
  - (109) Base sherd of gritty clay; one of two associated with the large urn, No. 103.
  - (110) Hard-fired sherd decorated with impressed holes.
- (111)-(115) Five of a number of bone splinters and fragments, many used as awls, associated with the large urn No. 103; the bones are well preserved and white in colour.

#### Coll

- (116) Flat-rimmed sherd of hard, light grey clay with small grits, light pink-brown on exterior surface: profile of the neck suggests that the sherd belongs to a sharply carinated jar: decorated with impressions along the top of the rim.
- (117) Flat-rimmed sherd with pulled-out flange on outside edge; gritty, grey clay with light brown surfaces: diameter not measurable.
- (118) Sherd of hard, grey, gritty clay with light brown surfaces and with part of a lug or handle attached: 'Bousd, Coll'.

(119), (120) Two bone awls or piercers from No. 1 hut, Balevullin, Tiree. No. 119 is the ulnar of a sheep with no signs of secondary working: No. 120 is a metacarpal, probably sheep and certainly worked into a smooth rounded point.

### APPENDIX B

Iron Fragments supposedly from No. 1 Hut

With the assistance of Dr J. C. Speakman, of the Department of Chemistry, one of the metal fragments, which appeared to be relatively unrusted, was measured for its specific gravity to confirm that it was in fact iron. With a weight of 41-42 grams and a volume of 5 ccs. the fragment has a specific gravity, or density, of the order of 8 which is consistent with its being iron (density 7.9).

#### APPENDIX C

The Charcoal Fragments from the Balevullin Hut Site

by DONALD W. BRETT, B.SC., F.L.S. Department of Botany, University of Glasgow

The charcoal is chiefly of oak and hazel in about equal amounts with the addition of two or three pieces each of elm, alder and willow (? or aspen), and two pieces of spruce.

Ignoring the spruce for the moment, this assemblage of broad-leaved trees is characteristic of the oak woodland that covered much of lowland Britain in prehistoric times. In this context willow is more probable than aspen although it is not possible to identify the sample with certainty.

It may be inferred then that Tiree also supported an oak forest with hazel shrubs and alder and willow in the wetter places. Today Tiree is virtually treeless and has almost certainly been so for several hundred years. This collection of charcoal is the only direct evidence we have so far concerning the past vegetation of the island.

The presence of spruce is puzzling. We have no reason to believe that *Picea* has been native in Britain since the last glaciation. Unless the charcoal is a contaminant of more recent date it must be assumed that the wood had been brought to Tiree from continental Europe or had been picked up as driftwood on the shore.

The degeneration of the oakwoods in Britain is usually ascribed to a combination of the spread of agriculture and a climatic deterioration which began some two to three thousand years ago marking the onset of the present climatic period (Sub-atlantic). Since the oakwood was presumably already at the northern limits of its range in Scotland it may be assumed that a climatic effect curtailing regeneration and favouring replacement by other species (birch or pine) would be felt quite quickly here. McVean and Ratcliffe<sup>1</sup> have constructed a map showing the distribution of woodland in Scotland as it would appear if the wholesale clearances had not occurred. They regard Tiree along with the Outer Hebrides and the far north of the mainland as potentially unable to support oak woodland at the present day. Tiree is marked on their map with six small patches of birch hazel scrub.

Unless these assumptions are incorrect and the special climate of Tiree allowed oak woodland to flourish until entirely cleared by man, these charcoal records suggest that the hut site should be dated within the previous climatic period (Sub-boreal), well before the fifth century B.C.

## APPENDIX D

# Shell Remains from the Balevullin Hut Site

Dr John Bowden, of the Department of Zoology, made the following identifications of the shells from the Balevullin hut site. Without precise stratigraphical records it cannot be said that all the shells are contemporary with the occupation deposits but most are edible and seem likely to have been food refuse.

<sup>1</sup> McVean, D. N. and Ratcliffe, D. A., Plant Communities of the Scottish Highlands, *Monographs of the Nature Conservancy* No. 1: H.M.S.O. London (1962).

## Shell Identifications

3 Buccinum undatum

10	Littorina littoralis*	
15	Littorina littorea	(winkles)
4	Nassarius reticolatus*	
4	Cepaea hortensis	(land snail)
I	Calliostoma zizyphinum	
3	Trivia perforated	(cowry)
2	Nucella lapillus	(dog whelk)
1	(plus 11 frags.) Mytilus edulis	(common mussel)
I	Glycymeris glycymeris	(dog cockle)
2	Patina pellucida	
I	Venus casina	(venus shell)
1	Laevicardium crassum	
2	(plus frags.) Lutraria lutraria	
25	(plus a few frags.) Patella	(limpets)

N.B.: Those items marked with an asterisk are themselves marked 'Oronsay' so may well be intruders from a Mesolithic site. Bishop excavated Mesolithic sites on Oronsay. There is no reason to doubt that the remainder came from Balevullin.

(whelks)

## APPENDIX E

# Bone Refuse

A number of complete and broken bones were collected from various parts of the hut site. The majority belong to animals and many of these have been broken into jagged pieces; there is no reason to doubt that they are the remains of animals killed for food. It will be recalled that animal bone refuse was found in two of the hut site rubbish pits (p. 159).

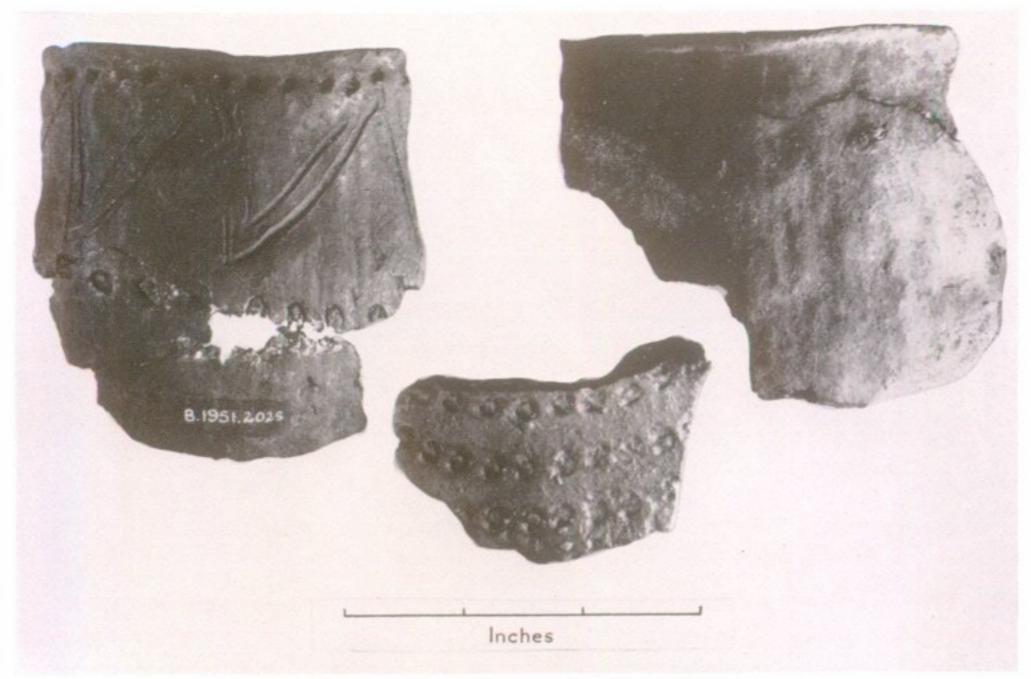
The following identifications, some necessarily tentative, were done with the help of Dr A. Young of the Department of Anatomy. At least three different varieties of animals were detectable from the ribs alone, one of the size of an ox or horse and two of the size of sheep or dog. One complete and one broken lower jaw, and an articulating humerus, radius and ulnar, all complete, confirmed the presence of sheep. The epyphisial surface of the proximal end of this humerus was unfused while the distal end was, indicating late immaturity. Several other calcined bones appeared to be fragments of sheep leg bones and two calcined fused metacarpals probably belong to the same species. Some carpal bones are probably also sheep.

Some spinous processes of vertebrae and a piece of a horn core might also be assigned to sheep but not with certainty.

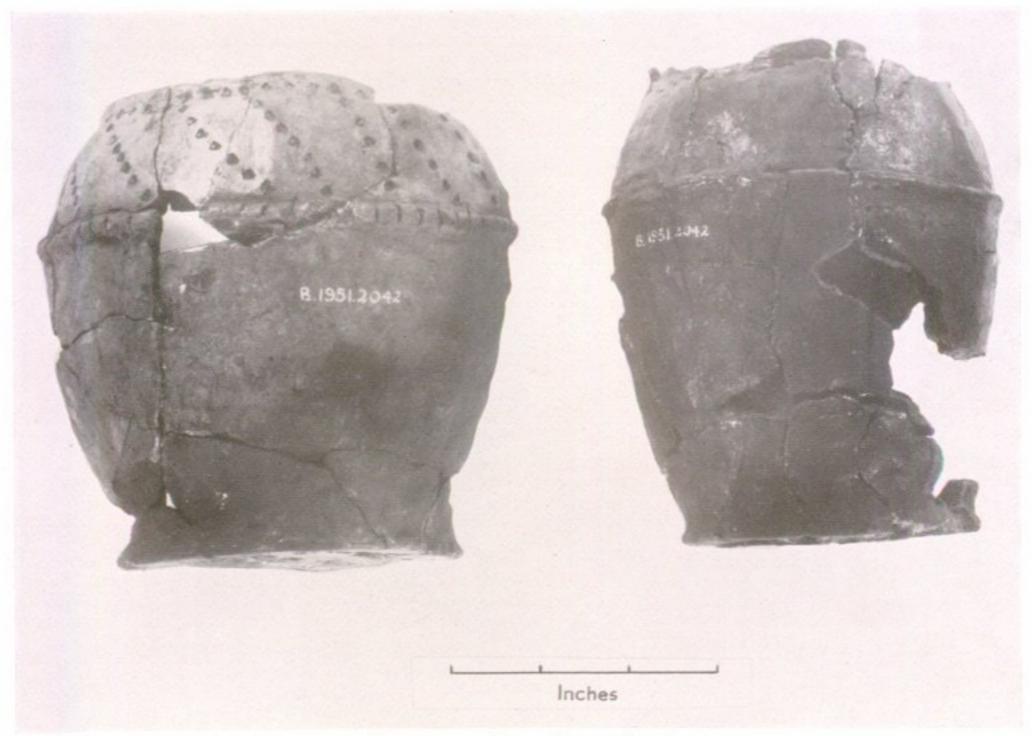
A large vertebra might be of an ox and some large, broad and flat rib fragments could be of similar origin. A large molar tooth is almost certainly bovine from the pattern of its cusps.

The second group of small ribs are small, slender bones with a fine rounded profile and are difficult to diagnose precisely.

A rectangular cut block of bone, some  $5\frac{3}{4}$  by  $\frac{3}{4}$  by 1 in., seems, from its density, to be cetacean. A collection of calcined fragments of skull vault are almost certainly human. Other probable human bones include the burnt head of a humerus, a piece of the shaft of a femur, a metacarpal fragment and a possible phalanx.

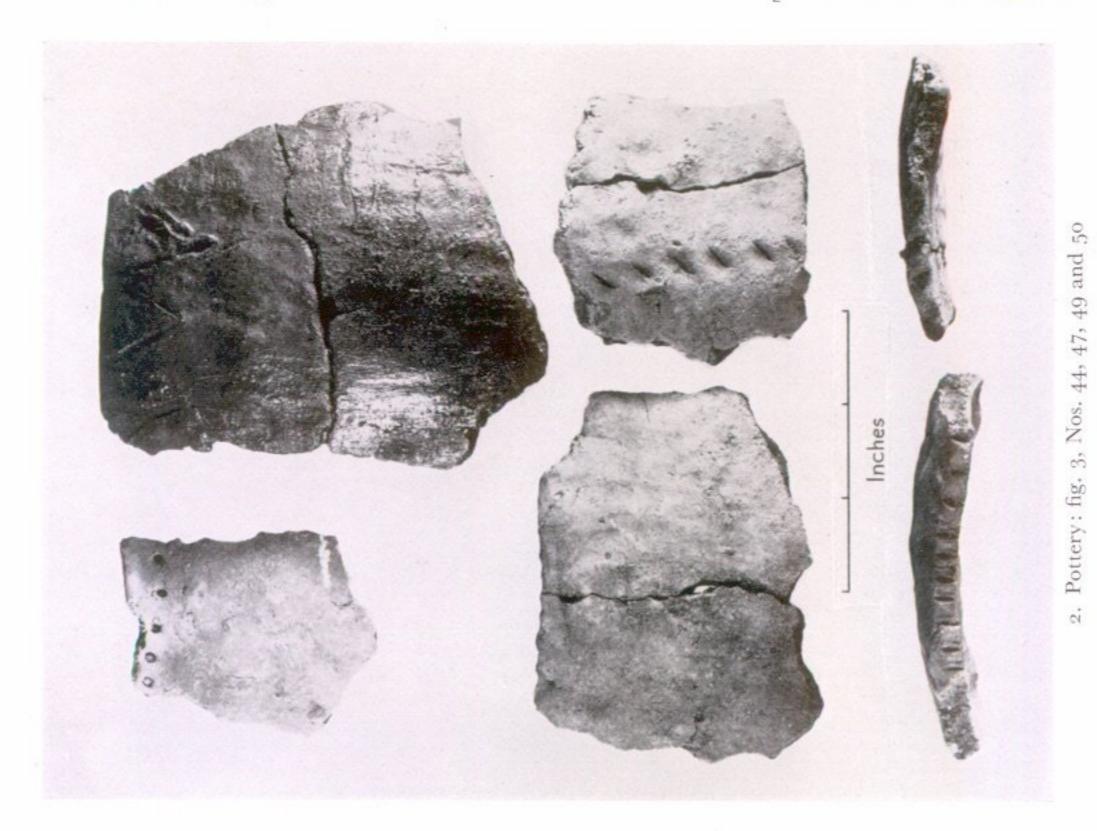


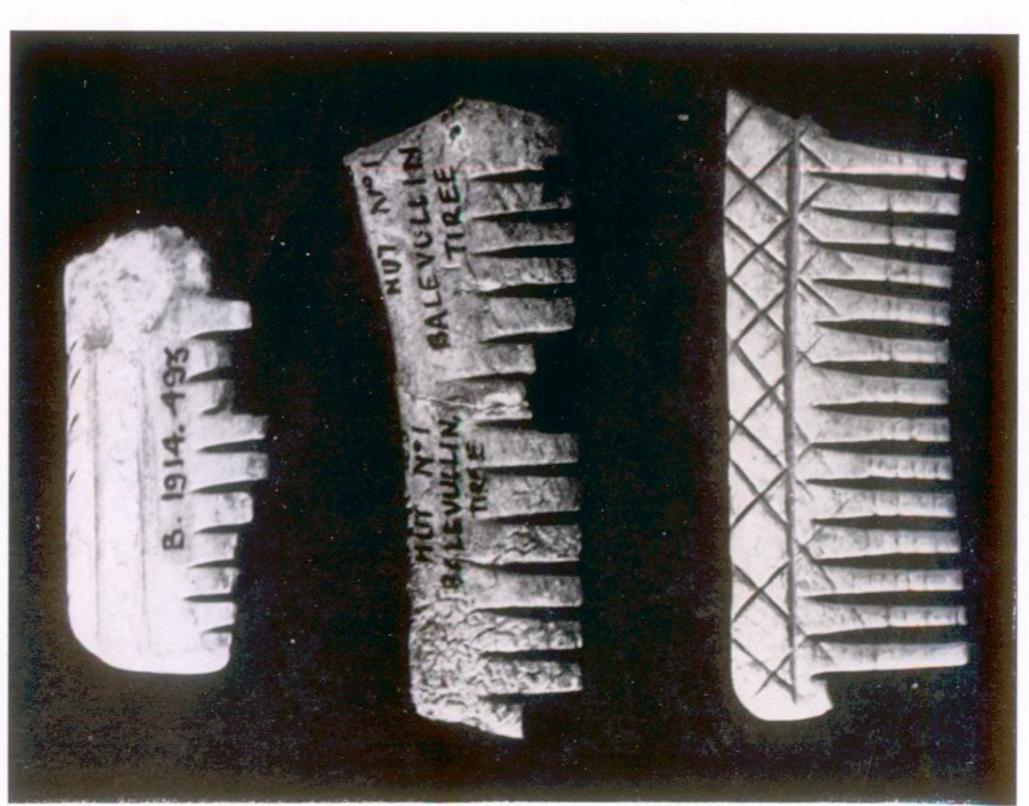
1. Pottery: fig. 2, Nos. 1 and 2; fig. 3, No. 40



2. The same: fig. 3, Nos. 26 and 27

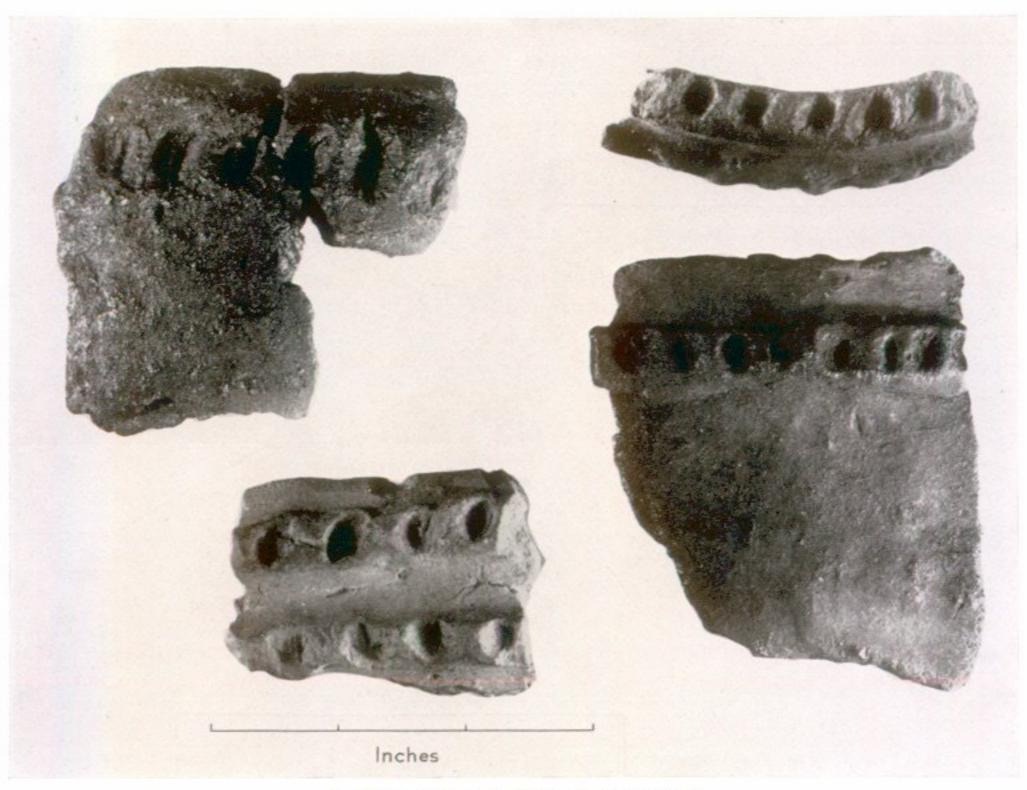
MACKIE: BALEVULLIN



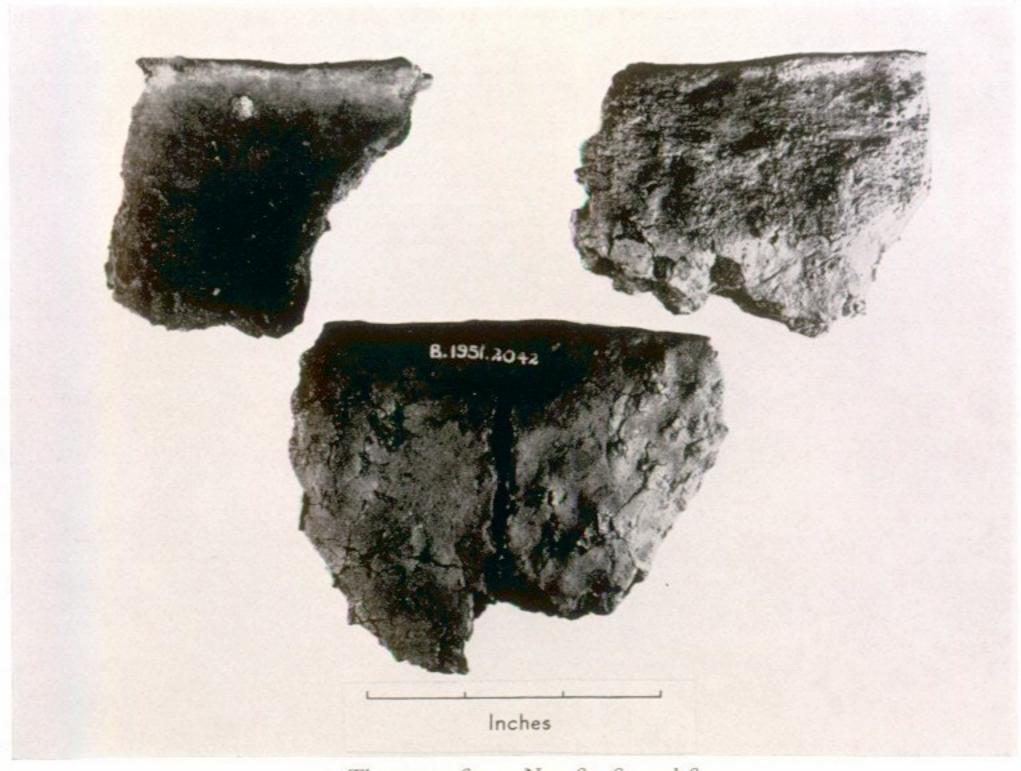


MacKie: Balevullin

1. Combs: fig. 2, Nos. 9, 10 and 11



1. Pottery: fig. 4, Nos. 58, 59 and 60



2. The same: fig. 4, Nos. 62, 64 and 65

MACKIE: BALEVULLIN